

TRAFFIC
REPORT

Review of Marine Wildlife Protection Legislation in ASEAN

OCTOBER 2018

Anna Ezekiel





TRAFFIC REPORT

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Green Turtle *Chelonia mydas*, Sipadan Island, Malaysia

Nicolas Voisin / Dreamstime.com

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This report considered relevant legislation in ASEAN countries up until December 2016.

LIST OF ACRONYMS AND ABBREVIATIONS

AO: Administrative Order (Philippines)

ASEAN: Association of Southeast Asian Nations

ASEAN MoU: Memorandum of Understanding on ASEAN Sea Turtle Conservation and Protection

ASEAN-WEN: Association of Southeast Asian Nations Wildlife Enforcement Network

BFAR: Bureau of Fisheries and Aquatic Resources (Philippines)

CAP: Comprehensive Action Plan (CTI-CFF, SSME MoU)

CBD: Convention on Biological Diversity

CCM: Convention Members, cooperating non-members and participating territories (WCPFC)

CCSBT: Commission for the Conservation of Southern Bluefin Tuna

CITES: Convention on International Trade in Endangered Species of Wild Fauna and Flora

CMM: Conservation and Management Measures (IOTC, WCPFC)

CMS: Convention on the Conservation of Migratory Species of Wild Animals

CoP: Conference of the Parties (CBD, CITES, CMS)

CPC: Contracting Parties and Cooperating non-Contracting Parties (IOTC)

CTI-CFF: Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security

DA: Department of Agriculture (Philippines)

DENR: Department of Environment and Natural Resources (Philippines)

DoF: Department of Fisheries (Malaysia, Myanmar)

Dugong MoU: Memorandum of Understanding on the Conservation and Management of Dugongs and their Habitats throughout their Range

ECP: Ecoregion Conservation Plan (SSME MoU)

EEZ: Exclusive Economic Zone

FAO: Fisheries Administrative Order (Philippines)

FAO: Food and Agriculture Organization of the United Nations

FAO Agreement on Port State Measures: Food and Agriculture Organization Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing

FAO Code of Conduct: Food and Agriculture Organization Code of Conduct for Responsible Fisheries

FAO Compliance Agreement: Food and Agriculture Organization Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas

ICRI: International Coral Reef Initiative

IOSEA Marine Turtle MoU: Indian Ocean Southeast Asian Marine Turtle Memorandum of Understanding

IOTC: Indian Ocean Tuna Commission

IPOA: International Plan of Action

IPOA-IUU: International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing

IUCN: International Union for Conservation of Nature

IUU Fishing: Illegal, Unreported and Unregulated Fishing

IWC: International Whaling Commission

Lao PDR: Lao People's Democratic Republic

LGU: Local Government Unit (Philippines)

MA: Management Authority (CITES)

MAF: Ministry of Agriculture and Forestry (Lao PDR)

MAFF: Ministry of Agriculture, Forestry and Fisheries (Cambodia)

MARD: Ministry of Agriculture and Rural Development (Viet Nam)

MoNRE: Ministry of Natural Resources and Environment (Thailand)

MONRE: Ministry of Natural Resources and Environment (Viet Nam)

MoU: Memorandum of Understanding

MPA: Marine Protected Area

NGO: Non-Governmental Organisation

NIPAS: National Integrated Protected Areas System (Philippines)

NPCA: Nature Protection and Conservation Administration (Cambodia)

PAMB: Protected Area Management Board (Philippines)

PCSD: Palawan Council for Sustainable Development (Philippines)

RA: Republic Act (Philippines)

Ramsar Convention: Convention on Wetlands of International Importance

RFMO: Regional Fisheries Management Organisation

SA: Scientific Authority (CITES)

SAP: Strategic Action Plan (Sulu-Celebes Sea Sustainable Fisheries Management Project)

SEAFDEC: Southeast Asian Fisheries Development Centre

SEDAC: Socioeconomic Data and Applications Center

Sharks MoU: Memorandum of Understanding on the Conservation of Migratory Sharks

SSME: Sulu Sulawesi Marine Ecoregion

SSME MoU: Memorandum of Understanding Between the Government of the Republic of Indonesia and the Government of Malaysia and the Government of the Republic of the Philippines on the Adoption of the Conservation Plan for the Sulu Sulawesi Marine Ecoregion

TCM: Traditional Chinese Medicine

TED: Turtle Excluder Device

TIHPA: Turtle Islands Heritage Protected Area

TIHPA MoU: Memorandum of Agreement between the Government of the Republic of the Philippines and the Government of Malaysia on the Establishment of the Turtle Islands Heritage Protected Area

TPAMB: Tubbataha Protected Area Management Board (Philippines)

TRNP: Tubbataha Reefs Natural Park

UNCLOS: United Nations Convention on the Law of the Sea

UNCTOC: United Nations Convention Against Transnational Organized Crime

UN Driftnet Moratorium: United Nations General Assembly Resolution 46/215 on Large-scale Pelagic Driftnet Fishing and its Impact on the Living Marine Resources of the World's Oceans and Seas

UNCED: United Nations Conference on Environment and Development

UNDP/GEF: United Nations Development Programme/Global Environment Facility

UN Fish Stocks Agreement: See UNFSA

UNFSA: United Nations Agreement for the Implementation of the Provisions of the UN Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks

WARPA: Wildlife Reservation and Protection Act (Thailand)

WCPFC: Western and Central Pacific Fisheries Commission

WCPFC Convention: Convention for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean

EXECUTIVE SUMMARY

The Association of Southeast Asian Nations (ASEAN) comprises 10 countries: Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic (Lao PDR), Malaysia, Myanmar, Philippines, Singapore, Thailand and Viet Nam. All the ASEAN countries, except land-locked Lao PDR, are rich in marine biodiversity, with the waters around the southern Philippines and central Indonesia containing the highest levels of marine biodiversity in the world (Burke *et al.*, 2011).

The waters in Southeast Asia are home to a large variety of marine wildlife species, many of which are under threat in the region, including from over-exploitation, accidental capture, destructive fishing practices, and habitat loss and degradation. Each of the ASEAN countries has adopted international and regional treaties and agreements as part of its attempt to conserve and manage wildlife and marine resources, and has enacted legislation to govern international trade in wildlife, wildlife protection, protected areas, and fisheries management. However, the provisions, penalties and effectiveness of the legislation vary across the region.



This report considers legislation to conserve and manage marine species that are vulnerable to wildlife trade-related activities in ASEAN, up-to-date until December 2016. These include marine turtles, Dugong *Dugong dugon*, various species of cetaceans, sharks, rays Mobulidae spp., seahorses Hippocampus spp., sea cucumbers Holothuroidea spp., corals, Humphead Wrasse *Cheilinus undulatus* and giant clams Tridacnidae spp. A detailed list of species considered in this report can be found in Appendix I, along with their listings on the Appendices of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the Convention on the Conservation of Migratory Species of Wild Animals (CMS), and the United Nations Convention on the Law of the Sea (UNCLOS), and their assessment by the International Union for the Conservation of Nature (IUCN).

The first part of the report identifies global and regional treaties and conventions relevant to marine wildlife conservation in ASEAN and summarises the measures each country is obliged to take in order to uphold its international commitments. A table of obligations imposed on each country by the international agreements it has adopted can be found in Appendix II. The second part of the report provides information on legislation in each ASEAN country and evaluates the legislation against benchmarks drawn from the international commitments that are summarised in Part 1. Summaries of legislation in each country include information on conservation and management measures, measures to regulate marine wildlife collection and domestic and international trade, prohibited activities and penalties for infractions, licensing requirements for hunting, collection of eggs, and marine capture fisheries, enforcement powers, and agencies responsible for implementation. Strengths and weaknesses of each country's legislation are identified in a separate section. The last two parts of the report discuss patterns in the strengths and weaknesses of the marine wildlife protection legislation across ASEAN and provide recommendations for improving this legislative framework.

Part 1: The international framework

A number of international instruments provide a legal framework for national legislation for marine wildlife conservation and management in ASEAN. Of these, several are legally binding and include specific obligations for signatories; others are voluntary agreements that provide guidelines and set expectations. Each ASEAN country is signatory to several of these international agreements, suggesting a level of political commitment to marine conservation that could be called upon to motivate improvements in legislation, enforcement and other conservation measures.

A number of major global conventions are directly relevant to the conservation of marine species. These include four legally binding agreements: CITES, CMS, the Convention on Biological Diversity (CBD), and the Convention on Wetlands of International Importance (Ramsar Convention). Two voluntary agreements under CMS are also important for encouraging marine wildlife protection: the Memorandum of Understanding (MoU) on the Conservation and Management of Dugongs and their Habitats throughout their Range and the MoU on the Conservation of Migratory Sharks. These provide guidelines and less formal commitments for the conservation of particular species. Each of the agreements mentioned above has at least one ASEAN signatory, and CITES and CBD have been signed by all ASEAN countries; however, of the ASEAN countries only the Philippines has signed CMS.

In addition to their global commitments, each ASEAN country is signatory to at least one regional agreement relating to marine wildlife conservation. Not all of these agreements are legally binding, but they demonstrate political commitment to marine conservation and some provide guidelines for conservation measures. Regional conservation agreements discussed in this report include the Indian Ocean Southeast Asian Marine Turtle Memorandum of Understanding (IOSEA Marine Turtle MoU), the Memorandum of Understanding on ASEAN Sea Turtle Conservation and Protection (ASEAN MoU), and the International Coral Reef Initiative (ICRI), which apply across Southeast Asia. The IOSEA Marine Turtle MoU and the ASEAN MoU have each been signed by the majority of ASEAN countries, while Indonesia, Malaysia, the Philippines, Thailand and Viet Nam are members of the ICRI. Three other regional agreements also apply in limited regions and have two or three ASEAN signatories: the Memorandum of Agreement between the Government of the Republic of the Philippines and the Government of Malaysia on the Establishment of the Turtle Islands Heritage Protected Area, the MoU Between the Government of the Republic of Indonesia and the Government of Malaysia and the Government of the Republic of the Philippines on the Adoption of the Conservation Plan for the Sulu Sulawesi Marine Ecoregion, and the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security.

Further relevant obligations are provided by global and regional oceans and fisheries legislation and guidelines. Regulation of national and international waters, including fisheries, is an important area for the preservation of marine turtles and other marine wildlife discussed in this report, as over-fishing and incidental capture are two of the biggest threats facing most of these species. Most basically, states must control fishery activities within their waters and by their nationals outside these waters if they are to effectively manage marine resources, including marine wildlife. Of the legally binding oceans and fisheries agreements discussed in this report, UNCLOS has been signed by all ASEAN countries, although Cambodia is yet to ratify it, while other agreements have only a small number of ASEAN signatories. These include the United Nations Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, the Food and Agriculture Organization (FAO) Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (FAO Compliance Agreement), the FAO Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing, the Convention on Fishing and Conservation of the Resources of the High Seas, and the International Convention for the Regulation of Whaling.

Several voluntary global fisheries agreements also offer guidance on measures to conserve and manage fish stocks, habitats and other species affected by fishing. These include the FAO Code of Conduct for Responsible Fisheries, the UN's Agenda 21, which provides a plan of action for sustainable economic and social development, including in marine and coastal areas, and UN General Assembly Resolutions, the most important of which for this report is Resolution 46/215 on Large-scale Pelagic Driftnet Fishing and its Impact on the Living Marine Resources of the World's Oceans and Seas (UN Driftnet Moratorium). Several non-binding international plans of action and guidelines have been created under the FAO Code of Conduct, including for management of sharks and rays, fishing capacity, and by-catch, and to prevent illegal, unreported and unregulated fishing. All the ASEAN countries are members of the UN and the FAO, meaning that they should abide by the non-binding measures provided by these bodies.

In addition to the above global oceans and fisheries agreements summarised, guidelines and agreements for management of oceans and fisheries are produced by regional fisheries management organisations (RFMOs). Of these, legally binding agreements that include measures to help conserve marine turtles and other protected wildlife in ASEAN are the Convention for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean and Resolutions passed under this Convention, conservation and management measures passed by the Indian Ocean Tuna Commission (IOTC), and the Convention for the Conservation of Southern Bluefin Tuna. Of the ASEAN countries, Indonesia, Malaysia, the Philippines, Thailand and Viet Nam are Parties or cooperating non-members of one or more of these agreements.

National legislation

Overview

With some exceptions, participation by ASEAN countries, especially Indonesia and the Philippines, in the international agreements mentioned above is generally strong. All ASEAN countries are signatories of CITES, the CBD and UNCLOS, and all ASEAN countries should abide by the measures provided by UN General Assembly Resolutions and FAO IPOAs and guidelines. Table i shows the participation of ASEAN countries in the international treaties, agreements, partnerships and organisations noted above.

Convention/Agreement	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
CITES	X	X	X	X	X	X	X	X	X	X
CBD	X	X	X	X	X	X	X	X	X	X
Ramsar Convention		X	X	X	X	X	X		X	X
CMS							X			
Dugong MoU*						X	X		X	
Sharks MoU*							X			
UNCLOS	X	S	X	X	X	X	X	X	X	X
UNFSA			X				X			
FAO Compliance Agreement						X				
FAO Agreement on Port State Measures			X			X			X	
Conservation of Resources of the High Seas		X	S		X				X	
Convention for the Regulation of Whaling		X		X						
FAO Code of Conduct*	M	M	M	M	M	M	M	M	M	M
Agenda 21*	M	M	M	M	M	M	M	M	M	M
UN General Assembly Resolutions*	M	M	M	M	M	M	M	M	M	M
IOSEA Marine Turtle MoU*		X	X		X	X	X		X	X
ASEAN MoU	X		X	X	X	X	X	X	X	X
TIHPA MoU					X		X			
SSME MoU			P		P		P			
CTI-CFF*			X		X		X			
International Coral Reef Initiative*			P		P		P		P	P
WCPFC Convention			X				X		C	C
IOTC			X		X		X		X	
Convention on Southern Bluefin Tuna			X				C			

Table i: ASEAN Signatories and Parties to international agreements

KEY:

X = Party, Ratified or Acceded;

S = Signed but not Ratified;

M = Member of organisation adopting a voluntary agreement;

P = Partner/Participant; C = Cooperating non-member

* Not legally binding

The agreements with the most worrying lack of signatures are CMS, which requires signatories to conserve migratory species and restore their habitats, UNFSA, which imposes legally binding obligations on signatories to conserve biodiversity and ecosystems, and the FAO Compliance Agreement which, along with UNFSA, requires record-keeping, international reporting, and compliance with international conservation management measures. The relatively low number of participants in RFMOs is also of note, although not all ASEAN countries fish in convention areas or have convention areas extending over their waters, and membership in RFMOs is therefore not necessary for all countries. Brunei, Lao PDR and Singapore have not signed the IOSEA Marine Turtle MoU.

Of course, participation in an international agreement is not a guarantee that its obligations will be passed into national legislation. Appendix II of this report provides an overview of the extent to which ASEAN countries meet their obligations under each international agreement to which they are signatories. The discussions of the strengths and weaknesses of national legislation for each country provide details on which measures of the international agreements considered for the report are implemented in legislation.

This report found implementation of CITES in national legislation to be generally fairly comprehensive. However, Lao PDR, Myanmar and Thailand lack at least some protections for non-native species of endangered wildlife and most countries lack requirements to return confiscated specimens to their country of origin. One of the biggest difficulties for implementation of CITES was the use in some countries of protected species lists that do not correspond to the CITES Appendices. This was found to be the case in Indonesia, Lao PDR, Myanmar, Thailand, Viet Nam, and, in relation to domestic protection, the Malaysian states of Sabah and Sarawak. In some countries, such as Viet Nam, a confusing proliferation of different lists of protected species may create difficulties for enforcement.

The CBD was also found to be well reflected across ASEAN in legislation prohibiting killing and collecting marine wildlife in protected areas and imposing relatively strict penalties for these activities.

With regard to oceans and fisheries agreements, almost all ASEAN countries control exploitation of marine resources within their jurisdictions through legal requirements for licences and registration of vessels, and all ASEAN countries prohibit many forms of destructive fishing. However, some details of these requirements, including measures to mitigate by-catch, are lacking in all ASEAN countries. Legal measures to control marine resource exploitation by nationals outside the Exclusive Economic Zone (EEZ) is weak everywhere except Thailand and Viet Nam, while across ASEAN the legislation includes few or no requirements for international cooperation such as reporting to RFMOs and convention bodies or sharing information.

Across ASEAN, penalties are not strong enough to constitute a deterrent for some offences. In particular, Brunei and Lao PDR have very low penalties across the board, while fines in Myanmar and custodial sentences in Singapore and in Thailand for fisheries offences are also particularly low. There is little consistency in the severity of penalties for the same crime across the region. However, the framework for penalising wildlife-related offences adequately is in place in most ASEAN countries, which would benefit in most cases from targeting penalties to organised and large-scale wildlife traffickers, increasing some penalties, strengthening enforcement powers, and providing more detailed criteria for determining where penalties should fall within a specified range.

Brunei Darussalam

Brunei has three laws relevant to the protection of marine wildlife: the Wild Fauna and Flora Order (2007), which governs international trade and is Brunei's main CITES-implementing legislation, the Wildlife Protection Act (1981, revised 1984), which protects wildlife within Brunei and governs protected areas, and the Fisheries Order (2009). Despite providing a generally strong framework for controlling international trade in wildlife, legislation in Brunei is not detailed, with the result that some measures that could help reduce illegal and unsustainable collection of marine wildlife are omitted. Strengths and weaknesses of Brunei's legislation with regard to marine wildlife protection are summarised below.

Strengths	Weaknesses
<ul style="list-style-type: none"> • Protected status for all CITES-listed species in international trade. • Relatively comprehensive lists of prohibited activities, including possession and trade of CITES-listed species without a permit/that have been illegally collected or imported, and killing or collection of animals within a wildlife sanctuary and some species anywhere in Brunei. • Prohibition of destructive fishing methods including fishing with explosives and poisons. • Requirement to release any aquatic mammal taken accidentally. • Director of Fisheries may (but not required to) specify closed seasons and areas. • Licences required to fish in Brunei's waters, including for foreign fishing vessels. • Permits required for trade in CITES-listed species. • Director of Forestry authorised to negotiate the return of confiscated specimens to country of origin. • Permits for imports and exports of some CITES-listed species only granted if steps have been taken to minimise harm and mistreatment. However, no penalties for mistreatment, and no requirements for wildlife to be treated appropriately within Brunei. • Some penalties higher for ships' masters than for crew under <i>Fisheries Order</i>. • Burden of proof on the accused to prove legal ownership of wildlife. Discovery of fish or fishing equipment on board a vessel within a marine reserve sufficient to establish guilt. • Clear specification of strong enforcement powers. 	<ul style="list-style-type: none"> • Laws are short and provide few details on prohibited activities, criteria for determining wildlife sanctuaries, criteria for granting fishing licences, permitted fishing equipment, and treatment of confiscated live specimens. • Laws provide significant discretion to implementing agencies, largely due to not specifying conditions or guidelines for many of the powers and responsibilities they provide. • Protection for wildlife parts and products is missing, except in some provisions of the <i>Wild Life Protection Act</i>. • Prohibition on killing or collecting protected animals or animals within a wildlife sanctuary under the <i>Wild Life Protection Act</i> does not apply to some CITES-listed species. • No requirement for licences to fish outside EEZ or cooperate with international laws or laws of other states. • No requirements for vessel registry or logbooks. • Almost all penalties are low and further weakened by the possibility of compounding most offences for a low fine. <i>Wild Fauna and Flora Order</i> and <i>Fisheries Act</i> do not state minimum penalties. <i>Wild Life Protection Act</i> provides fixed penalties. • <i>Wild Fauna and Flora Order</i> and <i>Wild Life Protection Act</i> prohibit several of the same activities, including possessing and exporting protected species and breaching licence conditions. These laws are administered by different agencies (the Department of Agriculture and the Museums Department) and use different species lists, which could lead to confusion in enforcement.

Cambodia

Cambodia's main piece of wildlife legislation, the Law on Forestry (2003), covers forest ecosystems only and excludes from its jurisdiction animals that breed in water. However, the Law on Protected Areas (2008) and the Law on Fisheries (2006) provide generally satisfactory measures for marine wildlife protection, especially when taken together with the various Sub-Decrees and Proclamations that are also summarised in this report, including Sub-Decree No. 53 On International Trade in Endangered Species (2006). Lists of protected wildlife species are provided in Sub Decree No. 123 On the Determination of Fish Species and Products that are Endangered (2009), Proclamation No. 020 On the Classification and List of Wild Animal Species (2007) and Sub-Decree No. 209 On the Enforcement of the List of Prohibited and Restricted Goods (2007). Strengths and weaknesses of Cambodia's legislation with regard to marine wildlife protection are summarised below.

Strengths	Weaknesses
<ul style="list-style-type: none"> • Protected status for all CITES-listed species. • Detailed list of prohibited activities, including destruction of habitat, fishing in protected areas, and trade, transport, possession, import and export of wildlife without a permit. • Prohibition of destructive fishing methods and methods not specified by Ministry of Agriculture, Forestry and Fisheries (MAFF). • MAFF and Ministry of Environment may (but not required to) declare closed seasons and areas. • Permits required for collection, transport, trade, export and import of wildlife. • Basic requirements for vessel registry and logbooks. • Strong maximum sentences under Law on Protected Areas and Law on Fisheries. • Specification of maximum and minimum sentences under Law on Protected Areas and Law on Fisheries. • Law on Protected Areas and Law on Fisheries double penalties or upgrade offences to a higher classification for repeat offences and under certain other conditions. • Penalisation of accomplices under Law on Fisheries. • Explicit criminalisation of involvement of officials in wildlife crime under Law on Fisheries. • Explicit criminalisation of failure to investigate wildlife offences under Law on Fisheries. • Strong powers of arrest, investigation and seizure of evidence under Law on Fisheries. 	<ul style="list-style-type: none"> • Law on Fisheries may allow catching, selling, buying, stocking and exporting endangered fishery resources with a permit and buying or selling shells of rare species. • No measures to require the release of marine wildlife taken as by-catch or accidentally entangled in fishing equipment. • No measures to require confiscated specimens to be housed in rescue centres, released into their natural habitat or returned to their country of origin. • No detailed requirements for logbooks or for registration and compliance history to be recorded. • Low penalties for some wildlife crimes under Law on Protected Areas and Law on Fisheries. • Vague specification of enforcement powers under Law on Protected Areas. • Lack of correspondence between list of prohibited activities and penalties in the Law on Fisheries. • Difficulty in obtaining regulations, especially lists of protected species.

*Since we were unable to locate the text of every relevant piece of legislation for Cambodia, some of the omissions noted here may in fact be addressed in Cambodian regulations that we have not viewed.

Indonesia

Indonesia has a generally strong legislative framework which includes some weaknesses, such as the lack of a single list of protected species that covers all CITES- and CMS-listed species and a lack of prohibitions on some harmful activities. The most important pieces of legislation for the conservation and management of marine wildlife in Indonesia are the Conservation of Living Resources and their Ecosystems Act (1990), the Law on the Management of Coastal Areas and Isles (2007) and the Fishery Law (2004, amended 2009). Several other laws provide relevant measures, including the Law on the Sea (2014), which makes the Indonesian government responsible for managing the marine environment, the Customs Law (1995, amended 2006), and the Penal Code (1915), which includes measures to protect animals from mistreatment. Three Government Regulations also relate to the conservation of marine wildlife: No. 60/2007 on the Conservation of Fishery Resources, No. 7/1999 on Preserving Flora and Fauna Species, and No. 8/1999 on Wild Flora and Fauna Exploitation. In addition, a large number of Ministerial Regulations provide detailed measures for the management and control of activities relating to marine wildlife. Strengths and weaknesses of Indonesia's legislation with regard to marine wildlife protection are summarised below.

Strengths	Weaknesses
<ul style="list-style-type: none"> • Detailed list of prohibited activities, including catching, killing, possessing, transporting or trading protected species without a licence and importing and exporting wildlife without a permit. • Prohibition of fishing with explosives, poisons or other materials that destroy coral reefs, fish resources or the environment. Possession of equipment for these types of fishing prohibited. • Requirement to release marine wildlife that has been captured accidentally alive and reported if dead. • Minister of Marine Affairs and Fisheries required to specify closed seasons and areas. • Permits and licences required for natural resource exploitation, including for fishing outside Indonesian waters. • Detailed requirements for vessel registration and logbooks. • Confiscated specimens and wildlife found in a human environment must be returned to their natural environment where possible, and confiscated wildlife housed in adequate facilities. • An offence to deliberately harm an animal, cause it pain or transport it in a needlessly painful manner. • Strong penalties for some offences under <i>Fishery Law</i>, <i>Law on the Management of Coastal Areas and Isles</i> and <i>Conservation of Living Resources and their Ecosystems Act</i>. • Specification of maximum and minimum sentences for some offences under <i>Customs Law</i> and <i>Law on the Management of Coastal Areas and Isles</i>. • Increased penalties for committing offences deliberately under <i>Conservation of Living Resources and their Ecosystems Act</i> and <i>Law on the Management of Coastal Areas and Isles</i>. • <i>Fishery Law</i> provides higher penalties for some offences for owners and operators of fishing vessels, managers of corporations, and larger fishing operations. • Penalties for some offences under <i>Fishery Law</i> and <i>Customs Law</i> are increased by one third if an official is involved. • Incentives for information and arrests under <i>Fishery Law</i> and for customs agents who have settled violations under <i>Customs Law</i>. • Clear indication of responsibilities for implementation. 	<ul style="list-style-type: none"> • <i>Conservation of Living Resources and their Ecosystems Act</i> and <i>Fishery Law</i> are general. Where implementing regulations provided by ministries, some provinces may not recognise jurisdiction (Lotolung <i>et al.</i> 2005). • Permitted to catch, kill, transport or trade protected animals for research, education or safeguarding of the animals under <i>Conservation of Living Resources and their Ecosystems Act</i> • <i>Government Regulation No. 7</i> (1999) allows Conservation Institutions, including zoos and animal parks, to take wildlife that is not protected from nature and does not provide conditions for obtaining wildlife in this way. • <i>Fishery Law</i> allows fishing with explosives and other damaging methods for research. Ministry of Fisheries Decrees specifying protected species provide exceptions for research and development to prohibition on hunting. • Capture, killing, possession, transportation and domestic trade of sharks (except Whale Shark), mobulid rays, corals (except black corals), seahorses and sea cucumbers, except coral protected within small island areas and Conservation Areas. • Protection for wildlife parts and products omitted from <i>Government Regulation No. 8/1999 on Wild Flora and Fauna Exploitation</i>. • No prohibition on possession of species obtained using destructive fishing equipment or techniques. • Fishing allowed with a permit within conservation zones under <i>Government Regulation No. 60</i> (2007). • <i>Regulation of the Minister of Forestry No. 447</i> (2003) allows collection of wildlife, including protected and CITES-listed species, from nature as long as not in protected areas. • No requirements for TEDs or minimum mesh sizes. • Under <i>Regulation of the Minister of Marine Affairs and Fisheries No. 04</i> (2010), CITES Appendix-I species may be traded if bred in captivity and of at least the second generation, or of the first generation if they belong to a species allowed by the Minister. Could enable laundering of wild-caught specimens. • Penalties for mistreating animals in trade low under <i>Penal Code</i>. • Some regulations impose only administrative sanctions and/or do not specify sanctions. • No provisions to apply penalties to corporations or managers under <i>Conservation of Living Resources and their Ecosystems Act</i>, <i>Government Regulation No. 8</i> (1999), <i>Law on the Sea</i> and <i>Law on Coastal Areas and Small Isles</i>. • No penalisation of accomplices. • Provincial legislation regarding marine wildlife protection may not be harmonised across the country or with Ministerial Regulations. • Permission for some protected wildlife of the first or second generation bred in captivity to be traded, creating loopholes for trade. • No single list of protected species that covers all CITES- and CMS-listed species.

Lao People's Democratic Republic

Lao PDR is landlocked and there is little protection for marine wildlife in this country. A handful of laws, including Lao PDR's main wildlife protection legislation, the Wildlife and Aquatic Law (2007), the Customs Law (2005) and several ministry Decrees, contain provisions that offer limited protection to marine species in transit in the country. The most significant problem in the legislation is a lack of coverage for endangered species that are not native to Lao PDR but that may still be imported into, transited through and traded within the country. Strengths and weaknesses of Lao PDR's legislation with regard to marine wildlife protection are summarised below.

Strengths	Weaknesses
<ul style="list-style-type: none"> • Permits required for import, export and transit of CITES-listed species. • Wildlife must be kept in adequate facilities. Prohibited to damage or torment wildlife. • Increased fines for repeat offences under <i>Wildlife and Aquatic Law</i> and <i>Customs Law</i>. • <i>Wildlife and Aquatic Law</i> prohibits officials from abusing authority for personal benefit, falsifying documents, or owning or operating businesses related to wildlife. Members of the public explicitly prohibited from bribing officials. • <i>Wildlife and Aquatic Law</i> prohibits officials from acting irresponsibly with regard to their duties. • <i>Customs Law</i> provides rewards for information leading to arrests. 	<ul style="list-style-type: none"> • Laws general and broad. • Lists of protected species based on species native to Lao PDR and therefore exclude most marine species. • No measure prohibiting possession or sale of CITES-listed species within the country. • Requirement under <i>Wildlife and Aquatic Law</i> for all use of wildlife to comply with CITES not specific enough to guide enforcement. • <i>Wildlife and Aquatic Law</i> and <i>MAF Regulation No. 0360 (2003)</i> include protection for wildlife parts in some measures but not others. • Permission for protected wildlife of the first or second generation bred in captivity to be traded creates a loophole for trade. • Low penalties under <i>Wildlife and Aquatic Law</i> and <i>Customs Law</i>. • Penalty ranges under <i>Wildlife and Aquatic Law</i> too large (usually three months to five years), and no guidelines on where penalties should fall within the range. • Article 92 of <i>Customs Law</i> provides penalties of education, warning, compensation and criminal punishment, but does not specify severity or conditions on which these may be imposed. • <i>Wildlife and Aquatic Law</i> bases fines on amount of damage caused, which may not be enough to deter offences. Not clear how penalties calculated for offences that do not directly damage wildlife or habitat. • Lack of provision of enforcement powers except in <i>Customs Law</i>. • <i>Wildlife and Aquatic Law</i> does not specify government department or ministry responsible for implementation. • Import and export of wildlife is covered by <i>Wildlife and Aquatic Law</i> and <i>MAF Regulations No. 0076</i> and <i>No. 0360</i> with similar but not identical lists of protected species. • Difficulty in identifying regulations. • Unclear (general) repealing clauses in most legislation.

Malaysia

Legislation to protect marine wildlife in Malaysia consists of a mixture of federal and state law. Malaysia's primary federal wildlife protection legislation, the Wildlife Conservation Act (2010), does not cover marine species and is not included in this report. The states of Sabah and Sarawak have their own wildlife protection legislation (the Wildlife Conservation Enactment (1997) and the Wildlife Protection Ordinance (1998)), which do cover marine wildlife. Federal legislation governs the import and export of wildlife through Malaysia's main CITES-implementing legislation, the International Trade in Endangered Species Act (2008), and the Customs Act (1967). National Parks are also regulated federally, except in Sabah and Sarawak, by the National Parks Act (1980). In Sabah and Sarawak protected areas are covered by the Parks Enactment (1984) and the National Parks and Nature Reserves Ordinance (1998), respectively. Both Sabah and Sarawak have also passed laws on biodiversity (the Sabah Biodiversity Enactment (2000) and Sarawak Biodiversity Ordinance (1997)) which govern the collection of natural resources.

The federal Fisheries Act (1985) applies to marine fisheries throughout Malaysia, but excludes turtles from its scope. However, most states have adopted the Fisheries Act. Measures to prevent mistreatment of animals are provided in the federal Wildlife Protection Act (2015), Sabah's Wildlife Protection Enactment (2015), and other legislation.

Malaysia's wildlife protection legislation is generally comprehensive and provides a solid framework to protect marine wildlife. On the other hand, many of the measures to protect wildlife within Malaysia do not apply to marine species, and the mixture of federal and state legislation to protect wildlife can create gaps, inconsistencies and overlap. Strengths and weaknesses of Malaysia's legislation with regard to marine wildlife protection are summarised below.

Strengths	Weaknesses
<ul style="list-style-type: none"> • Protected status for all CITES-listed species. • Coverage for parts and products. • Detailed list of prohibited activities, including import and export of protected species without a licence, possession of fish obtained illegally, and fishing and other activities within marine parks. • Prohibition of fishing with electricity, explosives and poisons. • Requirement for live aquatic mammals, turtles, Whale Shark and some species of clam that have been caught accidentally to be released and dead specimens reported. • Prohibited on fishing in marine parks. • Permits and CITES documentation required for import and export of scheduled species. <i>Customs Act</i> requires permits for import and export of all animals and products. • Fishing licences required by local and foreign vessels. Licences required for hunting in Sabah and Sarawak, collection of turtles and eggs in Kedah and Terengganu. • Requirement for registry of fishing licences and permits and to record catch data if intended for export. • Management Authority may (but not required to) order confiscated specimens to be returned to their home countries. • Regulations provide standards for rescue centres. • Potential to prohibit mistreatment of wildlife. • Strong penalties for serious offences under <i>International Trade in Endangered Species Act</i> and in Sabah. • Specification of maximum and minimum sentences for some offences under <i>Customs Act</i> and Sabah's <i>Wildlife Conservation Enactment</i>. • Penalties doubled for repeat offences under Sabah's <i>Wildlife Conservation Enactment</i> and <i>Parks Enactment</i> and Sarawak's <i>Wildlife Protection Ordinance</i>. Under <i>Wildlife Conservation Enactment</i>, use of a firearm and more than two accomplices in an offence results in doubled penalties. • Penalisation of accomplices under most legislation. • Managers of corporations responsible for offences committed by corporations under most legislation. For offences involving foreign vessels, higher fines for master and owner, who are liable for offences by crew, under <i>Fisheries Act</i>. • Low burden of proof for some offences under <i>Fisheries Act</i>, <i>Customs Act</i>, Sabah's <i>Wildlife Conservation Enactment</i>, Sarawak's <i>Wildlife Protection Ordinance</i>, Kedah's <i>Turtles Enactment</i> and Terengganu's <i>Turtles Enactment</i>. • Rewards for information leading to arrests and seizures under <i>International Trade in Endangered Species Act</i>, <i>Customs Act</i> and Sarawak's <i>Wildlife Protection Ordinance</i>. • All legislation states which ministry, department or other body is in charge of implementation. 	<ul style="list-style-type: none"> • <i>National Parks Act</i> lacks detail, including offences and penalties. • <i>Fisheries Act</i> lacks detailed requirements on permitted equipment, by-catch mitigation, prohibited areas, closed seasons and other issues for protecting marine wildlife. • Minister or director responsible for implementation of <i>International Trade in Endangered Species Act</i>, <i>Fisheries Act</i>, and Sabah's <i>Wildlife Conservation Enactment</i> may exempt anyone or any species from any or all provisions. • MA may return specimens, equipment and evidence seized under <i>International Trade in Endangered Species Act</i> without specifying conditions. • Marine species not covered by <i>Wildlife Protection Act</i> (2010). • <i>Fisheries Act</i> does not cover turtles, and many states lack measures to protect turtles. • No prohibition on indiscriminate fishing methods such as types of trawling or use of small mesh nets. • No requirement for TEDs. • No requirement for seized wildlife to be housed in a rescue centre, repatriated, or released into the wild. • No requirement for licences to fish outside EEZ or cooperate with international laws or laws of other states. • Mandatory collection of fisheries data only for crew nationality. • Low penalties for some offences under <i>Fisheries Act</i>, Sarawak's <i>Wildlife Protection Ordinance</i>, <i>National Parks and Nature Reserves Ordinance</i>, and <i>Biodiversity Ordinance</i>; <i>Parks Corporation Enactments</i> in peninsular states; Kedah's and Terengganu's <i>Turtle Enactments</i>. • Maximum fines for violations under <i>International Trade in Endangered Species Act</i> involving individual specimens are high, but maximum total fine only 10 times this amount. • Fixed penalties under Sarawak's <i>Wildlife Protection Ordinance</i>. • Most legislation allows some offences to be compounded by low fines. <i>Animal Welfare Act</i> does not specify amount of administrative fines. • Potential for gaps, inconsistencies and overlap created by omission of marine wildlife from <i>Wildlife Protection Act</i> (2010) and division of responsibility for marine wildlife and fisheries between federal and state governments. • <i>International Trade in Endangered Species Act</i>, <i>Fisheries Act</i>, and <i>Parks Enactments</i> of Johor, Perak and Selangor allow officials to return seized items if undefined "sufficient security" provided.

Myanmar

Four main laws protect wildlife in Myanmar: the Protection of Wildlife and Conservation of Natural Areas Law No. 6 (1994), the Myanmar Marine Fisheries Law No. 9 (1990), the Law Relating to the Fishing Rights of Foreign Fishing Vessels No. 11 (1989) and the Export and Import Law No. 17 (2012). The list of protected wildlife species in Myanmar is provided by Forest Department Notification No. 583 (1994). Several other laws and ministry notifications provide additional measures that protect, or could be adapted to protect, marine wildlife.

In general, wildlife protection laws in Myanmar are too brief and general, and several laws allow considerable latitude to officials in implementing, and in some cases overturning, their provisions. Despite its shortcomings, Myanmar's legislation includes several satisfactory aspects with regard to the protection of marine wildlife. Strengths and weaknesses of Myanmar's legislation with regard to marine wildlife protection are summarised below.

Strengths	Weaknesses
<ul style="list-style-type: none"> • Protected status for all CITES-listed marine species within Myanmar. • Prohibition on use of poisons and explosives to collect natural resources. Other types of destructive or indiscriminate equipment may also be prohibited in legislation we were unable to obtain. • Requirements for TEDs and release of CITES-listed species caught accidentally. Prohibition on jettisoning damaged gear (FAO, 2006; Holmes <i>et al.</i> 2014). • Specification of closed seasons and areas. • Licences required to fish. Permit required to collect protected species for research. • Basic requirements for vessel registration and logbooks. • Prohibition on mistreatment of mammals in captivity. • Strong maximum custodial sentences under fisheries laws, <i>Protection of Wildlife and Conservation of Natural Areas Law</i>. • Maximum and minimum sentences under <i>Law Relating to the Fishing Rights of Foreign Vessels</i>. • Higher penalties for ships' masters for many offences under <i>Law Relating to the Fishing Rights of Foreign Vessels</i>. • Penalisation of accomplices under fisheries laws and <i>Export and Import Law</i>. • Explicit criminalisation of involvement of officials in wildlife crime under fisheries laws and <i>Forest Law</i>. • Explicit criminalisation of failure to investigate wildlife offences under fisheries laws. • Burden of proof on the accused for some offences under fisheries laws and <i>Protection of Wildlife and Conservation of Natural Areas Law</i>. • Strong enforcement powers specified in detail under fisheries laws and <i>Protection of Wildlife and Conservation of Natural Areas Law</i>. 	<ul style="list-style-type: none"> • Most laws brief and general, details left to ministry regulations or discretion of officials. • Excessive discretion for officials under Protection of Wildlife and Conservation of Natural Areas Law: even killing Completely Protected animals not prohibited with ministerial approval. • Fisheries laws allow Director General of DoF to overrule penalties imposed by courts to return confiscated vessels and equipment and allow resumption of fishing. • Fisheries laws leave it to Director General of DoF to determine conditions for licences and revoke, suspend or cancel licences. • Protection of Wildlife and Conservation of Natural Areas Law includes exemptions to prohibition on possessing Protected wild animal or parts if possessed as a souvenir or part of traditional dress and, in the case of Normally and Seasonally Protected wild animals, for use as a drug. • Protection of Wildlife and Conservation of Natural Areas Law permits raising Normally or Seasonally Protected wild animals commercially, as a hobby, or for "traditional custom," which is not defined. • Limited protection for species originating outside the country. • No requirement for licences to fish outside EEZ or cooperate with international laws or laws of other states. • No detailed requirements for logbooks or for registration and compliance history to be recorded. • Low fines. Fines may be imposed instead of custodial sentences. Export and Import Law does not specify amounts of fines. • Maximum penalties only under all legislation except Law Relating to the Fishing Rights of Foreign Fishing Vessels. • A department that has captured a Completely Protected animal for research purposes may possess part of that animal as a souvenir. • Officials may sell confiscated wildlife and trophies, which could allow laundering specimens and/or encourage officials to get involved in wildlife trade. • Difficulty obtaining regulations beneath the level of laws.

Philippines

In the Philippines, the most important laws relating to marine wildlife conservation are the National Integrated Protected Areas System (NIPAS) Act (1992), the Wildlife Resources Conservation and Protection Act (2001) and the Philippine Fisheries Code (1998, amended 2014). The Strategic Plan for Palawan Act (1992) and the Tubbataha Reefs Natural Park Act (2009) govern the management of specific protected areas. Several departmental Administrative Orders are also relevant to marine wildlife.

There is considerable variation in the adequacy of the laws considered for this report. The Fisheries Code includes clear, comprehensive provisions and strong penalties for violations relating to fisheries activities, and the Wildlife Resources Conservation and Protection Act prohibits and penalises a large range of activities related to marine wildlife, often with strong penalties. However, the NIPAS Act is broad and vague. As a whole, the legislative framework in the Philippines includes loopholes that could allow the collection and trade of wildlife, particularly in light of the discretion the laws grant senior officials. Strengths and weaknesses of the Philippines' legislation with regard to marine wildlife protection are summarised below.

Strengths	Weaknesses
<ul style="list-style-type: none"> • Protected status for all CITES-listed species. • Detailed lists of prohibited activities under <i>Fisheries Code</i> and <i>Wildlife Resources Conservation and Protection Act</i>. • Prohibition on fishing with explosives, electricity, poisons, mesh sizes smaller than specified by fisheries regulations, and any methods that damage reefs or marine habitat. • Department of Agriculture must declare closed seasons and areas where needed to protect endangered species. At least 15% of coastal areas in each municipality must be reserved as fish sanctuaries. • Licences required for all fisheries activities in Philippine waters. • Detailed requirements for logbooks and record of vessels licenced to fish. • Confiscated wildlife must be housed in a rescue centre and confiscated wildlife returned to original habitat. • Strong penalties for some offences under <i>Fisheries Code</i>, <i>TRNP Act</i>, <i>Wildlife Resources Conservation and Protection Act</i> and <i>NIPAS Act</i>. • Specification of maximum and minimum sentences. • Managers of corporations responsible for actions of employees under <i>NIPAS Act</i>. • Penalties for many offences higher for large-scale and commercial fishing, or higher for, or only imposed on, owner and highest officers of the vessel under <i>Fisheries Code</i>. • Fines under <i>Wildlife Resources Conservation and Protection Act</i>, <i>Fisheries Code</i> and FAOs increased by 10% every three years. • <i>Fisheries Code</i> allows civilians to sue officials for neglect of duty. • Discovery of fishing vessel in prohibited area or of prohibited equipment is grounds for assumption of guilt under <i>Fisheries Code</i> and <i>TRNP Act</i>. 	<ul style="list-style-type: none"> • <i>NIPAS Act</i> lacks details to regulate activities in protected areas and provides vague measures. • Definition of protected areas under <i>NIPAS Act</i> is vague and could allow activities that damage biodiversity. • <i>Strategic Plan for Palawan Act</i> vague on how “multiple use zones” should be regulated to serve as buffers for the protected areas. • <i>NIPAS Act</i> does not provide guidelines on granting permits and allows officials discretion in determining administrative fines. • <i>Wildlife Resources Conservation and Protection Act</i> allows discretion to officials in determining which wildlife-related activities are permitted. • Lack of effective control on collecting protected species. • No requirement to use TEDs or release wildlife captured accidentally, except Whale Sharks, manta rays and cetaceans. • No requirements for vessel registration information to include flagging and compliance history. • No mention of returning non-native confiscated wildlife to country of origin. • Low penalties for some offences under <i>Wildlife Resources Conservation and Protection Act</i> and most FAOs. • Vague specification of enforcement powers under <i>Wildlife Resources Conservation and Protection Act</i> and <i>Fisheries Code</i>. • <i>NIPAS Act</i> conflicts with <i>Indigenous Peoples’ Rights Act</i> over control over ancestral lands (Lim and Salzer, 2011). • <i>NIPAS Act</i> is vague about boundaries of buffer zones, making it unclear where its measures apply. • Lack of clarity about which agency is responsible for issuing permits for hunting wildlife. • Overlap between <i>NIPAS Act</i>, <i>Wildlife Resources Conservation and Protection Act</i> and <i>Fisheries Code</i>. • Local legislative bodies may pass ordinances with lower penalties for offences than national laws, allowing forum shopping. • <i>NIPAS Act</i> shows terrestrial bias. • <i>Fisheries Code</i> promotes offshore fishing, which could conflict with sustainable management of resources in these areas.

Singapore

Singapore's Endangered Species (Import and Export) Act (2006, revised 2008) implements CITES with regard to international trade in wildlife, while the Wild Animals and Birds Act (1965, revised 2000) regulates the collection, possession and trade of wildlife within Singapore, and the Animals and Birds Act (1965, revised 2002) prohibits animal cruelty. The Fisheries Act (1966, revised 2002) controls fisheries activities within Singaporean waters and of Singapore nationals and vessels outside territorial waters. Subsidiary regulations that help implement these laws. The Parks and Trees Act (2005, revised 2006) contains a few provisions relevant to the limited protected areas in Singapore that involve marine and coastal areas.

Singapore's measures to regulate international trade are detailed, clear and generally strong; on the other hand, controls on fisheries activities and marine natural resource protection, which are provided by the Fisheries Act, are less developed. Strengths and weaknesses of Singapore's legislation with regard to marine wildlife protection are summarised below.

Strengths	Weaknesses
<ul style="list-style-type: none"> • Protected status for all CITES-listed species. • Prohibition on fishing with explosives and poisons and all trawling. • Minister of National Development authorised (but not required) to declare closed seasons. • Permits required for import, export, killing, taking, possessing, and offering for sale of wildlife. • Licences required for fishing in Singapore waters and for Singapore vessels and nationals fishing outside these waters. • Owners of vehicles used to illegally bring wildlife into the country required to return wildlife to point of departure if requested. • Prohibition of mistreatment of wildlife in captivity. • Strong fines for some wildlife offences. • Increased penalties for repeat offences under <i>Animals and Birds Act</i>. • Officers of corporations responsible for activities of subordinates under <i>Endangered Species Act</i>, <i>Fisheries Act</i> and <i>Parks and Trees Act</i>. • Penalisation of accomplices under all legislation except <i>Parks and Trees Act</i>. • Possession of explosives, poisons or stunned fish is evidence of having used prohibited fishing methods. Onus on those in possession of unlicensed animals to establish they are not the owners under <i>Wild Animals (Licensing) Order</i> and <i>Animals and Birds Act</i>. • All legislation clearly provides strong enforcement powers. 	<ul style="list-style-type: none"> • <i>Fisheries Act</i> lacks measures to consider conservation issues when licensing. • <i>Fisheries Act</i> does not prohibit harming wildlife or ecosystems or fishing with electricity. • No measures to mitigate by-catch. • No requirement for vessels fishing outside Singaporean waters to or cooperate with international laws or laws of other states. • Confiscated specimens may be, but not required to be, returned to place from which they were brought to Singapore. Not required to be returned to country of origin. Housed in appropriate rescue centres or released. • No requirement for logbooks. No requirement for vessel registration to include flagging and compliance history. • Low custodial sentences for wildlife offences. • Low fines for some offences, including killing, taking, keeping or selling wild animals without a licence. • Most offences may be compounded by relatively low fines. • Fines under <i>Endangered Species (Import and Export) Act</i> capped at 10 times the amount for an offence involving one specimen.

Thailand

Thailand's main wildlife protection legislation is the Wild Animal Reservation and Protection Act (WARPA) B.E. 2557 (2014). The Royal Ordinance on Fisheries B.E. 2558 (2015) and the Promotion of Marine and Coastal Resources Management Act B.E. 2558 (2015) provide measures for the protection and management of marine wildlife and marine and coastal and resources. The National Park Act B.E. 2504 (1961, amended 1989) and National Reserved Forests Act B.E. 2528 (1985), although primarily aimed at terrestrial areas, provide some protection for nesting marine turtles through their potential to create protected areas of coast. Lastly, the Customs Act B.E. 2557 (2015) and the Export and Import of Goods Act B.E. 2558 (2015) provide regulations that apply to wildlife species the import and export of which is prohibited or restricted. Ministry and departmental regulations also include measures to protect wildlife species considered in these report.

In general, the legislative framework in Thailand is reasonably strong with regard to marine wildlife protection, but lacks protection for a number of species and many penalties are insufficient as deterrents. Strengths and weaknesses of Thailand's legislation with regard to marine wildlife protection are summarised below.

Strengths	Weaknesses
<ul style="list-style-type: none"> • Detailed list of prohibited activities, including hunting protected wildlife, hunting wildlife within wildlife sanctuaries, importing and exporting protected wild animals without a permit, and possessing aquatic animals that have been obtained illegally. • Prohibition of fishing with noxious substances, explosives, electricity and certain kinds of net and other equipment. • Requirement for use of TEDs in gulfs and bays and release of marine turtles and Dugong that have been captured accidentally. • Licences required to fish in Thai waters or for Thai vessels to fish outside Thai waters. • Detailed requirements for vessel registration and monitoring, logbooks, reporting of data and suspected illegal activities, including to RFMOs. • Prohibition on cruelty to domesticated animals could be extended to wildlife. • Owners and managers of vessels and corporations liable for penalties under WARPA, <i>Ordinance on Fisheries</i>, <i>Customs Act</i>, and <i>Promotion of Marine and Coastal Resources Management Act</i>. • Higher penalties for larger vessels for many offences under <i>Ordinance on Fisheries</i>. Only ships' masters penalised for some smuggling offences under <i>Customs Act</i>. • Burden of proof for establishing the legality of goods lies with owner under <i>Customs Act</i>. • Incentives for information and arrests for some offences under <i>Customs Act</i>. • All legislation clearly states which ministry responsible for implementation. • Enforcement powers specified in detail in <i>Ordinance on Fisheries</i> and <i>Customs Act</i>. WARPA, <i>Ordinance on Fisheries</i> and <i>National Reserved Forest Act</i> provide officials with powers of police officers. 	<ul style="list-style-type: none"> • Limited protection for Humphead Wrasse, seahorse, sea cucumber, rays, corals, sharks and cetaceans within Thailand. • WARPA's prohibition on shooting wild animals between sunset and sunrise hard to enforce. • No use of TEDs required outside gulfs and bays. Requirements to resuscitate and release accidentally captured wildlife only apply to marine turtles and Dugong. • Measures for maintenance of confiscated wildlife, release into the wild, or return to country of origin missing from WARPA. • Penalties for wildlife-related offences generally low. • Offences may be compounded under WARPA, <i>Customs Act</i> and <i>Ordinance on Fisheries</i>. • Penalties for subsidiary regulations unspecified or weak. • No penalisation of accomplices under WARPA. • WARPA allows that prohibitions on hunting wildlife do not apply for hunting for "reasonable cause," but does not define this term.

Viet Nam

The most important laws for marine wildlife protection in Viet Nam are the Law on Environmental Protection (2014), the Biodiversity Law (2008), the Law on Marine and Island Resources and Environment (2015), the Fisheries Law (2003) and the Law on Customs (2014). These provide the general framework for marine wildlife protection. The Vietnam Maritime Code (2015) and the Law on the Vietnamese Sea (2012) also include measures relevant to marine wildlife protection. These laws are implemented by numerous regulations issued by the Government, Prime Minister and ministries. Penalties for crimes and administrative violations are provided separately in The Penal Code (1999),¹ the Law on Handling of Administrative Violations (2012), and implementing regulations of the latter.

Viet Nam's legal system is confusing to navigate, with a proliferation of laws and implementing regulations at different levels, but as a whole the legislation prohibits and penalises activities harmful to marine wildlife, controls marine resource exploitation, and provides a solid framework to protect marine wildlife in trade. Strengths and weaknesses of Viet Nam's legislation with regard to marine wildlife protection are summarised below.

Strengths	Weaknesses
<ul style="list-style-type: none"> • Protected status for all CITES-listed species. • Detailed list of prohibited activities, including possession of destructive fishing gear, destruction of habitat, and trade, import and export of wildlife without a permit. • Prohibition on using mass killing equipment, explosives, poisons, electricity and other destructive fishing methods. • Ministry of Fisheries may (but not required to) proclaim closed seasons and areas. • Licences required for fishing vessels over half a ton. Permits required to exploit wildlife, collect protected wildlife for research, and import or export wildlife. • Requirement for vessels over half a ton to register and maintain a logbook. • Confiscated wildlife to be housed in rescue centres and eventually released into their natural habitat. • Specification of maximum and minimum sentences under <i>Penal Code</i> and <i>Law on Handling of Administrative Violations</i>. • Lists of aggravating and extenuating circumstances guide determination of penalties within a range on <i>Law on Handling of Administrative Violations</i>. Increased penalties under aggravating circumstances, including repeat offences, offences involving organised crime, abuse of power, and particularly serious consequences under <i>Penal Code</i>. <i>Decree on Administrative Sanction in Fisheries Field</i> provides increased penalties for crimes involving larger quantities of illegally collected wildlife or larger vessels. • Prohibition of abuse of power under <i>Law on Environmental Protection</i>, <i>Fisheries Law</i> and <i>Penal Code</i>. • <i>Law on Handling of Administrative Violations</i> prohibits persons tasked with sanctioning administrative violations from failing to do so or doing so improperly or too slowly. 	<ul style="list-style-type: none"> • No requirement to release marine wildlife that has been captured accidentally. • Lack of details for logbooks and vessel registration, particularly regarding vessel compliance history. • No requirement to return confiscated wildlife that originated outside Viet Nam to country of origin. • Penalties for wildlife offences lower than for other serious offences under 1999 <i>Penal Code</i>. • Low administrative penalties. • Penalties provided by 1999 <i>Penal Code</i> based on vague categories of crimes with "less serious" "serious" "very serious" and "particularly serious" consequences. • Extenuating circumstances allowing reduced sentences include outstanding contributions in production, work, combat or study: a subjective criterion that could be abused. • Fines may be postponed or waived for offenders with financial difficulties. While important to recognise extra burden of penalties on poor people, this measure could be abused. • Powers of enforcement agencies generally weak and not clearly specified. • Not always clear whether MONRE or MARD has jurisdiction. E.g., MARD and MONRE both responsible for issuing permits for import and export of wildlife. • Several different lists of protected wildlife in use, leading to confusion in enforcement and possibly contradictory measures. • <i>Law on Handling of Administrative Sanctions</i> explicitly places burden of proof with those enforcing the law rather than suspects. • <i>Fisheries Law</i> promotes offshore fishing, which could conflict with sustainable management of fisheries resources in offshore areas. • Large number of regulations and issuing bodies leads to difficulty identifying active regulations.

¹ The 1999 Penal Code is due to be replaced but, owing to problems with the new 2015 Penal Code, the latter will not enter into force until amending legislation has been passed.

Recommendations

Most ASEAN countries have a viable legislative framework for controlling trade in marine wildlife, with at least some measures to regulate marine resource exploitation, MPAs, international trade, and domestic collection, trade and possession of some or all species considered in this report and to investigate and penalise infractions. Below, we summarise general recommendations for ASEAN countries to improve the legislative regime, protect marine wildlife from unsustainable and illegal trade, and target penalties to those who benefit the most from wildlife crime. Detailed lists of specific recommendations for each country are provided at the end of the report.

Recommendations for the legislative regime

States should adopt international agreements which they have not yet signed or ratified, particularly CMS, UNFSA, the FAO Compliance Agreement and the IOSEA Marine Turtle MoU. States that have EEZs covered by convention areas of RFMOs or whose vessels or nationals fish for species managed by these organisations and that have not yet done so should join these organisations.

Signatories of the IOSEA Marine Turtle MoU should consider amending the MoU and attached management plan to make these legally binding.

Areas of overlap between wildlife protection, fisheries, and protected areas legislation should be reviewed and conflicting measures harmonised. In countries where there is a proliferation of laws and regulations for wildlife protection and management, i.e. Cambodia, Indonesia, Myanmar and Viet Nam, legislation should be consolidated. Repeals should be clarified.

We recommend that ministries that have not already done so create and maintain on their websites publicly available comprehensive online banks of the legislation for which they are responsible and that is in force, in order to improve access to regulations.

Clarify jurisdiction where it is unclear which department is responsible for a certain area.

Recommendations to protect marine wildlife from unsustainable trade

Provide protected status for all species protected by international agreements. The simplest way to ensure all CITES-listed species, including non-native species, are protected is to use the CITES Appendices as the protected species list. Coverage for species listed on CMS but not on CITES or on other international agreements could be added.

Include wildlife parts and products in prohibitions on possession, trade, import and export of wildlife.

Ensure legislation clearly prohibits and requires licences for a comprehensive list of activities that can harm marine wildlife, including collection, possession, transportation, trade, export and import.

Require by-catch mitigation measures, including minimum mesh sizes, prohibitions on destructive and indiscriminate fishing equipment such as explosives, electricity and poisons, the use of TEDs, and the resuscitation and release of wildlife that has been captured accidentally.

Ban the use of large-scale pelagic driftnets in accordance with the UN Driftnet Moratorium.

Require the specification of closed seasons and areas when necessary to prevent over-exploitation.

Provide detailed requirements for vessel registration and logbooks.

Fisheries legislation should include clauses requiring flagged vessels and nationals fishing outside state waters to comply with international law and the laws and conservation and management measures of RFMOs and relevant coastal states, and enforcement authorities in each country to investigate violations of these laws by their flagged vessels and nationals.

Require ex situ conservation measures that comply with CITES and CBD including requiring confiscated specimens to be housed in adequately equipped wildlife rescue centres and, where possible, released into the wild or returned to their country of origin.

Require that wildlife be properly cared for during transport and trade by creating animal welfare legislation that covers wildlife, adding wildlife to existing animal welfare legislation, or adding these measures to wildlife protection legislation.

Recommendations for penalties

We recommend that measures to increase deterrent effectiveness focus primarily on targeting penalties to those who profit most from wildlife crime and facilitating the investigation and prosecution of offences, rather than simply increasing penalties.

We recommend integrating measures to target penalties to those who profit most from wildlife crime in legislation, including penalising only or more strongly owners, managers and senior crew of vessels and corporations; making officers of corporations and owners of vessels liable for the actions of their employees unless they can demonstrate ignorance of the offence and that they took adequate measures to prevent the offence; imposing higher penalties on corporations and larger operations; and linking penalties to the market value or number of specimens of wildlife involved in the offence.

Provide for increased penalties under aggravating circumstances, including repeat offences, offences committed as part of an organised crime network (e.g. where more than two accomplices are convicted of the same offence), and offences that involve abuse of power.

Consider specifying both maximum and minimum penalties. Providing a range of penalties communicates expectations for sentencing to judges and may be useful in countries where wildlife crimes are seen as a low priority or high levels of corruption increase the risk of offenders being able to secure more lenient sentences. Minimum sentences can still allow flexibility to penalise less serious crimes less harshly if they are used with other measures recommended by this report such as lists of extenuating circumstances to be considered when sentencing.

Provide guidelines on where penalties should fall within a range, for example by listing aggravating and extenuating circumstances to be considered when sentencing, or by providing separate penalty ranges for minor, moderate and serious offences and guidelines for determining which range to use.

Strengthen penalties for wildlife offences. In order to be applied fairly, increases to penalties should be applied in combination with measures that target penalties to those who profit most from wildlife crime, allow penalties to be increased under aggravating circumstances and reduced under extenuating circumstances, and specify factors to consider when allocating a penalty within a range.

Consider removing the option to compound penalties for more serious offences.

Increase fines automatically over time to maintain deterrent effectiveness.

Penalise accomplices.

Explicitly criminalise involvement of officials in wildlife crime and consider penalising failure to investigate wildlife offences and/or offering incentives for information and arrests.

All legislation should clearly provide detailed enforcement powers for its implementing officers.

INTRODUCTION

The image is a composite of two photographs. The left half shows a sea turtle, likely a hawksbill, resting on a light-colored, pebbly surface. The right half shows a bird, possibly a tern, perched on a sandy beach. The background of the entire image is a soft, out-of-focus natural setting.

The Association of Southeast Asian Nations (ASEAN) is made up of 10 countries: Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic (Lao PDR), Malaysia, Myanmar, Philippines, Singapore, Thailand and Viet Nam. ASEAN has a total population of around 6.2 billion, a land area of almost 4.5 million km² (ASEAN Secretariat, 2015), combined oceans of over 10.5 million km² (Cheung *et al.*, 2002; SEAFDEC, 2009) and coastline of around 173 000 km (ASEAN Centre for Biodiversity, 2010). ASEAN oceans include almost 70 000 km² of coral reefs, constituting 27% of the world's reefs, and some of the most extensive areas of mangrove and seagrass in the world (Burke *et al.*, 2011).

All of the ASEAN countries, with the exception of land-locked Lao PDR, are rich in marine biodiversity, with the waters around the southern Philippines and central Indonesia containing the highest levels of marine biodiversity in the world (Burke *et al.*, 2011). The region is home to 18% of plant and animal species that have been assessed by the International Union for the Conservation of Nature (IUCN) (ASEAN Centre for Biodiversity, 2010), including six of the world's seven species of marine turtles, Dugong *Dugong dugon* and many species of cetaceans, sharks, rays *Mobulidae* spp., seahorses *Hippocampus* spp., sea cucumbers *Holothuroidea* spp. and corals.

ASEAN contains four of the world's 35 biodiversity hotspots: the Philippines, Sundaland, Wallacea and the Indo-Burma area (Conservation International, 2016). The rates of coral reef and mangrove loss in Southeast Asia are the highest in the world (ASEAN Centre for Biodiversity, 2010); around 95% of reefs in the region are at risk from local threats posed largely by overfishing, destructive fishing and coastal development (Burke *et al.*, 2011).

Many species of marine wildlife are under threat in Southeast Asia, including from trade. Demand for marine wildlife is high from markets within the region and further afield, particularly in East Asia. Burke *et al.* (2011) note that demand from the latter encourages illegal fishing even in remote areas for items such as shark fin, sea cucumbers and live reef fish.

Attempts to protect marine resources in the region involve a combination of approaches including protected areas, national legislation and international treaties and conventions. Each of the ASEAN countries has passed national legislation designed to provide wildlife protection, but provisions, penalties and enforcement effectiveness vary in each country. Several countries, including Cambodia, the Philippines, Singapore and Viet Nam, have recently passed updated and improved wildlife protection and/or fisheries legislation; however, loopholes and weaknesses remain, while in many cases penalties are inadequate to act as a deterrent and in some cases legislation is too complex or, conversely, too brief and undeveloped, to effectively conserve and manage marine wildlife.

This report reviews international and national legislation relating to the trade and regulation of marine wildlife species threatened by trade in ASEAN. The first part of the report identifies global and regional treaties and conventions relevant to marine wildlife conservation in ASEAN and summarises the measures each ASEAN country is obliged to take in order to uphold its international commitments. This section of the report also includes information on regional partnerships that contribute to the framework for marine wildlife conservation and management in ASEAN. The second part of the report provides information on national legislation relating to marine wildlife in each ASEAN country. Summaries of legislation in each country include information on conservation and management measures, prohibited activities and penalties for infractions, licensing requirements for marine wildlife collection and trade, enforcement powers and agencies responsible for implementing the legislation. Subsequently, the Discussion section of the review identifies weaknesses and strengths in each country's legislation as well as patterns of strengths and weaknesses in legislation across the ASEAN region. Recommendations for improving the legislative framework are provided in the final section of the report.

BACKGROUND

Species considered in this report

This report considers legislation within ASEAN countries to conserve and manage marine species that have a higher vulnerability to wildlife trade-related activities in the region, including Dugong, various species of cetaceans, marine turtles, sharks, rays, seahorses, Humphead Wrasse *Cheilinus undulates*, sea cucumbers, coral, and giant clams Tridacnidae spp.²

This section of the report briefly provides information on these species and the major threats they face, to which international treaties and national legislation should be designed to respond. An overview of the listings of each species on the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the Convention on the Conservation of Migratory Species of Wild Animals (CMS) and their IUCN assessments is provided in Appendix I of this report.

² Trade involving ASEAN countries as sources, consumers or places of transit has been identified as a potential threat to Dugong (Lee and Nijman, 2015; Nijman and Nekaris, 2014; Rajamani *et al.*, 2006), species of cetaceans, marine turtles (IOSEA MoU and WWF, undated; Lam *et al.*, 2011; Stiles, 2008; WWF, 2006), sharks and rays (Bräutigam *et al.*, 2015; Lack and Sant, 2012; Mundy-Taylor and Crook, 2013), seahorses (Roe, 2008), Humphead Wrasse (IUCN *et al.*, 2004; Wu and Savody de Mitcheson, 2016), sea cucumbers (Purcell *et al.*, 2012; To and Shea, 2012; Toral-Granda and Lovatelli, 2008) and coral (Roe, 2008) and giant clams (Larson, 2016).

Marine turtles

Marine turtles are migratory reptiles found in all oceans except polar regions but predominantly in tropical waters. There are seven species of marine turtle, of which six are found in Southeast Asia: Leatherback *Dermochelys coriacea*, Green *Chelonia mydas*, Loggerhead *Caretta caretta*, Hawksbill *Eretmochelys imbricata*, Flat-backed *Natator depressus* and Olive Ridley *Lepidochelys olivacea*. (The seventh species, Kemp's Ridley *L. kempii*, occurs in the Atlantic Ocean and the Gulf of Mexico.) Except the Flat-backed Turtle, which only nests in Australia but forages around southern Indonesia and Papua New Guinea (IUCN, undated a), these species are widely distributed in ASEAN, although often in small numbers (IUCN, undated b–f). Nesting areas are more restricted but are found for at least some species in Indonesia, Malaysia, Myanmar, the Philippines, Thailand and Viet Nam (IUCN, undated b–f). All species nest on sandy beaches, while adults migrate between feeding grounds, breeding areas and (in the case of females) nesting sites (Conservation International *et al.*, undated).

All seven species of marine turtle are listed in Appendix I of CITES and all except the Flat-backed Turtle on Appendices I and II of CMS; the Flat-backed Turtle is listed on Appendix II only. The IUCN Red List of Threatened Species has assessed Hawksbills and the West Pacific population³ of Leatherbacks as Critically Endangered, Green and Loggerhead Turtles as Endangered and the Olive Ridley as Vulnerable, and does not currently provide an assessment for the Flat-backed Turtle (IUCN, 2014).

Marine turtles are threatened by a number of human activities, most importantly collection of eggs and hunting of adults, usually for food, and accidental entanglement in fishing gear (Wallace *et al.*, 2011). Other threats include habitat degradation and fishing with dynamite and poisons such as cyanide (Seminoff, 2004; Wallace *et al.*, 2013). Hawksbill Turtles are also hunted for their shells, which are used to make tortoiseshell. Despite prohibitions on international trade in tortoiseshell, hunting for this purpose is thought to be a significant threat to these turtles in Asia in particular (Mortimer and Donnelly, 2008; Stiles, 2008) and Hawksbills may be especially at risk as they migrate into Indonesian waters (IUCN, undated b).

Dugong

The Dugong, a marine mammal found in coastal waters in the Indian Ocean and western Pacific, inhabits and feeds on seagrass beds, which occur in shallow areas, often surrounded by mangroves. Threats include habitat loss and degradation, deliberate capture, primarily for meat, and accidental entanglement (Marsh and Sobotzick, 2015). Dugongs are long-lived and slow to breed (WWF, 2016), which increases the vulnerability of wild populations to the loss of individuals. Dugongs are listed on CITES Appendix I and CMS Appendix II, and have been assessed by the IUCN as Vulnerable.

Cetaceans

Cetaceans are a group of marine mammals comprising whales, dolphins and porpoises, of which many species are found in ASEAN waters. Several species are listed on CITES Appendix I and all others on Appendix II. Populations of cetaceans are also listed on Appendix I, II or both of CMS, and Annex I of the United Nations Convention on the Law of the Sea (UNCLOS) lists many cetacean species that require international coordination for conservation and management (see Appendix I of this report). The IUCN lists several species as Endangered, Vulnerable or Threatened.

³ The Leatherback species as a whole is assessed by the IUCN as Vulnerable (IUCN, undated d).

A number of cetaceans are or have been exploited deliberately in Southeast Asia; however, hunting these species is now prohibited or restricted and the main threats to cetaceans in ASEAN waters, particularly to dolphins and porpoises, are thought to be accidental entanglement and habitat loss and degradation (Hammond *et al.*, 2012; Reeves *et al.*, 2008; Taylor *et al.*, 2008). Vessel collisions are a cause of mortality in some species (Reeves *et al.*, 2008; Reilly *et al.*, 2013), and build-up of toxic chemicals and loss of prey are also concerns (Hammond *et al.*, 2012; Taylor *et al.*, 2013).

Sharks and rays

There are approximately 500 species of shark, of which eight species are listed in CITES Appendix II (with several more to be added in 2017), two on Appendix I of CMS and 13 on Appendix II of CMS. Several species and families are listed on Annex I of UNCLOS as highly migratory species that require international coordination for management and conservation. Many of these species are found in ASEAN waters (see Appendix I of this document for details).

Manta rays comprise two species: the Giant Manta Ray *Manta birostris* and Manta Ray *M. alfredi*, both of which are found in the waters of several ASEAN countries and are listed on Appendix II of CITES and Appendices I and II of CMS. Nine species of mobula ray are listed on Appendices I and II of CMS; of these, five are native to ASEAN waters. All *Mobula* spp. are to be added to CITES Appendix II in 2017 (CITES Secretariat, 2016). The IUCN Red List has assessed both species of manta ray as Vulnerable and three species of mobula ray as Near Threatened (IUCN, 2014).

The IUCN estimates that around 25% of shark, ray and chimaera species are threatened by targeted fishing and accidental capture (Dulvy *et al.*, 2014). Many species are particularly vulnerable to overexploitation because of their slow growth, late maturity and low rates of reproduction (IUCN Shark Specialist Group, 2007). Sharks are targeted for food, particularly for their fins, which may also be taken if sharks are captured accidentally (Clarke *et al.*, 2006; IUCN Shark Specialist Group, 2007). Rays are targeted for food and in some cases for traditional Chinese medicine (TCM) (Bizarro *et al.*, 2006; Clark *et al.*, 2006; Marshall *et al.*, 2011; White *et al.*, 2006).

Seahorses

Seahorses inhabit coral reefs, seagrass beds and mangroves, where they feed mainly on small crustaceans (Project Seahorse, 2016). *Hippocampus* spp. is listed on Appendix II of CITES, and around 40 species have been assessed for the IUCN Red List, of which one species is assessed as Endangered and eleven (including seven native to ASEAN waters) as Vulnerable (see Appendix I of this report for details). The main threats to seahorses are hunting for trade for traditional medicine and aquaria, incidental capture by other fisheries, particularly shrimp trawls, and habitat degradation (Project Seahorse, undated).

Humphead Wrasse

The Humphead Wrasse is a large reef-dwelling fish native to the Indo-Pacific. It is at risk from habitat degradation, destructive fishing practices and over-exploitation from hunting, mainly for food (Russell, 2004). As a long-lived species with a low rate of reproduction, it is especially vulnerable to unsustainable collection. It is listed on Appendix I of CITES and assessed as Endangered by the IUCN Red List.

Sea cucumbers

Sea cucumbers live throughout the world's oceans on the sea floor at all depths (Purcell *et al.*, 2012). In Southeast Asia and elsewhere, sea cucumbers are harvested for food and medicinal use, with the Food and Agriculture Organization (FAO) claiming that around 60 of the hundreds of known species are commonly harvested commercially, and that many more are collected in smaller

numbers or in limited locations (Purcell *et al.*, 2012). Some species may consequently be under pressure from over-exploitation (Purcell *et al.*, 2012; To and Shea, 2012; Toral-Granda and Lovatelli, 2008). Of the minority of Holothuroidea species that have been assessed for the IUCN Red List of Endangered Species, five are listed as Endangered and four are listed as Vulnerable. Many other species are listed as Data Deficient or have not yet been assessed. Only one species of sea cucumber, the Brown Sea Cucumber *Isostichopus fuscus*, which is not native to ASEAN waters, is listed by CITES on Appendix III (by Ecuador).

Corals

Coral reefs are diverse ecosystems, taking up less than 1% of the oceans' surface but home to around 25% of marine species (UNEP and WWF, 2003). They are formed from stony corals, which are polyps that build a hard skeleton (Mulhall, 2009) and thrive in warm, shallow, clear and sunny waters (Mulhall, 2009). Partly for this reason, Southeast Asia has almost a third of the world's total reefs (Burke *et al.*, 2011). Stony corals *Scleractinia* spp., along with other forms of coral and related species that grow on reefs, including fire corals *Millepora* spp. and lace corals *Stylasteridae* spp., are listed on Appendix II of CITES.

Coral reefs are under severe threat from a number of human activities, including collection of coral for minerals, jewellery and the aquarium trade, fishing with dynamite or poisons, pollution, coastal development, irresponsible tourism and climate change, especially ocean warming and acidification (Mulhall, 2009).

Trade-related threats and potential legislative responses

As the above summaries indicate, many of the species of wildlife considered in this report are under threat from similar activities by humans. Based on the above summaries, the main threats are:

Over-exploitation. Several of the species considered in this report are collected in unsustainable numbers. Marine turtles and their eggs are hunted for food and Hawksbill Turtles for their shells. Some species of sharks, rays, cetaceans and sea cucumbers and Humphead Wrasse are also hunted for food. Corals and seahorses are collected for aquaria. Seahorses and rays are hunted for TCM and corals are taken for use in jewellery.

Accidental capture. Accidental capture is a major threat to marine turtles, Dugong, sharks, rays, cetaceans and seahorses, usually through entanglement in various kinds of fishing net, although also in some cases involving longline fisheries.

Destructive fishing practices. In addition to nets that fish indiscriminately, fishing with dynamite, electricity and toxic substances threatens many species of marine wildlife, particularly marine turtles, corals and Humphead Wrasse.

Habitat loss and degradation. All marine species are ultimately threatened by pollution and climate change. Loss of and damage to habitat is of particular concern for coastal species and species that inhabit reefs, mangroves or seagrass beds, such as marine turtles, Dugong and corals.

In order to mitigate these threats, legislation needs to provide the following measures:

Prohibit or control trade in threatened species. Domestic and international trade in threatened species of marine wildlife should, depending on the species, be restricted, tightly controlled or prohibited. Species lists are integral to national implementation of these measures and should ideally reflect the CITES Appendices while allowing other species (for example those that are not listed by CITES but that are threatened within a particular region or country) to be added. Permits and controls should be applied to the import, export, re-export, introduction from the sea, possession, sale, offering for sale and exhibiting to the public of threatened species.

Prohibit or limit harvest of threatened species. The collection of threatened species of marine wildlife should be restricted or prohibited. In particular, species listed on Appendix I of CITES should only be taken from the wild under limited and controlled circumstances. Catch of species that can tolerate trade in limited numbers should be controlled (see next point). Species lists are crucial for applying laws prohibiting or restricting the collection of particular species of wildlife, and should reflect the CITES Appendices while allowing other species (for example those that are not on CITES but that are threatened within a particular region or country) to be added.

Control fishing/collection. Legislation should establish control over flagged vessels and nationals fishing within and outside national jurisdiction and foreign vessels fishing in national waters. Controls should include licences for fishing, conditions on licences, catch quotas, restrictions on fishing seasons and areas, restrictions on equipment, the establishment of marine protected areas (MPAs) and fish refuges, and requirements for vessel registration and logbooks that record catch and by-catch.

Reduce by-catch. Legislation should require the use of practices and equipment that mitigate harm to marine turtles and other non-target species by fisheries. This should include bans on certain types of nets and lines that are more likely to capture non-target species and requirements to use Turtle Excluder Devices (TEDs) and resuscitate and release captured but still living animals.

Prohibit destructive fishing methods. Legislation should prohibit types of fishing and fishing equipment that are harmful to turtles, reefs and other marine species, including dynamiting and the use of electricity, poisons, nets with small mesh sizes, large-scale pelagic driftnets and other methods.

Protect habitat, ecosystems and migratory corridors. Measures to protect habitat include creating MPAs, reducing pollution, and conducting impact assessments before beginning coastal construction or other activities that could harm marine habitats. Legislation should cover reefs, nesting beaches for turtles, seagrass beds, mangroves and migratory routes for sharks, rays, cetaceans and turtles, and should address the collection of sand and coral as well as removal of mangroves. However, this report focuses on legislative measures relating to the collection and trade of vulnerable marine wildlife species and does not consider measures to protect habitat or the environment more broadly.

The international treaties and agreements considered in the first part of the Results section of this report provide more detailed requirements for implementing the measures outlined just above, as well as other measures that can help protect and manage marine resources. These measures should be provided by national legislation in order to protect marine wildlife from unsustainable trade.

METHODOLOGY



Methods

Noting that this review does not include an exhaustive list of marine species, species were prioritised and selected for consideration in this report if they are listed on the Appendices of CITES, CMS or UNCLOS and are considered to be at risk from trade. The latter was determined on the basis of previous reports on wildlife trade conducted by TRAFFIC and other organisations and individuals (Bräutigam *et al.*, 2015; IUCN *et al.*, 2004; Lack and Sant, 2012; Lam *et al.*, 2011; Mundy-Taylor and Crook, 2013; Nijman and Nekaris, 2014; Purcell *et al.*, 2012; Rajamani *et al.*, 2006; Roe, 2008; Stiles, 2008; To and Shea, 2012; Toral-Granda and Lovatelli, 2008; Wu and Savody de Mitcheson, 2016; WWF, 2006; WWF, undated).

It was decided to also survey legislation relating to sea cucumbers although only one species is listed on Appendix III of CITES and none are listed on CMS or UNCLOS because of the IUCN Red List status of some species as Vulnerable, the extent of Southeast Asian trade in sea cucumbers, and concern that recent trade in these species may be unsustainable (Purcell *et al.*, 2012; To and Shea 2012; Toral-Granda and Lovatelli, Benchmarks for national legislation to protect marine wildlife were derived from the requirements of the international treaties and agreements considered for this report. The performance of each country's legislation is assessed in relation to all these benchmarks, not only the benchmarks drawn from the treaties to which that country is a signatory, because the purpose of the report is to make suggestions for improving legislation to protect and conserve wildlife and not just to measure the extent to which each country meets its legal obligations. However, Appendix II of this report, which tracks the performance of each country's legislation against the benchmarks, indicates which benchmarks are legally required for each country under its international obligations.

Relevant international conventions, treaties and agreements were identified using treaty databases including the UN Treaty Collection, Fishlex, Ecolex and the Socioeconomic Data and Applications Center (SEDAC) at Columbia University, New York. Agreements with a global scope and most regional agreements are readily available online in English. Bilateral agreements were more difficult to identify, and it is not guaranteed that all relevant bilateral agreements have been included here. The bilateral agreements discussed in this report were identified in four ways: (1) already known to the researchers; (2) using the treaty databases just mentioned; (3) mentioned in websites, articles and reports on fisheries and marine conservation efforts; and (4) searched on Google using the names of ASEAN countries and various combinations of the following search terms: "turtle," "Dugong," "whale," "shark," "coral," "dolphin," "wildlife," "agreement," "MoU," "memorandum of understanding," "treaty," "convention," "multilateral," "bilateral," "international" and "declaration."

Because of the wide scope, limited budget and small number of researchers for this project, it was not possible to visit all the countries included in the report, and reviews of national legislation relied on information available online and correspondence with volunteers in each country. Reviews for each country began with a search of the legal database Faolex and then expanded using government websites, including websites of ministries of justice, forestry, agriculture, environment, natural resources and fisheries, and attorney generals, online legal gazettes, and websites of Non-Governmental Organisations (NGOs), law societies and legal firms for each country. Many of these sites host lists of laws and texts of laws in the original language, English or both. Most texts that were not available on Faolex were obtained in this way. In some cases, laws and regulations were referenced in other pieces of legislation or other legislative reviews and then located online by searching for them by name. The lists of laws compiled in the manner just described were checked with lawyers in each country, with the exceptions of Indonesia, where we were unable to obtain pro bono assistance from lawyers, and Brunei and Singapore, where legal databases are well-maintained and user-friendly and it was not thought necessary. In the case of countries where the texts of all laws and regulations identified had not been acquired by the above methods, the lawyers were also asked to provide these texts. Where possible, the author also contacted NGO staff in each country to ask if they knew of any other laws or regulations or upcoming changes to legislation and, if all legal texts for that country had not yet been acquired, to provide these. A few texts were only available in the original language and not in English; volunteers who were native speakers of these languages provided summaries of these regulations or, in a few cases, Google Translate was used. Where possible, legislation that had been translated in this way was cross-referenced with existing English translations of earlier versions or drafts of the legislation. In every case in which English versions of legislation were not available this is indicated in the report. There remained a few pieces of legislation that it was not possible to obtain. Where possible, the author located summaries of these laws and regulations provided by other sources, such as the FAO or legislative reviews. The author attempted to cross-reference these summaries with other summaries for greater reliability. Where summaries included in this review are based on other summaries and not on a direct reading of the legislation, this is clearly indicated.

All currency conversion was done using www.oanda.com on 24 November 2016 and rounded to the nearest USD.

Limitations of this report

This report is a review of black letter law and does not consider case law or enforcement. It is therefore subject to the usual limitations of a review of this sort, i.e., with minor exceptions it does not consider the implementation of the law in practice, nor the work of judges in interpreting and developing the law. This limitation was necessary given the small number of researchers for this report and the need to keep the report to a manageable size.

While the methods described above aimed to identify all relevant legislation currently in force in each country, it cannot be guaranteed that this has been achieved. This is particularly the case in countries where comprehensive, well-organised repositories of legislation and means of checking whether laws are still in force were not available, namely Cambodia, Indonesia, Lao PDR, Myanmar and Viet Nam. In these countries, some laws may have been either missed, or included despite having been repealed. This project did not have a budget for subscriptions to legal gazettes or databases, which might have aided the comprehensiveness and accuracy of this report in Cambodia, Myanmar and Viet Nam.

In countries where official English versions were not available for some or all legislation, i.e. all countries except Brunei, the Philippines and Singapore, the summaries and analysis in this review relied on unofficial translations. Consequently, some weaknesses of legislation noted in this review, particularly relating to unclear or vague provisions, may not exist in the original legislation.

In particular, in Lao PDR there was very little information available on wildlife protection legislation, including whether laws and regulations are currently in force. We attempted to mitigate this problem by reading other reviews of Laotian legislation, but the authors of at least one of these reports noted the same problems (Cacaud and Latdavong, 2008).

Although legislation in Malaysia is easily searchable on legal databases, we came across conflicting information on whether or not certain legislation at the state level is currently in force. In particular, most state legislation on turtles does not appear on the database we used, which should host all active legislation (C. Ng, Lee Sok Wah & Co. in litt. to A. Ezekiel, December 2015), despite this legislation being referenced in recent conservation publications (e.g. Saad *et al.*, 2012).

In Myanmar, much of the protection provided to marine wildlife is specified in ministry regulations. Obtaining these regulations requires submitting personal information to the relevant ministry, and we therefore did not obtain the texts for many of these.

In Viet Nam, the legislative system proliferates laws and subsidiary decrees, decisions and regulations. As a result, it is impossible to be certain that nothing has been missed, and it was necessary to be selective in which regulations were included in this review. A second issue is that a new Penal Code was passed in 2015; however, it has not yet entered into force owing to the need to amend some of its articles. On the other hand, the reliability of the review of laws since 2003 is increased by the fact that legislation created since 2003 only enters into force after publication in the Official Gazette, the contents of which can be searched online.

RESULTS PART 1:

THE INTERNATIONAL FRAMEWORK

Various international instruments provide a legal framework for national legislation for marine wildlife conservation and management. Of these, several are legally binding and include specific obligations for signatories; others are voluntary agreements that provide guidelines and expectations for participating states. Each ASEAN country is signatory to several of these international agreements, suggesting a level of political commitment to marine conservation that could be called upon to motivate improvements in legislation, enforcement and other conservation measures.

In addition to the framework provided by global and regional agreements relating directly to marine wildlife conservation, further relevant obligations are provided by global and regional oceans and fisheries legislation and guidelines. The most important of these agreements for marine conservation are described below, and their obligations summarised.

Appendix II of this report tabulates the obligations of the ASEAN countries under the global and regional instruments to which they are signatories. Not all of these measures must be enacted in legislation in order to be implemented, but integration in legislation is one possible means of implementation for all of them.

Global conservation treaties and conventions

A number of major global conventions are directly relevant to the conservation of marine species, including marine turtles. These include four legally binding agreements: the Convention on the Trade in Endangered Species of Wild Fauna and Flora (CITES), the Convention on Biological Diversity (CBD), the Convention on Wetlands of International Importance (Ramsar Convention) and the Convention on the Conservation of Migratory Species of Wild Animals (CMS). In addition, voluntary agreements provide guidelines and less formal commitments for the conservation of various species or habitats of marine wildlife. Summaries of each of these agreements are provided below. Each of the agreements discussed below has at least one ASEAN signatory, while CITES and CBD have been signed by all ASEAN countries.

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

ASEAN Parties: Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, Viet Nam

CITES is a multilateral environmental treaty aimed at regulating the global trade in wild species to ensure that international trade does not threaten their survival. Over 180 states are Party to this Convention, including all ASEAN countries (CITES Secretariat, undated d). CITES entered into force in 1975 and is a legally binding agreement. Failure to comply with the Convention, or with some recommendations (e.g. Resolutions relating to national legislation requirements) made by the Conference of the Parties (CoP) may lead to enforcement sanctions (Sand, 2013).

CITES lists approximately 5600 species of animals and 36 000 species of plants in three Appendices (CITES Secretariat, undated c). International trade, defined as “export, re-export, import or introduction from the sea” (Art. I), in CITES-listed species is regulated through a system of permits and certificates, with the kind of documentation required dependent on which of the Appendices a species is listed in.

Appendix I lists species affected by trade that are threatened with extinction. International trade in these species is permitted only under exceptional circumstances and is not allowed for commercial purposes (CITES Secretariat, undated b). Appendix I lists approximately 670 animal and 1000 plant species (CITES Secretariat, undated c). All species of marine turtle are listed in Appendix I, as are Humphead Wrasse, Dugong and several species of cetacean native to ASEAN waters.

Appendix II lists species that, while not immediately under threat of extinction, may become so in the near future unless trade in these species is strictly regulated. This Appendix also lists species that must be regulated in order to effectively control species that are already listed (Art. II), for example those that resemble listed species and that could therefore be used to conceal or launder shipments of these species. International trade in these species is permitted as long as the specimens have been legally obtained and their trade will not detrimentally affect the species’ survival (CITES Secretariat, undated b). Nearly 5000 animals and over 35 000 plants are listed in Appendix II (CITES Secretariat, undated c). Most hard corals (black corals *Antipatharia* spp., blue corals *Helioporidae* spp., and stony corals) and organ-pipe corals *Tubiporidae* spp. are listed in Appendix II, as are seahorses, giant clams, mobulid rays *Manta* spp., several species of shark native to ASEAN waters and all species of cetaceans not included in Appendix I. All *Mobula* spp. and several more species of shark will be added to Appendix II in 2017 (CITES Secretariat, 2016).

Appendix III contains around 150 species of animal and 160 species of plants that have been added by range States for those species (CITES Secretariat, undated c). Should any Party deem that the national population of any of its native fauna or flora is at risk from international trade, that country can request that the species be listed in Appendix III (Art. XVI). Four species of red coral have been listed on Appendix III by China: *Corallium elatius*, *C. japonicum*, *C. konjoi* and *C. secundum*.

All shipments of species listed on Appendices I or II must be accompanied by valid permits issued by both exporting and importing countries (Art. III, IV). Shipments of Appendix III species must be accompanied by export permits when they are being exported from the country that added that species to the Appendix and by a certificate of origin when they originate from other countries (Art. V). For marine species on Appendix II only, if the Party is also a member of another international treaty that controls trade in that species, a certificate that the specimen was taken in accordance with that other treaty from the Management Authority (MA) of the state in which the specimen was introduced from the sea may be accepted instead of a CITES export certificate (Art. XIV.4–5).

Any Party can lodge a reservation to the listing of any taxa in Appendices I or II within 90 days of joining the Convention or within 90 days following an amendment to the listing of that taxa (Art. XV). Such a country will then be treated as a non-Party for the purposes of trade in that species (Art. XXIII) and therefore need not issue CITES permits or report trade in that species to the CITES Secretariat. There are no restrictions on when reservations can be lodged against Appendix III species (CITES Secretariat, undated f). The only relevant reservations lodged by an ASEAN state are by Indonesia in 2003 for Basking Shark *Cetorhinus maximus* (which is not native to ASEAN waters) and Whale Shark *Rhincodon typus* and in 2004 for seahorses (CITES Secretariat, undated g). All are listed on Appendix II.

Obligations

Parties to CITES are obliged to comply with the following measures, of which the first four are considered basic requirements of CITES legislation (CITES Secretariat, undated e; see also Resolution Conf. 8.4 (Rev. CoP15)):

National CITES authorities. Each Party must designate at least one national MA to administer its licensing system and at least one Scientific Authority (SA) to advise the MA on effects of trade in protected species (Art. IX). In addition to advising the MA, the SA is required to monitor the number of export permits issued against the actual level of exports and ensure species are maintained at a level appropriate to their role in the ecosystem (Art. IV). The SA is also required to determine whether recipients of live Appendix I specimens are equipped to house and care for them (Art. III). National implementing legislation should clearly designate (or authorise designation of) national authorities and precisely outline their powers (CITES Secretariat, undated e; see also Resolution Conf. 8.4 (Rev. CoP15)).

Prohibit trade in violation of the Convention. National legislation should prohibit trade without a valid permit and cover all CITES species and all types of trade (exports, re-exports, imports and introduction from the sea, and trade with Parties and non-Parties) (Art. VIII). CITES considers this requirement to be “the core of the CITES trade regime” (CITES Secretariat, undated e; see also Resolution Conf. 8.4 (Rev. CoP15)).

In general, the Convention requires that all trade in listed species requires a CITES permit. However, there are a number of exemptions (Art. VII):

1. Specimens acquired prior to a species' listing in the Appendices;
2. Shipments in transit that do not leave the custody of customs do not require a permit from the MA of the transit country;
3. Personal or household effects. This exemption does not apply to Appendix I species that are being taken to the owner's home country, or to Appendix II species that are being taken to the owner's home country from a range state where removal from the wild requires an export permit;
4. Certification by the MA that a shipment contains animals or plants bred in captivity. For permitting purposes, Appendix I species that have been captive bred for commercial purposes shall be treated as Appendix II species;
5. Non-commercial loans of herbarium or museum specimens between scientific researchers registered with the relevant MAs;
6. Zoos or travelling shows that have received approval from the relevant MAs.

Parties are permitted to trade in CITES-listed species with countries that are not Party to the Convention. In such cases, documentation comparable to that required by CITES and issued by competent authorities in the non-Party state is required (Art. X).

Penalise trade in violation of the Convention. Parties should penalise trade in and possession of CITES listed species without a valid permit (Art. VIII). National implementing legislation should clearly specify which activities are prohibited and what the penalties are for violation. Penalties should be adequate to deter violations (CITES Secretariat, undated e; see also Resolution Conf. 8.4 (Rev. CoP15)).

Confiscate specimens found in violation of the Convention. CITES Parties should confiscate or return to the state of export specimens found in violation of the Convention. Confiscated specimens should be entrusted to the MA (Art. VIII). National implementing legislation should specify which authorities are authorised to confiscate specimens and the extent of their authority (e.g. powers to search vehicles and baggage, powers of arrest, powers to seize specimens suspected to have been obtained illegally) (CITES Secretariat, undated e; see also Resolution Conf. 8.4 (Rev. CoP15)).

Records and reporting. Parties are required to maintain records of all imports and exports involving CITES listed species, which they must submit annually to the CITES Secretariat (note: in some cases such trade reports have been based solely on the number of CITES permits granted, rather than actual trade volumes). Parties must also submit biannual reports on legislative, regulatory and administrative measures taken to enforce the Convention (Art. VIII). Information on the trade records submitted by each Party is compiled in the CITES trade database, which is available on the CITES website.

Appropriate treatment of wildlife. Shipment of live specimens must minimise risk of injury, damage or cruel treatment (Art. VIII.3).

Relevant Resolutions under CITES

The CoP is the main decision making body for CITES and makes recommendations for improving the effectiveness of the Convention (Art. XI). These take the form of Decisions, which contain short-term instructions for committees or the Secretariat, and Resolutions, which provide long-term guidance (CITES Secretariat, undated a). Because the text of the Convention is general, these recommendations are important to the functioning and enforcement of the Convention. There are currently about 90 Resolutions in effect (CITES Secretariat, undated a), the texts of which are available on the CITES website (CITES Secretariat, undated h). Those most relevant to the conservation of marine wildlife are:

- Resolution Conf. 12.6 (Rev. CoP16) Conservation and Management of Sharks (2002);
- Resolution Conf. 11.10 (Rev. CoP15) Trade in Stony Corals (2000);
- Resolution Conf. 11.4 (Rev. CoP12) Conservation of Cetaceans, Trade in Cetacean Specimens and the Relationship with the International Whaling Commission (2000);
- Resolutions Conf. 9.9, 9.10 (Rev. CoP15) and 10.7 (Rev. CoP15) provide guidelines on the treatment of confiscated specimens;
- Resolution Conf. 8.4 (Rev. CoP15) on National Laws for Implementation of the Convention (1992) outlines the legislative measures CITES Parties are expected to take in order to comply with the Convention.

Convention on Biological Diversity (CBD)

ASEAN Parties: Brunei, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, Viet Nam

The CBD is a broad, legally binding multilateral agreement that seeks to conserve the wide variety of life on earth, promote sustainable use of biological resources and allow for equitable sharing of biotechnology (Art. 1). The Convention was opened for signature at the United Nations Conference on Environment and Development (UNCED), also known as the Earth Summit, at Rio de Janeiro in 1992 and entered into force in 1993. The CBD has become one of the most widely ratified multilateral agreements in the world with 196 Parties (CBD Secretariat, undated a).

Obligations

Among the requirements specified by the CBD, Parties are obliged to implement the following measures (but in most cases only “as far as possible and as appropriate”):

National conservation strategies. Parties are required to develop national strategies or plans for the conservation of biological diversity within their own country and integrate those plans or strategies across national sectors and policies (Art. 6).

Protected areas. Parties should establish national protected areas within their borders, manage important biodiversity and rehabilitate ecosystems within those areas, and promote the sustainable development of resources around those areas (Art. 8).

Control collection of natural resources. Parties should regulate and manage collection of natural resources from the wild in order to avoid threatening wild populations or ecosystems (Art. 9d).

Ex situ conservation measures. Parties must adopt measures for the ex situ conservation of biodiversity, including the recovery and rehabilitation of threatened species and reintroduction into their natural habitats (Art. 9).

Sustainable use of resources. Parties are required to identify aspects of biodiversity within their borders that should be conserved and monitor the sustainable use of and adverse impacts on these resources (Art. 7). Parties must promote the sustainable use of biological resources (Art. 10), including through offering incentives (Art. 11).

National implementing legislation. Countries must develop or maintain national legislation to protect threatened species (Art. 8).

Reporting. Parties must submit reports on the measures they have taken to implement the Convention and assess the effectiveness of those measures (Art. 26). The CoP determines the focus of these reports and when they should be submitted. The last reports were submitted in 2014 (CBD Secretariat, undated a).

Other obligations. Other obligations include cooperating with other Contracting Parties on matters of mutual interest, promoting research and training, including on sustainable use of resources, creating public awareness on conserving biodiversity, sharing biological resources, technology and information, and providing financial assistance to developing nations.

Relevant Decisions under the CBD

The CoP passes Decisions that provide guidance on implementing the CBD, several of which relate to the marine environment. The texts of these are available on the CBD website (CBD Secretariat, 2016). The most significant Decision for the purposes of this report is the 2010 Decision X/2 adopting the Strategic Plan for Biodiversity 2011–2020. The Strategic Plan, described as a “flexible framework” for improving biodiversity, includes 20 targets, the Aichi Biodiversity Targets, under five goals:

1. Mainstream biodiversity concerns;
2. Promote sustainable use of biodiversity (including Target 6: manage and use all aquatic stocks sustainably, legally, and applying ecosystem-based approaches, and Target 10: minimise anthropogenic pressures on coral reefs and other vulnerable ecosystems);
3. Safeguard ecosystems, species and genetic diversity (including Target 11: establish well managed and connected protected areas and other conservation measures, including for 10% of coastal and marine areas);
4. Enhance the benefits of biodiversity;
5. Enhance implementation of the CBD (including Target 17: develop national biodiversity strategies and action plans).

Convention on Wetlands of International Importance (Ramsar Convention)

ASEAN Contracting Parties: Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Thailand, Viet Nam

The Ramsar Convention is a legally binding agreement which was adopted in 1971, came into force in 1975 and was amended in 1982 and 1987. Currently there are 169 Contracting Parties, including all ASEAN countries except Brunei and Singapore (Ramsar Convention Secretariat, 2015).

The Convention’s definition of a wetland includes areas of marine water not deeper than six meters at low tide (Art. 1). The Convention can therefore apply to coral reefs and many habitats for marine turtles, seahorses, sea cucumbers and other species.

The Ramsar Strategic Plan 2009–2015 states 28 priority actions for Parties under five “Goals”:

1. Wise use of wetlands;
2. Development of the Ramsar List of wetlands of international importance;
3. International cooperation;
4. Implementation of the Convention;
5. Membership in the Convention.

These are guidelines only and not binding on Parties. These strategies are also intended to contribute to the goals of various other international agreements, including the CBD’s Strategic Plan for Biodiversity 2011–2020 (Ramsar, 2012).

Obligations

List and protect wetlands. Parties to the Ramsar Convention must list at least one wetland of international importance and clearly define the boundaries of the area (Art. 2). Parties are required to promote the conservation and, as far as possible, wise use of listed wetlands (Art. 3).

Create wetland reserves. Parties are obliged to create nature reserves on wetland areas, whether listed areas or not (Art. 4).

Reporting. Parties are required to keep abreast of any likely changes to listed wetlands as a result of human activities and to inform the bureau organisation (the Secretariat, currently administered by the IUCN) of any likely changes to such areas due to human activities (Art. 3). Beyond this obligation to report, no further action is required.

Cooperation with other Parties. Parties should consult with each other when implementing obligations arising from the Convention, particularly where these relate to wetlands that extend over the territory of more than one Party (Art. 5). This provision is important when considering transboundary coral reefs or habitats of migratory species.

Convention on the Conservation of Migratory Species of Wild Animals (CMS)

ASEAN Parties: Philippines

The CMS, which was opened for signature in 1979 and entered into force in 1983, aims to protect migratory species throughout their range and therefore seeks to operate on a global scale. All marine turtle species and many sharks, rays and cetaceans are highly migratory and covered under this convention. The CMS currently has 124 Parties (CMS Secretariat, 2016a); however, although all ASEAN countries except Lao PDR are range states for migratory species, including marine turtles, the Philippines is the only ASEAN Party. CMS is legally binding.

CMS includes two Appendices listing protected species. Appendix I is a list of migratory species threatened with extinction, while Appendix II lists species that need or would greatly benefit from international cooperation under a multilateral agreement (CMS Secretariat, 2016a). Species may be listed in both Appendices, assuming they meet the requirements for listing under each. All species of marine turtle except the Flat-backed Turtle are listed on Appendix I, and all species including the Flat-backed Turtle are covered by Appendix II. Manta rays are listed on Appendix I and II and a number of sharks are listed on Appendix II. Several species of cetaceans are listed on Appendix I, II or both. For a detailed list, see Appendix I of this report.

As with CITES, reservations are allowed for individual countries regarding the listing of specific species if they are entered within 90 days of the amendment (Art. 11), and Parties that have entered reservations will be treated as non-Parties to the Convention (Art. 14). The Philippines has not entered any reservations (CMS Secretariat 2016b).

Obligations

Parties to the Convention are obliged to take immediate measures to protect species listed on Appendix I (Art. 2) and to attempt to conclude further agreements to conserve and manage Appendix II species (Art. 2; see also Art. 4).

Conserve and restore habitat. Parties that are range states for Appendix I species are obliged to conserve and, where possible, restore the habitat of such species, reduce the harmful effects of activities that endanger the species, and prevent, reduce or control factors that may further endanger or harm the species (Art. 3). States should also eliminate or compensate for activities and obstacles that hinder migration (Art. 5h).

Protect species in situ. Range state Parties shall prohibit the taking of any specimens of Appendix I species, except for scientific purposes, breeding, traditional subsistence use or other exceptional circumstances (Art. 5).

Reporting. Parties that are Range States are required to submit reports six months prior to each CoP meeting on measures taken to comply with the Convention. Parties are required to keep the Secretariat informed of listed species that occur within their waters, flagged vessels operating outside their national jurisdiction that are taking listed species, and plans to harvest such species (Art. 6).

Agreements and Memoranda of Understandings (MoUs). The text of the Convention encourages Parties to conclude agreements for the protection of specific species or regional populations of species of Appendix II listed animals (Arts. 2, 4, 5). Parties can create Agreements, which are legally binding, and MoUs, which are less formal and are not legally binding.

Relevant agreements under CMS

To date, seven Agreements and 19 MoUs have been created under CMS. Of these, three MoUs are relevant to marine species: the MoU on the Conservation and Management of Dugongs and their Habitats throughout their Range (Dugong MoU), the MoU on the Conservation of Migratory Sharks (Sharks MoU) and the Indian Ocean Southeast Asian Marine Turtle MoU (IOSEA Marine Turtle MoU). The Philippines is signatory to all three MoUs, and Myanmar and Thailand have signed the Dugong MoU. The Dugong MoU and the Sharks MoU are discussed just below; the IOSEA Marine Turtle MoU, which several ASEAN countries have signed, is discussed in the section of this review on Regional agreements and treaties relating to wildlife.

Memorandum of Understanding on the Conservation and Management of Dugongs and their Habitats throughout their Range (Dugong MoU)

ASEAN Signatory States: Myanmar, Philippines, Thailand

This non-binding MoU was created under the auspices of the CMS with the objective of achieving and maintaining a favourable conservation status for Dugong. It came into effect in 2007.

Obligations

International agreements. Signatory States should consider joining international instruments most relevant to the conservation and management of Dugongs.

Designate a national authority. Signatories should designate a national authority to implement the MoU and coordinate with other Signatories.

Reporting. Signatories should report to the MoU Secretariat on their implementation of the MoU.

Conservation and Management Plan. Signatories should implement the Conservation and Management Plan, which is considered an integral part of the MoU. The Plan includes 27 “actions” under nine objectives, and several examples of “specific actions” for each of the 27 actions. The objectives include:

- Reducing causes of Dugong mortality, including incidental capture (Action 1.2) and illegal take (Action 1.4);
- Conserving and managing habitats, including rehabilitating degraded habitats (Action 3.4);
- Enhancing cooperation nationally, regionally and internationally, including collaboration on combating illegal trade (Action 6.1);
- Improving legal protection of Dugongs and their habitats, ensuring Signatories (and where possible Range States) implement national legislation to protect Dugongs (Action 8.1) and reviewing and strengthening national legislation (Action 8.2).

Memorandum of Understanding on the Conservation of Migratory Sharks (Sharks MoU)

ASEAN Signatory States: Philippines

This non-binding MoU was created under the auspices of the CMS with the objective of achieving and maintaining a favourable conservation status for migratory sharks, and came into effect in 2010. The Conservation Plan to the MoU was produced in 2012 to become Annex 3 of the agreement. Of the species considered in this report, the MoU covers Whale Shark, Great White Shark *Carcharodon carcharias* and Shortfin Mako *Isurus oxyrinchus*.

Obligations

Ecosystem and precautionary approaches. The Conservation Plan states that its measures should be implemented with consideration for the ecosystem and using the precautionary approach, i.e. the principle that uncertainty or lack of scientific knowledge about the potential harmful consequences of an activity should not be used as grounds for failing to take measures to mitigate those consequences.

Protect critical habitats and migratory corridors. Including through legal, regulatory and administrative measures.

Prohibit the taking of species listed on Appendix I of CMS. Although designed to protect sharks, this would also apply to species of marine turtles, cetaceans and rays listed on this Appendix.

International cooperation. Signatory States should consider joining international instruments most relevant to conservation and management of sharks. The Conservation Plan specifically mentions the Food and Agriculture Organization Code of Conduct for Responsible Fisheries (FAO Code of Conduct) (s. 16.3) (discussed below). States should also participate in or cooperate with the FAO and Regional Fisheries Management Organisations (RFMOs) as appropriate.

Improve and harmonise legislation. Signatory States should create, review, revise and harmonise national regulation relevant to the protection of migratory sharks and their habitats.

Record keeping. Signatories should maintain species-specific records of catches, landings and discards.

Prohibit shark finning. Including ensuring sharks are landed with fins attached.

Designate a national authority. States should designate a coordinating body to implement the MoU and facilitate communication between Signatories.

Implement the Conservation Plan. Objectives of the Conservation Plan include ensuring that United Nations General Assembly Resolution 46/215 (UN Driftnet Moratorium, discussed below), is implemented (Conservation Plan, s. 4.10), designating and managing conservation areas, including migration corridors and areas of critical habitat (s. 9.1), and determining seasonal closures (s. 9.3).

Global oceans and fisheries agreements

Regulation of national and international waters, including fisheries, is one of the most important areas for the preservation of marine turtles and other marine wildlife discussed in this report, as over-fishing and incidental capture are two of the biggest threats facing most of these species. Discussed below are the strongest and most comprehensive global agreements for the establishment of jurisdiction over the ocean, rules of conduct in national and international waters and the responsible management of fisheries. Of the legally binding agreements discussed below, UNCLOS has been signed by all ASEAN countries, although Cambodia is yet to ratify it, while other agreements have only a small number of ASEAN signatories. Several voluntary fisheries agreements offer guidance on measures to conserve and manage fish stocks, habitats and other species affected by fishing, and these are also summarised here.

United Nations Convention on the Law of the Sea (UNCLOS)

ASEAN States Parties: Brunei, Cambodia (not ratified), Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, Viet Nam

UNCLOS is a legally binding, broad governing agreement for standards of conduct on the open seas. The Convention seeks, among other aims, to establish a legal order for the seas in order to facilitate international communication and conserve the oceans' living resources. UNCLOS was opened for signature in 1982 and came into force in 1994 (Treves, 2013). It currently has 168 Parties, including all ASEAN countries except Cambodia, which has signed but not ratified the Convention (United Nations 2016). Declarations relating to the application of UNCLOS and/or the settlement of disputes were made upon ratification by Malaysia, the Philippines, Thailand and Viet Nam (Anon., 2013a).

Much of the Convention is concerned with delimitation of jurisdiction, exploitation rights over various parts of the ocean and seabed, scientific research and transfer of technology; however, it also requires Parties to protect and preserve the marine environment. Part V establishes Exclusive Economic Zones (EEZs) in the ocean for coastal states. These zones extend up to 200 miles from the coastline (Art. 57), and within these areas the controlling countries have exclusive jurisdiction over management and exploitation of natural resources (Art. 56). The establishment of national jurisdiction is important for marine conservation because it allows nations to implement and enforce legislation within these areas, including legislation that protects marine wildlife and the marine environment.

Two agreements have been created under UNCLOS. The first of these, the Agreement on Part XI, relates to exploitation of minerals on the sea bed. The second, the United Nations Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (the UN Fish Stocks Agreement, or UNFSA), is relevant to marine wildlife conservation and is discussed below.

Obligations

Manage living resources in the EEZ. States are required to ensure that living resources in their EEZ are not endangered through over-exploitation (Art. 61). States should aim for maximum sustainable yield of target species and consider the effects of harvesting on associated species (Arts. 61 and 119). States are required to give due notice of conservation and management laws and regulations that apply in their EEZ (Art. 62, 5).

Comply with conservation measures in the EEZ of other states. Foreign nationals harvesting in a state's EEZ are required to comply with that state's relevant laws and regulations (Art. 62). Under the Convention, states have the power to seize, board, inspect, arrest and initiate judicial proceedings against any foreign vessel violating national laws within their EEZ. However, punishment against foreign crew members may not include imprisonment or corporal punishment, and arrested vessels and crews must be released upon posting bail (Art. 73). Under certain conditions, states have the right to hot pursuit of a ship believed to have violated their laws and regulations (Art. 111).

Conserve living resources outside the EEZ. The Convention requires all states to take, and cooperate with other states to take, necessary measures for the conservation of living resources in international waters (Art. 117). States are required to cooperate in establishing sustainable levels of fishing and protecting the endangerment of species by over-exploitation (Art. 117–19).

Cooperate to manage straddling fish stocks. Where stocks extend beyond a state's EEZ into the high seas or the EEZ of another state, states must agree on measures to conserve these stocks (Art. 63). Annex I of UNCLOS lists 17 highly migratory taxa, which do not include turtles or rays but do include several species of shark and cetaceans (see Appendix I of this report). Any states whose nationals fish for these species must cooperate with other states for the conservation of these species (Art. 64). Where no international organisations exist for the conservation of these species, states whose nationals harvest these species shall establish such an organisation (Art. 64; see also Art. 116).

Record keeping. Each state should maintain a register of all ships entitled to fly its flag (Art. 94).

Penalties. Flag states should promptly investigate suspected violations of international rules and standards. Their laws should enable them to impose sufficient penalties to deter such violations (Art. 217).

Article 68 notes that Part V (Arts. 55–75) does not apply to sedentary species, which include corals.

United Nations Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (UNFSA)

ASEAN States Parties: Indonesia, Philippines

UNFSA, also known as the UN Fish Stocks Agreement, is a legally binding agreement created under UNCLOS that aims to maintain the sustainable use of highly migratory fish stocks or stocks that straddle borders of the EEZs of neighbouring countries. UNFSA functions by promoting implementation of the relevant provisions of UNCLOS (Art. 2). The Agreement was opened for signature in 1995 and came into force in 2001 (Anon., 2013b), but has been signed by only two ASEAN countries: Indonesia and the Philippines.

Obligations

Ensure sustainability of stocks. Parties are required to maintain or restore straddling and highly migratory fish stocks to maximum sustainable yield and prevent over-exploitation (Art. 5b, h).

Minimise harm to non-target species. Parties are required to assess the impacts of human activities on non-target species (both fish and non-fish), particularly those that are endangered, and minimise the catch of such species (Art. 5, 6). The fishing of stock under moratorium or the use of prohibited fishing gear is considered a “serious violation” of the agreement (Art. 21).

Protect marine biodiversity. The Agreement does not expand on this measure (Art. 5g).

Licences. Flag states should prohibit fishing without licences, which should include conditions that meet the state’s international obligations, and require vessels to carry these licences at all times (Art. 18.3).

Records. Parties are required to establish regulations on recording, reporting and verifying the catch of target and non-target species for ships flying their flag (Art. 18). Failure to keep accurate records of type of catch and how much is caught is considered a serious violation of the Agreement (Art. 21). Flag states should also maintain records of vessels entitled to fly their flag (Art. 18.3), and all vessels and equipment should be marked to allow owner identification (Art. 18.3). Annex I of the agreement provides details on requirements for record keeping.

Ensure compliance with conservation measures. States must take measures to ensure compliance with conservation and management measures by vessels flying their flag fishing on the high seas, including by investigating suspected infractions (Art. 18–21). States must require their ships to cooperate with agencies investigating potential violations of conservation and management measures and ensure that ships that have violated such measures do not fish until any sanctions imposed on them have been complied with (Art. 19).

Harmonise conservation and management measures. States are required to cooperate to establish compatible conservation and management measures for the high seas and areas under national jurisdiction (Art. 7). States must keep other relevant states informed about measures they have taken to regulate straddling and highly migratory fish stocks in their jurisdictions and to regulate fishing vessels flying their flag on the high seas (Art. 7).

Participation in RFMOs. Coastal states and states fishing on the high seas shall become members of relevant RFMOs or agree to apply conservation and management measures established by these organisations (Art. 8.3). Where there is no appropriate RFMO, states should cooperate to establish one (Art. 8.5). States that are not members of the appropriate RFMOs shall not be permitted access to the resources managed by the RFMOs (Art. 8.4; see also Art. 17.2).

Use a precautionary approach. Parties are required to use the best scientific information available in decision-making for fishery resource conservation, including developing research programmes to assess the impact of fishing on target species, associated species and their environment. Parties should be more cautious when information is unreliable or missing (Art. 6). Annex II of the agreement provides details of the precautionary approach that are to be applied.

Food and Agriculture Organization Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (FAO Compliance Agreement)

ASEAN Parties: Myanmar

This binding agreement was adopted by the FAO in 1993 and entered into force in 2003. There are approximately 40 Parties to the Agreement, of which only one, Myanmar, is a member of ASEAN (FAO, 2014a). The main objective of the FAO Compliance Agreement is to deter reflagging, a practice in which the operators of a fishing vessel evade the measures of international treaties to which their home country is Party by registering in a country that is not Party to the agreement.

Obligations

Prevent reflagging. The major obligation placed on each Party by the Compliance Agreement is to “take such measures as may be necessary to ensure that fishing vessels entitled to fly its flag do not engage in any activity that undermines the effectiveness of international conservation and management measures” (Art. III). Article II states that there is an exemption for vessels under 24 metres in length, but according to Article III Parties must still ensure that such vessels do not undermine the effectiveness of international treaties.

Records and reporting. As part of enforcing the above measure, Parties are required to ensure that fishing vessels entitled to fly their flag are readily identifiable (Art. 6) and that these vessels provide information on their operations (Art. VII). Parties should maintain records of fishing vessels authorised to fish on the high seas (Art. IV) and provide information on owners and specifications of vessels to the FAO, where practical, as well as information on vessels flying their flag that have acted in a way that undermines conservation and management measures (Arts. VI–VIII).

International cooperation. Parties should cooperate to implement the Agreement, particularly through exchanging information on the activities of fishing vessels (Arts. V, VI).

Food and Agriculture Organization Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (FAO Agreement on Port State Measures)

ASEAN Parties: Indonesia, Myanmar, Thailand

The FAO Agreement on Port State Measures is a binding agreement that aims to prevent, deter and eliminate illegal, unreported and unregulated (IUU) fishing in order to ensure the conservation and sustainable use of marine resources (Art. 2). The Agreement was opened for signature in 2009 and was signed and ratified by Indonesia in 2009 and 2016 respectively, and acceded to by Myanmar in 2010 and Thailand in 2016.

Obligations

Deny entry to ports. Parties are required to deny entry to ports to vessels for which there is evidence of participation in or support of IUU fishing (Art. 9.4).

Refuse services. Parties are required to prohibit vessels suspected of IUU fishing to land catch in their ports and to refuse access to services not essential to the health of the crew (Art. 11).

Inspections. States should inspect annually a number of vessels sufficient to prevent and deter IUU fishing (the specific number is to be agreed by RFMOs) (Art. 12). Inspections should prioritise vessels previously denied entry to or use of a port or suspected of IUU fishing.

Reporting. Results of inspections should be reported to relevant Parties including, as appropriate, the FAO, RFMOs, the state of which the vessel's master is a national and state(s) in which there is evidence that the vessel has engaged in IUU fishing (Art. 15).

International cooperation. Parties should support conservation and management measures taken by other states and exchange information relating to measures to combat IUU fishing (Art. 6). Each Party should designate a national authority to act as a contact point for the exchange of information under the Agreement (Art. 16).

The Agreement includes a measure that a Party may decide not to apply the Agreement to its nationals fishing within its own waters (Art. 3.2).

Convention on Fishing and Conservation of the Resources of the High Seas

ASEAN Parties: Cambodia, Indonesia (not ratified), Malaysia, Thailand

The Convention on Fishing and Conservation of the Resources of the High Seas, which opened for signature in Geneva in 1958 and entered into force in 1966, is a legally binding international convention that aims to prevent over-fishing on the high seas. Cambodia, Malaysia and Thailand have acceded to or ratified the Convention; Indonesia has signed but not ratified the Convention.

Obligations

The text of the Convention is general, and only commits Parties to conserve the living resources of the high seas in the broadest terms. "Conservation" is interpreted as ensuring optimum sustainable yield (Art. 3). These measures are also included in more detail in UNCLOS (see above).

Conserve the living resources of the high seas. Parties are required to adopt measures for their nationals to conserve the living resources of the high seas (Art. 2).

International cooperation. Parties are required to cooperate with each other as necessary to implement conservation measures (Art. 2, 4).

International Convention for the Regulation of Whaling

ASEAN Contracting Governments: Cambodia, Lao PDR

The International Convention for the Regulation of Whaling aims to conserve whale stocks and enable the “orderly development” of the whaling industry. The Convention was opened for signature in 1946, entered into force in 1948, and was amended in 1956. There are currently 89 signatories, known as Contracting Governments, of which only two, Cambodia (joined in 2006) and Lao PDR (joined 2007), are ASEAN countries. The Philippines was a member between 1981 and 1988 (IWC, 2016b).

The Convention establishes the International Whaling Commission (IWC) (Art. III), which may determine protected species, closed seasons and areas, size limits for each species, maximum catch, time, methods and intensity of whaling, types of gear, and requirements for record keeping (Art. V). These measures are provided in the Schedule attached to the Convention, which is usually updated (amended) at the annual meetings of the IWC (IWC, 2016a).

The Convention allows governments to issue special permits to capture whales for scientific research (Art. VIII).

Obligations

Ensure compliance with the Convention. Each Contracting Government must ensure vessels and persons under its jurisdiction comply with the Convention, including by penalising infractions (Art. IX.1). Details of catch limits, closed seasons, closed waters, size limits, types of gear and methods of whaling are specified in the Schedule.

Reporting. Contracting Governments must provide statistical and other information required by the Convention to the body designated by the IWC (Art. VII).

Food and Agriculture Organization Code of Conduct for Responsible Fisheries (FAO Code of Conduct)

ASEAN Members of the FAO: Brunei, Cambodia, Lao PDR, Indonesia, Malaysia, Myanmar, Philippines, Singapore, Thailand, Viet Nam

The FAO Code of Conduct is a non-binding set of principles for sustainable fisheries adopted by the FAO in 1995, directed at both members and non-members of the FAO (Art. 1). All ASEAN countries are currently members. The Code is to be applied in a manner consistent with UNCLOS and other international instruments (Art. 3), and many of its provisions are similar to those in UNCLOS and UNFSA. Because UNCLOS is a binding treaty and the FAO Code of Conduct is not, UNCLOS is a more effective tool for combating unsustainable exploitation and trade of marine wildlife. However, the FAO Code of Conduct provides useful guidance on formulating national conservation and fisheries plans and improving the legal and institutional framework for responsible fisheries (Art. 2).

Obligations

Minimise by-catch and discards. The Code urges the development and application of fishing gear and practices designed to reduce the by-catch of non-target species as well as waste and discards (Arts. 6.6, 7.2.2, 7.6.9, 8.4.5, 8.5.1). States are required to ensure that new developments and requirements relating to this requirement are made available to fishers (Art. 8.5.1).

Prohibit destructive fishing. States should prohibit dynamiting, poisoning and other destructive fishing practices (Art. 8.4.2). Selective and environmentally safe fishing gear and practices should be used (Art. 6.6; see also Art. 7.2.2g).

Protect and rehabilitate fisheries. The Code calls for the protection and rehabilitation of critical fisheries habitats and specifically mentions reefs, lagoons, mangroves and spawning grounds (Art. 6.8). The Code explicitly notes that not only target species, but also species belonging to the same ecosystem or associated with target species, are to be conserved (Art. 6.2).

Promote sustainability. States should adopt measures for long-term sustainable fisheries conservation and management, including creating a suitable policy, legal and regulatory framework (Art. 7.1.1; see also Art. 7.2.1). States should eliminate excess fishing capacity and ensure fishing levels are sustainable (Arts. 7.1.8, 7.2.2, 7.6.3).

Adopt a precautionary approach. States should apply a precautionary approach to management and exploitation of aquatic resources (Arts. 6.5, 7.5).

Protect biodiversity. States should protect aquatic biodiversity and endangered species (Art. 7.2.2d).

Legislation. States are required to ensure compliance with conservation and management measures within their jurisdictions (Art. 6.10) and ensure that they do not allow any vessel to fish without authorisation or in a way that contravenes international or national legislation (Art. 7.6.2). States are also required to cooperate in complying with international agreements regulating trade in endangered species (Art. 11.2.9). Laws and regulations should allow for sanctions in the case that they are contravened, including the refusal, withdrawal or suspension of permission to fish (Art. 7.7.2).

Records. States should maintain records of fishing vessels that are entitled to fly their flag and that are authorised to fish, which should include details of the vessels and their ownership (Art. 8.2.1). In addition, all fishing gear should be marked to allow for the owners' identification (Art. 8.2.4). States should also collect documentation relating to retained catch and discards and forward it to the relevant management bodies responsible for decisions on stock assessment (Art. 7.4.4, 8.4.3).

International cooperation. States should cooperate to manage straddling and highly migratory fish stocks for long-term sustainability (Art. 7.1.3). Conservation and management measures should be harmonised (Art. 7.3.2).

Relevant plans and guidelines created under the Code

Four voluntary international plans of action (IPOAs) and several guidelines have been issued under the Code. IPOAs include the IPOA for the Conservation and Management of Sharks, which also covers rays, and the IPOA for the Management of Fishing Capacity. Both these IPOAs were adopted by the FAO Commission on Fisheries in 1999 and endorsed by the FAO Council in 2000. The IPOA to Prevent, Deter, and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU) was adopted by the Commission in 2000 and endorsed by the Council in 2001 (FAO, 2015). The fourth IPOA relates to seabirds. The guidelines relevant to this report are the International Guidelines on By-catch Management and Reduction of Discards (2011), the International Guidelines on

Management of Deep Sea Fisheries in the High Seas (2009) and the Guidelines to Reduce Sea Turtle Mortality in Fishing Operations (2009).

All the IPOAs encourage record keeping and monitoring, collection of data, the creation of national plans for their respective areas and cooperation and exchange of information with other states. The IPOA-IUU also includes the following measures:

Legislation. Legislation should effectively address all aspects of IUU fishing (s. 16), include standards for admissible evidence (s. 17), discourage reflagging (s. 19) and impose sanctions of sufficient deterrent severity (s. 21).

Control of access to fisheries. States should control access to fishing through an authorisation system that imposes conditions for permission to fish and transport catch (s. 44–47). States should prevent fish that have been caught through IUU fishing being traded in or imported into their territories (s. 66).

The Guidelines to Reduce Sea Turtle Mortality in Fishing Operations contain detailed information on threats to turtles from different fisheries around the world and suggest that in Southeast Asia efforts to reduce turtle mortality should focus on coastal trawl and gillnet fisheries (13). These guidelines also include a detailed list of methods that could potentially reduce marine turtle mortality, along with evidence for their effectiveness, economic viability and practicality (18). TEDs are recommended for shrimp trawl fisheries (43). The Guidelines call for the harmonisation of national laws and policies on marine turtle conservation (97).

Agenda 21

ASEAN Members of the UN: Brunei, Cambodia, Lao PDR, Indonesia, Malaysia, Myanmar, Philippines, Singapore, Thailand, Viet Nam

Agenda 21 is a non-binding plan of action for sustainable economic and social development which, like the CBD, emerged from the Rio Earth Summit in 1992. The governments of 178 countries, including all 10 ASEAN countries, adopted the Agenda at the Summit.

The most significant part of Agenda 21 for marine wildlife conservation is Chapter 17, which outlines objectives and activities for the protection of oceans and coastal areas and the rational use of their living resources. The chapter divides these activities into seven areas:

- Integrated management and sustainable development of coastal areas, including EEZs;
- Marine environmental protection;
- Sustainable use and conservation of marine living resources of the high seas;
- Sustainable use and conservation of marine living resources under national jurisdiction;
- Addressing uncertainties for managing the marine environment and climate change;
- Strengthening international cooperation and coordination;
- Sustainable development of small islands.

In addition to Chapter 17, Chapter 15, on the conservation of biological diversity and the sustainable use of natural resources, is also important for marine wildlife conservation. Chapter 8, on integrating environmental and development considerations in decision-making, is relevant to legislation protecting marine wildlife.

Obligations

Conserve marine resources. States should promote the sustainable use and conservation of marine resources on the high seas and under national jurisdiction (17.46a–b, d, 17.74), including conserving and restoring altered ecosystems (17.6), protecting and restoring numbers of endangered marine species and preserving rare or fragile ecosystems, habitats and other ecologically sensitive areas (17.74, 15.5h; see also 17.46e, 17.85).

Create MPAs. States should identify marine ecosystems with high levels of biodiversity or productivity or other critical habitats and limit their use, including by designating protected areas. Priority should be granted to coral reefs, estuaries and wetlands, including mangroves, seagrass beds and spawning and nursery areas (17.85; see also 15.5g). Where appropriate, states should cooperate internationally, including with NGOs and other agencies, to establish transboundary protected areas (15.7). States should ensure that vessels respect protected areas that encompass rare or fragile ecosystems such as coral reefs and mangroves (17.30a) and encourage sustainable development near protected areas (15.5j).

Protect biodiversity. Coastal states should, with the support of international organisations, take measures to protect biodiversity and productivity of marine species and habitats under their jurisdiction (17.7).

Adopt a precautionary approach. A precautionary approach should be adopted in order to avoid degradation of the marine environment (17.21).

Minimise by-catch and discards. States should reduce wastage and discards of marine living resources (17.55, 17.79e) and ensure that flagged vessels fishing on the high seas minimise by-catch (17.50).

Minimise destructive fishing. States should require the development and use of selective fishing gear and practices that minimise waste and by-catch, and contribute to the development of international standards for these (17.46c, 17.50, 17.74d, 17.87c). Dynamiting, poisoning and other destructive fishing practices should be prohibited (17.84).

Support international conservation measures. States should manage oceans in accordance with UNCLOS, especially with regard to straddling fish stocks and migratory species (17.49, 17.77, 17.78), UNFSA (17.49) and the UN Driftnet Moratorium (17.54), and recognise the authority of the IWC (17.61, 17.89). Agenda 21 encourages states to cooperate internationally, including by becoming members of regional and sub-regional fishery organisations (17.57–70), strengthening support for international instruments on biological diversity and endangered migratory species, establishing protected areas in transboundary regions (15.7) and coordinating on conservation and management of cetaceans (17.62, 17.90).

Have a national strategy for conservation. Governments should create national strategies for promoting biological diversity and sustainable development that build on and harmonise national development plans (8.7, 15.5a–b).

Strengthen legal and regulatory frameworks. Agenda 21 promotes the development of “integrated, enforceable and effective laws and regulations that are based upon sound social, ecological, economic and scientific principles” (8.14). Governments should review and enforce compliance with these laws (8.17), where necessary with the cooperation of intergovernmental agencies and NGOs (8.19, 8.26). Regulations should incorporate sanctions to punish violations and deter offences (8.21). States should strengthen legal and regulatory frameworks to manage fisheries (17.79c–d), including by introducing legal and regulatory measures that support the sustainability of small-scale fishing (17.81).

United Nations General Assembly Resolutions

ASEAN Members of the UN: Brunei, Cambodia, Lao PDR, Indonesia, Malaysia, Myanmar, Philippines, Singapore, Thailand, Viet Nam

United Nations Resolutions are non-binding agreements which, once passed by a majority in the General Assembly, are adopted by all member states, which include all the ASEAN countries. The most relevant Resolutions for marine wildlife protection are summarised here.

Resolution 46/215 on Large-scale Pelagic Driftnet Fishing and its Impact on the Living Marine Resources of the World's Oceans and Seas (UN Driftnet Moratorium). This Resolution, which was passed in 1991, calls for a global moratorium on the use of large-scale driftnets in deep oceans by 31 December 1992. This Resolution affirms the earlier Resolution 45/197 (1990) and Resolution 44/225 (1989), which had called for an immediate cessation of expansion of pelagic driftnet fishing and a moratorium on large-scale pelagic driftnets by June 1992. The General Assembly has passed several subsequent Resolutions upholding the moratorium. Starting in 1996 (Resolution 50/25), Resolutions on large-scale pelagic driftnet fishing were combined with those on IUU fishing and by-catch and discards, and from 2003 (Resolution 58.14) these have been integrated with other fisheries issues in annual Resolutions on Sustainable Fisheries (Anon., 2015). The latest version of this Resolution is discussed just below.

United Nations General Assembly Resolution 70/75 on Sustainable Fisheries, including Through the 1995 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, and Related Instruments. A version of this Resolution is passed annually, urging states to cooperate internationally and implement UNCLOS, UNFSA and other instruments which, in the 2015 version, include CITES, CMS, the FAO Compliance Agreement, the FAO Agreement on Port State Measures, FAO IPOAs and guidelines and the Sharks MoU. The 2015 Resolution urges states to uphold the UN Driftnet Moratorium (s. 110–112), make efforts to reduce by-catch and accidental entanglement and require reporting of by-catch (ss. 113–128). The Resolution also urges states to control fishing activities of their nationals (s. 62), prevent vessels flying under their flag from fishing in the seas of other states without permission from those states (s. 65) and to deter IUU fishing (s. 64). States are encouraged to cooperate with RFMOs (s. 34), particularly in order to improve implementation of measures to regulate shark fisheries and incidental catch of sharks, including requiring sharks to be landed with fins attached (ss. 17–18). The Resolution urges greater monitoring and reporting of catch, by-catch and vessels (ss. 12, 91) and tracing of illegal fishery products (s. 92ff). The 2015 Resolution encourages use of the precautionary and ecosystems approaches (ss. 9–10, 156).

United Nations General Assembly Resolution 70/235 on Oceans and the Law of the Sea. The UN General Assembly passes a resolution on this topic annually. The 2016 Resolution calls upon states to become Parties to and harmonise their legislation with UNCLOS and other relevant international agreements (ss. 4–5). The Resolution also includes sections on the functioning of UNCLOS, capacity building for developing nations, maritime safety and security and international cooperation, including cooperation to protect the marine environment. Chapter IX relates to the marine environment and marine resources and encourages states to adopt an ecosystem approach to ocean management (ss. 209–211). Chapter X, on marine biodiversity, urges states to address practices that harm the marine environment (s. 228), strengthen conservation and management of marine biodiversity (s. 229) and increase protection in MPAs (ss. 229, 231).

Regional conservation treaties and conventions

In addition to their global commitments, each ASEAN country is signatory to at least one regional agreement relating to marine wildlife conservation. Not all of these regional agreements are legally binding; however, they demonstrate political commitment to marine conservation and some provide specific guidelines for conservation measures within each country or region.

Indian Ocean Southeast Asian Marine Turtle Memorandum of Understanding (IOSEA Marine Turtle MoU)

ASEAN Signatories: Cambodia, Indonesia, Malaysia, Myanmar, Philippines, Thailand, Viet Nam

The IOSEA Marine Turtle MoU was created under the auspices of CMS and came into effect in 2001. It was amended in 2009, along with the attached Conservation and Management Plan. The MoU is not legally binding; however, it does have a provision that it can be amended to become a binding treaty if enough signatories agree (Basic Principles 4). The MoU applies to the land and marine territory of Signatory States and is also applicable to vessels operating in the region under a Signatory's flag.

Obligations

International cooperation. Signatories must cooperate “closely” to conserve marine turtles and are urged to ratify relevant international agreements to promote the legal protection of marine turtles.

Create effective legislation. Signatories should create, review and implement national legislation to conserve marine turtles and harmonise legislation between signatory states.

National authorities. Signatories are required to designate (1) a national authority to coordinate communication between signatory states; (2) a Secretariat to coordinate and encourage reporting and communication between member states and other relevant organisations; and (3) an Advisory Committee to advise on scientific, technical and legal matters.

Reporting. Signatories should report regularly to the IOSEA Marine Turtle MoU on their implementation of the MoU.

Implement the Conservation and Management Plan. Signatories are required, subject to resources, to implement the Conservation and Management Plan appended to the MoU. The plan comprises a list of 105 activities to be undertaken, listed under the following six main objectives:

1. *Reduce direct and indirect causes of mortality of marine turtles.* This includes activities 1.4a–d to promote the use of fishing gear that minimises by-catch of turtles, and 1.4e–f to support the UN Driftnet Moratorium and provide proper facilities for disposal of fishing gear. This objective also includes activity 1.5a–e to prohibit harvest and trade in marine turtles and their eggs, including by enacting legislation to do so, where necessary.
2. *Protect and conserve marine turtle habitats.* This includes activities 2.2a–b to rehabilitate degraded nesting beaches, coral reefs, mangroves and seagrass beds.
3. *Increase and share research on marine turtle ecology.*
4. *Increase public awareness and participation in marine turtle conservation.*

5. *Enhance national, regional and international cooperation.* Including activities 5.1a–c to improve compliance with CITES, and 5.1f to implement legislation and improve enforcement efforts to deter illegal trade. Activities 5.3h and i urge Signatories to encourage non-signatory states to become Party to, respectively, CMS and global fisheries agreements, including UNFSA, and to implement the FAO Code of Conduct. Activity 5.5a is to “Review domestic policies and laws to address gaps or impediments to marine turtle conservation.” Signatories should exchange information on marine turtles with other states (3.4).
6. *Promote implementation of the MoU and Conservation and Management Plan.* Including activities 6.1a to encourage non-signatory states to sign the MoU and 6.1c to consider making the MoU legally binding.

Relevant resolutions passed under the IOSEA Marine Turtle MoU

Three resolutions have been passed by the Signatory States to the IOSEA Marine Turtle MoU, all of which relate to the issue of marine turtle by-catch and mortality:

- The *2012 Resolution to Establish the IOSEA Network of Sites of Importance for Marine Turtles in the Indian Ocean – South-East Asia Region* encourages Signatory States to nominate sites for inclusion in the IOSEA Network of Sites of Importance for Marine Turtles and provides guidance on how to evaluate potential sites for nomination and coordinate governance for selected sites.
- The *2008 Resolution to Promote the Use of Marine Turtle By-catch Reduction Measures by IOSEA* Signatory States urges Signatory States to adopt the FAO Guidelines to Reduce Sea Turtle Mortality in Fishing Operations and encourages Signatory States, the Indian Ocean Tuna Commission (IOTC) and the Western and Central Pacific Fisheries Commission (WCPFC) to adopt safe marine turtle handling measures for longline fisheries.
- *The 2005 Resolution 3.1 Urging the Indian Ocean Tuna Commission and its Member States to Address Marine Turtle By-Catch Issues within the IOSEA Region* contributed to the IOTC passing its 2005 Recommendation on Sea Turtles and 2009 Resolution on Sea Turtles, which were superseded in 2012 by the Resolution on the Conservation of Marine Turtles (discussed below under Regional fisheries agreements).

Memorandum of Understanding on ASEAN Sea Turtle Conservation and Protection (ASEAN MoU)

ASEAN Contracting Parties: Brunei, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, Viet Nam

The ASEAN MoU is a concise agreement signed in 1997 by all ASEAN countries except Cambodia. The agreement was one of the first multilateral agreements focused specifically on marine turtle conservation. However, the MoU is extremely broad and asks very little of its signatories. Other than designating Malaysia as the coordinator for implementing the MoU (Art. V) and requiring each Party to designate an agency to coordinate with Malaysia (Art. VI) and at least one expert to form a Technical Expert Working Group (Art. V), the MoU does not require specific actions from its Contracting Parties. However, it does ask Parties to consider enacting new laws on marine turtle conservation and harmonising existing national laws, and to coordinate with the Southeast Asian Fisheries Development Centre (SEAFDEC) in creating a sea turtle protection program (Art. IV).

Memorandum of Agreement between the Government of the Republic of the Philippines and the Government of Malaysia on the Establishment of the Turtle Islands Heritage Protected Area (TIHPA MoU)

ASEAN Parties: Malaysia, Philippines

The Turtle Islands Heritage Protected Area (TIHPA) MoU concerns the joint management and protection of the only remaining major Green Turtle nesting habitats and population in Southeast Asia, which also provide nesting sites for Hawksbill Turtles. This bilateral MoU covers six islands in the Philippines and three in Malaysia, located along the international treaty limits separating the two countries. The agreement was formalised by the Governments of the Philippines and Malaysia in 1996. The area is subject to each country's laws within the applicable jurisdiction and jointly managed as a Green and Hawksbill turtle sanctuary. As a marine sanctuary, each country's punishments for wildlife crimes within national protected areas apply. In addition, the agreement provides for protection of sand and coral within the area, as prescribed in Annex A.

Obligations

Conservation and management. Parties are required to implement a joint marine turtle resource management program and an integrated conservation and research programme that aims for the wise management of the Protected Area (Art. II). Annex A to the MoU lists nine actions to be taken to conserve and manage turtles, including protecting nesting habitat and prohibiting sand and coral excavation and the use of fishing gear that disturbs or harms turtles in the area.

Other obligations. Parties are required to establish an Implementing Agency (Art. IV), a centralised information network on marine turtles, including a database that collects information described in Annex A of the MoU, and eco-tourism and awareness programs (Art. II).

Memorandum of Understanding Between the Government of the Republic of Indonesia and the Government of Malaysia and the Government of the Republic of the Philippines on the Adoption of the Conservation Plan for the Sulu Sulawesi Marine Ecoregion (SSME MoU)

ASEAN State Partners: Indonesia, Malaysia, Philippines

In 2004, Indonesia, Malaysia and the Philippines signed a ministerial MoU to implement the joint Ecoregion Conservation Plan (ECP) of the Sulu Sulawesi Marine Ecoregion (SSME), which covers the Sulu Sea, the Sulawesi Sea and the inland seas of the Philippines. These countries ratified the agreement in 2006 (ADB, 2011). The SSME is a binding MoU originally intended to remain in force for 10 years (Art. XIII.1), but it was extended until 2017 by further MoUs signed by Indonesia and the Philippines in 2014 (GIZ-SSME IEC Team, 2015) (we are unable to confirm whether an anticipated MoU with Malaysia has also been signed). The has become a focal programme of the larger Coral Triangle Initiative (see below) and the basis for the United Nations Development Programme/Global Environment Facility (UNDP/GEF) Sulu-Celebes Sea Sustainable Fisheries Management Project.

The MoU established a tri-national committee to oversee the implementation of the ECP (Art. V), which in 2006 created three subcommittees to implement the ECP in relation to, respectively, (1) threatened, charismatic and migratory species, (2) MPAs and networks, and (3) sustainable fisheries (ADB, 2011). In 2009 these committees updated the ECP with Comprehensive Action Plans (CAPs) for each of these three areas (SSME Tri-National Committee, 2013) which include more specific actions to implement the MoU.

Obligations

MPAs and habitat conservation and management. The MoU requires Parties to cooperate to establish a network of priority conservation areas and protect critical habitat (Art. III.1). The CAP for MPAs and Networks aims to support the effective management of MPAs, MPA networks, feeding grounds and migratory routes, including by designing new MPAs and developing nesting habitats and management programs to maximise (marine turtle) hatchling survival (ADB, 2011). The CAP for Sustainable Fisheries suggests rehabilitating degraded wetlands (ADB, 2011). The CAP for Threatened, Charismatic and Migratory Species also has a short term goal for marine turtles, Humphead Wrasse, marine mammals and sharks of promoting effective management of feeding grounds and migratory routes (ADB, 2011). Strategies for achieving these goals for Humphead Wrasse and marine mammals are stated only in general terms. For marine turtles, strategies include implementing nesting habitat and management programs, providing recommendations on designing MPAs to protect and manage marine turtles and promoting best practices in habitat conservation and management (ADB, 2011). For sharks, strategies include developing and promoting conservation and management agreements for Whale Sharks and other CITES-listed species in the SSME (ADB, 2011).

Reduce over-exploitation and by-catch. The CAPs for Threatened, Charismatic and Migratory Species and for MPAs and Networks include the goal of protecting marine turtles, Humphead Wrasse, marine mammals and sharks or other target species from over-fishing and capture as by-catch (ADB, 2011). The CAP for Threatened, Charismatic and Migratory Species recommends banning export by sea of Humphead Wrasse and establishing quotas for domestic trade (ADB, 2011).

Ecosystem approach. The CAP for Sustainable Fisheries suggests adopting an ecosystem approach to fisheries management within the SSME (ADB, 2011).

National authorities. Each Party shall designate a focal authority to coordinate implementation of the program (Art. IV).

The CAP for Sustainable Fisheries has the goal of fostering a harmonised fisheries management regime for the SSME (ADB, 2011). The UNDP/GEF Sulu-Celebes Sea Sustainable Fisheries Management Project was created with the assistance of this committee, and includes among its aims the achievement of regional agreement on legal, policy and institutional fisheries management reforms through a Strategic Action Program (SAP) that builds on the SSME CAP (Anon., 2014a). This SAP, which concerns the management of small pelagic fish stocks, was signed by the governments of Indonesia, Malaysia and the Philippines in 2013 (SSME Tri-National Committee, 2013).

Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF)

ASEAN Signatories: Indonesia, Malaysia, Philippines

The CTI-CFF is a multilateral partnership between Indonesia, Malaysia, the Philippines and the non-ASEAN partners Papua New Guinea, Timor Leste and the Solomon Islands. A non-binding declaration, the Coral Triangle Initiative Leaders' Declaration on Coral Reefs, Fisheries and Food Security, was signed by these countries in 2009, committing them to implement a 10-year Regional Plan of Action as a rallying point for collective and parallel action at a variety of levels. The Regional Plan of Action states that it will target all six species of turtles found in the Coral Triangle, as well as corals, seagrass and other species assessed as threatened on the IUCN Red List.

Obligations

The Declaration does not provide any specific obligations; however, the Plan of Action includes 38 regional actions under five goals. These are:

1. Manage priority seascapes. Including designating and effectively managing these seascapes.
2. Develop an ecosystem approach to managing marine resources. Including implementing strong legislative, policy and regulatory frameworks for an ecosystem approach, including through international collaboration. This goal specifically mentions implementing the FAO IPOA-IUU. Under this goal are also targets of achieving a more sustainable trade in reef fish and establishing a forum on managing and trading internationally in reef-based organisms. It is also recommended to integrate the precautionary approach into legislation and take measures to reduce destructive fishing practices, including use of cyanide and blast fishing.
3. Conserve and manage marine areas. Including identifying priority seascapes, establishing a model for sustainable management of seascapes and securing funding. Parties are encouraged to establish and manage MPAs.
4. Adapt to climate change.
5. Improve the status of threatened species. The Plan of Action urges Parties to create and implement regional CAPs for sharks, sea turtles, marine mammals, targeted reef fish and threatened invertebrates. Specific targets for each of these are listed, including monitoring and enforcement of regulations regarding international trade and reduction of by-catch. Parties are encouraged to adopt and strengthen local and national legislative, policy and regulatory frameworks and regional and international agreements on threatened species. The Plan of Action indicates that these measures should include sharing information such as draft and final versions of national laws to enable regional harmonisation of legal and policy frameworks and enforcing laws and regulations to combat IUU fishing and trafficking of threatened marine species.

International Coral Reef Initiative (ICRI)

ASEAN Parties: Indonesia, Malaysia, Philippines, Thailand, Viet Nam

The International Coral Reef Initiative (ICRI) is an informal partnership between governments, NGOs and other organisations that aims to encourage the sustainable management of coral reefs and associated ecosystems (ICRI Secretariat, undated a). The ICRI was announced at the first CBD Conference of the Parties in 1994 and currently has over 60 members, including Indonesia, Malaysia, Thailand, Viet Nam, and the Philippines, which was a founding member. ICRI is a co-manager of the Global Coral Reef Monitoring Network, which provides research, data, training materials and assistance in finding funds for coral reef management and conservation (ICRI Secretariat, undated b).

ICRI's work is based on the Framework for Action, which describes goals, objectives and actions for protecting and conserving coral around the world. This was most recently updated in 2013 (ICRI Secretariat, undated a).

Obligations

Control trade in marine wildlife and products. Including through promoting effective regulation and management of trade in marine wildlife and products and reviewing and, where appropriate, reformulating, national legislation.

International cooperation. Including in order to set up MPAs and manage transboundary regions.

Adopt an ecosystem approach. One of the four objectives outlined in the Framework for Action is “Integrated Management,” which is explained as the management of coral reefs and related ecosystems using an ecosystem approach.

Regional fisheries agreements

In addition to the global oceans and fisheries agreements summarised above, guidelines and agreements for the management of oceans and fisheries are often produced by RFMOs. Of these, legally binding agreements that include measures that can help conserve marine turtles and other protected wildlife in ASEAN are the Convention for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (WCPFC Convention) and Resolutions passed under this Convention, Conservation and Management Measures passed by the IOTC, and the Convention for the Conservation of Southern Bluefin Tuna (CCSBT Convention). Of the ASEAN countries, Indonesia, Malaysia, the Philippines, Thailand and Viet Nam are Parties or cooperating non-members of one or more of these agreements.

Convention for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (WCPFC Convention)

ASEAN Parties: Indonesia, Philippines; Cooperating non-members: Thailand, Viet Nam

The WCPFC Convention is a binding agreement opened for Signature in 2000 and entering into force in 2004 (WCPFC, 2016). The Philippines signed the Convention in 2000 and ratified it in 2005; Indonesia signed in 2001 and ratified in 2013, while Thailand and Viet Nam are cooperating non-members. The Convention allows no reservations or exceptions (Art. 37); however, in its ratification of the Convention Indonesia notes that it understands the Convention to apply only to the EEZ and not to archipelagic or territorial waters (Status of the Convention, 2013).

The Convention aims to ensure the conservation and sustainable use of highly migratory fish stocks in the western and central Pacific Ocean in accordance with UNCLOS (Art. 2), defining “highly migratory fish stocks” as species listed on Annex I of UNCLOS (Art. 1f). In addition to the obligations on Parties outlined below, the Convention establishes the Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Pacific Ocean, known as the Western and Central Pacific Fisheries Commission (WCPFC). The WCPFC can determine catch quotas, areas and periods in which fishing may occur, size of fish that may be taken, fishing gear that may be used and conservation and management measures for non-target species (Art. 10).

Article 20 of the Convention allows the WCPFC to pass legally binding decisions through consensus or a 75% majority vote of the Parties. These are known as Conservation and Management Measures (CMMs); the WCPFC may also pass non-binding Resolutions (WCPFC, 2015). Relevant CMMs and Resolutions are discussed below.

Obligations

Minimise by-catch and waste. Including minimising discards, accidental entanglement, pollution, catch of non-target species and impact on associated species, especially endangered species (Art. 5e).

Use appropriate equipment. Members of the Commission are required to promote the use of selective, environmentally friendly fishing gear and techniques (Art. 5e).

Ensure sustainability. The Convention requires members to ensure long-term sustainability of highly migratory fish stocks in the Convention area (Art. 5a), protect marine biodiversity (Art. 5f) and prevent or eliminate over-fishing (Art.5g).

Precautionary approach. Members of the Commission should adopt a precautionary approach. Article 6 outlines principles for the application of this approach.

Ensure compliance with international and national laws. Members are required to ensure compliance of their vessels with licensing requirements of any state in whose waters they fish (Art. 24.3a).

Require permits. Flag states must prohibit vessels from fishing in the Convention area without a permit from the appropriate state (Art. 24.3).

Records and reporting. Statistics and biological data on migratory fish should be reported annually to the WCPFC, along with information on implementation of the Convention (Art. 23.2–4) and vessels entitled to fish in the Convention area (Art. 24.4–6).

Implement the Convention. Members of the Commission should promptly implement conservation, management or other measures agreed under the Convention (Art. 23.1) and ensure vessels under their jurisdiction fishing in the Convention area comply with the Convention (Arts. 23.4–5, 24.1a–2).

Penalise violations. Flag states must promptly investigate suspected violations of the Convention and impose sanctions sufficient to deter violations (Art. 25).

Obligations under Conservation and Management Measures

Several legally binding CMMs provide additional obligations on Parties and cooperating non-members (referred to as “Convention Members, cooperating non-members and participating territories,” or CCMs):

Implement FAO guidelines.

- The Conservation and Management of Sea Turtles CMM (2008) requires CCMs to implement “as appropriate” the FAO Guidelines to Reduce Sea Turtle Mortality in Fishing Operations (discussed above) (s. 1) and report on their implementation of these Guidelines (s. 2);
- The CMM for Sharks (2010) requires CCMs to implement “as appropriate” the FAO IPOA for the Conservation and Management of Sharks (discussed above) (s. 1) and report to the Commission on their implementation of the IPOA (s. 2).

Minimise incidental capture.

- The Conservation and Management of Sea Turtles (2008) requires CCMs to require operators of purse seine vessels to avoid encirclement of marine turtles and report all incidents involving marine turtles to the appropriate authorities (s. 5). Crew on vessels targeting highly migratory fish stocks that capture live hard-shelled turtles must be required to resuscitate and release these turtles using mitigation and handling techniques described in WCPFC guidelines (s. 4; see also s. 5). Operators of longline vessels must be required to carry line cutters, de-hookers and dip nets and to untangle and release captured marine turtles in accordance with procedures outlined in WCPFC guidelines (s. 6). Shallow-set longline vessels fishing for swordfish must be required to use methods to mitigate capture of sea turtles and report incidents involving sea turtles (s. 7);
- The CMM for Protection of Whale Sharks from Purse Seine Fishing Operations (2012) and CMM for Protection of Cetaceans from Purse Seine Fishing Operations (2011) require CCMs to prohibit their flagged vessels from setting a purse seine on a school of tuna in the convention area if a Whale Shark or a cetacean, respectively, has been sighted with the school (s. 1). CCMs must ensure that all reasonable measures are taken to immediately release Whale Sharks or cetaceans caught accidentally (s. 4a) and report incidents involving Whale Sharks or cetaceans to the relevant authority of the flag state (s. 4b);
- The CMM for Oceanic Whitetip Sharks (2011) and CMM for Silky Sharks (2013) require CCMs to require the release of Oceanic Whitetip Sharks *Carcharhinus longimanus* and Silky Sharks *C. falciformis*, respectively, that have been caught accidentally as quickly and with as little harm to the shark as possible (s. 2) and to include numbers of these sharks caught dead and alive in their annual reports to the WCPFC (s. 3).
- The CMM for Sharks (2010) requires CCMs to encourage release of live sharks taken as by-catch (s. 10).

Prohibit fishing for certain species. The CMM for Oceanic Whitetip Sharks (2011) and CMM for Silky Sharks (2013) require CCMs to prohibit the landing, storage and transshipment of Oceanic Whitetip Sharks and Silky Sharks, respectively (s. 1).

Reduce finning. The CMM for Sharks (2010) requires CCMs to take measures to ensure full use of shark catch, i.e. use of all parts other than head, guts and skins (s. 6). Fins must total no more than five per cent of the weight of sharks at point of first landing (s. 7)

Manage longline shark fisheries. The CMM for Sharks (2014) requires CCMs to develop management plans for longline shark fisheries that include licensing requirements, limits on catch and measures to ensure release of live specimens depleted species that are caught accidentally (s. 2).

Use appropriate equipment. The CMM for Sharks (2014) requires CCMs to ensure that longline tuna and bullfish fishing vessels either do not use wire trace as branch lines or leaders or do not use branch lines running directly off longline floats or droplines (s. 1).

Prohibit large-scale driftnet fishing. The CMM to Prohibit the Use of Large Scale Driftnets on the High Seas in the Convention Area (2008) requires CCMs to take all measures necessary to prohibit their vessels from using large-scale (over 2.5 km in length) driftnets on the high seas within the area covered by the Convention (s. 2). The measure states that possession of large-scale driftnets or configuration to use large-scale driftnets while operating on the high seas is sufficient to presume the vessel has used such driftnets on the high seas (s. 3), unless the vessel is authorised to use large-scale driftnets in national waters and has the equipment stowed in such a way that it is not readily available for fishing (s. 4).

Non-binding Resolutions under the Convention

The Guidelines for the Handling of Sea Turtles (2010) outline procedures for safe unangling and release of marine turtles caught accidentally. The Resolution on Non-Target Fish Species (2005) urges CCMs to minimise capture of non-target fish species and where possible to release non-target fish species that have been caught accidentally.

Agreement for the Establishment of the Indian Ocean Tuna Commission

ASEAN Contracting Parties: Indonesia, Malaysia, Philippines, Thailand

There are currently 32 Contracting Parties to this Agreement, including four ASEAN countries (IOTC, 2016b). This Agreement, which establishes the IOTC, was enacted in 1993 and entered into force in 1996. The Agreement authorises the Commission to adopt CMMs binding on Members, following a two-thirds majority vote (Art. IX). CMMs may be passed as binding Resolutions or non-binding Recommendations (IOTC, 2016a).

Obligations

The Agreement itself does not include detailed obligations, but requires each Member to implement binding CMMs passed under the Agreement, including by imposing adequate penalties for violations, and to report annually to the Commission on the actions it has taken (Art. X). The most relevant Resolutions are listed below, along with the obligations they impose on Contracting Parties:

Resolution No. 12/04 on the Conservation of Marine Turtles. This Resolution replaces the 2009 Resolution on Sea Turtles and the 2005 Recommendation on Sea Turtles, which were created in response to Resolution 3.1 passed under the IOSEA Marine Turtle MoU (see above). The Resolution requires Parties to implement the following measures:

- **Reduce incidental mortality.** As far as possible use nets that reduce turtle entanglement incidents and, where appropriate, experiment with equipment and techniques to reduce entanglement. Living turtles should be released from nets and lines and resuscitated. Ships should carry equipment (specified in the Resolution) to carry out these activities.
- **Reporting.** All data on marine turtle interactions, including estimations of mortality, should be reported to the IOTC. Contracting Parties and Cooperating non-Contracting Parties (CPCs) should report on measures to implement the Resolution and FAO guidelines, as well as successful mitigation measures and other impacts on turtles.

Resolution 13/04 On the Conservation of Cetaceans

- **Reduce incidental mortality.** This Resolution requires CPCs to prohibit flagged vessels from setting a purse seine net around a cetacean if the animal is sighted beforehand, and to take all reasonable measures to release any cetacean that has been accidentally encircled. CPCs should also adopt fish aggregating devices that reduce the risk of entanglement.
- **Reporting.** CPCs should require vessels to report accidental entanglement of cetaceans and all interactions with cetaceans involving fishing for tuna and tuna-like species associated with cetaceans to the relevant authority of the flag state.

Resolution 13/05 On the Conservation of Whale Sharks (*Rhincodon typus*)

- **Reduce incidental mortality.** This Resolution requires CPCs to prohibit flagged vessels from setting a purse seine net around a Whale Shark if the animal is sighted beforehand, and to take all reasonable measures to release any Whale Shark that has been accidentally encircled. CPCs should also adopt fish aggregating devices that reduce the risk of entanglement.
- **Reporting.** CPCs should require vessels to report accidental entanglement of Whale Sharks and all interactions with Whale Sharks involving fishing for tuna and tuna-like species associated with Whale Sharks to the relevant authority of the flag state.

Resolution 13/06 On a Scientific and Management Framework on the Conservation of Shark Species Caught in Association with IOTC Managed Fisheries

- **Prohibit capture of Oceanic Whitetip Shark.** CPCs should prohibit vessels authorised to fish for tuna or tuna-like species, except artisanal fisheries and scientific observers, from fishing for Oceanic Whitetip Shark.
- **Reduce incidental mortality.** CPCs shall require flagged vessels, where possible, to immediately release unharmed Oceanic Whitetip Shark caught accidentally.
- **Reporting.** CPCs should require vessels to report incidental capture of Oceanic Whitetip Shark to the relevant authority of the flag state.

Resolution 12/09 On the Conservation of Thresher Sharks (Family Alopiidae) Caught in Association with Fisheries in the IOTC Area of Competence

- **Prohibit capture of thresher sharks.** CPCs should prohibit vessels authorised to fish for tuna or tuna-like species to fish for, store, transport, land or sell thresher sharks Alopiidae spp., and require the release of thresher sharks captured accidentally.
- **Reduce incidental mortality.** CPCs shall require flagged vessels to, where possible, immediately release unharmed thresher sharks that have been caught accidentally.
- **Reporting.** CPCs should require vessels to report incidental capture of thresher sharks to the relevant authority of the flag state.

Resolution 05/05 Concerning the Conservation of Sharks Caught in Association with Fisheries Managed by IOTC

- **Full use of catch.** CPCs are required to ensure full use of catch of sharks, i.e. retention of all parts of the shark except head, guts and skins to point of first landing, and that vessels carry no more than five per cent of the weight of catch in fins.
- **Release of by-catch.** CPCs shall encourage release of sharks captured by fisheries not aimed at sharks.
- **Reporting.** CPCs are required to report annual shark catch data to the IOTC.

Resolution 12/12 To Prohibit the Use of Large-Scale Driftnets on the High Seas in the IOTC Area

- **Prohibit use of large-scale driftnets.** Use of large-scale driftnets should be prohibited on the high seas in the area under the competence of the IOTC.
- **Reporting.** CPCs shall report on their monitoring and control of large-scale driftnet fishing in the IOTC area of competence.

Resolution 16/11 On Port State Measures to Prevent, Deter and Eliminate Illegal, Unregulated and Unreported Fishing. This Resolution reflects the objectives and measures of the FAO Agreement on Port State Measures. The main obligations on Parties are as follows:

- **Deny entry to ports.** CPCs are required to deny entry to ports to vessels for which there is sufficient proof of participation in or support of IUU fishing (Part 7.4), except for purposes of inspection (Part 7.5).
- **Refuse services.** CPCs are required to prohibit vessels suspected of IUU fishing to land catch in their ports and to refuse access to services not essential to the health of the crew (Part 9.1–2).
- **Inspections.** CPCs are required to inspect at least five per cent of landings or transshipments in their ports each year (Part 10.1).

The Resolution does not apply to artisanal fishing vessels of neighbouring states and container vessels not carrying fish (Part 3.1).

Convention for the Conservation of Southern Bluefin Tuna (CCSBT Convention)

ASEAN Parties: Indonesia; cooperating non-members: Philippines

The CCSBT Convention is a legally binding agreement aiming to ensure the conservation and optimal use of Southern Bluefin Tuna *Thunnus macoyii*. The Convention was signed in 1993 by Australia, Japan and New Zealand and subsequently opened to other countries. Although the range of the Southern Bluefin Tuna is mostly to the south of ASEAN waters, Indonesia became a Party in 2008 and the Philippines has been a cooperating non-member since 2004. The Convention establishes the Commission for the Conservation of Southern Bluefin Tuna (CCSBT) (Art. 6), which is responsible for determining binding measures for the conservation, management and optimal use of Southern Bluefin Tuna, including setting catch quotas (Art. 8.3, 8.7). The Convention is also concerned with species that are ecologically related to Southern Bluefin Tuna, including seabirds, sharks and marine turtles.

The 2014 Minimum Performance Requirements to meet CCSBT Obligations and the 2011 Recommendation to Mitigate the Impact on Ecologically Related Species of Fishing for Southern Bluefin Tuna are non-binding recommendations produced by the Commission that encourage Parties to implement FAO IPOAs and guidelines on seabirds, sharks and marine turtles and all binding and non-binding measures adopted by the IOTC and WCPFC, whether or not the Party is a member of these commissions.

Obligations

Observe management measures. Parties must abide by determinations of the Commission regarding catch quotas and other measures to manage stocks of Southern Bluefin Tuna (Art. 5.1);

Records. Parties are obliged to record data relevant to Southern Bluefin Tuna and ecologically related species, including sharks and marine turtles (Art. 5.2);

Prevent reflagging. Parties must prevent the practice of reflagging vessels registered under their laws in order to avoid complying with the Convention (Art. 15.3);

International cooperation. Parties shall cooperate to exchange data related to fisheries, including biological samples and information on vessels or fishing activities (Art. 5.3–4).

RESULTS PART 2:

NATIONAL LEGISLATION

This section summarises national legislation relating to marine wildlife protection in each ASEAN country. Only measures directly relevant to conservation and management of marine species considered in this report are mentioned. This means, for example, that lists of prohibited activities in these summaries do not include activities that only apply to other species or terrestrial areas.

Brunei Darussalam

Brunei has a coastline of 161 km and an EEZ of 38 600 km² (Cheung *et al.*, 2002). Brunei's coast and waters include sandy beaches, mangroves, shallow shoals and reefs (Forestry Department, undated). According to Brunei's Forestry Department (undated), Brunei's waters are home to four species of marine turtle: Hawksbill, Green, Olive Ridley and Leatherback, all of which have been recorded as nesting there in small numbers. Several species of CITES-listed sharks and cetaceans, Dugong, and threatened or vulnerable species of sea cucumber are also found in the ocean around Brunei (IUCN, 2014), along with about 400 reef-building coral species (Forestry Department, undated).

Legislation relating to marine wildlife

Brunei has three laws relevant to the protection of marine wildlife: the Wild Fauna and Flora Order (2007), the Wildlife Protection Act (1981, revised 1984) and the Fisheries Order (2009).

Wild Fauna and Flora Order, 2007

This is Brunei's CITES-implementing legislation and protects wildlife in international trade (wildlife within the country is covered by the Wild Life Protection Act, discussed below). The Order prohibits trade in any CITES-listed species without a permit or certificate (s. 7) and regulates the granting, use and control of permits and certificates.

Permits to export, import, re-export or introduce from the sea Appendix I-listed wildlife, or permits to export or introduce from the sea Appendix II-listed wildlife, may only be granted if the Director of the Forestry Department is satisfied that (1) the activity in question is not detrimental to the survival of the species; (2) the specimen was obtained legally; and (3) the risk of injury, harm to its health or cruel treatment has been minimised (ss. 10–14, 17). The latter two of these conditions must also be met in order to grant permits for re-export of Appendix II-listed species (s. 16) or export of Appendix III-listed species (s. 18). The import of Appendix II- and III-listed species only requires an export permit from the country of export (ss. 15, 19). Appendix I-listed species may not be imported or introduced from the sea for primarily commercial purposes (ss. 11, 13). There is an exemption to these provisions for dead specimens that are personal or household effects; however, the exemption does not apply to specimens that are being imported for primarily commercial purposes or that are Appendix I- or II-listed species acquired outside Brunei and not accompanied by a certificate of acquisition or exemption (s. 27).

Sections 28–30 provide separate measures for granting permits for captive bred specimens, scientific exchange and travelling exhibitions.

The Order makes it an offence to:

- Trade (export, import, re-export or introduce from the sea) CITES-listed species without the appropriate permit or certificate (s. 47);
- Knowingly possess CITES-listed species that have been illegally imported or introduced from the sea or that are intended for illegal export or re-export (s. 48);
- Fail to comply with the conditions of a permit or certificate (s. 49);
- Make false statements in order to obtain a permit or other benefits related to the Order (s. 50);
- Obstruct an authorised officer (s. 51).

The Order provides custodial sentences and fines for individuals convicted of offences, and fines for bodies corporate. An officer of a corporate body may be charged as an individual for offences committed by that corporate body if it is proved that the officer was complicit, whether deliberately or through negligence (s. 57).

Penalties for trade or possession of CITES-listed species depend on which Appendix the species is listed under. For trade or possession of CITES Appendix I-listed species, the penalties for individuals are imprisonment of up to five years and/or a fine of up to BND100,000 (USD68,921). For Appendix II-listed species, the penalties are up to three years' imprisonment and/or a fine of BND50 000 (USD34 460). For Appendix III-listed species, the penalty is a fine of BND37,500 (USD25,845) (ss. 47, 48). Corporations are penalised by fines of double the amount imposed on individuals.

Failure to comply with conditions on a permit is punishable by a fine of up to BND10,000 (USD6,892) for an individual or double this amount for a body corporate (s. 49). Making false statements is punishable by imprisonment of up to two years or a fine of up to BND5,000 (USD3,446) (s. 50). Obstructing an officer is punishable by imprisonment of up to three months and/or a fine of up to BND2,000 (USD1,378). The Order also provides a general penalty of imprisonment for up to five years and a fine of up to BND100 ,000 (USD68,921) for an individual or a fine of up to BND200,000 (USD137,842) for a body corporate for any offences against the Order for which a specific penalty has not been provided.

The Director of the Department of Agriculture may compound offences by accepting from the accused a sum of up to BND2,000 (USD1,378) (s. 53).

For persons charged with performing activities without a permit for which a permit is required, the onus is on the accused to prove their innocence by producing the required permit (s. 54).

Section 5 authorises the Minister of Industry and Primary Resources to appoint any public officer to enforce the Order. These officers may enter premises or vehicles, demand information or to see permits, take samples and search premises (ss. 34–35). Where there is reasonable cause for suspicion, officers may arrest suspects without a warrant (s. 33). Officers may also seize specimens, vehicles or containers if they have reason to believe these are being used in contravention of the Order (ss. 36–37). Vehicles and containers may be forfeited upon conviction (s. 39).

The Order authorises the Director of Forestry to negotiate the return of confiscated specimens to their country of origin (s. 44).

Section 6 states that the Director of the Forestry Department and two other members are to form the CITES SA for Brunei. The Order is administered by the Director of the Department of Agriculture, under the direction of the Minister of Industry and Primary Resources (s. 4).

Section 3 of this law states that in cases of conflict with other laws relating to the export, import or trade in goods the other laws take precedence.

Wild Life Protection Act, 1978 (revised 1984)

This Act regulates conservation and management of wildlife within Brunei, providing for the establishment of wildlife sanctuaries (s. 4) and the protection of certain species of wildlife outside sanctuaries. The Act authorises the Sultan in Council to make rules to implement the Act, including establishing closed seasons or maturity standards for taking any kind of wildlife, rules for possession, import and export of wildlife and restrictions on types of equipment to be used in taking wildlife (s. 25). The First Schedule attached to the Act lists 34 “protected” species of wildlife. The only marine species on the list are Green, Hawksbill and Leatherback Turtles and Dugong.

Section 4 prohibits the following activities within a wildlife sanctuary, except with written permission from the Chief Wildlife Warden:

- i. Hunting, killing, capturing or taking animals, birds, fish or reptiles or disturbing the eggs or nests of birds;
- ii. Carrying equipment for taking or killing animals, birds, fish or reptiles;
- iii. Possessing trophies or flesh of animals, birds, fish or reptiles.

The Act also prohibits the following activities:

- iv. Hunting, killing or capturing protected animals without a licence (s. 7), which may only be issued for scientific purposes (s. 11);
- v. Possessing or offering for sale protected animals, their trophies or flesh without a licence (except for the Director of Museums for scientific purposes) (s. 8);
- vi. Exporting protected animals without a licence (s. 9).
- vii. Contravening any conditions of licences (s. 10);
- viii. Failing to report discovery of a trophy of a protected animal or young protected animal that should be under the care of its mother (s. 14).

The penalty for acts listed above under (i), (iv) and (vi) is imprisonment of one year and a fine of BND2,000 (USD1,378). For the acts listed above as (ii), (iii) and (v) the penalty is imprisonment of six months and a fine of BND1,000 (USD689). For the acts listed as (vii) and (viii) the penalty is three months' imprisonment and a fine of BND500 (USD345). Game Officers of the rank of Game Warden or above may fine offenders up to BND100 (USD69) and release them without further penalty, but not for offences under (i) or (iv) above (i.e. illegally killing or taking wildlife) (s. 17). For (v), the Act places the onus on the owner to prove the legal origins of the animal (s. 8).

Section 10 authorises the Chief Game Warden or his/her deputies to issue licences. Sections 15–19 outline the powers of Game Officers and Police Officers, including powers to search vessels and premises, arrest and search suspects and seize property. Under certain conditions, suspects may be arrested without a warrant (s. 15.1).

The Act is implemented by the Museums Department under the Ministry of Culture, Youth and Sports.

Fisheries Order No. S 25, 2009, amended 2010, 2014

The Fisheries Order regulates fisheries activities in Brunei waters, including the granting of licences and the investigation and penalisation of offences, and provides for the establishment and management of marine parks. The Order defines “fish” as any aquatic animal or plant life, including aquatic mammals, crustaceans and molluscs and their young; however, it explicitly excludes turtles and their eggs (s. 2).

The issuing, determining, and, where necessary, amending, of conditions of licences is at the discretion of the Director of Fisheries (ss. 7–8). For granting licences to foreign fishing vessels only, the Order lists several factors that the Director is required to consider; these mainly relate to diplomatic relations between Brunei and the flag state of the vessel (s. 22).

The Order provides that marine parks may be created anywhere in Brunei waters and may include adjoining land (s. 26). Within these areas, the following activities are prohibited without a licence (s. 27):

- Fishing or attempting to fish;
- Taking or possessing any living or dead aquatic fauna or flora;
- Collecting coral, extracting sand or gravel or destroying habitat or aquatic life;

- Anchoring a vessel to any submerged object, including coral;
- Destroying, defacing or removing any object, including animate objects.

The Fisheries Amendment Order (No. S 50) of 2014 added a new Section 26A requiring anyone entering a marine reserve or marine park to take all reasonable steps to prevent or minimise harm to the environment.

In addition to the above offences within marine parks, it is an offence anywhere in Brunei to:

- Attempt to fish using explosives, poisons, noxious substances or prohibited gear, or to possess such equipment (s. 31.1a);
- Knowingly (or with reasonable cause to know) possess or receive fish species prohibited under CITES (s. 31.1c);
- Take, disturb, sell or dispose of any aquatic mammal (s. 32);
- Fail to release any aquatic mammal taken accidentally, if alive, or to inform the Director of Fisheries if it is dead (s. 32);
- Destroy incriminating evidence (s. 34);
- Operate a fishing vessel without a licence or in contravention of directions or conditions of a licence (s. 15);
- Operate a foreign fishing vessel without a licence and an agreement between its government or international organisation and Brunei (s. 17);
- Fail to comply with lawful instructions of, or wilfully obstruct, enforcement officers performing their duty (s. 46).

The penalty for offences, attempted offences, abetting of offences or breach of conditions of licence is imprisonment of up to one year and/or a fine of up to BND10,000 (USD6,892) (ss. 39, 40). The exception is the penalty for operating a foreign fishing vessel without licence and agreement, for which the owner and master may be imprisoned for up to five years and/or fined up to BND100,000 (USD68,921), while each member of crew may be imprisoned for up to one year and/or fined up to BND2,500 (USD1,723) (s. 17). Licences may be cancelled or suspended for offences against the Order or breach of conditions (ss. 11, 30). Vessels or other articles used in the commission of an offence may be forfeited, even where no person has been found guilty of the offence (ss. 49, 53), and the Government may recover costs of storing the vessel or articles from an offender upon conviction (s. 52). Conviction of a second or subsequent offence may result in a prohibition from holding a fishing licence for up to five years in addition to any other penalty imposed (s. 30).

Individuals who are members of partnerships, officers of corporate bodies, and those acting on behalf of others are liable to penalty if they are complicit in the offences, whether wilfully or through negligence (s. 36).

The Director of Fisheries or police officers of at least the rank of Superintendent may compound offences (except certain offences involving foreign fishing vessels) by collecting up to BND1000 (USD689) from suspects, and may confiscate catch and equipment (s. 37, as amended by Fisheries Amendment Order (No. S 81), 2010).

The Order provides for the appointment of a Director of Fisheries to implement the Order (s. 3) and defines officers authorised to implement the Order or subsidiary regulations as the Director and Deputy Director of Fisheries, any officer authorised by the Director, or any police officer (s. 4). Along with these persons, commanding officers of Government naval ships and aircraft are considered enforcement officers.

If officers have reason to believe an offence has been committed, they may without a warrant stop, board and search vessels, vehicles and premises, demand to see licences, take samples, seize catch, vessels and equipment and make arrests (ss. 41–42).

The 2014 Amendment adds that the discovery of fish or fishing equipment on board a vessel within a marine park will be taken as evidence of fishing in the marine park without a licence, unless they are stored in a sealed hold or fishing equipment is stowed correctly (s. 5, amending s. 56A of the Fisheries Order).

The Order authorises the Minister of Fisheries, with the approval of the Sultan, to make further regulations for fisheries conservation and management, including specifying closed seasons and areas, minimum mesh sizes and permitted fishing equipment and regulations to control endangered species of fish or comply with CITES (s. 64d, f, g, i, zc). The Director of Fisheries is required to maintain a fisheries management plan consistent with principles of conservation and avoiding over-fishing (s. 5).

Cambodia

Cambodia has a coastline of approximately 435 km and an EEZ of 55 600 km² (FAO, 2011), which includes areas of mangroves, corals and seagrass (NBDS, 2014, 17). The CBD notes that the major threats to Cambodia's coast include unsustainable and destructive fishing, which are exacerbated by overlapping legislation and problems with enforcement (NBDS, 2014, 17).

Cambodia is home to three species of marine turtle: the Leatherback, Hawksbill and Olive Ridley, although none are recorded as nesting there in any numbers. Blue coral and organ-pipe corals are also found in Cambodian waters, along with Dugong, Humphead Wrasse, Spinetail Mobula *Mobula japonica* and several species of endangered and vulnerable sea cucumbers, CITES-listed seahorses, sharks and cetaceans (IUCN, 2014).

Legislation relating to marine wildlife

Cambodian legislation comprises Laws (chbab) passed by the National Assembly and Senate, Royal Decrees (preah reach kret) issued by the King or acting head of state by request of the Council of Ministers, and several levels of implementing legislation that must conform to the Laws above them. In decreasing order of precedence, these are:

- Sub-Decrees (anu-kret) prepared by the relevant ministry, adopted by the Council of Ministers and signed by the Prime Minister;
- Ministerial Orders/Proclamations (prakas);
- Decisions (sech kdei samrach) issued by a minister or the Prime Minister for a temporary purpose, or by the Constitutional Council;
- Circulars (sarachor) signed by a minister or the Prime Minister, which are not legally binding;
- Local regulations or bylaws (deika) issued by local councils (Anon., undated).

The main law covering wildlife in Cambodia is the Law on Forestry (2003), which applies only to forest ecosystems and wildlife that breeds on land. The Cambodian government is currently drafting a new law directed specifically at wildlife, but this will largely replace the relevant provisions of the Law on Forestry and will similarly have no jurisdiction over aquatic species (K. West,

pers. comm., 2015). The most important pieces of legislation for marine wildlife protection in Cambodia are therefore the Law on Protected Areas (2008) and the Law on Fisheries (2006). Another central regulation for combatting illegal wildlife trade in Cambodia is Sub-Decree No. 53 On International Trade in Endangered Species (2006); unfortunately, we were unable to obtain the text of this Sub-Decree, although we did find a summary that we have included below. Lists of protected wildlife species are provided in Sub Decree No. 123 On the Determination of Fish Species and Products that are Endangered (2009), Proclamation No. 020 On the Classification and List of Wild Animal Species (2007) and Sub-Decree No. 209 On the Enforcement of the List of Prohibited and Restricted Goods (2007). These and other relevant pieces of legislation are summarised below in decreasing order of precedence, according to the hierarchy described in the bullet points above.

In addition to the hierarchy of laws described above, in case of contradiction between pieces of legislation Cambodian law generally grants precedence to more recent pieces of legislation over older ones. Cambodian legislation tends not to include a clause repealing specific laws or articles, but instead to declare that any contradictory measures from earlier laws and regulations are repealed or annulled by the new legislation. A clause to this effect was included in all the laws and regulations that we read for this review.

Law on Protected Areas, 2008

The Law on Protected Areas aims to promote the conservation of biodiversity and the management and sustainable use of natural resources in protected areas (Art. 1), including by controlling national resource offences and the export and import of wildlife from/into protected areas (Art. 6). The Law provides regulations for the establishment and management of protected areas, including marine parks, outlines the general rights and responsibilities of the Ministry of Environment's Nature Protection and Conservation Administration (NPCA), requires the Ministry of Environment to develop a National Protected Area Strategic Management Plan, and lists prohibited activities and penalties for carrying out these activities within a protected area.

Article 39 specifies that non-commercial export, import or exchange with other countries of animal, plant and fish species shall be subject to research and evaluation by the NPCA and the Ministry of Environment. Article 35 authorises the Ministry of Environment to issue permits only for non-profit purposes.

This Law prohibits, within protected areas, the following activities relevant to marine wildlife (Art. 41):

- Collecting fishery products and natural resources in violation of access rights;
- Catching, hunting or collecting wild eggs, offspring and birds;
- Destroying water quality, including using poisons, chemicals or electric shock equipment;
- Stocking, buying and selling wild animals and "samples";
- Destroying plants and wildlife habitats;
- Illegal, harmful fishing practices.

Articles 57–64 provide more specific offences and penalties. The highest penalties are for "offences of the fourth grade," which are punishable by five to 10 years of imprisonment and a fine of KHR 15 million–150 million (USD3,628–36,277) or, if the offender is a legal entity, a fine of KHR 150 million–250 million (USD36,277–60,462), and confiscation of all evidence. The only such offence specified that is potentially relevant to marine wildlife is the bringing in, storing or discharging of pollutants or waste that can harm natural resources (Art. 62); this measure could cover the use or possession of poisons for fishing.

“Offences of the third grade,” which are punishable by one to five years of imprisonment and/or fines of KHR 15 million–150 million (USD3,628–36,277), include catching, hunting, injuring, killing, removing or taking the eggs or offspring of vulnerable, rare or critically endangered wildlife species, and using weapons, explosives, chemicals, poisons, electric equipment or any other illegal gear to trap animals (Art. 61). [The classification of “Critically endangered” here is not in accordance to the IUCN Classification, but rather a literal quote from the official English text of the law in Cambodia]. All evidence will be confiscated and fines doubled for repeat offences.

“Offences of the second grade” include (Art. 60):

- Using poisonous substances that can harm natural resources;
- Destroying wildlife habitat;
- Collecting eggs or chicks, or disturbing or injuring offspring;
- Preventing wildlife species from feeding, reproducing or nurturing;
- Operating equipment that can disturb wildlife;
- Concealing evidence of offences.

These offences are punishable by one month to one year of imprisonment and/or fines of KHR 1.5 million–15 million (USD363–3,628) and confiscation of all evidence. Fines are doubled and restoration for damages required for repeat offences.

Relevant “offences of the first grade” include bringing in equipment or means of transport with the purpose of committing a natural resource offence. This is punishable by a written warning (Art. 57).

Transactional fines may be imposed for the following activities:

- Importing or exporting fauna and flora without a permit (Art. 58);
- Collecting or poisoning eggs or offspring of wildlife (Art. 58);
- Destroying natural resources or damaging plants or wildlife (Art. 59);
- Stocking, collecting or transporting natural resource by-products without a permit (Art. 59);
- Raising wildlife or trading wildlife or wildlife parts (Art. 59);
- Illegal fishing practices harmful to natural resources, including marine water, mangroves, coral and seaweed (Art. 59).

The first two of the above offences are punishable by a transactional fine of KHR 100,000–one million (USD24–242), restoration of damages and confiscation of evidence, with fines doubled for repeat offences (Art. 58). The remaining offences are punishable by unspecified transactional fines or restoration of damages, plus confiscation of evidence, with fines doubled and imposed in addition to restoration of damages for repeat offences (Art. 59).

The law provides that products and by-products of illegal activities and vehicles and equipment used in committing offences will be seized and held until cases are resolved by the court (Arts. 49, 50). Article 51 authorises officials of the NPCA to temporarily stop activity that violates this law until the case is resolved.

The Ministry of Environment and the NPCA are responsible for implementing this law.

Law on Fisheries, 2006

The *Law on Fisheries* is part of Cambodia's CITES implementing legislation. The Law regulates licensing for exploitation, transportation, export and import of fisheries products and specifies prohibitions and penalties for certain activities. Additionally, the Law outlines the powers and responsibilities of the Ministry of Agriculture, Forestry and Fisheries (MAFF), which it makes responsible for fisheries management, and the Ministry of Environment, which it makes responsible for managing natural protected areas (Art. 3). The 2006 *Law on Fisheries* largely replaces the 1987 *Fiat-Law No. 33 On Fisheries Management and Administration*, although there is no clause in the *Law on Fisheries* that specifically repeals the earlier law. Since we did not find significant relevant measures in *Fiat-Law No. 33* that were not included in the *Law on Fisheries*, the earlier law is not discussed here. The Fisheries Administration is drafting a new fisheries law (K. West, pers. comm., 2015).

The Law on Fisheries outlines general principles of sustainable management for fisheries (Art. 14) and protection of biodiversity and the marine environment (Art. 15), and requires the Fisheries Administration to develop a National Fishery Management Plan, which must be reviewed every five years (Art. 15). All vessels fishing in international waters must register in accordance with UNCLOS and respect national and international laws (Art. 51).

For activities in Cambodian jurisdiction, the Law requires registration with the Fisheries Administration (Art. 33) and a licence for all fishing (except subsistence fishing) (Arts. 32, 45) and for commercial transportation, import and export of fishery products (Arts. 64, 66, 67). Endangered fishery products also require a licence from the CITES MA of Cambodia (for export) or the exporting country (for import), and, where applicable, a quality control certificate (Arts. 66, 67). A logbook must be maintained for all fishery production, processing, possession and trade that requires a permit, and must be reported monthly to the Fisheries Administration (Art. 34). This also applies to foreign vessels fishing in Cambodian waters (Art. 38; see also Art. 47).

The Law allows the following activities with a permit (Art. 23):

- Catching, selling, buying, stocking and transporting eggs and offspring of aquatic animals;
- Transporting, processing, buying, selling and stocking endangered fishery resources;
- Digging for sand in fishery domains;
- Buying or selling ornamental shells of rare species;
- Stocking fisheries products during closed season (Art. 35).

Article 18 decrees that islands that are fished or used for fishery conservation (see Art. 12), mangrove forests, seagrass areas and coral reefs that are important for the sustainability of fishery resources are Protected and Conservation Areas of Fishery Resources. Article 16 authorises the Fisheries Administration and MAFF to determine closed seasons.

The Law on Fisheries prohibits a large number of activities and provides penalties for violations. The most relevant of these to marine wildlife are summarised in Table 1. Penalties are classified into three classes of offence (Arts. 89–101):

- The highest penalties are for “class 1” fishery offences, which are punishable by imprisonment of three to five years and the confiscation of all evidence.
- Class 2 offences are punishable by one to three years of imprisonment, fines of KHR five million–50 million (USD1,209–12,092) and the confiscation of all evidence.
- Class 3 offences are punishable by imprisonment of one month to one year or a fine of KHR one million–five million (USD242–1,209) and the possible confiscation of evidence.

Anyone who commits a fisheries offence that damages fishery ecosystems must pay the cost of the destruction plus restoration to its original condition (Art. 90). Some fines are doubled or upgraded to a higher class of offence for second and subsequent offences or offences committed at night.

Other penalties, which may be imposed by the Fisheries Administration without first proceeding through a Court of Law (Art. 86), include transactional fines, termination or suspension of licence (Art. 89) and warning letters (Art. 91). Offences punishable by these measures are noted in Table 1.

Table 1: Prohibited activities and penalties under the Law on Fisheries

Prohibited activity	Class of offence	Additional penalties
Fishing in fishery conservation areas, except by the Fisheries Administration for research with permission from MAFF (Art. 19)	1 (large-scale fishing)	Licence revoked (Art. 98) Penalties doubled for repeat offences or if committed at night
	2 (medium-scale fishing)	Penalised as a class 1 offence for repeat offences or if committed at night (Art. 99)
	3 (subsistence fishing)	Penalised as a class 2 offence for repeat offences or if committed at night (Art. 101)
Any activities, except law-enforcement activities, in fishery conservation areas (Art. 19)		Transactional fine of KHR 500,000–five million (USD121–1,209) (Art. 97) Penalty doubled for repeat offences
Large- or medium-scale fishing in closed season	1 (large-scale fishing)	Licence revoked (Art. 98) Penalties doubled for repeat offences or if committed at night
	3 (medium-scale fishing)	Penalised as a class 2 offence for repeat offences or if committed at night (Art. 101)
Fishing using prohibited gear, including (Art. 19): <ul style="list-style-type: none"> • Explosives, electricity or poisons; • Devices to attract aquatic animals, including lamps; • Other destructive fishing methods; • Fishing methods not listed in proclamations issued by MAFF 	1	Licence revoked Penalties doubled for repeat offences or if committed at night (Art. 98)
	3 (some small-scale gear)	Penalised as a class 2 offence for repeat offences or if committed at night (Art. 101)
Producing, buying, selling, transporting or storing electrocuting devices (Art. 21)	2	Penalties doubled for repeat offences (Art. 100)
Discharging toxic substances or substances harmful to aquatic animals (Art. 22)	1	Licence revoked Penalties doubled for repeat offences (Art. 98)
Trawling in inshore fishing areas, except with permission from MAFF for re-search purposes (Art. 49)		Transactional fine of one to two times market price; evidence returned to owner (Art. 94) Penalty doubled and evidence confiscated for repeat offences or offences committed at night

Prohibited activity	Class of offence	Additional penalties
Entering coastal fishing areas with trawl fishing gear unless stored so as to be not readily available for fishing (Art. 50)		Transactional fine equivalent to fishing fees; evidence returned to owner (Art. 95) Penalty doubled and evidence confiscated for repeat offences
Buying, selling, processing, stocking or transporting fishery products that have been fished illegally or with illegal gear (Art. 69)	3	Repeat offences penalised as a class 2 offence (Art. 101)
Catching, selling, buying, transporting, stocking, exporting or importing endangered natural fishery products (Art. 92)		Transactional fine of two to three times market price; evidence returned to owner Penalty doubled and evidence confiscated for repeat offences
Collecting, buying, selling, transporting and stocking corals, except with the permission of the Minister of MAFF (Art. 52)		For buying and selling: Transactional fine of double market price; evidence returned to owner (Art. 93) Penalty doubled and evidence confiscated for repeat offences
		For collecting: Transactional fine of five million to 10 million KHR (USD1,209–2,418) (Art. 96) Penalty doubled for repeat offences
		For transporting and stocking: No penalty specified
Catching, selling, buying, stocking or transporting offspring or eggs of aquatic animals without a licence (Art. 94)		Transactional fine of one to two times market price; evidence returned to owner Penalty doubled and evidence confiscated for repeat offences
Exporting or importing (non-endangered) fishery products without a licence (Art. 93)		Transactional fine of double market price; evidence returned to owner (Art. 93) Penalty doubled and evidence confiscated for repeat offences
Importing aquatic animals or plants without a licence (Art. 97)		Transactional fine of KHR 500,000–five million (USD121–1,209) (Art. 97) Penalty doubled for repeat offences
Large- or middle-scale fishing without a licence, in the wrong areas or using wrong fishing gear		Transactional fine equivalent to fishing fees; evidence returned to owner (Art. 95) Penalty doubled and evidence confiscated for repeat offences
Using a fishing vessel without a licence, logbook or registration with the Fisheries Administration, or not complying with conditions stated in the logbook (Art. 95)		Transactional fine equivalent to fishing fees; evidence returned to owner Penalty doubled and evidence confiscated for repeat offences
Not maintaining a logbook for statistics of fishery products, failing to record statistics or failing to report the logbook regularly to the Fisheries Administration (Art. 97)		Transactional fine of KHR 500,000–five million (USD121–1,209) (Art. 97) Penalty doubled for repeat offences
Fishing with a foreign vessel without a licence or in contravention of conditions of agreement (Art. 94)		Transactional fine of one to two times market price; evidence returned to owner Penalty doubled and evidence confiscated for repeat offences or offences committed at night
Fishing in violation of terms of licence or transferring licences (Art. 24)		Transactional fine equivalent to fishing fees; evidence returned to owner (Art. 95) Penalty doubled and evidence confiscated for repeat offences
Transporting or stocking fishery products in violation of terms of licence (Art. 24); commercial transportation of fishery products without a licence or in violation of the terms of the licence (Art. 69)		Transactional fine of double market price; evidence returned to owner (Art. 93) Penalty doubled and evidence confiscated for repeat offences

Prohibited activity	Class of offence	Additional penalties
Anchoring on a coral reef, except with the permission of the Minister of MAFF (Art. 52)		Transactional fine of five million to 10 million KHR (USD1,209–2,418) (Art. 96) Penalty doubled for repeat offences
Exploitation that damages or disturbs the growth of seagrass or coral reef, except with permission of the Minister of MAFF, or other activities that damage seagrass or coral (Art. 52)	1	Licence revoked Penalties doubled for repeat offences (Art. 98)
		Transactional fine equivalent to fishing fees; evidence returned to owner (Art. 95) Penalty doubled and evidence confiscated for repeat offences
Activities in the fishery domain that damage aquatic resources (Art. 24)	2	Repeat offences penalised as a class 1 offence (Art. 99)
Fishing that damages coral reefs or seagrass		Transactional fine equivalent to fishing fees; evidence returned to owner (Art. 95) Penalty doubled and evidence confiscated for repeat offences
Concealing evidence of fisheries offences (Art. 99)	2	Repeat offences penalised as a class 1 offence
Involvement of officials in enabling fisheries offences (Arts. 102–103)	2*	No confiscation of evidence

* Class not specified, but penalties match penalties for this class of offence

Article 82 specifies that anyone who provides “means or orders or opportunity” to an offender will be considered an accomplice and prosecuted in the same way as the offender.

Officers of local authorities, police, army or other institutions who allow activities in violation of the Law on Fisheries or who threaten or obstruct the duties of Fisheries Administration officers are subject to one to three years of imprisonment and/or a fine of KHR five million–50 million (USD1,209–12,092) (Art. 102). The same fine is applied to Fisheries Administration officers who provide permissions in violation of this law, participate directly or indirectly in activities against this law, forgive or fail to report any class 1 fishery offence or run a fishing lot as an owner (Art. 103).

The Law on Fisheries authorises Fisheries Administration officers to stop and inspect vehicles suspected of carrying evidence of fishery offences, make inquiries relating to fishery offences, temporarily seize licences when the licence holder has committed a fisheries offence (Art. 75), and temporarily seize illegally fished, stocked, traded or transported fishery products, fishing equipment or vehicles that have been used illegally, endangered fishery resources and documents related to fishery offences (Art. 76). Fisheries Administration officers designated as judicial police officers may detain suspects for 48 hours while they submit a complaint to the court (Art. 76).

Law on Environmental Protection and Natural Resource Management, 1996

The main purposes of this law are to prevent, reduce and control pollution, ensure the sustainable management and use of natural resources, including ecosystems, wildlife, fish, aquatic resources and sand, and suppress any acts that harm the environment. The law specifies penalties of up to KHR 50 million (USD12,092) and five years’ imprisonment for activities that pollute the environment or destroy habitats, and provides for penalising violations of regulations passed under this law (Art. 25). Some activities relevant to the illegal trade in marine wildlife, such as fishing using poisons or chemicals, could be prosecuted under this law. The Ministry of Environment is responsible for implementing the Law.

Royal Decree on the Creation and Designation of Protected Areas, 1993

This Decree defines “National Protected Areas” in four categories: National Parks, Wildlife Sanctuaries, Protected Landscapes and Multiple-use Management Areas (Art. 1), and lists areas designated in each category. Several of these involve coastal areas. The Decree is implemented by the Prime Minister, Minister of State for Land Management and Urbanisation, Minister of Agriculture and Secretary of State for Environment (Art. 5).

Sub-Decree No. 53 On International Trade in Endangered Species, 2006

We were unable to obtain a copy of the text of this sub-decree, but Faolex (2014) provides the following summary: “The purpose of this Sub-Decree is to determine the procedures and mechanisms for managing the export, import, re-export and introduction from other nations of any specimen of wild flora or fauna in compliance with the Convention on International Trade in Endangered Species (CITES).

The Sub-Decree consists of 8 Chapters divided into 29 articles: General provisions (1); Management competence and CITES scientific competence of Cambodia (2); Carrying on international trade on specimens of species of wild fauna and flora registered in the lists of the Appendices of the CITES convention (3); management of international trade on species of wild fauna and flora registered in the CITES Appendices’ list originated from artificially propagated hybrids of fauna or multi-flora (4); Procedures for inspecting and solving offences (5); Penal provisions (6); Transitional provisions (7); and Final provisions (8).

This Sub-Decree shall apply to all specimens of species of wild flora and fauna registered in the appendices of the CITES.

A CITES Management Competence of Cambodia shall be established under the supervision of the Ministry of Agriculture, Forestry and Fisheries.

The Sub-Decree contains provisions in order to allow the export, import, re-export and introduction from international seas of specimens of wild flora and fauna registered in the list of Appendix 1 of the CITES convention.”

Sub-Decree No. 209 On The Enforcement of the List of Prohibited and Restricted Goods, 2007

This sub-decree promulgates the list of goods that are prohibited or restricted for import and export, which is contained in Annex 1. According to this list, cetaceans, Dugong, sharks, corals, marine fish and reptiles, including turtles, require import and export licences issued by MAFF.

Annex 2 contains explanatory notes for the list of prohibited and restricted goods, including a key for the treatment codes used in Annex I. This Annex notes that there are exemptions to the prohibitions and restrictions for samples or personal effects, except for goods subject to absolute prohibition on import or export (s. II.1). The Annex also clarifies that products originating from CITES-listed animals that are not specified on the Sub-Decree require a CITES permit for import and export.

The Sub-Decree is implemented by several ministries, but MAFF is responsible for issuing the licences for the import and export of wildlife.

Sub-Decree No. 26 On Hiring Inland and Marine Fishery Domain for Fishery Exploitation, 1989

Regulates issuance of fishing permits and provides detailed specifications of allowable gear. The Sub-Decree is implemented primarily by the Ministry of Agriculture.

Sub-Decree No. 123 On the Determination of Fish Species and Products that are Endangered, 2009

We were unable to obtain the text of this Sub-Decree. A 2014 report on Cambodian exports notes that “Prohibitions [on export] apply to any fish species mentioned on the CITES list of endangered species as provided for in Sub-Decree No. 123 (2009)” (Dao, 2014).

Sub-Decree No. 66 On Transportation of Fishery Product, 1988

Regulates the transport, import and export of fishery products, including quantities that may be transported, authorisation for issuing licences and penalties for violating the law. The Sub-Decree does not mention individual species. The Sub-Decree could be relevant to trade in wildlife if fishery products were being transported in violation of this law. However, penalties are low, comprising fines of up to two thirds the value of the excess product or product carried in violation of licensing conditions, with doubled fines and the possibility of revocation of licence for a period of one or two years for repeat offences (Arts. 9, 10). The Sub-Decree is implemented primarily by the Ministry of Agriculture.

Proclamation No. 020 On the Classification and List of Wild Animal Species, 2007

This Proclamation is part of Cambodia’s implementation of CITES. Article 2 categorises species as Endangered, Rare or Common. Endangered species, listed in Annex 1 to the Proclamation, are species whose population density or range has declined in the last 10 years or their last three generations. Rare species, listed in Annex 2, exist in low population densities in the wild, are seldom seen or are possibly facing extinction in the wild. Other species are categorised as Common and include all species not categorised as Endangered or Rare. Article 3 of the Proclamation states that the species listed on the Annexes will reflect CITES listings, and that the CITES MA (MAFF) will inform the public of any changes.

We were unable to obtain the species lists and therefore cannot determine whether marine species are covered by the Proclamation. The Proclamation decrees that all terrestrial species of wildlife are to be managed by the Forestry Administration (Art. 1), excluding any wildlife that breeds in water. It is therefore possible that this Proclamation does not apply to marine species.

The Proclamation is implemented by the General Director of the Ministry, Director of the General Inspectorate, the CITES MA, the Director of the Cabinet and the directors of all relevant departments in MAFF (Art. 6).

Proclamation No. 028 On Restrictions of Fishing Gear in Inland and Marine Fisheries, 1984

This Proclamation prohibits the use of fishing gear not mentioned in the appended lists. The Proclamation was promulgated by the Minister of Agriculture and is to be implemented by the Fisheries Administration and provincial peoples' committees. This was the most recent list relating to restricted fishing gear that we were able to obtain, but we believe it must have been replaced or updated since 1984, particularly since a new Proclamation No. 129 On Determination of the Type of Family Fishing Gears Allowed for Use in Fishing in the Freshwater Fisheries Domain in the Kingdom of Cambodia was produced by MAFF in 2012. A similar list may have been produced for marine fisheries, but we were unable to confirm this.⁴

Proclamation No. 1033 On the Protection of Natural Areas, 1994

This Proclamation prohibits the hunting and fishing of mammals, amphibians, reptiles and aquatic animals for tusks, bones, feathers, horns, leather and blood (Art. 2) and water pollution activities such as the use of explosives, poisons, chemicals and electricity (Art. 6). The Declaration does not specify penalties for violations. The Nature Conservation Department of the Secretariat of the Environment is responsible for implementing the Declaration.

Proclamation No. 0002 On Competent Authorities in Issuing Permission to do Fishery in Open Water, Aquaculture, Fish Processing and Special Permissions, 1989

Provides that fishing requires a licence issued by the Fisheries Administration or, in the case of foreign fishing vessels, the Ministry of Agriculture after consultation with the Council of Ministers.

Other legislation

We found references to three legal documents that seem relevant but for which we were unable to obtain either the texts or summaries: Proclamation No. 571 On the Measures for the Protection of Aquatic Resources Currently Under Threat (2010), Proclamation No. 485 On the Classification and Management of Aquarium Species (2014), and Circular No. 157 On the Measures to Manage and Prevent the Anarchic Trafficking of Animals and the Products Derived from Animals (2002). As a Circular, the latter is not legally binding.

⁴ A likely candidate was found in Khmer but we were unable to translate the document. The title translates approximately as Proclamation on Identifying the Type of Fishing Gear that Allow Fishermen to Fish in Sea [...] of the Kingdom of Cambodia (2015).

Indonesia

Indonesia is an archipelago comprising over 17 000 islands, with a coastline of 80 791 km and an EEZ of 5.8 million km² (Ministry of Environment and Forestry of Indonesia, 2014). Indonesia is home to all or almost all the species of marine wildlife considered in this report, including Dugong and many species of cetaceans, sharks, sea cucumbers and coral (Ministry of Environment and Forestry of Indonesia, 2014). All six species of marine turtle found in Southeast Asia nest in Indonesia, except the Flat-backed Turtle, which forages into Indonesian waters from its nesting grounds in Australia (IUCN, 2014).

Legislation relating to marine wildlife

Written laws in Indonesia are promulgated in the following forms, in decreasing order of precedence:

- Laws (Undang-undang);
- Government Regulations Substituting a Law (Peraturan Pemerintah Pengganti Undang-undang);
- Government Regulations (Peraturan Pemerintah);
- Presidential Decrees (Keputusan Presiden);
- Regional Regulations (Peraturan Daerah) (Laiman *et al.*, 2009).

Many provisions to implement conservation and management measures for marine wildlife are promulgated in Ministerial Regulations (Peraturan Menteri); however, these are not technically part of the legislative hierarchy, which according to Lotolung *et al.* (2005) has led to regional and local governments claiming that they are not bound by these regulations. Nonetheless, several of the Laws discussed in this report explicitly include Articles that devolve power for certain aspects of marine wildlife conservation upon ministries and their Regulations. This report therefore summarises those Ministerial Regulations that are most relevant to marine wildlife conservation.

In addition to the forms of legislation described above, Indonesian law is provided in several forms that are omitted from this report due to constraints of space and time. Regulations may be promulgated by Presidential Instructions (Instruksi Presiden), Ministerial Decrees (Keputusan Menteri) and Circular Letters (Surat Edaran), which are not included in the abovementioned

legislative hierarchy and do not provide penalties for non-compliance (DLA Piper, 2015). For these reasons, we do not discuss these here, except to draw attention to a handful of relevant Ministerial Decrees. Furthermore, under Law No. 22/1999 on Regional Administration, Provincial Governments are responsible for the management, use and conservation of marine resources in their territory (Arts. 7, 10). However, owing to the large number of provinces in Indonesia we do not have space to discuss these. Finally, in addition to the written laws of Indonesia, regulations and court decisions may take into account customary law (customary rules that are not written into law but are applicable in law) and Adat Law (traditional local rules and systems of dispute resolution) (Laiman *et al.*, 2009). These sources of law are also not discussed in this report.

The most important pieces of legislation for the conservation and management of marine wildlife in Indonesia are the Conservation of Living Resources and their Ecosystems Act (1990), the Law on the Management of Coastal Areas and Isles (2007) and the Fishery Law (2004, amended 2009). Several other laws provide relevant measures, including the Law on the Sea (2014), which makes the Indonesian government responsible for managing the marine environment and marine resources in Indonesian waters and on the high seas, the Customs Law (1995, amended 2006),

and the Penal Code (1915), which includes measures to protect animals from mistreatment. Three Government Regulations also relate to the conservation of marine wildlife: No. 60/2007 on the Conservation of Fishery Resources, No. 7/1999 on Preserving Flora and Fauna Species, and No. 8/1999 on Wild Flora and Fauna Exploitation.⁵ Finally, a large number of Ministerial Regulations, most issued by the Minister of Marine Resources and Fisheries, provide detailed measures for the management and control of activities relating to marine wildlife. These pieces of legislation are summarised below.

Conservation of Living Resources and their Ecosystems Act, 5/1990

This Act aims to promote the conservation of natural resources on the basis of the principle of sustainable use of living resources and their ecosystems (Art. 2). The provisions of the Act are general and most require more detailed Government Regulations for implementation. For example, the Act specifies that protected plant and animal species are classified as either endangered or rare, but that provisions related to their protection shall be outlined in a Government Regulation (Art. 20).

The Act requires the Government to create protected areas, basic guidelines for regulating these areas, and procedures for their use (Arts. 8, 16). Activities for research and development are permitted within Sanctuary Reserves (i.e. Wildlife Sanctuaries and Strict Nature Reserves) (Art. 17) and Nature Conservation Areas (including National Parks and National Recreation Parks) (Art. 31), but no activities in these areas are permitted that lead to changes to the “natural integrity” of a Sanctuary Reserve, including decreasing the function or area of the reserve (Art. 19, 31; see also Art. 33). There is an exception in the case of Sanctuary Reserves for habitat management activities in order to maintain wildlife populations (Art. 19.2).

It is prohibited under the Act to catch, kill, possess, destroy, transport or trade in live or dead protected animals or their parts or nests (Art. 21.2) except for purposes of research, education or safeguarding of these plants or animals (Art. 22.1) or in case of endangerment to human life (Art. 22.3). Any wild species found in violation of this prohibition are to be confiscated and returned to their habitat or given to a wildlife conservation institution, unless “its condition is such that it is not likely to be useful,” in which case it should be destroyed (Art. 24).

The maximum penalty for catching, killing, possessing, transporting or trading in protected animals is five years’ imprisonment and a fine of IDR100 million (USD7,390) if done intentionally (Art. 40.2), or one year’s imprisonment and a fine of IDR50 million (USD3,695) if done through negligence (Art. 40.4). The maximum penalty for damaging reserved areas is 10 years’ imprisonment and a fine of IDR200 million (USD14 780) if done intentionally (Art. 40.1), or one year’s imprisonment and a fine of IDR100 million (USD7,390) if done through negligence (Art. 40.3). Offences that are committed intentionally are considered to be criminal offences (Art. 40.5).

Enforcement powers authorised under the Act include the powers to examine reports of criminal activity concerning living resources and their ecosystems, investigate persons accused of such activities, examine identification cards of any persons found in a protected area, and search for and confiscate evidence (Art. 39).

The Act is implemented by the Ministry of Environment and Forestry.

Two Government Regulations implement the Conservation of Living Resources and their Ecosystems Act in relation to the conservation and management of marine wildlife:

⁵ We also found one relevant Presidential Decree: No. 15/1984 on Natural Resource Management in the Indonesian Exclusive Economic Zone. However, the measures of this Decree that are relevant to this report are duplicated in the Fishery Law, which has precedence, so this Decree is omitted from this report.

Government Regulation No. 7/1999 on Preserving Flora and Fauna Species. This Regulation aims to avoid extinction of wild species, preserve genetic diversity and maintain the stability of the ecosystem in order to enable its ongoing exploitation (Art. 2). As part of efforts to realise these goals, the Regulation provides criteria for stipulating protected species, which should (a) have a small population, (b) be sharply decreasing in number, or (c) exist in a limited area (Art. 5). The Regulation also provides a list of protected species, which includes Dugong, all species of marine turtles and cetaceans, black corals, and giant clams.

Most of the Regulation is concerned with outlining broad strategies for managing protected species. Article 15 specifies that ex situ conservation must provide safe, healthy and adequately large space for wildlife, and Article 18 requires wild animals found in a human environment to be rehabilitated and returned to their natural habitat. Conservation of flora and fauna must involve, where possible, relocating specimens, returning them to their original habitat or, if this is not possible, housing them in a Conservation Institution (Arts. 19, 26). Conservation Institutions include zoos, animal parks and animal training centres (Art. 22), which may obtain specimens from confiscation, barter, buying (except protected species) and taking from nature (Art. 23).

Government Regulation No. 8/1999 on Wild Flora and Fauna Exploitation. This Regulation aims to manage exploitation of wild species sustainably (Art. 2) and governs hunting, breeding, trade, display, exchange, exploitation and transportation of wild species. Any exploitation of wild fauna and flora or their parts requires a permit from the Minister (Art. 4; see Art. 1.1). Wild animals may be hunted for sport, trophies and local tradition⁶ (Art. 17) and taken for captive breeding (Art. 8). The Government is responsible for providing annual capture quotas (Art. 44). Import, export and re-export of wildlife requires a permit from the Minister of Environment and Forestry, delivery or transportation documents, a recommendation by the SA, and any other requirements specified by the Minister (Art. 24; see also Art. 43). Import, export or re-export without these is classified as smuggling (Art. 26). Wildlife trade may only be conducted by businesses that have approval from the Minister, except small-scale trade by communities living close to hunting areas (Art. 19).

A licence (Art. 9) and certification system are required for captive breeding of wildlife (Art. 15); however, non-protected wildlife may be kept by anyone as a hobby (Art. 37). Protected species may not be “commercialised” (Art. 18) but may be bred for purposes of trade, and second-generation captive bred specimens of wild caught protected species are not protected (Arts. 10–11). Display of wildlife must be conducted by Conservation Institutions and formal education institutions or with a permit from the Minister (Art. 28). Exchange may only be conducted for purposes of conservation or research (Art. 31) between Governments and Conservation Institutions (Art. 32).

The Regulation provides administrative penalties for some offences, some of which may also be penalised under the Conservation of Living Resources and their Ecosystems Act. The highest penalties are fines of up to IDR250 million (USD18,475) and revocation of business permit for import, export, re-export or transportation of wildlife without documents, with false documents, or in violation of conditions on documents (Arts. 59, 63). In addition to fines, wildlife involved in an offence shall be confiscated (Art. 64).

Law on the Management of Coastal Areas and Isles, 27/2007, amended 2014, 2016

This Law covers the coastal area and ecosystem affected by “changes at land and sea” and extending to 12 nautical miles from the shore (Art. 2). The Law aims to coordinate management of these areas partly in order to protect, conserve, rehabilitate and use resources sustainably (Art. 4a). The Law requires the creation of strategic, zoning, management and action plans for coastal areas and islands (Art. 7–14). Conservation areas are to be created to protect fish resources, migratory routes, regions regulated by customary law, and unique or sensitive coastal ecosystems (Art. 28). The Law itself is very general on these issues, but details on the establishment and managing of Conservation Areas, and on the management and other plans required under the Law,

⁶ The Regulation states that the latter is to be governed by a different Government Regulation; we were unable to confirm that this has been promulgated.

are given in the Regulation of the Minister of Marine Affairs and Fisheries No. PER.17/MEN/2008 on Conservation Areas in Coastal Areas and Small Islands.⁷ This Regulation also provides that in the core zones of Conservation Areas there shall be “absolute protection” of habitat and fish populations and migratory routes (Art. 1a).

Under the Law on Coastal Areas and Isles, permits for use of coastal areas and resources may be given to Indonesian citizens, corporations established under Indonesian law, and cooperatives set up by the community (Art. 22A). These may consist of a “location permit,” i.e. a permit to use an area (Art. 1.18), or a “management permit” which allows use of resources within that area (Art. 1.19). Anyone using resources in coastal waters or small islands on a permanent basis is required to obtain a location permit (Art. 16), issuance of which shall consider the local ecosystem, among other things (Art. 17). The powers of various agencies and individuals to grant and revoke licences are provided in Articles 50–51.

The following activities related to marine wildlife are prohibited in the area of small islands and their surrounding waters:

- Mining coral reefs in a way that destroys the coral reef ecosystem (Art. 35a);
- Removing coral from a Conservation Area (Art. 35b);
- Using explosives, poisons or other materials that destroy coral reef ecosystems (Art. 35c);
- Using tools or methods that destroy coral reef ecosystems (Art. 35d);
- Disrupting mangrove ecosystems or seagrass (Art. 35e–h);
- Mining sand in a way that causes environmental destruction (Art. 35i).

Penalties of two to 10 years of imprisonment and fines of two billion–10 billion IDR(USD147,800–739,000) may be imposed for any of these offences (Art. 73.1). However, for the first four of the offences on the above list, if the offence is committed through carelessness the maximum penalties are half those just stated (Art. 73.2).

In addition, using coastal areas and small islands without a location permit is punishable by a maximum of three years’ imprisonment and a fine of IDR500 million (USD36,950) (Art. 75), and using resources in these areas without a management permit is punishable by a maximum of four years’ imprisonment and a fine of two billion IDR(USD147,800) (Art. 75A). Violations of conditions of permits is punishable by administrative sanction, comprising warnings, freezing or revocation of licences, or, for management permits, temporary suspension of activity (Art. 71).

The Law defines “person” to include corporations (Art. 1.38) and the above penalties should therefore be applicable to corporate bodies. However, the Law does not make managers liable for offences committed by their corporations, so this cannot be implemented with regard to custodial sentences.

Enforcement powers are specified in Article 70.3, and include powers to verify complaints regarding criminal actions relating to the management of coastal areas and islands, call witnesses and suspects, stop, seal or seize equipment used in criminal activities, and apply other actions according to the law.

Management of coastal areas and islands is conducted by Government and Regional Government (Art. 52), coordinated by a minister in the marine affairs and fisheries sector (Art. 53.1) and by the department in charge of marine affairs and fisheries at the provincial level (Art. 54.1). The Minister may issue regulations for managing use of small islands and their surrounding waters (Art. 26).

⁷ We were only able to find this Regulation in Indonesian and this summary is based on a rough translation provided by Google Translate.

Fishery Law 31/2004, amended 2009

This Law governs the conduct of all fisheries activities in Indonesian waters and the EEZ and by Indonesian-flagged vessels outside these areas (Art. 4). The Law defines “fish” to include all organisms which spend all or part of their life cycle in water (Art. 1.4), and therefore also applies to for instance marine turtles, Dugongs, and marine mollusks. Article 2 articulates the principles upon which fisheries management is to be based, which include “perpetual preservation,” and Article 3i states that one of the goals of fisheries management is sustainability of fish resources.

The Law requires the minister responsible for fisheries to create a fishery management plan and stipulate catch quotas, minimum sizes and species of fish that may be caught, species of protected fish and fish prohibited for trade, import or export, types and sizes of permitted fishing equipment, areas and seasons for fish catching, conservation zones, operating procedures for fishing, and a monitoring system for larger operations (Art. 7). The Minister shall also determine and publicise conditions that threaten Indonesian fisheries resources and measures to mitigate the threats (Art. 11). Measures to conserve the ecosystem and fish should be specified in a Government Regulation (Art. 13), currently Government Regulation No. 60/2007 on the Conservation of Fishery Resources (see below).

Under this Law, commercial fishing within Indonesian fisheries areas may only be conducted by Indonesian citizens or corporations, with an exception for fishing in the Indonesian EEZ as required by international law (Art. 29; see also Art. 30). The Law requires a licence for fisheries production businesses of all kinds, except small-scale fishers (Art. 26), and for all fishing or transporting of fish in Indonesian fisheries areas and by Indonesian vessels on the high seas (Arts. 27, 28; see also Art. 31). Indonesian vessels fishing in the jurisdictions of other states must obtain permission from the government (Art. 27.4). Indonesian fishing vessels must be registered (Art. 36) and have their allowed equipment and catch area identified (Art. 37). Small-scale fishers may fish anywhere in Indonesian fisheries areas, but must be registered, obey all conservation and other rules determined by the Minister, and conserve the fishery environment (Art. 61).

Table 2 shows relevant offences and penalties under the Fishery Law.

Table 2: Offences and penalties under the Fishery Law

Offence	Prison term and/or fine	
Fishing using chemicals or biological substances, explosives, or other methods that may damage conservation of fish resources or the environment, except for research purposes (Arts. 8, 84)+	6 years* 10 years (masters, captain, crew, fishing experts, owners or operators/ managers of vessels or corporations)	IDR1.2 billion (USD88,680)* IDR2 billion (USD147,800) (owners or operators/ managers of vessels or corporations)
Operating a fisheries business without a licence (Arts. 26, 92)+	8 years*	IDR1.5 billion (USD110,850)*
Forging or falsifying fishing licences (Arts. 28A, 94A)**	7 years	IDR3 billion (USD221,700)
Owning or operating a fishing vessel without a licence or failing to carry the licence (Arts. 27, 28, 93)*+	6 years	IDR2 billion (USD147,800) IDR20 billion (USD1 478,000) (foreign vessels)
Possessing, using in fishing boats, or bringing into Indonesian fisheries areas fishing equipment specified in a ministerial regulation as “disturbing and damaging the continuity of fish resources” (Arts. 9, 85)*+	5 years	IDR2 billion (USD147,800)
Owning or operating a vessel found transporting fish without a licence (Art. 94)*+	5 years	IDR1.5 billion (USD110,850)
Fishing with an unregistered Indonesian vessel (Arts. 36, 96)**+**	1 year	IDR800 million (USD59,120)
Failure of a foreign vessel to stow equipment for which it does not have a licence to fish (Arts. 38, 97)		IDR1 billion (USD73,900)
Failure of a foreign vessel to stow fishing equipment in an area for which it does not have a licence to fish (Arts. 38, 97)		IDR500 million (USD36,950)
Breach of ministerial fisheries regulations (Arts. 7.2, 100)		IDR250 million (USD18,475)

* For offences by corporations, penalties shall be increased by one third and imposed on managers (Art. 101).

** Penalties increased by one third if the offence involved an official (Art. 100A).

+ For offences by small-scale fishers, penalties reduced to a maximum of one year’s imprisonment or a fine of IDR250 million (USD18,475) (Art. 100B).

In addition to the above penalties, materials and equipment used in or obtained through offences may be seized by the state (Arts. 76A, 104.2) and auctioned or destroyed (Arts. 76A–C).

Article 102 states that the provisions on imprisonment do not apply for offences in the Indonesian EEZ (outside territorial waters) unless there is an agreement between the Indonesian Government and the “government of the relevant country.” Presumably this is meant to apply only to offences committed by foreign nationals.

Articles 71–83 establish and regulate enforcement procedures under a special court for fisheries offences. Authorised investigating officers may summon and examine suspects and witnesses, stop, search, detain and arrest vessels and individuals suspected of criminal fisheries violations, photograph suspects and evidence, confiscate evidence and stop investigations (Art. 73A). The Fisheries Controller is authorised to enter and search premises, stop and search vessels, investigate fisheries activities and arrest suspects (Art. 66C). Fisheries monitoring vessels may be armed and may stop, inspect, detain and force to the nearest port ships suspected of committing violations within Indonesian fisheries management areas (Art. 69). The 2009 amendment adds that the investigator and/or Fisheries Controller may burn and/or sink a foreign fishing ship “based on sufficient initial proof” (Art. 69.4). Rewards may be given to individuals and law enforcement officers who have assisted in prosecutions (Art. 76C).

The Government and regional governments are required to collect and publicise information on fisheries, including disseminating this information to relevant international agencies (Arts. 46–47). The Law authorises the Government to cooperate internationally for purposes of conservation and to communicate on suspicious activities involving foreign vessels (Art. 10.1), and requires the Government to be active in regional and international fisheries management organisations (Art. 10.2).

The provisions of the Fishery Law relating to data collection and reporting are general, but more detailed measures on these areas are provided by several Regulations issued by the Minister of Marine and Fisheries. These include Regulation No. 48/PERMEN-KP/2014 on Fishing Log Books; Regulation No. PER.08/MEN/2012 Regulating Ports for Fisheries; and Regulation No. 03/PERMEN-KP/2013 on Harbour Master Activities at Fishery Ports.

Government Regulation No. 60/2007 on the Conservation of Fishery Resources. This Regulation helps implement Article 13 of the Fishery Law regarding conservation of fish (defined as including all organisms which spend all or part of their life cycle in water) and the ecosystem. It provides principles for the conservation of fisheries resources, including sustainable conservation (Art. 2.1h), the precautionary principle, consideration of scientific evidence, prevention of excessive catch, development of environmentally friendly fishing tools and methods, sustainable use of biological diversity (Art. 2.2), and the ecosystem approach (Arts. 4–5; see also Art. 21). The Regulation also stipulates that the Indonesian Institute of Sciences shall be the (CITES) SA (Art. 53).

The Indonesian Government is responsible for managing water conservation areas outside 12 nautical miles from shore; water conservation areas within 12 miles of shore are managed by provincial and municipal governments (Art. 16). These areas must have management plans (Art. 17) and their governments must coordinate to establish local, regional and global water conservation area networks (Art. 19).

Permits are required to fish and conduct other activities in a conservation zone (Art. 31.2; see also Arts. 32–34), take fish from nature (Art. 35.3), conduct research and development (Art. 36.3), breed fish (Art. 37.3), use fish in aquaria or for pleasure (Arts. 42.3–4), or exchange or trade in fish (Arts. 43.3, 38–39). Only unprotected species of fish, fish that may be traded under international law, fish of the second or subsequent generation bred in captivity or, on the advice of scientific authority, fish of the first generation bred in captivity, may be traded, imported, exported or re-exported (Arts. 38.1, 40.1). Article 40.2–7 specifies the forms of documentation required for import, export and re-export.

The Regulation requires the minister responsible for fisheries to issue regulations providing more detailed measures on various areas related to fishery resource conservation, including specifying closed and conservation areas (Arts. 7–14), protected fish species (Art. 24), quotas for taking protected and unprotected fish species for trade (Art. 38.2), procedures governing permits to fish in a conservation zone (Art. 31.5), procedures governing permits for trade (Art. 39), provisions for exchange (Art. 43.5), and regulation of import, export and re-export (Art. 40.8), breeding of protected and non-protected species (Art. 26), and use of fish for aquaria and pleasure (Arts. 42.6, 44.6).

The Regulation provides administrative sanctions for violations, including written warnings, freezing of permits, revocation of permits and/or fines of unspecified amounts (Arts. 48–51).

Law on the Sea No. 32, 2014

The Law on the Sea asserts Indonesia's sovereignty over its waters, including for purposes of managing fisheries and other marine resources, and makes the Government responsible for protecting and conserving the marine environment (Arts. 50–57). Principles for implementation of the Law include sustainability (Art. 2; see also Arts. 3d, 4.1). Government and Local Government are responsible for management and use of coastal areas and small islands, with the goal of protecting, conserving, rehabilitating, using and enriching the resources of these areas (Art. 22). Article 11 reserves the right to the Government to conserve and manage biological resources on the high seas, including by combating international crime, conducting hot pursuit, and cooperating with other countries and international agencies regarding marine pollution and fisheries management. The Law establishes the Maritime Protection Agency to uphold the law within Indonesian jurisdiction, particularly with regard to safety and security (Art. 59).

Customs Law, 10/1995, amended by Customs Law 17/2006

Lists of goods that are prohibited and restricted for import and export under the Customs Law are determined by relevant “technical institutions” (including Government agencies) (Art. 53.1). Government Regulation No. 8 (1999) classifies import and export of wildlife without a permit as smuggling, while Government Regulation No. 60 (2007) provides conditions for import and export of fisheries products, including licences and permits (see above).

Under the Customs Law, importing or exporting goods without declaring them or intentionally declaring them incorrectly is punishable by imprisonment of one to 10 years and/or a fine of IDR50 million–five billion (USD3,695–369,500) (Arts. 102, 102A). If government officials or law enforcement officers are involved in the offence, penalties are increased by one third (Art. 102C). Goods that are imported or exported without being declared or that are incorrectly declared shall be claimed by the state (Art. 53.4), as shall goods and/or means of transport that originated from crime by an unknown perpetrator or have been confiscated by a court (Art. 73c, f).

Knowingly storing, exchanging, buying, selling, giving or receiving goods known or assumed to have been imported without having been correctly declared is punishable by imprisonment of two to eight years and/or a fine of IDR100 million–five billion (USD7,390–369,500) (Art. 103). Participation in falsification of customs documents and knowingly giving false information are subject to the same penalties (Art. 103).

Transporting goods that have been imported or exported illegally, or destroying or deleting information from records or customs declarations, is punishable by imprisonment of one to three years and/or a fine of IDR500 million–three billion (USD36,950–221,700) (Art. 104). Illegally imported or exported goods and means of transport used to commit the crime will be confiscated (Art. 109).

For crimes committed by corporations, the corporation, its directors, or those who failed to prevent the crimes will be held responsible (Art. 108.1). The “basic penalty” for such crimes is to be a fine of IDR1.5 billion (USD110,850) (Art. 108.4).

Powers and authorities of Customs officials include powers to stop and search vehicles, detain goods and means of transport, examine and take samples of goods, open mail, examine books and records, search premises (not including dwellings) with a warrant issued by the Director General of Customs and Excise, and perform body searches (Art. 74–92).

Customs agents who successfully settle customs violations are entitled to a “premium” of up to 50% of the administrative fine and/or proceeds of auction of goods, if these are auctionable; if not, the premium shall be calculated on the value of the goods as stipulated by the Minister (Art. 113D).

Penal Code, 1915

The Penal Code includes a number of measures to protect animals from mistreatment. Deliberately causing pain or harm to an animal, including by withholding necessary sustenance from an animal in one’s possession, is punishable by a maximum penalty of imprisonment of three months or a fine (Art. 302.1). If the act results in illness of more than one week, mutilation, serious harm or death, the maximum penalty is imprisonment of nine months or a fine (Art. 302.2). The animal may be forfeited (Art. 302.3). Transporting animals in a needlessly painful manner or without necessary sustenance is punishable by a maximum of eight days’ imprisonment or a fine (Art. 540). Repeat offences within a year may be punished by imprisonment of up to 14 days (Art. 540.2). The amounts of fines under the Code have been increased by amendments since the promulgation of this law, including by a factor of 15 in Government Regulation Substituting for a Law No. 18/1960, but owing to time constraints we have not traced the amounts of increases through the various amendments. Because fines may be imposed instead of a custodial sentence, it is possible that the above offences may be punishable by very light penalties.

Ministerial Regulations

Further protection for marine wildlife is provided by Ministerial Regulations, the most relevant of which are summarised here. Unless specified otherwise, these were issued by the Minister of Marine Affairs and Fisheries. Under the Fishery Law, commercial fishers who violate Ministerial Regulations on permitted equipment, quotas, areas, seasons, fish size, operating procedures, monitoring requirements, protected areas, protected species and species prohibited for trade, import or export are punishable by a fine of up to IDR250 million (USD18,475) (Art. 100; see also Art. 7).

Regulation of the Minister of Forestry No. 447/2003 Concerning Administration Directive for the Harvest and Capture and Distribution of Specimens of Wild Plants and Animals. This Regulation aims to promote conservation of wild plants and animals through governing collection, possession and transportation of wildlife in line with CITES (Art. 2). The Regulation prohibits the collection of wildlife within protected areas, which include nature reserves, game reserves, national parks, recreation parks and hunting areas (Art. 5.1), and requires the Director General of Forest Protection and Nature Conservation to establish quotas for collection of wildlife outside these areas according to maximum sustainable harvest as recommended by the SA (Art. 6). However, the Regulation allows that wildlife may be sourced from the wild or captive bred whether or not it is protected or listed on the CITES Appendices (Art. 4). Article 112 provides that violations will be sanctioned under Government Regulation No. 8/1988 Concerning Wild Plants and Animals Utilisation; this Government Regulation seems to have been replaced by Government Regulation No. 8 (1999) (see above).

Regulation No. 35/PERMEN-KP/2013 on Procedures for the Determination of Fish Species with Protected Status.⁸ This Regulation, which governs procedures for determining which species of fish should have protected status within Indonesia, states that such a determination should aim to safeguard the existence, availability and sustainability of a diverse range of fish (Art. 2). Protected species should be determined according to whether they are endangered, rare or declining in the wild, or have low reproductive ability or a limited area of distribution (Art. 3). Articles 4–8 provide more details on these criteria. Protected status may consist of either full or limited protection (Art. 9). Full protection includes protection for all stages of the lifecycle and body parts (Art. 10), while limited protection includes protection under a certain size, in a specific area, or within a specific period of time (Art. 11).

We found three Decrees of the Minister of Marine Affairs and Fisheries stipulating protected status for specific marine species:

- Decree No. 18/KEPMEN-KP/2013 on the Determination of Full Protected Status for Whale Shark (*Rhincodon typus*);
- Decree No. 04/KEPMEN-KP/2014 on the Determination of Full Protected Status for the Manta Ray;
- Decree No. 37/KEPMEN-KP/2013 on the Determination of Protected Status for Napoleon Fish (*Cheilinus undulatus*).

The latter grants limited protected status to Humphead Wrasse weighing between 100 grams and one kilogram and over three kilograms. All three Decrees include exceptions for purposes of research and development to the prohibition on capturing these species.⁹

⁸ We were only able to find this Regulation in Indonesian and this summary is based on a rough translation provided by Google Translate.

⁹ We were only able to find these Decrees in Indonesian and this summary is based on rough translations provided by Google Translate.

Regulation No. PER.04/MEN/2010 on Procedures for the Use of Fish and Fish Genetic Resources.¹⁰ This Regulation aims to foster an orderly use of fish and fish genetic resources based on the precautionary principle and scientific evidence in order to prevent degradation of fish resources (Art. 2.1). The Regulation applies to all fish that are protected under Indonesian or international law (Art. 3). According to this Regulation, research and development, breeding, trading, aquaria, exchange and keeping for pleasure may only be done using fish that are not protected (Arts. 4, 5.1), with permission from the Minister of Marine Affairs and Fisheries (Art. 12). Only captive bred fish may be kept for pleasure (Art. 5.3), while fish caught for breeding, trading and exchange must observe quotas (Art. 6). Quotas, which must state species, numbers, sizes and areas allowed for fishing, are to be set annually by the Director General of Coastal and Small Island Affairs in consultation with the SA (Arts. 7). Fisheries levies are to be applied for capturing fish, which are to be used for the conservation of fish and the environment (Art. 39).

The Director General is responsible for granting licences for use of fish and fish genetic resources (Arts. 14–15). A permit is required for domestic and international trade (Arts. 19–20), and CITES Appendix I-listed species may only be traded if they are of at least the second generation bred in captivity, or the first generation bred in captivity if they belong to species determined by the Minister on the advice of the SA (Art. 19.5). Trading permits must be accompanied by transportation documents, certificates of origin (Art. 21.1) and, for foreign trade, documentation for sending in and out of country (Art. 21.3). CITES permits are required for CITES-listed species (Art. 22; see also Arts. 35–38). Export permits are required and may only be granted if fish were removed from the wild according to quota, resulted from breeding, or their parts and products have documents certifying they are of legitimate origin (Art. 36). A licence is also required to transport fish (Art. 30.3), which must include, among other things, the species name, amount, and allowed use (Arts. 31–33). Transportation of live specimens must reduce risk of death, injury or stress (Art. 34a).

Permits may only be granted for catching fish and fish genetic resources outside the core zone of MPAs, nature reserves, and conservation areas, in accordance with quotas, sustainability and the welfare of the animals, and if the activities will not disrupt or destroy habitat or populations (Art. 26.1). These conditions do not apply to research and development (Art. 26.2). Permit holders must comply with conservation measures and conditions on their permits (Art. 27).

Violations of the Regulations are subject to unspecified criminal sanctions or administrative sanctions imposed by the Director General (Art. 41). The latter include written warnings, licence suspension or revocation, and fines of 10 to 15 times the levies (Art. 42).

Regulation No. 59/PERMEN-KP/2014 Prohibiting the Export of Oceanic Whitetip Sharks (*Carcharhinus longimanus*) and Hammerhead Sharks (*Sphyrna* spp.) from the Territory of the Republic of Indonesia.¹¹ Prohibits the export of Oceanic Whitetip Sharks, Scalloped Hammerheads *Sphyrna lewini*, Great Hammerheads *S. mokarran* and Smooth Hammerheads *S. zygaena*, including their processed products, until November 30, 2015. This deadline was extended to the end of 2016 by Regulation No. 34/PERMEN-KP/2015 Amendment to Minister of Marine Affairs and Fisheries Regulation No. 59/PERMEN-KP/2014.

Regulation No. 46/PERMEN-KP/2014 on Import Quality Control and Product Safety of Fisheries Imported into the Territory of the Republic of Indonesia. With the goal of protecting human and animal health in Indonesia, this Regulation requires all fishery products being imported to Indonesia to be accompanied by a Fishery Product Import Permit (Art. 6.1), except for amounts of under 25 kilograms and IDR1.5 million (USD111) that are transported as carry-on baggage (Art. 19). In addition, any fishery product being imported for re-export to the European Union must be accompanied by a catch certificate attesting that it was not obtained through IUU fishing (Art. 5.5).

¹⁰ We were only able to find this Regulation in Indonesian and this summary is based on a rough translation provided by Google Translate.

¹¹ We were only able to find this Regulation and its amendment in Indonesian and this summary is based on a rough translation provided by Google Translate.

Regulation No. PER.30/MEN/2012 on Business Fisheries in the Regional Fisheries Management Area of the Republic of Indonesia (amended by Regulation No. 26/PERMEN-KP/2013).¹²

This Regulation governs commercial fisheries, including registration of vessels, licensing, logbooks, monitoring and reporting. Under the Regulation, anyone conducting fisheries business within the Indonesian Regional Fisheries Management Area must have a permit (Art. 11; see also Art 26.1). Operators of Indonesian flag fishing vessels in the Indonesian Fisheries Management Area are to be registered and vessels and gear must be marked (Art. 85), and vessels must submit logbooks to the Director General of fisheries (Art. 80.1).

The Regulation includes several measures to conserve marine resources. Permits may only be issued if they are compatible with quotas determined by the Minister of Marine Resources and Fisheries (Art. 15.1), and it is prohibited to fish or transport species that are protected or subject to conservation measures (Art. 76.1). Fishing vessels must observe closed seasons and areas as set by Ministerial Decree (Art. 75.1). Fishing vessels must take conservation measures for species associated with tuna, including sharks, marine turtles and marine mammals (Art. 73.1–2). These measures include release of live animals caught accidentally, reporting accidental capture of dead animals, and landing of dead sharks in one piece (Art. 73.3–4). Mixed fish by-catch is to be used for consumption or fish meal and reported (Art. 74.1). Violations are subject to revocation of licence (Art. 73.5, 74.3, 75.2, 76.2).

Regulation No. PER.12/MEN/2012 on Business Fisheries on the High Seas.¹³ This Regulation governs fishing and transporting fish on the high seas, including requirements for registering vessels, licences and permits, logbooks, monitoring and reporting, and by-catch mitigation measures. Under this Regulation, anyone fishing or transporting fish on the high seas or who owns or operates a vessel used for fishing on the high seas requires a permit and licence (Arts. 4–5, 8, 10). Owners and operators must sign an affidavit that the vessel is not listed as used in IUU fishing; if the affidavit is false, the Director General is not liable (Arts. 8.4–5, 10.3f–4).

Under the Regulation, the Director General must register vessels that hold Indonesian licences for operating on the high seas with the relevant RFMO (Art. 14.1). All vessels fishing or transporting fish on the high seas must comply with the requirements and standards of the RFMO, and violations are considered IUU fishing (Art. 32.1–2), resulting in a warning from the Director General (Art. 33.2) and, potentially, listing as involved in IUU fishing (Arts. 33–37). Other administrative sanctions, including suspension and freezing or revocation of licences, may also be imposed (Art. 35). Ships that have been listed as engaged in IUU fishing or subjected to these sanctions will be banned from fishing, transporting fish or selling fish, and may not be renamed (Art. 38d).

Vessels wishing to fish in the waters of other states must obtain permission from the Minister of Marine Affairs and Fisheries and observe the regulations of other states (Art. 54.1).

The Regulation provides measures to conserve marine wildlife, including a requirement that vessels must observe closed seasons and areas set by the RFMO (Art. 45; see also Art. 56).

Whalers may not capture types of whales subject to conservation measures under the RFMO (Art. 46.1). Ships that accidentally capture species ecologically linked to tuna (which the Regulation lists as sharks, seabirds, marine turtles and marine mammals) are required to implement conservation measures (Art. 39). Sharks must be landed intact (i.e. de-finning at sea is not permitted), juvenile or pregnant sharks may not be caught, and accidental capture of sharks must be reported (Art. 40.1–2). Seabirds, marine turtles, marine mammals and thresher sharks that are caught alive must be released alive and, if dead, must be reported (Arts. 42–43).

¹² We were only able to find this Regulation in Indonesian and this summary is based on a rough translation provided by Google Translate.

¹³ We were only able to find this Regulation in Indonesian and this summary is based on a rough translation provided by Google Translate.

Regulation No. PER.15/MEN/2005 on Fishing and/or Fish Cultivation in the Regional Fisheries Management Area of the Republic of Indonesia not for Commercial Purpose.¹⁴ Defines and regulates non-commercial fishery activities, including for education, counselling, research, pleasure or travel (Art. 2.1–2). These activities are not permitted under certain conditions, including in spawning sites or conservation areas, on species of fish prohibited for capture or cultivation, in ways that may contaminate or damage fish resources, or using prohibited tools (Art. 2.3). Non-commercial fishing requires permission from the Minister (Art. 3), unless it involves quantities under 100 kg (Art. 4.1).

Regulation No. 15/PERMEN-KP/2016 on Transportation of Live Fish.¹⁵ Requires a licence to transport live fish (Art. 4.1), except for small-scale fishers (Art. 5). The Regulation prohibits the transportation of live fish of species that are protected, prohibited from trade, import or export, or have been caught in a prohibited manner or in a conservation area (Art. 7). The amount of fish transported may not exceed the total allowable catch for live fish per year (Art. 9). The Regulation requires physical inspections of vessels (Art. 14), and specifies requirements and procedures for granting, renewing, extending, changing and replacing (Arts. 10–27) licences.

Regulation No. PER.02/MEN/2011 on Fishing Lanes and Placement of Fishing Tools and Auxiliary Fishing Tools in the Fishery Management Area of the Republic of Indonesia. This Regulation specifies fisheries zones (“lanes”) in Indonesian waters and specifies kinds of fishing equipment that may be used in each of these areas. Several amendments to this Regulation modify the definitions of equipment provided, and Regulation No. 02/PERMEN-KP/2015 (see just below) replaces the measures of this regulation on trawl equipment and seine nets.

Regulation No. 02/PERMEN-KP/2015 on the Prohibition of the Use of Fishing Trawler (Trawls) and Trawl Pull (Seine Nets) in the Regional Fisheries Management Area of the Republic of Indonesia.¹⁶ Prohibits the use of various kinds of trawl fishing equipment and seine nets in all Indonesian waters (Art 2). This Regulation replaces the relevant measures of Regulation No. PER.02/MEN/2011 (see just above) (Art. 7).

In addition to the Regulations summarised above, the Ministry of Marine Affairs and Fisheries has issued numerous Regulations specifying closed areas or other restrictions on fishing in specific areas. These include Regulation No. PER.02/MEN/2009 on Procedures for Determination of Water Conservation Areas, which regulates criteria and procedures for specifying aquatic conservation areas, Regulation No. PER.30/MEN/2010 Concerning Management Plans and Zoning of Water Conservation Areas, which requires zoning and management plans for aquatic conservation areas, and Regulation No. PER.13/PERMEN-KP/2014 on MPA Networks, which governs procedures for establishing MPA networks at local, national, regional or global levels. Regulation of the Minister of Home Affairs No. 30/2010 on Guidance for Managing Resources in the Marine Territory authorises local authorities to designate parts of their marine territories as conservation areas (Art. 16).

¹⁴ We were only able to find this Regulation in Indonesian and this summary is based on a rough translation provided by Google Translate.

¹⁵ We were only able to find this Regulation in Indonesian and this summary is based on a rough translation provided by Google Translate.

¹⁶ We were only able to find this Decision in Indonesian and this summary is based on a rough translation provided by Google Translate.

Lao PDR

Although Lao PDR is a land-locked state and is therefore not a range state for any marine species, illegal trafficking brings some marine specimens into Lao PDR's territory. The range of the Irrawaddy Dolphin, which inhabits rivers, estuaries, and coastal waters, extends into the Mekong river as far as Lao PDR (Reeves et al., 2008).

Legislation relating to marine wildlife

There is little protection for marine wildlife in Lao PDR. A handful of laws contain provisions that offer very limited protection to marine species in transit in the country, while limited penal measures against offences such as smuggling may be taken under the Customs Law.

Wildlife and Aquatic Law, 2007

This Law protects species native to Lao PDR in which trade is prohibited (listed as Category I) or managed (listed as Category II), or which are common (listed as Category III). As one would expect for a land-locked state, these lists do not include marine species (except the estuarine Irrawaddy Dolphin, listed as Category I). As a result, most of this law does not apply to the marine wildlife trade. However, one or two provisions are useful. Article 34 specifies that businesses involving wildlife and aquatic species, including zoos, trade, transport, export, re-export and transshipment, should comply with international treaties to which Lao PDR is a signatory, which include CITES. Article 42 requires all wildlife and aquatic species and their parts being imported into Lao PDR to have valid export permits from the exporting country, and Article 71 specifies that import, export, re-export and transit of wildlife that does not comply with regulations is a criminal offence.

The Law allows trade in wildlife in the “common” category, while “managed” wildlife may be traded from the first generation bred in captivity, and “prohibited” wildlife may be traded from the second generation bred in captivity (Art. 40). It is illegal to trade or possess wildlife without required permissions (Art. 52.3). In addition, it is forbidden to damage or “torment” wildlife (Arts. 52.6, 52.2). Wild animals in captivity, including those originating outside Lao PDR, must be kept in places that can care for them responsibly without causing them suffering or impacting their ability to reproduce (Art. 21).

Other potentially useful provisions are those prohibiting officials from abusing their position or authority for their own benefit (Art. 53.1), falsifying documents, behaving irresponsibly in relation to their duties (Art. 53.2) or conducting or owning shares in business relating to wildlife (Art. 53.3). Members of the public are prohibited from bribing officers (Art. 52.10), falsifying documents (Art. 52.10) and threatening officers or obstructing them in carrying out their duties (Art. 52.11).

The Law also contains a provision prohibiting the violation of other laws or regulations on wildlife (Art. 52.12).

Under the Wildlife and Aquatic Law, the only criminal offences relevant to marine species are importing, exporting, re-exporting or transiting wildlife, bribery, and falsifying documents (Art. 71). These are punishable by three months to five years of imprisonment and fines worth double the damage caused, with increases for repeat offences and confiscation of unlawful earnings (Art.

70). These penalties are similar to those for non-criminal offences that cause more than LAK200,000 (USD24) of damage (Art. 71). Article 68 states that non-criminal offenders against the Wildlife and Aquatic Law who have caused under LAK200,000 (USD24) of damage will be warned and educated. Article 69 provides further penalties for offenders who have caused less than LAK200 000 of damage if they are civil servants, including suspension or removal from position. Article 72 allows additional penalties such as revocation of licence.

The Law is implemented through the Ministry of Agriculture and Forestry (MAF).

MAF Decree No. 81, 2008 and MAF Decree No. 70, 2008

These Decrees issue the most recent lists of protected species we could find. Decree No. 81 lists Category I (“prohibited”) and II (“under protection”) species of land and aquatic animals, while Decree No. 70 provides a list of Category III (“common”) land and aquatic animals. The short texts of these Decrees do not provide specific measures for protection and management of listed species, but simply issue the lists.¹⁷

The lists reflect wildlife native to Lao PDR and therefore do not include any marine species (except the Irrawaddy Dolphin, listed as Category I). The lists also do not correspond to the CITES Appendices, i.e. the lists of prohibited and protected species both include CITES Appendix I, II and III-listed species, as well as species not listed on CITES, and do not include all CITES-listed species.

MAF Instruction No. 0076 On the Ban of Hunting, Trading of Aquatic and Wild Animals Inside the Country and Abroad, Importing and Exporting to a Third Country, 2002

This regulation is part of Lao PDR’s CITES implementation and helps implement Article 40 of the 1996 Forestry Law relating to the hunting, possession and moving of wildlife. The 1996 Forestry Law has now been replaced by the 2007 Forestry Law, which does not contain any provisions relating to wildlife (wildlife protection measures are now included in the Wildlife and Aquatic Law). However, we have found no indication that Instruction No. 0076 has been repealed. On the other hand, since there are no penal measures included in the Instruction, it is not very useful as a control on illegal trade.

The Instruction requires that import of aquatic or wild animals must be authorised by MAF and abide by CITES (Clause 1). The Instruction also bans the hunting, trading, import, export and transiting in a third country of the species of wildlife on the two attached lists, which are very similar to the lists issued with MAF Regulation No. 0360 (see below) and Prime Minister Decree No. 81 (see above) and which we assume have been replaced by these later lists. Like the later lists, the lists appended to MAF Instruction No. 0076 contain no marine species other than the Irrawaddy Dolphin, which is listed as Category I (prohibited).

¹⁷ We were unable to find these Decrees in English translation and a native Lao-speaker translated the short texts for us; however, the species lists include Latin and common English species names.

MAF Regulation No. 0360 On National Biodiversity Conservation Areas, Aquatic and Wildlife Management, 2003

This Regulation prohibits the possession of restricted wildlife (wildlife on the attached List I “Restricted wildlife and aquatic animals”) except for purposes of breeding or research with permission from the government (Art. 20). The Regulation also prohibits the import, export and transit of CITES Appendix I species and domestic species on List I for commercial purposes, and requires all imports and exports of wildlife to be inspected for proper permits, including CITES permits where relevant (Art. 20). It is prohibited to trade wildlife species on List I, or to trade species on List II (“Controlled wildlife and aquatic animals”) without a permit (Art. 20). These species lists are very similar to the lists promulgated with Prime Minister Decree No. 81 and may have been replaced by these later lists; however, in relation to marine species this makes no difference since neither list contains any marine species except the Irrawaddy Dolphin (listed as restricted/prohibited).

This Regulation does not prohibit the possession, offering for sale or displaying of CITES Appendix I species that are not domestically protected. This means that, once wildlife not on the attached lists (i.e. all marine species except the Irrawaddy Dolphin) enters the country, it may be owned, sold and displayed in Lao PDR without penalty. This Regulation also does not provide punishments for importing CITES-listed species without a permit.

Customs Law, 2005

This Law includes some measures that could be used to penalise activities related to wildlife crime. Under this Law, “serious offences” include smuggling or importing/exporting/moving goods without proper authorisation (Arts. 54–56). First offences are punishable by a fine equal to customs duties and confiscation of goods (Art. 54), second offences by a fine of double the duties and confiscation of goods plus a court case (Art. 55), while subsequent offences are punishable by a fine of three times the duties and confiscation of goods plus a court case (Art. 56). “Minor offences at the first degree” include intentionally providing inaccurate or incomplete information on a declaration with no impact on duties, concealing or failing to provide documents to Customs officials, and hindering Customs officers in their duties (Art. 51). These are punishable by a fine of LAK150,000–five million (USD18–596). For second offences, offences that have an impact on duties, and concealing goods in order to avoid paying duties, the penalty is payment of the duty owing plus fines of one, two or three times the duty, while the goods will be returned (Arts. 52–53). Legal entities may be subject to penalties including education, warning, and/or compensation for damages or criminal punishment (Art. 92).

Enforcement powers for Customs officials include powers to seize goods and vehicles and arrest suspects (Art. 61), search individuals, stop (including forcibly if necessary) and search vehicles, enter and inspect business premises with a warrant, inspect suspicious parcels, search buildings for smuggled goods during a continuing pursuit, and possess and use weapons and other equipment (Art. 76). Article 89 authorises the payment of rewards for information leading to the arrest of offenders.

Malaysia

Malaysia has a coastline of 4675 km and an EEZ of 475 600 km² (Cheung *et al.*, 2002). All species of marine turtle found in Southeast Asia except the Flat-backed Turtle inhabit Malaysian waters, and the country's beaches provide nesting sites for Leatherback, Hawksbill, Green and Olive Ridley Turtles. In addition, Malaysia is home to Blue Coral and organ-pipe corals, Dugong, giant clams, Humphead Wrasse, several species of endangered and vulnerable sea cucumbers, several species of mobulid ray, and CITES-listed seahorses, sharks and cetaceans (IUCN, 2014).

Legislation relating to marine wildlife

Malaysia comprises 13 states and three federal territories, and legislation relating to marine wildlife consists of a mixture of federal and state law. Where there is a conflict between federal and state legislation, federal law prevails (Constitution of Malaysia, Art. 75).

Malaysia's primary federal wildlife protection legislation, the Wildlife Conservation Act (2010), does not cover marine species and is not included in this report. The states of Sabah and Sarawak, however, have their own wildlife protection legislation (respectively, the Wildlife Conservation Enactment (1997) and the Wildlife Protection Ordinance (1998)), which do cover marine wildlife.

Federal legislation governs the import and export of wildlife through Malaysia's main CITES-implementing legislation, the International Trade in Endangered Species Act (2008), and the Customs Act (1967). National Parks are also regulated federally, except in Sabah and Sarawak, by the National Parks Act (1980). In Sabah and Sarawak protected areas are covered, respectively, by the Parks Enactment (1984) and the National Parks and Nature Reserves Ordinance (1998). Both Sabah and Sarawak have also passed laws on biodiversity (the Sabah Biodiversity Enactment (2000) and Sarawak Biodiversity Ordinance (1997)) which govern the collection of natural resources.

The federal Fisheries Act (1985) applies to marine fisheries throughout Malaysia, but excludes turtles (and riverine fishing) from its scope, since responsibility for these matters is assigned to the states by the Constitution (Constitution of Malaysia, Ninth Schedule, List II, 12). However, most states have adopted the Fisheries Act with respect to turtles and riverine fishing (see below).

Lastly, Malaysia has recently passed an Animal Welfare Act (2015) which may technically apply to some species of marine wildlife in transit or captivity, although this interpretation may not reflect the purposes of the Act which is primarily aimed at domestic animals. This Act does not apply in Sabah or Sarawak; however, Sarawak includes measures to protect animals in transit in its Wildlife Protection Ordinance. Sabah has passed a new Animal Welfare Enactment (2015) which closely reflects the measures in the federal Animal Welfare Act, but this Act does not apply to wildlife¹⁸ and is not discussed in this report.

¹⁸ Article 2 of the Animal Welfare Enactment defines "animal" to exclude wildlife under Sabah's Wildlife Conservation Enactment (1997). The latter defines "animal" to include all animals except domestic animals, and "domestic animals" to mean animals that are customarily kept in captivity and not wild species that have been captured or bred in captivity (Art. 2). In other words, the Animal Welfare Enactment applies only to domestic animals.

Federal Legislation

International Trade in Endangered Species Act No. 686, 2008

The International Trade in Endangered Species Act is Malaysia's main CITES-implementing legislation, and its measures take precedence over any conflicting laws relating to the protection, import or export of plants or animals or trade in scheduled species (Art. 2). The Act governs CITES MAs and SAs (Part II), trade in scheduled species (Part III), permits, certificates and registration (Part IV), and enforcement powers (Part V).

The Act specifies the CITES MAs and SAs and their functions (Arts. 4–9; First Schedule), providing that the Ministry of Natural Resources and Environment is the lead MA, which is responsible for the implementation of the Act and must communicate with the CITES Secretariat and other countries regarding all matters covered under the Act (Art. 5).

The Third Schedule reproduces the CITES Appendices, and therefore all CITES-listed species should be covered by the provisions of the Act, as long as the Schedule is updated after new CITES listings (see Art. 53). Importantly, the Act's definition of "animal" includes "any readily recognisable part or derivative of an animal" (Art. 3). The definition of the latter term specifies various body parts, urine, faeces, chemical compounds derived from animals or their parts, and anything labelled as an animal part or derivative.

The Act makes any of the following activities an offence:

- Importing, exporting, re-exporting, or introducing from the sea scheduled species without a permit or certificate (Arts. 10, 11);
- Transiting scheduled species without a CITES permit from the country of import or export (Art. 13.1);
- Possessing, selling, offering for sale or displaying to the public scheduled species that have been imported or introduced from the sea without the appropriate permits (Art. 12);
- Breeding scheduled species in captivity for commercial trade without being registered with the MA, or possessing, selling, offering for sale or displaying to the public animals produced in this way (Art. 14);
- Failing to comply with conditions on permits or licences (Art. 16.4).

The first four of the above offences are punishable by a fine of up to MYR100,000 (USD22,614) for each specimen or its readily recognisable part or derivative up to a maximum of one million ringgit (USD226,43) in total and/or imprisonment of up to seven years; the maximum fine is doubled for bodies corporate (Arts. 10–14). The last item on the above list is punishable by fines of up to MYR200,000 (USD45,229) and/or imprisonment of up to ten years for individuals, or fines of double the amount for corporations (Art. 16.4).

In addition, obstructing officers in performance of their duties, "rescuing" seized items, and destroying or concealing evidence are punishable by fines of up to MYR100,000 (USD22,614) and/or imprisonment of up to seven years (Art. 40). The same penalties are applied to individuals for providing false or misleading declarations or evidence, or altering or forging permits or certificates or using such documents; corporations may be fined up to MYR200,000 (USD45,229) for these activities (Art. 44).

The Act makes managers of corporations liable for offences committed by the corporation, and individuals liable for offences committed by partners, agents or subordinates, unless they can prove the offence was committed without their knowledge and that they took all reasonable precautions to avoid the commission of the offence (Arts. 45, 46). Aiding and abetting the commission of offences is punishable by the same penalties as the commission of the offence (Art. 47).

In addition to the above penalties, any scheduled species, equipment, documents or other articles seized under the Act shall be forfeited if a court determines that the item in question was used in the commission of an offence, even if no person has been convicted of the offence (Art. 34.1–2). The MA may require the repatriation of forfeited goods at the owner's expense (Art. 34.8–11).

Officers are authorised to return seized items to whomever they “consider entitled thereto” on receipt of security; failure to surrender the items on demand is punishable by a fine of up to MYR50, 000 (USD11,307) and/or imprisonment of up to three years (Art. 30). The MA may at any point release seized items to the person from whom they were seized (Art. 36).

The Act allows the MA, with the consent of the Public Prosecutor, to compound offences listed as compoundable by Regulations under the Act upon payment of a fine of up to 50% of the maximum for that offence (Art. 42.1). The International Trade in Endangered Species (Compounding of Offences) Regulations (2010) lists a small number of offences that may be compounded, but these do not include any of the major wildlife offences noted in this summary.

Part V governs the powers of the enforcement officers specified in the Second Schedule (Art. 19). These officers are provided with the special powers for police officers in seizable cases governed by the Criminal Procedure Code (Art. 20.2). More specifically, the Act authorises enforcement officers to arrest without warrant any person found, or reasonably suspected to be, committing, attempting to commit, or abetting any offence under the Act (Art. 22.1), stop and search vehicles and conveyances suspected of carrying items involved in the commission of an offence (Art. 28.1), examine persons acquainted with the case (Art. 32), request the production of documents for inspection (Art. 39), enter premises to inspect equipment, verify documents or take samples (Art. 25), and seize scheduled species, vehicles or other articles that an officer suspects has been or will be used in an offence (Art. 27). With a warrant, officers may search premises and make seizures, including with force (Art. 23), and may do so without a warrant if there is reason to believe that a delay is likely to frustrate the search (Art. 24). Officers may detain any person found at such premises until the search has been completed (Art. 23.4c).

The MA is authorised to pay rewards for services in detecting an offence under the Act or seizures related to the Act (Art. 51).

The Minister, upon the recommendation of the MA and by publication in the legal Gazette, may exempt any person, class of persons or scheduled species from all or any of the provisions of the Act (Art. 52.1). The Minister may make any regulations expedient for implementing the Act (Art. 54). Of these, the International Trade in Endangered Species (Rescue Centres) Regulations (2009) contains basic provisions for the establishment and oversight of rescue centres for specimens seized under the Act.

National Parks Act No. 226, 1980, amended 1983

This Act does not apply to Sabah or Sarawak (or Taman Negara, which, however, does not include marine areas) (Art. 1), which have their own legislation governing the establishment and governance of wildlife reserves (discussed below).

The *National Parks Act* authorises the State Authority, on the request of the Minister of Natural Resources and Environment, to reserve any state land or marine area as a National Park (Art. 3.1) in order to preserve and protect wildlife and objects of scientific and scenic interest and promote health and recreation (Art. 4). The Minister may make regulations to implement the Act, which may apply throughout Peninsular Malaysia and the Federal Territory of Labuan or specifically to individual National Parks (Art. 11). We have not been able to find any such Ministerial regulations, and the Act itself does not specify offences within National Parks or penalties for offences. Four states (Johor, Perak, Selangor and Terengganu) have enacted parks regulations, some of which provide a limited number of offences and penalties (discussed below).

Fisheries Act No. 317, 1985, with amendments to 2012

The Malaysian Constitution assigns responsibility for managing turtles and riverine fishing to the states (Constitution, First Schedule, List II, s. 12); however, the Act makes the Minister of Agriculture and Director General of Fisheries responsible for turtles outside state waters (Art. 3). Furthermore, several states have passed the *Fisheries Act* into state law with respect to turtles and inland fisheries, as provided by Article 1.2 of the Act (see below under State legislation). The definition of “fish” under the Act includes all aquatic life except turtles or their eggs and except otters (Art. 2).

Under the Fisheries Act all local fishing vessels in Malaysia require a licence (Art. 8, Art. 11.3) and vessels must be marked (Art. 10.1a). Foreign nationals and foreign vessels require a permit and authorisation under an international agreement to fish in Malaysian waters (Art. 15). Conditions on permits granted to foreign vessels may include areas and periods in which fishing is authorised, species, age, size, weight and quantity of fish that may be taken, fishing methods that may be used, reporting requirements, and other conditions (Art. 19.4); however, the only condition that must be included relates to the nationality of the crew (Art. 19.4t). The Director General may vary these conditions if “necessary or expedient for the proper management of fisheries” (Art. 22). The Director General maintains a register of licences and permits (Art. 59).

The *Fisheries Act* makes it an offence to:

- Fish, disturb, harass or catch aquatic mammals or turtles in waters beyond state jurisdiction (Art. 27.1) (state laws on turtles apply within state jurisdiction (Art. 27.2));
- Fail to release a live aquatic mammal or turtle caught accidentally or to report the accidental capture of a dead aquatic mammal or turtle to a fisheries officer (Art. 27.3);
- Use, attempt to use, or possess explosives, poisons or electricity for fishing (Art. 26.1a–b);
- Knowingly, or while having reasonable cause to believe, possess fish taken using explosives, poisons or electricity (Art. 26.1c);
- Destroy evidence (Art. 29);
- Possess or bring into Malaysia fish received from a foreign fishing vessel without authorisation from the Director General (Art. 20);
- Fish with a local vessel without a licence or in contravention of conditions of licences (Art. 8);
- Fish without authorisation using a foreign vessel (Art. 15).

The first two of the above offences are punishable by a fine of up to MYR5,000 (USD1,131) (Art. 27.4). The remaining offences are punishable by the general penalty under the Act, i.e. a fine of up to MYR20,000 (USD4,523) and/or imprisonment of up to two years for Malaysian nationals, or, in the case of foreign nationals or when foreign vessels are involved in the offence, a fine of up to one million ringgit (USD226,143) for each of the owner and master and a fine of up to MYR100,000 (USD22,614) for each member of the crew (Art. 25). For offences involving foreign vessels, the owner, master and every member of the crew is liable (Art. 24.1).

Breaches of permitting requirements by foreign fishing vessels are punishable by fines of up to MYR100,000 (USD22,614) per person for the owner and master and up to MYR5,000 (USD1,131) for each crew member (Art. 19.5).

The Minister may establish marine parks or marine reserves in any area of Malaysian fisheries waters (except in Sabah (see Preamble)) in order to protect, preserve and manage aquatic life, allow regeneration of stocks, or preserve the area in pristine condition (Art. 41). Within these areas, it is an offence to do any of the following without written permission from the Director General:

- Fish or attempt to fish (Art. 43.1a);
- Take or remove any living or dead aquatic plant or animal (Art. 43.1b);
- Collect coral or sand (Art. 43.1c);
- Discharge any pollutant (Art. 43.1c);
- Anchor a vessel to coral (Art. 43.1d);
- Destroy, deface or remove any animate or inanimate object (Art. 43.1e);
- Carry any weapon potentially harmful to aquatic life or the coral reef (Art. 44).

The general penalty under the Act applies to these offences (Art. 25; see above).

In addition to the above penalties, the court may – and for some offences shall (Art. 52) – order the forfeiture of any vessel or article seized under the Act that was used in the commission of an offence, even where no one has been convicted of the offence (Art. 34; see also Art. 49). Vessels and other articles that have been seized may be temporarily returned to the owner by the Director General once security of at least the aggregate value of the vessel and its equipment has been provided (Art. 50).

For most offences under the Act, first, second and third offences may be compounded by any fisheries officer upon payment of a fine of at least MYR500 (USD113) and up to the maximum fine for that offence (Art. 31.1). Offences that may not be compounded include fishing without a licence or in contravention of vessel licensing requirements (Art. 31.2).

Masters and owners of fishing vessels are liable for offences committed by any person on board the vessel (Art. 30.1), and managers of a company that has committed an offence will be guilty of the offence (Art. 30.2).

The *Fisheries Act* carries a low burden of proof for some offences. Explosives, poisons or equipment for fishing with electricity found in someone's possession will be presumed to be intended for use in fishing unless the contrary is proved (Art. 26.2). Any fish or fishing equipment found on board foreign vessels in Malaysian waters will be presumed to have been caught or used or intended for use for fishing in Malaysian waters without a permit, unless the contrary can be proven (Art. 56). The onus for proving that a fishing vessel is not a foreign vessel or that a non-Malaysian national found on board a vessel is not a crew member is on the accused (Arts. 14A, 24.3).

Enforcement powers under the *Fisheries Act* include the power to investigate any offences under the Act (Art. 47A), examine witnesses (Art. 47B–C) and, when there is reason to believe that an offence has been committed, stop and search any vessel, or any vehicle carrying fish, inspect licences, documents and equipment (Art. 46), enter and search premises, take samples of fish, arrest suspects, seize vessels, equipment, fish, explosives, poisons, or other prohibited gear (Art. 47.1), and to use force where necessary in order to do so (Art. 47.2). Obstructing fisheries officers in performance of their duties is punishable by a fine of up to MYR20,000 (USD4,523) (Art. 53).

The Director General may exempt any vessel or person from all or any of the provisions of the Act for purposes of research, training or fisheries management (Art. 58).

The Act requires the Department of Fisheries to maintain fisheries plans that aim at maximum sustainable yield (Art. 6.1). The states may create regulations to manage turtles and their eggs and inland fisheries (Art. 38), while the Minister may create regulations to conserve and manage marine and estuarine fishing and turtles and their eggs outside state jurisdiction (Arts. 38, 61), and to manage marine parks and reserves (Art. 45). State regulations relating to turtles are discussed below under State legislation. Ministerial regulations relevant to this report are as follows:

Fisheries (Maritime) (Licensing of Local Fishing Vessel) Regulations, 1985, amended 2010. Requires the Director General of Fisheries to maintain a registry of licences (Art. 5), and vessel owners to mark vessels (Art. 10) and record the number and species of fish caught and the area in which they were caught if these are intended for export (Art. 14A).

Establishment of Marine Parks Malaysia Order, 1994, amended 1998, 2000, 2008, 2012. Establishes marine parks around several islands delimited in the original Order and four amendments.

Fisheries (Prohibited Areas) Regulations, 1994, amended 1998, 2002. Prohibits the collection of shells, molluscs or corals (Art. 3) or killing or capturing fish without a licence (Art. 4) within the areas specified in the schedule (waters around islands in Terengganu and Sarawak).

Fisheries (Prohibited Area) (Rantau Abang) Regulations, 1991. Prohibits fishing in the specified area in Terengganu except by a very limited number of methods.

Fisheries (Protected Area for Sea-Cucumber) Regulations, 2010. Prohibits disturbing, harassing, catching, taking, killing or possessing sea cucumber, or removing or destroying any object, within a specified area in Kedah without permission from the Director General of Fisheries (Art. 4). The penalty for violations is a fine of up to MYR1,000 (USD226) and/or imprisonment for up to six months (Art. 6). Possession of any of the specified species of sea cucumber within the protected area will be considered evidence of guilt (Art. 5).

Fisheries (Control of Endangered Species of Fish) Regulation, 1999, amended 2010. Makes it an offence (Art. 3) to fish for, disturb, harass, catch, kill, take, possess, sell, buy, export or transport Dugong, Whale Shark, four species of clams, six species of whale, 13 species of dolphin and seven species of sawfish, or any part of these animals, without written permission from the Director General (Art. 2.1–2). This Regulation also requires the immediate release of any of these species caught accidentally if alive, or, if dead, reporting the accidental capture to a fisheries officer (Art. 2.3).

Where the above Regulations do not specify a penalty, offences are subject to the general penalty under the Act (see Fisheries Act Art. 2, 25).

Fisheries (Prohibition of Method of Fishing) Regulations, 1980.

These Regulations prohibit fishing using, or possessing, certain equipment including pair trawls and other nets that are dragged along the sea floor by powered boats. The Regulations were promulgated under the 1963 Fisheries Act, which has been repealed, and we cannot find them on the legal databases we searched, indicating that they are not in force. However, they appear on the Department of Fisheries (DoF) website and Faolex and are cited in much recent literature on Malaysian fisheries legislation.

Customs Act No. 235, 1967, revised 1980

Like the International Trade in Endangered Species Act, the Customs Act governs the import and export of wildlife in Malaysia. Article 2 of the International Trade in Endangered Species Act provides that in case of inconsistencies with other legislation its measures shall prevail; however, the Customs Act includes some measures relevant to wildlife crime that are not included in, and do not conflict with, the International Trade in Endangered Species Act.

The Customs Act prohibits the import or export animal products without a permit or licence, including those required by the International Trade in Endangered Species Act. However, the Customs Act applies to all animal species and not just those listed on CITES (Customs (Prohibition of Export) Order (2012), Third Schedule, Part I, items 1–6, 8–10, 16; Customs (Prohibition of Import) Order (2012), Third Schedule, Part I, items 1–6, 8–11, 17). Smuggling offences under the Act include involvement in importing or exporting prohibited goods, holding or harbouring or causing to be held or harboured prohibited goods, or in any way attempting to evade prohibitions on import or export (Art. 135.1). These offences are punishable by a fine of MYR50,000–100,000 (USD11

307–22 614) or 10–20 times the value of the goods, whichever is less, and/or imprisonment of up to three years for a first offence, with subsequent offences subject to fines of MYR100,000–500,000 (USD22,614–113,072) or 10–40 times the value of the goods, whichever is less, and/or imprisonment of up to five years (Art. 135.1iii). If the value of the goods cannot be ascertained, the penalty is a fine of up to MYR500,000 (USD113,072) and/or imprisonment of up to five years (Art. 135.1iii).

The above offences may be compounded by the Director General upon payment of ten times the value of the goods and forfeiture of the goods (Arts. 131.2A, 131.3bii). Other offences under the Act may be compounded by any senior Customs officer upon payment of a fine of up to MYR5,000 (USD1,131) (Art. 131.1), or by any non-senior Customs officer upon payment of a fine of up to MYR100 (USD23) (Art. 131.2).

The Customs Act criminalises the acceptance of bribes by Customs officers, who may be punished by a fine of up to MYR10,000 (USD2,261) and/or imprisonment of up to five years, and shall be prohibited from holding public office (Art. 137.1). Offering bribes is also punishable as abetment and therefore subject to the same penalty (Art. 137.1, 139).

The Customs Act places a high burden of proof on defendants, including where there is a question whether goods have been legally imported, exported, landed or loaded (Art. 119), or where the defendant claims to have provided false information unknowingly (Art. 134.2). The master and crew of a vessel found loitering in Malaysian territorial waters with goods prohibited for import will be presumed to have imported prohibited goods (Art. 44.1), and if the vessel is not carrying such goods, it will be presumed to be waiting to receive such goods for export (Art. 44.2). Failure to carry a correct manifest for such goods is also an offence (Art. 44.3).

Managers of corporations are liable for an offence committed by the corporation, and individuals are responsible for offences committed by their agents or subordinates, unless they can prove that the offence was committed without their knowledge and that they exercised due diligence in avoiding the commission of the offence (Art. 140.1–2).

The Director General may pay a reward to any officer or other person for services in detecting an offence under the Act or seizures related to the Act (Art. 141).

Detailed powers of inspection, investigation, search, seizure and arrest are provided in Part XII.

Animal Welfare Act No. 772, 2015

The new Animal Welfare Act does not apply to wildlife under the Wildlife Conservation Act (2010) (Art. 2), but since the Wildlife Conservation Act excludes marine species the Animal Welfare Act may technically cover marine wildlife. The Act does not apply in Sabah or Sarawak (Art. 1.2).

The Animal Welfare Act requires a licence to carry out the activities specified in the First Schedule (Art. 15.1), which includes capturing live animals for sale and slaughtering and disposing of animals (First Schedule nos. 10, 11, 12). There is an exemption for slaughtering animals for religious or customary purposes (Art. 15.2). Owners of animals must fulfil the needs of the animals, including the needs for a suitable environment and diet and to be protected from pain, suffering, injury and disease (Art. 24.1a). Owners and operators of conveyances must ensure adequate facilities, food and water during transportation of animals and avoid cruelly constraining them (Art. 27.1–2). Violations of these requirements are subject to a fine of MYR15,000–75,000 (USD3,392–16,961) and/or imprisonment of up to two years (Arts. 15.3, 24.3, 27.3).

Article 29 provides a list of cruelty offences, which include beating, torturing or terrifying animals (Art. 29.1a), neglect (Art. 29.1d), causing unnecessary pain and suffering by act or omission (Art. 29.1e–f), extracting parts of live animals in a painful way (Art. 29.1j), dynamiting, electrifying or poisoning bodies of water in order to harvest animals (Art. 29.1k), and offering for sale or possessing any animal that is suffering due to ill-treatment (Art. 29.1n–o). These offences are punishable by a fine of MYR20,000–100,000 (USD4,523–22,614) and/or imprisonment of up to three years (Art. 29.1). However, Article 51.1 provides that, in the case of offences under Article 29, the court may confiscate the animal instead of or in addition to imposing any other penalty.

For all offences, items used in committing the offence may be forfeited (Art. 55). Second or subsequent offences are subject to fines of up to double the original fine for the offence and a minimum prison sentence of three months (Art. 50).

In addition to or instead of the above penalties, for all the above offences the court may prohibit someone convicted of an offence from owning or keeping animals for up to one year (Art. 52.1).

Managers of corporations will be held responsible for offences committed by the corporation unless they can prove that the offence was committed without their knowledge and that they took reasonable precautions to prevent the offence from happening (Art. 56).

All offences under the Act may be compounded by the Board and the Public Prosecutor (Art. 60.1).

Animal Welfare Officers under the Act may investigate offences with the powers provided by the Criminal Procedure Code (Art. 39). Officers may search premises and seize animals without a warrant if they believe a delay would result in evidence being tampered with, removed or destroyed (Art. 40); they may also enter premises at any time for inspection or to collect samples (Art. 41). Officers may stop, search and seize conveyances and evidence found within them if they have reasonable cause to believe that the conveyance is carrying an animal, carcass or other item involved in the commission of an offence under the Act (Art. 42).

The Animal Welfare Act is implemented by the Ministry of Agriculture and Agro-Based Industry.

State legislation

Federal legislation governs international wildlife trade in Malaysia and, except in Sabah and Sarawak, wildlife protection (not including marine species), protected areas, animal welfare and marine fisheries. Sabah and Sarawak have their own wildlife protection legislation and parks legislation and have promulgated laws on biodiversity. Four peninsular states (Johor, Perak, Selangor and Terengganu) have enacted parks legislation that helps implement the federal National Parks Act (see Table 3). Most of the peninsular states have passed “Fisheries (Adoption) Enactments” that pass the federal Fisheries Act into law with respect to turtles and riverine fishing (see Table 3). Of the peninsular states, several have also enacted legislation specifically to protect turtles; however, it appears that except in Kelantan and Terengganu these regulations are not in force (see Table 3). These laws are discussed below.

Table 3: Marine wildlife conservation and management legislation in the peninsular states

State	State legislation governing turtles	Legislation passing the <i>Fisheries Act (1985)</i> into state law in relation to turtles and riverine fishing	State legislation governing National Parks
Johor	<i>Fisheries (Turtles and Turtle Egg Rules)</i> , 1984*		<i>National Parks (Johor) Corporation Enactment</i> , 1989, amended 1992, 2000, 2016
Kedah	<i>Turtles Enactment</i> , 1972, amended 1974, 1988 <i>Turtle Rules</i> , 1975*	<i>Fisheries (Adoption) Enactment</i> , 1989	
Kelantan	<i>Fisheries (Turtles and Turtle Egg) Rules</i> , 1972, amended 1985 by <i>Enactment No. 8*</i>	<i>Fisheries (Adoption) Enactment</i> , 1986	
Melaka	<i>Turtle Rules</i> , 1989*	<i>Fisheries (Adoption) Enactment</i> , 1987	
Negiri Sembilan	<i>Fisheries (Turtles and Turtle Egg Rules)</i> , 1976*	<i>Fisheries (Adoption) Enactment</i> , 1989	
Pahang	<i>Fisheries (Turtles and Turtle Eggs) Rules</i> , 1996*		
Penang	<i>Fisheries (Turtles and Turtle Egg Rules)</i> , 1999*	<i>Fisheries (Adoption) Enactment</i> , 1987	
Perak			<i>Perak State Parks Corporation Enactment</i> , 2001, amended 2006
Perlis		<i>Fisheries (Adoption) Enactment</i> , 1987	
Selangor		<i>Fisheries (Adoption) Enactment</i> , 2005	<i>Selangor State Parks Corporation Enactment</i> , 2005
Terengganu	<i>Turtles Enactment</i> , 1951, amended 1987, 1989 <i>Section 3A Notification under Turtle Enactment</i> , 1951*	<i>Fisheries (Adoption) Enactment</i> , 1986	<i>Terengganu State Parks Enactment</i> , 1986

* Not in force.

Peninsular state legislation regulating turtles

[Kedah] Turtles Enactment, 1972, amended 1974, 1988. This Enactment consolidates and replaces earlier regulations on turtles within Kedah and applies to all species covered by the Malay term penyu (“turtle”), which includes all marine species. Under this Enactment, it is prohibited to capture, kill, injure or possess turtles without a licence (s. 7), remove, sell or possess turtles’ eggs without a permit (s. 9), or enter or take eggs from areas that have been announced as off-limits for those activities (s. 11; see s. 10). Only the state’s Ruler has the right to collect turtle eggs (s. 4), and may grant rights and licences to do so (ss. 12, 13). Licensing Officers under the Enactment, Fishery Officers, and police of the rank of corporal or above may without a warrant stop and search any vessel suspected of carrying turtles or turtle eggs in violation of the Enactment, seize specimens or equipment and arrest suspects (s. 6). Possession of turtles or eggs is sufficient for a presumption of guilt, unless a permit can be produced (ss. 8, 9). Violations of the Enactment, including of conditions of licences, are punishable by a fine of up to MYR500 (USD113) or imprisonment of up to one year (s. 17i). Turtles, eggs or equipment that have been used in an offence may be forfeited (s. 17ii). Attempting to commit offences and abetting offences are to be penalised to the same extent as actual offences (s. 18).

[Terengganu] Turtles Enactment, 1951, amended 1987, 1989. This Enactment consolidates and replaces earlier regulations on turtles in Terengganu, and applies to all species covered by the Malay terms penyu, kambua, belimbing, agar, and tutong ("turtle"), which includes all marine and freshwater turtles, as well as tortoises. The Enactment governs the establishment and management of Turtle Sanctuaries (s. 3A–B), the granting and cancelling of licences to collect turtle eggs (ss. 7–12), and offences and penalties.

Under the Enactment, it is prohibited to kill or take any turtle without the permission of the Ruler of the state (s. 5), take or destroy turtle eggs in prohibited areas or areas where rights or licences are granted, except by the holder of the rights or licence (s. 7), or use a nesting area to attract tourists (s. 12A). These offences, as well as violations of conditions of licences or offences for which no penalty is specified (s. 14i), are punishable by a fine of up to MYR3,000 (USD678) and/or imprisonment of up to one year. It is also prohibited to disturb a turtle on its way to or from its nesting area or climb on or injure a turtle; this offence is punishable by a fine of up to MYR1,000 (USD226) and/or imprisonment of up to six months (s. 12B). Turtles, eggs or equipment that have been used in any offence may be forfeited (s. 14ii). Attempting to commit and abetting offences are penalised to the same extent as actual offences (s. 15). Offences may be compounded upon payment of a fine of up to 50% of the fine for the offence (s. 12C).

Licensing Officers under the Enactment and police of the rank of corporal or above may, without a warrant, stop and search vessels suspected of carrying turtles or turtle eggs in violation of the Enactment, seize specimens or equipment and arrest suspects (s. 4). A person found in possession of a turtle or part of a turtle will be presumed to have killed or taken the turtle; if the specimen is found on board a vessel the owner or master will be presumed to have killed or taken the turtle (s. 6).

Legislation governing national parks in the peninsular states

National Parks (Johor) Corporation Enactment, 1989, amended 1992, 2000, 2016; Perak State Parks Corporation Enactment, 2001, amended 2006; and Selangor State Parks Corporation Enactment, 2005. The texts of the National or State Parks Enactments for Johor, Perak and Selangor are almost identical and are summarised together here. These Enactments authorise the State Authorities of, respectively, Johor, Perak and Selangor to reserve any state land as a National/State Park (s. 3.1) to protect and preserve wildlife and objects of scientific or other interest (s. 4). Although the Enactments do not authorise the establishment of marine parks, land areas covered by this legislation could include mangroves or sandy beaches used by nesting turtles. With respect to areas surrounded by marine parks, the State Authority may delegate its powers to the Director General of Fisheries (s. 3). It is prohibited to enter National/State Parks without permission from their managing Corporation (s. 5.4). The Enactment prohibits certain activities within Parks, including:

- Bringing in weapons, explosives, traps, equipment, poisons or other dangerous items (s. 29.1a);
- Hunting, killing, injuring, catching or annoying wildlife, except in self-defence (s. 29.1b);
- Removing living or dead plants or animals (s. 29.1e);
- Destroying or damaging any living or non-living object (s. 29.1g).

In Perak only, the State Authority may exempt any person or class of persons from these provisions (s. 29.2).

The penalty for violations or for failing to comply with conditions imposed under Section 32.1 (see below) is, in Johor and Perak, a fine of up to MYR5,000 (USD1,131) and/or imprisonment of up to six months and, in Selangor, a fine of up to MYR10,000 (USD2,261) and/or imprisonment of up to twelve months (ss. 29, 32).

Section 30 outlines enforcement powers, which include the powers to, without a warrant, arrest any person committing, attempting to commit or abetting an offence under the Enactment and seize any vehicle, tool or item which there is reason to believe has been or is being used in the commission of an offence. Authorised officers and senior police officers may return seized items to their owner if “sufficient security” is provided (s. 32.1).

Terengganu State Parks Enactment, 1986. This Enactment governs the creation, alteration, dissolution and management of State Parks within Terengganu (except Taman Negara). The Enactment authorises the State Authority to reserve any land or marine area within the state as a State Park (s. 3) for protecting and preserving wildlife and objects of scientific or other interest (s. 4). The State Authority may permit the use of land (including marine areas) within a State Park for a limited number of purposes, including mining (s. 9), which could apply to the sea bed.

Sabah

Wildlife Conservation Enactment, 1997, amended 2002, 2016. This Enactment is the main wildlife protection legislation in Sabah, governing the conservation and management of protected species and the establishment and management of protected areas, including Wildlife Sanctuaries, provisional Wildlife Sanctuaries, Wildlife Hunting Areas, turtle egg collection areas and Conservation Areas. The Enactment also regulates procedures and conditions for hunting licences.

Under the Enactment, all protected animals and their parts and products are the property of the Government of Sabah unless they have been lawfully imported or obtained legally (s. 40.1). A “protected animal” is defined as any animal listed on the CITES Appendices or Schedules 1–3 of the Enactment (s. 2). Schedule 1 lists 12 “Totally Protected” species of animal, including Green, Hawksbill and Olive Ridley Turtles; these species may not be hunted (s. 25.1). Schedule 2 lists “Protected” species, including 12 species of cetacean, that may be hunted or collected in limited numbers under licence. Schedule 3 lists “Protected” species that may be hunted under licence; these do not include any species considered in this report.

The Enactment prohibits, within the State of Sabah, a large number of wildlife-related activities. The most relevant to the conservation of marine species considered in this report are:

Table 4: Activities prohibited throughout Sabah and penalties for violations under the Wildlife Conservation Enactment

Prohibited activity	Penalty	
	Prison term and/or fine	
Hunting Totally Protected animals (s 25.1)	1–5 years	MYR50,000–250,000 (USD11 307–56 536)
Unlawful possession of Totally Protected or CITES Appendix I-listed animals or their parts or products (s. 41)		
Bringing Totally Protected or CITES Appendix I-listed animals or their products into or out of the state without a permit (s. 53)		
Hunting Protected animals without a licence or in excess of the numbers stipulated on the licence (s. 25.2)	6 months–5 years	MYR50,000–100,000 (USD11 307–22 614)
Bringing Protected (Schedule 2) or CITES Appendix II-listed animals or their products in or out of the state without a permit (s. 53)		
Unlawful possession of Protected (Schedule 2) or CITES Appendix II animals or their parts or products (s. 41)		
Hunting sucklings or female animals that are pregnant, suckling young, or accompanied by dependent young (s. 33.1a–b)*		
Using a motorised launch to hunt animals, approach within 300 m for hunting, or drive or disturb animals (s. 33.1c–e)*		
Hunting between 18:00 and 06:00 (s. 33.1j)*		
Using or possessing for hunting drugs, poisons, explosives, electrical equipment, lures, artificial lights or any other prohibited methods of hunting (s. 33.1k)*		
Bringing Protected (Schedule 3) or CITES Appendix III-listed animals or their products in or out of the state without a permit (s. 53)		
Unlawful possession of Protected (Schedule 3) or CITES Appendix III animals or their parts or products (s. 41)		
Selling a live protected animal or its product without proper documentation, or buying a live protected animal or its product from someone who does not have proper documentation (s. 48)		
Making articles from, selling, or dealing in protected animals or their parts (s. 51)		
Collecting products of Totally Protected animals or other proscribed animals, products of Protected animals or other animals that require a permit for collection, or animal products not included in or in excess of the quota on the permit (s. 84)		
Obstructing officers in the performance of their duties (s. 95.1)		
Providing false information in order to obtain a licence, permit or certificate (s. 95.2)		
Failing to hand over a protected animal or its part or product to the Government (s. 40)	up to 2 years	MYR5,000–50,000 (USD1131–11 307)
Accidentally killing or injuring a Totally Protected animal due to recklessness (s. 37)		
Violation of closed seasons declared by the Director (s. 106)		
Accidentally killing or injuring a Protected animal due to recklessness (s. 37)	up to 1 year	up to MYR30,000 (USD6784)

*May be carried out with authorisation from the Director of Wildlife (s. 33).

Notwithstanding the prohibitions on killing or harming animals, it is permitted to take any measures “reasonably necessary” in self-defence or defence of another person or property from a direct attack by a Protected animal (s. 39.2). This does not apply to protecting property from Totally Protected species, or if the person has provoked the animal or is committing an offence against the Enactment at the time (s. 39.4–5). The burden of proof for establishing that an animal was wounded or killed in self-defence lies with the defendant (s. 39.6). Hunting by Wildlife Officers under the authority of the Director is allowed for research, management, public safety, protection of property or to prevent undue suffering of the animal (s. 115.1).

In addition to the above restrictions, which apply throughout Sabah, the Enactment provides measures to protect wildlife within Wildlife Sanctuaries, Wildlife Hunting Areas and turtle protection areas.

Wildlife Sanctuaries aim to protect wildlife habitats and natural processes in an undisturbed state, ensure the maintenance of biodiversity, and protect significant species, biotic communities or genetic resources (s. 9.1). The Enactment requires a five-year management plan to be maintained for each Wildlife Sanctuary (s. 13). In addition to permanent Wildlife Sanctuaries, provisional Wildlife Sanctuaries may be declared for a period of up to 120 days (s. 22.1–2). Entry into Wildlife Sanctuaries is only allowed with a permit (s. 15) (this measure does not apply to residents of provisional Wildlife Sanctuaries (s. 22.6)). Within a Wildlife Sanctuary, it is prohibited to:

- i. Hunt animals, except fishing with rod and line with a permit (s. 16);
- ii. Search for or collect any animal product (s. 17.1b);
- iii. Possess animals or animal products without “lawful excuse” (s. 17.1d);
- iv. Disturb animals (s. 17.1f);
- v. Bring in, use or possess equipment used for any of the above activities (s. 17.2);
- vi. Enter parts of a Wildlife Sanctuary that are closed to the public (s. 20.2);
- vii. Spread chemicals or other toxic materials (s. 18.1a).

There are exceptions to (i)–(v) for native or traditional rights if specified in the proposal for establishing the Sanctuary (s. 20.1).

The penalties for violating (i)–(v) above are imprisonment of six months to five years and/or a fine of MYR50,000–100,000 (USD11,307–22,614). The same penalties apply to violations of item vii; however, a minimum prison sentence is not specified, offenders may be liable for remediation, and corporations are subject to fines of MYR100,000–500,000 (USD22,614–113,072) (s. 18.2). Violations of (vi) are punishable by imprisonment of up to three years and/or a fine of MYR20,000–50,000 (USD4,523–11,307) (s. 20.3).

Wildlife Hunting Areas may be created to manage habitat and animal populations for hunting (s. 64), and within these areas, zones may be created where hunting of Protected species is permitted (s. 71.1). A five year management plan must be created for each of these areas (s. 68). Within a Wildlife Hunting Area, it is prohibited to:

- i. Hunt Totally Protected animals, or other animals without a permit (s. 71.);
- ii. Enter a Wildlife Hunting Area, or enter an area outside the area allowed on a permit (s. 70.1);
- iii. Possess animals or animal products without “lawful excuse” (s. 72.1c);
- iv. Spread chemicals or other toxic materials (s. 73.1a).

There are exceptions to the above prohibitions for native or traditional rights if specified in the proposal for establishing the Wildlife Hunting Area (s. 75.1).

The maximum penalties for the above offences are, for individuals, imprisonment of five years and/or a fine of MYR100,000 (USD22,614). Minimum sentences of six months imprisonment and/or a fine of MYR50,000 (USD11,307) are specified for violations of (iii) (s. 72.2). For (iv), remediation may also be required (s. 73.2) and corporations are subject to fines of MYR100,000–500,000 (USD22,614–113,072) (s. 73.1).

The Director may declare a traditional turtle egg collection area (s. 87.1). A permit in accordance with traditional rights of local people is required to collect eggs within this area (s. 87.2). The permit does not entitle the holder to sell the eggs (s. 87.3). Violation of these provisions is punishable by a fine of MYR50,000–250,000 (USD11,307–56,536) and/or imprisonment of one to five years (s. 87.4).

Finally, Conservation Areas may be created to protect wildlife, wildlife habitats, migration corridors and sites of other value, ensure the security of wildlife or wildlife habitat in a neighbouring Wildlife Sanctuary or control the smuggling of animal and plant products (s. 21.1). The Head of State may create regulations to control hunting, the carrying of equipment for hunting, and the movement of animal and plant products in these areas (s. 21.2), or restrict entry by non-residents for up to one year (s. 21.3). No special offences or penalties are specified in the Enactment for these areas.

For all offences under the Enactment, those that involve failing to procure a required licence or permit carry the extra penalty of a fine of double the fee for the licence or permit (s. 96.4). Furthermore, conviction will result in the cancellation of licence or permit unless the Court decides otherwise, and the holder will be disqualified from holding a licence for two to five years (s. 100.1–3). Conviction elsewhere in Malaysia or ASEAN for an offence relating to the preservation of wildlife or habitat also disqualifies the offender from holding a licence in Sabah for two to five years (s. 100.4).

Abetting or attempting to commit offences are liable to the same penalties as committing the offence (s. 96.2–3). Penalties are doubled for repeated offences (s. 96.6), for use of a firearm in committing an offence (s. 96.8) and for anyone who is convicted of an offence when more than two accomplices are convicted of the same offence (s. 96.7). Officers of companies are liable for offences committed by the company unless they can prove the offence was committed without their knowledge or consent and that they exercised due diligence in avoiding the offence (s. 99).

Section 98 places the onus on the defendant to prove their innocence in a large number of cases, particularly those involving possession of protected animals or their products, equipment for hunting or fishing, or other evidence (see also ss. 33.2, 41.3).

The Enactment provides that some offences may be compounded by a fine of up to 50% of the maximum fine prescribed by the Enactment (s. 101.1); however, we have not found a list of compoundable offences. Non-compoundable offences are specified as hunting wildlife within a Wildlife Sanctuary, hunting Totally Protected wildlife, unlawfully possessing Totally Protected wildlife or its products, and bringing a Totally Protected of CITES Appendix I-listed animal or plant into or out of the state without a permit (s. 101.5).

Sections 88–90 and 116–117 provide enforcement powers, including powers of inspection of documents, weapons, equipment and animal and plant products, stop and search of vehicles, entry and search of premises, breaking open of compartments or containers on vehicles, seizure of weapons, equipment and animal and plant products suspected of involvement in an offence, or any other potential evidence, suspension or cancellation of licences and permits, arrest of suspects without warrant, and entry of dwelling places with a warrant or consent of the owner. The Enactment authorises the payment of rewards to informers (s. 97.3). The Enactment provides that confiscated Totally Protected or CITES Appendix I-listed wildlife or their products may not be disposed of so that they may become objects of trade (s. 93.8; see also s. 102.3).

The Enactment allows several exceptions to its provisions. The Minister may suspend or reinstate all or any part of the Enactment at any time with regard to any part of Sabah (s. 1.2), and animals and animal products may be prescribed as exempted from its provisions if they were acquired before the species was listed on CITES or a Schedule to the Enactment (s. 114).

Holders of research permits issued by the Director are exempt from the Enactment (s. 113.1–2).

Wildlife Regulations, 1998. The Wildlife Conservation Enactment is implemented by the Wildlife Regulations, including in relation to procedures for fishing licences (s. 12) and permits for bringing animals into and out of the state (ss. 49–51). Permits for taking live animals into and out of Sabah may only be granted if the Director of wildlife is satisfied that the animal will be transported in accordance with CITES and other guidelines for transportation (ss. 49.2, 50.2). Additional measures provided by the Regulations that could help conserve marine wildlife include a prohibition on travelling within a Wildlife Sanctuary or Wildlife Hunting Area except with a wildlife officer or wildlife guide (ss. 11m, 54k) and a provision that forfeited animals and animal products may only be disposed of through public auction, destruction, permanent loan to a scientific or educational institution, or placement in a museum or zoo controlled by the Government (s. 66). There is a general penalty for violating the Regulations or conditions of licences and permits of imprisonment of up to one year and/or a fine of up to MYR10,000 (USD2,261) (s. 75).

Parks Enactment, 1984, incorporating amendments to 2007. This Enactment governs the establishment, dissolution and management of Parks and Nature Reserves in Sabah. The Enactment constitutes several parks, including marine parks (s. 17), and authorises the Head of State, with the advice of the Minister responsible for parks, to create Parks and Nature Reserves on any state land, including territorial waters (s. 3). Under the Enactment, it is prohibited within any Park in Sabah to, without permission or rights pre-existing the establishment of the Park:

- Damage, destroy, remove or bomb coral (s. 48.1b);
- Hunt, kill, injure, capture or disturb any animal other than coral, or take or destroy eggs (s. 48.1d; see also s. 53.1a);
- Carry in or possess any weapon, explosive, trap, poison or noxious substance or other equipment or vehicles for collecting plants or animals (s. 48.1c);
- Remove living or dead plants or animals (s. 48.1g);
- Destroy or deface any animate or inanimate object (s. 48.1i);
- Discharge any poison or noxious substance capable of harming plants or animals (s. 48.1m);
- Enter any area not open to the public (s. 48.1p).

There are exceptions to these prohibitions for the killing or capture of animals by the Director or a Park Officer if necessary for public safety, protection of property, scientific research or protection of the environment or other animals (s. 49).

Except the first offence on the above list, these offences are punishable by a fine of up to MYR50,000 (USD11,307) and/or imprisonment of up to one year, and, for a repeated offence, a fine of up to MYR100,000 (USD22,614) and/or imprisonment of up to five years (s. 48.2). The first item on the list (damaging, destroying, removing or bombing coral) is punishable by a fine of up to MYR500,000 (USD113,072) and/or imprisonment of up to five years, and for a repeated offence by a fine of up to MYR750,000 (USD169,607) and/or imprisonment of up to seven years (s. 48.2). Abetting an offence is subject to the same penalties as the offence (s. 48.3).

It should be noted that Section 53.1a makes it an offence to hunt animals or birds, move the nest or eggs of animals or birds, or be found in circumstances indicating the intention to do so. This largely duplicates the prohibition on hunting or disturbing animals or their eggs in Section 48.1d but adds the clause on circumstances indicating intent and applies a lower penalty, i.e. the general penalty under the Enactment of a fine of up to MYR20,000 (USD4,523) and/or imprisonment of up to one year; for a second or subsequent offence these penalties are doubled (s. 58.1).

This general penalty also applies to failing to report possession of a trophy found within a Park to a Park Officer (s. 50), obstructing officers in performance of their duties (s. 53.1d), and failing to produce a permit when required (s. 53.2).

In addition to the above penalties, a court may order the forfeiture of any animal, meat, trophy, vehicle, equipment or other materials related to the commission of an offence (s. 55.1).

Any licences or permits in respect of which an offence has been committed will be cancelled unless ordered otherwise by the Court and for second or subsequent offences the holder may be disqualified from holding a licence or permit for up to three years (s. 55.2–3).

All offences described in this summary, except damaging, destroying, removing or bombing coral, may be compounded by the Director or any Park Officer by payment of a fine of up to MYR3,000 (USD678) (s. 56.1).

Sections 51–52 provide enforcement powers, including powers of entry, search, seizure, inspection and arrest. Rewards may be offered to informers (s. 58A.4). Possession of any animal, meat or animal product from a freshly killed animal within a Park or Nature Reserve will be considered evidence of poaching (s. 58D.1), while possession of these products within “reasonable distance” of a Park or Nature Reserve will be considered evidence of poaching unless the contrary is proven (s. 58D.2). Anyone in control of a vehicle in which such products are found will be considered to have custody and control of these products (s. 58D.5).

Tunku Abdul Rahman National Park Regulations, 1974. These Regulations were created under the National Parks Ordinance (1962) which is no longer in force and we could not find them on the legal databases we searched; however, they are listed on the website of the Sabah State Attorney General’s Chambers and therefore still seem to be in use. Within Tunku Abdul Rahman National Park, these Regulations prohibit:

- Harming or removing coral, sand, gravel or marine invertebrates (s. 4);
- Injuring, mutilating, displacing or breaking off any bottom formation or growth (s. 5);
- Attaching any rope, wire, chain or contrivance to coral, rock or other formations (s. 6);
- Spear fishing (s. 10);
- Using poisons, electricity, carbide bombs or similar equipment to take or kill fish or other marine organisms (s. 11);
- Fishing by any means other than a line with one or two hooks, except traditional indigenous fishing with a licence (s. 12a);
- Casting or dragging anchors in a way that damages reef structures, except in case of endangerment to life or property (s. 13b).

The penalty for violations is a fine of up to MYR500 (USD113) (s. 26); offences may be compounded by summary payment of a fine of MYR100 (USD23) (s. 27.1).

Turtle Islands National Park Regulations, 1979. These Regulations were created under the National Parks Enactment (1977) which is no longer in force and we could not find them on the legal databases we searched; however, they are listed on the website of the Sabah State Attorney General’s Chambers and therefore still seem to be in use. Within Turtle Islands National Park, the Regulations prohibit:

- Harming or removing coral, sand, gravel or marine invertebrates (s. 5);
- Injuring, mutilating, displacing or breaking off any bottom formation or growth (s. 6);
- Attaching any rope, wire, chain or contrivance to coral, rock or other formations (s. 7);
- Spear fishing (s. 11);
- Using poisons, electricity, carbide bombs or similar equipment to take or kill fish or other marine organisms (s. 12);
- Fishing by any means other than a line with one or two hooks, except traditional indigenous fishing with a licence (s. 13);
- Casting or dragging anchors in a way that damages reef structures, except in case of endangerment to life or property (s.15.2).

The penalty for violations is a fine of up to MYR500 (USD113) (s. 28).

Sabah Biodiversity Enactment, 2000. This Enactment establishes the Sabah Biodiversity Council and the Sabah Biodiversity Centre, provides their powers and responsibilities, and governs procedures for granting licences for access to biological resources within the state. A licence is required for access to biological resources, except for public officers carrying out their duties and institutions to which the Council has granted an exemption to this requirement for academic, non-profit research (s. 15). Violation of this requirement, failure to provide information required under the Enactment, or removal of biological resources from the state without written authorisation from the Council, is punishable by a fine of up to MYR50,000 (USD11,307) and/or imprisonment of up to five years (s. 26; see also s. 28). Obstructing officers in performance of their duties is punishable by a fine of MYR10,000 (USD2,261) and/or imprisonment of up to one year (s. 33). Managers and officers of corporations that have committed an offence are liable for these penalties unless they can prove the offence was committed without their consent or connivance and that they exercised due diligence in preventing the offence (s. 34). All offences under the Enactment may be compounded by a fine of up to 50% of the maximum fine for the offence (s. 36). Articles 29–32 provide powers of entry, investigation, search, seizure and arrest.

Sarawak

Wildlife Protection Ordinance, 1998, incorporating amendments to 2008. This Ordinance governs the management and conservation of wildlife in Sarawak, including the creation and management of Wildlife Sanctuaries. The attached Schedules list Totally Protected and Protected species of wildlife, and wildlife that may be imported or exported under licence. Part I of the First Schedule (Totally Protected Animals) includes all whales, dolphins and porpoises, dugong and marine turtles. Part II (Protected Animals) includes all hard and soft corals and all CITES Appendix I- and II-listed species except those already listed on Part I. Part III includes all animals other than those listed on Parts I or II; these may be imported or exported under licence. The schedules may be amended by the Minister responsible for wildlife protection (s. 55.2).

The definition of “animal” under the Ordinance includes recognisable parts and derivatives (s. 2.1).

The Ordinance prohibits certain activities throughout the state, whether inside or outside a Wildlife Sanctuary. The most relevant of these to this report are:

- Hunting, killing, capturing, offering for sale, importing, exporting or possessing Totally Protected or Protected animals or their nests without permission or in contravention of terms of licences (s. 29);
- Importing to or exporting from Sarawak any wildlife on Part III of the First Schedule without, or in contravention of, licences (s. 31);
- Selling, offering for sale or buying wild animals or their recognisable parts or derivatives that have been bred without a licence (ss. 33, 34);
- Possessing wildlife without a licence, except for personal use if under 5 kg or in the case of a native person residing within Native Area Land or Native Customary Land (s. 37);
- Harming, frightening or torturing a wild animal (s. 44);
- Provoking a wild animal (s. 44);
- Failing to provide adequate food and water to a wild animal in one’s keeping; keeping a wild animal in a way that causes it unnecessary suffering; wilfully causing unnecessary suffering, pain or discomfort to a wild animal through act or omission (s. 44).

The highest penalties are for hunting, killing, capturing, offering for sale, importing, exporting or possessing wildlife. In the case of Totally Protected animals (other than Sumatran Rhinoceros *Dicerorhinus sumatrensis*, Bornean Orangutan *Pongo pygmaeus* and Proboscis Monkeys *Nasalis larvatus*), these offences are punishable by a fine of MYR25,000 (USD5,654) and/or two years’

imprisonment (ss. 29.1c). For Protected species the penalties are MYR10,000 (USD2,261) and one year's imprisonment (ss. 29.2). The same penalties are applied per animal or animal part for possessing wildlife without a licence and adds a penalty of one year's imprisonment and a fine of MYR2,000 (USD452) for non-protected species (s. 37). Section 37 thus appears to impose a higher penalty for possession than under Section 29. The lowest penalty is for buying wildlife or its parts that have been bred without a licence, which is punishable by a fine of MYR2,000 (USD452) (s. 34).

Under the Ordinance, Wildlife Sanctuaries may be created in any area of state land (including marine areas, see s. 2) that is not already a National Park or Nature Reserve (s. 10). Sections 12–20 regulate claims by native peoples to use land within Wildlife Sanctuaries. In addition to the prohibited activities listed above, the Ordinance prohibits the following activities within a Wildlife Sanctuary (except for scientific or educational purposes (s. 25.2)):

- Hunting, killing or capturing animals (s. 24.2a);
- Possessing wild animals or their recognisable parts or derivatives (s. 24.2e);
- Possessing or carrying weapons, materials or equipment for killing or capturing animals, except fishing equipment being used by people with subsistence rights (s. 24.2b–c);
- Entering without permission (s. 24.1).

The penalty for hunting, killing, capturing or possessing animals within a Wildlife Sanctuary is, for Totally Protected and Protected animals, the same as described above under the prohibition on these activities anywhere in the state (s. 24.3c–d); however, within a Wildlife Sanctuary a penalty may also be imposed for carrying out these activities in relation to non-Protected species, i.e. imprisonment of one year and fine of MYR2,000 (USD452) or five times the sum of the wild animal involved, whichever is greater (s. 24.3e). The penalty for the other offences on the above list is imprisonment of one year and a fine of MYR5,000 (USD1,131) (s. 24.5).

Outside Wildlife Sanctuaries, the Ordinance authorises the Minister to require landowners to adopt measures to conserve wildlife and habitat and/or not to kill or capture any wildlife (s. 28.1–2). The penalty for contravening these orders is imprisonment of one year and a fine of MYR2,000 (USD452) or five times the value of any wildlife involved in the offence, whichever is higher (s. 28.6).

The Minister may exempt public officers from prohibitions on collecting, possessing and transporting turtle eggs or other wildlife in the performance of their duties (s. 39). Wardens may also shoot, kill or capture wildlife deemed dangerous to human life or property, to prevent unnecessary suffering, or to manage numbers of wildlife (s. 41), and none of the prohibitions in the Ordinance apply to actions taken in self-defence, as long as the animal has not been provoked (s. 42). Conditions for carrying out activities under Sections 41 and 42 are specified in Sections 42–42C.

Penalties are doubled for repeat offences and offences committed between sunset and sunrise (s. 51).

All offences may be compounded by a fine of up to MYR1,000 (USD226), except hunting, killing, capturing, offering for sale, importing, exporting or possessing Totally Protected wildlife (s. 47.1). Officers may dispose of any seized property as they see fit, unless it is a Totally Protected or Protected animal or recognisable part or derivative (s. 47.2).

Enforcement powers include powers to evict suspects from Wildlife Sanctuaries and seize equipment, weapons, and any other item believed to be used in commission of an offence under the Ordinance (s. 26). In addition, enforcement officers may arrest suspects without a warrant, enter and search premises to carry out the provisions of the Ordinance or prevent or detect offences (s. 45), require the attendance of anyone suspected of being concerned in an offence under the Ordinance (s. 46), and seize any animal or its part or derivative thought to be involved in an offence (s. 48). For offences under Sections 29, 33, 34 and 37 (see above), the onus for proving lawful acquisition for wildlife or their recognisable parts and derivatives is on the suspect (s. 38). Section 54 authorises rewards of up to one half the fine collected to be paid to informers.

Wildlife Protection Rules, 1998. These implementing rules for the Wildlife Protection Ordinance govern licensing, fees, management of Wild Animal Farms and commercial wildlife farms, possession and sale of captive bred wild animals and their meat, and the import and export of wildlife. Within a Wildlife Sanctuary, it is prohibited to fish without a permit (s. 6) or possess traps without a permit for conservation or research (s. 5). A licence is required to operate a Wild Animal Farm (s. 13) or a commercial wildlife farm (s. 19), or sell captive bred wild animals or their meat, which may not include animals that were originally taken from the wild or their offspring of the first generation (ss. 22–23). Licences for commercial wildlife farms will only be granted if the wildlife is obtained without detriment to the wild population in the state (s. 24a). Totally Protected animals and animals listed on Appendix I of CITES may not be kept in a commercial wildlife farm (s. 21). Possession of more than five kilograms of meat will be taken as evidence of offering meat for sale (s. 23.2b). Violations are punishable by the general penalty under the Regulations of a fine of MYR3,000 (USD678) plus MYR500 (USD113) for every day the offence continues (s. 41).

The Rules prohibit the import and export of Totally Protected wildlife into and out of Sarawak, except with permission from the Controller for purposes of research, education, or protection of the wildlife (s. 26.1). Violations of conditions for such import or export are punishable by a fine of MYR3,000 (USD678) and/or imprisonment of six months (s. 26.3).

Powers of investigation are provided in Section 32. Obstructing officers in performing their duty is punishable by a fine of MYR3,000 (USD678) and/or imprisonment of six months (s. 32.2).

National Parks and Nature Reserves Ordinance 1998, incorporating amendments to 2008. Governs the establishment and management of National Parks and Nature Reserves, including marine parks. The Ordinance allows any area within the territorial waters of Sarawak to be constituted as a National Park or Nature Reserve (s. 9). The Minister may appoint a Controller of National Parks and Nature Reserves (s. 3.1), who is authorised to take measures necessary for protection of wildlife, including in their natural state, and reserve areas of National Parks or Nature Reserves as breeding areas (s. 24.2b–c; see also s. 4). For purposes of maintaining the park or reserve or protecting visitors, the Controller may authorise the removal of wild animals, but must consult with the Controller of Wildlife if the animal is of a totally protected or protected species (s. 24.5).

Under the Ordinance, it is prohibited, without permission from the Controller, to conduct the following activities within a National Park or Nature Reserve:

- Enter the area (s. 26a);
- Bring in weapons, explosives or any equipment for capturing or killing animals (s. 26b);
- Kill, injure, capture or disturb any animal, egg or nest (s. 26c);
- Remove living or dead animals (s. 26d);
- Destroy any animate or inanimate object (s. 26h);
- Dump any noxious liquid or other substance (s. 26l).

Offences under the Ordinance or any subsidiary regulations are punishable by a fine of MYR5,000 (USD1,131) and or imprisonment of one year (s. 32). Animals and equipment involved in the commission of an offence may be confiscated (s. 33.1). Accomplices and those who attempt to commit offences are punishable by the same penalties (s. 35). Offences may be compounded upon payment of a fine of up to half the maximum fine prescribed for the offence (s. 28.1). Officers may dispose of any seized property as they see fit, unless it is a Totally Protected or Protected animal or its recognisable part or derivative (s. 28.2).

Enforcement powers include powers to arrest suspects and search vehicles and premises without a warrant (s. 27), require the attendance of suspects for investigation (s. 29), seize vehicles, equipment, and wildlife and their parts and derivatives if they are suspected to be involved in an offence under the Ordinance (ss. 30, 34.1b), and evict suspects from parks or reserves (s. 34.1a).

National Parks and Nature Reserves Regulations, 1999. These implementing Regulations for the National Parks and Nature Reserves Ordinance add some useful protections for marine wildlife. Certain people may be denied entry to National Parks or Nature Reserves, including anyone who has committed an offence under the Ordinance or is likely to damage animals or other objects within the park or reserve (s. 6). It is prohibited to dive without permission from a Park Warden (s. 12) and accompaniment of a guide (s. 13), and between 18:00 and 08:00 (s. 14), which could help discourage certain kinds of fishing. When diving, it is prohibited to touch any marine creature or underwater formation, stand on a coral reef, or move within five metres of a turtle (ss. 15.1e, 16.1). Vessels may only anchor within a National Park or Nature Reserve at designated areas (s. 18). The Regulations also prohibit the following activities on or near turtle beaches:

- Entering between 18:00 and 06:00 without permission from a Park Warden (s. 19);
- Taking a vessel along or within the boundaries of a turtle beach zone between 18:00 and 06:00 without permission from a Park Warden (s. 20);
- Touching, disturbing, injuring, sitting or riding on a turtle, disturbing turtle nests, or creating any nuisance that would drive turtles from a turtle beach zone (s. 21);
- Shining lights on a turtle beach zone (s. 22).

Violation of these prohibitions, or failure to comply with conditions of licences, is punishable by a fine of MYR3,000 (USD678) (s. 37). In addition, anyone who damages property or the natural environment within a National Park or Nature Reserve is liable for damages (s. 39). All offences under the Ordinance or subsidiary regulations may be compounded (s. 48) by payment of a fine of up to half the maximum fine prescribed for the offence (s. 50.1).

Fisheries (Maritime) (Sarawak) Regulations, 1976, amended 2000. These Regulations were promulgated under the federal Fisheries Act (1963) but may still be in force.¹⁹ The Regulations govern licensing for fisheries activities in estuaries and waters adjacent to the Sarawak coast (s. 1). Under the Regulations, use or possession of fishing equipment requires a licence (s. 3.2) and is prohibited in territorial waters adjacent to Sarawak except for residents of Sarawak (s. 3.1). The Fourth Schedule includes restrictions on trawl fishing gear, including mesh sizes, while the Fifth Schedule includes restrictions on drift gill-nets. The only penalty provided by the Regulations is cancellation of licences for noncompliance with conditions (s. 13).

Sarawak State Fisheries Ordinance, 2003, incorporating amendments to 2007. This Ordinance regulates inland fisheries and aquaculture, but also applies to some species of marine wildlife that have been brought into Sarawak (s. 2). The definition of “fish” in this Ordinance includes marine species that have been brought into the state, but explicitly excludes turtles and their eggs (s. 2). The Ordinance also explicitly excludes from its scope species of fish that are protected under the Wildlife Protection Ordinance (s. 69). The latter protects all cetaceans, hard and soft corals and all CITES-listed species, meaning that, of the species considered in this report, the Fisheries Ordinance applies only to sea cucumbers and some species of mobula rays²⁰ and shark. The only measures of this Ordinance that are applicable to the conservation and management of these species are those relating to possession and processing of fish. A licence is required for fish processing for human consumption or sale; the penalty for noncompliance is a fine of up to MYR10,000 (USD2,261) and/or imprisonment of up to 18 months (s. 41). However, the minister responsible for fisheries may exempt individuals or classes of individuals from this requirement (s. 41.3). Breach of conditions of licences is punishable by a fine of up to MYR2,000 (USD452) and/or imprisonment of up to one year (s. 42.3), plus possible cancellation of licence (s. 42.4). Sale of fish products that have been processed without a licence is punishable by a fine of up to MYR20,000 (USD4,523) and/or imprisonment of up to three years (s. 45.3). Licences must be produced upon request by any authorised person (s. 55.1); the penalty for noncompliance is a fine of up to MYR1,000 (USD226) (s. 55.3). Anyone who abandons fish or equipment in order to avoid its seizure or detection of an offence is liable to the general penalty under the Ordinance of up to MYR20,000 (USD4,523) and/or imprisonment of up to three years or, if a corporate body, a fine of up to MYR50,000 (USD11,307) (ss. 61, 62). Any offence may be compounded by payment of a fine of up to half the maximum fine prescribed for the offence (s. 59). Enforcement powers include powers of entry, search, seizure, arrest, use of reasonable force (s. 46), examination of witnesses (s. 49) and requiring concerned individuals to provide evidence (s. 47) and/or appear for questioning (s. 48).

¹⁹ They are listed on the DoF website (Department of Fisheries, Malaysia, 2016) and Faolex, but not on the website of the Sarawak Attorney General's Chambers (2016) or the legal databases we searched.

²⁰ All species of mobula rays will be added to CITES Appendix II in 2017 (CITES Secretariat 2016) and will therefore cease to be covered by the State Fisheries Ordinance.

Sarawak Biodiversity Centre Ordinance, 1997, incorporating amendments to 2015. This Ordinance establishes the Sarawak Biodiversity Centre under the Sarawak Biodiversity Centre and provides its powers and responsibilities. The Centre has the purpose of advising the Government, managing biodiversity research and development, and managing and ensuring the sustainable use of biodiversity within the state (s. 5). Under the Ordinance, the Minister of Natural Resources is authorised to declare any biological resources as Protected Resources if they have valuable properties, are required for research and development, or require conservation (s. 21.1). Protected resources may not, for purposes of research and development, be removed from their natural habitat or from the state without a permit (s. 21.2). Violations of this provision are punishable by a fine of MYR50,000–200,000 (USD11,307–45,229) and/or imprisonment of up to five years for an individual, or a fine of MYR100,000–500,000 (USD22,614–113,072) for corporations (s. 22). Sections 26–29 provide powers of entry, investigation, search, seizure and arrest. Obstructing an officer in performing their duties is punishable by a fine of MYR5,000 (USD1,131) and/or imprisonment of two years (s. 30). All offences may be compounded by payment of a fine of up to half the maximum penalty prescribed for the offence (s. 34). Directors of corporate or non-corporate bodies are liable for offences committed by these bodies, unless they can prove the offence was committed without their participation or consent, and that they took all appropriate measures to prevent the commission of such an offence (s. 31). Implementing regulations under the Ordinance may specify penalties of MYR50,000–200,000 (USD11,307–45,229) and/or imprisonment of up to five years for individuals and a fine of MYR100,000–500,000 (USD22,614–113,072) for corporations (35).

Sarawak Biodiversity Regulations, 2004. These Regulations govern licensing, control and reporting of the collection of biological resources for research purposes. Under the Regulations, it is prohibited to remove biological resources from various protected areas of the state, including National Parks, Nature Reserves and Wildlife Sanctuaries, without a permit (s. 3.1). The permit holder must be accompanied by an agent of the Biodiversity Centre at all times while collecting biological resources, unless exempted by the Chief Executive Officer (s. 9a). The biological resources may not be removed from the state without an export permit (ss. 9d; 10). Section 11 provides conditions for granting of export licences, including that the Sarawak Biodiversity Council must be satisfied that the research cannot be conducted within the state (11.1a) and that the permit must specify the quantity permitted for export (s. 11.2). Under the Regulations, it is an offence to conduct research into or propagate protected resources without written approval from the Council (s. 26.1). The penalty for offences is a fine of up to MYR20,000 (USD4,523) and/or imprisonment of three years, plus a fine of MYR1,000 (USD226) per day for continued offences (s. 26.2). Protected resources may not be sold without a permit from the Council (s. 28). There penalty for this is the general penalty under the Regulations of a fine of up to MYR5,000 (USD1,131) and/or imprisonment of one year (s. 46).

Myanmar

Myanmar has a coastline of approximately 3000 km, including islands (FAO, 2006) and an EEZ of 509 500 km² (Cheung *et al.*, 2002). Myanmar's waters include estuaries, beaches, coral reefs and mangroves, the latter of which are in a seriously depleted condition (FAO, 2010).

Myanmar is home to five species of marine turtle: Hawksbill, Green, Loggerhead, Olive Ridley and Leatherback, all of which nest there. Other species native to Myanmar that are considered in this report include Blue Coral and organ-pipe corals, giant clams, Humphead Wrasse, and several species of mobulid rays, endangered and vulnerable sea cucumbers and CITES-listed seahorses, sharks and cetaceans (IUCN, 2014).

Major threats to Myanmar's wildlife include over-fishing, destructive fishing (Holmes *et al.*, 2014, 77) and illegal hunting and trade, which, according to the CBD, occur in a context of limited environmental safeguards and an undervaluation of ecosystems and biodiversity (Ministry of Environmental Conservation and Forestry, 2014).

Legislation relating to marine wildlife

Four main laws protect wildlife in Myanmar: the Protection of Wildlife and Conservation of Natural Areas Law No. 6 (1994), the Myanmar Marine Fisheries Law No. 9 (1990), the Law Relating to the Fishing Rights of Foreign Fishing Vessels No. 11 (1989) and the Export and Import Law No. 17 (2012). The list of protected wildlife species in Myanmar is provided by Forest Department Notification No. 583 (1994). In addition, Forest Law No. 8 (1992) and the Myanmar Pearl Law No. 7 (1995) provide protection for marine wildlife through measures designed to conserve mangroves and marine ecosystems, and on one interpretation the Animal Health and Development Law No. 17 (1993) includes measures that could be used to protect marine wildlife in trade. Several notifications issued by the Department of Livestock Breeding and Fisheries also protect marine turtles, sharks and other marine wildlife.

Protection of Wildlife and Conservation of Natural Areas Law No. 6, 1994

The Protection of Wildlife and Conservation of Natural Areas Law aims to protect endangered species of wildlife and their natural habitats and is part of Myanmar's efforts to implement international wildlife protection conventions to which the country is Party, which include CITES. The Law designates the Forestry Department as responsible for wildlife protection, requires the Government to form a Committee for Protection of Wildlife and Natural Areas to advise on conservation and wildlife protection, and lists wildlife offences and penalties.

Chapter IV provides the Minister of Forestry with the authority to create "Natural Areas," including Marine National Parks (ss. 7, 8). Within these areas, the Forest Department should preserve wildlife, habitats and ecosystems (s. 14). The Director General of the Forest Department, with approval from the Minister, may allow scientific and environmental research and recreational activities in Natural Areas, except in totally prohibited areas (this law does not define the term "totally prohibited area") and may exchange wildlife species with foreign countries (s. 12).

Chapter V provides the Director General of the Forestry Department with the authority to, with the approval of the Minister, determine species of wild animals that are Completely Protected, Normally Protected and Seasonally Protected, and species of plants that are endangered (s. 15). The lists of these species are provided in Forest Department Notification No. 583 (see below). The Law provides that the Director General may, with the approval of the Minister, grant permits to capture and possess Completely Protected wild animals for research purposes (s. 16). Section

26c allows parts of Completely Protected wild animals that have been captured with permission for research purposes to be kept as souvenirs, if registered with the Ministry of Forestry. Normally Protected and Seasonally Protected wildlife may be captured or raised commercially, as a hobby or according to custom, if permitted by the Director General (s. 17).

This Law provides the following offences and penalties relevant to marine wildlife:

- i. Killing, hunting, wounding, possessing, transporting or selling Completely Protected wild animals or their parts without permission, or exporting these without recommendation from the Director General (s. 37);
- ii. Killing, hunting, wounding, possessing, transporting or selling Normally Protected or Seasonally Protected wild animals or their parts without permission (s. 36);
- iii. Destroying the ecosystem in any designated Natural Area (s. 36);
- iv. Hunting without a licence or violating the condition of a hunting licence (s. 35).

Violations of (i) are punishable by a fine of up to MMK50 000 (USD37) and/or seven years' imprisonment (s. 37). These are the highest penalties provided in this law for any offence. Violations of (ii) and (iii) are punishable a fine of up to MMK30 000 (USD22) and/or five years' imprisonment (s. 36). Violations of (iv) are punishable by a fine of up to MMK10,000 (USD7) and/or three years' imprisonment (s. 35). Upon conviction, offenders may be required to pay compensation for damage to the Forest Department and the court may confiscate the illegally collected specimen and/or the tools used in committing the offence (s. 39).

There are exemptions to the above offences for possessing parts of Normally Protected and Seasonally Protected wild animals as souvenirs or part of traditional dress, or when accompanied with a certificate of registration, or when used as a drug (s. 38). Completely Protected wild animals may also be possessed as a souvenir or worn as part of traditional dress if registered with the Ministry of Forestry (s. 26).

The Law also allows for administrative sanctions to be imposed for the following activities within a designated Natural Area:

- For killing, hunting, wounding or raising a Seasonally Protected wild animal without permission during closed season: a fine of MMK10,000 (USD7) (s. 31). This is the highest administrative penalty provided by this law;
- For entering a totally prohibited area without permission: a fine of MMK5,000 (USD4) (s. 30);
- For failing to meet conditions for entering a place open to the public for recreation, trespassing in a prohibited place, frightening or wilfully disturbing protected wild animals, or picking or damaging plants without permission: a fine of MMK1,000 (USD1) (s. 29).

In the case of both legal proceedings and administrative sanctions, the Law places the burden of proof of legal possession on the accused (s. 43).

The Law is implemented by the Minister of Forestry and the Director General of the Forestry Department. Forest staff may search, seize and dispose of exhibits and impose administrative fines for some offences (Art. 28–32).

Rules Relating to the Protection of Wildlife and Conservation of Natural Areas Law, 2002

These Rules implement the *Protection of Wildlife and Conservation of Natural Areas Law (2002)*. We were unable to obtain a copy of the Rules; however, DLA Piper (2015) provides a detailed summary based on an informal translation. Based on this summary, the most important points that the Rules add to the Law are summarised here.

The Rules outline procedures for the Director General of the Forest Department to grant permits for capturing wildlife for scientific research, exchange with foreign countries and organisations, and hunting or raising on a commercial basis (DLA Piper, 2015). According to DLA Piper (2015): “Rule 46 contains 23 additional conditions which the hunter must abide by once a hunting licence is granted. These conditions cover an extensive set of disallowed methods of hunting, including protection for female animals and young animals and prohibitions of hunting [...] with dogs, explosives, poisons, electrical traps, snares, nooses, nets, or food.” Also: “Rule 35 provides for sub-rules which a person granted permission to capture wild animals [for commercial breeding stock] must abide by, including registration, method of transport, payments of prescribed value and payment of penalty if any animal is injured or dies. The rules do not contain provisions relating to individual identification methods, such as tags or microchips, and are also silent on Forest Department record keeping methods” (DLA Piper, 2015). Rule 39 “permits the raising of Normally Protected Wild Animals or Seasonally Protected Wild Animals as a hobby or for ‘traditional custom’ (not defined)” after permission is granted by the Director General, and “Rule 41 (e) prohibits trading of these animals on a commercial basis” (DLA Piper, 2015).

According to DLA Piper (2015), enforcement powers are as follows: “Under Rule 62, if there is sufficient reason to believe a Protected Wild Animal is illegally hidden on private property, a judge not lower than the rank of First Class Magistrate must issue a search warrant before any search can be conducted. The search warrant has to be administered to a Forest Officer of an Administrator and this person shall then conduct the search personally in the presence of two witnesses. The search warrant gives the power for the official to seize any animal, vehicle or equipment used in any offence. Within 24 hours of conducting the search a written report must be submitted to the Judge who issued the warrant. If a search of a publically accessible place or vehicle is required, personnel of the Forest Department along with two witnesses may undertake the search without the requirement for a search warrant. When conducting the search, any animal, exhibit, vehicle or other machinery can be seized and any action taken against the offender”; “Rule 70 gives the authority to the State or Divisional Forest Officer to sell these Protected Wild Animals and/or parts once confiscated”; and Chapter VIII on Administrative Action “give[s] Township Forest Officers permission to seize any Protected Wild Animals and parts and allows for:

- the animals and parts to be temporarily returned to the person from whom they had been seized (with a bond); and/or
- the Township Forest Officer to sell any perishable property (not defined) seized.”

Forest Department Notification No. 583, 1994.

This Notification provides the list of Myanmar’s Completely Protected, Protected (or Normally Protected) and Seasonally Protected wildlife. Completely Protected wildlife includes all five species of marine turtle found in Myanmar, Dugong and Irrawaddy Dolphins. No other species considered in this report are listed.

Myanmar Marine Fisheries Law No. 9, 1990, amended 1993

This law regulates licensing for fisheries activities and responsibilities of the Minister of Fisheries and provides offences and penalties within the marine fisheries domain.

The Law requires licences for all fishing and collection of marine products for sale (ss. 3–7) and registration of offshore fishing vessels (s. 10) and fishermen (s. 11). The ship's master must maintain a logbook (s. 31). The Department of Fisheries (DoF) is authorised to determine fishing grounds, within which it has the right to grant fishing rights (ss. 13–16). The Minister has considerable flexibility in assigning fishing rights, as s/he may “of his own accord” allow fishing in Myanmar waters (s. 51) and amend fishing grounds or conditions specified in a licence (s. 24).

The Marine Fisheries Law prohibits the following activities relevant to marine wildlife protection:

- i. Keeping on board explosives, poisons, chemicals or other dangerous substances not permitted for use in fishing (s. 38);
- ii. Fishing in inshore or offshore waters without a licence (ss. 33, 34);
- iii. Collecting marine products without a licence (s. 40);
- iv. Transferring licences (s. 36);
- v. Polluting marine fisheries waters (s. 39).

The *Law Amending the Myanmar Marine Fisheries Law* (1993) substantially increased fines and custodial penalties for violations of these prohibitions (s. 3). The highest penalties are for (i), which is punishable by a fine of up to MMK500,000 (USD375) and/or imprisonment of up to 10 years. Offences involving (ii) and (iii) are punishable by a fine of up to MMK300,000 (USD225) and/or imprisonment of up to 10 years. Offences involving (iv) are punishable by a fine of up to MMK300,000 (USD225) and/or imprisonment of up to three years. Offences involving (v) are punishable by a fine of up to MMK100,000 (USD75) and/or imprisonment of up to three years.

The amendment also makes it an offence to conceal fish, equipment or money from an Inspector or dispose of these items without permission from the Inspector (Amendment, s. 2), and for public servants to conceal offenders without taking action or alter or dispose of exhibits used in an offence (Amendment, s. 3). Violations of these provisions are punishable by fines of up to MMK100,000 (USD75) and/or imprisonment of up to three years (s. 3). Those who abet an offence shall be punished by the same measures as those who commit the offence (s. 50).

Notwithstanding these measures or measures under any other laws, the Marine Fisheries Law allows the Director General to return the vessel or equipment to its owner or permit resumption of operations if “sufficient security” is provided or a “reasonable fine” paid (s. 25).

The Law empowers fisheries Inspectors to stop, board and inspect vessels, including without a warrant, interrogate crew, seize fishing vessels, “materials found therein” and explosives, poisons, chemicals and other equipment not permitted for use in fishing, and arrest and prosecute crew members (s. 30). Failing to stow equipment properly will be deemed evidence of fishing (s. 52).

This Law is implemented by the Minister of Livestock Breeding and Fisheries and the Director General of the DoF.

Law Relating to the Fishing Rights of Foreign Fishing Vessels No. 11, 1989, amended 1993

The Law Relating to the Fishing Rights of Foreign Fishing Vessels regulates the licensing of foreign fishing vessels to fish in Myanmar waters and establishes the responsibilities of Inspectors, the Director General of the DoF and ships' masters.

The Law requires foreign residents to obtain a licence in order to fish in the Myanmar EEZ beyond Myanmar territorial waters (s. 6). Once granted a licence, such fishers must register with the DoF (s. 7), abide by the directives of the DoF and Myanmar law (s. 8) and the conditions of the licence, and maintain a logbook that includes information on “goods and commodities” held on board, presumably including at least some catch data (s. 23). Section 12 allows the Director-General to amend conditions of licences in consultation with the licence holder.

The Law prohibits foreign fishing vessels from engaging in the following activities:

- i. Entering Myanmar waters without a licence (s. 31);
- ii. Loading, unloading, processing or transporting fish or fishing equipment (s. 32a);
- iii. Harassing, catching, killing, storing, processing or transporting fish belonging to species prohibited by the DoF (s. 32b);
- iv. Keeping on board explosives, poisons, chemicals or other harmful substances not permitted for use in fishing (s. 32c);
- v. Fishing in contravention of the conditions of the licence (s. 33);
- vi. Transfer of licence (s. 19);
- vii. Polluting the water (s. 36).

The Law Amending the Law Relating to the Fishing Rights of Foreign Fishing Vessels (1993) substantially increases fines and custodial penalties for violations of some of these prohibitions (s. 2). The highest penalties are for (iv), for which the ship's master is liable to imprisonment of five to 10 years and a fine of MMK200,000–500,000 (USD150–375); on default of the fine, the master may be imprisoned for one to three years. For (v), the master may be imprisoned for two to five years and fined MMK50,000–200,000 (USD37–150); on default of fine, the master may be imprisoned for one to two years. For violations under (ii) and (iii), the master may be fined MMK100,000–300,000 (USD75–225) and, on default of the fine, imprisoned for one to three years.

The 1993 amendment did not alter penalties for the remaining offences on the above list. The 1989 Law lists the penalties for these as follows: For (i), the ship's master may be fined MMK50,000–100,000 (USD37–75) or, in case of default of fine, imprisoned for one to two years. For the same violation, members of the crew may be fined MMK5,000–10,000 (USD4–7) or, in case of default of fine, imprisoned for three to six months (s. 38). Anyone who violates (vii) may be fined MMK5,000–10,000 (USD4–7) and upon default of fine imprisoned three to six months (s. 43). Violation of (vi) is punishable by revocation of licence, forfeit of security deposit or blacklisting (s. 19).

The 1993 amendment also makes it an offence for public servants to conceal offenders without taking action or to alter or dispose of exhibits used in an offence (Amendment, s. 2). Unfortunately, a page is missing from the copy of this law that we were able to obtain and we were unable to determine what penalties, if any, are specified for this offence.

The Director General of the DoF has the discretion, with the approval of the Minister, to revoke, suspend or cancel licences (s. 14).

Abetting an offence is punishable by the same measures as committing the offence (s. 45).

As with the Myanmar Marine Fisheries Law, this Law authorises the Director General of Fisheries to return confiscated vessels and equipment and permit fishing to resume, even after these measures have been imposed by a court (s. 16).

The Law Relating to the Fishing Rights of Foreign Fishing Vessels empowers fisheries Inspectors to stop, board and inspect vessels, including without a warrant, interrogate crew, seize fishing vessels, "materials found therein" and explosives, poisons, chemicals and other equipment not permitted for use in fishing, arrest and prosecute crew members and bring the ship into Myanmar fisheries waters after pursuit and seizure in accordance with international law (s. 22).

This Law provides that the presence of a foreign fishing vessel in Myanmar waters will be deemed evidence of fishing unless the equipment is stored in the required manner (s. 52), and that the onus is on the accused to demonstrate their innocence (s. 53).

This legislation is implemented by the Ministry of Livestock Breeding and Fisheries.

Export and Import Law No. 17, 2012

This Law bans the export or import of banned goods (s. 5) and requires a licence for exporting or importing goods specified as needing permission (s. 6). The Export and Import Law does not provide lists of these goods; instead, each ministry determines prohibited and restricted goods for its area. The Forest Department's Notification No. 583 (1994) lists five species of marine turtle, Dugong and Irrawaddy Dolphin as Completely Protected, and these species are therefore prohibited from export without recommendation by the Director General of the Forest Department under the Protection of Wildlife and Conservation of Natural Areas Law No. 6 (1994) Section 37. These species would also therefore seem have the status of controlled goods under the Export and Import Law. The Notification for Control of Endangered Fish Species and Notification on Prohibition of Fish Importing (see below) are likely to include lists of prohibited and controlled goods for fisheries export and import; however, we were unable to obtain the texts of these notifications in order to verify this.

Violation of the prohibitions specified in Sections 5 and 6 of the Export and Import Law, violation of conditions of licences, or abetting commission of these violations is punishable by imprisonment of up to three years, a fine of an unspecified amount, or both (ss. 8, 9, 10).

The Export and Import Law is implemented by the Ministry of Commerce.

Forest Law No. 8, 1992

The Forest Law contributes to marine wildlife conservation by enabling protection for mangrove forests. This law authorises the Minister of Forestry, with approval of the Government, to create "reserved forests" (s. 4), and "protected public forests" outside the reserves, including for purposes of protecting biodiversity and the environment (s. 5). The Forest Law prohibits the following activities relevant to marine wildlife conservation within a reserved forest:

- i. Trespassing;
- ii. Using poison, chemicals or explosives in the water;
- iii. Catching animals or fish;
- iv. Injuring trees.

Violations of (i), (ii) and (iii) are punishable by a fine of up to MMK5,000 (USD4) and/or imprisonment of up to six months (s. 40). Violations of (iv) are punishable by a fine of up to MMK20,000 (USD15) and/or imprisonment of up to two years (s. 42). Upon conviction, the court shall confiscate all illegally acquired forest produce (which includes wild animals and their parts and products (s. 2e)) and may confiscate vehicles and equipment used in committing the offence and/or require compensation for loss and damage (s. 47).

The Forest Law also provides that any forest staff who abuse their power to accept bribes and conspire in extracting, moving or unlawfully possessing forest products shall be imprisoned for one to seven years (s. 46).

The Forest Law is administered by the Ministry of Forestry.

The FAO (2006) claims that "The Government of the Union of Myanmar, having been empowered by the Forest Law of 1992, has declared all mangrove forests as protected areas, and fishing within three hundred yards of such mangrove areas is strictly prohibited." We were unable to find legislation that reflected this claim.

Myanmar Pearl Law No. 7, 1995

Although intended to regulate the pearl industry, the Pearl Law may be useful for protecting other species of marine wildlife. The Pearl Law was amended in 2014 by the Law Amending the Myanmar Pearl Industry Law No. 34, mainly by increasing fines.²¹

Under the Myanmar Pearl Law and the Law Amending the Myanmar Pearl Industry Law, the following activities are prohibited:

- i. Using or keeping on board a vessel explosives, poisons, chemicals or similar dangerous substances (s. 28);
- ii. Fishing by upheaval of the soil at the waterbed with sharp-edged implements (s. 27);
- iii. Concealing evidence from inspectors (s. 29);
- iv. Concealing evidence or offenders (the 1995 Pearl Law restricted this offence to activities by public officials but this was broadened by the amendment) (s. 30).

Violations of (i) are punishable by a fine of up to MMKfive million (USD3,749) and/or imprisonment of up to 10 years (s. 28). Violations of (ii) and (iii) are punishable by a fine of up to MMKtwo million (USD1,500) and/or three years' imprisonment (ss. 27, 29). Violations of (iv) are punishable by up to seven years' imprisonment (s. 30). On conviction, exhibits will be confiscated (s. 33).

Other prohibitions created by the Ministry of Mines relating to oyster management are punishable by a fine of up to MMKone million (USD750) and/or imprisonment of up to one year (s. 31).

Section 35 of the Pearl Law notes that the Ministry may exempt any Government department or organisation from this law.

The Pearl Law is implemented by the Ministry of Mines and the Myanmar Pearl Enterprise.

Animal Health and Development Law No. 17, 1993, amended 2010

This law may include one provision relevant to marine wildlife in trade, which is the penalisation of cruelty to animals, including wilful mistreatment, unnecessary maiming, depriving of food or water and neglecting to give proper care and treatment when sick or wounded (s. 25). These activities are punishable by a fine of up to MMK50,000 (USD37) and/or imprisonment of up to six months (Law Amending the Animal Health and Development Law 2010, s. 9).

This law is intended to apply to livestock, but the definition of "animal" includes domestic animals that have been "captured for a certain purpose" as well as those bred in captivity. DLA Piper (2015) maintains that this means the law should also apply where "captured wild animals are bred for sale under the 2002 Rules" (i.e. the Rules Relating to the Protection of Wildlife and Conservation of Natural Areas Law; see above). Furthermore, the definition does not specify that the "certain purpose" must be captive breeding so it may also apply to wildlife that has been captured for trade. However, the 2010 amendment specifies that "animal" includes only mammals, birds and bees (s. 2a), so even if DLA Piper is correct this measure would apply, of the species considered in this report, only to Dugong and cetaceans.

²¹ The text of this amendment is not available in English; however, a Burmese speaker summarised the changes, which are reflected in the following summary.

Department of Fisheries notifications

The following notifications promulgated by the DoF are also important sources of protection for marine wildlife. We were unable to obtain copies of these texts, and the following summaries are based on summaries found elsewhere.

Notification No. 2 for Sea Turtle Conservation, 1993. Holmes *et al.* (2014) claim that this notification “specifies that all turtles caught accidentally must be released, marine turtles cannot be consumed, TEDs must be used on trawling gear in all fishing areas and damaged fishing gear cannot be thrown into the ocean.” The FAO (2006) claims that marine turtle protection laws and regulations in Myanmar, including this notification: “require the release of turtles caught accidentally; ban the eating of sea turtles; require use of Turtle Excluder Device (TEDs) in all fishing areas; and forbid the jettison of damaged fishing gear” and that “The objectives for marine turtle conservation and management are to:

- preserve and restore developmental, feeding and nesting habitats;
- make nesting beaches acceptable to turtles by eliminating the impact of artificial lighting through technology, legislation and public information;
- clean beaches and control predators;
- minimise solid waste and pollution of the marine environment; and
- increase public awareness and participation in marine turtle conservation through public education.”

Notification for Control of Endangered Fish Species (year and number unknown). The FAO (2006) provides the following summary of this notification: “This regulation lists all the species of fish and mammals that are protected, including the Dugong, whale, Whale Shark, dolphin, giant clam and turtle, and included in the list of endangered species in the Convention on International Trade of Endangered Species (CITES). It is an offence to fish for, harass, catch, kill, possess, sell, buy, export or transport any endangered fish as specified in this regulation. Any of the listed endangered fish species caught unintentionally must be released immediately or disposed of as directed by the Fishery Officer.”

Notification on Prohibition of Fish Importing (year and number unknown). Holmes *et al.* (2014) state that this notification “lists fish species that may not be imported, exported, sold or kept in captivity without permission of the Director General of the DoF.”

Ministry of Fisheries Regulations, 2005. A summary of unnamed Myanmar fisheries regulations states that “New regulations issued in 2005 by the Ministry of Fisheries prohibit the eating of turtle meat and eggs and require that turtles caught as by-catch in fishing nets be released, and trawlers must be equipped with devices to minimise the risk of turtle capture” (IOSEA MoU, 2006).

Notification No. 1/2005, 1924. The FAO (2006) states that this regulation “banned trespass within three miles of a turtle hatching area, and imposed conservation of juveniles of sea turtles, allowing them to survive, and forbid the eating of turtle eggs.”

Notification No. 2/2001. Holmes *et al.* (2014) claim that this notification provides that “It is forbidden to catch, harass, kill, possess, sell, buy, export or transport Whale sharks (*Rhincodon typus*) anywhere in Myanmar waters. If accidental entanglement in fishing gear occurs, the animal must be released immediately.”

Notification No. 3/2013. According to Holmes *et al.* (2014), this notification prohibits offshore fishing at the height of shrimp reproductive season, between 1 June and 15 July.

Notifications creating protected areas. Holmes *et al.* (2014) claim that DoF notifications Nos. 5/94, 7/93 and 1/99 establish several no-fishing areas in Myanmar waters, and notification No. 2/2004 creates two Shark Protected Areas. In addition, four protected areas with a marine component were created by notifications Nos. 188/28, 289/70, 91/93 and 40/96 (Holmes *et al.*, 2014).

Other remarks

During our research, we found sources claiming that Myanmar prohibits fishing with certain kinds of nets. For example, SEAFDEC states that “In Myanmar large scale push net operated by mechanised boat is prohibited” (SEAFDEC, 2007) and the FAO (2006) claims that “Under ‘Law relating to the Fishing Rights of Foreign Fishing Vessels 1989’ and ‘Myanmar Marine Fisheries Law’ and related regulations, fishing gear that is destructive to the environment and fisheries resources are banned. Banned gear includes pair trawling, electric fishing, fishing using poisons, chemicals and explosives, and push net.” We did not find provisions relating to pair trawling or push nets in any of the legislation we were able to view, nor in summaries of the specific notifications listed above. These measures are presumably either in the notifications listed above but not mentioned in the summaries we found or in other notifications or regulations that we were unable to identify.

The Philippines

The Philippines has a continental coastline of 36 289 km and an EEZ of 2.2 million km² (FAO, 2014b). The country has one of the world’s highest levels of biodiversity, including marine biodiversity (CBD Secretariat, undated b). Its waters are home to Blue Coral and organ-pipe corals, Dugong, Humphead Wrasse and five species of marine turtle (Green and Olive Ridley Turtles nest in the Philippines, while Leatherback, Hawksbill and Loggerhead Turtles forage there) (IUCN, 2014). Most species of sea cucumbers, seahorses, mobulid rays, sharks and cetaceans considered in this report are also native to the Philippines.

Legislation relating to marine wildlife

The most important laws relating to marine wildlife conservation in the Philippines are the National Integrated Protected Areas System (NIPAS) Act (1992), the Wildlife Resources Conservation and Protection Act (2001) and the Philippine Fisheries Code (1998, amended 2014). The Strategic Plan for Palawan Act (1992) and the Tubbataha Reefs Natural Park Act (2009) govern the management of specific protected areas. In addition to these laws, several Administrative Orders (AOs) promulgated by the Department of Environment and Natural Resources (DENR) and the Bureau of Fisheries and Aquatic Resources (BFAR) of the Department of Agriculture (DA) include provisions relevant to marine wildlife. AOs are implementing rules and regulations for laws that have the force of law. This review also discusses the Local Government Code (1991), which authorises local government units (LGUs) to create implementing regulations for national legislation and also regulates some activities that affect marine wildlife.

Republic Act (RA) No. 7568 National Integrated Protected Areas System (NIPAS) Act, 1992

The *NIPAS Act* establishes the National Integrated Protected Areas System (NIPAS), a nationwide system of protected areas to be managed for the sake of preserving the ecosystem, biodiversity and/or geological aspects of the area (s. 2). Protected areas include nature reserves, natural parks, national monuments, wildlife sanctuaries, protected landscapes and seascapes, resource reserves, natural biotic areas and other categories established by national law or international agreements (s. 3). The initial components of NIPAS were constituted by all areas designated by previous legislation as national parks, game refuges, bird and wildlife sanctuaries, wilderness areas, strict nature reserves, watersheds, mangrove reserves, fish sanctuaries, natural and historical landmarks, protected and managed landscapes and seascapes and identified virgin forests (s. 5). Other areas may be added to the system (s. 6). The Act requires the creation of a general management planning strategy to guide the development of management plans for individual protected areas within the system (s. 9).

The Act prohibits the following activities within protected areas (s. 20):

- Hunting, destroying or possessing plants, animals or their products without a permit;
- Dumping waste detrimental to the protected area or its plants, animals or inhabitants, or depositing refuse or debris in bodies of water;
- Mutilating, defacing or destroying objects of natural beauty or cultural interest.

Violations of these prohibitions are punishable by fines of PHP5,000–500,000 (USD100–10,007) and/or imprisonment of one to six years. DENR may also impose administrative fines (amount unspecified). Offenders are required to restore or compensate for restoration of damage, and the government shall confiscate any items collected illegally plus equipment. DENR may also impose administrative fines (s. 21). Managers of corporations are responsible for the acts of their employees (s. 21).

The Act empowers the Secretary of DENR to implement and enforce the Act in protected areas, including authorising the Secretary to deputise officers and exact administrative fees and fines for violations of the Act (s. 10). There is an exception for areas already under the jurisdiction of other government bodies, which retain their jurisdiction (s. 15). Section 11 outlines requirements for the establishment of a Management Board for each protected area, whose responsibilities include granting permits. All persons deputised by DENR and recommended by the Management Board have the power to investigate and search premises and make arrests (s. 18). Section 19 requires the Department of Justice to designate special prosecutors to prosecute offences in protected areas.

RA No. 7611 Strategic Environmental Plan (SEP) for Palawan Act, 1992

The Act adopts a Strategic Environmental Plan, described as a “comprehensive framework” for the sustainable development of the province of Palawan (s. 4). This Plan is to be integrated in the Regional Development Plan used by Region IV (MIMAROPA) of the Philippines, and the Act primarily states broad policy goals, principles and main components for the plan, as well as outlining the administrative machinery for implementing the plan. The Act requires the establishment of a system of protection and controlled development in Palawan that maintains biological diversity, protects rare and endangered species and their habitat and maintains maximum sustainable yield (s. 7). The coastal/marine zone covered by the plan should have a core zone, in which no human activity is permitted, and a multiple use zone that should also serve as a buffer zone (s. 10). The Act is administered by the Palawan Council for Sustainable Development (PCSD), which is established by the Act (s. 16).

RA No. 10067 Tubbataha Reefs Natural Park (TRNP) Act, 2009

This act aims to help protect and conserve the Tubbataha Reefs area in the province of Palawan, including through a no-take policy, sustainable and participatory management and attention to all international agreements to which the Philippines is signatory (s. 2). The Act establishes the Tubbataha Reefs Natural Park (TRNP) (s. 4) and a buffer zone of 10 nautical miles around the park (s. 5). The Tubbataha Management Office is required to cooperate with various stakeholders to produce and periodically review a 10 year management plan (s. 6), which is to be succeeded by another such management plan (s. 9).

The Act prohibits the following activities within the TRNP:

- Entering or using the TRNP or its resources without permission from the Tubbataha Protected Area Management Board (TPAMB) (s. 19);
- Damaging the reef (s. 20);
- Anchoring to the reef (s. 22);
- Collecting, destroying, disturbing or possessing resources or their products, or attempting to do so (s. 26). The unauthorised entry of a vessel into the area shall be deemed evidence of attempting to commit this offence. Penalties are increased for using or possessing explosives, poisons or other destructive fishing gear or if the offence involves corals or protected species;
- Poaching by foreigners (s. 27).

The highest penalties under the TRNP Act are for collecting, destroying, disturbing or possessing protected species or their parts, or attempting to do so. For this offence, violators shall be imprisoned for 12–20 years, fined PHP500,000–one million (USD10,007–20,015) for every threatened or endangered organism involved in the offence, given administrative fines in the same range, forfeit catch, equipment and vessels and have their fishing permit cancelled (s. 26f). The lowest penalties are for anchoring to the reef, for which TPAMB shall impose administrative fines of PHP50,000–100,000 (USD1,001–2,001), and damaging the reef, for which TPAMB shall impose administrative fines of an unspecified amount plus restoration (s. 20). These are set by the Revised Implementing Rules and Regulations of the TRNP Act (2012) as at least PHP12,000 (USD240) per square metre, plus restoration costs of the same (Rule 21). The remaining offences listed above are all punishable by custodial sentences as well as fines, in most cases imprisonment of six years and a day to 12 years and minimum fines of PHP100,000 or 300,000 (USD2,001–6,004) (ss. 26–27).

In addition, the Act provides that non-payment of fines shall result in subsidiary imprisonment (s. 32). Administrative fines may be imposed by TPAMB, which may keep the funds for its running costs and sell forfeited vessels, materials and equipment (s. 33). The Act also provides that prosecution under this Act shall not prevent prosecution for violations of other laws and regulations (s. 34).

The Armed Forces, Police, Coastguard, law enforcement officers of DENR and BFAR, PCSD staff, LGU officials and members of TPAMB are authorised to enforce the Act and its rules and regulations (s. 35). The implementing Rules for this act add that officers of the park have the right to board and search vessels (Rule 18f). The Act requires the Department of Justice to designate special prosecutors to investigate and prosecute violations of the Act within the TRNP (s. 36).

The implementing Rules for this Act²² provide a few more details on administrative fines and state that in response to violations the TPAMB may impose additional penalties of cancellation of operation permits for tour companies and non-renewal of permits for operation within other marine parks, prohibition from operating within TRNP for one year or a ban on individuals (Rule 22 AO No. 1 Revised Implementing Rules and Regulations of Republic Act 10067 Otherwise Known as an Act Establishing the Tubbataha Reefs Natural Park (TRNP) in the Province of Palawan as a Protected Area Under the NIPAS Act (RA 7586) and the Strategic Environmental Plan (SEP) for Palawan Act (RA 7611), Providing for its Management and for Other Purposes (2012).

38). Maximum penalties should be imposed for repeated violations, attempts to use force or intimidation against enforcement officers or other aggravating conditions (Rule 36). Chapter 3 of the Rules states that allowable activities within TRNP may include only non-extractive and non-destructive activities (Rule 12) such as tourism (Rule 13), research and monitoring (Rule 14) and commercial filming and photography (Rule 16), all of which require permission from TPAMB and registration with park rangers upon entry to the park (Rule 18).

RA No. 9147 Wildlife Resources Conservation and Protection Act, 2001

The Wildlife Resources Conservation and Protection Act was enacted to complement the NIPAS Act and help implement the Philippine commitment to international treaties, including CITES. The Act establishes a state policy to conserve the country's wildlife resources and habitats, and aims to conserve and protect wildlife species and habitats to promote ecological balance and biological diversity, regulate collection and trade of wildlife and pursue the Philippine commitment to international conventions, protection of wildlife and their habitats (s. 2). Section 3 of the Act establishes that its provisions shall be enforceable for all wildlife species found in all areas of the country, including protected areas under the NIPAS Act and critical habitats. The Act also applies to exotic species that are subject to trade or maintained or bred in captivity in the country.

Section 4 of the Act provides that DENR has jurisdiction over all terrestrial plants and animals, as well as (among others) Dugong and all turtle and wetlands species. The DA has jurisdiction over all declared aquatic critical habitats, all aquatic resources, including but not limited to all fishes, aquatic plants, invertebrates and marine mammals except Dugong. In the Province of Palawan, jurisdiction is conferred on the PCSD (through RA No. 7611, discussed above).

The Act requires the Secretaries of DENR and the DA to maintain and update a list of wildlife species classified as Critically Endangered, Endangered and Vulnerable (or other accepted categories) according to internationally accepted criteria, as well as a list of lookalike species, which shall be categorised correspondingly to the listed species (s. 22). The current lists are contained in DENR AO No. 15 (2004) and FAO No. 208 (2001) (see below).

The Act prohibits the collection of threatened wildlife, including their by-products and derivatives, except for scientific research, breeding or propagation by accredited entities (s. 23). The Act allows the collection of wildlife of non-threatened species if the collection is not detrimental to wildlife populations and their habitats (s. 7; see also s. 18).

The Act requires those in possession of wildlife to prove financial and technical capability to maintain the wildlife (s. 8) and, in the case of threatened and exotic wildlife, to register the wildlife (s. 26). The source of the wildlife, including by-products and derivatives, must not violate the Act (ss. 8, 9). Export and import of wildlife requires authorisation from the Secretary of DENR or the DA (s. 11).

Section 27 of the Act prohibits wilfully and knowingly exploiting wildlife resources and their habitats, as well as the following activities, unless these are otherwise allowed in accordance with the Act:

- i. Killing or destroying wildlife species, unless:
 - a. it is part of the religious rituals of established tribal or indigenous communities;
 - b. the wildlife has an incurable communicable disease;
 - c. it is necessary to end misery suffered by the wildlife;

- d. it is to prevent imminent danger to a human being; or
- e. the wildlife has been used in authorised research;
- ii. Inflicting injury that cripples and/or impairs the reproductive system of wildlife species;
- iii. Dumping waste products detrimental to wildlife in critical habitat;
- iv. Trading wildlife, including import and export (see also s. 5t);
- v. Collecting, hunting, or possessing wildlife, their by-products and derivatives;
- vi. Maltreating and/or inflicting other injuries not covered above;
- vii. Transporting wildlife.

Penalties imposed under the Act vary depending on which prohibited act has been violated and whether the species affected is listed as Critically Endangered, Endangered, Vulnerable, Other Threatened or is not listed as threatened. In each case, the Act specifies a minimum and maximum custodial sentence and a minimum and maximum fine, one or both of which may be imposed (see Table 5). All fines are to be increased by at least 10% every three years to maintain their deterrent function. Penalties range from imprisonment of five to 10 days and/or a fine of PHP200–1,000 (USD4–20) for maltreating or transporting non-threatened wildlife to imprisonment of six years and one day to 12 years and/or a fine of PHP100,000–one million (USD2,001–20,015) for killing or destroying critically endangered wildlife (s. 28).

Table 5: Penalties under the Wildlife Resources Conservation and Protection Act

Against a species listed as:	Minimum and maximum custodial sentences and fines for prohibited acts listed in Section 27 of the Act (see list in text above)					
	i	ii	iii	iv	v	vi and vii
Critically Endangered	6 years, 1 day–12 years PHP100,000–one million (USD2001–20 015)	4 years, 1 day–6 years PHP50,000–500,000 (USD1,001–10,007)	1 month to 8 years PHP5,000–five million (100–100,073)	2 years, 1 day–4 years PHP500–300,000 (USD10–6,004)	2 years, 1 day–4 years PHP30,000–300,000 (600–6,004)	6 months, 1 day–1 year PHP50,000–100,000 (USD1,001–2,001)
Endangered	4 years, 1 day–6 years PHP50,000–500,000 (USD1,001–10,007)	2 years, 1 day–4 years PHP30,000–200,000 (USD600–4,003)		1 year, 1 day–2 years PHP2,000–200,000 (USD40–4,003)	1 year, 1 day–2 years PHP20,000–200,000 (400–4,003)	3 months, 1 day–6 months PHP20,000–50,000 (USD400–1,001)
Vulnerable	2 years, 1 day–4 years PHP30,000–300,000 (USD600–6,004)	1 year, 1 day–2 years PHP20,000–200,000 (400–4,003)		6 months, 1 day–1 year PHP1,000–100,000 (USD20–2,001)	6 months, 1 day to 1 year PHP10,000–100,000 (200–2,001)	1 month, 1 day–3 months PHP5000–20,000 (USD100–400)
Other Threatened	1 year, 1 day–2 years PHP20,000–200,000 (USD400–4,003)	6 months, 1 day–1 year PHP10,000–50,000 (USD200–1,001)		1 month, 1 day–6 months PHP500–50,000 (10–1,001)	1 month, 1 day–6 months PHP5000–50,000 (USD100–1,001)	10 days–1 month PHP1000–5,000 (USD20–100)
Non-threatened	6 months, 1 day–1 year PHP10,000–100,000 (USD200–2,001)	1–6 months PHP5,000–20,000 (100–400)		10 days–1 month PHP200–20,000 (4–400)	10 days–1 month* PHP1,000–5,000 (USD20–100)*	5–10 days PHP200–1,000 (4–20)

* If the acts were perpetrated using inappropriate techniques and devices maximum penalties shall be imposed.

In addition to the above penalties, all wildlife, its derivatives or by-products, and all equipment used in connection with violations of the Act are to be forfeited to the Government, unless these belong to a third person who has no participation in or knowledge of the illegal acts, in which case they may be released to their owner. The apprehending agency must immediately transfer all wildlife that has been seized or recovered to the nearest wildlife rescue centre of the Department in the area. If the offender is a foreigner, s/he shall be deported after serving sentence and payment of fines, without any further proceedings (s. 28).

Section 30 of the Act empowers the Secretaries of DENR and the DA to deputise, and law enforcement agencies to designate, wildlife enforcement officers, who have the power to seize illegally traded wildlife and arrest offenders against the Act.

Section 19 of the Act lists the CITES MAs and SAs.

DENR AO No. 15 Establishing the List of Terrestrial Threatened Species and their Categories, and the List of Other Wildlife Species Pursuant to RA 9147, 2004

This Administrative Order provides the list of threatened species required for implementation of the Wildlife Conservation and Protection Act. The AO lists threatened wildlife in four categories: Critically Endangered, Endangered, Vulnerable, and Other Threatened. Penalties outlined in the Wildlife Conservation and Protection Act (see Table 5 above) reflect the categorisation of species provided in this AO. While the AO is subordinate legislation issued by an administrative body of the government, it has the force and effect of law.

The AO classifies the Hawksbill Turtle and Dugong as Critically Endangered (along with all species of terrestrial fauna and flora listed on Appendix I of CITES). The AO classifies Loggerhead, Green, Olive Ridley and Leatherback Turtles as Endangered (along with all species of terrestrial fauna and flora listed on Appendix II of CITES).

Section 5 of the AO states that for purposes of applying penalties under the Wildlife Resources Conservation and Protection Act, in case of conflict between the AO and CITES the categorisation of the AO shall prevail; however, for other conservation purposes the higher listing shall prevail.

Fisheries Administrative Order No. 208, Conservation of Rare, Threatened and Endangered Fishery Species, 2001

This Fisheries Administrative Order (FAO), which prohibits the taking of Rare, Threatened or Endangered species, provides the list of threatened aquatic species protected under the Wildlife Resources Conservation and Protection Act. “Endangered” species are those listed on any of the CITES Appendices (s. 2). In addition to applying to all such species, the FAO provides lists of additional species that it classifies as “Rare” and “Threatened,” which are also protected; however, these categories do not include any species considered in this report.

FAO No. 233, Aquatic Wildlife Conservation, 2010

This FAO is part of the Philippines' CITES-implementing legislation. The FAO provides the responsibilities of committees responsible for managing aquatic wildlife and governs procedures for granting various kinds of permits. These include import/export permits as well as permits to perform research on aquatic wildlife, collect threatened and non-threatened wildlife and commercially breed wildlife, including threatened species. The latter must involve simultaneous conservation breeding and rehabilitation or protection of the habitat (s. 23). CITES listed species may be commercially bred after registration with the CITES Secretariat (for Appendix I species) or approval from the MA (for Appendix II and III species) (s. 23.1). The FAO requires registration of threatened aquatic wildlife by owners and of any aquatic wildlife by captive breeders (s. 27). Unregistered wildlife shall be confiscated. The FAO requires the establishment of rescue centres for aquatic wildlife and requires BFAR to release confiscated specimens into their original habitats, where possible (s. 17; see also s. 27).

The FAO requires a permit for the import or export of aquatic wildlife, products or derivatives, and only allows the export of CITES-listed species if these have been commercially propagated and registered with the CITES Secretariat (s. 31). Sections 32–34 outline procedures and requirements for issuance of CITES and non-CITES permits/clearance for import, export and re-export. Sections 5 and 6 designate the CITES MAs and SAs for aquatic wildlife.

Violations of FAO No. 233 are punishable under the Wildlife Resources Conservation and Protected Act (s. 36). The FAO also authorises administrative penalties of suspension of permits pending trial, cancellation of permits upon conviction and permanent ban from using wildlife for commercial, research or other purposes (s. 36).

FAO No. 233 was amended by FAO No. 233-1 (2011) and FAO No. 233-2 (2012) by the addition of new definitions of terms and modifications of fees for import and export.

RA No. 8550, The Philippine Fisheries Code, 1998 and RA No. 10654 Amending RA No. 8550, 2014

The Philippine Fisheries Code implements state policy regarding the conservation, protection and sustainable management of the country's fishery and aquatic resources. The Code was enacted with due regard to CITES. In 2014, the Code was amended by RA No. 10654 An Act to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing, Amending RA No. 8550, Otherwise Known as "The Philippine Fisheries Code of 1998," and for Other Purposes. The following summary of the Code reflects the later amendments.

The Code includes several general measures designed to promote environmental protection. Section 9 empowers the DA to declare closed seasons, while Section 11 obliges the DA to declare closed seasons and take conservation and rehabilitation measures for endangered, rare and threatened species (defined in s. 4.17 as species listed on CITES, in existing fisheries laws, rules and regulations or by DENR) and to ban the fishing or taking of such species and their eggs and offspring. The DA is required to set aside 25–40% of bays, foreshore lands, continental shelf and fishing grounds for mangrove cultivation in order to strengthen fish habitat and spawning grounds. No commercial fishing is to be allowed in these areas. At least 15% of coastal areas in each municipality must be set aside as fish refuges and sanctuaries (s. 81). The 2014 amendment also requires that aquatic resources be managed in accordance with the precautionary principle (s. 1).

-Philippine registered commercial fishing vessels that operate in international waters or the waters of other countries must comply with Philippine laws and regulations (s. 32). The 2014 amendment adds to s. 32 of the Code that Philippine distant water fishing vessels must also comply with requirements of the relevant RFMO and other coastal states (s. 10).

Chapter VI of the Code provides a list of prohibitions and penalties. In 2014, this chapter was replaced in its entirety by the corresponding chapter of the amendment, much of which aims to reduce IUU fishing. The amended Code provides for penalties for possession, sale, transport, import or export of fish that have been caught illegally or in violation of the Code, fishing without a permit or unlicensed gear, or failing to comply with reporting requirements provided in the Code. Other sections make it an offence to obstruct fishery law enforcement officers (s. 115), tamper with evidence (s. 123) or fail to comply with monitoring (ss. 116, 119) or trade-related measures (s. 125; see also ss. 106, 110).

Importantly for the purposes of preventing and prosecuting marine wildlife crime, the amended version of the Code prohibits the following activities:

- Collection, sale, purchase, possession, transport, export, forwarding or shipping out of aquatic species that are:
 - listed in CITES Appendix I or categorised as threatened by the IUCN and determined as such by the DA (s. 102a);
 - listed in CITES Appendices II or III if population assessments show the wild population cannot remain viable under pressure of collection and trade (taking from the wild may be allowed for scientific research or conservation breeding, including when simultaneous with commercial breeding) (s. 102b);
- The collection, possession, sale or export of ordinary, semi-precious or precious coral, whether raw or processed, except for scientific or research purposes, or any activity that damages coral reefs (s. 96);
- Import or export in violation of the Code (s. 105);
- Possession or trade of species taken in violation of the Code (s. 126);
- Fishing with explosives, noxious substances or electricity (exceptions may be granted for scientific, educational or research purposes), or possession of equipment for doing so (s. 92);
- Fishing with mesh size smaller than set by the DA (with exceptions for some species) (s. 93);
- Fishing with gear that destroys coral reefs or other marine life habitat, or gathering coral or any part of marine habitat (s. 97);
- Fishing in MPAs, fishery reserves, refuges and sanctuaries (s. 101), over-exploited fishery management areas (s. 94) or during closed seasons (s. 100);
- Failure to comply with conservation management rules and regulations (s. 118);
- Fishing without a permit, except for daily food sustenance or leisure (s. 86);
- Fishing without a permit in distant waters (s. 88);
- Use of unlicensed gear (s. 121);
- Failing to comply with reporting measures (s. 89) or falsifying or tampering with vessel markings, identity or registration (s. 122);
- Poaching by foreign vessels (s. 91);
- Aquatic pollution (s. 107).

The Code allows for a fine to be imposed upon summary finding of administrative liability for any of these violations, and in many cases also confiscation of catch and/or gear and suspension or revocation of licence. For some offences, administrative fines vary according to whether the crime was committed by municipal fishers or small, medium or large-scale commercial fishers. For

the offences specified under Sections 86, 88, 89, 96 and 97, administrative fines are imposed only on the captain, owner, operator, three highest officers of the vessel and/or recruiter/organiser of the crew. Administrative fines for the violations listed above range from the value of catch or PHP5,000 (USD100), whichever is higher, for unreported fishing by municipal fishers (but with considerably higher penalties for larger-scale and commercial fishers) to USD600,000–one million for foreign vessels poaching in Philippine waters and similar fines of PHP25 million–45 million (USD500,367–900,661) for large-scale commercial fishing without a permit or without meeting reporting requirements. Collection or trade of CITES-listed species is subject to administrative fines of five times the value of the species or PHP500,000–five million (USD10,007–100,073), whichever is higher, for Appendix I listed species, and three times the value of the species or PHP300 000–three million (USD6,004–60,044), whichever is higher, for Appendix II and III listed species, plus forfeiture of the specimens.

Following conviction in a court of law, a custodial sentence may be imposed, and/or additional fines, usually double the administrative fines but sometimes with additional penalties. Violations of all the prohibitions listed above (except poaching by foreign vessels in Philippines waters other than internal waters) carry a custodial sentence of at least six months; however, for some offences custodial sentences can be applied only to the captain, owner, operator, three highest officers of the vessel and/or recruiter/organiser of the crew. The highest custodial sentences are for collection or trade of CITES Appendix I listed species, which are for 12 years and one day to 20 years (the sentence is five to eight years for CITES Appendix II and III listed species). The collection, possession, sale or export of corals also carries a high custodial sentence of 10 to 20 years for the captain, master fisherman and recruiter/organiser of fish workers.

RA No. 10654 inserts a new Chapter VII into the Code empowering the DA to impose the administrative fines and penalties outlined in the Code and additional administrative sanctions for serious violations. Such sanctions include confiscation of gear, impoundment of vessel, temporary or permanent revocation of licence or permit, temporary or permanent ban from applicable duty and tax rebates, inclusion in an IUU fishing vessel list, denial of entry and other port services, blacklisting, and increase in value of fines up to five times the value of catch or, in case of repeated violations within a five year period, up to eight times the value of catch (s. 135). Serious violations are defined in Section 4.82 of the amended Code and include several of the prohibitions relevant to marine wildlife crime that are listed above.

In addition to these penalties, the Code makes violations of FAOs or other regulations promulgated by the DA punishable by a fine of PHP100,000 to five million (USD2,001–100,015) (RA No. 10654, s. 128).

All fines are to be increased by at least 10% every three years to maintain their deterrent function (RA No. 10654, s. 129).

RA No. 10654 allows a civilian to file a suit against public officials who neglect to perform their duties under the Code or its implementing rules or abuses their authority (s. 138c)

In some cases, the Code requires a low burden of proof for demonstrating the commission of an offence. The possession of fishing gear or operation of a fishing vessel in an area where the operator has no licence is considered evidence of unauthorised fishing (s. 86) and the discovery of explosives, poisonous substances, electrofishing equipment or fine mesh net in a fishing vessel constitutes a presumption that the equipment has been used for fishing (ss. 92, 93).

The Philippine Fisheries Code authorises officers of the DA, Navy, Coast Guard, National Police, National Police-Maritime Command, law enforcement officers of LGUs and other government enforcement agencies, and individuals deputised by the DA, to enforce the Code and other fishery regulations (s. 124). The Code is administered by BFAR and, in municipal waters, by municipal governments (ss. 16–25; see also Local Government Code of 1991, s. 17b.2i) who may also enact ordinances for the management of fisheries resources in their waters.

The 2014 amendment adds several measures to implement the Philippines' commitment to international agreements. In addition to the port state measures to deter IUU fishing mentioned above, the amendment provides that it is the function of BFAR to create regulations for conservation and management of straddling and migratory fish stocks and threatened living marine resources

including sharks and rays, implement boarding and inspection protocols to comply with international treaty obligations, and adopt and implement the FAO Code of Conduct and a national plan of action to manage fisheries (s. 16) (BFAR is required to implement a National Fisheries Development Plan by s. 65a of the Fisheries Code).

Section 35 of the Philippine Fisheries Code authorises economic incentives to be paid for fishing far out in the Philippines EEZ and beyond, with the goal of moving fishing away from coastal regions.

The Fisheries Code is implemented by DA AO No. 3 (1998) Implementing Rules and Regulations Pursuant to RA No. 8550, which provides more detailed guidelines on many of the measures contained in the Code. These include requirement for BFAR to inventory commercial fishing boats (s. 7.4) and declare over-fished areas (s. 23.1–2) and for commercial fishing vessels to include in their logbooks a record of where their catch is taken (s. 38.1).

Other FAOs

FAOs, administered by BFAR, help implement the Fisheries Code and often include extra or more detailed requirements or prohibitions. FAOs have the force of law and, under the 2014 amendment to the Fisheries Code, violations are punishable by a fine of PHP100,000–five million (USD2,001–100,073) (s. 17 regarding s. 128 of the Code), with this amount increased every three years by at least 10% (s. 17 regarding s. 129 of the Code). This penalty supersedes penalties outlined in earlier FAOs (D. Cula, *You Legal*, in litt. to A. Ezekiel, July 2015), which are usually significantly lower. The following FAOs include relevant provisions:

FAO No. 198 Rules and Regulations on Commercial Fishing, 2000. FAO No. 198 outlines requirements for fishing permits, including the keeping of record books noting catch and spoilage (s. 22) which must be registered with BFAR (s. 23) and kept on board for inspection (s. 24). Fishing in areas that are reserved or restricted under other fishery laws and regulations is prohibited (s. 25).

FAO No. 193 Ban on the Taking or Catching, Selling, Purchasing and Possessing, Transporting and Exporting of Whale Sharks and Manta Rays, 1998. This FAO prohibits the taking, catching, selling, purchasing, possession, transportation, export, wounding or killing of Whale Sharks and manta rays, including as by-catch (s. 2), except for scientific research with a special permit from the Director of BFAR (s. 3). Accidental by-catch must be immediately released unharmed (s. 2).

AO No. 282 Intensifying the Protection of Whale Shark (*Rhincodon Typus*), Popularly Known as “Butanding,” in the Philippine Waters, 2010. Not an FAO, this AO issued by the President is mentioned here because it provides increased protection for Whale Sharks by requiring various agencies to monitor and protect Whale Shark pathways, rescue wounded Whale Sharks and investigate and prosecute suspected violators. AO No. 282 declares that a reward shall be given to anyone who provides information leading to the arrest of a person who has harmed a Whale Shark or to the rescue or protection of a wounded Whale Shark.

FAO No. 185 Ban on the Taking or Catching, Selling, Purchasing, Possessing, Transporting and Exporting of Dolphins, 1992. This FAO bans collection, trade or export in, as well as wounding or killing any species of dolphin, although the Director of BFAR may issue a special permit for research or exhibition. Dolphins caught accidentally must be released immediately. FAO No. 185-1 (1997) amends this FAO by adding whales and porpoises to the ban.

FAO No. 202 Ban on Coral Exploitation and Exportation, 2000. This FAO prohibits the collection, possession, sale and export of any corals, although the Secretary of Agriculture may, through the Director of BFAR, issue a special permit to research institutions for research purposes in relation to non-CITES listed species only. Confiscated corals shall be returned to the sea or disposed of in other ways. In addition to fines, this FAO notes a custodial sentence for violations of six months to two years.

FAO No. 250 Prohibition on the Collection, Harvesting, Gathering, Selling, and/or Exporting of Brown Algae (*Sargassum* spp.), and Seagrass, 2014. Prohibits the collection, selling and export of Brown Algae and Seagrass, except for scientific or educational purposes with a special permit from the Director of BFAR.

RA No. 8485 Animal Welfare Act, 1998

The Animal Welfare Act is not primarily aimed at wildlife; however, it aims to promote the welfare of “all animals in the Philippines” (s. 1). The Act prohibits any form of cruelty towards animals, including overcrowding (s. 4), torture, neglect, maltreatment and killing (s. 5). Section 7 defines destruction of wildlife habitat as a form of cruelty to animals. It is prohibited to kill animals except certain species (not including any marine species) and in a limited number of clearly defined situations (s. 6).

Violations of the Act are punishable by imprisonment of six months to two years and/or a fine of at least PHP1,000–5,000 (USD20–100). If the violation is committed by a foreigner, s/he will be immediately deported after serving the sentence (s. 8).

The Act is administered by the Bureau of Animal Industry and by a Committee on Animal Welfare attached to the Department of Agriculture.

RA No. 7160 Local Government Code, 1991

Laws enacted by Congress that should be implemented by LGUs are sometimes general in nature and need an enabling law or implementing rules and regulations for their enforcement. The Local Government Code codifies the authority of LGUs to implement laws, executive orders, promulgations and other legislative and executive acts and ordinances of local application, whether these were enacted by Congress or the local legislative body.

The Code empowers local legislative bodies to enact ordinances, approve resolutions, and appropriate funds for the general welfare of the municipality, city or province and its inhabitants that protect the environment, and to impose appropriate penalties for acts that endanger the environment (ss. 447, 458, 468). The Code specifies that such acts include dynamite fishing and other forms of destructive fishing, smuggling of natural resources products and endangered species of flora and fauna, and other activities that result in pollution or ecological imbalance (ss. 447a.1.vi, 458a.1.vi, 468a.1.vi).

Singapore

Singapore has a coastline of 193 km, much of which borders reclaimed land, and a shelf area of approximately 640 km² (Cheung *et al.*, 2002). Within this relatively small area, Singapore has reef flats estimated to cover up to 30 km² and 4 km² of mangrove forest (National Parks Board Singapore, 2010). Blue Coral and organ-pipe corals are found in Singaporean waters, as are Dugong, Humphead Wrasse, several species of endangered and vulnerable sea cucumbers, two species of CITES-listed sharks and most species of CITES-listed cetaceans found in Southeast Asia (IUCN, 2014). Several species of marine turtle are occasionally found in Singaporean waters and have even been known to attempt to nest there (WWF Singapore, 2015), but sightings are rare.

Singapore is a major point of transfer and transit for international shipments and some of its legislation is therefore important to efforts to combat the illegal international wildlife trade.

Legislation relating to marine wildlife

Singapore has four pieces of legislation to protect marine wildlife from unsustainable and illegal trade. The Endangered Species (Import and Export) Act (2006, revised 2008) implements CITES with regard to international trade in wildlife, while the Wild Animals and Birds Act (1965, revised 2000) regulates the collection, possession and trade of wildlife within Singapore, and the Animals and Birds Act (1965, revised 2002) prohibits animal cruelty. The Fisheries Act (1966, revised 2002) controls fisheries activities within Singaporean waters and of Singapore nationals and vessels outside territorial waters. Some of these primary pieces of legislation have subsidiary regulations that help in their implementation, and these are also summarised below. The Parks and Trees Act (2005, revised 2006) contains a few provisions relevant to the limited protected areas in Singapore that involve marine and coastal areas.

Endangered Species (Import and Export) Act, 2006, revised 2008.

The Endangered Species Act implements CITES by controlling the import, export, re-export and introduction from the sea of scheduled species of animals and plants and their derivatives, including parts, products, and anything claimed to contain or labelled as containing such parts or products (s. 2). These attached Schedule matches the CITES Appendices. The Minister of National Development may amend the Schedule by order in the Gazette (s. 28).

The Act requires permits issued by the Director-General of the Agri-food and Veterinary Authority to import, export, re-export or introduce from the sea scheduled species and their derivatives; the Director-General may impose conditions on these permits (s. 7). It is an offence to import, export, re-export or introduce from the sea scheduled species without a permit, or to possess, offer for sale or display to the public scheduled species that have been imported or introduced from the sea without a permit (s. 4.1–2). Violations are punishable by a fine of up to SGD50,000 (USD35,018) per specimen up to a total of SGD500,000 (USD350,177) and/or imprisonment of up to two years. If the scheduled species have been specified by the Minister as subject to a lower penalty, the penalty may instead be a fine of up to SGD10,000 (USD7,004) per specimen up to a total of SGD100,000 (USD70,035) and/or imprisonment of up to one year (s. 4.3). Penalties for transiting scheduled species without a CITES permit are up to SGD50,000 per specimen up to a total of SGD500,000 and/or up to two years' imprisonment (s. 5). Upon conviction, specimens that have been seized in response to any of these offences will be forfeited (s. 15.1).

The Act makes it an offence to obstruct officers in the performance of their duties (s. 16) or to make false declarations, including by altering, forging or defacing permits (s. 17). There is a general penalty for offences for which a specific penalty is not provided of up to SGD10,000 (USD7,004) and/or imprisonment of up to one year (s. 18).

Under this Act, those who abet the commission of an offence are punishable by the same penalties as those who commit the offence (s. 19). Officers of corporations that commit offences are liable as well as the corporation if they are found to have connived in or consented to the commission of the offence or facilitated the offence through neglect (s. 20).

The Director-General may compound certain offences by collecting a fine of up to SGD5,000 (USD3,502) and confiscating any specimens involved in the offence (s. 25). Compoundable offences are specified by the Endangered Species (Import and Export) (Composition of Offences) Rules (2008, revised 2009). According to this regulation, compoundable offences include the import, export, re-export, transit or introduction from the sea of scheduled species without a permit, making false declarations, failing to surrender a permit that has been cancelled, and abetting an offence. In addition to this measure, the Minister may exempt any person or scheduled species from the provisions of the Act by publishing an order to this effect in the Gazette or by notice in writing (s. 26).

In order to enforce the Act, authorised officers may enter and inspect premises or conveyances, including without a warrant when there is reasonable suspicion that scheduled species are held there in contravention of the Act, open and inspect containers suspected of containing items or documents relevant to the Act, search persons, seize specimens and equipment and exercise other powers “reasonable and necessary” for enforcing the Act (ss. 9–11). Officers may arrest without a warrant persons suspected of committing or attempting to commit an offence (s. 14). Further enforcement powers are provided in Sections 12–13.

The Act specifies that it is the task of the Director-General to determine how to dispose of scheduled species that have been forfeited, including by repatriation (s. 15.6). The owner of a vehicle by which a specimen was illegally imported or introduced into Singapore is responsible for returning the specimen to its point of departure and for the proper care and maintenance of the specimen during the voyage (s. 15.10).

The Act is implemented by the Agri-food and Veterinary Authority (s. 3). The Minister of National Development may make regulations for granting permits, conditions of permits, fees and authorising the sale or possession of scheduled species or other activities involving these species (s. 29.1).

Under the Endangered Species (Import and Export) (Prohibition of Sale) Notification (2006, revised 2008), it is prohibited to sell or display to the public the species specified in the attached Schedule or their recognisable parts or derivatives. At the moment, the Notification only lists rhinoceros *Rhinocerotidae* spp. and Tigers *Panthera tigris*, but it could be amended to cover marine species.

Wild Animals and Birds Act, 1965, revised 2000

The Act makes the Director-General of Agri-food and Veterinary Services or the Commissioner of Police responsible for issuing licences for killing or taking any wild animal or bird (s. 7). The penalty for killing, taking or keeping any wild animals or birds without a licence, except those of species listed in the attached schedule (which includes only six species of birds), is a fine of up to SGD1,000 (USD700) and forfeiture of the specimen (s. 5; see also s. 8). The same penalty is applied for the export, sale or exposing to the public of wild animals or birds not specified in the schedule (s. 8e) and for possessing wild animals or birds that have been obtained in contravention of Section 5. However, it is permitted to destroy any wild animal or bird that is destroying crops (s. 6.1); the onus for proving that the animal or bird was in fact destroying crops is on the defendant (s. 6.2).

The Act also prohibits the import of any live or dead wild animal or bird without the written authorisation of the Director-General. This would apply to wildlife species not covered by the Endangered Species (Import and Export) Act, i.e., non-CITES-listed species. Violations are subject to a fine of up to SGD1,000 (USD700) (s. 10.1). There is an exemption for frozen food that can be shown to have been killed outside Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Thailand or Viet Nam (s. 10.2).

Under the Wild Animals and Birds (Composition of Offences) Order (2005), all the above offences may be compounded by a fine of up to SGD500 (USD350) imposed by the Director-General of Agri-food and Veterinary Services.

Police, customs and other authorised officers may stop and arrest without warrant anyone thought to have committed an offence against the Act or any of its implementing rules (s. 12).

The Agri-food and Veterinary Authority is responsible for implementing the Act. The Minister of National Development may declare closed seasons, prohibit killing or capture of any species of wild animal or bird, and provide for the control, registering and licensing of wild animals and birds (s. 3).

Wild Animals (Licensing) Order, 1975, revised 1990

This Order provides conditions for granting and revoking licences for keeping wild animals of the species listed on the attached schedule, which includes Dugong (under “sea cows”) and dolphins. The Order makes it an offence to keep wild animals without a licence (s. 3) and penalises offences against the order by a fine of up to SGD1,000 (USD700) and forfeiture of the animal (s. 14). Under the Wild Animals and Birds (Composition of Offences) Order (2005), this may be compounded by the Director-General of Agri-food and Veterinary Services or his/her delegates by a fine of up to SGD500 (USD350).

The Wild Animals (Licensing) Order provides that a licensing officer may enter premises at any time to enforce the Order (s. 12). Unless there is proof to the contrary, the owner or occupier of premises where a wild animal is found shall be assumed to be the keeper of the animal (s. 10). The Director of Primary Production (now the Agri-food and Veterinary Authority) may exempt any person from the provisions of the Order (s. 15).

Animals and Birds Act, 1965, revised 2002, amended 2014

The Animals and Birds Act aims to prevent the introduction of diseases into Singapore, control the movement of animals into and within the country and prevent cruelty to animals. “Animals” are defined under the Act as including all fish, reptiles, amphibians, and mammals other than humans (s. 2.1 and Animals and Birds (Prescribed Classes of Animals) Rules (2015) s.2). Note that import and export of CITES-listed species are regulated by the Endangered Species (Import and Export) Act (see above).

Under this Act, it is prohibited to import or transship a bird or animal through Singapore without a licence (s. 8), land carcasses without a licence (s. 14), export animals, birds or their carcasses without a licence (s. 16) or keep animals for sale or export without a licence (s. 48). The Minister of National Development may make further orders prohibiting or imposing restrictions on the import and transshipment of any species or imposing restrictions on countries from which species may be imported or transshipped (s. 7). Violations of these provisions are punishable by a fine of up to SGD10,000 (USD7,004) and/or imprisonment of up to one year, except possessing animals for sale or export without a licence, which is punishable by a fine of up to SGD5,000 (USD3,502) and/or imprisonment of up to six months.

The Act makes it the duty of every owner of an animal to ensure that animals have access to adequate, suitable food, water and shelter, are not confined or moved in a way that causes them unnecessary suffering, are protected from and rapidly diagnosed with any significant injury or disease and are not abandoned, and must take reasonable steps to care for the animal in accordance with any applicable codes of welfare (s. 41C1). The Director-General of Agri-food and Veterinary Services may issue such codes of animal welfare (s. 41A.1). Violations of these provisions are punishable by a fine of up to SGD10,000 (USD7,004) and/or imprisonment of one year for a first offence or double these penalties for a second or subsequent offence (s. 41C3b). The Act also defines various activities as “cruelty to animals” and provides penalties for these of a fine of up to SGD15,000 (USD10,505) and/or imprisonment of up to 18 months for a first offence and double these penalties for a second or subsequent offence (s. 42). For all the offences described above, if the offence is committed in the course of carrying on an animal-related business the penalty is a fine of up to SGD40,000 (USD28,014) and/or imprisonment of up to two years for a first offence and up to SGD100,000 (USD70,035) up to three years for a second or subsequent offence (s. 42). Individuals who have been convicted under these provisions may also be banned from participating in animal-related business for a period of up to one year (s. 43).

It is also an offence under the Act to obstruct an officer in performance of duties or to alter licences, punishable by fine of up to SGD10,000 (USD7,004) and/or imprisonment of up to one year (ss. 61–62). Other offences for which no specific penalty has been provided are punishable by fines of up to SGD5,000 (USD3,502) and/or imprisonment of up to six months (s. 63). The court may order any item that has been seized in association with an investigation to be forfeited (s. 64).

Some offences under this Act may be compounded by the Director-General or his/her delegates by payment of a fine of up to SGD1,000 (USD700) (s. 69). The Animals and Birds (Composition of Offences) Rules (2002, revised 2004) specifies that these include importing or transshipping animals or birds without a licence, landing carcasses without permission, exporting carcasses without permission, failing to adequately care for an animal, cruelty to animals, keeping animals or birds for export or sale and altering licences. Penalties under any supplementary regulation made under the Act may also be compounded, according to the Rules. At the request of the Minister, the Director-General may exempt any person, premises, animal or bird from the provisions of this Act (s. 79).

The Act specifies that a person in possession of a bird or animal will be presumed to be the owner unless the contrary is proved (s. 65.2). Officers of corporations that commit offences are liable as well as the corporation if they are found to have connived in or consented to the commission of the offence or facilitated the offence through neglect (s. 66.1). Individuals are responsible for the actions of those under their supervision or who are acting as their agents (s. 66.2).

Part VI of the act provides strong enforcement powers in detail. These include powers to enter and search premises and vehicles, break doors, windows and locks to gain access to premises, vehicles and containers, stop and search, take photographs (s. 50), seize animals, birds, carcasses, vehicles and equipment suspected of being involved in the offence or other articles (s. 51), arrest suspects without a warrant and detain them for up to 48 hours (s. 52) and require information to be furnished (s. 52A).

The Minister may make further rules to regulate import and export of animals, birds or their carcasses and to provide for compounding of offences (s. 80c, p).

Several directives have been issued under the Animals and Birds Act. The most relevant of these to the protection of marine wildlife are the following:

Animals and Birds (Importation) Order, 2009. This Order prohibits the import or transshipment of any animal or bird part or product other than those noted on a short list of exceptions in the attached schedule or those allowed at the discretion of the Director-General of Agri-food and Veterinary Services. The only potentially relevant exceptions are clinical and pathological specimens for diagnostic or research purposes or carcasses for any purposes.

Animals and Birds (Live Fish) Rules, 2011. These Rules apply to all “live fish” (defined as including turtles, crustaceans, molluscs and all other forms of aquatic life, including their eggs and young) that are being imported or exported while alive and are not intended for human consumption (s. 2). The Rules require a permit to import or export live fish (s. 4). Violations are punishable by a fine of up to SGD10,000 (USD7,004) and/or imprisonment of up to one year. Providing false information is punishable by the same penalties (ss. 10), while transferring licences is punishable by a fine of up to SGD10,000 only.

Animals and Birds (Care and Use of Animals for Scientific Purposes) Rules, 2007. These Rules provide that no person shall keep animals for scientific purposes without a licence and oversight from an animal care and use committee (s. 3). The Rules provide details on the issuing and conditions of licences and the functions and obligations of the animal care and use committee and authorise the Director-General of Agri-food and Veterinary Services to create further guidelines on standards, procedures and requirements for animals kept for scientific purposes. Penalties for contraventions of the Rules are fines of up to SGD10,000 (USD7,004) and/or imprisonment of up to one year (s. 19).

Fisheries Act, 1966, revised 2002

The Fisheries Act regulates fishing activities in Singapore waters and by Singapore nationals outside these waters, as well as the use of fishing ports and sale of fisheries products in Singapore. The Act prohibits certain activities and requires a licence from the Director-General of Agri-food and Veterinary Services to carry out any of the activities normally prohibited by the Act (s. 6.1). The Fisheries (Fishing Gear) Rules issued under the Act require a licence for the use or possession of nets, stakes, traps, and lines with more than three hooks (Fisheries (Fishing Gear) Rules ss. 2–3). The Director-General may exempt from the Act subsistence fishers or those conducting scientific research (s. 25). The Act defines “fish” as including all forms of aquatic life, their young and eggs (s. 2).

Under the Fisheries Act, the following activities are prohibited:

- Using poisons or explosives to stupefy, poison or kill fish or possessing poisons or explosives in a vessel (s. 10). The onus is on anyone found in possession of poisons, explosives or fish that have been stupefied, poisoned or killed to demonstrate that they have not used these substances to stupefy, poison or kill fish;
- Landing or selling fish that have been caught using prohibited methods or in prohibited areas (s. 11);
- Using trawl nets (s. 12);
- Breaching conditions of licences (s. 13.2b).

Penalties for violating these prohibitions are a fine of up to SGD10,000 (USD7,004) and/or imprisonment of up to one year (s. 13.1). Vessels, vehicles, equipment and fish found in contravention of the Act may be forfeited (s. 14; see also s. 16). Those who abet an offence or cause an offence to be committed shall be subject to the same penalty (s. 13.2a). Employers are responsible for offences committed by their employees and officers of corporations for offences committed by their corporation, unless they can prove that the offence was committed without their knowledge and that they diligently attempted to ensure compliance with the Act (ss. 19–20). Citizens and residents of Singapore and owners and crew of vessels registered in Singapore are punishable under the Act for offences under the Act committed outside the territorial waters of Singapore (s. 22).

Under Section 18, some offences may be compounded by payment of a fine of up to SGD1,000 (USD700). According to the Fisheries (Composition of Offences) Rules (1994), these include any offence under the Act or its implementing rules (except those relating to piranhas).

Section 23 provides enforcement powers to police officers and other authorised officers. These include the powers to stop, search and detain vessels and vehicles suspected of being used in violation of the Act, seize vessels, vehicles, equipment and catch, arrest persons found committing or abetting offences against the Act, enter and search premises and seize evidence found therein, and break doors, windows, locks and containers as necessary in order to gain access.

The Director-General of Agri-food and Veterinary Services is responsible for implementing the Act, under the direction of the Minister of National Development (s. 3.1). The Minister may make further rules for regulating fishing methods, licensing, mesh sizes, vessel types and sizes, closed seasons and areas, moratoria on fishing for certain species, and landing, transport, sale, import, export and transshipment of fish (s. 27).

Seven regulations are currently effective under the Fisheries Act, of which three are relevant to our purposes, including the Fisheries (Fishing Gear) Rules noted above. The Fisheries (Fishing Vessels) Rules (1969, revised 1994) prohibit vessels from plying at Singapore ports without a licence and registration number (ss. 2, 6.3, 6.5). The Director-General is required to maintain a register of licences (s. 7). However, the Director-General may exempt any person from any or all of the provisions of the Rules (s. 14). The Fisheries (Fishing Harbour) Rules (1971) require ships' masters to submit logbooks, clearance documents from the last port, a list of cargo, and a list of any animals on board to the Director within 24 hours of arrival (s. 10), and authorises fishery officers to board any vessel in fishing harbours (s. 16).

Parks and Trees Act, 2005, revised 2006

As its name suggests, the Parks and Trees Act applies mainly to terrestrial areas; however, two parks covered by this legislation, Labrador Park and Sungei Buloh Wetland Reserve, have foreshore areas including mangroves. The Schedule attached to the Act, which lists areas covered by the Act, may be amended by the Minister of National Development (s. 62) and MPAs could therefore be added. Further measures to control activities in MPAs could also be integrated in this Act.

Within national parks, the Act prohibits (s. 9):

- Capturing or displacing any animal;
- Using any equipment for capturing animals;
- Carrying explosives, nets, traps or hunting devices;
- Any activity that could reasonably be expected to injure or kill any animal or organism.

However, the first three activities on the above list may be conducted with written approval from the Commissioner of Parks and Recreation (s. 12). The Minister may exempt any class of person, premises or thing from the provisions of the Act, through publication in the Gazette (s. 58).

Violations of the above offences are punishable by fines of up to SGD50,000 (USD35,018) and/or imprisonment of up to six months (s. 9.4). The Commissioner may compound any of the above offences by collecting from a suspect a fine of SGD2,000 (USD1,401) and requiring payment of any fees or compensation for damages (s. 51). Section 49.1 makes officers of corporations responsible for offences committed by corporations if they consented to or connived in committing the offence or were negligent in preventing the offence.

Enforcement powers, including powers of entry and arrest, are specified in Part VII.

The Act is implemented by the National Parks Board, which may create implementing regulations for the Act, including regulations for the conservation and protection of plants and animals and activities to be prohibited (s. 63). Of the regulations currently in force, the only one potentially relevant to marine wildlife is the Parks and Trees Regulations (Cap.216, Regulation 1) (2005, revised 2006). This regulation prohibits any activity that one ought reasonably to know might injure or kill an animal (s. 5b), disturb or take the nest of any animal (s. 8.2g), or moor a boat except at a public mooring area or with a permit from the Commissioner (s. 13). The first two of these offences are punishable by a fine of SGD5,000 (USD3,502), the third by a fine of SGD2,000 (USD1,401).

Thailand

Thailand has a coastline of around 2615 km and an EEZ of approximately 420 280 km² (SEAFDEC, 2009). The country's coral reefs cover an area of approximately 153 km², with about 400 species of coral, and its waters also include 150 km² of seagrass beds and approximately 2500 km² of mangroves (Anon., 2014b). According to Thailand's 2014 report to the CBD, its coral reefs are currently in decline with over 50% of reef areas damaged, while seagrass beds remain stable (Anon., 2014b). Thailand has over 6000 km² of national marine parks, covering 40–50% of the country's coral reefs, 35% of its seagrass beds and 7% of its mangroves, and over 72 000 km² of marine and coastal areas in which some form of protective measures are in force (Anon., 2014b).

Thailand is home to Leatherback, Hawksbill, Green and Olive Ridley Turtles, all of which nest in the country. Dugong, giant clams and Humphead Wrasse are also found in its waters, along with several species of endangered and vulnerable sea cucumbers, mobulid rays, seahorses, sharks, cetaceans and corals (IUCN, 2014).

Legislation relating to marine wildlife

Marine wildlife in Thailand is conserved and managed by a combination of wildlife protection, marine resource management and customs laws, along with their implementing regulations. The most important piece of legislation protecting wildlife in Thailand is the Wild Animal Reservation and Protection Act (WARPA) (No. 3) B.E. 2557 (2014). The Royal Ordinance on Fisheries B.E. 2558 (2015) provides important measures for the conservation and management of marine resources, including marine wildlife, while the Promotion of Marine and Coastal Resources Management Act B.E. 2558 (2015) helps coordinate coastal and marine resource protection. The National Park Act B.E. 2504 (1961, amended 1989) and National Reserved Forests Act (No. 3) B.E. 2528 (1985), although primarily aimed at terrestrial areas, provide some protection for nesting marine turtles through their potential to create protected areas of coast. The Customs Act (No. 22) B.E. 2557 (2015) and the Export and Import of Goods Act (No. 2) B.E. 2558 (2015) provide regulations that apply to wildlife species the import and export of which is prohibited or restricted. Thailand has animal welfare legislation, the Cruelty Prevention and Welfare of Animals Act B.E. 2557 (2014); however, this Act does not apply to wild animals and is therefore not summarised here. In addition to these laws, regulations passed by the Ministry of Natural Resources and Environment (MoNRE), the Department of Agriculture and Cooperatives, the Fisheries Department and the Customs Department include measures to protect wildlife species considered in these report.

Wild Animal Reservation and Protection Act (WARPA) (No. 3) B.E. 2557, 2014²³

WARPA is Thailand's main wildlife protection legislation, governing the creation and management of Wild Animal Sanctuaries and Non-Hunting Wild Animal Areas (the latter relating to specific species of wildlife) (ss. 34, 35), outlining procedures for granting and cancelling licences for hunting, breeding, importing and exporting wildlife, and providing offences and penalties. The Act also regulates zoos. WARPA applies to all animals and their eggs except beasts of burden (s. 4). The Act was originally promulgated in 1992, has been amended twice, in 2003 and 2014, and a new draft amendment is currently in circulation. The draft amendment proposes to increase penalties for some offences and extend protected status to all species covered by Thailand's international obligations (e.g. CITES) with regard to possession, import, export, trade and breeding (Arts. 8, 16, 19, 21).

²³ The 2003 and 2014 versions of WARPA and the new draft amendment are not available in English. This summary was created using an English translation of the 1992 Act and rough translations of the Thai texts of the 2014 Act and the draft amendment, which were provided by Google Translate and cross-referenced with the English text of the 1992 Act.

Prohibitions under WARPA that are relevant to marine wildlife include:

- i. Hunting, collecting, endangering or endangering the nests of species specified for no hunting within a Non-Hunting Wild Animal Area (s. 42);
- ii. Hunting wild animals or collecting or endangering their nests within a Wild Animal Sanctuary, except with written permission for educational or research purposes (s. 36);
- iii. Hunting or attempting to hunt preserved or protected wild animals, except by authorised officials (s. 16) for certain purposes specified in Section 26;
- iv. Possessing or trading (buying, selling or distributing) preserved or protected wild animals, their carcasses or products, unless these were bred legally in captivity (ss. 19, 20; see also ss. 17, 18);
- v. Importing, exporting or transiting wild animals, their carcasses or products without permission, which shall not be granted for preserved and protected wildlife unless these were bred legally in captivity (s. 23; see also ss. 17, 18);
- vi. Breeding preserved or protected wild animals in captivity without permission or that are not on the list of protected wildlife that may be bred in captivity,²⁴ unless the breeder has permission to operate a zoo and breed wildlife (s. 18);
- vii. Maintaining a public zoo without permission or failing to comply with ministerial regulations on zoos and permit conditions (s. 29);
- viii. Collecting, possessing or endangering nests of protected wild animals (s. 21);
- ix. Shooting wild animals between sunset and sunrise (s. 22);
- x. Hunting wild animals or endangering nests within a monastery or area provided for public religious observances (s. 41);
- xi. Concealing, disposing of, removing, purchasing, holding in pledge or otherwise receiving wild animals, carcasses or their products acquired through commission of offence under WARPA (s. 55);
- xii. Entering a Wild Animal Sanctuary without permission from a competent officer (s. 37).²⁵

Prohibitions on hunting wild animals do not apply to hunting for self-defence or out of necessity, including in order to protect property or for any other “reasonable cause” (s. 7).²⁶

Maximum penalties for the offences listed above are as follows:

- For (i): seven years’ imprisonment and/or THB100,000 (USD2,807) (s. 54);
- For (ii): five years’ imprisonment and/or THB50,000 (USD1,403) (s. 53).
- For (iii)–(v): four years’ imprisonment and/or THB40,000 (USD1,123) (s. 47) (however, Sections 49 and 50 include lower sentences for offences under Sections 19 and 20 of the Act relating to specimens acquired through propagation, which conflict with the penalties specified in Section 47);
- For (vi)–(vii): three years’ imprisonment and/or THB30,000 (USD842) (s. 48);
- For (xiii)–(xi): one year’s imprisonment and/or THB10,000 (USD281) (ss. 51, 55).

No penalties are specified for (xii). In addition to the measures described above, zoos must provide evidence to the authorities of the number of preserved protected wild animals in their possession (s. 30). However, no penalties are specified for failing to comply with this provision.²⁷

²⁴ See s. 17 and MoNRE Regulation Prescribing Species of Wildlife that May Be Bred in Captivity B.E. 2546 (2003), discussed below.

²⁵ In addition, the draft amendment proposes to prohibit bringing weapons or tools for hunting or fishing into Wildlife Sanctuaries (s. 50.14) and any activity that affects the behaviour of wild animals within a Wildlife Sanctuary (s. 50.16). These measures would repeat measures currently provided in Ministry of Agriculture Regulation No. 7 B.E. 2535 (1992). Under the proposed amendment, the prohibition under WARPA on shooting wild animals between sunset and sunrise would be removed, as would the penalty for receiving wildlife obtained through commission of an offence under the Act.

²⁶ The wording of the corresponding clause in the draft amendment would omit the general exemption for hunting for any “reasonable cause” (s. 11).

²⁷ The draft amendment proposes to increase penalties and/or add minimum penalties for some offences and limit the number of offences that can be compounded (ss. 75–84). For example, hunting preserved

In addition to the above penalties, all protected wild animals and their carcasses, nests or products that have been acquired in violation of the Act shall be confiscated (s. 58), as shall vehicles, beasts of burden and equipment acquired or used in the commission of offences under Sections 16, 36, 38, 41 and 42.2, whether or not these belong to the offender or the offender is convicted (s. 57). If the offence is committed by the holder of any kind of permit issued under WARPA, the permit may be suspended or cancelled (s. 43).²⁸

Managers and representatives of offenders are liable to the same penalties as offenders unless they can prove they did not participate in or consent to the offence (s. 59).

The Director General of Forestry or Fisheries or their designated officers may settle cases with the payment of the specified fines (s. 60).

Officials who have been delegated to implement the Act are considered police officers for purposes of arresting and suppressing offenders (s. 45).²⁹

MoNRE is responsible for implementing WARPA (Art. 5); the Fisheries Department has responsibility for some measures under the Act.

MoNRE regulations issued under WARPA

Regulation Prescribing Wildlife as Protected Wildlife B.E. 2546 (2003).³⁰ The list of “preserved species” issued with WARPA includes 15 species, of which the only marine species is Dugong. Several other species of concern to this report have “protected” status under ministerial regulations issued under Section 6 of WARPA, the most recent of which concerning marine species is the 2003 Regulation Prescribing Wildlife as Protected Wildlife. This includes Green, Hawksbill, Leatherback, Loggerhead and Olive Ridley Turtles, giant clams and several species of cetaceans, sharks and coral. No species of seahorse or sea cucumber are listed; nor is Humphead Wrasse.

Regulation Prescribing Species of Wildlife that May Be Bred in Captivity B.E. 2546 (2003).³¹ Under Section 17 of WARPA, the Minister of MoNRE is authorised to specify species of protected wildlife that may be bred in captivity with permission; this Regulation lists these species. The list does not include any marine species except the Saltwater Crocodile *Crocodylus porosus* and we could find no amendments adding other species considered in this report. In other words, it is illegal to captive breed any of the species considered in this report and exemptions for possessing, trading, importing or exporting legally captive bred specimens under Sections 19, 20, 23 and 24 of WARPA do not apply to any of any of these species.

Notification on Wild Animals and their Carcasses Prohibited to Import or Export B.E. 2556 (2013).³² Prohibits the import or export of all CITES-listed species without authorisation from the Director General of MoNRE.

Department of Forestry Regulation on Management of Wildlife or their Carcasses that Vest in the State B.E. 2540 (1997).³³ Governs the treatment of wildlife and wildlife carcasses, including confiscated specimens, for which the state has responsibility.

or protected species, harming nests within a wildlife reserve, or importing, exporting or breeding wildlife covered by international agreements would be punishable by imprisonment of three to 10 years and a fine of THB6,000–200,000 (USD168–5,613) (s. 76), and these offences would not be compoundable (s. 84).

28 The draft amendment proposes to make anyone who damages natural resources or biodiversity in protected areas liable for restoration of damages (s. 64).

29 The draft amendment specifies enforcement powers in more detail (Arts. 69–74).

30 We were unable to find this Regulation in English translation, and this summary is based on a rough translation of the Thai Regulation provided by Google Translate. However, the species list appended to the Regulation includes both Thai and Latin names.

31 We were unable to find this Regulation in English translation, and this summary is based on a rough translation of the Thai Regulation provided by Google Translate. However, the species list appended to the Regulation includes both Thai and Latin names.

32 We were unable to find this Regulation in English translation, and this summary is based on a rough translation of the Thai Regulation provided by Google Translate. However, the attached species list, which reflects the CITES Appendices, includes Thai, English and Latin names.

33 We were unable to find this Regulation in English translation, and this summary is based on a rough translation of the Thai Regulation provided by Google Translate.

Royal Ordinance on Fisheries B.E. 2558, 2015

In 2015, a new Fisheries Act (No. 4) B.E. 2558 (2015) was passed, but was quickly replaced by the Royal Ordinance on Fisheries, Section 3 of which repeals the Fisheries Act. The Ordinance includes measures on licensing requirements and procedures, including for revocation of licences, measures to control fishing by Thai vessels and nationals outside Thai waters, and detailed lists of prohibited activities and penalties. The goals of the Ordinance are to help prevent IUU fishing, increase international cooperation, impose appropriate penalties for offences, preserve aquatic resources to provide a sustainable food source, and conserve the environment to internationally accepted standards (s. 4; see also ss. 12, 21, 22). The Ordinance requires the establishment of a National Fisheries Committee with responsibility for determining fisheries policy, targets for fisheries development, control measures, measures for managing aquatic resources, and total allowable catch (ss. 13–22).

The Ordinance declares that aquatic resource management is to be based on the best available scientific knowledge, the precautionary principle and the ecosystem approach (s. 4.5; see also ss. 12, 55). The Fisheries Department is required to create a Fisheries Management Plan, which should cover, among other things, operational procedures for issuing fishing licences in line with maximum sustainable yield, restoring aquatic animal resources to their “normal natural state” and reducing numbers of commercial fishing vessels (ss. 23–24). If there is evidence that fisheries activities are unsustainable, the Minister of Agriculture is required to temporarily suspend the issuance of fishing licences and convene a meeting to determine a reduction in fishing quotas that will not cause “excessive losses” to those who have already been issued with a licence (s. 45).

Fishing in Thai waters, whether artisanal or commercial, requires a licence that specifies the vessel (where a vessel is used) and equipment (ss. 31, 32, 35, 36). For commercial fishing, the licence must also specify areas in which fishing may be carried out and maximum allowable catch (s. 36). Licences must be carried on the vessel at all times (s. 41). Licences may not be granted to anyone who has a current fishing licence under another state (s. 39.6), has been convicted of a serious fisheries-related offence (offences under Section 114; see below) within the last five years (s. 39.1), or had their licence revoked within the previous five years (s. 39.5), revoked twice within a five year period (s. 39.7), or suspended (s. 39.2). In addition, licences may not be granted to vessels that have a history of IUU fishing (s. 46).

Measures under Section 39 also apply to licences to Thai vessels for fishing outside Thai waters, which are also required under the Ordinance (s. 48). Vessels fishing outside Thai waters must comply with the laws, regulations and conservation and management measures of coastal states and international organisations (s. 49). The Thai government is authorised to investigate and prosecute offences that occur outside Thai waters or that involve non-Thai nationals or vessels (s. 8).

The Ordinance requires the maintenance of logbooks that include the type and quantity of captured aquatic animals as well as other details, and which must be reported regularly (ss. 33, 81, 90). The Ordinance defines “aquatic animal” to include all animals that normally inhabit water or have part of their lifecycles in water, including their spawn, eggs, carcasses and parts (s. 5).

The list below notes activities most relevant to the conservation of marine species that are prohibited under the Ordinance:

- i. Fishing using a stateless vessel (s. 10);
- ii. Fishing commercially in a coastal zone (s. 38);
- iii. Fishing offshore with a licence for artisanal fishing (s. 34);
- iv. Releasing any intoxicating or harmful substance into fishing grounds (s. 58) or fishing using explosives or electricity (except with written permission from the Director General) (s. 60);
- v. Fishing using prohibited equipment, including nets of various kinds (ss. 67–69), or with tools that do not meet conditions specified on the licence (s. 42);

- vi. Possessing for commercial purposes aquatic animals or their products knowingly acquired through offences under Sections 58 or 60, through a serious offence as specified under Section 114 (see below), or by a vessel on the list of IUU fishing vessels (s. 61);
- vii. Importing, exporting, propagating or possessing without a permit aquatic animals or their products listed by the Minister as banned from import, export, transit, propagation or possession (s. 65);
- viii. Importing aquatic animals or their products without permission and documentation to show they were obtained legally (s. 92);
- ix. Capturing aquatic animals, including rare or endangered animals, prescribed by the Minister, unless it is necessary to save their lives (s. 66);
- x. Capturing aquatic animals in a sanctuary, unless for purposes or research or conservation with permission from the Director General (s. 56);
- xi. Capturing aquatic animals that are smaller than the size specified by the Minister (s. 57);
- xii. Fishing in spawning seasons or other closed seasons (s. 70);
- xiii. Fishing without a licence (s. 114.2);
- xiv. Violating conditions of licences for commercial fishing (s. 43);
- xv. Failing to maintain a logbook for commercial fishing (s. 81) or entering false details in a logbook (s. 114.3–4)
- xvi. Destroying evidence relating to an offence or obstructing an officer in performance of duties (s. 114.12).

The only offences listed above that carry a custodial sentence are items (vii) and (xvi) (import, export, transit, propagation or possession of banned aquatic animals without a permit, and obstruction of duty). These offences are punishable, respectively, by a maximum of one year's imprisonment and/or a fine of up to one million baht (USD28,066) (s. 144), and imprisonment of one month to one year and/or a fine of THB100,000–one million (USD2,807–28,066).

There is a fine of THB300,000–one million (USD8,420–28,066) or five times the value of the animals involved in the offence, whichever is higher, for capturing rare or endangered animals (item (ix) on the above list) (s. 145).

Most of the remaining offences are punishable by the higher of (a) a fine of five times the value of aquatic animals involved in the offence or (b) a fine within a specified range, which in many cases is higher for larger vessels. For vessels over 150 gross tons, the maximum fines under (b) may be THB30 million or 36 million (USD841,973 or 1,010,370).

“Serious infringements” are listed in Section 114 and include (i), (v), (x)–(xiii), (xiv) and (xv) on the above list, as well as any three offences committed within a five year period. For these violations, a repeated offence within five years is subject to doubled penalties (s. 167). In addition, the Director General may order suspension or revocation of licences, seizure of animals and/or equipment, detention of vessels or listing of vessels as vessels used in IUU fishing (s. 113).

Animal products, vessels, equipment and other items used in or acquired through an offence under the Ordinance are to be forfeited, except in the case of foreign vessels that have been ordered to leave and for which the owner or occupant leaves a pledge with the court (s. 169).

Anyone who abets or profits from an offence under this Ordinance is subject to the same penalties as the offender (s. 166). Corporations are subject to the penalties provided by the Ordinance (s. 168).

Offences may be compounded through payment of a fine following consideration by a committee, which must include representatives of the Office of the Attorney General, the Police and the Fisheries Department (s. 170).

The Ordinance specifies detailed enforcement powers, including powers to issue summons, enter and search premises and vessels or, between the hours of sunrise and sunset, any area where there is reasonable cause to suspect an offence under the Ordinance has been committed, seize documents, equipment, aquatic animals or any other evidence and detain vessels (ss. 102, 104, 105).

The Minister of Agriculture and Cooperatives is responsible for implementing the Ordinance, and may issue Ministerial Regulations to help execute the Ordinance (s. 6) and notifications relating to permitted/prohibited fishing equipment and fishing areas, by-catch and other matters (s. 71).

Ministry of Agriculture and Cooperatives Regulations on Fisheries

In addition to the Ordinance on Fisheries, the Ministry of Agriculture and Cooperatives has issued a large number of regulations to control and manage fisheries resources. These include specifications of prohibited fishing equipment, minimum mesh sizes, and seasons or areas in which fishing, fishing for certain species, or fishing using certain equipment is prohibited, as well as procedures for licence applications for collection of wildlife, aquaculture businesses, import, export, transshipment and transportation, and requirements for vessel registration, monitoring and reporting. Under the Ordinance on Fisheries, violations of notifications pursuant to the provisions of the Ordinance may result in licence suspension or, for repeated offences, revocation of licence (s. 111). Due to constraints of space, we could not list all the relevant regulations here; however, we note below three Regulations that fill gaps in WARPA and the Ordinance on Fisheries:

Decree Prohibiting the Possession of Certain Fish and Fishery Products for Commercial Purposes B.E. 2535 (1992).³⁴ Prohibits possession for purposes of trade of coral, marine turtles and their parts and products without permission from the competent authority. This adds protection for species of coral not listed on Regulation Prescribing Wildlife as Protected Wildlife B.E. 2546 (2003) under WARPA with respect to possession for trade.

Prohibition of Fishing of Dolphins B.E. 2533 (1990). Prohibits any fishing of dolphins except with written permission from the Director General of Fisheries or a delegated official. This notification also authorises the Director General to determine kinds, sizes and maximum numbers of aquatic animals that may be fished. This adds protection from fishing for any species of dolphins not protected under Regulation Prescribing Wildlife as Protected Wildlife B.E. 2546 (2003).

Determination on Fixing of Turtles Excluder Devices with Trawls for Fishing Shrimp in Fisheries B.E. 2539 (1996). Prohibits the use of motorised fishing trawls in gulfs or bays unless TEDs have been fitted. There is an exception for academic research purposes with written permission from the Director General of Fisheries.

Promotion of Marine and Coastal Resources Management Act B.E. 2558, 2015³⁵

This Act aims to consolidate marine and coastal management by providing a legal mandate to the Department of Marine and Coastal Resources and promoting cooperation between the various agencies responsible for managing marine and coastal areas (Moore *et al.*, 2006). The Act establishes a national committee responsible for developing marine and coastal resources policies and management plans, approving regulations passed under the Act, and monitoring compliance of government agencies responsible for marine and coastal resource management (ss. 5, 9). The Act also governs the functioning of provincial committees with similar responsibilities within their jurisdictions (s. 12).

The Act provides that, with the approval of the committee, MoNRE may create marine and coastal protected areas that are preserved in their original condition, provide a natural habitat

³⁴ We were unable to find a copy of this decree in English and this summary is based on a rough translation provided by Google Translate.

³⁵ We were unable to find a final version of this Act in English, and this summary is based on a rough translation of the Thai Act provided by Google Translate, which was cross-referenced with an English translation of an earlier draft of the Act.

for animals and plants, or are important to marine ecosystems, and establish regulations for these areas (s. 20). The Director General of Marine and Coastal Resources may order the suspension of persons causing serious damage to marine or coastal resources and take measures to mitigate the damage (s. 17). Violations of these regulations or orders, or obstructing officials in performing their duties, may be penalised by a maximum of one year's imprisonment and/or a fine of THB100,000 (USD2,807) (ss. 27, 28). In the case of risk of serious damage to marine or coastal resources, the committee and MoNRE may take additional measures to control and correct the problem (s. 22). Violations of these measures are punishable by a maximum of two years' imprisonment and/or a fine of up to THB200,000 (USD5,613) (s. 29).

Corporations and their managers are liable for the same penalties as individual offenders (s. 30).

In order to enforce the Act, officials may enter and inspect premises, stop and search vehicles if they suspect an offence has been committed, including without a warrant if they believe that a delay will result in the destruction or concealment of evidence, seize objects related to an offence, and order persons to leave an area or cease activities (s. 24).

MoNRE has responsibility for implementing this Act and may issue further regulations under the Act (s. 4). The Department of Marine and Coastal Resources implements many provisions of the Act.

National Park Act B.E. 2504, 1961, amended 1989

The National Park Act is a relatively brief document that governs the creation, dissolution and management of National Parks, which may include areas of seashore and which could therefore provide protection to nesting marine turtles. The Act authorises the Government to create and cancel National Parks by announcement in a Royal Decree (ss. 6–7) and establishes a National Park Committee to advise the Government on the establishment, maintenance, protection and cancellation of National Parks and other matters determined by the Minister of Agriculture (s. 15).

Within National Parks, it is prohibited to remove, endanger (s. 16.3) or disturb animals (s. 16.17), endanger or deteriorate sand (s. 16.4), carry out any activity for benefit without permission (s. 16.13) or bring in equipment for hunting or catching animals without permission (s. 16.15). There are exceptions to these prohibitions for officials for purposes of protecting or maintaining the park, education, research, or facilitating tourism, safety or public awareness (s. 19).

Maximum penalties for removing or endangering animals or damaging or endangering sand are imprisonment of five years and/or a fine of THB20,000 (USD561) (s. 24). The maximum penalty for the remaining offences noted above, or for the offences just mentioned if the animal or sand is of "small value" or only "slight damage" is caused by doing so is a fine of THB500 (USD14) (ss. 26, 27). These low fines may be administered by any official delegated to implement the Act (s. 28). Weapons, equipment and vehicles used in removing or endangering animals or damaging sand will be forfeited whether or not they belong to the offender or the offender is convicted (s. 29). Offenders may be required to leave the park (s. 21) or provide restoration for damages (s. 22).

Officials who have been delegated to implement the Act are considered police officers for purposes of arresting and suppressing offenders (s. 20).

Responsibility for administering the National Park Act lies with the Ministry of Agriculture (s. 5), but many measures are implemented by the Royal Forest Department, which is part of MoNRE.

National Reserved Forests Act (No. 3) B.E. 2528, 1985³⁶

The National Reserved Forests Act is a relatively brief document that governs the creation, dissolution and management of National Reserved Forests, which may include areas of seashore and which could therefore provide protection to nesting marine turtles. The Act states that all existing reserved forests count as National Reserved Forests and authorises the creation of new National Reserved Forests, or changes to or cancellations of these, by notification in ministerial regulations (ss. 6–7).

The Director General of Forestry may grant permission to conduct any activities within a National Reserved Forests if these are for purposes of education or scientific research (s. 17).

Within National Reserved Forests, it is prohibited to collect forest products (s. 14.2), which include animal carcasses, hide, bones, jaws, eggs and sand (s. 4.3–4). The penalty for violations is imprisonment of six months to five years and a fine of THB5,000–50,000 (USD140–1,403) (s. 31).³⁷ Knowingly concealing or disposing of forest products that have been acquired through the commission of an offence carries the same penalty as committing the offence (s. 34). All forest products, equipment, vehicles or beasts of burden used in committing or acquired through an offence will be confiscated, whether or not they belong to the offender or the offender is convicted (s. 35).

Officials who have been designated to implement the Act are considered police officers for purposes of arresting and suppressing offenders (s. 26). When there is suspicion that an offence under the Act has been committed, such officials may order individuals to leave or refrain from carrying out any activities within National Reserved Forests or remove, seize or destroy items causing damage to nature (s. 25). Failure to comply with these orders carries a maximum penalty of six months' imprisonment and/or a fine of THB5,000 (USD140) (s. 33.2). Officials may also suspend licences and permits for up to 60 days, while the Director General of Forestry may increase the suspension to 120 days (s. 27) and the Minister of Agriculture may revoke the licence or permit (s. 29).

The National Reserved Forests Act is implemented by the Ministry of Agriculture (s. 5), with many measures enforced by the Royal Forest Department, which is part of MoNRE.

Customs Act (No. 22) B.E. 2557, 2015

The Customs Act regulates the import, export and landing of goods in Thailand, including by stipulating offences and penalties and providing the powers and authorities of customs officials. The measures of the Act apply to goods imported and exported by post as well as by vessel (ss. 35–37).³⁸

Relevant offences and penalties under the Act are as follows:

- For importing or exporting restricted or prohibited goods, assisting in importing or exporting restricted or prohibited goods, concealing or storing such goods, or behaving in any manner in order to attempt to avoid legal restrictions on import, export and landing: a prison term of up to 10 years and/or a fine of four times the price of the goods, including duty (s. 27);
- For assisting in concealing or disposing of, or knowingly receiving, restricted or prohibited goods that have been imported illegally: a maximum of five years' imprisonment and/or a fine of four times the value of goods including duty (s. 27.2);
- For a vessel within a port found to have been lightened and the master cannot prove lawful unloading of goods: master is liable for a maximum fine of THB one million (USD28,066) or forfeiture of vessel (s. 28);
- For secret compartments discovered on board a vessel: master is liable for a fine of up to THB500,000 (USD14,033), unless there are no reasonable grounds to believe the master was involved in creating or using the compartments or that s/he did not exercise proper vigilance to prevent their creation or use (s. 29). The compartments will be destroyed or otherwise rendered unusable;

³⁶ The only English translation of this Act that we were able to find was of the original 1964 version (No. 1). However, National Reserved Forests Act (No. 2) B.E. 2522 (1979) and (No. 3) B.E. 2528 (1985) are available in Thai. This summary is based on the English translation of the 1964 Act, cross-referenced with the amendments, which were translated roughly from Thai by Google Translate.

³⁷ The National Reserved Forests Act (No. 2) B.E. 2522 (1979) increases penalties for damage to large areas of woodland or river water, but not for any offences involving wildlife.

³⁸ This Act was only available in English translation with amendments to 2005; this summary was prepared using the 2005 Act in English, cross-referenced against the Thai Act with amendments to 2015.

- For smuggling involving large vessels (able to carry over 250 tons of cargo): master is liable for a fine of up to THB500,000 (USD14,033) unless s/he can prove s/he took all possible steps to avoid the offence (s. 33);
- For making false, misleading or incomplete declarations, including verbally or on certificates and records, not maintaining records or documents required by the Customs Act, modifying instruments of record after they have been issued, or counterfeiting seals, signatures and marks of officials: imprisonment of up to six months and/or a fine of THB500,000 (USD14,033) (s. 99).

In addition to the above penalties, vessels with up to 250 tons of carrying capacity and any vehicles that have been used to remove, carry or conceal restricted or prohibited goods, along with their cargo, will be forfeited whether or not any individual is subject to a penalty, and vessels with over 250 tons of carrying capacity may be appropriated by the Court (s. 32).

The Act states that in cases where there is any doubt whether goods have been or are being legally imported, exported, shipped, stored, sold or otherwise dealt with, the burden of proof lies with the defendant (s. 100).

Senior managers of organisations are liable for penalties under the Act unless they can prove the offences were committed without their knowledge or consent and that they have taken reasonable steps to prevent such offences taking place (s. 115.4). The owners of vessels have civil liability for payment of fines incurred by ships' masters, and owners of premises for fines imposed on their agents or occupiers of the premises (s. 105).

The Director General of Customs, or for some offences a committee comprising representatives of Customs, the Ministry of Finance and the police, may waive prosecution in exchange for payment of a fine of an unspecified amount or upon the conclusion of a bond, agreement or security as determined by the Director General (s. 102.1–2).

The Act allows "bribes and rewards" to be paid to informants and arresting officers for arrests involving smuggling, the import or export of prohibited or restricted goods and false declarations (s. 102.3).

The Customs Act specifies enforcement powers of customs officials in detail and provides penalties for obstructing officials in the performance of some of these duties, in some cases up to one year of imprisonment and/or fines of THB100,000 (USD2,807). These powers include the right to stop and board vessels and vehicles; search vessels, vehicles, warehouses, places of business, packages, baggage and persons; and request documents, oral or written testimony and other evidence (ss. 14–19, 37.4, 97.2, 114, 115). Officials may arrest without a warrant and take to the police anyone committing, attempting to commit, aiding or inciting an offence under the Customs Act (s. 20).

The Ministry of Finance is responsible for administering the Act (s. 122), with most measures implemented through the Customs Department (under the Ministry of Finance).

Export and Import of Goods Act (No. 2) B.E. 2558, 2015³⁹

This Act provides the legal framework for controlling goods entering and leaving Thailand. The Minister of Commerce is responsible for determining goods prohibited from, or requiring a licence for, export or import (ss. 5.1–2) and conditions on export and import of goods, including the kinds, volume, size, weight, signs and origins of the goods and the countries to or from which they may be exported or imported (s. 5.3). The Minister may also specify requirements for certificates of origin or other certificates in relation to international conventions (s. 5.5).

Exporting or importing prohibited goods, or goods without a required licence, carries a maximum penalty of 10 years' imprisonment and/or a fine of five times the value of the goods, plus confiscation of goods, containers and vehicles (s. 20). For this offence, a reward may be provided to informants and/or arresting officers. The Director General of the Department of Foreign Trade may pay a reward out of the proceeds of sale of exhibits even when no arrest has been made (s. 20).

Violations of conditions of export or import or of requirements for certificates carry a maximum penalty of one year's imprisonment and/or a fine of THB20,000 (USD561) (s. 22).

Obstructing officers in the performance of their duties as specified by the Act carries a maximum penalty of six months' imprisonment and/or a fine of THB10,000 (USD281) (s. 23).

The Act states that the provisions of Customs law, including enforcement powers, shall apply to exports and imports under the Act (s. 16); however, the Act also specifies enforcement powers. These include the authorisation to enter and search premises or vehicles between sunrise and sunset if an offence under the Act is thought to have been committed, request relevant documents or evidence, order the seizure of documents or other items connected to an offence, and summon persons to provide testimony, documents or evidence (s. 17).

The Ministries of Commerce and Finance are responsible for implementing the Export and Import of Goods Act (s. 25).

Ministry Regulations related to import and export

Ministry of Agriculture and Cooperatives Announcement of Regulation for Import, Export and Bringing in-transit of Marine Life B.E. 2559 (2016). In order to protect rare marine species and protect from epidemics, this Regulation prohibits the import, export or transit of certain marine species without a permit. These species are listed in the Annex to the Regulation and include Dugong, Humphead Wrasse, all species of marine turtle, seahorse, manta ray, and giant clam, many species of cetaceans, sharks and corals and Brown Sea Cucumber.

Customs Department Announcement on Regulation for Import, Export and Bringing in-transit of Marine Life and Marine Products (No. 3) B.E. 2559 (2016). In order to allow vessels to be checked for compliance with IUU fishing regulations, this regulation requires ships' masters to submit cargo information electronically and receive a permit in order to import, transit, transship or export "certain species" of marine life. We assume that these are the same as those species listed in the Annex to Ministry of Agriculture and Cooperatives Announcement of Regulation for Import, Export and Bringing in-transit of Marine Life B.E. 2559 (2016) (see just above).

MoNRE Notification on Wild Animals and their Carcasses Prohibited to Import or Export B.E. 2556 (2013).⁴⁰ This notification issued under WARPA prohibits the unauthorised import or export of all CITES-listed species.

³⁹ An English translation of the amended 2015 Act was not available, and the following summary is based on a rough translation of the Thai text provided by Google Translate, which was cross-referenced with an English translation of the original 1979 Act.

⁴⁰ This Notification was not available in English, and this summary is based on a rough translation of the Thai text provided by Google Translate.

Viet Nam

Viet Nam has a continental coastline of approximately 3260 km and a shelf area of around one million km² (SEAFDEC, 2009), which includes areas of coral reef, seagrass and mangrove (MONRE, 2014). Leatherback, Hawksbill, Green and Olive Ridley Turtles nest in Viet Nam, and Loggerhead Turtles forage in Vietnamese waters (IUCN, 2014). Blue Coral, organ-pipe corals and Humphead Wrasse are also found in Viet Nam's oceans, along with several species of endangered and vulnerable sea cucumbers, mobulid rays and many CITES-listed species of seahorses, sharks and cetaceans.

According to Viet Nam's 2014 report to the CBD, the country's marine ecosystems are currently being degraded, largely through unsustainable exploitation and destructive fishing practices (MONRE, 2014). Most coral reefs are in poor and declining condition, seagrass coverage has decreased by 40–70%, and mangrove cover is also declining (MONRE, 2014). The report notes that marine species, including migratory species, are in decline and that the illegal wildlife trade is a serious threat to biodiversity (MONRE, 2014).

Legislation relating to marine wildlife

Viet Nam has a complicated legislative process which proliferates implementing regulations for its laws. Laws, which are passed by the National Assembly, are often very broad and general, requiring implementing regulations created by administrative officials in order to be effective. These take the form, in decreasing order of precedence, of:

- Orders or Decisions issued by the President;
- Resolutions or Decrees issued by the Government;
- Decisions or Directives issued by the Prime Minister;
- Decisions, Directives and Circulars issued by ministries;
- Resolutions, Decisions and Directives issued by the Supreme People's Court and various subordinate bodies (Luu, 2013).

Another characteristic of the legal system in Viet Nam is that penalties for crimes or non-criminal violations of laws and regulations are not listed in the laws and regulations themselves, but in the general Penal Code and the Law on Handling of Administrative Sanctions. The latter is implemented by Government Decrees that outline specific crimes and penalties in particular areas such as environmental protection and fisheries.

The most important pieces of National Assembly legislation relating to marine wildlife protection are the Law on Environmental Protection (2014), the Biodiversity Law (2008), the Law on Marine and Island Resources and Environment (2015), the Fisheries Law (2003) and the Law on Customs (2014). These provide the general framework for marine wildlife protection in Viet Nam. Two other laws passed by the National Assembly include measures relevant to marine wildlife protection: The Vietnam Maritime Code (2015) and the Law on the Vietnamese Sea (2012), and the relevant provisions of these are also noted below. After outlining the National Assembly laws, this report summarises their most important implementing regulations, which have been issued by the Government, Prime Minister and ministries. Finally, the report summarises the penalties for crimes and administrative violations related to marine wildlife, which are provided, respectively, in The Penal Code (1999)⁴¹ and the Law on Handling of Administrative Violations (2012) and the implementing regulations of the latter. Provincial and local peoples' committees also issue regulations for their jurisdictions, but owing to space constraints these are not discussed here.

⁴¹ The 1999 Penal Code is due to be replaced but, owing to problems with the new 2015 Penal Code, the latter will not enter into force until amending legislation has been passed.

Owing to the sheer number of Vietnamese regulations on marine protection, the list of texts included in this report is not exhaustive, but aims to include the most important legislation relating to marine protection in Viet Nam. However, since there is no complete database for Vietnamese legislation it is possible that there exist other significant Decrees, Decisions or Circulars that have not been included. For the same reason, although an attempt has been made to ensure that all legislation summarised here is currently in force, we cannot guarantee that repealing legislation has not been enacted.

Several of the Government Decrees and Ministry Circulars and Decisions discussed in this report include lists of species that are subject to various types of protection. These lists are often referred to by other regulations. Table 6 identifies which lists are found in which regulations.

Table 6: Species lists and promulgating regulations for marine wildlife protection in Viet Nam

Regulation	Lists promulgated by regulation
<i>Government Decree No. 32/2006/ND-CP</i>	List of Endangered, Rare and Precious Plant and Animal Species
<i>Government Decree No. 59/2006/ND-CP</i>	Appendix I: List of Goods and Services Banned from Business Appendix II: List of Goods and Services Subject to Business Restriction
<i>Government Decree No. 160/2013/ND-CP</i>	Annex I: List of Endangered, Precious and Rare Species Prioritised in Protection
<i>Government Decree No. 187/2013/ND-CP</i>	Annex I: List of Goods the Import or Export of which is Prohibited Annex II: List of Goods the Import or Export of which is Subject to Issuance of a Permit
<i>MARD Circular No. 04/2015/TT-BNNPTNT</i>	Appendix 1: List of Aquatic Species Prohibited from Export Appendix 2: List of Aquatic Species Exported Subject to Requirements Appendix 3: List of Aquatic Species Imported Subject to Requirements Appendix 5: List of Live Aquatic Species Permitted to be Imported as Food
<i>MARD Decision No. 82/2008/QD-BNN</i>	Protected species
<i>MARD Circular No. 40/2013/QD-BNNPTNT</i>	CITES Appendices
<i>Ministry of Fisheries Circular No. 02/2006/TT-BTS</i>	Appendix 5: Objects Banned from Exploitation Appendix 6: Objects Banned from Exploitation for a Definite Period in the Year Appendix 7: Minimum Sizes of Valuable Aquatic Species Living in Natural Water Areas Permitted for Exploitation

Laws

National Assembly Law No. 55/2014/QH13 On Environmental Protection. This Law details general governing principles for environmental protection activities, conservation of biodiversity, response to climate change and sustainable development. The Law provides rules for designing environmental protection plans and impact assessments, measures and resources for protecting the environment, and powers and obligations of agencies and individuals tasked with protecting the environment. The Law states that it aims to fulfil international commitments relating to environmental conservation and foster further international cooperation in this area (Art. 5.11). Much of the document is concerned with regulating and determining compensation for pollution and environmental damage. However, the Law also prohibits the following activities relevant to marine wildlife protection (Art. 7):

- Ruining or illegally extracting natural resources;
- Obtaining biotic resources using mass-killing equipment or methods, in wrong seasons or in breach of regulations;
- Collecting, trading and consuming wildlife identified on the list of protected endangered, precious and rare species;
- Various forms of water pollution;
- Damaging natural heritage sites or wildlife sanctuaries;
- Interfering with environmental protection, including concealing activities that damage the environment or information relevant to protecting the environment;
- Abusing power in order to infringe regulations on environmental management.

The Law also bans the import of items on the list of goods banned from import (Appendix I of Government Decree No. 187/2013/ND-CP, see below), but this does not include any species of wildlife (Art. 75c).

The Ministry of Natural Resources and Environment (MONRE) is responsible for overseeing the implementation of the measures contained in the Law on Environmental Protection, in cooperation with other ministries and agencies (Art. 142). Peoples' committees of various levels have responsibility for promulgating and implementing environmental regulations and controlling licences for relevant activities within their jurisdictions (Art. 143). Chapter XIV of the Law provides details on the responsibilities for environmental protection of different regulatory agencies.

National Assembly Law No. 20/2008/QH12 Biodiversity Law. The Biodiversity Law provides general principles for biodiversity conservation and sustainable development in Viet Nam, guidelines for creating strategic biodiversity plans at the national, provincial and city levels and guidelines and criteria for establishing conservation areas. Articles 38–40 govern procedures for including or excluding species on the list of endangered precious and rare species prioritised for protection. These are defined as endemic wild species that are in danger of extinction, exist in small numbers or have special scientific, medical, economic, ecological, scenic, environmental or cultural value (Art. 3.20). The list itself is appended to Government Decree No. 160/2013/ND-CP (see below).

Article 7 of the *Biodiversity Law* prohibits the following activities related to marine wildlife:

- Exploiting wild species in strictly protected areas, except for scientific research;
- Hunting, fishing, illegally killing, consuming, transporting, buying or selling species on the list of endangered precious and rare species prioritised for protection, or advertising, selling or consuming their parts;
- Illegally rearing wildlife on the list of endangered, precious and rare species prioritised for protection;
- Destroying landscape or causing the deterioration of ecosystems;
- Polluting the environment in strictly protected areas.

The Act specifies that exchange, import, export, storage and transportation of species on the list of endangered precious and rare species prioritised for protection must comply with government regulations (Art. 46). Article 47 governs the handling of specimens of endangered precious and rare species prioritised for protection that have been injured or have left or lost their natural habitat. These must be surrendered to the nearest rescue centre with the aim of eventually re-releasing them into their natural habitat. The Act also requires that organisations or individuals that damage biodiversity pay damages (Art. 75).

MONRE is responsible for overseeing biodiversity management, while other ministries should manage biodiversity within their jurisdictions (Art. 6). The Ministry of Agriculture and Rural Development (MARD), in coordination with MONRE, is responsible for specifying the protection of wild species banned from exploitation or permitted for conditional exploitation (Art. 44).

The Law recognises the importance of prioritising protection of ecosystems (Art. 5). The Law also commits the government to implementing international treaties on biodiversity to which it is a Party, concluding further treaties, and cooperating with bordering countries on protecting migratory species and managing migratory corridors (Art. 70).

National Assembly Law No. 82/2015/QH13 on Marine and Island Natural Resources and Environment.⁴² This Law regulates integrated management of marine and island natural resources and environment and the rights and responsibilities of agencies and individuals involved in this management (Art. 1), including the creation of management plans (Arts. 26–33). Principles for natural resource and environment management in these areas include sustainability (Arts. 4.1, 5.1, 10, 26.1a, 26.2a, 72.1c), the ecosystem approach (Art. 5.2), and rational use (Art. 9.1b). Under this Law, it is prohibited to destroy or degrade the environment of marine ecosystems and islands (Art. 8.5) or violate plans for exploitation and sustainable use created by the competent state agencies (Art. 8.2). The Law provides for the establishment of coastal corridors to protect the ecosystem (Art. 23), within which it is prohibited to conduct activities that erode the coast, degrade ecosystems or result in a decline in the value of ecosystem services and natural landscapes (Art. 24). The Law encourages international cooperation, including to protect biological diversity and encourage the sustainable exploitation of marine resources and islands (Arts. 71–72). The Minister of MONRE is responsible for implementation of the Law (Art. 73.2).

National Assembly Law No. 17/2003/QH11 Fisheries Law. The 2003 Fisheries Law outlines general provisions for developing, managing and protecting fisheries resources in Viet Nam, including broad principles for sustainable development (Art. 5), habitat protection (Art. 7), conservation, protection, rehabilitation and development (Art. 8) and planning and management of marine parks (Art. 9). The Law prohibits the following activities:

- Illegal exploitation and destruction of reefs, mangrove forests and other aquatic habitats;
- Exploitation, processing, transport or marketing of fish species on prohibited lists, except for scientific research;
- Import or export of fishery products on the prohibited import and export lists;
- Violation of regulations in management rules of protected areas;
- Breach of regulations of environmental law regarding aquatic habitats;
- Over-fishing or fishing in closed areas or closed seasons;
- Production, circulation and use of prohibited fishing gear, activities and methods, and the use of explosives, poisons, electric and other destructive fishing methods;
- Abandonment of fishing gear (Art. 6).

Articles 16–18 specify that organisations and individuals fishing with vessels over 0.5 tons must hold a fishing licence, and outline requirements for granting and withdrawing fishing licences. Requirements include registering vessels and submitting to inspection (Art. 17; see also Art. 40). Failing to do so shall result in revocation of licence, as shall altering the conditions of the licence (Art. 18). Fishing vessels must also maintain a logbook, the details of which shall be specified by the Ministry of Fisheries (Art. 19), and mark fishing gear as specified by the Ministry (Art. 21).

⁴² This Law was obtained in Vietnamese and this summary is based on a rough translation using Google Translate.

Violations of regulations under the Fisheries Law, or abuse of position to protect violators, are punishable by administrative penalty or criminal prosecution, plus compensation for damages (Art. 58). The Law provides the powers and authority of the Fisheries Inspection Force, which includes the power to require and verify documentation, conduct inspections, collect evidence, suspend activities and take action against violations (Art. 55).

Article 8.3 makes the Ministry of Fisheries responsible for periodically proclaiming lists of aquatic species to be included in the Vietnam Red Book (which lists threatened species native to Viet Nam), other species that are prohibited to be fished, closed seasons and areas and species subject to closed seasons, as well as prohibited and restricted fisheries and fishing gear. Articles 53–56 outline the duties and organisation of the Fisheries Inspection Force, which the Law requires to detect and prevent violations against fisheries legislation.

The Law includes a measure that investment in offshore fishing operations should be promoted, apparently in order to transition fisheries activities from coastal to offshore areas (Arts. 12–13).

The Fisheries Law promotes international cooperation in fisheries management, including by managing Vietnamese fishing vessels operating outside the jurisdiction of Viet Nam (Art. 49) and requiring vessels fishing beyond Vietnamese waters to comply with international treaties to which Viet Nam is a Party and the laws of the relevant coastal states (Art. 50).

National Assembly Law No. 54/2014/QH13 On Customs. The Law on Customs prohibits smuggling, fraud, bribery and obstructing customs officials (Art. 10). Customs officials are prohibited from taking bribes, appropriating seized goods or colluding in smuggling (Art. 10) and will be held responsible before the law for their decisions (Art. 90). Articles 88–92 outline the powers and responsibilities of customs authorities in tackling smuggling. The Law authorises customs officials to handle administrative violations in accordance with the Law on Handling of Administrative Violations (see below) and, for more serious violations, to initiate criminal proceedings (Art. 90).

This Law requires any international treaty that Viet Nam has ratified to apply in any case where national law conflicts with the treaty, and international practices to apply in situations not covered by Vietnamese law (Art. 5). Essentially this gives CITES precedence for wildlife trafficking issues. The Law does not provide further specific regulations to implement CITES provisions.

National Assembly Law No. 95/2015/QH13 The Vietnam Maritime Code.⁴³ The Maritime Code contains measures that can help combat IUU fishing, including prohibiting operating an unregistered vessel (Art. 12.4), requiring the maintenance of a registry of Vietnamese seagoing vessels (Arts. 17–33), and restricting use of the Vietnamese flag to Vietnamese seagoing vessels (Art. 14). This Code will take effect in July 2017 (Art. 340); however, all the above measures are also included in National Assembly Law No. 40/2005/QH11 which the new Code will replace.

National Assembly Law No. 18/2012/QH13 On Vietnamese Sea. This Law defines the boundaries of Vietnamese waters and outlines general provisions for the management and protection of the sea and islands (Art. 1). The Law authorises the Sea Patrol and Control Force of Viet Nam to apprehend persons and investigate crimes on foreign ships in Vietnamese waters (Art. 30), but not to do so for civil violations (Art. 31). Article 35 requires foreign vessels operating in Vietnamese waters to comply with Vietnamese and international law on the protection of the environment.

Government Decrees

Government Decrees are implementing legislation for laws passed by the National Assembly and have the force of law. The Decrees considered here range from general principals and objectives for developing more detailed implementing legislation (usually at the ministerial level) on wildlife, environment and fisheries, through specifications of powers and responsibilities of the agencies involved in regulating these areas, to detailed regulations, which may be accompanied by lists of wildlife species or controlled goods.

⁴³ This Code was obtained in Vietnamese and this summary is based on a rough translation using Google Translate.

This section summarises Government Decrees that contribute to Viet Nam's implementation of CITES (i.e. Nos. 82/2006/ND-CP, 160/2013/ND-CP, 187/2013/ND-CP and 59/2006/ND-CP), regulate planning and management of environmental resources (i.e. Nos. 65/2010/ND-CP, 57/2008/ND-CP, 40/2016/ND-CP, 72/2010/ND-CP and 03/2015/ND-CP) and regulate fisheries activities (i.e. Nos. 27/2005/ND-CP, 59/2005/ND-CP, 33/2010/ND-CP and 32/2010/ND-CP).

Not included in this discussion is Government Decree No. 32/2006/ND-CP On Management of Endangered, Precious and Rare Species of Wild Plants and Animals. This is an important piece of legislation providing an authoritative list of terrestrial wildlife that is protected under Vietnamese law, and is mentioned in several of the regulations discussed in this report. However, Decree No. 32 relates only to terrestrial species.

Government Decree No. 82/2006/ND-CP On Management of Export, Import, Re-export, Introduction from the Sea, Transit, Breeding, Rearing and Artificial Propagation of Endangered Species of Precious and Rare Wild Fauna and Flora. As part of Viet Nam's implementation of CITES, this Decree governs the import, export and breeding of species listed on CITES Appendices or protected by Vietnamese law. In cases of conflict between this decree and international treaties to which Viet Nam is a Party, the provisions of the international treaties apply (Art. 1.2).

The Decree bans the export, import, re-export and introduction from the sea of wild-caught CITES-listed species for commercial purposes. If accompanied by CITES permits or certificates, it is permitted to export, import or re-export Appendix II- or III-listed species and specimens obtained prior to Viet Nam's signing of CITES and to introduce Appendix II-listed species from the sea. Import, export and re-export of Appendix I-listed species is also allowed with CITES permits and certificates if it is not for commercial purposes. There is an exemption from the permit requirement for the export, import or re-export of a limited quantity of some species that are household effects if they are accompanied by people (Art. 3). Article 4 provides conditions on the export, import and re-export of CITES-listed specimens that have been bred in captivity.

The Decree prohibits, except for non-commercial purposes when accompanied by permits, the export of wild-caught endangered precious and rare wildlife that is not listed on the CITES Appendices but is covered by Vietnamese law (Art. 5). Captive-bred endangered precious and rare wildlife not listed by CITES may be exported with a permit under certain conditions, and those of high scientific, environmental or economic value must be marked under the guidance of the CITES MA (Art. 6). The CITES MA must also approve the transit of living wild animals through Viet Nam (Art. 8).

Rules for granting CITES permits and certificates are provided in Chapter V (Arts. 15–24). Article 26 guides the handling of seized and confiscated specimens.

The Decree is implemented by MARD and the Ministry of Fisheries (Art. 27). The Decree provides that MARD is answerable for the operation of the CITES MA (Art. 13), and specifies the CITES scientific bodies (Art. 14). Articles 13 and 14 provide details of the responsibilities of the MA and scientific bodies. Enforcement and handling of violations of the Decree are managed by the offices of forest protection, customs, police, border guard, taxation, market management, animal quarantine, plant quarantine, aquatic resource protection and environmental protection (Art. 25).

Note that Articles 11 and 12 on registration of captive breeding facilities and Articles 16–20 and 22 on procedures for granting licences for CITES specimens have been amended by Government Decree No. 98/2011/ND-CP Amending and Supplementing a Number of Articles of Decrees on Agriculture.

Government Decree No. 160/2013/ND-CP On Criteria to Determine Species and Regime of Managing Species Under List of Endangered, Precious and Rare Species Prioritised Protection.

This Decree provides regulations for managing and updating the list of endangered, precious and rare species prioritised for protection, which is attached to the Decree as Annex I. The Decree is part of Viet Nam's implementation of CITES and is designed to be applied together with Government Decree No. 32/2006/ND-CP, which stipulates management of the species list in relation to Viet Nam's terrestrial plants and animals. Decree No. 160 replaces Articles 12–16 of Government Decree No. 65/2010/ND-CP (see below).

Marine species on the list of endangered, precious and rare species prioritised for protection include Leatherback, Hawksbill, Loggerhead, Green and Olive Ridley Turtles, Dugong and Chinese White Dolphin (or Indo-pacific Humpbacked Dolphin) *Sousa chinensis*.

Decree No. 160 specifies that exploitation, transfer, trade or storage of species on the list of endangered, precious and rare species prioritised for protection must (1) only be for scientific research or biodiversity preservation, (2) not have a negative impact on the species in the wild, and (3) be accompanied by a licence (Arts. 11–12). Species on this list may only be reared or planted for scientific research or biodiversity preservation (Art. 13).

Article 14 outlines procedures for rescue and release of species on the list. Article 15 states that import and export of species on the list must comply with CITES and requires CITES MAs to consult with MONRE before issuing import or export licences and to report import and export statistics annually to MONRE. MONRE has primary responsibility for implementing the Decree in relation to wildlife (MARD is responsible for implementing the Decree in relation to domesticated species, fungi and microorganisms) (Art. 8.2).

Government Decree No. 187/2013/ND-CP Detailing Implementation of the Commercial Law with Respect to International Purchases and Sales of Goods; and Activities of Agency for Sale and Purchase, Processing and Transit of Goods Involving Foreign Parties. The Decree regulates the import, export and temporary import for re-export of goods, and includes provisions that help implement CITES. Attached to the Decree are lists of goods the import or export of which is prohibited (Annex I) or requires a permit (Annex II).

It is prohibited to export rare and precious wild animals, wildlife listed in Viet Nam's Red Book, rare and precious products of aquaculture, or (terrestrial) wildlife listed in groups IA–IB of Government Decree No. 32/2006/ND-CP (Annex I.I.5). The Red Book lists threatened species of wildlife native to Viet Nam, and the current version includes Green, Hawksbill, Loggerhead, Leatherback and Olive Ridley Turtles, Dugong, and several species of cetacean, seahorse and coral (IUCN and Vietnam Institute of Science and Technology, 2007). There is no prohibition on imports of wildlife.

A permit from the Ministry of Trade is required to export or import goods that must be controlled according to international treaties in which Viet Nam participates (e.g. CITES) (Annex II.I.A.5, II.I.B.2). A permit from MARD is required in order to export CITES-listed species, (terrestrial) species listed in groups IIA–IIB of Government Decree No. 32/2006/ND-CP, or products of aquaculture that may normally be exported or that are subject to conditional export (Annex II.III.A.1, 2, 5). (MARD Circular No. 04/2015/TT-BNNPTNP promulgates lists of such aquaculture products.) A permit from MARD is also required to import CITES-listed species (Annex II.III.B.10).

The Ministry of Trade is responsible for overseeing implementation of the Decree (Art. 41).

Government Decree No. 59/2006/ND-CP Detailing the Commercial Law Regarding Goods and Services Banned from Business, Subject to Business Restriction or to Conditional Business.

This Decree promulgates lists of goods and services that are banned from business (Appendix I), subject to business restriction (Appendix II) or subject to conditional business (Appendix III). The appendices list broad categories of plants and animals (rather than specific species) in which trade is subject to these controls. Appendix I encompasses wildlife species on lists provided by treaties to which Viet Nam is a Party (including CITES), precious and rare wildlife species on lists banned from exploitation and use (including those provided by CITES) and aquatic resources banned from exploitation (Nos. 8, 9). Appendix II includes precious and rare wildlife as listed on CITES and, for terrestrial species, Government Decree No. 32/2006/ND-CP (No. 5).

Ministers and heads of Government agencies are responsible for implementing the Decree under the oversight of the Trade Minister (Art. 11).

Government Decree No. 65/2010/ND-CP Detailing and Guiding a Number of Articles of the Biodiversity Law. This Decree helps implement the Biodiversity Law in relation to biodiversity conservation planning and sustainable development. The Decree provides guidelines on elaborating master plans in these areas at various levels (Arts. 3–6) and criteria for determining national and provincial conservation zones and reserves (Art. 7). Articles 12–16 guiding management of the list of endangered, precious and rare species prioritised for protection have been repealed and replaced by Government Decree No. 160/2013/ND-CP (see above).

MONRE and MARĐ have primary responsibility for enforcing Decree No. 65.

Government Decree No. 57/2008/ND-CP Promulgating the Regulation on Management of Vietnam’s Marine Reserves of National and International Importance. Provides criteria for classifying and zoning MPAs, management regulations, and responsibilities for agencies tasked with managing MPAs. The Decree categorises MPAs into “strictly protected zones,” which are managed to preserve their original state, “ecological restoration zones,” which are managed to facilitate the regeneration of aquatic species and ecosystems, and “development zones,” in which controlled activities, including aquaculture, ecotourism and scientific research, may be carried out (Art. 3). The following activities are prohibited:

- In strictly protected zones (Art. 6):
 - Exploitation of organisms or non-organisms;
 - Traveling by any waterway means of transport;
 - Treading on coral reefs or seagrass;
- In ecological restoration zones (Art. 7):
 - Exploitation of organisms or non-organisms;
 - Stopping or anchoring any waterway means of transport;
 - Treading on coral reefs or seagrass;
- In development zones (Art. 8):
 - Exploiting aquatic resources with destructive fishing gear;
 - Treading or anchoring on coral reefs or seagrass;
- In protection belts (Art. 9):
 - Exploiting aquatic resources with destructive gear;
 - Infringing on or destroying ecosystems, or pollution;
 - Anchoring on coral reefs or seagrass.

The Decree replaces Article 3 of Government Decree No. 27/2005/ND-CP (see below).

Government Decree No. 40/2016/ND-CP Detailed Provisions for Implementation of a Number of Articles of the Law on Marine and Island Natural Resources and Environment.⁴⁴ This Decree provides for sea and island management planning that protects the environment and defines the responsibilities of agencies, organisations and individuals involved in managing, exploiting and using natural resources in these areas. Most of the Decree is concerned with providing detailed requirements for the creation of management plans for marine and island natural resources and the environment. MONRE is responsible for guiding implementation of the Decree.

⁴⁴ This Decree was obtained in Vietnamese and this summary is based on a rough translation using Google Translate.

Government Decree No. 72/2010/ND-CP Providing for Prevention and Combat of Environmental Crimes and Other Environment-related Violations. This Decree regulates the powers and responsibilities of state agencies in preventing and combating environmental crimes and violations. As part of this mandate, the Decree requires the Ministry of Public Security to conclude and implement international treaties and agreements relating to environmental crimes and violations, including on extradition of environmental criminals (Art. 18). The Ministry of Public Security is also responsible for overseeing implementation of the Decree (Art. 21).

Government Decree No. 03/2015/ND-CP Regulations Determining Environmental Damage. The Decree defines the powers and responsibilities of various agencies related to environmental protection and provides procedures for evaluating, determining liability for and claiming compensation for environmental damage, including damage to natural ecosystems and priority species. Implementation of the Decree is overseen by MONRE (Art. 3).⁴⁵

Government Decree No. 27/2005/ND-CP Regulating and Guiding the Implementation of Certain Articles in the Fisheries Law. This Decree helps implement the Fisheries Law, outlining responsibilities of various government agencies for managing MPAs (including islands) and inland protected areas. The Ministry of Fisheries is responsible for creating a master plan on MPAs and managing MPAs of national or international significance, while provincial People's Committees are responsible for managing all other MPAs (Art. 4). Article 3 on classifying MPAs has been replaced by Government Decree No. 57/2008/ND-CP (see above).

Government Decree No. 59/2005/ND-CP On Conditions for a Number of Aquatic Resource Production and Business Lines. This Decree helps implement the Fisheries Law, providing conditions and procedures for granting permits (conditions for withdrawals are given in Article 18 of the Fisheries Law) and procedures for inspections and handling violations. Article 5 states that permits shall not be granted for exploitation of banned aquatic species or species listed by the Ministry of Fisheries as drastically reducing in numbers, exploitation in prohibited areas or closed season, or using banned methods. Several Articles of this Decree were amended by Government Decree No. 14/2009/ND-CP Amendments and Supplements to a Number of Articles of Decree No. 59/2005/ND-CP. Articles 6 and 7 on licensing procedures and agencies were subsequently amended by Government Decree No. 53/2012/ND-CP Amending and Supplementing a Number of Articles of the Decrees on Fisheries. These amendments mainly deal with business standards and details of licensing requirements, and are therefore not discussed here. Decree No. 14/2009/ND-CP also moves responsibility for implementing the Decree to MARD (from the Ministry of Fisheries, as was specified in Article 21 of Decree No. 59/2005/ND-CP) (Art. 14).⁴⁶

Government Decree No. 33/2010/ND-CP On the Management of Fishing Activities in Sea Areas by Vietnamese Organisations and Individuals. The Decree requires vessels fishing in Vietnamese waters to comply with Vietnamese laws and MARD regulations on aquatic species banned from fishing, banned or restricted fishing methods and gear, closed areas and seasons and types and minimum sizes of aquatic species that may be fished (Art. 5). Vessels fishing outside Vietnamese waters must be registered, have obtained fishing permits from Vietnamese authorities (Arts. 6–7) and obey all Vietnamese, international and relevant coastal state laws (Art. 9).

MARD has primary responsibility for administering the Decree (Art. 10); heads of government agencies and People's Committees are also to implement the Decree (Art. 14).

Some articles of Decree No. 33 not directly relevant to marine wildlife protection have been amended by Government Decree No. 53/2012/ND-CP Amending and Supplementing a Number of Articles of the Decrees on Fisheries (not discussed here).

Government Decree No. 32/2010/ND-CP On the Management of Fishery Activities of Foreign Ships in Vietnam's Sea Areas. Regulates fishing activities of foreign vessels in Vietnamese waters, including granting and withdrawal of permits (controlled by MARD) and investigation and handling of administrative violations. The Decree states that violations of Vietnamese law will subject owners of foreign fishing vessels to administrative sanctions (Art. 23) and empowers the fisheries inspectorate, marine police, border guard, waterway traffic police, customs and other

⁴⁵ This Decree was not found in English translation and this summary is based on a rough translation from Vietnamese using Google Translate.

⁴⁶ These amendments were found only in Vietnamese and were roughly translated using Google Translate.

competent forces to examine and control activities of foreign fishing vessels (Art. 22). Article 10 lists circumstances under which permits will be withdrawn, including erasure or modification of the permit, use of a permit for a vessel other than that for which it is granted, failure to comply with provisions of the permit, use of prohibited fishing gear or methods, or violations of Vietnamese law or regulations of international organisations of which Vietnam is a member.

Some articles of Decree No. 32 not directly relevant to marine wildlife protection have been amended by Government Decree No. 53/2012/ND-CP Amending and Supplementing a Number of Articles of the Decrees on Fisheries (not discussed here).

Prime Minister Decisions and Directives

Decisions issued by the Prime Minister often approve plans for development in various areas. These plans list tasks that should be accomplished by certain dates and assign responsibility for these tasks to suitable agencies. Plans relevant to marine wildlife conservation that have been approved by Prime Minister's Decisions include:

- Action Plan on Implementation of the Strategy on Integrated Management of Coastal Zones of Vietnam Through 2020, with a Vision Toward 2030 (Decision No. 914/QD-TTg, 2016);
- Master Plan on Biodiversity Conservation in the Whole Country Through 2020, with Orientations Toward 2030 (Decision No. 45/QD-TTg, 2014);
- National Biodiversity Strategy to 2020, Vision to 2030 (Decision No. 1250/QD-TTg, 2013);
- Action Plan on National Environmental Protection Strategy to 2020, Vision to 2030 (Decision No. 166/QD-TTg, 2014);
- National Environmental Protection Strategy to 2020, Vision to 2030 (Decision No. 1216/QD-TTg, 2012);
- 2012 Program to Protect and Develop Aquatic Resources by 2020 (Decision No. 188/QD-TTg, 2012);
- Strategy for Management Systems of Special-use Forests, Marine Protected Areas and Internal Water Reserves to 2020, Vision to 2030 (Decision No. 218/QD-TTg, 2014).⁴⁷

The above plans outline tasks for creating, expanding and/or managing conservation zones, including in marine areas, strengthening legal and institutional frameworks for protected areas, and/or reducing pollution.

The Scheme on the Protection of Endangered Precious and Rare Aquatic Species to 2015, and a Vision to 2020 (approved by Decision No. 485/QD-TTg, 2008) requires, among other things, the creation of protection zones for turtle breeding grounds in Con Dao and coordinating CITES implementation with countries in the region, especially ASEAN and China. The Scheme assigns VND11 billion (USD479,388) to enhancing control of trade on precious and rare aquatic species threatened with extinction and control of alien aquatic organisms (Appendix 2.V).

Prime Minister Directive No. 1/1998/CT-TTg To Strictly Ban the Use of Explosives, Electric Impulses and Toxics to Exploit Aquatic Resources bans the production, trade, storing, transportation or use of explosives, electricity and poisons for fishing. The Ministry of Aquatic Resources has primary responsibility for administering the ban, but the Ministries of Defence, Industry and the Interior are required to take action to prevent materials used in these methods from entering the market.

⁴⁷ Prime Minister Decisions Nos. 1250/2013/QD-TTg, 166/2014/QD-TTg, 1216/2012/QD-TTg and 218/2014/QD-TTg were obtained in Vietnamese and roughly translated using Google Translate.

Ministry Decisions and Circulars

Detailed implementing regulations for laws passed by the National Assembly are generally provided in Decisions and Circulars promulgated and implemented by the various ministries. The Decisions and Circulars most relevant to marine wildlife protection and discussed below have been promulgated by MARD, except Ministry of Fisheries' Circular No. 02/2006/TT-BTS. Relevant MARD Decisions and Circulars include lists of protected wildlife (Decision No. 82/2008/QĐ-BNN and Circular No. 40/2013/TT-BNNPTNT), regulations on import and export of wildlife (Circular No. 04/2015/TT-BNNPTNT) and fisheries regulations (Circular No. 50/2015/TT-BNNPTNT).

MARD Decision No. 82/2008/QĐ-BNN On Announcing the List of Vietnam's Endangered Aquatic Species That Need to be Protected, Rehabilitated and Developed. This Decision lists endangered aquatic species that are to be strictly protected under current legislation in categories of Extinct, Extinct in the Wild, Critically Endangered, Endangered and Vulnerable, using criteria based on those used by the IUCN (Version 2.2, 1994) and the 2007 Red Book for Viet Nam.⁴⁸ Species considered in this report appear on these lists as follows:

Critically Endangered	Endangered	Vulnerable
Leatherback Turtle	Green Turtle	Delphinidae spp. (15 species)
Loggerhead Turtle	Hawksbill Turtle	Great White Shark
Dugong	Olive Ridley Turtle	Spiny Seahorse
	Chinese White Dolphin	Great Seahorse
	Sperm Whale	Fluted Giant Clam
	Whale Shark	Small Giant Clam
	Pelagic Thresher Shark	Stony corals (nine species)
	Japanese Seahorse	Sea cucumbers (five species)
	Spotted Seahorse	
	Flat-faced Seahorse	
	Giant Clam	
	Stony corals (two species)	

MARD Circular No. 40/2013/TT-BNNPTNT Issuing the List of Wild Animals and Plants Specified in the Appendices to the Convention on International Trade in Endangered Species of Wild Fauna and Flora. This Circular implements CITES and MARD Decision No. 82/2008/QĐ-BNN (discussed above), and legislates protection of CITES-listed species in Viet Nam. Wildlife species on the CITES Appendices are listed on the annex to the Circular, and Article 8 specifies that parts and derivatives of listed wildlife are also covered by the legislation. The Circular prohibits the export, import, re-export, introduction from the sea or transit of CITES wild-caught Appendix I-listed species for commercial purposes (s. 2a). The Circular is implemented by the heads of the Forestry Department, Fisheries Department, MARD and other agencies and organisations.⁴⁹

⁴⁸ This Decision was not found in English and this summary is based on a translation provided by Google Translate. However, the species lists appended to the Decision include Latin names.

⁴⁹ This Circular was only found in Vietnamese and this summary is based on an approximate translation provided by Google Translate. However, the species lists include names in Latin and English.

MARD Circular No. 04/2015/TT-BNNPTNT Guiding the Implementation for Decree No. 187/2013/ND-CP Dated November 20, 2013 of the Government Making Detailed Provisions for Implementation of the Commercial Law with Respect to International Purchases and Sales of Goods; and Agency for Sale and Purchase, Processing and Transit of Goods Involving Foreign Parties in the Agriculture, Forestry and Aquaculture Fields Sector. This Circular is part of Viet Nam's CITES implementation, guiding the implementation of Government Decree No. 187/2013/ND-CP in relation to goods subject to specialised management by the agriculture, forestry and fisheries sector. The Circular regulates the export and import of aquatic breeds and endangered, precious and rare wildlife, defined as wild species of animals and plants listed on CITES and the list of endangered precious species of fauna and flora stipulated by the Government (i.e. by Government Decree No. 32/2005/ND-CP) (Art. 3.4).

Article 10 bans the commercial export of endangered, precious and rare wild species listed on Appendix I of CITES or in groups IA or IB stipulated by the Government (i.e. by Government Decree No. 32/2006/ND-CP). With a permit, it is allowed to export endangered, precious and rare species for purposes of foreign affairs, scientific research, exhibitions or exchange between wildlife parks or CITES MAs. Species listed on Appendices II or III of CITES or endangered, precious and rare species that have been legally reared in captivity may be exported for commercial purposes if accompanied by a permit.

Article 11 bans the import of wild-born species listed on Appendix I of CITES unless for purposes of foreign affairs, scientific research, exhibitions, or exchange between wildlife parks or CITES MAs, and accompanied by a permit. Captive-reared Appendix I-listed species may be imported if accompanied by a permit.

Appendix 1 lists aquatic species that are prohibited from export unless accompanied by a permit and in order to abide by international treaties to which Viet Nam is a signatory (Art. 31). These species include Leatherback, Olive Ridley, Hawksbill, Green and Loggerhead Turtles as well as the family of marine turtles Cheloniidae spp., soft coral Stolonifera spp., stony coral, blue coral, black coral, whales of Balaenoptera spp. and dolphins of Delphinidae spp.

Appendices 2 and 3 contain lists of aquatic species that may be exported or imported (respectively) without a permit if requirements noted next to each entry are met (Arts. 31 and 32). None of the species considered in this report are listed on either appendix. Aquatic breeds not listed on Appendix 3 or the list of aquatic breeds permitted to breed or trade (ordinary import list)⁵⁰ issued by MARD may only be imported if accompanied by a permit for research or use in trade fairs or exhibitions (Art. 32). This applies to all aquatic breeds considered in this report, except certain species of seahorse and sea cucumber (see just below).

Appendix 5 lists aquatic species permitted to be imported as food without a permit. This includes four species of seahorse (Longnose Seahorse *Hippocampus trinaculatus*, Spotted Seahorse *H. kuda*, Thorny Seahorse *H. histrix* and Lemur-tail Seahorse or Japanese Seahorse *H. japonicus*) and two of sea cucumber (Japanese Sea Cucumber *Holothuria Stichopus* and Sandfish *H. scabra*). Species not on this list will be considered for import with a permit, subject to a risk assessment (Art. 33).

MARD Circular No. 50/2015/TT-BNNPTNT Providing for Certification of Catches.⁵¹ Circular No. 50 helps implement the 2003 Fisheries Law and Government Decrees No. 59/2005/ND-CP and No. 33/2010/ND-CP by providing regulations and procedures for registering catch and exports to markets that have certification requirements. The Circular does not apply to fry, larvae, roe, heads, live ornamental fish, molluscs, aquatic invertebrates other than crustaceans, or crustaceans in the form of meal or pellets (Art. 2.2; Annex 1). The Circular prohibits and classifies as IUU fishing the following activities (Art. 4):

⁵⁰ We were unable to locate this list.

⁵¹ This Circular was only found in Vietnamese and this summary is based on an approximate translation provided by Google Translate. However, the annexes are in English and Vietnamese.

- Fishing without a licence;
- Failing to record and submit logs and reports according to regulations;
- Fishing in a no-fishing area, during closed season, for a prohibited species or for specimens outside permitted sizes;
- Using prohibited fishing gear or methods;
- Concealing or tampering with evidence of violation of fisheries regulations;
- Joining fishing operations with or supporting vessels that have engaged in IUU fishing;
- Exploiting in areas under management of fisheries management organisations or other states.

The Circular authorises the Department of Capture Fisheries and Resources Protection and assigned local units to validate certificates and inspect IUU activities (Arts. 5, 10).

Ministry of Fisheries Circular No. 02/2006/TT-BTS Guiding the Implementation of the Government's Decree No. 59/ND-CP of May 4, 2005 On Production and Business Conditions of a Number of Fisheries Trades. This Circular implements the 2003 Fisheries Law and Government Decree No. 59/2005/ND-CP (see above) by regulating conditions and procedures for granting of permits for aquatic resource exploitation. The Circular provides that permits may not be granted for exploitation of "objects" (i.e. specimens) in closed seasons or no-exploitation areas in conservation zones (s. II.3a) or objects that are banned from exploitation entirely (listed in Appendix 5) or for definite periods (listed in Appendix 6), listed by regulations of provincial-level People's Committees or listed on decisions of the Ministry of Fisheries as seriously diminishing in numbers or threatened with extinction (s. II.3b).

Species listed on Appendix 5 and banned from exploitation include Leatherback, Olive Ridley, Green and Hawksbill Turtles, Dugong, stony corals, Blue Whale *Balaenoptera musculus* and Indo-pacific Finless Dolphin *Neophocaena phocaenoides*. In addition, Appendix 7 specifies minimum lengths for exploitation of one species of sea cucumber (*Holothuria vagabunda*) and three species of clam, including Giant Clam *Tridacna maxima*.

The Circular also prohibits exploiting aquatic resources using dynamite, electricity, chemicals, noxious substances, mesh sizes smaller than those specified in Appendices 2 and 3 (s. II.3c) and fishing vessels or trades banned from operation or from operating in certain areas (s. II.3c–e).

Penalties

National Assembly Law No. 15/1999/QH10 The Penal Code and National Assembly Law No. 37/2009/QH12 Amending and Supplementing a Number of Articles of the Penal Code. This Law is due to be replaced by a new Penal Code (Law No. 100/2015/QH13) which includes significantly higher penalties for wildlife crimes than those under the 1999 Law. However, a number of problems have been identified with the 2015 Penal Code and it will not come into effect until an amending law is passed (National Assembly Resolution No. 144/2016/QH13). For this reason, this report considers the 1999 Code as amended in 2009, which is currently still in force.

The 1999 Penal Code defines the penalties for criminal offences in Viet Nam and offences committed outside Viet Nam by Vietnamese nationals or, if covered by international treaties to which Viet Nam is a Party, non-nationals (Art. 6). The severity of penalties provided by the Code depend on whether the crime is considered “less serious” (causing no great harm to society), “serious” (causing great harm to society), “very serious” (causing very great harm to society) or “particularly serious” (causing exceptionally great harms to society) (Art. 8). The Code specifies that acts that “show signs of crime” but pose minimal danger to society will be handled by measures outwith the Code (e.g. the Law on Handling of Administrative Violations).

Article 28 lists the types of penalties that may be imposed for crimes in Viet Nam and specifies that for each offence the offender is liable for one principal penalty (one of: a warning, fine, non-custodial reform, expulsion, imprisonment, or death) and possibly one or more additional penalties (a ban from certain posts or occupations, ban on residence, probation, deprivation of some civic rights, confiscation of property, additional fines or expulsion). Articles 29–41 detail the conditions for sentencing using each of the penalties listed in Article 28.

Chapter XVII of the Code deals specifically with environmental crimes. The most relevant penalties for prosecuting crimes related to the illegal trade in marine wildlife are for destroying aquatic resources (Art. 188), breaching regulations on the protection of precious and rare wild animals (Art. 190) and breaching the special protection regime for nature preservation areas (Art. 191).

Criminal prosecution is possible for the destruction of aquatic resources under the following circumstances (Art. 188):

- Use of toxic substances, chemicals, electric current or banned fishing means;
- Exploitation of aquatic products in restricted areas or closed season;
- Exploitation of precious and rare aquatic species the exploitation of which is banned by government regulations;
- Destruction of habitats of precious and rare aquatic species protected by government regulations;
- Breach of other regulations protecting aquatic resources.

Where the consequences of the crime are very serious⁵² or particularly serious, offenders are subject to a fine of VND50 million–200 million (USD2,179–8,716) or imprisonment of two to five years. Where the consequences are serious or offenders have already been administratively sanctioned or sentenced, offenders may be punished by a fine of VND10 million–100 million (USD436–4,358), non-custodial reform of up to three years or imprisonment of six months to three years. Offenders may also be subject to an additional fine of VNDtwo million–20 million (USD87–872) or a ban from holding certain posts or occupations for one to five years. No penalties are specified for offences with “less serious” consequences.

Article 190, which was amended in 2009, provides penalties for hunting, killing, transporting, raising, caging or trafficking in animals (or their parts or products) on the list of endangered, precious and rare species prioritised for protection. Offenders are liable for a fine of VND50 million–500 million (USD2,179–21,790), non-custodial reform of up to three years or a prison term of six months to three years. The prison sentence is increased to two to seven years if the crime was committed in an organised manner, involved abuse of power or position, used banned hunting equipment, involved hunting in closed areas or seasons or caused very or particularly serious consequences. Offenders may be subject to an additional fine of VND10 million to 100 million (USD436–4,358) or a ban from holding certain posts or occupations for one to five years.

Article 191, which was also amended in 2009, provides penalties for breaching regulations on managing nature reserves. Those who do so and cause serious consequences are subject to a fine of VND50 million–500 million (USD2,179–21,790), non-custodial reform of up to three years or a prison term of six months to three years. Offenders who cause serious consequences to strictly protected sub-zones shall be imprisoned for two to five years. If the crime is committed in an organised manner, using banned hunting equipment or causing very or particularly serious consequences to strictly protected sub-zones, the prison term is increased to three to 10 years. Offenders may also be subject to an additional fine of VND10 million–100 million (USD436–4,358) or a ban from certain posts or occupations for one to five years.

⁵² The English translation of this law says “serious or particularly serious,” but since penalties for “serious” crimes are specified in a different clause it is likely that this is an error and should read “very serious or particularly serious.” This would also correspond to the format used in other Articles of the Code.

In addition to these measures, Article 172 specifies penalties for breaching regulations on natural resource exploitation or conducting these activities without or with improper permits, causing serious, very serious or particularly serious consequences. For very serious or particularly serious offences, prison sentences may extend to 10 years. For serious offences, a warning or a fine of VND50 million–one billion (USD2179–43 581) may be imposed instead of a prison sentence of six months to three years. For all these offences, an additional fine of VND50 million–500 million (USD2,179–21,790) may be imposed.

Penalties for smuggling, illegal cross-border trading, and making, transporting or trading in banned goods are provided in Articles 153, 154 and 155 respectively. Where there are aggravating circumstances and the consequences are particularly serious, penalties for smuggling can extend to twenty years' imprisonment or life imprisonment.

Article 47 of the Code allows for imposing lighter sentences in extenuating circumstances, which are enumerated in Article 46. These largely amount to having committed the crime through incitement or reduced capacity or having made efforts to remedy the situation, but also include the commission of offences with individuals who “have made outstanding achievements in production, combat, study or work” (Art. 46.1r). Conditions for exemptions from penalties, reduction of penalties and suspended sentences are outlined in Articles 57–62 respectively. Article 48 lists circumstances that “aggravate penal liability.” These include organised or professional criminal activity, abuse of power in order to commit crimes, infringing on state property and re-offending.

National Assembly Law No. 15/2012/QH13 On Handling of Administrative Violations. This Law provides the penalties and remedial measures for “administrative violations,” which are defined as “faulty acts” that violate state management law but do not constitute a crime (Art. 2.1). The Law provides general principles for handling administrative violations (Art. 3), types and severity of sanctions and remedial measures that can be applied and procedures for determining and enforcing administrative measures.

Under this Law, the types of administrative sanctions that may be imposed are: caution; fine; suspension of licences, certificates or operation for a definite time; confiscation of evidence or means used to commit violations; and expulsion (Art. 21). For each administrative violation, one of these penalties shall be imposed as a principal sanction and one or more may also be imposed as an additional sanction, but cautions and fines are to be used only as principal sanctions. Article 13 provides that administrative violators shall pay compensation for any damage they have caused. The Law also provides for remedial measures to be imposed, including restoration of original state, remedying of environmental pollution and refund of illicit profits (Art. 28). Details on remedial measures are given in Articles 29–37.

Articles 22–27 provide details on the sanctions listed in Article 21. Cautions are to be imposed only for non-serious crimes with extenuating circumstances or committed by minors (Art. 22). Fines should range from VND50,000–1 billion (USD2,179–43,581) for individuals and twice this amount for organisations, and should be in the middle of this range except in case of extenuating or aggravating circumstances (listed in Articles 9 and 10 respectively); however, in no case should fines fall above or below this range (Art. 23). Article 24 lists maximum fines within this range for particular types of administrative violations. The maximum fine for violations relating to management of sea areas, islands and continental shelf or to environmental protection is the same as the maximum given in Article 23, that is, VND1 billion (USD43,297) for individuals and twice this amount for organisations (Art. 24.1j and 24.2). However, the maximum fine for violations relating to protection of aquatic and marine resources is only VND100 million (USD4,358) for individuals and twice this amount for organisations (Art. 24.1e).

In addition to these measures, the Act requires public notification of the sanctioning of administrative violators for violations of environmental protection measures that have serious consequences. Notification is to be in the mass media and in websites or newspapers of the management agencies or People's Committees under whose jurisdiction the acts were committed (Art. 72).

Offenders may have their payment of fines postponed or waived if the fine is greater than VNDthree million (USD131) and they encounter severe financial difficulties as the result of natural disasters and similar events, as attested by their local communes (Arts. 76–77).

The Ministry of Justice has primary responsibility for managing the enforcement of the Law On Handling of Administrative Violations (Art. 17). Articles 38–54 empower members of various bodies, including, among others, the Public Security Force, border guards, marine police, customs and inspectors and directors of various government ministries and departments, to impose administrative sanctions. These Articles also specify the types and severity of sanctions that may be imposed by each of these persons. The burden of proof for establishing guilt lies with the persons who are empowered to impose the sanctions, not with the accused (Arts. 3.1e, 3.2d).

The Law prohibits persons tasked with imposing administrative sanctions from failing to do so, failing to do so properly or in a timely manner, resisting, avoiding, delaying or obstructing the execution of decisions on administrative sanctions, or handling as an administrative violation cases that show signs of being a crime (Art. 12; see also Arts. 16, 66, 82). However, no penalties are specified for these violations.

Government Decree No. 179/2013/ND-CP On Administrative Penalties in Respect of Environmental Protection.⁵³ This Decree helps implement the 2012 Law on Handling of Administrative Violations by providing specific penalties within the range stipulated by that Law for violations in the area of environmental protection.

The penalties provided by the Decree that are most relevant to marine wildlife trade are for harvesting, possessing or trading parts or products of wild animals listed as endangered, rare, precious and priority (Art. 42) and exploiting wildlife in protected areas (Art. 43).

Penalties for these violations are generally based on the value of the wildlife that is possessed or exploited. For illegal possession of the parts or products of endangered, precious and rare wildlife, or from other wildlife within a strictly protected zone, these range from a warning if the value of the wildlife is less than VND500,000 (USD22) to a fine of VND500 million (USD21,790) if the value of the products is higher than VND170 million (USD7,409) (Arts. 42–43). For illegal exploitation of wildlife, penalties range from a warning if the value of the wildlife is less than VND500,000 (USD22) to a fine of VND400 million–500 million (USD17,432–21,790) if the value of the exploited wildlife is higher than VND200 million (USD8,716). Fines are to be increased by 40–50% for endangered, precious and rare wildlife collected in the strictly protected area of a reserve, but are not to exceed VND500 million (USD21,790).⁵⁴ Specimens and vehicles may also be confiscated.

The Decree allows fines of VND80 million–150 million (USD3,486–6,537) to be imposed for violations of regulations on protection of the marine environment (Art. 29) and fines of VND10 million–200 million (USD436–8,716) for exploiting or adversely affecting the environment in natural heritage areas (Art. 31). Violations of regulations on the conservation and sustainable development of ecosystems that damage ecosystems are punishable by fines of VND1 million–400 million (USD44–17,432), depending on the area affected. Exhibits may be confiscated and remedial measures imposed (Art. 41).⁵⁵

The Minister of Natural Resources and Environment has responsibility for guiding interpretation and implementation of the Decree. Ministers, heads of governmental agencies and chairpersons of People’s Committees are also responsible for fulfilling the decree (Art. 74). Enforcement is the responsibility of various agencies including the Committees, the People’s Police, Border Guard, Coast Guard, Customs and port authorities (Art. 50).⁵⁶

Government Decree No. 103/2013/ND-CP On Administrative Sanction in Fisheries Field.⁵⁷ This Decree helps implement the 2012 Law on Handling of Administrative Violations by providing specific penalties within the range stipulated by that Law for violations relating to fisheries.

⁵³ Only an excerpt of this Decree was available in English, and some of the information included in this summary was obtained using Google Translate.

⁵⁴ Information in this sentence was not included in the excerpted English translation of the law and was roughly translated from the Vietnamese law using Google Translate.

⁵⁵ Information in this paragraph was not included in the excerpted English translation of the law that we found and was roughly translated from Vietnamese using Google Translate.

⁵⁶ Information in this paragraph was not included in the excerpted English translation of the law that we found and was roughly translated from Vietnamese using Google Translate.

⁵⁷ Only an excerpt of this Decree was available in English, and some of the information included in this summary was obtained using Google Translate.

The Decree provides a maximum penalty for administrative violations in the area of fisheries of VND100 million (USD4,358) for individuals and double this amount for organisations (Art. 3). Specific penalties within the range provided by the Decree include penalties for breaching regulations on:

- Management of endangered species threatened with extinction, including harvesting, transporting and collecting endangered species (Art. 7);
- Aquatic species protection (Art. 6), including:
 - Violating regulations on closed seasons and areas;
 - Harvesting species prohibited from harvest;
- Collecting, pre-processing, possessing and transporting aquatic species (Art. 28), including:
 - Doing so without confirmation of legal origin;
 - Doing so outside closed seasons;
- Marine protected areas (Art. 8), including:
 - Exploiting fisheries resources;
 - Using destructive or prohibited fishing practices;
 - Abusing or destroying ecosystems;
 - Stepping or anchoring on coral reefs or seagrass beds;
 - Moving through waterways;
- Fisheries habitat protection (Art. 5), including:
 - Destroying coral reefs, seagrass beds and seaweed belts;
 - Harvesting, transporting and trading corals;
- Equipment and fishing methods (Art. 14), including:
 - Failing to mark fishing gear as prescribed by law;
 - Discarding fishing gear in natural waters;
 - Using mesh sizes smaller than permitted by law;
 - Using electricity to fish or storing equipment for electric fishing on a vessel (Art. 15);
 - Using explosives to fish or storing explosives that can be used for fishing on a vessel (Art. 16);
 - Using poisons to fish or storing poisons that can be used for fishing on a vessel (Art. 17);
- Fishing licences (Art. 10), including:
 - Fishing without a licence;
 - Violating conditions of licence;

- Foreign vessels fishing in Vietnamese waters (Art. 13), including:
 - Fishing without a licence;
 - Failing to keep records as stipulated by law;
- Fishing in the waters of other countries (Art. 12);
- Record keeping (Art. 9);
- Registering vessels (Art. 21).

Penalties for the illegal collection, possession, processing or transport of wildlife are generally based on the weight of the wildlife at issue and for individuals range from, at the low end, VND500,000–one million (USD22–44) for harvesting, trading and transporting coral under 10 kg to, at the high end, VND80 million–100 million (USD3,486–4,358) for harvesting, trading, possessing etc. more than 30 kg of Critically Endangered species. Other penalties vary according to the size of vessel involved in the offence or the duration of the offence.

Additional punishments for some of these violations include confiscation of specimens and/or withdrawal of licence. Remedial measures, such as release of live specimens and/or restoration of damaged habitats, may also be imposed.

The Decree authorises various officers and agencies to apply administrative sanctions of various severity and types. These include the presidents of Peoples' Committees, fisheries inspectors, certain members of departments responsible for controlling fisheries activities, the Coast Guard, the Border Guard, Police and directors of port authorities (Arts. 35–41). MARD oversees the implementation of this Decree (Art. 46).

DISCUSSION

In this section, legislation protecting marine wildlife in ASEAN countries is evaluated according to benchmarks derived from the international agreements summarised in the Results part 1 section of this report. Legislation is evaluated for its ability to provide a strong framework for managing and conserving marine wildlife species considered in this report, in particular by requiring measures to protect wildlife, prohibiting activities that harm marine wildlife, and providing penalties that are sufficient to deter harmful activities. A table of obligations imposed on each country by its participation in international agreements and the extent to which each country fulfils these obligations can be found in Appendix II of this report.



Discussion by country

Strengths and weaknesses of each country's legislation with respect to the prevention of illegal and unsustainable trade in marine wildlife are noted below. In general, this report considers custodial sentences to be strong penalties if they allow a maximum term of imprisonment of at least four years. This is the length of custodial sentence that is considered to reflect a "serious crime" in the United Nations Convention Against Transnational Organized Crime (UNTOC) (Art. 2b). However, custodial sentences may need to be higher to deter more lucrative offences while for minor offences a smaller sentence or a fine may suffice as a deterrent.

Brunei Darussalam

Brunei Darussalam has a relatively small area of marine waters and participates in relatively few international treaties relating to marine wildlife protection. However, these include CITES, CBD and UNCLOS (see Table 7). Among the agreements that Brunei has not signed are CMS, UNFSA and the IOSEA Marine Turtle MoU. Like all the ASEAN countries, Brunei is a member of the UN and the FAO and should therefore abide by the non-binding measures provided by UN General Assembly Resolutions and FAO IPOAs and guidelines.

Table 7: International treaties and agreements signed by Brunei Darussalam

Convention/Agreement	Signed	Ratified/ acceded	Remarks
CITES		1990	
CBD		2008	
UNCLOS	1984	1996	
ASEAN MoU	1997		

Brunei's wildlife protection legislation has been assessed by the CITES national legislation project as Category 1, i.e. as generally meeting requirements to implement CITES (CITES Secretariat, 2015b). Despite providing a generally strong framework for controlling international trade in wildlife, the relevant legislation in Brunei is not detailed, with the result that some measures that could help reduce illegal and unsustainable collection of marine wildlife are omitted.

Strengths of Brunei's marine wildlife protection legislation

Protected status for all CITES-listed species in international trade. Brunei's main CITES-implementing legislation, the Wild Fauna and Flora Order, uses the CITES Appendices as its list of protected species. (However, the Wild Life Protection Act provides a different, short list of protected species that does not include all CITES-listed wildlife and omits some species found in Brunei's waters that are of concern in this report; see weaknesses, below.)

Lists of prohibited activities. The Wild Fauna and Flora Order prohibits most trade-related activities that are harmful to wildlife, including possession and trade of CITES-listed species without a permit or that have been illegally collected or imported. The Wild Life Protection Act prohibits the killing or collection of animals within a wildlife sanctuary or of some marine species anywhere in Brunei's waters.

Prohibition of destructive fishing methods. The Fisheries Act prohibits fishing with explosives, poisons or other prohibited gear in order to stun fish or render them easier to catch.

Measures to minimise by-catch. The Fisheries Order requires the release of any aquatic mammal taken accidentally. However, there is no requirement to use TEDs or other specialised equipment to mitigate by-catch.

Specification of closed seasons and areas. The Fisheries Order and the Wild Life Protection Act authorise the Director of Fisheries and the Sultan, respectively, to specify closed seasons and areas. However, neither Order requires that these measures be taken or provides details on when they should be taken.

Requirements for licences within Brunei. The Fisheries Act requires a licence for fishing in Brunei's waters, including for foreign fishing vessels. The Wild Fauna and Flora Order requires permits for trade in CITES-listed species.

Ex situ conservation measures. The Wild Fauna and Flora Order authorises the Director of Forestry to negotiate the return of confiscated specimens to their country of origin.

Prevent mistreatment of wildlife in trade. The Wild Fauna and Flora Order only allows permits for imports and exports of some CITES-listed species to be granted if steps have been taken to minimise harm and mistreatment. However, there are no penalties for mistreatment or requirements for wildlife within the country to be treated appropriately.

Higher penalties for offenders with more to gain. Under the Fisheries Order, some penalties are higher for ships' masters than for ordinary members of the crew.

Burden of proof on the accused. The Wild Fauna and Flora Order provides that, for any activity for which a permit is required, the onus is on the defendant to produce the permit. The Wild Life Protection Act provides a similar measure for possessing or offering protected animals for sale. The amended Fisheries Order makes the discovery of fish or fishing equipment on board a vessel within a marine reserve sufficient to establish guilt, unless these are stored in a particular manner.

Strong enforcement powers. All laws clearly specify strong enforcement powers, including powers to enter and search premises and vehicles, require information to be provided, seize specimens, equipment and vehicles and in some cases arrest suspects.

Weaknesses of Brunei's marine wildlife protection legislation

Laws too general and lacking detail. All three laws discussed in this report are short and provide few details on most of the measures they provide. Measures that are not well developed include lists of prohibited activities in all three laws, criteria for determining wildlife sanctuaries under the Wild Life Protection Act, criteria for granting fishing licences or conditions to be met by vessels fishing in Brunei's waters in the Fisheries Order, prohibited and permitted fishing equipment under the Fisheries Order, and the treatment of confiscated live specimens under both the Wild Fauna and Flora Order and the Wild Life Protection Act.

Excessive discretion. Related to the previous point, all three laws provide significant discretion to their implementing agencies, largely as a result of not specifying conditions or guidelines for many of the powers and responsibilities they provide. In particular, the Fisheries Order leaves it up to the Director of Fisheries to determine the conditions of licences, including authorising her/him to alter the conditions of licences.

Missing protection for parts and products. The Wild Fauna and Flora Order does not extend protection to wildlife parts and products. The Wild Life Protection Act includes protection in some measures for “trophies and flesh” but not all parts and products, and this protection is missing from the prohibition on exporting wildlife without a licence in Section 9.

Some harmful measures permitted. The Wild Fauna and Flora Order does not prohibit the killing or collection of protected wildlife, as it relates only to international trade and introduction from the sea. The Wild Life Protection Act does prohibit the killing or collection of protected animals or animals within a wildlife sanctuary, but the list of wildlife protected by the Act excludes some CITES-listed species, including species of concern to this report that fall within the scope of fisheries legislation (e.g. Olive Ridley Turtles, seahorses and corals).

Limited controls on flagged vessels outside the EEZ. The Fisheries Order contains no provision requiring vessels to obtain licences to fish outside Brunei’s EEZ or cooperate with international laws or the laws of other states while doing so.

Lack of requirements for vessel registration and logbooks. The Fisheries Order lacks requirements for vessels to register or maintain logbooks.

Low penalties. Almost all penalties are low and are further weakened by the possibility of compounding most offences for a low fine. Only the penalties imposed by the Wild Fauna and Flora Order for trade or possession of CITES Appendix I-listed species and by the Fisheries Order on the owner and master of a foreign vessel for fishing without a licence (in both cases a maximum of five years’ imprisonment plus a fine of up to BND100,000 (USD68,921)) meet the UNCTOC definition of the penalty for a serious crime. The former of these, like other offences under the Wild Fauna and Flora Order, may be compounded by a maximum fine of BND2,000 (USD1,378). Under the Wild Life Protection Act the highest penalty is one year of imprisonment plus a fine of BND2,000 (USD1,378) for killing or collecting wildlife or protected wildlife without a licence, or exporting protected animals. For the latter of these offences, a fine of BND100 (USD69) may be imposed instead. Under the Fisheries Act, other than for the offence mentioned above, the highest penalties are imprisonment of one year and/or a fine of BND10,000 (USD6,892), and offences may be compounded by a fine of BND1,000 (USD689). In addition to these low maximum penalties, the Wild Fauna and Flora Order and the Fisheries Act do not state minimum penalties. The Wild Life Protection Act provides fixed penalties.

Overlapping legislation. The Wild Fauna and Flora Order and the Wild Life Protection Act prohibit several of the same activities, including possessing and exporting protected species and breaching conditions of licences. These laws are administered by different agencies (the Department of Agriculture and the Museums Department, respectively) and use different species lists, which could lead to confusion in enforcement.

Cambodia

Cambodia participates in a number of important global and regional conservation and oceans and fisheries agreements, notably CITES, CBD, UNCLOS and the IOSEA Marine Turtle MoU (however, Cambodia has not ratified UNCLOS) (see Table 8). Cambodia has not signed CMS or UNFSA and does not participate in any of the RFMOs for the region. Like all the ASEAN countries, Cambodia is a member of the UN and the FAO and should therefore abide by the non-binding measures provided by UN General Assembly Resolutions and FAO IPOAs and guidelines.

Table 8: International treaties and agreements signed by Cambodia

Convention/Agreement	Signed	Ratified/ acceded	Remarks
CITES		1997	
CBD		1995	
Ramsar Convention		1999	
UNCLOS	1983		
Conservation of Resources of the High Seas		1960	
Convention for the Regulation of Whaling		2006	
IOSEA Marine Turtle MoU	2002	2003	Not legally binding

The CITES National Legislation Project has assessed Cambodia's wildlife legislation as Category 1, indicating that provisions generally meet the requirements for implementing CITES (CITES 2015b). A 2015 legislative review by DLA Piper concluded that the legislative framework for wildlife protection in Cambodia is relatively strong and that problems in wildlife protection primarily stem from shortcomings in enforcement (DLA Piper 2015).

Cambodia's main piece of wildlife legislation, the Law on Forestry (2003), covers forest ecosystems only and excludes from its jurisdiction animals that breed in water. However, the Law on Protected Areas (2008) and the Law on Fisheries (2006) provide generally satisfactory measures for marine wildlife protection, especially when taken together with the various Sub-Decrees and Proclamations that are also summarised in this report.

Strengths of Cambodia's marine wildlife protection legislation

Protected status for all CITES-listed species. According to the Faolex (2014) summary of Sub-Decree No. 53 On International Trade in Endangered Species, this Sub-Decree regulates trade in all CITES-listed species in accordance with CITES.

Detailed list of prohibited activities. Cambodian wildlife legislation prohibits and penalises destruction of habitat, fishing in protected areas, trade, transport, possession, import or export of wildlife without a permit, and a large number of other activities that occur as part of the illegal trade in marine wildlife.

Prohibition of destructive fishing methods. The Law on Protected Areas and Law on Fisheries prohibit the use of harmful and destructive fishing methods, and the Law on Fisheries prohibits fishing using methods not specified by MAFF, i.e. in Proclamation No. 028 On Restrictions of Fishing Gear in Inland and Marine Fisheries (1984) (or its replacement; see Results section, above).

Specification of closed seasons and areas. The Law on Fisheries provides penalties for violations of closed seasons and areas, which are to be determined by MAFF and the Ministry of Environment. However, the Law does not require these ministries to specify closed seasons.

Requirements for licences. The Law on Protected Areas and the Law on Fisheries require permits for various activities, including collection, transport, trade, export and import of wildlife, and penalise violations of conditions of licences. Certain violations of conditions of licences may also be penalised under Sub-Decree No. 66 On Transportation of Fishery Product (1988).

Requirements for vessel registration and logbooks. The Law on Fisheries makes it obligatory for all fishing vessels to register with the Fisheries Administration, while all fishery production and trade activities that require a permit must maintain a logbook and report this monthly to the Fisheries Administration. The Law also requires Cambodian vessels fishing outside Cambodian waters to register in accordance with UNCLOS.

Strong maximum sentences. The Law on Protected Areas carries a maximum custodial sentence of 10 years, which may be doubled for repeat offences. Fines go up to KHR 150 million (USD36,277), or KHR 250 million (USD60,462) if the offender is a legal entity, and may be applied in addition to custodial sentences. The Law on Fisheries carries a maximum custodial sentence of five years, which can be doubled for repeat offences or under certain other conditions, and maximum fines of KHR 50 million (USD12,092). Both laws require confiscation of catch and equipment and/or restoration of damages for some offences.

Specification of both maximum and minimum sentences. The Law on Protected Areas and the Law on Fisheries specify maximum and minimum sentences for many offences. Providing a range of sentences communicates expectations regarding sentencing to judges and may be particularly useful in countries where wildlife crimes are seen as a low priority or high levels of corruption increase the risk of offenders being able to secure more lenient sentences (or both).

Increased penalties under aggravating conditions. Measures under the Law on Protected Areas and the Law on Fisheries to double penalties (and, under the latter, to upgrade offences to a higher classification) for repeat offences or under certain other conditions, mean that career offenders can be more heavily penalised than opportunistic offenders.

Penalisation of accomplices. Under the Law on Fisheries, accomplices are to be penalised at the same rate as offenders, making it easier to secure prosecutions for associates of convicted offenders, which may include more senior members of organised groups.

Explicit criminalisation of involvement of officials in wildlife crime. The Law on Fisheries makes it an offence for Fisheries Administration officers to provide permissions in violation of this Law or to participate directly or indirectly in activities prohibited by the Law. The penalties for violations of these provisions are moderate: one to three years' imprisonment, with the possible addition of fines of up to KHR 50 million (USD12,092).

Explicit criminalisation of failure to investigate wildlife offences. The Law on Fisheries makes it an offence for Fisheries Administration officers to forgive or fail to report any class 1 fishery offence. The penalties for violation of these provisions are fairly strong, considering they are the same as the penalties for actual involvement of officials in offences (see previous point): one to three years' imprisonment, with the possible addition of fines of up to KHR 50 million (USD12,092).

Strong powers for fisheries enforcement. The Law on Fisheries clearly describes strong powers of arrest, investigation and seizure of evidence.

Weaknesses of Cambodia's marine wildlife protection legislation

Since we were unable to locate the text of every relevant piece of legislation for Cambodia, some of the omissions noted here may in fact be addressed in Cambodian regulations that we have not viewed.

Some harmful activities permitted. The Law on Fisheries explicitly allows the catching, selling, buying, stocking and export of endangered fishery resources with a permit (although the Law may include another provision that contradicts this; see below) and buying or selling shells of rare species. The Law does not specify that this should only be for purposes of scientific research or exchange with other countries as regulated by international agreements. The potential harms from this provision should be mitigated in the case of international trade by Sub-Decree No. 53, which allegedly regulates the granting of licences and permits for activities involving CITES-listed species in accordance with CITES, and which should therefore limit the granting of export permits.

Lack of measures to mitigate by-catch. None of the legislation viewed for this report requires the release of marine wildlife taken as by-catch or accidentally entangled in fishing equipment.

Lack of ex situ conservation measures. As far as we were able to determine, Cambodian legislation lacks measures that require confiscated specimens to be housed in rescue centres and, where possible, released into their natural habitat or returned to their country of origin. However, we were unable to obtain the text of Sub-Decree No. 53 On International Trade in Endangered Species so it is possible that this piece of legislation includes these measures.

Lack of requirements for vessel registration and logbooks. The Law on Fisheries requires fishing vessels to register and maintain a logbook; however, the Law does not specify details to be included in the logbooks or that registration history or history of compliance with national and international laws should be recorded at registration.

Low penalties for some significant wildlife crimes. Under both the Law on Protected Areas and the Law on Fisheries some offences relating to marine wildlife trade are punished lightly. Under the Law on Protected Areas, very few offences are subject to the high penalties mentioned above and penalties for other offences can be very low. Maximum penalties for importing and exporting fauna and flora without a permit or collecting or poisoning eggs or offspring are transactional fines of up to KHR one million (USD242), which can be doubled for repeat offences. For collecting by-products of natural resources, trading wildlife, or harmful illegal fishing without a permit, the penalty is a fine of an unspecified amount, which can be doubled for repeat offences. The bringing in of equipment with the intent to commit an offence is punishable by a written warning. Some offences, for example destroying wildlife habitat or collecting eggs, can be prosecuted as offences of the second grade but may instead be penalised by a transactional fine. Similarly, under the Law on Fisheries there are low penalties for buying, selling, processing, stocking or transporting fishery products that have been obtained illegally or using illegal fishing gear (a maximum of one year in prison and a fine of KHR five million (USD1,209), increased to a maximum of three years in prison and a fine of KHR 50 million (USD12,092) for repeat offences). Such penalties may constitute a deterrent for poaching undertaken for subsistence and relatively small-scale traffickers but may not be high enough to deter criminal organisations. Other offences, including fishing without a licence and catching, selling, stocking, transporting, exporting or importing endangered natural fishery products, are only subject to a transactional fine. The Law on Fisheries includes offenses that can be penalised under more than one category, including fishery exploitation that damages aquatic resources, which can be punished as a class 1 offence, a class 2 offence or by transactional fines. Although this allows penalties to be applied to both minor and more serious offences, this flexibility could be used to apply light penalties to relatively serious offences, and more guidance should be provided on how to determine which of these types of penalty should be applied in specific cases. Note that, according to the summary we found of Sub-Decree No. 53, this legislation also includes penal measures, and it is therefore possible that this Sub-Decree provides stronger penalties for some of the above offences.

Weak enforcement powers. The Law on Protected Areas provides a vague authorisation to “investigate, prevent, and crack down” on violations of the Law and does not give details of the powers to be used in doing so.

Contradictions/lack of clarity. The list of prohibited activities in the Law on Fisheries does not correspond precisely to the offences described in the sections providing penalties, which at the least is confusing but may also mean that some prohibited activities are not penalised and/or that penalties are described for some activities that are not explicitly prohibited. For example, Article 23 explicitly allows the transportation, possession, processing and trade of endangered fishery resources with a permit, whereas Article 92 penalises the catching, transportation, possession, processing and trade of endangered fishery resources, and does not specify that the penalty applies only when these activities are conducted without a permit.

Undefined terms. The Law on Protected Areas prohibits the stocking, buying and selling of “samples” but does not define this term. The context suggests it may mean wildlife parts or products; however, the other references in this Law to the term “sample” are to “seeds and samples” (Art. 6.4) and to “physio-geographical samples” (Annex s. 2.1.2) which do not fit this interpretation.

Difficulty in obtaining regulations. It was difficult to obtain the texts of some regulations, particularly lists of protected species. Law firms and NGOs that we contacted in Cambodia were also unable to identify or obtain these regulations. As further evidence of the difficulty, the recent DLA Piper review of Cambodian wildlife legislation seems to have been written without access to the text of Sub-Decree No. 53 On International Trade in Endangered Species, since the review cites only the Faolex summary of this regulation (DLA Piper, 2015). The difficulty in checking legislation may be a problem not only for wildlife NGOs, but also for enforcement agencies, prosecutors and judges.

Indonesia

Indonesia has ratified, acceded, signed, become Party to or participated in almost all applicable international agreements considered in this report, with the exceptions of CMS, the MoUs on Dugong and sharks and the Convention for the Regulation of Whaling. With the Philippines, it is the only ASEAN country to have signed or ratified UNFSA, and one of only three ASEAN countries (with Myanmar and Thailand) to have signed the FAO Agreement on Port State Measures. Indonesia also participates in several regional conservation initiatives and is a member of three RFMOs. Indonesia has not ratified the Convention on Fishing and Conservation of the Resources of the High Seas which it signed in 1958, but since the provisions of this Convention are quite general and also provided in UNCLOS, this is not of great concern. Indonesia has also not signed the FAO Compliance Agreement; however, legally binding measures under the WCPFC Convention require Indonesia to implement “as appropriate” the FAO IPOA on sharks and guidelines on turtles that were created under this Agreement. Like all the ASEAN countries, Indonesia is a member of the UN and the FAO and should therefore abide by the non-binding measures provided by UN General Assembly Resolutions and FAO IPOAs and guidelines.

Table 9 below lists the international treaties and conventions to which Indonesia is a Party.

Table 9: International treaties and agreements signed by Indonesia

Convention/Agreement	Signed	Ratified/ acceded	Remarks
CITES		1978	Entered into force 1979 Reservations against Appendix II listings of seahorses, Whale Shark and Basking Shark
CBD	1992	1994	
Ramsar Convention		1992	
UNCLOS	1982	1986	Entered into force in 1994
UNFSA	1995	2009	
FAO Agreement on Port State Measures	2009	2016	
Conservation of Resources of the High Seas	1958		
IOSEA Marine Turtle MoU	2005	2005	Not legally binding
ASEAN MoU	1997		
SSME MoU	2004	2006	
CTI-CFF	2009		Not legally binding
International Coral Reef Initiative			Not legally binding
WCPFC Convention	2001	2013	
IOTC CMMs		2007	
Convention on Southern Bluefin Tuna		2008	

The CITES National Legislation Project has assessed Indonesia’s wildlife legislation as Category 1, indicating that provisions generally meet the requirements for implementing CITES (CITES, 2015b). A 2015 legislative review by DLA Piper also concluded that wildlife protection legislation in Indonesia provides a “sound framework,” and that problems in wildlife protection stem largely from shortcomings in enforcement (DLA Piper 2015). Other commentators note that corruption undermines the application of the law in some cases, in particular regarding the use of bribes to obtain reduced penalties (Felbab-Brown 2013). This generally strong legislative framework includes some weaknesses, such as the use of Ministerial Regulations, which may not be respected in all jurisdictions within Indonesia, to implement broad and general Laws, the lack of a single list of protected species that covers all CITES- and CMS-listed species, and a lack of prohibitions on some harmful activities.

Strengths of Indonesia's marine wildlife protection legislation

Detailed list of prohibited activities. Under Indonesian law it is prohibited to catch, kill, possess, transport or trade protected species and fish without a licence and to import or export wildlife without a permit.

Prohibition of destructive fishing methods. Under the Law on the Management of Coastal Areas and Isles and the Fishery Law, it is prohibited to fish using explosives, poisons or other materials that destroy coral reefs, fish resources or the environment. Possession of equipment for these types of fishing is also prohibited under the Fishery Law.

Requirements to mitigate by-catch. Ministry of Marine Affairs and Fisheries Regulations No. 30 (2012) and No. 12 (2012) require sharks, marine mammals, marine turtles and other by-catch that has been captured accidentally to be released alive if possible and dead specimens to be reported.

Specification of closed seasons and areas. The Minister of Marine Affairs and Fisheries is required to specify closed seasons and areas under the Fishery Law and Government Regulation No. 60 (2007).

Requirements for licences. Permits and licences are required for natural resource exploitation under the Conservation of Living Resources and their Ecosystem Act and its implementing Government Regulations, the Law on the Management of Coastal Areas and Isles, and the Fishery Law. The latter requires licences for all fishery production businesses and fishery activities on the high seas and in the jurisdictions of other states.

Requirements for vessel registration and logbooks. The Fishery Law requires Indonesian flagged vessels to be registered and to maintain logbooks. Detailed requirements for the latter are given in Regulations issued by the Ministry of Marine Affairs and Fisheries.

Ex situ conservation measures. The Conservation of Living Resources and their Ecosystems Act and Government Regulation No. 7 (1999) require confiscated specimens and wildlife found in a human environment to be returned to their natural environment where possible, and Government Regulation No. 7 requires confiscated wildlife to be housed in adequate facilities.

Potential to prevent mistreatment of wildlife in trade. The Penal Code makes it an offence to deliberately harm an animal or cause it pain or to transport it in a needlessly painful manner.

Strong penalties. There are strong penalties for some offences under Indonesian legislation. Under the Fishery Law, fishing using destructive methods is punishable by up to 10 years' imprisonment and a fine of up to IDR two billion (USD147,800), and fishing commercially without a licence is punishable by imprisonment of up to eight years and/or a fine of up to IDR1.5 billion (USD110,850). This Law also allows fisheries inspectors to summarily burn and/or sink foreign fishing vessels if there is "sufficient initial proof" of IUU fishing in Indonesian waters. It should be noted that, while this may serve as a deterrent and send a strong message about Indonesia's lack of tolerance for IUU fishing, there are questions about the legality of this measure and its potential to aggravate relationships between Indonesia and its neighbours (Herman 2014; South China Morning Post 2015). In practical terms, burning a vessel is no more costly to its owner/operator than simply confiscating the vessel.

The Law on the Management of Coastal Areas and Isles makes several offences, mainly relating to damaging coral, punishable by two to 10 years of imprisonment and fines of IDR two billion–10 billion (USD147,800–739,000). Under the Conservation of Living Resources and their Ecosystems Act, deliberate killing, catching, possessing, transporting or trading in protected species is punishable by up to five years' imprisonment and a fine of IDR100 million (USD7,390). The Customs Law punishes smuggling offences by prison terms of one to 10 years and/or a fine of

IDR50 million–five billion (USD3,695–369,500). Note that this is a significantly higher penalty than those provided for smuggling under *Government Regulation No. 8/1999 on Wild Flora and Fauna Exploitation*.

Specification of both maximum and minimum sentences for some offences. Most legislation viewed for this report specified maximum sentences only; however, smuggling offences under the Customs Law and some offences under the Law on the Management of Coastal Areas and Isles include minimum penalties. Providing a range of sentences communicates expectations regarding sentencing to judges and may be particularly useful in countries where wildlife crimes are seen as a low priority or high levels of corruption increase the risk of offenders being able to secure more lenient sentences (or both).

Increased penalties under aggravating conditions. Under the Conservation of Living Resources and their Ecosystems Act and the Law on the Management of Coastal Areas and Isles, penalties for some offences are higher if committed deliberately than if they are committed by mistake.

Higher penalties for offenders with more to gain. The Fishery Law provides higher penalties for some offences for owners and operators of fishing vessels, and increases penalties for some offences committed by corporations, which are imposed on the managers of the corporations. Under this Act, small-scale fishers are subject to lower penalties for some offences.

Explicit criminalisation of involvement of officials in wildlife crime. The legislation viewed for this report does not include special measures to criminalise the involvement of officials in offences; however, under the Fishery Law and the Customs Law penalties for some offences are increased by one third if an official is involved.

Incentives for information and arrests. Rewards may be given to individuals and law enforcement who have assisted in prosecutions under the Fishery Law, and Customs agents who have successfully settled customs violations may also be granted financial rewards under the Customs Law.

Clear indication of responsibilities for implementation. The agencies responsible for implementing Laws and Regulations are generally clearly indicated in the legislation.

Weaknesses of Indonesia's marine wildlife protection legislation

Laws too general and lacking detail. Several of the Laws described in this report, including the Conservation of Living Resources and their Ecosystems Act and the Fishery Law, are general in nature and provide powers and responsibilities of their implementing agencies rather than detailed regulations. Where these regulations are provided by ministries, there may be a problem with some provinces not recognising the jurisdiction of Ministry Regulations (Lotolung *et al.* 2005).

Exemptions. A number of exemptions weaken measures to protect wildlife from unsustainable collection from the wild. Under the Conservation of Living Resources and their Ecosystems Act, habitat management activities to maintain wildlife populations are allowed within Sanctuary Reserves even if they damage the "natural integrity" of the reserve (Art. 19.2). It is permitted to catch, kill, transport or trade protected animals for research, education or safeguarding of the animals (Art. 22.2). Government Regulation No. 7 (1999) allows Conservation Institutions, including zoos and animal parks, to take wildlife that is not protected from nature and does not provide conditions for obtaining wildlife in this way (Art. 23). As discussed below, several species of interest to this report are not protected under Indonesian law and may therefore be taken from nature by Conservation Institutions. The Fishery Law allows fishing with explosives and other damaging methods for purposes of research. Ministry of Fisheries Decrees specifying protected species provide exceptions for purposes or research and development to the prohibition on hunting these species.

Some species not protected. Government Regulation No. 7 (1999) provides Indonesia's list of protected species, which includes Dugong, marine turtles, cetaceans, black corals and giant clams. Minister of Marine Affairs and Fisheries Regulation No. 35 (2013) adds protected status to Whale Shark, Manta Rays and Humphead Wrasse. This means that all other sharks, mobulid rays and corals, along with seahorses and sea cucumbers, are not protected, and therefore their capture, killing, possession, transportation and trade is not prohibited. A partial exception is coral, which is protected from destruction or collection within small island areas and Conservation Areas by the Law on the Management of Coastal Areas and Isles. However, regulations on

international trade are more stringent. Under Government Regulation No. 8 (1999) import, export and re-export of all species of wildlife requires a permit, delivery and transportation documents, and a recommendation by the SA, and must meet any other requirements specified by the Minister. Regulation of the Minister of Marine Affairs and Fisheries No. 04 (2010) requires CITES permits for import, export and re-export of CITES-listed species.

Missing protection for parts and products. The Conservation of Living Resources and their Ecosystems Act includes protection for wildlife parts, but this is omitted from Government Regulation No. 8/1999 on Wild Flora and Fauna Exploitation.

Some harmful activities permitted. The legislation viewed for this report does not prohibit possession of species obtained using destructive fishing equipment or techniques. Fishing is allowed with a permit within conservation zones under Government Regulation No. 60 (2007). Regulation of the Minister of Forestry No. 447 (2003) allows the collection of wildlife, including protected and CITES-listed species, from nature as long as it is outside protected areas (Art. 4).

Lack of measures to mitigate by-catch. There are no requirements for TEDs and we did not find specifications of minimum mesh sizes.

A loophole. Under Regulation of the Minister of Marine Affairs and Fisheries No. 04 (2010), CITES Appendix-I listed species may be traded if they are bred in captivity and of at least the second generation, or of the first generation if they belong to a species for which that is allowed by the Minister on the advice of the SA (Art. 19.5). This could enable the laundering of wild-caught specimens for trade.

Low penalties. Penalties for mistreating animals in trade under the Penal Code are too low to constitute a deterrent: maximum fines are difficult to determine while the maximum prison term even for repeat offences is only 14 days. Government Regulation No. 60 (2007) provides only administrative sanctions for violations, and does not specify the amounts of fines. No penalties are provided for violations of most Regulations of the Ministry of Marine Affairs and Fisheries that are related to non-commercial activities, while for violations involving commercial activities there are no custodial sentences and the maximum fine is IDR250 million (USD18,475).

Vagueness in specifying penalties. Under Regulation No. 04 on Procedures of the Use of Fish and Fish Genetic Resources (2010) only unspecified criminal or administrative sanctions may be imposed for violations. Government Regulation No. 60 (2007) does not specify the amount of administrative fines that may be imposed for violations.

Loopholes in applying penalties. Under Article 100 of the Fishery Law, there is a penalty of IDR250 million (USD18,475) for violations of Ministerial Regulations relating to some aspects of commercial fishing. It therefore appears that there are no penalties for violating prohibitions on fishing for non-commercial purposes in the cases of several of the Regulations considered for this report, including Regulation No. 35 (2013) which governs protected species, Regulations Nos. 59 (2014) and 21 (2014) concerning export of certain species of sharks and fish, respectively, Regulation No. 46 (2014) which requires catch certificates for fish being exported to the EU, Regulation No. 15 (2016) on transporting live fish, Regulations Nos. 02 (2011) and 02 (2015) which include measures governing types of permitted fishing equipment, or Regulation No. 15 (2005) regarding non-commercial fisheries activities.

There are no provisions to apply penalties to corporations or their managers under the Conservation of Living Resources and their Ecosystems Act, Government Regulation No. 8 (1999), or the Law on the Sea. The Law on Coastal Areas and Small Isles defines “person” to include corporations, and corporations are therefore liable for the fines it specifies for violations. However, since the Law does not make managers or directors of corporations liable for offences committed by their corporations, it seems the custodial sentences specified by the Law may not be imposed, and the fines will be paid by the corporation rather than by its managers or directors, which is likely to reduce the deterrent effect of these penalties on individuals.

No penalisation of accomplices. None of the legislation viewed for this report makes it an offence to aid and abet the commission of a crime, or to be involved in attempting to commit a crime. Penalising accomplices makes it easier to secure prosecutions for associates of convicted offenders, which may include more senior members of organised groups.

Unsystematic and/or overlapping legislation. The devolution of responsibility for fisheries management within Indonesian territorial waters upon the provinces means that it was not possible for this report to view all the legislation to manage marine resource conservation in place in Indonesia. It is possible that provincial legislation regarding marine wildlife protection is not harmonised across the country, and there may be overlap with Ministerial Regulations.

Unclear or contradictory measures. Government Regulation No. 8 (1999) states that protected species may not be “commercialised” (Art. 18) however does allow them to be bred for trade if they are from second-generation offspring. It is not clear how these statements can be reconciled.

Under Article 102 of the Fishery Law, the provisions of this Law on imprisonment do not apply for offences in the Indonesian EEZ outside territorial waters unless there is an agreement between the Indonesian Government and the “government of the relevant country.” Presumably this is intended to apply only to offences committed by foreign nationals, but this is not specified.

Lao PDR

Lao PDR does not have any marine areas, but participates in several relevant international treaties, including CITES, CBD and UNCLOS (see Table 10). Among the agreements not signed by Lao PDR are CMS, UNFSA and the IOSEA Marine Turtle MoU. Like all the ASEAN countries, Lao PDR is a member of the UN and the FAO and should therefore abide by the non-binding measures provided by UN General Assembly Resolutions and FAO IPOAs and guidelines.

Table 10: International treaties and agreements signed by Lao PDR

Convention/Agreement	Signed	Ratified/ acceded	Remarks
CITES		2004	
CBD		1996	
Ramsar Convention		2010	
UNCLOS	1982	1998	
Convention for the Regulation of Whaling		2007	
ASEAN MoU	1997		

Lao PDR's wildlife protection legislation has been assessed by the CITES national legislation project as Category 3, i.e. as generally not meeting the requirements for implementing CITES (CITES Secretariat, 2015b). DLA Piper (2015) notes poor enforcement of measures provided in the legislation, including an apparently complete absence of custodial sentences imposed for wildlife crimes, lack of border controls and high corruption. The most significant problem in the legislation itself is a lack of coverage for endangered species that are not native to Lao PDR but that may still be imported into, transited through and traded within the country.

Strengths of Lao PDR's marine wildlife protection legislation

Requirements for licences. Legislation in Lao PDR requires permits for import, export and transit of CITES-listed species (and some other species native to Lao PDR, which does not add any marine species). A permit is required for the possession of species covered by the Wildlife and Aquatic Law, but this does not include marine species except the Irrawaddy Dolphin.

Prevent mistreatment of wildlife in trade. The Wildlife and Aquatic Law requires wildlife to be kept in facilities that do not cause it suffering or impact its ability to reproduce, and prohibits damaging or tormenting wildlife.

Increased penalties under aggravating conditions. The Wildlife and Aquatic Law and the Customs Law provide for increased fines for repeat offences.

Explicit prohibition of involvement of officials in wildlife crime. The Wildlife and Aquatic Law prohibits officials from abusing their authority for personal benefit, falsifying documents, or owning or operating businesses related to wildlife. Members of the public are explicitly prohibited from bribing officials. Falsifying documents is considered a criminal offence under the Wildlife and Aquatic Law and therefore carries a custodial sentence. Civil servants involved in wildlife offences may also be suspended or removed from their position.

Explicit prohibition of failure to investigate wildlife offences. The Wildlife and Aquatic Law prohibits officials from acting irresponsibly with regard to their duties, which should include failing to investigate wildlife offences.

Incentives for information and arrests. The Customs Law allows rewards to be paid for information leading to arrests.

Weaknesses of Lao PDR's marine wildlife protection legislation

Laws too general and lacking detail. The laws considered here are brief and lack sufficient information on the powers and authorities of implementing agencies, factors to be considered when granting licences and permits, types of offences, and penalties.

Limited protection for species originating outside the country. The lists of protected species provided by the Wildlife and Aquatic Law and MAF Instruction No. 0076 are based on species native to Lao PDR and, as a result, exclude most marine species. These lists also do not correspond to the CITES Appendices: CITES Appendix I-, II- or III-listed species may appear as Category I or Category II species on the Lao PDR lists or be omitted from these lists entirely. Although the import and export of all CITES-listed wildlife requires a permit under MAF Regulation No. 0360, there is no measure prohibiting the possession or sale of CITES-listed species within the country. Similarly, under the Wildlife and Aquatic Law permits are required to possess, trade, use or operate a business using wildlife listed as Category I, II or III, which cover species native to Lao PDR, but there is no requirement for a permit for possession or use of other CITES-listed species. This gap might be mitigated by the requirement under the Wildlife and Aquatic Law for all use of wildlife to comply with CITES (Arts. 34, 50); however, this measure is not specific enough to guide enforcement.

Missing protection for parts and products. The Wildlife and Aquatic Law includes protection for wildlife parts in some measures (Art. 42) but not others (Art. 71). Similarly, MAF Regulation No. 0360 (2003) omits wildlife parts from its measures to regulate import and export, although it mentions wild animal parts in its definition of “possession.”

A loophole. The provision under Article 40 of the Wildlife and Aquatic Law that allows “managed” wildlife of the first generation bred in captivity and “prohibited” wildlife of the second generation bred in captivity to be traded creates a loophole for trade in protected species, particularly as Lao PDR lacks good controls on determining whether or not specimens have been captive bred (DLA Piper, 2015). Wild caught specimens could be passed off as captive bred, and it seems that this does in fact occur with some species (EIA, 2015; Fuller, 2013).

Low penalties. The Wildlife and Aquatic Law imposes fines for wildlife crimes of only double the damage caused, although these can be increased for repeat offences, while non-criminal offences that cause under LAK200,000 (USD24) of damage may be sanctioned by only a warning and “education.” The highest relevant penalties under the Customs Law are fines of only three times the duty owed plus payment of duty. Given the high potential profits of some wildlife crime, these ratios are not sufficient to function as a deterrent. Similarly, although the maximum custodial penalty for criminal offences under the Wildlife and Aquatic Law is five years, the minimum in all cases is only three months, which means that even serious wildlife crimes could be penalised lightly. Even the five year maximum sentence may not be sufficient to act as a deterrent for more lucrative wildlife crimes.

Although the Wildlife and Aquatic Law provides maximum and minimum sentences, the range (three months to five years for most offences) for these is too great, especially considering that the Law includes no guidelines on how to decide where penalties should fall within this range. As a result, serious violations could potentially be penalised quite lightly. Similarly, Article 92 of the Customs Law states that individuals and legal entities may be penalised by education, warning, compensation for damages or criminal punishment, but does not specify the conditions under which these types of punishment may be imposed or their severity other than the vague caveat that they depend on the seriousness of the violation.

The Wildlife and Aquatic Law bases fines on the amount of damage caused, which, while helpful for restoring damages, may not be enough to function as a deterrent for offences for which the potential rewards are high. Furthermore, it is not clear how penalties for non-criminal offences that do not directly damage wildlife or their habitat, such as obstructing officials in performing their duties, will be calculated.

Missing provision of enforcement powers. Of the legislation considered here, only the Customs Law provides powers of investigation, search, seizure and arrest for enforcement personnel.

Lack of clarity regarding jurisdiction. The Wildlife and Aquatic Law, like some other primary legislation in Lao PDR such as the Penal Law, does not specify a particular government department or ministry that is responsible for implementation. This may result in a lack of ownership of controls provided in the law and contribute to enforcement failures.

Unsystematic and/or overlapping legislation. The import and export of wildlife is covered by the Wildlife and Aquatic Law as well as two MAF regulations (No. 0076 and No. 0360). Each of these promulgates similar, but not identical, lists of protected species, which complicates determination of the regulations and species coverage and could lead to confusion in enforcement.

Difficulty in identifying regulations. Instead of specifying which particular laws and regulations are repealed by new legislation, most laws and regulations in Lao PDR include a general repealing clause to the effect that conflicting measures in other laws and regulations are superseded by the new measures. This lack of detail makes it difficult to determine which laws are still in force.

Malaysia

Malaysia is a Party to a relatively large number of international treaties related to marine wildlife protection, including CITES, CBD and UNCLOS, participates in several regional conservation initiatives, and is a member of the IOTC (see Table 11). Malaysia has not signed CMS, UNFSA or the FAO Agreement on Port State Measures. Like all the ASEAN countries, Malaysia is a member of the UN and the FAO and should therefore abide by the non-binding measures provided by UN General Assembly Resolutions and FAO IPOAs and guidelines.

Table 11: International treaties and agreements signed by Malaysia

Convention/Agreement	Signed	Ratified/ acceded	Remarks
CITES	1977	1978	
CBD	1992	1994	
Ramsar Convention		1995	
UNCLOS	1982	1996	Declaration made on ratification (Anon., 2013a)
Conservation of Resources of the High Seas		1960	
IOSEA Marine Turtle MoU	2011	2011	Not legally binding
ASEAN MoU	1997		
TIHPA MoU	1996		
SSME MoU	2004	2006	
International Coral Reef Initiative			Not legally binding
CTI-CFF	2009		Not legally binding
IOTC CMMs		1998	

Malaysia's wildlife protection legislation has been assessed by the CITES national legislation project as Category 1, i.e. as generally meeting requirements to implement CITES (CITES Secretariat, 2015b). DLA Piper (2014) concludes that the legislation is "in general terms, comprehensive," and that "The range of offences enables enforcement officers to target all stages of the illegal trade in wildlife." The review points to enforcement as the main issue facing Malaysian wildlife protection efforts. On the other hand, many of the measures to protect wildlife within Malaysia do not apply to marine species, and the mixture of federal and state legislation to protect wildlife can create gaps, inconsistencies and overlap.

Strengths of Malaysia's marine wildlife protection legislation

Protected status for all CITES-listed species. Although marine species are not covered by the federal Wildlife Protection Act (2010), the International Trade in Endangered Species Act lists CITES-listed species on its Schedules and therefore protects all CITES-listed species in relation to international trade, as long as the Schedules are kept updated. Sabah's Wildlife Conservation Enactment and Sarawak's Wildlife Protection Ordinance grant protected status to all CITES-listed species.

Coverage for parts and products. The definition of “animals” under the International Trade in Endangered Species Act includes any “readily recognisable part or derivative” of an animal and any item labelled as such. Although the term “readily recognisable” might suggest that only immediately identifiable animal parts are covered, the inclusion in the definition of this term of chemical compounds derived from animals suggests that items that require testing in order to be identified are included. Sarawak’s Wildlife Protection Ordinance also includes recognisable parts and derivatives in its definition of “animal,” while under Sabah’s Wildlife Conservation Enactment, offences involving possession or trade in protected animals apply to activities involving their parts or products.

Detailed list of prohibited activities. The International Trade in Endangered Species Act prohibits import, export, transit, and introduction from the sea of scheduled species without a licence, and the Customs Act extends similar requirements to all wildlife species. The Fisheries Act prohibits fishing without a licence, possession of fish obtained illegally, and fishing within marine parks. Sabah’s Wildlife Conservation Enactment and Sarawak’s Wildlife Protection Ordinance prohibit and penalise a comprehensive list of wildlife offences in these states, including killing, hunting, collecting, harming, trading and possessing protected species, and, along with the Parks Enactment and National Parks and Nature Reserves Ordinance, provide extra protection to wildlife, including non-protected species, within parks.

Prohibition of destructive fishing methods. The Fisheries Act, the Animal Welfare Act and Sabah’s Wildlife Conservation Enactment prohibit fishing with electricity, explosives or poisons.

Requirements to mitigate by-catch. The Fisheries Act requires live aquatic mammals and turtles that have been caught accidentally to be released and dead specimens to be reported. The Fisheries (Control of Endangered Species of Fish) Regulation (1999) requires the same measures to be taken for Whale Shark and some species of clam.

Specification of closed areas. Under the Fisheries Act, it is prohibited to fish in marine parks, and prohibited areas are established by several pieces of subsidiary legislation.

Requirements for licences. The International Trade in Endangered Species Act requires permits and CITES documentation for import, export, transit and introduction from the sea of scheduled species, while the Customs Act requires permits for these activities regarding all animals and their products. Under the Fisheries Act, licences to fish are required by local and foreign vessels. Sabah and Sarawak require licences for hunting and access to biological resources. Kedah and Terengganu require licences for the collection of turtles and their eggs.

Requirements for vessel registration and logbooks. The Fisheries Act requires the DoF to maintain a registry of licences and permits. The Fisheries (Maritime) (Licensing of Local Fishing Vessel) Regulations requires the recording of catch data if it is intended for export.

Ex situ conservation measures. The International Trade in Endangered Species Act allows the MA to order confiscated specimens to be returned to their home countries (although it does not make this a requirement) and has subsidiary regulations governing rescue centres.

Prevention of mistreatment of wildlife in trade. The federal Animal Welfare Act, which may technically apply to marine wildlife, and Sabah’s Wildlife Regulations include requirements to protect animals in transit and captivity from being mistreated. Sarawak’s Wildlife Protection Ordinance prohibits harming wildlife or failing to care adequately for wildlife in one’s care.

Strong penalties for serious offences. Under the International Trade in Endangered Species Act, the maximum prison term is 10 years for failing to comply with conditions on licences, while most maximum prison sentences for serious offences are seven years. Fines for individuals for importing or exporting scheduled wildlife without a permit may be MYR100,000 (USD22,614) per specimen, with a total maximum of one million MYR(USD226,143). Under Sabah’s Wildlife Conservation Enactment, maximum prison terms are five years and maximum fines around USD60,000; under the Parks Enactment, they are seven years and MYR750,000 (USD169,607). (On the other hand, in Sarawak penalties for wildlife offences are generally low; see weaknesses, below.)

Specification of both maximum and minimum sentences under some legislation. Most of the legislation reviewed for this report specifies maximum penalties only, but minimum penalties are provided for some offences under Sabah's Wildlife Conservation Enactment, and minimum fines are specified in the Customs Act and the Animal Welfare Act (minimum prison sentences for repeat offences are also specified in the latter). Providing a range of sentences communicates expectations regarding sentencing to judges and may be particularly useful in countries where wildlife crimes are seen as a low priority.

Increased penalties under aggravating conditions. Under the Animal Welfare Act, Sabah's Wildlife Conservation Enactment and Parks Enactment, and Sarawak's Wildlife Protection Ordinance, penalties are doubled for second and subsequent offences. The Animal Welfare Act also imposes a minimum prison sentence of three months for repeat offences. Under the Wildlife Conservation Enactment, use of a firearm in an offence results in doubled penalties, as does committing an offence with more than two accomplices. The latter measure targets organised crime.

Higher penalties for offenders with more to gain. For offences involving foreign fishing vessels, the Fisheries Act provides higher fines for the master and owner than for the crew, and makes them liable for offences committed by crew.

Penalisation of accomplices. Most of the Malaysian legislation reviewed for this report provides the same penalties for aiding and abetting offences as it does for committing the offence. This makes it easier to secure prosecutions for associates of convicted offenders, which may include more senior members of organised groups. Managers of corporations are responsible for offences committed by the corporations under most legislation in Malaysia.

Low burden of proof for some offences. Several pieces of legislation require a low burden of proof for some offences. Possession is considered prima facie evidence of guilt for several offences under the Fisheries Act, the Customs Act, Sabah's Wildlife Conservation Enactment, Sarawak's Wildlife Protection Ordinance, Kedah's Turtles Enactment and Terengganu's Turtles Enactment.

Incentives for information and arrests. The International Trade in Endangered Species Act, the Customs Act and Sarawak's Wildlife Protection Ordinance allow rewards to be paid for information leading to arrests or seizures.

Clear indication of responsibilities for implementation. All the legislation considered for this review states which ministry, department or other body is in charge of implementation.

Weaknesses of Malaysia's marine wildlife protection legislation

Some laws too general and lacking detail. The National Parks Act provides only a basic framework for the establishment and management of parks by the states and does not provide offences and penalties within National Parks. We found subsidiary regulations in only four states (Johor, Perak, Selangor and Terengganu), and these are relatively brief. The Fisheries Act and its implementing regulations, while prohibiting some activities or controlling them through licensing, do not provide detailed requirements on permitted equipment, by-catch mitigation, prohibited areas, closed seasons or other issues that are useful for protecting marine wildlife.

Excessive discretion. Under the International Trade in Endangered Species Act, the Fisheries Act, and Sabah's Wildlife Conservation Enactment, the minister or director responsible for implementation of the legislation may exempt anyone and/or any species from any or all of the provisions of the legislation. The likelihood of these measures being used to insulate offenders is reduced by requirements to consult with the MA before doing so and publish exemptions (International Trade in Endangered Species Act, Wildlife Conservation Enactment), or make exemptions only for purposes of research, training and proper fisheries conservation and management (Fisheries Act). However, the criterion of proper fisheries conservation and management is open to broad interpretation and could be abused.

The International Trade in Endangered Species allows the MA to return specimens, equipment and evidence to the person from whom they were seized without specifying conditions for this return.

Lack of protection for some species. The most significant gap in coverage is the omission of all marine species from Malaysia's main federal wildlife protection legislation, the Wildlife Protection Act (2010). As a result, outside Sabah and Sarawak the hunting and collection of marine species is controlled mainly through the Fisheries Act, which excludes turtles from its definition of fish and has few measures relating to turtles or endangered species in general.

The Fisheries Act does prohibit fishing for turtles (and aquatic mammals) outside state waters. Most states have adopted the Fisheries Act, and these measures therefore also apply in their waters; however, Sabah, Sarawak, Johor, Pahang and Perak have not passed the Fisheries Act into law. Sabah and Sarawak include turtles in their wildlife protection legislation, but there are few measures to manage and conserve turtles elsewhere in Malaysia.

Depending on how quickly the Third Schedule of the International Trade in Endangered Species Act is updated following new CITES listings, there could be a time lag between the addition of new species to the CITES appendices and their coverage by this law.

The few species considered in this report that are not listed on CITES (sea cucumbers, some species of mobulid rays⁵⁸ and sharks) are not covered by the International Trade in Endangered Species Act; however, like all animals, specimens for these species require licences for import and export under the Customs Act. These species are also not covered by Sabah's Wildlife Conservation Enactment and Sarawak's Wildlife Protection Ordinance.

Some harmful activities permitted. Although the Fisheries Act prohibits destructive fishing methods such as explosives, electricity and poisons, except for brief regulations in pieces of legislation that may not be in force (the Fisheries (Prohibition of Methods of Fishing) Regulations (1980) and the Fisheries (Maritime) (Sarawak) Regulations (1976)), it does not prohibit indiscriminate fishing methods (Ededon et al., 2010d), e.g. types of trawling or use of small mesh nets.

Lack of measures to mitigate by-catch. The Fisheries Act does not require the use of TEDs or specify restrictions on fishing gear beyond the prohibition on destructive fishing methods.

Lack of ex situ measures. Although the International Trade in Endangered Species Act allows the MA to order confiscated specimens to be returned to their home countries and has subsidiary legislation governing rescue centres, it does not make it a requirement to house seized live specimens in a rescue centre, repatriate seized wildlife, or rehabilitate and release wildlife into the wild where possible. These measures are also missing from wildlife protection legislation in Sabah and Sarawak.

Limited control over flagged vessels outside the EEZ. The Fisheries Act does not include measures relating to the comportment of Malaysian fishing vessels or investigation of offences by Malaysian nationals outside Malaysian waters.

Lack of requirements for vessel registration and logbooks. Although the Fisheries Act authorises the collection of data on fisheries as part of licensing requirements, it only makes mandatory the collection of information on crew nationality. The Fisheries (Maritime) (Licensing of Local Fishing Vessel) Regulations requires the recording of catch data but only if the catch is intended for export.

Low penalties for some offences. Under the International Trade in Endangered Species Act, maximum fines for violations involving individual specimens are MYR100,000 (USD22,614); however, the maximum total fine for each offence is only 10 times this amount. This means that, while these penalties may deter small-scale offenders, particularly those moving less valuable products, operations that are large or that traffic very valuable products may not be disincentivised.

⁵⁸ These will be added to CITES Appendix II in 2017.

Some penalties under the Fisheries Act are also low. The penalty for fishing for or killing aquatic mammals or turtles is a fine of MYR5,000 (USD1,131), while fishing without a licence, using poisons, explosives or electricity to fish, and penalties within marine parks, are punishable by a fine of up to MYR20,000 (USD4,523) and imprisonment of up to two years for Malaysians.

Under Sarawak's Wildlife Protection Ordinance the highest prison terms and fines are, respectively, only two years and MYR25,000 (USD5,654) per specimen for hunting, killing, capturing, trading or possessing Totally Protected species. Other offences carry lower penalties, e.g. the same offences for Protected species are punishable by only one year's imprisonment and a fine of the equivalent of MYR10,000 (USD2,261) per specimen, while bearing hunting equipment within a National Park or Nature Reserve carries a fine of MYR5,000 (USD1,131). Another concern about penalties under the Ordinance is that they do not specify a range, meaning that there is no capacity under this law to punish more serious violations, for example violations involving a larger number of specimens, more strongly than minor offences.

Penalties within parks and reserves also tend to be on the low side. In addition to the above examples, Sarawak's National Parks and Nature Reserves Ordinance imposes a maximum penalty of a fine of MYR5,000 (USD1,131) and imprisonment of a year, including for killing and capturing animals or disturbing or taking nests within parks and nature reserves. These are similar to maximum penalties under the Parks Corporation Enactments in Johor and Perak (MYR5,000 (USD1,131) and imprisonment of six months) and Selangor (MYR10,000 (USD2,261) and imprisonment of one year).

Under the Turtle Enactments in Kedah and Terengganu, penalties are also low, with maximum fines of MYR500 (USD113) and MYR3,000 (USD678) for violations on prohibitions on killing or hunting turtles and collecting eggs without a licence or in prohibited areas.

Lastly, penalties under Sarawak's Biodiversity Ordinance are considerably lower than those under Sabah's Biodiversity Ordinance: maximum penalties of MYR20,000 (USD4,532) and imprisonment of three years under the former as opposed to fixed fines of MYR50,000 (USD11,307) and imprisonment of up to five years under the latter.

In addition to the abovementioned low penalties, most Malaysian legislation allows at least some offences to be compounded by payment of a fine of up to 50% of the maximum fine for the offence. Offences under Fisheries Act, except fishing without a licence or in contravention of licensing requirements, may be compounded by a very low fine of at least MYR500 (USD113). Offences under the Customs Act may also be compounded, in some cases for as little as MYR100 (USD23). For more serious crimes the administrative fines under this Act are set at 10 times the value of the goods. The Animal Welfare Act does not specify the amount of administrative fines. This problem is mitigated in some legislation. Only a small number of offences may be compounded under the International Trade in Endangered Species Act and these do not include any major offences. It is fair and reasonable to allow composition of offences that can be committed through oversight, e.g. failing to surrender a cancelled licence. In addition, the International Trade in Endangered Species Act and the Animal Welfare Act require the Public Prosecutor to consent to any composition of offences, which reduces the chances of individual officers compounding offences without good reason or in exchange for personal gain.

Unsystematic and/or overlapping legislation. Potential gaps, inconsistencies and overlap in legislation are created by the omission of marine wildlife from the main federal wildlife protection legislation, the Wildlife Protection Act (2010), and the division of responsibility for management and conservation of marine wildlife and fisheries in Malaysia between federal and state governments. The result of the omission of marine wildlife from the Wildlife Protection Act is that the main legislation to protect marine species is the Fisheries Act, which is focused on managing commercial fisheries rather than on conservation or wildlife protection. The Fisheries Act has not been passed into law in Sabah, Sarawak, Johor, Pahang or Perak, meaning that the protections provided to marine turtles in this Act are not active in these states. However, Kedah, Terengganu, Sabah and Sarawak have additional measures to protect marine turtles within their jurisdiction.

Although there are some inconsistencies in penalties under the International Trade in Endangered Species Act and the Customs Act for smuggling offences involving protected wildlife, this problem is mitigated by the fact that the International Trade in Endangered Species Act clearly specifies that in case of conflict its measures prevail. Furthermore, any inconsistencies between state and federal legislation are resolved by the precedence of federal laws over state laws.

Unclear or contradictory measures. Under Section 29 of Sarawak's Wildlife Protection Ordinance, hunting, killing, capturing, offering for sale, importing, exporting or possessing wildlife is punishable by a fine of MYR25,000 (USD5,654) and/or two years' imprisonment for Totally Protected species and MYR10,000 (USD2,261) and/or one year's imprisonment for Protected Species. Under Section 37, the same penalties are applied per specimen, which appears to conflict with Section 29 with regard to possession and to provide a potentially much higher penalty for possessing a wild animal than for hunting, killing, capturing, offering for sale, importing or exporting wildlife, even though the latter offences would seem in many cases to be more harmful.

Ambiguities and undefined terms. The International Trade in Endangered Species Act, the Fisheries Act, and the Parks Enactments of Johor, Perak and Selangor allow officials, at their discretion, to return seized specimens, vehicles, equipment or evidence to their owner or the person from whom they were confiscated. The legislation requires security to be furnished and penalises failure to return the item(s) when requested, but whereas under the Fisheries Act the security must be at least market value of the returned item, the International Trade in Endangered Species and the Parks Enactments only state that "sufficient security" must be provided to ensure the return of the item. This measure leaves considerable room for subjective interpretation and could result in items being released to suspects at less than their market value and potentially in suspects absconding with evidence at a cost of only the security.

Myanmar

Myanmar is a Party to a number of international conventions, treaties and agreements, including CITES, CBD and UNCLOS (see Table 12). With the Philippines and Thailand, Myanmar is one of only three ASEAN countries to have signed the Dugong MoU and, with Indonesia and Thailand, one of only three that are Parties to the FAO Agreement on Port State Measures. Myanmar has not signed CMS or UNFSA or agreements committing the country to be bound by regulations of the WPCFC, IOTC or CCSBT. Like all the ASEAN countries, Myanmar is a member of the UN and the FAO and should therefore abide by the non-binding measures provided by UN General Assembly Resolutions and FAO IPOAs and guidelines.

Table 12: International treaties and agreements signed by Myanmar

Convention/Agreement	Signed	Ratified/ acceded	Remarks
CITES		1997	
CBD	1992	1994	Became a Party in 1995
Ramsar Convention		2005	
Dugong MoU	2007		Not legally binding
UNCLOS	1982	1996	
FAO Compliance Agreement		1994	Entered into force 2003
FAO Agreement on Port State Measures		2010	
IOSEA Marine Turtle MoU	2001	2001	Not legally binding
ASEAN MoU	1997		

The CITES national legislation project has assessed Myanmar's legislation as Category 3, meaning that it generally does not meet the requirements for implementing CITES (CITES Secretariat, 2015b). Other legislative reviews also note shortcomings with Myanmar wildlife and fisheries legislation (DLA Piper, 2015; Gutter, 2001). In general, laws are too brief and general, and several crucial laws, including the Protection of Wildlife and Conservation of Natural Areas Law and the Myanmar Marine Fisheries Law, allow considerable latitude to officials in implementing, and in some cases overturning, their provisions. Despite its shortcomings, Myanmar's legislation includes several satisfactory aspects with regard to the protection of marine wildlife, which are also noted below.

Strengths of Myanmar's marine wildlife protection legislation

Protected status for all CITES-listed marine species within Myanmar. According to the FAO (2006), the Notification for Control of Endangered Fish Species makes it an offence to capture, possess, sell, buy or export CITES-listed species. However, CITES-listed species originating outside Myanmar may not be protected (see weaknesses, below).

Prohibition of destructive fishing methods. The 2002 Rules, the Marine Fisheries Law and the Law Relating to the Fishing Rights of Foreign Fishing Vessels all prohibit the use of poisons and explosives for collecting natural resources. According to the FAO (2006) and SEAFDEC (2007), other types of destructive or indiscriminate equipment are also prohibited under Myanmar law but we were unable to verify this.

Requirements to mitigate by-catch. According to the FAO (2006), the Notification for Control of Endangered Fish Species requires the immediate release of CITES-listed species caught accidentally. Holmes et al. (2014) claim that Notification No. 2 for Sea Turtle Conservation requires the use of TEDs and prohibits the jettisoning of damaged gear. We were unable to view these regulations in order to verify these claims.

Specification of closed seasons and areas. Several notifications create closed seasons and areas. Holmes et al. (2014) note that at least in some cases a large number of exemptions are granted to these regulations, rendering them ineffective; nonetheless, the legislation does provide this measure.

Requirements for licences. The Marine Fisheries Law and the Law Relating to the Fishing Rights of Foreign Fishing Vessels require licences for fisheries activities in Myanmar waters, while the Protection of Wildlife and Conservation of Natural Areas Law requires a permit to collect protected species of wildlife for research purposes.

Requirements for vessel registration and logbooks. The Marine Fisheries Law and the Law Relating to the Fishing Rights of Foreign Fishing Vessels require the use of logbooks and registration of vessels with the DoF.

Potential to prevent mistreatment of wildlife in trade. The Animal Health and Development Law, while targeted to livestock, prohibits the mistreatment of mammals, birds and bees in captivity in general and may therefore extend to prohibiting the mistreatment of captured or captive-bred wildlife of these types.

Strong maximum custodial sentences. Custodial sentences for some offences involving marine wildlife extend to 10 years under the Marine Fisheries Law, the Law Relating to the Fishing Rights of Foreign Vessels and the Myanmar Pearl Law and to seven years under the Protection of Wildlife and Conservation of Natural Areas Law.

Specification of both maximum and minimum sentences. The Law Relating to the Fishing Rights of Foreign Vessels specifies maximum and minimum sentences (most of the remaining regulations viewed for this report specify maximum sentences only). Providing a range of sentences communicates expectations regarding sentencing to judges and may be particularly useful in countries where wildlife crimes are seen as a low priority or high levels of corruption increase the risk of offenders being able to secure more lenient sentences (or both).

Higher penalties for ships' masters. For many offences, the Law Relating to the Fishing Rights of Foreign Vessels provides higher penalties for ships' masters than for crew or only penalises ships' masters. This helps target penalties to offenders in positions of power or who are more likely to benefit from wildlife crime.

Penalisation of accomplices. The Marine Fisheries Law, the Law Relating to the Fishing Rights of Foreign Fishing Vessels and the Export and Import Law provide the same penalties for abetting offences as for committing offences. This makes it easier to secure prosecutions for associates of convicted offenders, which may include more senior members of organised groups.

Explicit criminalisation of involvement of officials in wildlife crime. The Marine Fisheries Law and the Law Relating to the Fishing Rights of Foreign Fishing Vessels penalise officials who conceal evidence or offenders, and the Forest Law penalises staff who accept bribes and conspire in removing forest produce, including wildlife found in mangrove forests.

Explicit criminalisation of failure to investigate wildlife offences. The Marine Fisheries Law and the Law Relating to the Fishing Rights of Foreign Fishing Vessels penalise officials who conceal evidence or offenders without taking action.

Low burden of proof for some offences. The Protection of Wildlife and Conservation of Natural Areas Law places the burden of proof on the accused. Under the Marine Fisheries Law and the Law Relating to the Fishing Rights of Foreign Fishing Vessels, failing to stow equipment in the prescribed manner will be viewed as evidence of fishing.

Strong enforcement powers. The Marine Fisheries Law and the Law Relating to the Fishing Rights of Foreign Fishing Vessels provide adequate powers for inspectors, which are described in reasonable detail. The Protection of Wildlife and Conservation of Natural Areas Law and its implementing Rules also provide detailed specification of powers which are generally fairly strong, although they are weakened by the requirement for a warrant from a senior judge and the presence of two witnesses in order to conduct a search of private property.

Weaknesses of Myanmar's marine wildlife protection legislation

Laws too general and lacking detail. Myanmar laws protecting wildlife tend to be brief and general, leaving the details of implementation to lower-level regulations or the discretion of ministers and director generals of the relevant departments (see also next point). For example, the Protection of Wildlife and Conservation of Natural Areas Law lists categories of natural areas but does not define these areas, while the regulations this Law provides for the Committee for Protection of Wildlife and Natural Areas only state that the Committee should guide implementation of the Law, provide suggestions to the Government on conservation policies, and facilitate cooperation with other countries. Under the Marine Fisheries Law, conditions and fees for licences are left up to the Director General of the DoF. The Export and Import Law is particularly brief and simply authorises the Ministry of Commerce to determine lists of prohibited and restricted goods, leaving the details to the regulations. This lack of specificity is particularly problematic since the implementing regulations for the laws, which are made internally by the ministries, are very difficult to obtain.

Excessive discretion for officials. The Protection of Wildlife and Conservation of Natural Areas Law provides the Director General and Minister of Forestry with a great deal of discretion: even the killing of Completely Protected animals is not prohibited if there is ministerial approval. According to this Law, the Director General may allow scientific and environmental research except in "totally prohibited areas," which are not defined. The Director General and the Minister are authorised to determine which species of wildlife belong to the three categories of protected species, what measures should be taken to preserve them, and conditions for granting permits for hunting wild animals and raising wild animals on a commercial basis.

The Marine Fisheries Law and the Law Relating to the Fishing Rights of Foreign Fishing Vessels allow the Director General of the DoF to overrule penalties imposed by courts to return confiscated vessels and equipment and allow resumption of fishing. Gutter (2001) claims that this measure "was drafted to protect the interests of foreign companies working in joint venture with the military junta."

The Marine Fisheries Law and the Law Relating to the Fishing Rights of Foreign Fishing Vessels leave it to the Director General of the DoF to determine conditions and fees for licences, amend conditions of licences and revoke, suspend or cancel licences. The Marine Fisheries Law allows the Director General to delegate his/her powers under this law to any officer of the DoF (s. 27).

Exemptions. The Protection of Wildlife and Conservation of Natural Areas Law includes exemptions to the prohibition on possessing a Protected wild animal or its part if it is possessed as a souvenir or part of traditional dress and, in the case of Normally and Seasonally Protected wild animals, for use as a drug. Given the use of wildlife in Southeast Asia, including seahorses and rays, in traditional medicine, this is a significant loophole. This Law also permits the raising of Normally or Seasonally Protected wild animals commercially, as a hobby, or for “traditional custom.” As DLA Piper (2015) notes, this term is not defined and could include use in traditional medicine.

Limited protection for species originating outside the country. DLA Piper (2015) claims that Myanmar’s legislation only prohibits trade in wildlife species derived in Myanmar and fails to protect wildlife sourced elsewhere and brought into the country. The Protection of Wildlife and Conservation of Natural Areas Law defines “wildlife” and “wild animal” to include only wildlife in its natural habitat (s. 2a–b) while, according to the FAO (2006) summary of the Notification for Control of Endangered Fish Species (which we were not able to obtain) this Notification prohibits the capture, possession, sale, purchase or export of endangered species but does not mention a prohibition on imports. However, the lists of prohibited and restricted goods created under the Export and Import Law (which we were also unable to view) may include marine wildlife.

Limited controls on flagged vessels outside the EEZ. The Myanmar Marine Fisheries Law contains no provision requiring vessels to obtain licences to fish outside Myanmar’s EEZ or cooperate with international laws or the laws of other states while doing so.

Lack of detailed requirements for vessel registration and logbooks. The Marine Fisheries Law and the Law Relating to the Fishing Rights of Foreign Fishing Vessels require the use of logbooks and registration of vessels with the DoF. However, the laws do not provide detailed instructions on what records are to be kept in the logbooks, how often logbooks should be reported to the DoF, or how or whether data on vessel registration should be maintained or disseminated by the DoF. In particular, the Marine Fisheries Law does not specify that detailed catch data should be kept in logbooks, although the Law Relating to the Fishing Rights of Foreign Fishing Vessels requires ships’ masters to report to the DoF on “goods and commodities” held on board. The DoF is not required by this legislation to maintain a register of ships entitled to fly the Myanmar flag or communicate information on vessel registration or fishing data to the FAO or RFMOs. It is possible that some of these measures are contained in regulations under the Myanmar Fishing Law that we have not viewed.

Low fines. Under Myanmar law, fines for wildlife crimes are low and in almost all cases may be imposed instead of custodial sentences. The highest maximum fine under the Protection of Wildlife and Conservation of Natural Areas Law is MMK50,000 (USD37) for killing, possessing or selling Completely Protected wildlife or their parts. For some offences, including killing or wounding a Seasonally Protected wild animal, lower transactional fines may be imposed instead of penalties determined by a court. Fines under the Marine Fisheries Law are higher (up to MMK500 000 (USD375)), but still not high enough to constitute an effective deterrent for more lucrative crimes. The Export and Import Law does not specify the amounts of fines. All the laws viewed for this report except the Law Relating to the Fishing Rights of Foreign Fishing Vessels provide maximum penalties only and no minimum penalties; this applies to custodial sentences as well as fines.

Ambiguities and undefined terms. The Marine Fisheries Law and the Law Relating to the Fishing Rights of Foreign Fishing Vessels allow the Director General of the DoF to return confiscated vessels and equipment and allow resumption of fishing activities in exchange for “sufficient security” or a “reasonable fine,” but do not define these terms.

The *Protection of Wildlife and Conservation of Natural Areas Law* and the associated 2002 Rules do not define “traditional custom,” for which there are several exceptions to prohibitions and requirements provided in this legislation. This could therefore create exemptions for the use of wild animals for traditional medicine (DLA Piper, 2015) or other purposes.

The *Protection of Wildlife and Conservation of Natural Areas Law* does not define “totally prohibited area.” The Director General of the Forest Department and the Minister of Forestry may allow scientific and environmental research and recreational activities anywhere except these areas, and this lack of definition removes a potential limitation on the discretion of these individuals.

A counterproductive measure. The Protection of Wildlife and Conservation of Natural Areas Law allows a department that has been permitted to capture a Completely Protected animal for research purposes to possess part of that animal for research or as a souvenir. This measure provides an incentive to request permission to capture a Completely Protected animal ostensibly for research purposes when the real purpose is to obtain a souvenir, which might subsequently be illegally traded.

A conflict with CITES. DLA Piper (2015) points out that under the 2002 Rules, officials may sell confiscated wildlife and trophies. This could create a means for laundering specimens and/or an incentive to officials to involve themselves in wildlife trade.

Difficulty in obtaining regulations. It was extremely difficult to obtain the texts of regulations beneath the level of Laws, and it would have been necessary to submit personal information to the ministries in order to do so. The difficulty in obtaining legislation may be a problem not only for wildlife NGOs, but also for enforcement agencies and prosecutors.

The Philippines

The Philippines shows considerable commitment to adopting international agreements. This country has signed most of the agreements considered in this report, but not the FAO Compliance Agreement, the FAO Agreement on Port State Measures, or the International Convention for the Regulation of Whaling. The Philippines is the only ASEAN signatory to CMS, the only ASEAN country to have signed the MoU on sharks, the only ASEAN country apart from Indonesia to have signed UNFSA and one of only three ASEAN countries (with Myanmar and Thailand) to have signed the Dugong MoU. Although the Philippines has not signed the FAO Compliance Agreement, legally binding measures under the WCPFC Convention require the Philippines to implement “as appropriate” the FAO IPOA on sharks and guidelines on turtles that were created under the Agreement. Like all the ASEAN countries, the Philippines is a member of the UN and the FAO and should therefore abide by the non-binding measures provided by UN General Assembly Resolutions and FAO IPOAs and guidelines.

Table 13: International treaties and agreements signed by the Philippines

Convention/Agreement	Signed	Ratified/ acceded	Remarks
CITES		1981	
CBD	1992	1993	Became a Party in 1994
Ramsar Convention		1994	
CMS		1994	
Dugong MoU	2008		Not legally binding
Sharks MoU	2010		Not legally binding
UNCLOS	1982	1984	Entered into force in 1994 Declaration made on signing and reiterated on ratification (Anon., 2013a)
UNFSA	1996	2014	
IOSEA Marine Turtle MoU	2001	2001	Not legally binding
ASEAN MoU	1997		
TIHPA MoU	1996		
SSME MoU	2004	2006	
CTI-CFF	2009		Not legally binding
International Coral Reef Initiative	1994		Not legally binding
WCPFC Convention	2000	2005	
IOTC CMMs		2004	
Convention on Southern Bluefin Tuna			Cooperating non-member since 2004

The Philippines' wildlife protection legislation has been assessed as Category 2 by the CITES national legislation project, meaning that it is not adequate to meet all CITES requirements (CITES Secretariat, 2015b). A recent legislative review by DLA Piper (2014) claims that enforcement of wildlife regulations in the Philippines is also weak. There is considerable variation in the adequacy of the laws considered for this report. The Fisheries Code, particularly with its new amendments, includes clear, comprehensive provisions and strong penalties for violations relating to fisheries activities, and the Wildlife Resources Conservation and Protection Act prohibits and penalises a large range of activities related to marine wildlife, often with strong penalties. By contrast, the NIPAS Act is very broad and vague. As a whole, the legislative framework in the Philippines includes loopholes that could allow the collection and trade of wildlife, particularly in light of the discretion the laws grant senior officials in determining permitted activities.

Strengths of the Philippines' marine wildlife protection legislation

Protected status for all CITES-listed species. All CITES-listed species are protected under the Fisheries Code and the Wildlife Resources Conservation and Protection Act through the species lists promulgated by DENR AO No. 15 (2004) and FAO No. 208 (2001).

Detailed lists of prohibited activities. The Fisheries Code and the Wildlife Resources Conservation and Protection Act provide extensive lists of prohibited activities related to the protection of marine wildlife and their ecosystems, as well as penalties for these activities.

Prohibit destructive fishing methods. The Fisheries Code prohibits fishing with explosives, electricity, poisons, mesh sizes smaller than those specified by fisheries regulations, and any methods that damage reefs or other marine habitat.

Specification of closed seasons and areas. The Fisheries Code authorises the DA and LGUs to declare closed seasons and areas and requires the DA to do so where necessary in order to protect endangered species. The Code requires at least 15% of coastal areas in each municipality to be reserved as fish sanctuaries.

Requirements for licences. The Fisheries Code requires licences for all fisheries activities in Philippine waters.

Requirements for vessel registration and logbooks. The Fisheries Code and its 1993 implementing rules (DA AO No. 3) include detailed requirements for logbooks and require BFAR to maintain a record of vessels licenced to fish. However, there are no requirements for BFAR to report these records to RFMOs, or for registration information to include flagging and compliance histories.

Ex situ conservation measures. The Wildlife Resources Conservation and Protection Act requires confiscated wildlife to be housed in the nearest wildlife rescue centre, while FAO No. 233 (2010) requires the return of confiscated wildlife to its original habitat where possible. There is no mention of returning non-native wildlife to its country of origin as required by CITES.

Strong penalties for some offences involving marine wildlife. Some wildlife crimes carry very strong custodial sentences and high fines in the Philippines. The Fisheries Code and the TRNP Act require prison sentences of 12–20 years for collecting or possessing CITES-listed wildlife, and these laws, as well as the Wildlife Resources Conservation and Protection Act and the NIPAS Act, allow sentences of more than four years for a number of other kinds of wildlife crime. Such crimes include destruction of habitat (NIPAS Act), trading critically endangered wildlife (Wildlife Resources Conservation and Protection Act) and commercial fishing in an MPA or fish sanctuary (Fisheries Code). Under the Fisheries Code and the TRNP Act, some violations, including collecting or possessing critically endangered wildlife, fishing without a licence, or failing to meet reporting requirements, carry fines equivalent to tens or hundreds of thousands of US dollars.

Specification of both maximum and minimum sentences. Legislation in the Philippines provides both maximum and minimum sentences, which communicates expectations regarding sentencing to judges and may be particularly useful in countries where wildlife crimes are seen as a low priority or high levels of corruption increase the risk of offenders securing more lenient sentences (or both).

Higher penalties for offenders with more to gain. Under the NIPAS Act, managers of corporations are responsible for the actions of their employees, while under the Fisheries Code penalties for many offences are higher for large-scale and commercial fishing than for subsistence or municipal fishing. Such offences include fishing with explosives, electricity or poisons, fishing in marine protected areas or closed seasons, fishing without a permit or failing to comply with reporting requirements. For some offences, penalties under the Fisheries Code are higher for, or only imposed on, the owner, captain, three highest officers of the vessel, recruiter and/or organiser of crew. Such offences include collecting coral or damaging coral reefs, fishing without a permit and failing to comply with reporting measures. These provisions mean that those who benefit the most from wildlife crime can be penalised more strongly than small-scale or subsistence-level offenders.

Automatic increases to fines. Fines under the Wildlife Resources Conservation and Protection Act, Fisheries Code and FAOs are increased by 10% every three years in order to maintain deterrent effectiveness.

Explicit prohibition of failure to investigate wildlife offences. The Fisheries Code allows civilians to sue officials for neglect of duty.

Burden of proof on the accused for some crimes. The Fisheries Code and the TRNP Act allow a low burden of proof for some crimes. Specifically, the discovery of a fishing vessel in a prohibited area or of prohibited equipment such as fine mesh nets, explosives or noxious substances is regarded as grounds for assumption of guilt.

Weaknesses of the Philippines marine wildlife protection legislation

Some laws lack detail. The NIPAS Act does not regulate activity in protected areas, leaving this to the management plans that it requires for each area. The report on the Act commissioned by DENR notes that in 2011 only 29 of 112 declared protected areas in the Philippines had management plans (Lim and Salzer, 2011).

The NIPAS Act defines protected areas as areas that include “normal lifestyle and economic activity” (s. 4.9). This is a very broad term and could be interpreted to include commercial harvesting, even where this undermines principles of biodiversity conservation (Lim and Salzer, 2011).

The descriptions of activities prohibited by the NIPAS Act are very vague, to the extent that a review commissioned by DENR suggests that it may be unconstitutional in some respects (Lim and Salzer, 2011). According to this review, the list of prohibitions “lacks comprehensible standards which allow the people to necessarily guess at its meaning,” violating due process by not giving fair notice of the conduct that is to be avoided and allowing law enforcers “unbridled discretion” in carrying out its provisions. For example, the law prohibits dumping waste that is detrimental to the area and destroying objects that are beautiful or culturally interesting. Particularly in the second case, determining which activities meet these criteria is a subjective matter.

The Strategic Plan for Palawan Act requires the establishment of “multiple use zones” for protected areas that also serve as buffer zones. Given that fishing is permitted in these zones and that no details are provided on how the zones are to be managed, it is unclear how activities in these areas should be regulated in order to serve as buffers for the protected areas.

Excessive discretion for officials. Some of the legislation reviewed for this report allows considerable discretion in granting permits or applying penalties. The NIPAS Act does not provide guidelines or criteria for granting permits for activities in protected areas, instead leaving this largely up to DENR, prompting Lim and Salzer (2011) to describe the Act as possibly “an undue delegation of powers.” This Act also allows DENR discretion in determining administrative fines. Section 6 of the Wildlife Resources Conservation and Protection Act also allows considerable discretion to the Secretary of DENR in determining which wildlife-related activities are to be permitted.

Lack of effective prohibition of collecting protected species. Philippines wildlife and fisheries legislation allows the taking of wildlife with a permit, at least under some circumstances. The Fisheries Code allows CITES Appendix II and III species to be taken from the wild for conservation breeding, which can occur simultaneously with commercial breeding, providing a potential loophole for wildlife poachers and traffickers. The list of activities prohibited within national parks by the NIPAS Act is very limited and fails to explicitly prohibit the taking of rare, threatened or endangered species as listed on CITES. The Wildlife Resources Conservation and Protection Act allows the collection of threatened wildlife for scientific research or breeding and of non-threatened wildlife if collection is not considered detrimental to wild populations and habitats.

Lack of measures to mitigate by-catch. The legislation does not include measures to prevent or mitigate by-catch, except in relation to specific species, namely Whale Sharks, manta rays and cetaceans. There is no requirement to use TEDs when fishing.

Low penalties for some offences. Offences involving “other threatened” and non-threatened wildlife are penalised relatively lightly by the Wildlife Resources Conservation and Protection Act. Collecting, hunting or possessing these species is punishable, respectively, by one month, one day to six months in prison and a fine of PHP5,000–50,000 (USD100–1,001) and 10 days to one month in prison and a fine of PHP1000–5000 (USD20–100). Trading, exporting or importing such wildlife is punishable by the same prison terms and a fine of, respectively, PHP500–50,000 (USD10–1,001) or PHP200–20,000 (USD4–400).⁵⁹ No custodial sentences are provided for violations of most FAOs, including FAOs banning the collection and trade of Whale Sharks, manta rays and cetaceans. DLA Piper (2014) states that even where the law allows for strong penalties, in practice penalties weaker than the maximums are often imposed.

Weak enforcement powers. The Wildlife Resources Conservation and Protection Act and Fisheries Code are vague about the powers provided to enforcement personnel. On the other hand, the NIPAS Act empowers all persons deputised by DENR to investigate and search premises and make arrests.

Lack of clarity regarding jurisdiction. A review of the NIPAS Act commissioned by DENR notes that the Act conflicts with the Indigenous Peoples’ Rights Act over whether indigenous peoples have full control over their ancestral lands. This is provided by the Indigenous Peoples’ Rights Act, whereas Section 13 of the NIPAS Act allows DENR to prescribe rules and regulations for governing ancestral lands within protected areas (Lim and Salzer, 2011).

The same review notes that the NIPAS Act is vague about the boundaries of buffer zones, making it unclear where the measures provided in the Act apply (Lim and Salzer, 2011).

The Wildlife Resources Conservation and Protection Act provides that DENR is responsible for issuing permits for hunting wildlife, whereas the NIPAS Act authorises the Protected Area Management Board (PAMB) to do so. Lim and Salzer (2011) claim that in practice PAMB issues a “clearance” which DENR uses as the basis for issuing a permit; nonetheless, the conflict remains in the legislation.

Overlapping legislation. The NIPAS Act, Wildlife Resources Conservation and Protection Act and Fisheries Code prohibit some of the same activities and in some cases apply different penalties for the same offence. This could result in lower penalties being applied even where one law penalises an activity strongly. (The TRNP Act also includes prohibitions on some of the same activities, but this is less of a problem since this Act only applies within a limited area.) Measures providing conflicting penalties include prohibitions on killing, collecting or possessing protected wildlife or other wildlife without a permit, which are included in all four laws, and on trading, transporting, importing and exporting wildlife or, where these activities are allowed with a permit, doing so without a permit, which are included in the Fisheries Code and the Wildlife Resources Conservation and Protection Act. The highest penalties for most offences are provided by the Fisheries Code, which is also the most recent of the above laws. The 2014 amendment to this Code contains a clause repealing all laws, regulations or parts thereof that are inconsistent with the amendment (s. 23), which ought to give this law precedence. However, in practice Philippine law seems to allow flexibility in choosing which law to prosecute crimes under (see next point).

Double jeopardy. Under the Philippines constitution, offenders may not be punished more than once for the same offence (the principle of “double jeopardy”) (Constitution of the Republic of the Philippines, 1987, s. 21, Art. III). In some cases, penalties for the same offence are not harmonised across the legislation, and this may allow offenders to be penalised under the law that provides lower penalties. The TRNP Act seems to circumvent this problem insofar as it specifically provides that an offence can be prosecuted under other laws as well as this Act. However, that would seem to make this aspect of the Act unconstitutional.

⁵⁹ Adjusted for the 10% increase in fines every three years, these fines would now be 60% higher.

In combination with the authorisation of LGUs to create their own laws, the principle of double jeopardy creates a loophole that can be used to protect wildlife criminals from severe punishment. In general, LGUs do not have discretion whether or not to implement or enforce laws enacted by Congress, including laws protecting wildlife. However, in addition to the authority granted to LGUs to implement laws enacted by Congress, the Local Government Code devolves onto LGUs some of the powers of the national government to enforce laws of local importance. In effect, LGUs enjoy local autonomy. As a result, in practice the laws enacted by Congress, including laws relating to the protection of marine wildlife, are implemented at the discretion of LGUs, particularly local executives (mayors). In some instances, a local legislative body passes and enacts an ordinance that punishes the same act as one punished by a law passed by Congress and imposes a lesser penalty (usually a fine and not imprisonment) than that imposed by Congress (D. Cula, *You Legal*, in litt. to A. Ezekiel, July 2015). In the event of a violation, the violator can then negotiate to be charged under the ordinance and not under the law passed by Congress. The application of the laws relating to the protection of endangered species such as marine turtles are vulnerable to abuse of this loophole.

Terrestrial bias (NIPAS Act). The NIPAS Act includes some measures the wording of which entails that they apply only to activities, personnel, or areas that occur on land. The most serious of these is in Section 18, which authorises personnel to enforce the Act in terms that seem to exclude fisheries officials (Lim and Salzer, 2011).

A potentially detrimental measure. Section 35 of the Philippine Fisheries Code includes a measure to promote fishing far out in the Philippines EEZ and beyond, which is intended to relocate fishing away from coastal regions. However, increased offshore fishery activities could conflict with the sustainable management of fisheries resources in these areas.

Singapore

Singapore has a relatively small area of marine waters and participates in relatively few international treaties relating to marine wildlife protection, which, however, include CITES, CBD and UNCLOS (see Table 14). Among the agreements Singapore has not signed are the Ramsar Convention, CMS, UNFSA, the IOSEA Marine Turtle MoU and agreements committing Singapore to regulations made by the WCPFC, IOTC and CCSBT. However, some of these agreements may not be applicable to Singapore. Like all the ASEAN countries, Singapore is a member of the UN and the FAO and should therefore abide by the non-binding measures provided by UN General Assembly Resolutions and FAO IPOAs and guidelines.

Table 14: International treaties and agreements signed by Singapore

Convention/Agreement	Signed	Ratified/ acceded	Remarks
CITES		1986	
CBD	1992	1995	Became a Party in 1996
UNCLOS	1982	1994	
ASEAN MoU	1997		

Singapore's legislation has been assessed by the CITES national legislation project as Category 1, that is, as generally meeting requirements to implement CITES (CITES Secretariat, 2015b). The measures to regulate international trade provided by the Endangered Species Act and the Wild Animals and Birds Act are detailed, clear and generally strong; on the other hand, controls on fisheries activities and marine natural resource protection, which are provided by the Fisheries Act, are less developed, reflecting the small size of Singapore's marine capture fisheries sector (Ha and Tu, 2015).

Strengths of Singapore's marine wildlife protection legislation

Protected status for all CITES-listed species. The Endangered Species Act uses the CITES Appendices as the basis for its lists of species that are controlled for import, export, re-export and introduction from the sea. The Act extends protection to parts and products of these wildlife species and any items labelled as including wildlife parts.

Prohibition of destructive fishing methods. The Fisheries Act prohibits the use of explosives and poisons for fishing and, except with a licence exempting from this provision, all trawl fishing. The Act does not specify prohibit the use of electricity for fishing.

Specification of closed seasons. The Fisheries Act and the Wild Animals and Birds Act empower the Minister of National Development to declare closed seasons. However, neither Act requires the Minister to specify these when necessary to protect wildlife from over-exploitation.

Requirements for licences. Under the Endangered Species Act and the Wild Animals and Birds Act, permits are required for the import, export, re-export, introduction from the sea, killing, taking, possessing, and offering for sale of wildlife. Licences are required for fishing under the Fisheries Act.

Ex situ conservation measures. The Endangered Species Act requires owners of vehicles that have been used to illegally bring wildlife into the country to return wildlife to its point of departure if requested by the Director-General of Agri-food and Veterinary Services.

Prohibition of mistreatment of wildlife in trade. The Animals and Birds Act prohibits animal cruelty, requires animals in captivity to be adequately cared for, and provides penalties for violations. The Act specifies in detail what kinds of activities constitute animal cruelty and adequate care.

Strong fines for some offences. Although custodial penalties for wildlife crime in Singapore are low (see weaknesses, below), fines for some offences are substantial. For example, under the Endangered Species Act offenders may be fined up to SGD50,000 (USD35,018) per specimen of protected wildlife that is illegally imported, exported, re-exported or introduced from the sea. This is an effective deterrent for smuggling of many wildlife species, especially in small numbers. However, we note that the maximum aggregate penalty for this offence of SGD500,000 (USD350,177) may not be sufficient to deter large-scale smuggling.

Increased penalties under aggravating conditions. Under the Animals and Birds Act there are increased penalties for repeat offences.

Higher penalties for offenders with more to gain. The Endangered Species Act, the Fisheries Act and the Parks and Trees Act provide that employers and officers of corporations are responsible for the activities of their subordinates.

Penalisation of accomplices. All the Singaporean legislation reviewed for this report, with the exception of the Parks and Trees Act, requires the application of identical penalties for abetting offences as for committing offences. This makes it easier to secure prosecutions for associates of convicted offenders, which may include more senior members of organised groups.

Burden of proof on the accused. The Wild Animals (Licensing) Order and the Animals and Birds Act place the onus on those in possession of unlicensed animals or birds to establish that they are not the owners. Under the Fisheries Act, possession of explosives, poisons or stunned fish is considered sufficient for a presumption of guilt of having used prohibited destructive fishing methods.

Strong enforcement powers. All the Singaporean legislation reviewed for this report clearly provides strong powers of investigation, search, seizure and arrest.

Weaknesses of Singapore's marine wildlife protection legislation

Fisheries Act lacking detail. While most of the Singapore laws viewed for this report are detailed and specific, the Fisheries Act is short and general. Despite its brevity, the Act succeeds in controlling a large number of fisheries activities; nonetheless, either the Act or implementing regulations could be developed further, particularly with respect to licensing procedures, which should be required to consider conservation issues, by-catch mitigation, and reporting.

Some harmful activities permitted. The list of activities prohibited by the Fisheries Act does not include harming wildlife or ecosystems or fishing with destructive fishing methods other than explosives, poisons, or trawl nets. An exemption to the latter prohibition may in theory be allowed.

Lack of measures to mitigate by-catch. The legislation reviewed for this report includes no measures to mitigate by-catch other than restrictions on types of fishing equipment that may be used.

Limited controls on flagged vessels outside territorial waters. Although the Fisheries Act makes it an offence for Singapore flagged vessels or nationals to violate the Act when fishing outside Singaporean waters, it does not require vessels and nationals that are doing so to cooperate with international laws or the laws of other states.

Lack of ex situ conservation measures. Although the Endangered Species Act authorises the Director-General of Agri-food and Veterinary Services to require confiscated specimens to be returned to the place from which they were brought to Singapore, the Act does not require this measure nor require specimens to be returned to their country of origin. The Act also does not specify that confiscated specimens must be housed in appropriate rescue centres or released into the wild if they originated in Singapore.

Lack of requirements for vessel registration and logbooks. Although the Fisheries Act requires the maintenance of a vessel registry, it does not specify that flagging and compliance history should be recorded and does not require the keeping of logbooks.

Low penalties for some crimes. Custodial sentences for wildlife crimes are low in Singapore, with most punishable by a maximum period of imprisonment of only one or two years under all the legislation viewed for this report. The maximum custodial sentence applicable to any wildlife crime in Singapore is three years under the Animals and Birds Act for a repeat offence of animal cruelty. Fines for some offences are also low, particularly when the high incomes in Singapore are considered or when fines are compared to fines for offences not related to wildlife. For example, under the Wild Animals and Birds Act the maximum fine for killing, taking, keeping or selling wild animals without a licence is SGD1,000 (USD700), the same penalty as for affixing a notice to a wall without permission, spitting in public or making noise that annoys the public (Miscellaneous Offences (Public Order and Nuisance) Act, 1906, revised 1997, Art. 11a, f, 14.1). Furthermore, all the Acts considered for this report allow most offences to be compounded by payment of a fine of up to SGD5,000 (USD3,502) (Endangered Species (Import and Export) Act), SGD500 (USD350) (Wild Animals and Birds Act) or SGD1,000 (USD700) (Animals and Birds Act and Fisheries Act).

All the legislation considered for this report specifies maximum sentences only with no stated minimum to the penalty ranges. However, we are wary of criticising the lack of minimum sentences in Singapore, where low levels of corruption (Transparency International, 2015) mean that the risk of offenders securing lenient sentences through bribery or intimidation is low. Increasing maximum sentences may be sufficient to communicate expectations regarding sentencing to judges and increase the level of priority given to wildlife crime in this country.

One further issue is that under the Endangered Species (Import and Export) Act, fines are calculated based on the number of specimens involved in the offence, up to a maximum amount. As a result, although these fines are likely sufficient to deter trade in relatively small numbers, particularly of less expensive products, they are not sufficient to deter trade in more expensive species or bulk trade. In other words, the penalties are more effective in targeting small-scale traders rather than large-scale, professional criminals or criminal organisations.

Thailand

Thailand has signed a large number of international treaties, including CITES, CBD and UNCLOS, and is a member of several regional conservation initiatives and two RFMOs (see Table 15). Thailand has not signed CMS, UNFSA or the International Convention for the Regulation of Whaling. With Myanmar and the Philippines, Thailand is one of only three ASEAN countries to have signed the Dugong MoU, and with Indonesia and Myanmar one of only three to have signed the FAO Agreement on Port State Measures. Like all the ASEAN countries, Thailand is a member of the UN and the FAO and should therefore abide by the non-binding measures provided by UN General Assembly Resolutions and FAO IPOAs and guidelines.

Table 15: International treaties and agreements signed by Thailand

Convention/Agreement	Signed	Ratified/ acceded	Remarks
CITES		1983	
CBD	1992	2003	Became a Party in 2004
Ramsar Convention		1998	
Dugong MoU	2011		Not legally binding
UNCLOS	1982	2011	Declaration made on ratification (Anon., 2013a)
Conservation of Resources of the High Seas	1958	1968	
FAO Agreement on Port State Measures		2016	
IOSEA Marine Turtle MoU	2004	2004	Not legally binding
ASEAN MoU	1997		
International Coral Reef Initiative			Not legally binding
WCPFC Convention			Cooperating non-member
IOTC CMMs		1997	

Thailand's wildlife legislation has been assessed by the CITES national legislation project as Category 1, that is as generally meeting the requirements to implement CITES (CITES Secretariat, 2015b). A 2006 report by the IUCN notes that problems in wildlife protection in Thailand stem mainly from interference from personal interests rather than failings in the legal regime (Moore *et al.*, 2006). DLA Piper (2014) similarly notes that the most significant problems hindering prosecutions for wildlife crimes in this country are lack of enforcement of existing legislation, a slow judicial process, and the imposition of penalties much lower than the maximums allowed under the legislation. Our findings show that, in general, the legislative framework in Thailand is reasonably strong with regard to marine wildlife protection, particularly since the introduction of the new Ordinance on Fisheries in 2015, but that it lacks protection for a number of species and that in many cases penalties are insufficient to function as a deterrent.

Strengths of Thailand's marine wildlife protection legislation

Detailed list of prohibited activities. WARPA prohibits hunting preserved or protected wild animals anywhere in the country or any wild animals within a wildlife sanctuary, importing, exporting, transiting, and possessing preserved or protected wild animals without permission, and captive breeding without permission. The Ordinance on Fisheries prohibits fishing without a licence or in violation of conditions of licences, possessing aquatic animals that have been obtained illegally, importing, exporting, transiting, possessing, and breeding aquatic animals without permission, collecting rare or endangered aquatic animals, fishing in closed seasons or areas, and a number of other activities that can be harmful to marine wildlife.

Prohibition of destructive fishing methods. Under the Ordinance on Fisheries it is prohibited to fish with noxious substances, explosives, electricity and certain kinds of net and other equipment.

Requirements to mitigate by-catch. Ministerial regulations require the use of TEDs in gulfs and bays and the release of marine turtles and Dugong that have been captured accidentally.

Requirements for licences. The Ordinance on Fisheries requires fishing licences to fish in Thai waters or for Thai vessels to fish outside Thai waters.

Requirements for vessel registration and logbooks. The Ordinance on Fisheries includes detailed measures for vessel registration and monitoring, maintenance of logbooks and reporting of data to fisheries authorities and, in the case of suspected illegal activities, to international fisheries management organisations.

Potential to prevent mistreatment of wildlife in trade. Thailand's Cruelty Prevention and Welfare of Animals Act prohibits cruelty to domesticated animals and could be extended to cover wildlife.

Higher penalties for offenders with more to gain. The Ordinance on Fisheries makes owners and managers of vessels and corporations involved in an offence liable for penalties and, for many offences, provides higher penalties for larger vessels. Under the Customs Act, only ships' masters are penalised for some smuggling offences.

Penalisation of accomplices. Under the Ordinance on Fisheries, the Customs Act and the National Reserved Forests Act, accomplices are subject to the same penalties as offenders (however, WARPA lacks such a measure). The Ordinance on Fisheries makes corporations responsible for the activities of their employees, and under WARPA, the Customs Act and the Promotion of Marine and Coastal Resources Management Act, owners of vessels or managers and representatives of offenders are liable to the same penalties as offenders unless they can prove they were not involved in the offence. However, Moore *et al.* (2016) suggest that this measure may not be enforceable, as a 2012 court decision found that a similar measure in different legislation conflicted with Section 227 of the Criminal Procedure Code (1934), which requires the benefit of the doubt to go to the accused.

Burden of proof on the accused. Under the Customs Act, the burden of proof for establishing the legality of goods lies with the owner.

Incentives for information and arrests. The Customs Act allows incentives to be paid to informants and arresting officers for some crimes, which could increase the chances of arrest and conviction.

Clear indication of responsibilities for implementation. All the legislation viewed for this report clearly states which ministry has overall responsibility for implementation and enforcement. In addition, most legislation, including WARPA and the Ordinance on Fisheries, includes detailed measures on the powers, responsibilities and functioning of the various ministries, departments, committees and other agencies involved in implementation.

Strong enforcement powers. Enforcement powers are specified in detail in the Ordinance on Fisheries and the Customs Act, and include powers to stop, search, seize evidence and arrest suspects. WARPA, the Ordinance on Fisheries and the National Reserved Forest Act provide that the officials designated to enforce these Acts have the powers of police officers to arrest and suppress offenders (these powers are outlined in the Criminal Procedure Code).

Weaknesses of Thailand's marine wildlife protection legislation

Limited protection for some species within Thailand. Under WARPA and its subsidiary regulations, preserved and protected species do not include Humphead Wrasse or any species of seahorse, sea cucumber or rays, while several species of corals, sharks and cetaceans are also not covered, including CITES-listed species and some species native to Thailand. Possession for trade of any species of coral is prohibited by Decree Prohibiting the Possession of Certain Fish and Fishery Products for Commercial Purposes B.E. 2535 (1992) and fishing for any species of dolphin is prohibited by Prohibition of Fishing of Dolphins B.E. 2533 (1990); but the result is still that collection of and trade in most non-native marine species within the country is not prohibited or penalised. On the other hand, international trade in most of these species is controlled through MoNRE Notification on Wild Animals and their Carcasses Prohibited to Import or Export B.E. 2556 (2013), which prohibits the import or export of all CITES-listed species without authorisation. Also, as Moore *et al.* (2016) note, the upcoming amendment to WARPA will require a permit to possess, import, export, transit, trade or hunt all species listed under international agreements (Art. 8), which should mitigate the loophole for domestic trade of non-native species that are listed on CITES.

Some harmful activities permitted. As Moore *et al.* (2016) note, WARPA prohibits the import, export, transiting, possession, buying and selling of preserved and protected species without a permit, but does not prohibit introduction from the sea.

Measures that are hard to enforce. Offences against WARPA's prohibition on shooting wild animals between sunset and sunrise are likely to be hard to prove (Vishvajith, undated). The draft amendment to WARPA proposes to omit this measure.

Requirements to mitigate by-catch. The Ordinance on Fisheries does not require any by-catch mitigation measures, although it does authorise the Minister of Agriculture to issue regulations on by-catch and there are a few subsidiary regulations with some by-catch mitigation measures (see above).

Lack of *ex situ* conservation measures. Measures for the maintenance of confiscated wildlife, its release into the wild, or return to country of origin are missing from WARPA.

Low penalties. Penalties for wildlife-related crimes are generally low in Thailand. While fines may be relatively high under the Ordinance on Fisheries, very few offences carry a custodial sentence. Under WARPA, there is a strong maximum custodial sentence of seven years for hunting, collecting or endangering prohibited species or their nests within a Non-Hunting Wild Animal Area, but for most crimes, custodial sentences are significantly lower. Fines are particularly low under WARPA, with the highest fines being THB100,000 (USD2,807). The draft amendment to WARPA proposes to raise some maximum custodial sentences to 10 years, increase fines, and add minimum penalties for some offences. No minimum sentences are currently specified by WARPA or the National Parks Act, while the Ordinance on Fisheries, the Customs Act and the Export and Import of Goods Act provide fixed or minimum sentences for some offences only. These relatively low penalties are exacerbated by the possibility of compounding offences under WARPA, the Customs Act and the Ordinance on Fisheries. Finally, penalties for subsidiary regulations are unspecified or weak (e.g. licence suspension or revocation for those implementing the Ordinance on Fisheries).

Loopholes in applying penalties. DLA Piper (2014) points out that Section 78 of the Thai Criminal Code allows a reduction in sentences of one half to one third for voluntary admission of guilt and that amnesties are traditionally granted on the King or Queen's birthday.

Ambiguities and undefined terms. Section 7 of WARPA allows that prohibitions on hunting wildlife do not apply for hunting for “reasonable cause,” but does not define “reasonable cause.” This leaves room for interpretation that could potentially allow the hunting of wildlife for just about any reason. The proposed amendment to WARPA omits this term.

Under Section 26 of the National Park Act, penalties are lower for some offences if the animals (or sand) involved in the offence are of “small value” or only “slight damage” is caused by the offence. These terms are vague and leave considerable room for interpretation.

Viet Nam

Viet Nam has signed several international treaties, including CITES, CBD and UNCLOS, and is a member of one regional conservation initiative and one RFMO (see Table 16). Among the agreements Viet Nam has not signed are CMS, UNFSA and the FAO Agreement on Port State Measures. Like all the ASEAN countries, Viet Nam is a member of the UN and the FAO and should therefore abide by the non-binding measures provided by UN General Assembly Resolutions and FAO IPOAs and guidelines.

Table 16: International treaties and agreements signed by Viet Nam

Convention/Agreement	Signed	Ratified/ ac- ceded	Remarks
CITES		1994	
CBD	1993	1994	Became a Party in 2005
Ramsar Convention		1989	
UNCLOS	1982	1994	Declaration made on ratification (Anon., 2013a)
IOSEA Marine Turtle MoU	2001	2001	Not legally binding
ASEAN MoU	1997		
International Coral Reef Initiative			Not legally binding
WCPFC Convention			Cooperating non-member

Viet Nam’s wildlife legislation has been assessed by the CITES national legislation project as Category 1, that is as generally meeting the requirements to implement CITES (CITES Secretariat, 2015b). Although the legal system in Viet Nam is confusing to navigate and there are some weaknesses to the legislation, as a whole the legislation prohibits and penalises activities harmful to marine wildlife, controls marine resource exploitation, and provides a solid framework to protect marine wildlife in trade. However, according to a report by DLA Piper (2014), in practice the legislation is not effective as a deterrent to wildlife crime, in part due to the provision of low penalties for some crimes but more importantly as the result of problems in enforcement, including corruption, lack of resources, and lack of trained enforcement personnel, lawyers and judges. The report also found that penalties imposed are generally far more lenient than those permitted by the law and do not constitute a sufficient deterrent. CITES currently recommends suspension of significant trade of Spotted Seahorse with Viet Nam (CITES Secretariat, 2015a), indicating that in practice controls are not considered adequate in regard to at least this species.

Strengths of Viet Nam's marine wildlife protection legislation

Protected status for all CITES-listed species. All CITES-listed species are protected under Decrees Nos. 82/2006/ND-CP, 160/2013/ND-CP, 187/2013/ND-CP and 59/2006/ND-CP and MARD Circulars Nos. 40/2013/TT-BNNPTNT and 04/2015/TT-BNNPTNT.

Detailed list of prohibited activities. Vietnamese legislation prohibits and penalises harmful fishing practices, possession of destructive fishing gear, destruction of habitat, fishing in protected areas, trade, transport, possession, import and export of wildlife without a permit, and a large number of other activities that occur as part of the illegal trade in marine wildlife.

Prohibition of destructive fishing methods. The Law on Environmental Protection prohibits using mass killing equipment, while the Fisheries Law prohibits the use of explosives, poisons, electricity and other destructive fishing methods.

Specification of closed seasons and areas. The Fisheries Law makes the Ministry of Fisheries responsible for proclaiming closed seasons and areas. The Law does not require the Ministry to determine these or specify how extensive they should be.

Requirements for licences. The Fisheries Law requires fishing vessels over half a ton to obtain a licence. Under Vietnamese law, permits are also required to exploit wildlife, collect protected wildlife for research purposes, and import or export wildlife.

Requirement for record keeping. The Fisheries Law requires vessels over half a ton to register and maintain a logbook.

Ex situ conservation measures. The Law on Biodiversity requires confiscated wildlife to be housed in rescue centres and eventually released into their natural habitat. However, there is no mention of returning wildlife that originated outside Viet Nam to its country of origin.

Specification of both maximum and minimum sentences. The 1999 Penal Code⁶⁰ and the Law on Handling of Administrative Violations specify both minimum and maximum sentences. Providing a range of sentences communicates expectations regarding sentencing to judges and may be particularly useful in countries where wildlife crimes are seen as a low priority or high levels of corruption increase the risk of offenders being able to secure more lenient sentences (or both). Additionally, the Law on Handling of Administrative Violations states that penalties should fall in the middle of the specified range unless there are aggravating or extenuating circumstances, in which case penalties should be increased or decreased, respectively. The 1999 Penal Code clearly lists extenuating and aggravating circumstances that should be taken into account when determining sentences within the range specified.⁶¹ These laws therefore allow flexibility in applying penalties depending on the circumstances in which the offence was committed while providing guidelines that should help reduce judicial discretion.

Increased penalties under aggravating circumstances. The 1999 Penal Code provides for the imposition of stronger penalties for repeat offences, offences involving organised crime, abuse of power, or particularly serious consequences, and under other aggravating circumstances.⁶² The Decree on Administrative Sanction in Fisheries Field provides increased penalties for crimes involving larger quantities of illegally collected wildlife or larger vessels. These measures can help target harsher penalties to professional wildlife criminals and criminal organisations, rather than opportunistic offenders or people breaking the law for subsistence needs.

60 This measure is retained by the 2015 Penal Code (National Assembly Law No. 100/2015/QH13) which, however, is under consideration for amendment prior to entering into force.

61 This measure is retained by the 2015 Penal Code (National Assembly Law No. 100/2015/QH13) which, however, is under consideration for amendment prior to entering into force.

62 This measure is retained by the 2015 Penal Code (National Assembly Law No. 100/2015/QH13) which, however, is under consideration for amendment prior to entering into force.

Explicit criminalisation of involvement of officials in wildlife crime. Abuse of power in order to violate the law or protect violators is prohibited by the Law on Environmental Protection and the Fisheries Law, while the 1999 Penal Code includes a number of measures to penalise abuse of power more generally.⁶³

Explicit prohibition of failure to investigate wildlife offences. The Law on Handling of Administrative Violations prohibits persons tasked with sanctioning administrative violations from failing to do so, doing so improperly or doing so too slowly.

Weaknesses of Viet Nam's marine wildlife protection legislation

Owing to the large number of regulations in Viet Nam, we may have missed some and it is possible that the problems listed below are addressed by measures provided elsewhere.

Lack of measures to mitigate by-catch. None of the legislation viewed for this report requires the release of marine wildlife taken as by-catch or accidentally entangled in fishing equipment. The only by-catch reduction measure we found other than prohibitions on destructive fishing was the Fisheries Law prohibition on the abandonment of fishing gear, which is helpful for reducing ghost fishing.

Missing requirements for vessel registration and logbooks. As Edeson *et al.* (2010g), Viet Nam's registration system needs to specify more details in order to be effective, particularly the history of vessels' compliance with fisheries laws. The same is true of the requirement for vessels to maintain a logbook, which does not specify details to be included in the logbook or how often it should be reported to the Ministry of Fisheries.

Low penalties for wildlife crimes. Under the 1999 Penal Code, custodial penalties for wildlife crimes are lower than allowed by Article 8 of the same law, which specifies the range of custodial sentences that should be applied for crimes of various degrees of severity. This Article allows prison sentences of up to three years for less serious crimes, for which the 1999 Penal Code usually specifies no penalties at all in relation to wildlife crime; up to seven years for serious crimes, which the Code usually penalises with six months to three years when the crime is a wildlife crime; up to 15 years for very serious crimes, which are penalised much less severely than this when the crime is a wildlife crime; and up to life imprisonment for particularly serious crimes, which are never penalised with anything approaching this severity when the crime is a wildlife crime, with the exception of the penalty for smuggling under certain aggravating circumstances. In general, the 1999 Penal Code penalises wildlife crimes as if they belong to the category of severity one step below their stated severity, e.g. penalties for a "very serious" wildlife crime are in the range specified for "serious" crimes in general, while penalties for a "serious" wildlife crime fall into the range specified for "less serious" crimes in general. This suggests that wildlife crimes are regarded as causing less serious harms to society than other crimes. As examples of the abovementioned tendency, the Penal Code includes maximum custodial sentences of only three years for hunting, killing, transporting or trafficking in endangered, precious and rare species prioritised for protection and for breaching regulations on managing nature reserves, unless there are aggravating factors (including causing very or particularly serious consequences). In this case, the offender may be imprisoned for a period of two to seven years. This problem is corrected by the 2015 Penal Code (National Assembly Law No. 100/2015/QH13) which, however, is under consideration for amendment prior to entering into force.

Administrative penalties relating to wildlife crime are in many cases inadequate to constitute a deterrent. Under the Decree on Administrative Sanctions in Fisheries Field, maximum fines are only VND100 million (USD4,358), which is low considering the potential profits of illegal activities in this area. However, it is the maximum allowed by the Law on Handling of Administrative Violations for violations of measures to manage aquatic and marine resources. Under the Decree on Administrative Penalties in Respect of Environmental Protection, maximum fines are only two to four times the value of the goods involved. For offences involving very valuable merchandise, fines could even be lower than the value of the goods, since the maximum administrative penalty allowed

⁶³ As does the 2015 Penal Code (National Assembly Law No. 100/2015/QH13) which, however, is under consideration for amendment prior to entering into force.

is VND500 million (USD21,790). These penalties do not go up to the full VNDone billion (USD43,581) fines for individuals and twice this amount for corporations that are allowed under Article 23 of the Law on Handling of Administrative Violations for offences related to environmental protection.

Vagueness in specifying criminal penalties. Penalties provided by the 1999 Penal Code are based on vague categories of crimes with “less serious” “serious” “very serious” and “particularly serious” consequences, and the definitions for these categories are similarly vague (e.g. “particularly serious” crimes are those that cause “exceptionally great harms to society”). While providing some guidance for determining penalties, these terms leave considerable room for interpretation.

Inappropriate measures for determining administrative penalties. As Nguyen *et al.* (2008) note, under the Decree on Administrative Penalties in Respect of Environmental Protection the amounts of fines are usually determined by the weight or value of the products involved in the offence. The authors argue that these measures are inappropriate: the market value of the wildlife does not correlate with the ecological damage caused by killing the wildlife or removing it from its habitat, while the weight of the wildlife products involved in the offence does not correlate with either market value or ecological damage. However, the market value does correlate with the amount of fine required to have a deterrent effect. It is also perhaps easier to calculate than the ecological damage caused by the offence (which is the solution suggested by Nguyen *et al.*).

Loopholes in applying penalties. The 1999 Penal Code includes a list of extenuating circumstances that can be used to reduce sentences. One of these is for a person who has made outstanding contributions in production, work, combat or study.⁶⁴ This is a subjective criterion and may be subject to deliberate abuse or unconscious bias, and is more likely to be used to exempt relatively privileged individuals. For example, a subsistence fisher may not have had the opportunity to perform actions that are recognised as outstanding contributions in the above areas, whereas relatively wealthy people, potentially including those who occupy positions of power within criminal networks, could be treated more leniently because of good performance at university or working in a well-respected field, or simply because of who they know.

Under the Law on Handling of Administrative Violations, offenders may have fines postponed or waived if they encounter severe financial difficulties. Sumrall (2009) claims that this kind of measure is used in Viet Nam to exempt poor people, widows, divorced women and members of ethnic minority groups “by way of the philosophy that they cannot afford either a fine or a prison sentence” and that “When caught, they are simply asked not to do it again.” It is important to target penal measures to those who benefit most from wildlife crime rather than individuals who derive only marginal benefits from the crimes, and also to recognise the extra burdens that penalties impose on poor people. Nonetheless, this measure could be abused to allow some people to commit wildlife crimes with impunity, and it should be considered how this could be mitigated.

Weak enforcement powers. The powers and authority of enforcement agencies are generally weak and not clearly specified in Vietnamese legislation. The Fisheries Law specifies the investigative powers of the Fisheries Inspection Force but does not authorise them to stop and search vessels, apprehend suspects or confiscate specimens. Some of these activities may be covered under the powers provided to “take technical inspection measures” and “collect and verify the evidence,” but should be spelled out more clearly.

Unsystematic and overlapping legislation. MONRE and MARD (which includes the Department of Fisheries) share responsibility for protecting wildlife in Viet Nam, and each of these bodies issues regulations to manage and conserve wildlife. One resulting problem is that it is not always clear whether MONRE or MARD has jurisdiction over a particular issue (MONRE, 2014; Nguyen *et al.*, 2008). In some cases, regulations explicitly state that MONRE and MARD share jurisdiction (e.g. for implementation of the Biodiversity Law) or have jurisdiction for specific areas (e.g. Decree No. 160/2013/ND-CP makes MONRE responsible for implementing the Decree with respect to wildlife while MARD is responsible for implementing the Decree with respect to domesticated species). In other cases, however, the tasks of MARD and MONRE as specified by the legislation overlap. For example, MARD and MONRE are both responsible for implementing prohibitions on the import and export of certain species of wildlife and issuing permits for the import and export of other species.

⁶⁴ This measure is retained by the 2015 Penal Code (National Assembly Law No. 100/2015/QH13) which, however, is under consideration for amendment prior to entering into force.

In addition, both MONRE and MARD are responsible for promulgating species lists, which Nguyen *et al.* (2008) and Sumrall (2009) claim has led to contradictions in the legal applicability of some wildlife protection measures to certain species and, due to the resulting confusion, failures in enforcement. For example, Sumrall (2009) claims that one (now superseded) Decree allows domestic trade with a permit in Siamese Crocodiles *Crocodylus siamensis* while another (also now superseded) Decree prohibits the exploitation of this breed except for research purposes. In case of contradiction, it is not clear which regulation or which management authority should have precedence. However, since the two sources that flagged this problem are both at least seven years old (the 2014 DLA Piper legislative review also refers to this problem, but through Sumrall, 2009), it is possible that the species lists have been harmonised with the issuance of new regulations. Due to time constraints, we have not performed a detailed comparison of the species lists promulgated by MONRE and MARD in relation to the protective measures provided in the legislation in order to determine whether there are still cases in which it is unclear whether a particular measure applies to a particular species. At the least, the existence of multiple species lists makes it time consuming and complicated to conclusively determine the legal status of a particular species in Viet Nam. In some cases, it can also be difficult to determine which species list is intended when regulations refer to a list (for example, we had trouble identifying the “ordinary import list” referred to by MARD Circular No. 04/2015/TT-BNNPTNT).

High burden of proof. Under the Law on Handling of Administrative Sanctions the burden of proof for establishing guilt lies with those enforcing the law rather than with the suspect. This will make it more difficult to conclude prosecutions for the illegal collection, possession or trade of protected wildlife than if it were up to the suspect to produce proof of legal collection and/or ownership.

A potentially detrimental measure. The Fisheries Law includes a measure to promote offshore fishing, which is intended to relocate fishing away from coastal regions. However, increased offshore fishery activities could conflict with the sustainable management of fisheries resources in these areas.

Difficulty in identifying active regulations. Because of the number of implementing regulations and issuing bodies for Vietnamese legislation, it is time consuming and confusing to identify all the relevant legislation on marine wildlife protection. It would be easy to overlook important relevant legislation, including legislation that may have repealed other Laws and regulations. This could hinder the operations of enforcement personnel, lawyers and judges who are attempting to combat illegal trade in marine wildlife in Viet Nam.

General discussion

Implementation of international agreements

In general, ASEAN countries show considerable commitment to international instruments related to marine wildlife conservation. All ASEAN countries are Parties to CITES and the CBD and all but Brunei and Singapore to the Ramsar Convention. Seven ASEAN countries have signed the IOSEA Marine Turtle MoU and all but Cambodia have signed the ASEAN Sea Turtle MoU. All ASEAN countries are signatories to UNCLOS, although Cambodia has yet to ratify the agreement. Table 17 provides an overview of participation in international agreements by each ASEAN country.

Table 17: ASEAN Signatories and Parties to international agreements

Convention/Agreement	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
CITES	X	X	X	X	X	X	X	X	X	X
CBD	X	X	X	X	X	X	X	X	X	X
Ramsar Convention		X	X	X	X	X	X		X	X
CMS							X			
Dugong MoU*						X	X		X	
Sharks MoU*							X			
UNCLOS	X	S	X	X	X	X	X	X	X	X
UNFSA			X				X			
FAO Compliance Agreement						X				
FAO Agreement on Port State Measures			X			X			X	
Conservation of Resources of the High Seas		X	S		X				X	
Convention for the Regulation of Whaling		X		X						
FAO Code of Conduct*	M	M	M	M	M	M	M	M	M	M
Agenda 21*	M	M	M	M	M	M	M	M	M	M
UN General Assembly Resolutions*	M	M	M	M	M	M	M	M	M	M
IOSEA Marine Turtle MoU*		X	X		X	X	X		X	X
ASEAN MoU	X		X	X	X	X	X	X	X	X
TIHPA MoU					X		X			
SSME MoU			P		P		P			
CTI-CFF*			X		X		X			
International Coral Reef Initiative*			P		P		P		P	P
WCPFC Convention			X				X		C	C
IOTC CMMs			X		X		X		X	
Convention on Southern Bluefin Tuna			X				C			

KEY: X = Party, Ratified or Acceded; S = Signed but not Ratified; M = Member of organisation adopting a voluntary agreement; P = Partner/Participant; C = Cooperating non-member

* Not legally binding

The Philippines and Indonesia are particularly consistent participants in international instruments, having ratified or signed most of the agreements considered in this report and being members or cooperating non-members of all three RFMOs discussed here. Brunei and Singapore seem to be the least enthusiastic participants, not having signed CMS, UNFSA, the IOSEA Marine Turtle MoU or any of the smaller MoUs or initiatives. However, the lack of participation in the Ramsar Convention by these two countries may be explained by their small areas of wetland, while Singapore's lack of participation in RFMOs might be attributable to the relatively low economic importance of fisheries in this country (Ha and Tu, 2015). Another factor to consider is the extent to which each country passes into law the obligations imposed upon it by the international agreements to which it is a signatory. In this respect, legislation in Myanmar is disappointing as it lacks many measures that it has committed to enact, for example those relating to control of collection of marine resources and combating IUU fishing. On the other hand, Viet Nam's legislation implements a large number of its international obligations in addition to some measures provided by international agreements to which it is not a signatory, in particular those relating to IUU fishing and international cooperation. The biggest shortfall of the marine wildlife protection legislative framework in Viet Nam is the difficulty of tracking down these legal provisions, which are dispersed in a large number of regulations issued by several government bodies. A full list of obligations imposed by international agreements, and information on which ASEAN countries are subject to these obligations and the extent to which each country implements them in its legislation, can be found in Appendix II of this report.

In terms of accession to international agreements, the most significant tool missing from almost every ASEAN country's toolbox in fighting illegal trade in marine species is CMS. This convention is highly relevant to marine turtles and many species of cetaceans, sharks and rays, but among ASEAN nations only the Philippines has ratified the Convention. As range states for several migratory species covered by CMS, all ASEAN countries except Lao PDR would be obliged under this Convention to take measures to conserve these species and restore their habitats.

The other major international instruments that lack commitment from ASEAN countries are UNFSA, in which only Indonesia and the Philippines participate, and the FAO Compliance Agreement, which has been adopted by Myanmar alone (and Myanmar's legislation does not effectively implement the Agreement; see Discussion by country and Appendix II). UNFSA is particularly important as it imposes legally binding obligations on signatories to conserve biodiversity and ecosystems. Among these obligations are measures to ensure the sustainable use of resources, prevent over-exploitation, consider the effects of fisheries activities on associated species, minimise discards, by-catch and incidental mortality and adopt an ecosystem approach and the precautionary principle in natural resource management. UNFSA is also the only legally binding agreement considered in this report to oblige countries to require permits for marine resource exploitation. Both UNFSA and the FAO Compliance Agreement include requirements for record keeping, international reporting, and compliance with international conservation management measures. Many of the obligations just mentioned are also required by other international agreements but are not made binding by these as they are by UNFSA and the FAO Compliance Agreement (see Appendix II for details). Legislation in most ASEAN countries lacks measures requiring fisheries departments or other agencies involved in marine wildlife protection to report data to the FAO, RFMOs or other relevant international bodies (partial exceptions are Indonesia, Malaysia, and Thailand; see Appendix II). Countries may meet the reporting requirements of international treaties without writing these requirements into law; however, making these measures mandatory under national legislation governing the responsibilities of wildlife, parks and fisheries management agencies would likely improve and increase the consistency of reporting across the region. Signing UNFSA and the FAO Compliance Agreement would subject ASEAN countries to these requirements, encouraging better reporting and thereby better international coordination to combat illegal and unsustainable trade in marine wildlife.

The IOSEA Marine Turtle MoU lacks signatures from Brunei, Lao PDR and Singapore but has Cambodia's signature where the ASEAN MoU does not. The IOSEA MoU is a much more detailed agreement than the ASEAN MoU, presents a large number of specific actions to be taken in its Conservation and Management Plan, and includes a provision allowing it to be made legally binding. The cooperation between the IOSEA MoU signatories and the IOTC is one example of the effectiveness of the MoU. The lack of signatures to the IOSEA Marine Turtle MoU from Brunei, Singapore, and, to a lesser extent, Lao PDR, is therefore of greater concern than Cambodia's missing signature from the ASEAN Sea Turtle MoU.

On the positive side, all the ASEAN countries are Parties to CITES and the CBD which, if effectively implemented, together provide fairly comprehensive protection for marine wildlife. CITES obliges countries to pass legislation controlling international trade and domestic possession of listed species while the CBD addresses harvesting and killing endangered species and requires the establishment of protected areas. The ASEAN countries' implementation of these two agreements is discussed in more detail in the next two sections of this report.

Controlling trade in threatened wildlife: Implementation of CITES

The requirement that Parties have national legislation implementing CITES is one of the core obligations of this Convention and in 1992 the National Legislation Project was initiated to help ensure that Parties can meet this requirement (CITES Secretariat, 2015b). Table 18 shows the assessments received by the 10 ASEAN countries under this project. A Category 1 assessment indicates that a Party's legislation generally meets the requirements for implementing CITES, Category 2 legislation is not adequate to meet all CITES requirements and Category 3 legislation generally does not meet requirements for implementing CITES (CITES Secretariat, 2015b). It should be noted that the existence of robust CITES-implementing legislation does not necessarily mean that Parties enforce this legislation effectively, nor, of course, that the legislation includes measures to protect marine wildlife that are not required by CITES (e.g. measures related to domestic trade in wildlife, control of marine resource exploitation, or species not listed on the CITES Appendices).

Table 18: Assessment of CITES implementing legislation for the ASEAN countries

Country	Category		
	1	2	3
Brunei Darussalam	X		
Cambodia	X		
Indonesia	X		
Lao PDR			X
Malaysia	X		
Myanmar			X
Philippines		X	
Singapore	X		
Thailand	X		
Viet Nam	X		

Source: CITES Secretariat, 2015c

The simplest way to ensure that CITES is implemented is to pass the CITES Appendices into law as lists of species in which trade is prohibited or controlled according to the requirements prescribed by the Convention. Legislation in Brunei, Malaysia, Singapore, Viet Nam and, with respect to aquatic species only, Cambodia and the Philippines does this, while legislation in Lao PDR does so with respect to CITES Appendix I-listed species. Indonesia, Myanmar and Thailand issue their own lists of species which do not correspond to the CITES appendices; however,

Indonesia and Thailand use the CITES appendices in addition to their own lists for measures relating to international trade, and Thailand's draft amendment to WARPA would extend coverage of all measures of the Act to all species covered by international agreements to which Thailand is a Party, which would include CITES. Lao PDR and Viet Nam issue their own protected species lists as well as the CITES appendices, and the Malaysian states of Sabah and Sarawak do so for managing collection and domestic trade in wildlife, but not for international trade (Cambodia and the Philippines issue their own additional protected species lists for terrestrial species but not marine species). These lists aim to protect and manage wildlife native to these countries. As a result, non-native CITES-listed species are not covered by legislation in Myanmar or legislation relating to possession within Thailand, non-native CITES Appendix II- and III-listed species are not covered in Lao PDR, and many CITES-listed species – both native and non-native – are not protected from domestic trade or possession within Indonesia. In Indonesia, Myanmar and Thailand, this problem is mitigated for marine turtles, Dugong, giant clams and some species of shark and cetacean (and in Thailand also for some species of coral) because these countries list these species among their protected native species, but the other species considered in this report are not listed. Lao PDR, which is not a range state for marine species, does not list any (except the Irrawaddy Dolphin).

In Malaysia, marine wildlife is not covered by federal wildlife protection legislation and fisheries legislation does not prohibit the collection, killing, trade and possession of all CITES-listed species (it does not prohibit these activities in relation to corals, seahorses, Humphead Wrasse or sharks, except Whale Shark, except within parks and reserves). On the other hand, although wildlife protection legislation in the states of Sabah and Sarawak focuses on domestic species, it prohibits the import of all CITES-listed species without a permit or possession of or trade in CITES-listed species that have been imported illegally, which provides some protection to non-native species within the country.

One result of this use of protected species lists that do not correspond to lists of species that should be protected under international agreements is that in some ASEAN countries there is a lack of controls on domestic possession of or trade in CITES-listed species. Once a wildlife specimen has passed through customs it is technically no longer in transit or trade, which means that in order to protect CITES-listed species that have passed into the country legislation must prohibit domestic possession (or possession without a permit) of these species. In Indonesia, Lao PDR, Malaysia, Myanmar and Thailand, some species considered in this report are not included in lists of protected species, and (except in Sabah and Sarawak in Malaysia) possession of or trade in these species is not controlled after they have passed through customs and entered the country.

In addition to this problem, Cambodia, Lao PDR, Myanmar and (especially) Viet Nam have produced a confusing proliferation of species lists, which may contribute to difficulties in enforcement. In Indonesia, one piece of legislation (Government Regulation No. 8 (1999)) provides the main list of protected species, but protection for other species is provided in several Ministry Regulations, with the same difficulties for enforcement.

Some species discussed in this report are not covered even by legislation that effectively prohibits or controls international trade and domestic possession of all CITES-listed species. Mobula rays and some species of shark (Shortfin Mako, Pelagic Thresher *Alopias pelagicus*, Common Thresher *A. vulpinus* and most *Carcharinidae* spp. and *Sphyrnidae* spp.)⁶⁵ that are listed on CMS and/or UNCLOS are not listed on CITES (see Appendix I of this report for details). These are therefore not covered by CITES-implementing legislation alone, and they also do not appear on the lists of protected species that supplement or replace the CITES Appendices in Indonesia, Lao PDR, Myanmar, Thailand or Viet Nam, with the exception of manta rays, which are protected in Indonesia, and the Pelagic Thresher, which is listed as Endangered by Viet Nam's MARD Decision No. 82/2008/QD-BNN. There is also very little legislation to protect sea cucumbers, with only Viet Nam listing a few species of sea cucumber as Vulnerable under MARD Decision No. 82/2008/QD-BNN.

Implementation in ASEAN of the other CITES requirements is of mixed quality. CITES requires that specimens found in violation of the Convention should be confiscated and, where possible, returned to the state of origin. Legislation in all ASEAN countries except Lao PDR authorises the confiscation of specimens; however, the requirement to return confiscated wildlife to its country

⁶⁵ This problem will soon be addressed for some of these species, i.e. *Mobula* spp. and *Alopias* spp., which will be added to CITES Appendix II in 2017 (CITES Secretariat, 2016).

of origin (where appropriate) is not as well integrated in the legislation, with only Brunei, Malaysian, Singaporean and Thai legislation explicitly authorising (but not requiring) officials to take this step. All ASEAN countries except Thailand and Viet Nam have at least rudimentary measures to require the adequate care of wildlife in trade, but only Malaysia and Singapore have clear, detailed, comprehensive requirements and strict penalties for poor treatment of wildlife. None of the ASEAN countries except Malaysia require reporting to CITES in their legislation; however, this measure may be enacted without it being a legal requirement.

Controlling collection and killing of threatened wildlife: Implementation of CBD

The CBD requires Parties to take measures to control the collection and killing of endangered species, including establishing national protected areas where important biological diversity exists. Every ASEAN country except Lao PDR has designated MPAs (although the two MPAs covered by Singapore's Parks and Trees Act cover only small areas of mangroves). In many ASEAN countries legislation only protects wildlife or some species of wildlife within protected areas and/or protects wildlife from a greater number of harmful activities in protected areas than elsewhere in the country. As a result, the establishment and regulation of MPAs is an important measure for the conservation and management of marine wildlife.

In Brunei, Cambodia, Indonesia, Malaysia, the Philippines, Thailand and Viet Nam, legislation prohibits the collection of any wildlife within protected areas, whereas only species listed as protected are afforded this protection elsewhere in the country. Similarly, Myanmar prohibits the taking of protected wildlife anywhere in the country, while a measure to prohibit frightening or wilfully disturbing any wildlife within a Natural Area extends protection to other wildlife within these areas. (Singapore, on the other hand, prohibits the taking of any wildlife without a licence anywhere in the country.) MPAs are therefore particularly valuable for conserving wildlife species that are not listed as protected. In relation to species of concern in this report, this applies to many species of corals, seahorses, sea cucumbers, mobula rays⁶⁶ and shark, which tend not to be granted protected status.

In addition to prohibiting the killing and collection of wildlife, legislation in some countries prohibits within MPAs certain other activities that are harmful or potentially harmful to wildlife and that are permitted elsewhere in the country. These include possessing wildlife (Brunei, Cambodia, Malaysia), possessing equipment for collecting wildlife (Brunei, Malaysia, Singapore, Thailand), mutilating or removing natural objects including wildlife (Brunei, Cambodia, Malaysia, Myanmar, the Philippines, Thailand), and anchoring to coral reefs (Brunei, Malaysia, the Philippines, Viet Nam).

Like CITES, the CBD obliges countries to take ex situ measures to conserve biodiversity, including the reintroduction of confiscated specimens to their natural habitats, where possible. This requirement is missing from legislation in all ASEAN countries except Indonesia, the Philippines and Viet Nam (legislation in Brunei, Malaysia, and Singapore authorises the return of illegally imported wildlife to its country of origin or last port of call, but does not mention release into the wild).

Most of the other requirements of the CBD are broad guiding principles such as the requirement to regulate and manage collection of biological resources, protect and conserve ecosystems, use resources sustainably and protect biodiversity. Except in Malaysia, which includes very little mention of these principles in its legislation, these measures are reflected at least in general terms in legislation in all ASEAN countries that have significant MPAs, i.e. all ASEAN countries except Lao PDR and Singapore (see Appendix II). The latter two countries also provide most of these measures in legislation regulating the conservation and management of terrestrial areas or resources and, in the case of Singapore, these could be extended to apply to marine areas.

66 Until their addition to CITES Appendix II in 2017 (CITES Secretariat, 2016).

Implementation of oceans and fisheries agreements

The international oceans and fisheries agreements discussed in this report provide measures to control deliberate and accidental capture of marine species and encourage international cooperation to combat illegal and unsustainable trade in marine wildlife. For a detailed list of obligations imposed on ASEAN countries by their participation in international oceans and fisheries agreements and their implementation of these obligations in legislation, see Appendix II of this report.

Legislation in all ASEAN countries (except Lao PDR) includes basic measures to directly control exploitation of marine resources within their jurisdictions by requiring licences and permits for fisheries activities, authorising fisheries management agencies to impose conditions and restrictions on licences and specifying penalties for violations. A partial exception to this statement is Singapore, which only requires licences for certain kinds of fisheries activities (which, however, include all forms of trawling).

Requirements to maintain records of fishing vessels and catch data are useful tools for controlling deliberate and accidental catch of marine wildlife, and most ASEAN countries are signatories of agreements that require these measures. These obligations are at least partly reflected in legislation in all ASEAN countries except Brunei and Lao PDR. Other than these two nations, all the ASEAN countries require vessels to register and fisheries management bodies to maintain records of registered vessels, while all except Singapore require fishing vessels to maintain logbooks. However, only the Philippines, Thailand, Viet Nam, and, to an extent, Indonesia spell out in their legislation detailed requirements for information to be entered in logbooks on catch and discards of target and non-target species. None of the ASEAN countries except Indonesia have made it a legal requirement for vessel registries or catch data to be reported to RFMOs or convention bodies, which would contribute to international cooperation to combat IUU fishing and illegal trade in marine wildlife.

Some by-catch reduction measures, such as minimum mesh sizes and prohibitions on destructive and indiscriminate fishing equipment, including explosives, electricity and poisons, are required by legislation in most ASEAN countries. On the other hand, requirements for the use of TEDs and mandatory resuscitation and release of protected species that have been captured accidentally are not well-represented in the legislation. Only legislation in Myanmar includes both these measures, and Thailand requires the use of TEDs in gulfs and bays and the release of Dugong and marine turtles that have been captured accidentally; Brunei requires the release of marine mammals that have been captured accidentally; Indonesia and Malaysia require the release of accidentally captured turtles, aquatic mammals, sharks (in the case of Malaysia only Whale Sharks), and some other species; and the Philippines requires by-catch mitigation measures for Whale Sharks, manta rays and cetaceans. Despite their adoption of the UN Driftnet Moratorium, none of the ASEAN countries explicitly prohibits the use of large-scale pelagic driftnets; nor do most ASEAN countries require the full use of shark catch or strict limits to finning; Indonesia is the only country to require landing of entire sharks. In addition, although all ASEAN countries except Cambodia are Parties to international agreements that require fisheries management agencies to consider the effects of activities on associated species (including UNCLOS, UNFSA and the WCPFC Convention), none of the legislation viewed for this report in any country in ASEAN includes specific measures to implement this requirement other than the minimal by-catch mitigation measures mentioned above. Among other problems, this indicates a weak or inconsistent adoption of the ecosystem approach in ASEAN fisheries legislation.

Obligations to control fisheries activities outside national waters are not well reflected in legislation in ASEAN. All the ASEAN countries have signed agreements (and all except Cambodia are legally bound by these agreements) that require them to ensure flagged vessels' compliance with international laws and the laws and conservation measures in the jurisdictions of other coastal states. These measures are not included in legislation in Brunei, Lao PDR or Malaysia, reflected only vaguely or incompletely in legislation in Cambodia, Indonesia, Myanmar, the Philippines and Singapore, and provided adequately only by legislation in Thailand and Viet Nam (see Appendix II of this report for details). On the other hand, legislation in Cambodia, the Philippines, Singapore, Thailand and Viet Nam authorises fisheries authorities to investigate infractions of their own and international laws outside their waters.

Thailand and Viet Nam are also the only ASEAN countries with legal provisions requiring international cooperation to implement conservation measures, combat illegal trade in marine resources and exchange information with other states. None of the ASEAN countries require reporting to the FAO, RFMOs or convention bodies by law, with the partial exceptions of Indonesia, which requires reporting of vessel registration and IUU fishing to RFMOs, and Thailand, which requires reporting of suspected illegal fisheries activities to RFMOs. All the ASEAN countries are obliged by their participation in international agreements (including some legally binding agreements) to take some such reporting measures. Of course, the marine resource management departments in each country may cooperate internationally and/or share information with departments in other states without this being written into legislation. However, requiring these measures by law, for example by including them in legislation that establishes and provides the powers and responsibilities of the relevant departments, would promote implementation of these activities.

Deterrent effectiveness

For many offences, penalties across ASEAN are unlikely to be sufficient to deter illegal and unsustainable collection and trade of marine wildlife, at least in relation to large-scale operations. However, there are potentially strong maximum penalties for a number of offences. For example, killing or collecting protected species carries high penalties in several countries, including Cambodia (five years' imprisonment and/or a fine of KHR 150 million (USD36,277)), the Philippines (in the case of CITES Appendix I-listed species, 20 years' imprisonment and/or a fine of five times the value of the specimens or PHP five million (USD100,073), whichever is higher, or administrative fines of the same amount) and Viet Nam (seven years' imprisonment and/or a fine of VND500 million (USD21,790) if the offence is committed in an organised manner). There are high penalties for possessing or selling protected species in Indonesia (five years' imprisonment and/or a fine of IDR100 million (USD7,390)), Myanmar (seven years' imprisonment and/or a small fine), and Singapore (two years' imprisonment and/or a fine of SGD500,000 (USD350,177)). Importing or exporting protected species or smuggling carry high penalties in Malaysia (seven years' imprisonment and/or a fine of one million MYR(USD226,143)) and Singapore (two years' imprisonment and/or a fine of SGD500,000 (USD350,177)). Fishing without a licence is penalised strongly in Indonesia (six years' imprisonment and/or a fine of two billion IDR(USD147,800), or IDR20 billion (USD1 478,000) for foreign vessels) and Myanmar (10 years' imprisonment and/or a small fine). These are examples only and not an exhaustive list of either offences or penalties for the offences mentioned.

In general, the strongest custodial sentences for wildlife-related offences are in the Philippines, Cambodia and Myanmar, where maximum prison sentences for wildlife-related crimes are 20, 10 and 10 years respectively, while the highest fines are in Indonesia, Singapore, Malaysia (except Sarawak), the Philippines, and Cambodia. In these countries, fines for some wildlife-related offences may be equivalent to tens or hundreds of thousands of US dollars. The lowest custodial sentences are in Singapore, where maximum sentences for any wildlife-related crimes are two years, with the possibility of extending to three years for a repeat offence for some crimes, while the lowest fines are generally in Brunei, Cambodia, Lao PDR and Myanmar. Thailand also has low custodial sentences for most offences under the Royal Ordinance on Fisheries, and Malaysia has low custodial sentences under the Fisheries Act and most legislation in Sarawak. Penalties for offences related to wildlife are low across the board in Brunei and Lao PDR. Penalties in Viet Nam tend to be middle of the range for ASEAN countries. Generally, countries with lower fines tend to also have relatively low per capita incomes (World Bank, 2016); an exception to this tendency is Brunei.

While legislation protecting marine wildlife in Cambodia, Malaysia, Myanmar, the Philippines and Singapore provides high penalties for some crimes, other offences are penalised only lightly. For example, in Cambodia the maximum penalty for importing and exporting wildlife without a permit is a transactional fine of up to KHR one million (USD242), which can be doubled for repeat offences, while the penalty for collecting by-products of natural resources, trading wildlife, and harmful illegal fishing without a permit is a fine of an unspecified amount. In Myanmar, most fines are low and may be imposed instead of custodial offences. The highest maximum fines under wildlife protection legislation are MMK50,000 (USD37), and for some offences, including killing or wounding Seasonally Protected wild animals, lower transactional fines may be imposed instead of penalties determined by a court. Fines under the Myanmar Marine Fisheries Law are

also relatively low: a maximum of MMK500,000 (USD375) for offences relevant to this report. In the Philippines, offences involving “other threatened” and non-threatened wildlife are penalised relatively lightly, with maximum penalties for collecting, hunting or possessing these species of, respectively, imprisonment of six months and a fine of PHP50,000 (USD1,001) or imprisonment of one month and a fine of PHP5,000 (USD100). Trading, exporting or importing such wildlife is punishable by the same prison terms and maximum fines of, respectively, PHP50,000 (USD1,001) and PHP20,000 (USD400). In Singapore, the maximum penalty for killing or collecting wild animals without a licence is a fine of SGD1,000 (USD700), which is very low in relation to the high average income in this country. Also in this country, while fines for the illegal import or export of protected wildlife can be very high (up to SGD50,000 (USD35,018)) for individual specimens, fines reach a ceiling at 10 times this amount, with the result that small-scale smugglers are penalised more effectively than those who traffic in larger numbers of specimens. The same problem is found in Malaysia’s International Trade in Endangered Species Act, where penalties for illegal import or export of individual specimens of protected species are high (up to MYR100,000 (USD22,614) per specimen) but are capped at a total of one million MYR(USD226,143) in aggregate.

The deterrent effectiveness of both fines and custodial sentences is reduced in Brunei, Malaysia, Myanmar, Singapore and Thailand by measures that allow penalties to be compounded or exchanged for a lower transactional fine. It is fair and reasonable to allow composition of some offences, particularly those that can be committed through oversight (e.g. failing to surrender a cancelled licence), and administrative sanctions can also be used to reduce the time and resources spent in obtaining a prosecution and increase the likelihood of a penalty being imposed. However, if administrative sanctions are too lenient they may be useless as a deterrent. This is a concern in particular where administrative sanctions are not specified, include warnings or other very lenient measures, or where administrative fines are a tiny fraction of the maximum fines that may be imposed by a court, which is often the case under many pieces of legislation considered for this report. In countries with high levels of corruption, administrative sanctions may be abused in order to protect offenders from criminal prosecution. A further weakness of administrative sanctions, especially in relation to efforts to target penalties to repeat and organised offenders, is that they do not create the same record of offences allowing for increased penalties for repeated violations and implication of accomplices.

The deterrent effectiveness of fines is reduced over time by inflation in all countries except the Philippines, where fines under some legislation increase by at least 10% every three years.

There is considerable variation in the custodial sentences imposed for specific wildlife-related crimes across the region. For example, the sentence for harming, killing or collecting the most protected category of wildlife is punishable by up to seven years’ imprisonment in Myanmar, up to five years’ imprisonment in Cambodia, up to one year in Brunei, and carries no custodial sentence in Singapore unless it occurs in a protected area, in which case the maximum prison term is six months. Possessing or selling these species of wildlife is punishable by imprisonment of up to seven years in Myanmar, five years in Brunei, two years in Singapore, and carries no custodial sentence in Cambodia. Importing or exporting these species is punishable by imprisonment of four years in the Philippines, three years in Myanmar, one year in Brunei and carries no custodial sentence in Cambodia.

At least as importantly as providing strong penalties, legislation that effectively deters violations of measures to protect marine wildlife has to be targeted to the right people, i.e. to people who gain the most from wildlife crime and/or commit the most serious or damaging wildlife-related offences. Legislation in all ASEAN countries except Indonesia and Myanmar provides increased penalties for repeat offences in at least some cases. Brunei, Malaysia, Myanmar, the Philippines, and Viet Nam penalise only or more severely the senior crew of vessels for some offences, while for some offences Cambodia, Indonesia, Malaysia, the Philippines, and Thailand provide higher penalties for large-scale or commercial operators than for small-scale or subsistence-level offenders.

Penalties are also more likely to be adequate as deterrents, particularly for larger-scale offences, if they are based on the potential financial gains from illegal wildlife trade, i.e. the market value of the illegal products, than if they are based on other measures such as the amount of environmental damage caused, weight of products, number of specimens involved in the offence, size of the operation involved in committing the offence, or a flat rate that does not consider any of these factors. On the other hand, linking penalties to the number of specimens has the advantage

of being a relatively simple measure for calculating penalties, and possibly less subject to errors, out-dated information, and subjective judgment than calculating market value. Market value is used as a basis for calculating fines for some offences in Cambodia, the Philippines, Thailand and Viet Nam. The amount of damage caused is used as a basis for calculating penalties for some offences in Lao PDR and Viet Nam, while restoration or compensation for damages may be required in addition to other penalties for some offences in Cambodia, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Viet Nam. The weight of products is used as a basis for calculating some penalties in Viet Nam, the number of specimens for some offences in Malaysia and Singapore, and the size of the operation involved in the offence for some offences in Cambodia, the Philippines and Thailand. However, for most offences across ASEAN, penalty ranges are specified without reference to any of these factors.

Legislation in several ASEAN countries specifies a penalty range by stating minimum and maximum sentences. Providing a range of penalties communicates expectations for sentencing to judges and may be particularly useful in countries where wildlife crimes are seen as a low priority or high levels of corruption increase the risk of offenders being able to secure more lenient sentences. Minimum sentences are less useful and may risk unfairness in countries where judges tend to impose penalties near the maximum. However, a reasonably wide range can allow penalties to be imposed that are sufficient to deter serious crimes, while allowing milder penalisation of less serious offences. In order to avoid abuse (the granting of sentences near the bottom of the range for serious crimes) and unfair sentencing (excessive penalisation for minor infractions), this measure is best accompanied by lists of extenuating and aggravating factors that guide determination of where penalties should fall within the range, and/or a set of penalty ranges for mild, more serious, and very serious instances of the same offence and criteria for determining which of these ranges an offence should fall within. A range of penalties is provided in Cambodia, Lao PDR, the Philippines and Viet Nam, and some legislation in Indonesia, Malaysia, Myanmar and Thailand; however, minimum sentences are missing from all or most legislation in Brunei, Indonesia, Malaysia, Myanmar, Singapore and Thailand. Viet Nam's Penal Code and Law on Handling of Administrative Violations, which provide penalties for offences in this country, provide guidance for sentencing while allowing flexibility and targeting of penalties to those who benefit most from crimes. Along with Cambodia, Malaysia, Lao PDR (for some offences) and Singapore (for some offences), Viet Nam requires increased penalties to be imposed under aggravating circumstances, but the list of possible aggravating circumstances is more comprehensive in Viet Nam than in these other countries. Viet Nam also provides a list of extenuating circumstances that must be present in order to impose a penalty below the middle of the specified range of penalties.

The effectiveness of a deterrent is a function not just of the severity of the penalty but also of the likelihood that it will be imposed, i.e. enforcement effectiveness. Most factors relating to enforcement are outside the scope of this review; however, one legislative measure that can facilitate prosecutions is the clear and detailed provision of enforcement powers. Laws in Brunei, Indonesia, Malaysia, Singapore and Thailand, as well as Cambodian fisheries law, provide strong powers of investigation, search, seizure and arrest. Laws in Lao PDR, Myanmar, the Philippines

and Viet Nam, as well as wildlife protection laws in Cambodia, provide only vague specifications of enforcement powers. The lack of clear authorisation for enforcement in these countries may make it difficult for officials to identify offenders, arrest suspects or secure evidence. Another measure that can facilitate investigation and prosecution of wildlife-related offences, especially in countries where corruption may lead to failure to investigate offences, is the penalisation of officials for not investigating suspected offences or apprehending suspects. This measure is included in legislation in Cambodia, Myanmar, the Philippines and Viet Nam, while some offences in Indonesia are penalised more heavily if officials were involved. Finally, legislation in some ASEAN countries places the burden of proof on suspects for some crimes. In Brunei, Malaysia, Myanmar, Singapore, and Thailand (under the Customs Act) those in possession of protected wildlife must prove legal ownership (however, in Viet Nam legislation explicitly places the onus on prosecutors to establish illegal ownership). Legislation in the Philippines provides that discovery of fishing vessels in areas in which they are not entitled to fish will be considered evidence of fishing, and the Malaysian Customs Act provides that fishing vessels loitering in Malaysian waters will be assumed to be awaiting fish for illegal export. These measures are useful for securing prosecutions as they make it much easier to establish guilt, but are provided by legislation in a minority of ASEAN countries. A measure that is more frequently found in legislation in ASEAN is the provision that discovery in possession of prohibited equipment will be considered evidence of having used that equipment to collect natural resources illegally. This measure is found in Brunei, Malaysia, Myanmar, the Philippines and Singapore. Cambodia, Indonesia and Viet Nam do not have this measure in their legislation but prohibit the possession of certain kinds of equipment, which in Indonesia and Viet Nam is punishable by the same penalties as actually using the equipment. In Cambodia the penalty for possession is lower than for use.

Overall, in light of the high potential financial gains of trafficking in endangered wildlife, many of the penalties provided by legislation in ASEAN are not sufficient to deter offences or are only sufficient to deter small-scale offenders. However, the legal framework for prosecuting wildlife offenders is in place in most ASEAN countries and could be amended to more effectively target large-scale, organised crime and senior members of criminal enterprises, including through targeted provisions for stronger penalties. Legislation in some ASEAN countries includes exemplary measures that could be used as a model for making these amendments to legislation elsewhere. These include the clear specification of strong enforcement powers and high fines for some offences in Malaysian and Singaporean legislation, the low burden of proof for some offences in Brunei, Malaysia, Myanmar, the Philippines and Singapore, and provisions that allow penalties to be tailored to the severity of the offence while clearly communicating sentencing expectations and avoiding devolving excessive discretion upon judges in Viet Nam.

Coordination on marine wildlife protection

Marine wildlife protection in all ASEAN countries except Lao PDR depends on a combination of wildlife protection, protected areas and fisheries legislation, each of which may be administered by a different department. While fisheries departments are essential to marine wildlife conservation and management, in no ASEAN country do they have sole or even primary responsibility for managing marine wildlife and protected areas. Rather, depending on the country, wildlife and protected areas legislation is implemented by ministries or departments of environment, forestry or agriculture (or, in the case of Brunei, museums), which should coordinate with fisheries departments in order to implement the full range of measures necessary to conserve and manage marine wildlife. Furthermore, although in some countries two or three of these departments are under the same ministry, the only country where a single ministry is responsible for all legislation relating to marine wildlife protection is Singapore. Table 19 shows whether primary legislation for marine wildlife protection in each ASEAN country is implemented by environment, forestry, agriculture, fisheries or other departments.

Table 19: Implementing agencies for marine wildlife protection legislation in each ASEAN country

Country	Ministry/Department responsible for implementing legislation					
	Environment	Forestry	Agriculture	Fisheries	Customs	Other
Brunei		Ministry of Industry & Primary Resources			<i>Wild Life Protection Act, 1978 (rev. 1984) (Museums Dept.)</i>	
			Dept. of Agriculture & Agrifood <i>Wild Fauna & Flora Order, 2007*</i>	Dept. of Fisheries <i>Fisheries Order (No. S 25), 2009</i>		
Cambodia	2008	MAFF				
	<i>Law on Fisheries, 2006 (natural protected areas)</i> <i>Law on Environmental Protection, 1996</i> <i>Proclamation No. 1033, 1994</i> <i>Sub-Decree No. 53, 2006*</i>			Fisheries Admin. <i>Law on Fisheries, 2006* (fisheries management)</i> <i>Sub-Decree No. 209, 2007*</i> <i>Sub-Decree No. 26, 1989</i> <i>Sub-Decree No. 123, 2009*</i> <i>Proclamation No. 020, 2007*</i> <i>Proclamation No. 028, 1984</i> <i>Proclamation No. 571, 2010</i>		
Indonesia	Ministry of Environment & Forestry <i>Conservation of Living Resources & their Ecosystems Act No. 5, 1990*</i> <i>Govt. Reg. No. 7 on Preserving Flora & Fauna Species, 1999*</i> <i>Govt. Reg. No. 8 on Wild Flora & Fauna Exploitation, 1999*</i>		Ministry of Marine Affairs & Fisheries <i>Fishery Law No. 31, 2004</i> <i>Law on the Management of Coastal Areas & Isles No. 27, 2007</i> <i>Govt. Reg. on the Conservation of Fishery Resources No. 60, 2007</i>	Customs & Excises <i>Customs Law No. 10, 1995</i>		

Country	Ministry/Department responsible for implementing legislation						
	Environment		Forestry	Agriculture	Fisheries	Customs	Other
Lao PDR			MAF <i>Wildlife & Aquatic Law, 2007*</i> <i>MAF Instruction No. 0076, 2002*</i> <i>MAF Regulation No. 0360, 2003*</i>	Customs Dept. <i>Customs Law, 2005</i>	<i>Penal Law, 2005 (various)</i>		
Malaysia	Ministry of Nat. Resources & Env. <i>International Trade in Endangered Species Act, 2008*</i> <i>National Parks Act, 1980 (Dept. of Wildlife & Nat. Parks)</i>		Ministry of Agriculture & Agro-Based Industry	Customs Dept. <i>Customs Act, 1967</i>	Legislation at state level		
				DoF <i>Fisheries Act, 1985</i>			
Myanmar	Ministry of Env. Conservation & Forestry		Ministry of Livestock, Fisheries & Rural Development	Ministry of Commerce <i>Export & Import Law, 2012</i>			
		Forestry Dept. <i>Protection of Wildlife & Conservation of Natural Areas Law, 1994*</i> <i>Rules Relating to the Protection of Wildlife & Conservation of Natural Areas, 2002</i>	Livestock Breeding & Vet. Dept. <i>Animal Health & Development Law, 1993</i>	DoF <i>Law Relating to the Fishing Rights of Foreign Vessels, 1989</i> <i>Marine Fisheries Law, 1990</i> <i>Notification No. 11/93 for Sea Turtle Conservation, 2004</i> <i>Notification for the Control of Endangered Fish Species</i>			

Country	Ministry/Department responsible for implementing legislation								
	Environment		Forestry		Agriculture		Fisheries	Customs	Other
Philippines	DENR <i>NIPAS Act, 1992</i> <i>Wildlife Resources Conservation & Protection Act, 2001* (with DA)</i> <i>DENR AO No. 15, 2004*</i>		DA <i>Wildlife Resources Conservation & Protection Act, 2001* (with DENR)</i> <i>Animal Welfare Act, 1998</i>						
					BFAR <i>Fisheries Code (RA No. 8550), 1998*</i> <i>RA No. 10654 Amending RA No. 8550, 2014*</i> <i>FAO No. 233, 2010*</i> Other FAOs				
Singapore			Agri-food & Vet. Authority <i>Endangered Species (Import & Export) Act, 2006 (2008)*</i> <i>Wild Animals & Birds Act, 1965 (2000)</i> <i>Animals & Birds Act, 1965 (2002)</i> <i>Fisheries Act, 1996 (2002)</i>						
Thailand	MoNRE <i>WARPA, 1992 (with Dept. of Fisheries)*</i> <i>Promotion of Marine and Coastal Resources Management Act, 2015 (Dept. of Marine & Coastal Resources)</i>		Ministry of Agriculture & Cooperatives <i>National Park Act, 1961 (1989) (with Royal Forest Dept.)</i> <i>National Reserved Forests Act, 1964 (with Royal Forest Dept.)</i>		Ministry of Finance <i>Customs Act, 1926 (2005) (with Customs Dept.)</i> <i>Export & Import of Goods Act, 1979 (with Ministry of Commerce)</i>				
		Royal Forest Dept. <i>National Park Act, 1961 (1989) (with Ministry of Agriculture)</i> <i>National Reserved Forests Act, 1964 (with Ministry of Agriculture)</i>			Dept. of Fisheries <i>WARPA (1992, amended 2003, 2014) (with MoNRE)*</i> <i>Ordinance on Fisheries, 2015</i>				

Country	Ministry/Department responsible for implementing legislation				
	Environment	Forestry	Agriculture	Fisheries	Customs
Viet Nam	MONRE	MARD <i>Law No. 20/2008/QH12 Biodiversity Law (with MONRE)</i> <i>Govt. Decree No. 82/2006/ND-CP* (with Ministry of Fisheries)</i> <i>Govt. Decree No. 103/2013/ND-CP</i> <i>Govt. Decree No. 187/2013/ND-CP (with Ministry of Trade)</i> <i>MARD Circular No. 04/2015/TT-BNNPTNT*</i> <i>MARD Circular No. 40/2013/TT-BNNPTNT*</i>	Customs Dept. <i>Law No. 54/2014/QH13 On Customs</i>	<i>Law No. 15/1999/QH10 The Penal Code (various)</i> <i>Law No. 15/2012/QH13 On Handling of Administrative Violations (various)</i> <i>Govt. Decree No. 187/2013/ND-CP (Ministry of Trade, with MARD)</i> <i>Govt. Decree No. 59/2006/ND-CP (various)</i>	
				Ministry of Fisheries <i>Law No. 17/2003/QH11 Fisheries Law</i> <i>Govt. Decree No. 82/2006/ND-CP* (with MARD)</i>	

* CITES-implementing legislation

This division of responsibilities is entailed by the necessary involvement of fisheries departments in the conservation and management of marine resources, the need for wildlife conservation and protected areas legislation to cover terrestrial as well as marine species and areas, and the need for the expertise of ministries responsible for the environment in managing and conserving the environment. However, it could create a barrier to communication and risks the creation of overlapping legislation, lack of ownership of conservation and management needs, and gaps in marine wildlife protection.

One area in which this could be a problem is in the management of MPAs. Across ASEAN, resources and jurisdiction for managing and policing marine areas tends to lie with fisheries departments. However, only in Brunei, Malaysia, and Viet Nam does responsibility for establishing and managing MPAs lie explicitly with the fisheries departments (and in Brunei the Museums Department has jurisdiction over all protected areas, complicating the question of which department has legal responsibility for managing MPAs). Responsibility for establishing and managing protected areas, including MPAs, is assigned to the environment department in Cambodia and the Philippines, the Forestry Department in Myanmar, and, to the extent that there are MPAs in this country, the National Parks Board in Singapore. In Indonesia, responsibility for MPAs lies with a number of bodies, including national and regional government and the Ministry for Marine Affairs and Fisheries. Similarly, in Thailand a number of government agencies have responsibility for protected areas which include marine areas or areas of foreshore, including MoNRE, the Department of Marine and Coastal Resources and the Forestry Department (both under MoNRE), and the Ministry of Agriculture. Unless there is a good relationship and close coordination between the departments responsible for establishing MPAs and those responsible for managing marine areas, it is very possible that MPAs will be established in inappropriate areas, protected areas legislation will impose measures that conflict with fisheries regulations and/or management plans for these areas, the responsible department will lack the resources or be unwilling to police the area, or neither department will have clear responsibility for or ownership of enforcing legislation.

Inter-agency and international coordination could also be complicated by the division of responsibilities for the conservation and management of specific marine species. Fisheries legislation in most ASEAN countries defines fish or fishery resources (which are managed by fisheries departments and covered by fisheries legislation) to include all aquatic and marine wildlife species. The exceptions are Brunei, which explicitly excludes marine turtles from the fisheries domain, Malaysia, which assigns responsibility for turtles to the states, and Viet Nam, which adds the vague

caveat that fisheries resources are those aquatic species that have economic and scientific value. In Brunei, Dugong and three species of marine turtle (Green, Hawksbill and Leatherback) are protected by the Wild Life Protection Act, which is administered by the Museums Department, but other species of marine turtle are not protected under either fisheries or wildlife protection legislation and no department has responsibility for their conservation and management. Elsewhere in ASEAN, certain marine species are covered by both fisheries legislation and wildlife protection legislation, which is administered by ministries or departments of environment, agriculture or forestry. Marine turtles and Dugong are covered by wildlife protection legislation (in addition to fisheries legislation) in Indonesia, Myanmar, the Philippines, Singapore, Thailand and Viet Nam, which is enforced by, respectively, the Indonesian Ministry of Environment and Forestry, the Myanmar Forestry Department, DENR, the Agri-food and Veterinary Authority of Singapore, MoNRE and MONRE. Other marine wildlife species are covered by both wildlife protection legislation and fisheries legislation in Indonesia (cetaceans, black corals and giant clams), Lao PDR and Myanmar (Irrawaddy Dolphins), the Philippines (all native marine wildlife species except marine turtles and Dugong, plus all exotic species that are kept, traded or bred in the Philippines), Singapore (all wild animals), Thailand (various species of shark, cetacean, coral and giant clams), and Viet Nam (Chinese White Dolphins). Regulations covering these species are administered by, respectively, the Indonesian Ministry of Environment and Forestry, MAF, the Myanmar Forestry Department, the DA, the Agri-food and Veterinary Authority of Singapore, MoNRE and MONRE.

Where this is the case, the problems are the same as for overlapping jurisdiction in general: the potential for the establishment of contradictory legal provisions or different penalties for the same offence, lack of clarity regarding responsibility for enforcement, and lack of ownership. It may also make it more difficult for individuals working for NGOs or government agencies involved in marine wildlife protection to obtain information relevant to these species in other ASEAN countries or coordinate internationally if it is not clear which department has responsibility for their conservation and management.

These difficulties are not necessarily signs of problems with legislation; indeed, the work of several departments is vital to the conservation and management of marine wildlife in any country. Rather, the division of responsibilities described above indicates the importance of good communication and working relationships between fisheries departments and other departments responsible for marine wildlife protection within each country, and of clearly communicating among ASEAN states which departments in each country are responsible for which species, management of MPAs and enforcement of relevant legislation.

Complicated, undeveloped and unharmonised regulation

Several countries in ASEAN have a legislative framework for marine wildlife protection or specific laws that is difficult to navigate due to complexity, laws that are vague, laws that lack measures necessary to provide adequate protection for marine wildlife, or laws that duplicate or provide contradictory measures or overlapping jurisdiction for different departments. These factors can be major obstacles to raising public awareness of the law and clearly communicating responsibilities to enforcement personnel, prosecutors and judiciary.

Viet Nam has a very complicated legislative framework for marine wildlife protection, with the result that even where the law provides measures to protect wildlife it can be difficult to determine that this is the case. This is exacerbated by the existence of several regulations that provide overlapping and therefore potentially contradictory measures to regulate the import and export of wildlife, and promulgate competing lists of protected species. Also as a result of the large number of laws in this country, it is very time consuming to determine which regulations take precedence or are still in force, as all subsequently enacted related legislation must be searched for repealing clauses, and the results are unreliable because it is difficult to identify and obtain all the relevant legislation in this country. The situation is similar, although less extreme, in Cambodia, which also has a large number of regulations relating to marine wildlife protection. It is also

difficult to identify and obtain all the active legislation in Lao PDR and Myanmar where, as in Cambodia, much legislation, particularly ministry regulations, is not widely shared. Cambodia, Lao PDR and Myanmar would all benefit from consolidating marine wildlife protection legislation or, at the least, reformatting repealing clauses to name specific regulations that are repealed by new legislation rather than simply stating that all measures in earlier regulations that contradict the new legislation are repealed, as they do now.

A different problem occurs as a result of the federal system in Malaysia. The federal fisheries laws and regulations apply only to off-shore Malaysian waters and the federal territories and excludes turtles. Marine turtle egg protection and regulation thus depends on the states' rules, which vary greatly from state to state and are absent in most of the peninsular states. As a result, Malaysia's marine turtle protection is inefficient and ineffective on a national level.

Similarly, in Indonesia several factors make it difficult to determine the measures that are in force to protect marine wildlife. The combination of federal legislation governing wildlife protection and fisheries management on the one hand and provincial jurisdiction over inshore marine areas on the other makes it prohibitively time-consuming to track down all the measures in place to protect marine wildlife across the country. The tendency for Laws to provide a general outline of powers and responsibilities with more detailed measures provided in Ministerial Regulations, in combination with the lack of clarity regarding the authority of these Regulations, obscures the status of the measures thus provided and may mean that these measures are not enforced in many areas. In addition, the lack of repealing clauses in some legislation can make it difficult to determine whether older pieces of legislation are still in force. These difficulties do not take into account the additional complexities that may emerge from the interactions between the written law and adat and customary law, which have not been discussed in this report.

In some countries in ASEAN, some laws are too brief, general and lacking in detail to effectively control marine wildlife collection and trade. This is the case with all the legislation relating to marine wildlife protection in Brunei, Lao PDR and Myanmar, the NIPAS Act and the Strategic Plan for Palawan Act in the Philippines, the National Parks Act in Malaysia and, to a lesser extent, the Fisheries Act in Singapore. Partly as a result, legislation in Brunei, Lao PDR, the Philippines (in the case of the NIPAS Act), Malaysia (in the case of the National Parks Act) and Singapore (in the case of the Fisheries Act) does not include comprehensive lists of prohibited activities; legislation in Brunei, Lao PDR and Myanmar does not include detailed measures on granting licences and permits; legislation in Lao PDR and Myanmar does not adequately specify the powers and authorities of enforcement agencies; and legislation in Lao PDR does not adequately specify penalties for offences. Also partly as a result of this lack of specificity, laws in these countries provide considerable discretion to officials in some respects, for example in granting and/or determining conditions of licences in Brunei and Myanmar, determining prohibited activities within protected areas in Malaysia, Myanmar and the Philippines, and determining penalties within the very broad stated range in Lao PDR. In some cases, a degree of discretion is advisable, for example in selecting an appropriate penalty from within a range of penalties. However, too much discretion undermines the effectiveness of legislation and can result in measures not being applied. In particular, officials in Myanmar have the discretion to reverse penalties imposed by the courts under fisheries legislation. Excessive discretion is more likely to be a serious problem in countries where there is also high corruption and therefore an increased chance that this discretion will enable abuses of power. Transparency International's Corruption Perceptions Index indicates high levels of corruption for Indonesia, the Philippines, Thailand, Viet Nam and, to an even greater degree, Cambodia, Lao PDR and Myanmar (Transparency International, 2015).

In addition to the above problems, Brunei, Lao PDR and the Philippines have some instances of overlapping legislation and/or overlapping jurisdiction. In Brunei, the Wild Fauna and Flora Order and the Wild Life Protection Act, which are administered by different departments, regulate some of the same activities and use different species lists, which could lead to confusion in enforcement. In Indonesia, there is overlap in provincial and ministerial jurisdiction over some areas. In Lao PDR, three separate regulations on the import and export of wildlife promulgate similar, but not identical, species lists. In the Philippines, it is unclear whether DENR or other agencies have responsibility for controlling activities within protected areas, and the ability of LGUs to pass legislation regulating some of the same activities as national level legislation, combined with the constitutional principle of double jeopardy, means that some crimes may be punished more leniently than indicated by the legislation reviewed here.

RECOMMENDATIONS

Most ASEAN countries have a viable legislative framework for controlling trade in marine wildlife, with at least some measures to regulate marine resource exploitation, MPAs, international trade, and domestic possession of some or all species considered in this report and to investigate and penalise infractions. Existing legislation should be developed, streamlined, and amended to add provisions that are lacking, remove or amend provisions that are vague, incomplete or inadequate, and add species that should be protected but currently are not. The first three sections below provide general recommendations to improve the legislative regime, protect marine wildlife from unsustainable and illegal trade, and target penalties to those who benefit the most from wildlife crime. The last section of the report provides more specific regulations for each country.



Recommendations for the legislative regime

Commit to international agreements. States should adopt those international agreements discussed in this report which they have not yet signed or ratified. States that have EEZs covered by convention areas of RFMOs or whose vessels or nationals fish for species managed by these organisations and that have not yet done so should join these organisations. In particular, we recommend the following:

- Sign or ratify CMS. As well as imposing obligations similar to those provided by other international agreements such as CITES, the CBD and the Ramsar Convention, CMS requires Parties to protect migration corridors and report on the status of migratory species within their waters and on flagged vessels planning to take migratory species.
- Sign UNFSA. UNFSA requires states to minimise the impact of fisheries activities on non-target species.
- Sign the FAO Compliance Agreement. This Agreement requires signatories to take strong measures to control reflagging, which is a prerequisite for adequate control of marine resource exploitation.
- Sign the IOSEA Marine Turtle MoU. This MoU encourages international cooperation and the development of national legislation to preserve marine turtles.
- Signatories of the IOSEA Marine Turtle MoU should make the MoU and attached management plan legally binding, as allowed by the fourth Basic Principle of the MoU.

Systematise, simplify and harmonise legislation. Areas of overlap between wildlife protection, fisheries, and protected areas legislation should be reviewed and conflicting measures harmonised. In countries where there is a proliferation of laws and regulations for wildlife protection and management, i.e. Cambodia, Indonesia, Myanmar and Viet Nam, legislation should be consolidated. Repeals should be clarified by ensuring that, consistently across all legislation, repealing clauses state the specific laws and regulations, or the specific clauses of these, that are repealed by new legislation.

Improve access to regulations. We recommend that ministries that have not already done so create a page on their website that hosts comprehensive banks of the legislation for which they are responsible and that is in force, and keep these banks updated. This would improve access for lawmakers, judges, lawyers, enforcement personnel, ministry officials, and the public. An example is the website of the Agri-food and Veterinary Authority of Singapore (<https://www.ava.gov.sg>), which has a legislation page listing the laws for which it is responsible, each of which expands to list subsidiary legislation. Texts of all legislation are available on the page.

Clarify jurisdiction. Where it is unclear which ministry or department has jurisdiction over a certain area, this should be clarified. For legislation covering only some geographical areas within the country, e.g. protected areas legislation, the geographical limits of jurisdiction should be clearly indicated in the legislation.

Recommendations to protect marine wildlife from unsustainable trade

Provide protected status for all species protected by international agreements. The simplest way to ensure all CITES-listed species, including non-native species, are protected is to use the CITES Appendices as the protected species list. Species listed on CMS or other international agreements that are not on CITES could be added to the same legislation. The promulgation of a single regulation listing all protected species would reduce confusion, ensure that all threatened species are protected, and help ensure the country meets its obligations under international agreements. To avoid confusion, changes to the lists should be promulgated as amendments to the list and not in regulations promulgating separate lists.

Include wildlife parts and products in the scope of legislation. Wildlife parts, parts and products, or parts and derivatives should be included in the scope of measures regulating collection and trade of wildlife, including prohibitions on possession, trade, import and export of wildlife.

Prohibit activities related to unsustainable trade in marine wildlife. Most ASEAN countries explicitly prohibit or control a large number of activities related to trade in marine wildlife, including collection, possession, transportation, sale, export and import of protected species. Nonetheless, almost all ASEAN countries are missing at least one or two protections that should be added.

Require by-catch mitigation measures. Some by-catch reduction measures, such as minimum mesh sizes and prohibitions on destructive and indiscriminate fishing equipment including explosives, electricity and poisons, are required by legislation in most ASEAN countries. However, requirements to use TEDs and resuscitate and release wildlife that has been captured accidentally need to be added to legislation in most ASEAN countries.

Ban the use of large-scale pelagic driftnets. A clause prohibiting the use of large-scale pelagic driftnets on the high seas should be added to fisheries legislation in all ASEAN countries.

Specify closed seasons and areas. It is recommended that legislation require a minimum percentage of coastal or territorial waters to be set aside as a fish refuge (this measure is already found in Philippines legislation). Legislation in each country should not only authorise senior government officials or departments to declare closed seasons and areas but require these measures to be taken when necessary to protect species from over-exploitation.

Require vessel registration and logbooks and specify details. Fisheries legislation should require fisheries management authorities to maintain records of flagged vessels that include vessels' registration history and history of compliance with national and international laws. Legislation should also require vessels to maintain logbooks that include information on catch and by-catch, and specify how often these should be reported to authorities. Fisheries management authorities should be required to provide this information to RFMOs and the FAO to facilitate international cooperation to combat IUU fishing. Most ASEAN countries have basic legal requirements for vessel registration and logbooks but, with the exception of Thailand, need to add some of these details.

Ensure compliance with international law and the laws and conservation and management measures outside the EEZ. Fisheries legislation should include clauses requiring (1) flagged vessels and nationals fishing outside state waters to comply with international law and the laws and conservation and management measures of RFMOs and relevant coastal states, and (2) enforcement authorities to investigate violations of these laws by their flagged vessels and nationals. One or both of these measures need to be added in whole or in part to legislation in several countries.

Require adequate ex situ conservation measures. In order to comply with CITES and CBD and ensure the appropriate treatment of wildlife that has been removed from the wild, legislation should require confiscated specimens to be housed in adequately equipped wildlife rescue centres and, where possible, released into the wild or returned to their country of origin.

Prohibit the mistreatment of wildlife in trade. ASEAN countries that do not already do so should require that wildlife be properly cared for during transport and trade by creating animal welfare legislation that covers wildlife, adding wildlife to existing animal welfare legislation, or adding these measures to wildlife protection legislation.

Recommendations for penalties

While we have noted that many penalties for wildlife crimes in ASEAN are too low to constitute an adequate deterrent, especially for large-scale illegal trade or trade in more expensive wildlife species, we recommend that measures to increase deterrent effectiveness focus primarily on targeting penalties to those who profit most from wildlife crime, rather than simply increasing penalties. Stronger penalties are only fair and effective in the context of legislation that distinguishes between large-scale, commercial and organised operations and small-scale, subsistence offenders. For this reason, this section begins with recommendations for targeting punitive measures to where they will be most effective.

Target penalties to those who profit most from wildlife crime. We recommend integrating measures to target penalties to those who profit most from wildlife crime in legislation, including penalising only or more strongly owners, operators, captains and senior crew of vessels and owners and managers of corporations; making officers of corporations and owners of vessels liable for the actions of their employees unless they demonstrate that they took adequate measures to prevent the offence; imposing higher penalties on corporations and larger operations; and linking penalties to the market value or number of specimens of wildlife involved in the offence.

Provide for increased penalties under aggravating circumstances. Aggravating circumstances could include repeat offences, offences committed as part of an organised crime network (e.g. where more than two accomplices are convicted of the same offence), and offences that involve abuse of power. Viet Nam's Penal Code includes a list of aggravating circumstances that can be used to increase penalties (as well as a list of extenuating circumstances that can be used to reduce penalties), and similar measures could be adopted by the other ASEAN countries to help avoid both overly lenient sentencing of serious crimes and too harsh penalisation of minor offences.

Consider specifying both maximum and minimum penalties. Providing a range of penalties communicates expectations for sentencing to judges and may be useful in countries where wildlife crimes are seen as a low priority or high levels of corruption increase the risk of offenders being able to secure more lenient sentences. Minimum sentences can still allow flexibility to penalise less serious crimes less harshly if they are used with other measures recommended by this report such as lists of extenuating circumstances to be considered when sentencing.

Provide guidelines on where penalties should fall within a range. Provide guidelines on where penalties should fall within minimum and maximum sentences, for example by listing aggravating and extenuating circumstances to be considered when sentencing, or by providing separate penalty ranges for minor, moderate and serious offences and guidelines for determining which range the penalty for a given offence should fall within.

Strengthen penalties for wildlife offences. ASEAN countries should ensure that penalties for wildlife crimes are sufficient to act as a deterrent, bearing in mind the high profits that can be associated with illegal trade in wildlife. Wildlife offences should be treated as serious crimes and penalised at levels commensurate with other serious crimes in the country. In order to be applied

fairly, increases to penalties should be applied in combination with measures that target penalties to those who profit most from wildlife crime, allow penalties to be increased under aggravating circumstances and reduced under extenuating circumstances, and specify factors to consider when allocating a penalty within a range.

Consider removing the option to compound penalties for some offences. To ensure that wildlife offences are penalised sufficiently to function as a deterrent and encourage fair and transparent penal procedures, the option to compound offences for serious violations could be removed or limited to minor offences. Another option is to require enforcement officials to obtain the consent of a public prosecutor or judge and/or the CITES MA or other management body before compounding crimes. Where the option to compound offences is provided, it should be ensured that administrative sanctions are strong enough to constitute a deterrent.

Increase fines automatically over time. Legislation in the Philippines includes a measure to increase fines automatically over time in order to maintain deterrent effectiveness, and it is recommended that a similar measure be adopted by the other ASEAN countries.

Penalise accomplices. Provisions allowing those who aid and abet offences to be penalised are important for securing prosecutions for associates of convicted offenders, which may include more senior members of organised groups.

Explicitly criminalise the involvement of officials in wildlife crime. Some laws in Cambodia, Lao PDR, Myanmar, and Viet Nam explicitly prohibit officials from participating in breaches of the law, particularly through abuse of power, and impose penalties for doing so. Similar measures should be added to other legislation in these countries and legislation elsewhere in ASEAN.

Penalise failure to investigate wildlife offences. In countries where corruption hinders enforcement, the criminalisation of failure to investigate wildlife offences could help ensure that laws are enforced. Some laws in Cambodia, Lao PDR, Myanmar, the Philippines and Viet Nam already do this, and a similar measure should be added to other legislation in these countries and legislation in other ASEAN countries where levels of corruption are high or moderate.

Provide strong enforcement powers. Legislation should clearly state which persons and agencies are authorised to investigate violations and include details of enforcement powers that these persons and agencies may use. These should include powers to stop and search vehicles, search premises, make relevant inquiries, temporarily seize or suspend licences, temporarily halt activities, confiscate specimens, equipment and means of transport, file complaints with the courts, and, where appropriate, make arrests and detain suspects.

Consider offering incentives for information and arrest. Rewards for information leading to arrest may be useful for encouraging members of the public to come forward, and could also help raise public awareness of wildlife crime.

Recommendations by country

Brunei

Systematise, simplify and harmonise legislation. The overlap between the Wild Fauna and Flora Order and the Wild Life Protection Act should be addressed. At the least, penalties for violating prohibitions on possessing and exporting protected species should be harmonised, using the higher penalties under the Wild Fauna and Flora Order.

Develop legislation to manage integrated protected areas. The Wild Life Protection Act should be developed to provide more detailed regulations for conservation and management of protected areas.

Clarify jurisdiction. It should be considered whether the Museums Department is the best agency to administer the Wild Life Protection Act or whether responsibility for wildlife protection should be assigned to the Department of Agriculture or Forestry.

Reduce discretion. The provisions of the Wild Life Protection Act and the Fisheries Order and, to a lesser extent, the Wild Fauna and Flora Order, could be spelled out in more detail to reduce the amount of discretion devolved upon their implementing agencies.

Provide protected status for all species protected by international agreements. The Wild Life Protection Act should define “protected species” as species listed on the CITES Appendices. Species on the CMS Appendices and any other species Brunei wishes to add would also ideally be included.

Extend measures to cover parts and products. Section 2.1 of the Wild Fauna and Flora Order should be amended to include parts and products in its definition of “animal.” The Wild Life Protection Act should be amended to replace the phrase “trophies and flesh” with the more comprehensive “parts and products” throughout and a definition of “parts and products” added to Section 2. A prohibition on exporting parts and products of protected animals should be added to the prohibition on exporting protected animals without a licence in Section 9.

Prohibit activities related to unsustainable trade in marine wildlife. The Wild Fauna and Flora Order should be amended to explicitly prohibit and penalise the killing and collection of protected wildlife.

Require by-catch mitigation measures. Section 32 of the Fisheries Order should be amended to make it an offence to fail to immediately release any protected marine animal (in addition to marine mammals, which are already included) that has been captured accidentally. A clause should be added requiring the use of TEDs.

Require licences for marine resource exploitation. A clause should be added to the Fisheries Order to require vessels fishing outside Brunei’s EEZ to obtain licences.

Require vessel registration and logbooks and specify details. Requirements for vessel registration and logbooks should be added to the Fisheries Order and spelled out in detail.

Ensure compliance with international law and the laws and conservation and management measures outside the EEZ. Clauses should be added to the Fisheries Order requiring flagged vessels and nationals fishing outside Brunei’s EEZ to comply with international law and the laws and conservation and management measures of RFMOs and relevant coastal states, and authorising enforcement authorities to investigate violations of these measures by flagged vessels and nationals.

Require adequate ex situ conservation measures. Clauses should be added to the Wild Fauna and Flora Order and the Wild Life Protection Act that require confiscated specimens to be housed in rescue centres and, where possible, released into their natural habitat.

Prohibit the mistreatment of wildlife in trade. Brunei should consider creating animal welfare legislation, which should cover wildlife as well as domesticated species. Alternatively, requirements for wildlife to be properly cared for in captivity and penalties for violations should be added to the Wild Fauna and Flora Order and the Wild Life Protection Act.

Strengthen penalties for wildlife offences. In conjunction with the measures outlined above for targeting penalties to those who cause the most damage and profit the most from wildlife crime, Brunei should consider increasing maximum penalties for almost all wildlife offences in the laws discussed for this report.

Penalise accomplices. A clause providing penalties for inciting, aiding, and concealing wildlife offences, or a clause stating that such activities will be penalised at the same rate as offences, should be added to all Brunei legislation viewed for this report.

Cambodia

Systematise, simplify and harmonise legislation. We recommend that Sub-Decrees and Proclamations regulating fisheries management and wildlife protection be consolidated and their number reduced. In particular, the number of species lists should be reduced, ideally to a single list.

Clarify repeals. All legislation should include a repealing clause that states the specific laws and regulations, or the specific clauses of these, that each piece of legislation replaces and repeals.

Reduce conflicts and ambiguities. The list of prohibited activities and the Articles specifying penalties for offences in the Law of Fisheries should be harmonised and rephrased to clarify the correspondence between the list of prohibitions and the penalties. Any gaps or contradictions should be amended. In particular, Article 23.2, which allows the transport, possession, processing and trade of endangered fishery resources with a permit, should either be removed or amended to specify that the permit may only be granted for transport and possession and only for research purposes. If it is amended rather than removed, then Article 92, which penalises the transport, possession, processing and trade of endangered fishery resources, should also be amended to penalise transport and possession of endangered fishery resources without a permit.

The meaning of the term “sample” in Article 41 of the Law on Protected Areas, which may refer to wildlife parts/products, should be clarified.

Provide protected status for all species protected by international agreements. Proclamation No. 020 On the Classification and List of Wild Animal Species should be amended to reflect the CITES Appendices. Wildlife species on CMS or that Cambodia wishes to protect could also be added. This list should be used as the basis for marine wildlife-related activities regulated by Sub-Decree No. 209 On the Enforcement of the List of Prohibited and Restricted Goods and Sub-Decree No. 123 On the Determination of Fish Species and Products that are Endangered, rather than issuing new lists with these regulations.

Prohibit activities related to unsustainable trade in marine wildlife. A clause should be added to the Law on Fisheries that explicitly prohibits the collection of endangered species from the wild.

Require by-catch mitigation measures. Clauses requiring the use of TEDs and the release of protected marine wildlife that has been captured accidentally should be added to the Law on Fisheries.

Ensure compliance with international law and the laws and conservation and management measures outside the EEZ. Clauses should be added to the Law on Fisheries that require Cambodian flagged vessels and nationals fishing outside the EEZ to comply with international law and the laws and conservation and management measures of RFMOs and relevant coastal states, and that authorise enforcement authorities to investigate violations of these measures by flagged vessels and nationals.

Require adequate ex situ conservation measures. Clauses should be added to the Law on Protected Areas and (if it does not include such measures already) Sub-Decree No. 53 On International Trade in Endangered Species that require confiscated specimens to be housed in rescue centres and, where possible, released into their natural habitat or returned to their country of origin.

Prohibit the mistreatment of wildlife in trade. Cambodia should consider creating animal welfare legislation, which should cover wildlife as well as domesticated species. Alternatively, requirements for wildlife to be properly cared for in captivity should be added to the Law on Protected Areas and Sub-Decree No. 53 On International Trade in Endangered Species.

Strengthen penalties for wildlife offences. The Law on Protected Areas and the Law on Fisheries provide high penalties for the highest classes of crimes but, in conjunction with the measures outlined above for targeting penalties to those who cause the most damage and profit the most from wildlife crime, should be amended to upgrade the penalty class of some wildlife crimes (e.g. possessing or trading illegally acquired fisheries products under the Law on Fisheries). Where these laws provide a choice regarding which class to penalise an offence under, criteria should be added to reduce discretion in determining which class to use.

Provide strong enforcement powers. Chapter IX of the Law on Protected Areas should be developed to provide stronger enforcement powers and specify these in more detail.

Adopt the precautionary principle in fisheries legislation. Article 48 of Law on Fisheries should be amended to reflect the precautionary principle (rather than its opposite). Specifically, the Article should require the Fisheries Administration to suspend fishing activities when it is suspected that fishing practices may be seriously damaging stocks, including in the absence of scientific evidence that this is the case.

Indonesia

Systematise, develop and harmonise legislation. We recommend that the Conservation of Living Resources and their Ecosystems Act and the Fishery Law be developed to incorporate some of the more detailed regulations for managing natural resources and fisheries that are currently provided by Ministerial Regulations. This would help consolidate legislation in these areas and address the concern noted by Lotolung *et al.* (2005) that Ministerial Regulations may sometimes not be enforced by provincial governments.

Conservation and management measures for protected areas should be harmonised, in particular with regard to prohibited activities and penalties within these areas. This applies particularly to implementing regulations passed under the Conservation of Living Resources and their Ecosystems Act and the Law on the Management of Coastal Areas and Isles. This would assist with enforcement and public awareness of regulations for activities in these areas.

Clarify repeals. All legislation should include a repealing clause that states the specific laws and regulations, or the specific clauses of these, that it repeals. This approach is used in some, but not all, Indonesian legislation reviewed for this report and should be applied consistently in new legislation.

Reduce discretion. Article 19.5 of the Regulation of the Minister of Marine Affairs and Fisheries No. 04 (2010) should be amended to remove the measure allowing the Minister to specify CITES Appendix I-listed species that may be traded from the first generation.

More detailed conditions for invoking the exemption for catching, killing, transporting and trading in protected animals for purposes of research or education should be provided under Article 22.2 of the Conservation of Living Resources and their Ecosystems Act and Minister of Marine Affairs and Fisheries Decrees.

The conditions under which Conservation Institutions may take wildlife from nature under Article 23 of Government Regulation No. 7 (1999) should be specified.

More detailed conditions should be provided for invoking the exemption to the prohibition on fishing with explosives or other damaging methods for research purposes under Article 8 of the Fishery Law.

Conditions for invoking the exemption to the prohibition on damaging the “natural integrity” of sanctuary reserves for management activities should be added Article 19.2 of the Conservation of Living Resources and their Ecosystems Act.

Define terms and clarify vague language and ambiguities. In Government Regulation No. 8 (1999), the relationship between Article 18, which prohibits protected species from being “commercialised,” and Articles 10–11, which regulate the captive breeding of protected species for trade, should be clarified.

Article 102 of the Fishery Law should be amended to specify that the exemption from penal provisions within the Indonesian EEZ outside territorial waters applies only to foreign nationals.

Provide protected status for all species protected by international agreements. The lists of protected species under Government Regulation No. 7 (1999) and Minister of Marine Affairs and Fisheries Regulation No. 35 (2013) should be amended to include all CITES-listed species. Species on the CMS Appendices and any other species Indonesia wishes to protect could also be included.

Extend measures to cover parts and products. Government Regulation No. 8/1999 on Wild Flora and Fauna Exploitation should be amended to replace the phrase “Each wild flora and fauna trade” in Section 24 with the phrase “Trade in wild flora and fauna and their parts and products”; to add “and their parts and products” after the phrase “wild flora and fauna species” in Sections 26, 59.1 and 63.1; and to add a definition of “parts and products” to Section 1.

Prohibit activities related to unsustainable trade in marine wildlife. Article 9 of the Fishery Law should be amended to prohibit the possession of fish obtained through the use of prohibited materials, equipment and techniques. Government Regulation No. 60 (2007) should be amended to prohibit fishing in conservation zones.

Require by-catch mitigation measures. The requirement to use TEDs should be added to Ministry of Marine Affairs and Fisheries Regulations No. 30 (2012) and No. 12 (2012) and/or the Fishery Law.

Ensure compliance with international law and the laws and conservation and management measures outside the EEZ. A clause should be added to the Fishery Law requiring enforcement authorities to investigate violations of international law and the laws and conservation and management measures of RFMOs and relevant coastal states by Indonesian flagged vessels and nationals fishing outside Indonesian waters.

Require adequate *ex situ* conservation measures. Clauses should be added to the Conservation of Living Resources and their Ecosystems Act and Government Regulation No. 7 (1999) requiring confiscated specimens that originated outside Indonesia to be returned to their country of origin where possible.

Strengthen penalties for wildlife offences. Article 100 of the Fishery Law should be amended to (a) increase fines and add custodial sentences for violations of its implementing Ministerial Regulations regarding commercial activities, (2) include penalties for non-commercial violations, which could be lower than those for violations involving commercial activities, and (3) cover violations of all Minister of Marine Affairs and Fisheries Regulations (not only those specified in Article 7.2 of the Law). Penalties under the 1999 Penal Code for mistreating wildlife in captivity should be increased,⁶⁷ and the amounts of administrative fines for violations of Government Regulation No. 60 (2007) should be specified. These measures should be taken in conjunction with the measures outlined above for targeting penalties to those who cause the most damage and profit the most from wildlife crime.

Penalise accomplices. A clause providing penalties for inciting, aiding, and concealing wildlife offences, or a clause stating that such activities will be penalised at the same rate as offences, should be added to all Indonesian legislation viewed for this report.

Penalise managers of corporations. Clauses should be added to the Conservation of Living Resources and their Ecosystems Act, Government Regulation No. 8 (1999), the Law on the Sea, and the Law on Coastal Areas and Small Isles that state that managers of corporations will be liable for offences committed by the corporations unless they can demonstrate ignorance of the offence and that they took all reasonable precautions to avoid the commission of the offence.

Lao PDR

Systematise, simplify and harmonise legislation. Wildlife protection legislation in Lao PDR could be simplified by integrating the provisions of MAF regulations Nos. 0076 and 0360 in the Wildlife and Aquatic Law, which is currently quite brief and general, and promulgating the list of protected species in only one piece of legislation (i.e. the Wildlife and Aquatic Law).

Clarify repeals. All legislation should include a repealing clause that states the specific laws and regulations, or the specific clauses of these, that it replaces and repeals.

Clarify jurisdiction. It should be ensured that all legislation clearly states which government agency is responsible for its implementation. In particular, the Wildlife and Aquatic Law should identify a particular government department or ministry, ideally MAF, as responsible for implementation.

Reduce discretion. Smaller penalty ranges for wildlife crimes should be specified in order to reduce discretion in applying penalties. As appropriate, legislation should provide (a) separate penalty ranges for less serious, very serious and more serious violations, and/or (b) more detailed lists of prohibited activities and specific penalties for each of these, and/or (c) guidelines on applying penalties within a specified range. In particular, Article 92 of the Customs Law should be removed or further details provided on the circumstances under which each form of penalty may be imposed and the severity of the penalty in each case. These measures should be harmonised with and inserted close to the penal provisions in Articles 50–57.

Provide protected status for all species protected by international agreements. We recommend amending the Wildlife and Aquatic Law and MAF regulations Nos. 0076 and 0360 to cover all CITES-listed species, which would automatically include non-native CITES-listed species in the list of species for which a permit is required for possession, use or sale. The current lists of “prohibited” and “regulated” wildlife species could be replaced with lists that reflect the CITES Appendices. Species listed on CMS could also be added. The list of “prohibited” wildlife should include all CITES Appendix I-listed species. Where necessary, to increase protection of CITES Appendix II- or III-listed (or other) species, these could be added.

Extend measures to cover parts and products. The phrase “and their parts and products” should be added after the term “wildlife” in Article 71.5 and after the term “aquatic life” in Article 52.3 of the Wildlife and Aquatic Law. Article 20 of MAF Regulation No. 0360 (2003) should be amended to include wildlife parts and products in the prohibition on import and export of wildlife without a permit.

⁶⁷ This measure has already been taken in the 2015 Penal Code (National Assembly Law No. 100/2015/QH13) which, however, is under consideration for amendment prior to entering into force.

Prohibit activities related to unsustainable trade in marine wildlife. Article 40 of the Wildlife and Aquatic Law should be amended to remove the clause allowing trade in second generation captive bred species of wildlife on the “prohibited” list. It should be considered whether the clause allowing trade in first generation captive bred species of wildlife on the “managed” list should be removed or amended to require more stringent conditions on trade in these species.

Require adequate ex situ conservation measures. Clauses should be added to the Wildlife and Resource Law that require confiscated specimens to be housed in adequately equipped wildlife rescue centres and, where possible, released into the wild or returned to their country of origin.

Prohibit the mistreatment of wildlife in trade. Lao PDR should consider creating animal welfare legislation, which should cover wildlife as well as domesticated species, or adding requirements for wildlife to be properly cared for during transport and trade to the Wildlife and Aquatic Law and MAF Instruction No. 0076.

Strengthen penalties for wildlife offences. Lao PDR should consider increasing penalties for wildlife offences under the Wildlife and Aquatic Law, in particular by differentiating between more and less serious crimes and increasing minimum penalties for more serious crimes. Maximum penalties for offences under the Customs Law should also be increased, retaining the distinction between serious and minor offences. These steps should be taken in conjunction with the measures outlined above for targeting penalties to those who cause the most damage and profit the most from wildlife crime.

Penalise accomplices. A clause providing penalties for inciting, aiding, and concealing wildlife offences, or a clause stating that such activities will be penalised at the same rate as offences, should be added to all legislation in Lao PDR that was viewed for this report.

Provide strong enforcement powers. Clauses should be added to the Wildlife and Aquatic Law and other legislation that clearly state which persons are authorised to enforce the law and that specify their powers.

Require a low burden of proof. A clause requiring those in possession of protected wildlife or wildlife parts or products to produce a permit, certificate of legal origin or other proof of legal ownership on demand should be added to legislation, particularly the Wildlife and Aquatic Law and MAF Instruction No. 0076.

Malaysia

Harmonise and develop legislation. All states should pass legislation to meet their responsibilities in the areas over which they are guaranteed jurisdiction by the Constitution, including management and conservation of turtles. In particular, states should ensure that they have legislation to manage and conserve marine turtles (this applies to all states except Kedah and Terengganu, which have dedicated legislation for turtles, and Sabah and Sarawak, which include measures to manage and conserve turtles in their Wildlife Conservation Enactment and Wildlife Protection Ordinance). States should also attempt to harmonise penalty provisions, bringing them into line with penalties for similar offences in areas of federal jurisdiction and in other states (e.g. differences in penalties for similar offences under Sabah’s Biodiversity Enactment and Sarawak’s Biodiversity Ordinance).

The National Parks Act should be developed to specify prohibited activities and penalties within national parks, including marine parks.

Reduce discretion. Article 36 of the International Trade in Endangered Species Act should be amended to remove the phrase “where it thinks fit.” This Article, and Section 32 of the National/State Parks Enactments of Johor, Perak and Selangor, should also be amended to replace the phrase “sufficient security” with a more specific indication of the amount of security to be furnished,

e.g. at least the market value of the item. Conditions should be added for returning seized specimens, equipment or evidence to the person from whom they were seized, which should prohibit returning potential evidence or specimens that are, or are suspected to be, protected species for which proof of legal ownership/legal import has not been provided. Conditions also might include a requirement for consent from the Public Prosecutor before releasing items to their owners.

Article 58 of the Fisheries Act should be amended to stipulate (a) procedures for granting exemptions (e.g. consent of the Public Prosecutor and/or publication in advance in the Gazette) and/or (b) criteria to exclude harmful activities, especially overexploitation, from the term “proper conservation and management of fisheries.”

Reduce conflicts and ambiguities. Sarawak’s Wildlife Protection Ordinance should be amended to remove the conflict between the penalties for possessing wildlife under Sections 29 and 37.

Provide protected status for all species protected by international agreements. We suggest amending the International Trade in Endangered Species Act to provide that all species listed on the CITES Appendices count as scheduled species under this Act. This would avoid the need to update the Schedules to keep up with changes to the CITES Appendices. Other species that would benefit from more controls on trade could be added in a list attached to the Act.

The Fisheries (Control of Endangered Species of Fish) Regulation should be amended to apply to all CITES-listed marine species (and, ideally, all species considered in this report).

It should be considered whether the Wildlife Conservation Act could be revised to cover marine as well as terrestrial species (except turtles, responsibility for which is constitutionally assigned to the states).

Require by-catch mitigation measures. Clauses should be added to the Fisheries Act or implementing regulations created to require the use of TEDs, specify minimum mesh sizes, and prohibit indiscriminate and destructive methods of fishing.

Require licences for marine resource exploitation. A clause should be added to the Fisheries Act to require flagged vessels and nationals fishing outside the Malaysian EEZ to obtain licences.

Ensure compliance with international law and the laws and conservation and management measures outside the EEZ. The Fisheries Act should have clauses added that require flagged vessels and nationals fishing outside the EEZ to comply with international law and the laws and conservation and management measures of RFMOs and relevant coastal states, and authorise enforcement authorities to investigate violations of these measures by Malaysian flagged vessels and nationals.

Require adequate ex situ conservation measures. Article 34 of the International Trade in Endangered Species Act should be amended to require the MA to return seized live specimens to their country of origin or release them into the wild if they originated in Malaysia, and, where this is not possible, to house them in a rescue centre. Clauses should be added to Sabah’s Wildlife Conservation Enactment and Sarawak’s Wildlife Protection Ordinance that require confiscated specimens to be housed in adequately equipped wildlife rescue centres and, where possible, released into the wild or returned to their country of origin.

Prohibit the mistreatment of wildlife in trade. Malaysia should consider adding wildlife to, or ensuring all wildlife is covered by, the federal Animal Welfare Act and Sabah’s Animal Welfare Enactment. Requirements for wildlife to be properly cared for during transport and trade to wildlife should be added to the federal International Trade in Endangered Species Act.

Strengthen penalties for wildlife offences. We suggest removing the cap on fines for aggregate offences under the International Trade in Endangered Species Act in order to allow larger-scale illegal trade to be penalised effectively.

The following measures are also recommended, in conjunction with the measures outlined above for targeting penalties to those who cause the most damage and profit the most from wildlife crime: Penalties under the Fisheries Act should be increased for some offences, including killing aquatic mammals and turtles (Art. 27), fishing without a licence (Art. 8), fishing using explosives, poisons and electricity (Art. 26), and offences in marine parks. Penalties should be increased for offences in parks and nature reserves under Sarawak's National Parks and Protected Areas Ordinance and the National/State Parks Corporation Enactments in Sarawak, Johor, Perak and Selangor. Penalties under Sarawak's Wildlife Protection Ordinance and penalties for killing turtles and collecting eggs without a licence or in prohibited areas under Kedah's and Terengganu's Turtle Enactments should also be increased. Sarawak should increase penalties under the Biodiversity Ordinance to harmonise with penalties for the same offences under Sabah's Biodiversity Enactment.

Myanmar

Develop and harmonise legislation. The Protection of Wildlife and Conservation of Natural Areas Law, the Marine Fisheries Law, and the Export and Import Law, which are vague and general, should be developed to provide detailed implementing measures, which are currently contained in ministry regulations. In particular, the Protection of Wildlife and Conservation of Natural Areas Law should be developed to provide more detailed and comprehensive lists of prohibited activities.

The measures of the Forest Law for regulating activities in protected areas should be harmonised with those under the Protection of Wildlife and Conservation of Natural Areas Law by adding to the latter any relevant measures from the Forest Law that are not already included and increasing penalties under the Forest Law to match those in the Protection of Wildlife and Conservation of Natural Areas Law. This would simplify the management of protected areas and assist with enforcement and public awareness of regulations for activities in these areas.

Clarify repeals. All legislation should include a repealing clause that states the specific laws and regulations, or the specific clauses of these, that the legislation replaces and repeals.

Reduce discretion. Section 25 of the Marine Fisheries Law and Section 16 of the Law Relating to the Fishing Rights of Foreign Fishing Vessels should be amended to remove the clause allowing the Director General of the DoF to overrule penalties imposed by courts and amend conditions of licences. The terms "sufficient security" and "reasonable fine" in these Sections should be defined.

More guidance on conditions for granting, suspending and revoking licences and permits should be added to the Marine Fisheries Law, the Law Relating to the Fishing Rights or Foreign Fishing Vessels and the Protection of Wildlife and Conservation of Natural Areas Law.

We were unable to view the Rules Relating to the Protection of Wildlife and Conservation of Natural Areas Law (2002), but DLA Piper (2015) recommends that this legislation be amended to prohibit the return of confiscated animals or trophies to their owners and remove a clause allowing officials to sell confiscated wildlife and trophies. Based on the summary of the Rules provided by DLA Piper, we agree with these recommendations.

Clarify vague language and ambiguities. A definition of "traditional custom" should be added to the Protection of Wildlife and Conservation of Natural Areas Law and the 2002 Rules. The definition should exclude the use of wildlife in traditional medicine, restrict the exemption to the customs of indigenous peoples, and prohibit, if appropriate, the commercialisation of these customs, e.g. the sale of large quantities of wildlife to non-members of indigenous communities.

The "totally prohibited areas" in which no collection of wildlife for research is allowed should be defined under the Protection of Wildlife and Conservation of Natural Areas Law.

Provide protected status for all species protected by international agreements. Section 2a–b of the Protection of Wildlife and Conservation of Natural Areas Law should be amended to explicitly state that the terms “wildlife” and “wild animal” include species originating outside Myanmar. We were unable to view the Notification for Control of Endangered Fish Species, but the summary we found does not mention that it prohibits imports of CITES-listed species. If this measure is missing from the Notification, it should be added in order to protect CITES-listed wildlife that originates outside Myanmar.

Prohibit activities related to unsustainable trade in marine wildlife. The exemption from the prohibition on possessing Protected wild animals or their parts for use as a drug should be removed from the Protection of Wildlife and Conservation of Natural Areas Law.

The commercial sale of Completely Protected Wild Animals that have been used for scientific purposes should be prohibited and the clause in the Protection of Wildlife and Conservation of Natural Areas Law that allows them to be kept as souvenirs should be removed (see DLA Piper, 2015). The latter can be achieved easily by removing the phrase “or as a souvenir” from Section 26c.

Ensure compliance with international law and the laws and conservation and management measures outside the EEZ. Clauses should be added to the Myanmar Marine Fisheries Law requiring flagged vessels and nationals fishing outside the EEZ to comply with international law and the laws and conservation and management measures of RFMOs and relevant coastal states, and that authorise enforcement authorities to investigate violations of these measures by Myanmar flagged vessels and nationals.

Require adequate ex situ conservation measures. The Wildlife Resources Conservation and Protection Act should be amended to require confiscated wildlife to be returned to the wild or to its country of origin, where possible. FAO No. 233 (2010) should be amended to require confiscated wildlife that cannot be returned to the wild to be housed in a rescue centre and/or returned to its country of origin. Clauses should be added to the Protection of Wildlife and Conservation of Natural Areas Law requiring confiscated specimens to be housed in adequately equipped wildlife rescue centres and, where possible, released into the wild or returned to their country of origin.

Prohibit the mistreatment of wildlife in trade. Myanmar should clarify whether wildlife is covered by the Animal Health and Development Law and, if it is not, add wildlife to the scope of this Law. The Law should also be expanded to cover all animals, rather than just mammals, birds and bees.

Strengthen penalties for wildlife offences. The amounts of fines imposed under the Export and Import Law should be specified. In conjunction with the measures outlined above for targeting penalties to those who cause the most damage and profit the most from wildlife crime, maximum fines under the Protection of Wildlife and Conservation of Natural Areas Law and Marine Fisheries Law should be increased.

Provide strong enforcement powers. The 2002 Rules should be amended to allow less senior judges to award warrants to search private property.

The Philippines

Harmonise legislation. The NIPAS Act, Wildlife Resource Conservation and Protection Act, the Fisheries Code and the TRNP Act should be harmonised, in particular by ensuring these pieces of legislation provide the same penalties for the same offences.

Clarify jurisdiction. The NIPAS Act should be amended to specify the boundaries of buffer zones.

It should be clarified whether DENR (as specified by the Wildlife Resources Conservation and Protection Act) or PAMB (as specified by the NIPAS Act) is responsible for issuing permits for hunting wildlife.

It should be clarified whether DENR (as currently provided by the NIPAS Act) or indigenous peoples (as provided by the Indigenous Peoples' Rights Act) control ancestral lands of indigenous peoples

Reduce discretion. Guidelines should be provided under the NIPAS Act and the Wildlife Resources Conservation and Protection Act for determining administrative fines, granting permits for activities in protected areas, and deciding which wildlife activities are to be allowed. These are currently left to the discretion of the Secretary of DENR.

Define terms and clarify vague language and ambiguities. The NIPAS Act should be amended to avoid vague language, providing clear descriptions of prohibited activities that avoid subjective standards. For example, Section 20b should be amended to read simply "Dumping of any waste products," and Section 20d should be amended to read "Mutilating, defacing or destroying natural objects."

Prohibit activities related to unsustainable trade in marine wildlife. A more detailed and clearer list of prohibited activities within national parks should be provided under the NIPAS Act, and this list should include the taking of rare, threatened or endangered species. Section 4.9 of the NIPAS Act should be amended to explicitly prohibit commercial harvesting that undermines principles of biodiversity conservation within protected areas (cf Lim and Salzer, 2011).

The Strategic Plan for Palawan Act should be amended to specify activities that are permitted and prohibited within buffer zones.

The Fisheries Code should be amended to prohibit commercial breeding using CITES Appendix II- and III-listed species that have been taken from the wild for purposes of conservation breeding.

Require by-catch mitigation measures. Clauses should be added to the Philippine Fisheries Code requiring the use of TEDs and the immediate release of any protected marine species that have been taken accidentally. Alternatively, FAQs could be issued requiring these measures to be taken.

Manage integrated protected areas. While the NIPAS Act creates an integrated system of protected areas, individual protected areas within this system have their own legislation to govern activities within them. We recommend that these be consolidated into a single piece of protected areas legislation; this could be done by developing the NIPAS Act with reference to the TRNP Act (cf Lim and Salzer, 2011).

Ensure compliance with international law and the laws and conservation and management measures outside the EEZ. A clause should be added to the Philippine Fisheries Code authorising enforcement authorities to investigate violations of Philippine law, international law, and the laws and conservation and management measures of RFMOs and relevant coastal states by Philippine flagged vessels and nationals outside Philippine waters.

Require adequate *ex situ* conservation measures. A clause should be added to the Wildlife Resources Conservation and Protection Act requiring confiscated wildlife to be returned to its country of origin, where possible.

Prohibit the mistreatment of wildlife in trade. The Philippines should consider creating animal welfare legislation, which should cover wildlife as well as domesticated species. Alternatively, requirements for wildlife to be properly cared for during transport and trade could be added to the Wildlife Resources Conservation and Protection Act.

Strengthen penalties for wildlife offences. In conjunction with the measures outlined above for targeting penalties to those who cause the most damage and profit the most from wildlife crime, maximum penalties under the Wildlife Resources Conservation and Protection Act could be raised for some crimes involving “other threatened” wildlife. It should be considered whether custodial sentences should be added for some offences to those FAOs that do not already provide them.

Penalise accomplices. A clause providing penalties for inciting, aiding, and concealing wildlife offences, or a clause stating that such activities will be penalised at the same rate as offences, should be added to all Philippine legislation viewed for this report.

Provide strong enforcement powers. Enforcement powers should be specified in the Fisheries Code and the Wildlife Resources Conservation and Protection Act. These should be strong enough to allow effective investigation and arrest of suspects. All personnel authorised to enforce the Fisheries Code should be included in persons authorised to enforce Section 18 of the NIPAS Act (Lim and Salzer, 2011).

Require a low burden of proof. A clause requiring those in possession of protected wildlife or wildlife parts to produce a permit, certificate of legal origin, or other proof of legal ownership on demand should be added to legislation.

Close a loophole. Address the loophole created by the combination of the constitutional right to be punished only once for the same crime and the authorisation of LGUs to pass laws governing some of the same areas as national legislation. This loophole could be removed by (a) requiring that, where more than one law provides penalties for the same offence, the higher penalty must be applied; (b) including a clause in national legislation to the effect that, where an offence is punishable under both national laws and laws passed by LGUs, national legislation has precedence; or (c) requiring LGUs to harmonise their legislation, including penal measures, with national legislation.

Replace incentives. Consider replacing the incentives for fishing further out into the Philippines' EEZ and beyond provided for by Section 35 of the Philippine Fisheries Code by incentives for other economic activities. While it is important to reduce the exploitation of coastal marine resources, offshore areas are also increasingly coming under pressure and it might be better to divert activities away from marine capture fisheries altogether.

Singapore

Provide protected status for all species protected by international agreements. We suggest amending the Endangered Species (Import and Export) Act to provide that all species listed on the CITES Appendices count as scheduled species under this Act. This would avoid the need to update the Schedules to keep up with changes to the CITES Appendices. Other species that would benefit from more controls on trade could be added in a list attached to the Act.

Prohibit activities related to unsustainable trade in marine wildlife. Section 10.1 of the Fisheries Act should be amended to add electrocuting equipment to the list of prohibited equipment in this Section. A clause prohibiting harming wildlife or ecosystems could be added to the Act.

Require by-catch mitigation measures. Clauses should be added to the Fisheries Act requiring the release of protected marine wildlife that has been captured accidentally.

Expand protected areas system. The Parks and Trees Act governs national parks and nature reserves, which are currently almost entirely terrestrial. MPAs could be added to the areas listed on the attached Schedule as covered by the Act and the legislation amended as necessary to apply to these. Alternatively, a separate piece of legislation could be created to govern MPAs.

Ensure compliance with international law and the laws and conservation and management measures outside territorial waters. A clause should be added to the Fisheries Act requiring flagged vessels and nationals fishing outside Singaporean waters to comply with international law and the laws and conservation and management measures of RFMOs and relevant coastal states. Section 22 should be amended or a new clause added to authorise enforcement authorities to investigate, in addition to violations of Singapore law, violations of international law and the laws and conservation and management measures of RFMOs and relevant coastal states by Singapore flagged vessels and nationals.

Require adequate ex situ conservation measures. The Endangered Species Act allows the Director-General of Agri-food and Veterinary Services to require owners of vessels that have been used to illegally import scheduled species into Singapore to return specimens to their point of departure. This measure should be amended to require the return of wildlife originating outside Singapore to its country of origin, where this is possible. The Act should also be amended to include measures requiring confiscated specimens to be kept in rescue centres.

Strengthen penalties for wildlife offences. We recommend removing the cap on fines for aggregate offences provided by the Endangered Species Act to allow larger-scale illegal trade to be penalised effectively. It should be considered whether maximum custodial sentences should be increased for more serious offences, in conjunction with the measures outlined above for targeting penalties to those who cause the most damage and profit the most from wildlife crime. Increased penalties for repeat offences should be added to all legislation (it is currently included only for some offences under the Animals and Birds Act).

Thailand

Clarify repeals. All legislation should include a repealing clause that states the specific laws and regulations, or the specific clauses of these, that the legislation replaces and repeals. This approach is used in some, but not all, of the Thai legislation reviewed for this report.

Define terms and remove conflicts and ambiguities. WARPA should be amended to add the term “introduction from the sea” to the definitions included in Section 4 and clauses regulating the import, export and transit of wildlife.

Section 7 of WARPA should be amended to remove the exemption to the prohibition on hunting wildlife for hunting with “reasonable cause.” Alternatively, this Section should include (a) a list of circumstances that constitute “reasonable cause” for killing a wild animal or (b) criteria for determining circumstances that constitute reasonable cause for killing a wild animal. (The proposed amendment to WARPA removes the term “reasonable cause.”)

The conflict between Section 47 and Sections 49 and 50 of WARPA, which provide different penalties for possessing or trading wildlife, should be resolved. This could be accomplished by (a) removing Sections 49 and 50 or (b) amending Section 47 to specify that the penalties provided in this Section apply only to the possession or trade of wild-caught specimens.

Section 26 of the National Park Act should be amended to replace the phrase “small value” with a specific monetary value. The phrase “slight damage” could also be replaced with a monetary value related to the cost of rehabilitation for the damage.

Provide protected status for all species protected by international agreements. We recommend implementing the proposed amendment to WARPA that provides that protected species include all species listed on CITES and other international agreements.

Prohibit activities related to unsustainable trade in marine wildlife. WARPA should be amended to prohibit hunting of wildlife species listed on CITES Appendix I and allow hunting of Appendix II- and III-listed species only for purposes of captive breeding or exchange with a research institution (cf Moore *et al.*, 2016).

Require by-catch mitigation measures. Clauses should be added to the Ordinance on Fisheries requiring the use of TEDs and the release of protected marine wildlife that has been captured accidentally. Alternatively, fisheries notifications could be issued that require these measures.

Require adequate ex situ conservation measures. WARPA should be amended to require seized live specimens to be returned to their country of origin or released into the wild if they originated in Thailand, and, where this is not possible, to be housed in a rescue centre.

Prohibit the mistreatment of wildlife in trade. Wildlife should be added to the scope of the Cruelty Prevention and Welfare of Animals Act. Alternatively, requirements for wildlife to be properly cared for in captivity should be added to WARPA.

Strengthen penalties for wildlife offences. In conjunction with the measures outlined above for targeting penalties to those who cause the most damage and profit the most from wildlife crime, fines and custodial sentences under WARPA should be increased, and custodial sentences should be added to penalties for serious offences under the Ordinance on Fisheries.

Penalise accomplices. A clause providing penalties for inciting, aiding, and concealing wildlife offences, or a clause stating that such activities will be penalised at the same rate as offences, should be added to all Thai legislation viewed for this report (except the Customs Act and the Ordinance on Fisheries, which already include this measure).

Require a low burden of proof. A clause requiring those in possession of protected wildlife or wildlife parts to produce a permit, certificate of legal origin, or other proof of legal ownership on demand should be added to all legislation in Thailand (except the Customs Act, which already includes this measure).

Remove unenforceable measures. WARPA should be amended to remove Section 22, which prohibits shooting wildlife between sunset and sunrise, as this measure is difficult to enforce. (The proposed amendment to WARPA removes this provision.)

Viet Nam

Systematise, simplify and harmonise legislation. Viet Nam would benefit from consolidation of its regulations. This could be undertaken at the ministerial level, by reviewing extant regulations under each ministry and consolidating these in a fewer number of regulations that each deal with a standardised, specific area (e.g. licences, fees, fishing gear etc.) and that explicitly repeal the regulations they replace.

Custodial sentences for wildlife crimes under the 1999 Penal Code should be increased to the amounts specified by the Code as appropriate for “less serious,” “serious,” “very serious” and “particularly serious” crimes in general.⁶⁸ Administrative penalties for wildlife crimes provided by the Decree on Administrative Penalties in Respect of Environmental Protection should be brought into line with the maximums allowed by the Law on Handling of Administrative Violations.

Measures governing the creation and management of protected areas under the Biodiversity Law, the Law on Marine and Island National Resources and Environment, and the Fisheries Law and their implementing regulations should be harmonised. This would simplify the management of MPAs, clarify jurisdiction, and assist in public awareness of regulations for activities in these areas.

Reduce discretion. Legislation in Viet Nam generally provides both flexibility and guidance in applying penalties. Nonetheless, in order to provide further guidance, criteria could be added to the Penal Code determining whether an offence is “less serious,” “serious,” “very serious” or “particularly serious,” i.e. the Articles defining these terms (Art. 8 in the 1999 Code; Arts. 8–9 in the 2015 Code) should list types of “harms to society” and criteria for evaluating their severity.

Articles 76 and 77 of the Law on Handling of Administrative Violations should be amended to reduce discretion in the use of postponements of and exemptions from payment of fines by providing more detailed guidelines on the circumstances in which these measures should be used. For example, Article 77 might allow reductions of fines, payment plans, or other penalties, such as community service, warnings, and suspended sentences, to be used instead of exemptions. The new measures should aim to remove the possibility of individuals being able to commit wildlife crimes with impunity while taking seriously the extra costs imposed on poor people by fines or by measures that impact their ability to work.

Clarify jurisdiction. Clauses should be added to wildlife protection legislation that clarify the respective jurisdictions of MARD and MONRE, including specifying which agency has jurisdiction over the granting of permits for collection, import and export of wildlife. This should help avoid duplication of measures regulating wildlife protection in ministry regulations.

Provide protected status for all species protected by international agreements. Viet Nam has several pieces of legislation that issue or refer to lists of protected species, including Government Decree No. 82/2006/ND-CP and MARD Circular 40/2013/TT-BNNPTNT, which use the CITES Appendices, the trade regulation decrees No. 187/2013/ND-CP and No. 59/2006/ND-CP, which refer to the CITES Appendices and other lists of marine wildlife, and Government Decree No. 160/2013/ND-CP, which promulgates a separate list of endangered, precious and rare species prioritised for protection.

⁶⁸ This measure has already been taken in the 2015 Penal Code (National Assembly Law No. 100/2015/QH13) which, however, is under consideration for amendment prior to entering into force.

Although the outcome is that all CITES-listed species are protected by law along with other endangered native Vietnamese species, the resulting proliferation of lists is confusing. It would be beneficial to consolidate the lists, writing the CITES Appendices into law as the basis for wildlife protection and adding to the same legislation any additional species listed on CMS and priority species within Viet Nam (i.e. species on the existing list of endangered, precious and rare species prioritised for protection).

Require by-catch mitigation measures. Clauses requiring the use of TEDs and the release of protected marine wildlife that has been captured accidentally should be added to the Fisheries Law. Penalties for failing to take these measures should be added to Government Decree No. 103/2013/ND-CP On Administrative Sanctions in Fisheries Field.

Require adequate ex situ conservation measures. Article 47 of the Law on Biodiversity should be amended to require wildlife that originated outside Viet Nam to be returned to its country of origin, where possible.

Prohibit the mistreatment of wildlife in trade. Viet Nam should consider creating animal welfare legislation, which should cover wildlife as well as domesticated species. Alternatively, requirements for wildlife to be properly cared for during transport and trade should be added to the Law On Environmental Protection, the Biodiversity Law, and Government Decree No. 82 (2006).

Strengthen penalties for wildlife offences. In conjunction with the measures outlined above for targeting penalties to those who cause the most damage and profit the most from wildlife crime, the Law on Handling of Administrative Violations should be amended to allow higher penalties for violations of aquatic and marine resource conservation and management regulations. This amendment should be reflected by a corresponding increase in penalties under the Decree on Administrative Penalties in Fisheries Field.

The amounts of all fines provided by the Law on Handling of Administrative Violations should be based on the market value or number of specimens, not the weight, of wildlife products involved. These measures usually correspond more closely with deterrent effectiveness than the weight of the product.

The extenuating circumstance in Penal Code Article 46.1r (Art. 51.1v in the 2015 Code) for people with strong contributions to production, work, combat or study should be removed. This is a subjective criterion that may encourage more lenient sentences for individuals in more privileged positions.

Provide enforcement powers. Article 55 of the Fisheries Law should be amended to add or more clearly provide powers to stop and search vessels, apprehend suspects and confiscate specimens. Clear specifications of strong enforcement powers should be added to the remaining primary legislation viewed for this report (except the Law on Customs, which already includes these measures).

Require a low burden of proof. The Law on Handling of Administrative Sanctions should be amended to (a) remove the clause placing the burden of proof with those enforcing the law, or (b) amend this clause to state that in the case of suspected illegal possession of wildlife the onus lies with the owner. A clause requiring those in possession of protected wildlife or wildlife parts to produce a permit, certificate of legal origin, or other proof of legal ownership on demand should be added to all legislation that regulates permits and possession of wildlife.

Replace incentives. Consider replacing the incentives for offshore fishing provided for by Articles 12 and 13 of the Fisheries Law by incentives for other economic activities. While it is important to reduce the exploitation of coastal marine resources, offshore areas are also increasingly coming under pressure and it might be better to divert activities away from marine capture fisheries altogether.

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APPENDICES

Appendix I: ASEAN marine species listed on CITES, CMS and UNCLOS, and IUCN Red List status

Species	CITES Appendix	CMS Appendix	UNCLOS	IUCN Red List
Leatherback Turtle <i>Dermochelys coriacea</i>	I	I & II	-	Critically Endangered
Hawksbill Turtle <i>Eretmochelys imbricata</i>	I	I & II	-	Critically Endangered
Loggerhead Turtle <i>Caretta caretta</i>	I	I & II	-	Endangered
Green Turtle <i>Chelonia mydas</i>	I	I & II	-	Endangered
Olive Ridley Turtle <i>Lepidochelys olivacea</i>	I	I & II	-	Vulnerable
Flat-backed Turtle <i>Natator depressus</i>	I	II	-	Data Deficient
Blue coral <i>Helioporidae</i> spp. (<i>Heliopora coerulea</i>)	II	-	-	Vulnerable
Stony corals <i>Scleractinia</i> spp.	II	-	-	Several species assessed as Endangered, Vulnerable or Near threatened
Organ-pipe corals <i>Tubiporidae</i> spp. (<i>Tubipora musica</i>)	II	-	-	Near threatened
Black corals <i>Antipatharia</i> spp.	II	-	-	-
Red coral <i>Corallium elatius</i> , <i>C. japonicum</i> , <i>C. konojoi</i> , <i>C. secundum</i>	III (China)	-	-	-
Fire corals <i>Milleporidae</i> spp.	II	-	-	Critically endangered (<i>M. boschmai</i>) Vulnerable (<i>M. foveolata</i> , <i>M. latifolia</i>) Near threatened (<i>M. murrayi</i>)
Lace corals <i>Stylasteridae</i> spp.	II	-	-	-
Giant clams <i>Tridacnidae</i> spp.	II	-	-	Vulnerable (Giant Clam <i>T. gigas</i> , Southern Giant Clam <i>T. derasa</i>)
Sea cucumbers <i>Holothuroidea</i> spp.	-*	-	-	Endangered (Golden Sandfish <i>H. lessoni</i> & <i>H. scabra</i> , Black Teatfish <i>H. nobilis</i> & <i>H. whitmaei</i> , Prickly Redfish <i>Thelenota ananas</i>) Vulnerable (Deep Water Redfish <i>Actinopyga echinites</i> , Harry Blackfish <i>A. miliaris</i> , <i>H. fuscogilva</i> , Curryfish <i>Stichopus herrmanni</i>)

Species	CITES Appendix	CMS Appendix	UNCLOS	IUCN Red List
Seahorses <i>Hippocampus</i> spp.	II+	-	-	Vulnerable (Barbour's Seahorse <i>H. barbouri</i> , Tiger Tail Seahorse <i>H. comes</i> , Spiny Seahorse <i>H. histrix</i> , Great Seahorse <i>H. kelloggi</i> , Spotted Seahorse <i>H. kuda</i> , Hedgehog Seahorse <i>H. spinosissimus</i> & Three-spot Seahorse <i>H. trimaculatus</i>)
Humphead Wrasse <i>Cheilinus undulatus</i>	I	-	-	Endangered
<i>Manta</i> spp.	II	I & II	-	Vulnerable
Spinetail Mobula <i>Mobula japonica</i>	**	I & II	-	Near threatened
Smoothtail Devilray <i>M. thurstoni</i>	**	I & II	-	Near threatened
Greater Guinean Mobula <i>M. tarapacana</i>	**	I & II	-	Data deficient
Pygmy Devilray <i>M. eregoodootenkee</i>	**	I & II	-	Near threatened
Shortfin Devilray <i>M. kuhlii</i>	**	I & II	-	Data deficient
Scalloped Hammerhead Shark <i>Sphyrna lewini</i>	II	II	X	Endangered
Great Hammerhead Shark <i>S. mokarran</i>	II	II	X	Endangered
Oceanic Whitetip Shark <i>Carcharhinus longimanus</i>	II	-	X	Vulnerable
Great White Shark <i>Carcharodon carcharias</i>	II	I & II	X	Vulnerable
Whale Shark <i>Rhincodon typus</i>	II+	II	X	Vulnerable
Shortfin Mako <i>Isurus oxyrinchus</i>	-	II	X	Vulnerable
Pelagic Thresher <i>Alopias pelagicus</i>	**	II	X	Vulnerable
Common Thresher Shark <i>A. vulpinus</i>	**	II	X	Vulnerable
Silky Shark <i>Carcharhinus falciformis</i>	**	II	X	Near threatened
<i>Carcharhinidae</i> spp. & <i>Sphyrnidae</i> spp.	-	-	X	-
<i>Cetacea</i> spp.	II (all species not on App. I)	-	X (<i>Balaenopteridae</i> , <i>Delphinidae</i> , <i>Physeteridae</i> , <i>Ziphiidae</i>)	-
Fin Whale <i>Balaenoptera physalus</i>	I	I & II	X	Endangered
Blue Whale <i>B. musculus</i>	I	I	X	Endangered
Bryde's Whale <i>B. edeni</i>	I	II	X	Data deficient
Omura's Whale <i>B. omurai</i>	I	II	X	Data deficient
Sperm Whale <i>Physeter macrocephalus</i>	I	I & II	X	Vulnerable
Irrawaddy Dolphin <i>Orcaella brevirostris</i>	I	I & II	X	Vulnerable

Species	CITES Appendix	CMS Appendix	UNCLOS	IUCN Red List
Indo-pacific Humpbacked Dolphin <i>Sousa chinensis</i>	I	II	X	Near threatened
Indo-pacific Bottlenose Dolphin <i>Tursiops aduncus</i>	II	II (Arafura & Timor Sea)	X	Data deficient
Spinner Dolphin <i>Stenella longirostris</i>	II	II (E. tropical Pacific & SE Asia)	X	Data deficient
Killer Whale <i>Orcinus orca</i>	II	II	X	Data deficient
Indo-pacific Finless Porpoise <i>Neophocaena phocaenoides</i>	I	II	-	Vulnerable
Dugong <i>Dugong dugon</i>	I	II	-	Vulnerable

Note: Table includes species native to ASEAN waters listed under CITES, CMS or UNCLOS (exception: sea cucumbers) and excludes species assessed as Least Concern by the IUCN Red List.

* Ecuador has listed the Brown Sea Cucumber *Isostichopus fuscus* as CITES Appendix III, but this species is not native to ASEAN waters.

** Added to CITES Appendix II in 2017 (Silky Shark, *Alopias* spp. and *Mobula* spp.; CITES Secretariat 2016).

+ Reservation lodged by Indonesia.

Appendix II: Obligations of ASEAN countries under international agreements and extent of implementation

Key:

* this agreement or measure is not legally binding

Y (Yes) the country's legislation requires this measure

P (Partly) the country's legislation requires this measure in part, under some circumstances or in an ineffective or vague way

N (No) the country's legislation does not require this measure

? this measure is not in legislation reviewed for this report but may be in other legislation in this country

+ this measure is not in legislation viewed for this report but is thought to be in the following pieces of legislation:

Cambodia: Sub-Decree No. 53 on International Trade in Endangered Species (2006)

Myanmar: Notification for Control of Endangered Fish Species or Notification on Prohibition of Fish Importing

_ this measure is not in legislation reviewed for this report but is known to be, is likely to be or may be implemented without codification in legislation

N/A this measure does not apply to this country because the country does not have marine areas (Lao PDR only)

Type of obligation	Obligation	Provided by which international instrument	ASEAN countries bound by obligation	Implementation in legislation by ASEAN countries									
				Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
Control of trade	Prohibit trade, including import, export and introduction from the sea, in violation of CITES (including requiring appropriate CITES permits)	CITES, WCPFC guidelines (Oceanic Whitetip Sharks), IOTC Resolution 13/06 (Oceanic Whitetip Sharks), Dugong MoU*, Sharks MoU*	All	Y	P/+	Y	P	Y	Y	Y	Y	P	Y
	Penalise trade in violation of CITES, including clearly specifying prohibited activities and penalties sufficient to deter violations	CITES	All	Y	P/+	Y	P	Y	Y/P	P	Y	P	Y
	Confiscate and return to the state of export specimens transported, held or collected in violation of CITES	CITES	All	P	+	Y	N	P	P	P	P	P	Y
	Record imports and exports of CITES-listed species	CITES	All	-	+	-	-	-	+	P	Y	-	P
	Regulate and manage trade in marine wildlife and products*	ICRI*	Indonesia*, Malaysia*, Philippines*, Thailand*, Viet Nam*	Y	Y	Y	P	Y	P	Y	Y	P	P
Control of harvest / collection	Regulate and manage collection of biological resources	CBD	All	Y	P	Y	N/A	P	P	Y	Y	P	Y
	Require permits for exploitation of resources	UNFSA, FAO Code of Conduct*	Indonesia, Philippines, all*	Y	Y	Y	N/A	Y	Y	Y	Y	Y	Y
	Prohibit taking of CMS listed species	CMS, WCPFC guidelines (Silky Sharks), IOTC Resolution 12/09 (thresher sharks), Dugong MoU*, Sharks MoU*, IOSEA Marine Turtle MoU*	Cambodia (turtles)*, Indonesia (Silky Sharks, turtles)*, Malaysia (turtles)*, Myanmar (Dugong, turtles)*, Philippines, Thailand (Dugong, turtles, Silky Sharks)*, Viet Nam (turtles, Silky Sharks)* All (Cambodia*)	P	+	P	N/A	P	Y	Y	P	P	P
	Prevent or eliminate over-exploitation	UNCLOS, UNFSA, WCPFC Convention (migratory fish), SSME CAPs*	All (Cambodia*)	P	P	P	N/A	P	N	P	P	P	P
	Consider effects of activity on associated species	UNCLOS, UNFSA, FAO Code of Conduct*, WCPFC Convention, CCSBT*		N	N	Y	N/A	N	N	N	N	N	N

Type of obligation	Obligation	Provided by which international instrument	ASEAN countries bound by obligation	Implementation in legislation by ASEAN countries									
				Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
Control of collection methods and equipment	Use environmentally safe equipment	WCPFC Convention and guidelines (for certain types of fishing), Sharks MoU*, IOSEA Marine Turtle MoU*, UN Resolution 70/75*	Indonesia, Philippines, all*	P	Y	Y	N/A	P	P	P	P	P	Y
	Prohibit large-scale pelagic driftnet fishing	WCPFC guidelines, IOTC Resolution 12/12, Sharks MoU*, IOSEA Marine Turtle MoU*, Agenda 21*, UN Resolution 46/215*, UN Resolution 70/75*	Indonesia, Malaysia, Philippines, Thailand, all*	N	P	N	N/A	N	N	N	N	N	N
	Minimise discards, by-catch and incidental mortality of non-target species	UNFSA, WCPFC Convention and guidelines (for fishing for migratory species), IOTC Resolutions 12/04, 13/04, 13/05, 13/06, 12/09, 05/05 (turtles, cetaceans, sharks for tuna fisheries), Dugong MoU*, Sharks MoU*, FAO Code of Conduct*, IOSEA Marine Turtle MoU*, Agenda 21*, UN Resolution 70/75*, SSME CAPs*, CTI-CFF*	Indonesia, Malaysia (turtles, cetaceans, sharks for tuna fisheries), Philippines, Thailand (turtles, cetaceans, sharks for tuna fisheries), all*	P	N	P	N/A	P	P	P	N	P	N
	Reduce finning/require full use of shark catch	WCPFC guidelines, IOTC Resolution 05/05, Sharks MoU*, UN Resolution 70/75*	Indonesia, Malaysia, Philippines, Thailand, all*	N	N	Y	N/A	N	N	N	N	N	N
	Prohibit/minimise destructive fishing*	FAO Code of Conduct*, Agenda 21*, TIHPA, CTI-CFF*	All*	P	Y	Y	N/A	Y	Y	Y	P	Y	Y

Type of obligation	Obligation	Provided by which international instrument	ASEAN countries bound by obligation	Implementation in legislation by ASEAN countries									
				Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
MPAs	Designate and manage protected areas in which to conserve biodiversity and rehabilitate damaged ecosystems	CBD, Ramsar (wetlands), Sharks MoU*, Agenda 21*, UN Resolution 69/245*, TIHPA, CTI-CFF*, SSME MoU*, CTI-CFF*, ICR1*	All	P	Y	Y	N/A	Y	Y	Y	N	Y	Y
	Protect/conservate and rehabilitate ecosystems, marine resources and/or habitat	CBD, CMS, UNCLOS, Convention on Fishing and Conservation of the Resources of the High Seas (on the high seas), Dugong MoU*, Sharks MoU*, FAO Code of Conduct*, Agenda 21*, IOSEA Marine Turtle MoU*, TIHPA, SSME MoU*, CTI-CFF*	All	P	P	Y	N/A	N	P	P	N	P	Y
	Protect migratory corridors	CMS, Sharks MoU*, SSME CAPs*	Indonesia*, Malaysia*, Philippines	N	N	Y	N/A	N	N	P	N	N	Y
	Develop spatial and/or seasonal closures of fishing areas*	Sharks MoU*	Philippines*	P	Y	Y	N/A	P	P	Y	P	Y	P
Ex situ protection	Confiscate specimens transported, held or collected in violation of CITES	CITES	All	Y	+	Y	N	Y	P	Y	Y	P	Y
	Adopt ex situ measures to conserve biodiversity, including reintroduction of threatened species to their natural habitats	CBD	All	P	+	Y	N	N	N	Y	P	N	Y
Records	Require recording and reporting of catch (and discards) of target and non-target species	UNFSA, IOTC Resolutions 12/04, 13/04, 13/05, 13/06, 12/09, 05/05 (turtles, cetaceans, sharks for tuna fisheries), CCSBT (Southern Bluefin Tuna and ecologically related species), Sharks MoU*, FAO Code of Conduct*, UN Resolution 70/75*	Indonesia, Malaysia (turtles, cetaceans, sharks for tuna fisheries), Philippines, Thailand (turtles, cetaceans, sharks for tuna fisheries), all*	N	P/?	Y	N/A	P	P	Y	N	Y	Y
	Record imports and exports of CITES-listed species	CITES	All (Cambodia*)	-	+	-	-	Y	+	P	Y	-	P
	Maintain records of fishing vessels entitled to fly the state's flag	UNCLOS, UNFSA, FAO Compliance Agreement, WCPFC Convention, FAO Code of Conduct*	Indonesia, Philippines, all*	N	P	Y	?	Y	P	Y	Y	Y	Y
	Mark all fishing gear to allow owner identification	UNFSA, FAO Code of Conduct*		N	N	Y	N	N	N	Y	Y	Y	Y

Type of obligation	Obligation	Provided by which international instrument	ASEAN countries bound by obligation	Implementation in legislation by ASEAN countries										
				Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam	
Reporting to convention bodies	Submit annual reports on imports and exports to CITES	CITES	All	-	+	-	-	Y	-	-	-	-	-	-
	Submit biannual reports on legislative, regulatory and administrative measures to CITES	CITES	All	-	+	-	-	Y	-	-	-	-	-	-
	Submit reports to CBD	CBD	All	-	-	-	-	-	-	-	-	-	-	-
	Inform the Ramsar Secretariat at the IUCN of likely changes affecting wetland areas	Ramsar	Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Thailand, Viet Nam	-	-	-	-	-	-	-	-	-	-	-
	Report on measures to comply with CMS, CMS-listed species occurring within their waters, and plans to take CMS-listed species	CMS	Philippines	-	-	-	-	-	-	-	-	-	-	-
	Report statistics relating to whaling to the IWC	Whaling Convention	Cambodia, Lao PDR	-	-	-	-	-	-	-	-	-	-	-
	Report to the IOTC on implementation and impacts of tuna fishing on turtles	IOTC Resolution 12/04	Indonesia, Malaysia, Philippines, Thailand	-	-	-	-	-	-	-	-	-	-	-
	Report results of port inspections to FAO, RFMOs and relevant states	FAO Port State Measures Agreement	Indonesia, Myanmar, Thailand	-	-	-	-	-	-	-	-	-	-	-
	Provide data to FAO on vessel specifications, owners and activities that undermine conservation and management measures	FAO Compliance Agreement	Myanmar	-	-	-	-	-	-	-	-	-	-	-
	Report data to CCSBT on Southern Bluefin Tuna and ecologically related species	CCSBT	Indonesia, Philippines*	-	-	-	-	-	-	-	-	Y	-	-
	Report to the IOTC on monitoring and control of large-scale driftnet fishing	IOTC Resolution 12/12	Indonesia, Malaysia, Philippines, Thailand	-	-	P	-	-	-	-	-	-	-	-
	Report to the IOTC on monitoring and control of large-scale driftnet fishing	IOTC Resolution 12/12	Indonesia, Philippines, Thailand*, Viet Nam*	-	-	P	-	-	-	-	-	-	-	-
	Report to WCPFC annually on data and conservation measures relating to migratory fish, and on implementation of FAO IPOA on sharks and sea turtle guidelines	WCPFC Convention	Indonesia, Myanmar, Thailand	-	-	P	-	-	-	-	-	-	-	-
	Report data on catch and discards to management bodies responsible for stock assessments*	FAO Code of Conduct*, UN Resolution 70/75*	All*	-	-	-	-	-	-	-	-	-	-	-
Report on measures to implement the Dugong MoU*	Dugong MoU*	Myanmar*, Philippines*, Thailand*	-	-	Y	-	-	-	-	-	-	-	-	
Report on measures to implement the Sharks MoU*	Sharks MoU*	Philippines*	-	-	-	-	-	-	-	-	-	-	-	
Report on measures to implement the IOSEA Marine Turtle MoU*	IOSEA Marine Turtle MoU*	Cambodia*, Indonesia*, Malaysia*, Myanmar*, Philippines*, Thailand*, Viet Nam*	-	-	-	-	-	-	-	-	-	-	-	

Type of obligation	Obligation	Provided by which international instrument	ASEAN countries bound by obligation	Implementation in legislation by ASEAN countries									
				Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
IUU fishing	Deny entry and refuse services to vessels suspected of IUU fishing	FAO Agreement on Port State Measures, IOTC Resolution 10/11	Indonesia, Malaysia, Myanmar, Philippines, Thailand Indonesia, Myanmar, Thailand	N	?	?	N/A	N	N	P	?	Y	N
	Exchange information with other states on measures relating to IUU fishing	FAO Agreement on Port State Measures, FAO Compliance Agreement		-	-	P	-	-	-	-	-	Y	P
	Discourage reflagging	FAO Compliance Agreement, CCSBT, FAO Code of Conduct *, UN Resolution 70/75*	Indonesia (tuna fishing), Myanmar, all*	N	?	P	N	P	N	P	P	Y	P
	Maintain records of all vessels with the right to fly state flag	UNCLOS, FAO Code of Conduct*	All (Cambodia*)	-	P	Y	-	Y	P	Y	Y	Y	Y
	Inspect landings or transshipments	FAO Agreement on Port State Measures, IOTC Resolution 10/11 (≥ 5% of landings or transshipments) UNFSA	Indonesia, Malaysia, Myanmar, Philippines, Thailand Indonesia, Philippines	P	?	Y	N/A	Y	P	P	Y	Y	P
	Ensure compliance of flagged vessels with conservation measures	UNFSA, FAO Code of Conduct*	Indonesia, Philippines, all* All (Cambodia*)	P	P	P	N	N	N	Y	P	Y	Y
	Require permits for exploitation of resources			Y	Y	Y	N/A	Y	Y	Y	Y	Y	Y
	Investigate and penalise violations of international and national legislation outside the EEZ	UNCLOS, UNFSA, WCPFC Convention (for migratory fish), FAO Code of Conduct*, Agenda 21*	All* All*	N	P	P	N	N	N	Y	P	Y	Y
	Control fishing activities of nationals*	UN Resolution 70/75*		P	Y	Y	P	P	P	Y	Y	Y	Y
	Deter IUU fishing*	FAO Code of Conduct*, UN Resolution 70/75*		P	P	Y	P	P	P	P	P	Y	Y
Improve legislation	Develop national legislation to protect threatened species	CBD, Dugong MoU*, IOSEA Marine Turtle MoU*, ASEAN MoU	All	Y	Y	Y	P	P	P	P	P	P	Y
	Strengthen and harmonise legal and regulatory frameworks*	Dugong MoU*, Sharks MoU*, Agenda 21*, IOSEA Marine Turtle MoU*, CTI-CFF*, ICRI (review and reformulate legislation)*	All*	-	-	-	-	-	-	-	-	-	P
	Harmonise legislation with UNCLOS and other relevant international agreements*	UN Resolution 69/245*	All*	-	-	-	-	-	P	-	-	-	P

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				Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
Conservation and management plans and strategies	Develop national conservation strategies to conserve biodiversity	CBD, Agenda 21*	All	P	Y	Y	N/A	P	-	Y	N	Y	Y
	Harmonise conservation and management measures for fisheries	UNFSA	Indonesia, Philippines	-	-	-	N/A	-	-	-	-	-	P
	Develop management plans for longline shark fisheries	WCPFC guidelines	Indonesia, Philippines, Thailand*, Viet Nam*	-	-	-	N/A	-	-	-	-	-	-
	Implement the Conservation and Management Plan attached to the Dugong MoU*	Dugong MoU*	Myanmar*, Philippines*, Thailand* Cambodia*, Indonesia*, Malaysia*, Myanmar*, Philippines*, Thailand*, Viet Nam*	-	-	-	N/A	-	-	-	-	-	-
	Implement the Conservation and Management Plan attached to the IOSEA Marine Turtle MoU*	IOSEA Marine Turtle MoU*	All*	-	-	-	N/A	-	-	-	-	-	-
	Develop national plans for sea turtles, sharks and managing fishing capacity*	FAO Code of Conduct IPOAs*	Indonesia*, Malaysia*, Philippines*	P	-	P	N/A	-	-	-	-	P	-
	Develop regional CAPs for sharks, sea turtles, marine mammals, targeted reef fish and threatened invertebrates*	CTI-CFF*		-	-	-	N/A	-	-	-	-	-	-
Designate national authorities	CITES MA and SA	CITES	All	Y	Y/+	P	-	Y	Y	Y	Y	P	Y
	Contact point for exchanging information relating to the FAO Port State Measures Agreement	FAO Port State Measures Agreement	Indonesia, Myanmar, Thailand	-	-	-	-	-	-	-	-	-	-
	Coordinating authority for the IOSEA Marine Turtle MoU*	IOSEA Marine Turtle MoU*	Cambodia*, Indonesia*, Malaysia*, Myanmar*, Philippines*, Thailand*, Viet Nam* All except Cambodia	-	-	-	-	-	-	-	-	-	-
	Coordinating authority for the ASEAN MoU	ASEAN MoU	Myanmar*, Philippines*, Thailand* Philippines*	-	-	-	-	-	-	-	-	-	-
	National authority for the Dugong MoU*	Dugong MoU*	Malaysia, Philippines	-	-	-	-	-	-	-	-	-	-
	National authority for the Sharks MoU*	Sharks MoU*	Indonesia*, Malaysia*, Philippines*	-	-	-	-	-	-	-	-	-	-
	Implementing authority for TIHPA	TIHPA		-	-	-	-	-	-	-	-	-	-
Focal point for SSME*	SSME CAPs*		-	-	-	-	-	-	-	-	-	-	

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				Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
International cooperation	Ensure compliance with international and national laws, including investigating and penalising violations	UNCLOS, UNFSA, WCPFC Convention (for migratory fish), FAO Code of Conduct*, Agenda 21*	All	N	P	P	N	P	P	P	P	Y	Y
	Cooperate to implement conservation measures	CBD, UNCLOS, Convention on Fishing and Conservation of the Resources of the High Seas, WCPFC Convention, Dugong MoU*, Sharks MoU*, FAO Code of Conduct*, Agenda 21*, UN Resolution 69/245*, IOSEA Marine Turtle MoU*	All	-	-	P	-	-	-	-	-	P	Y
	Cooperate to manage straddling and migratory fish stocks and transboundary areas	UNCLOS, WCPFC Convention, FAO Code of Conduct*, Agenda 21*, ICRI* UNCLOS, UN Resolution 70/75*	All	-	-	P	-	-	-	-	-	Y	Y
	Require flagged vessels to comply with conservation measures in the EEZs of other states	UNFSA, FAO Code of Conduct*, ASEAN MoU	All (Cambodia*)	N	P	Y	N	N	N	P	P	Y	Y
	Harmonise conservation and management measures	UNCLOS ("as appropriate"), UNFSA, Sharks MoU*, Agenda 21*, UN Resolution 70/75*	Cambodia*, all others	-	-	-	-	-	-	-	-	-	Y
	Join or cooperate with relevant RFMOs	FAO Agreement on Port State Measures, FAO Compliance Agreement, FAO Code of Conduct IPOAs* CCSBT	All	-	-	Y	-	-	-	-	-	Y	-
	Exchange information with other states on measures relating to IUU fishing	Ramsar	Indonesia, Myanmar, Thailand, all*	-	-	P	-	-	-	-	-	P	P
	Exchange information with other states on fishing for Southern Bluefin Tuna	Agenda 21*, IOSEA Marine Turtle MoU* UN Resolution 69/245*	Indonesia, Philippines*	-	-	P	-	-	-	-	-	P	P
	Consult with other Parties when implementing obligations under the Ramsar Convention	Dugong MoU*, Sharks MoU*, IOSEA Marine Turtle MoU*	Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Thailand, Viet Nam	-	Y	-	-	-	-	-	-	-	-
	Exchange information with other states*	Harmonise legislation with UNCLOS and other agreements relevant to oceans management*	All*	-	-	-	-	-	-	-	-	-	P
Cooperate on combating illegal trade*		Cambodia (turtles)*, Indonesia (turtles)*, Malaysia (turtles)*, Myanmar (turtles, Dugong)*, Philippines*, Thailand (turtles, Dugong)*, Viet Nam (turtles)*	-	-	P	-	-	-	P	-	-	P	-
				-	-	-	-	-	-	-	-	-	Y

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				Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
Sign/create/ implement interna- tional instruments	Agreements to protect migratory species	CMS (Parties should “endeavour” to conclude agreements), Sharks MoU*, Dugong MoU*, IOSEA Marine Turtle MoU*	Cambodia (turtles)*, Indonesia (turtles)*, Malaysia (turtles)*, Myanmar (Dugong, turtles)*, Philippines, Thailand (Dugong, turtles)*, Viet Nam (turtles)* Indonesia, Philippines, all*	P	P	P	P	P	P	Y	P	P	P
	FAO Guidelines to Reduce Sea Turtle Mortality in Fishing Operations	WCPFC guidelines, CCSBT recommendations*, UN Resolution 70/75*	Indonesia, Philippines, all*	-	-	-	-	-	-	-	-	-	-
	FAO IPOA for the Conservation and Management of Sharks	WCPFC guidelines, CCSBT recommendations*, UN Resolution 70/75*	All*	-	-	-	-	-	-	-	-	-	-
	Other FAO IPOAs*	UN Resolution 70/75*, CTI-CFF*	All*	-	-	-	-	-	-	-	-	-	-
	CITES*	UN Resolution 70/75*	All*	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	CMS*	UN Resolution 70/75*, UN Resolution 69/245*	All*	N	N	N	N	N	N	Y	N	N	N
	UNCLOS*	UN Resolution 70/75*	All*	Y	P	Y	Y	Y	Y	Y	Y	Y	Y
	Sharks MoU*	IOSEA Marine Turtle MoU*, UN Resolution 70/75*, UN Resolution 69/245*	All*	N	N	N	N	N	N	N	Y	N	N
	UNFSA*	FAO Code of Conduct*, IOSEA Marine Turtle MoU*, UN Resolution 70/75*	All*	N	N	Y	N	N	N	Y	N	N	N
	FAO Compliance Agreement*	UN Resolution 70/75*	All*	N	N	N	N	N	Y	N	N	N	N
	FAO Agreement on Port State Measures*	CITES Resolution Conf. 11.4 (Rev. CoP12)*	Cambodia*, Indonesia*, Malaysia*, Myanmar*, Philippines*, Thailand*, Viet Nam*	N	N	Y	N	N	Y	N	N	Y	N
	International Convention for the Regulation of Whaling*	Sharks MoU*, IOSEA Marine Turtle MoU*	All*	N	Y	N	Y	N	N	N	N	N	N
	FAO Code of Conduct*	Agenda 21*, UN Resolution 69/245*, SSME MoU*, CTI-CFF*		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
In general*			P	P	P	P	P	P	Y	P	P	Y	

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				Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
Broad measures	Protect/conservate and rehabilitate ecosystems, marine resources and/or habitat	CBD, CMS, UNCLOS, Convention on Fishing and Conservation of the Resources of the High Seas (on the high seas), Dugong MoU*, FAO Code of Conduct*, Agenda 21*, IOSEA Marine Turtle MoU*	All	Y	P	Y	P	P	N	P	N	Y	Y
	Use resources sustainably	CBD, UNCLOS, UNFSA, WCPFC Convention (migratory fish), FAO Code of Conduct*	All	P	Y	Y	Y	P	N	Y	N	Y	Y
	Protect (marine) biodiversity	CBD, UNFSA, WCPFC Convention (migratory fish), FAO Code of Conduct*, Agenda 21*, UN Resolution 70/75*, UN Resolution 69/245*	All	N	Y	Y	N/A	P	P	Y	N	Y	Y
	Adopt a precautionary approach	UNFSA, WCPFC Convention (migratory fish), Sharks MoU*, FAO Code of Conduct*, Agenda 21*, UN Resolution 70/75*, CTI-CFF*	Indonesia, Philippines, all*	N	N	P	N	N	N	P	N	P	Y
	Protect and rehabilitate fisheries* Adopt an ecosystem approach*	FAO Code of Conduct* Sharks MoU*, UN Resolution 70/75*, UN Resolution 69/245*, CTI-CFF*, SSME CAPs*, CTI-CFF*, ICR1*	All* All*	P P	P P	Y Y	N/A N	P N	P N	Y P	N N	Y P	Y P
Other	Treat wildlife in trade appropriately	CITES	All	P	+	Y	Y	Y	P	Y	Y	N	N

TRAFFIC, the wildlife trade monitoring network, is a leading non-governmental organisation working globally on trade in wild animals and plants in the context of both biodiversity conservation and sustainable development.

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