

TRAFFIC



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REPORT ON ILLEGAL TRAFFICKING AND
INTERNATIONAL LEGAL TRADE IN WILDLIFE FROM
GALAPAGOS

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TRAFFIC REPORT

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Galapagos lava lizard (*Microlophus albemarlensis*)



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ACRONYMS

- CBD** Convention on Biological Diversity
- CMS** Convention on the Conservation of Migratory Species of Wild Animals
- IATTC** Inter-American Tropical Tuna Commission
- IAC** Inter-American Sea Turtle Convention
- CITES** Convention on International Trade in Endangered Species of Wild Fauna and Flora
- CODA** Ecuadorian Organic Code of the Environment
- UNCLOS** United Nations Convention on the Law of the Sea
- GNPD** Galapagos National Park Directorate
- EN** Endangered
- GIZ** Deutsche Gesellschaft für Internationale Zusammenarbeit /German Cooperation
- LC** Least Concern
- LOREG** Organic Law of Special Regime of the Province of Galapagos
- MAATE** Ministry of Environment, Water and Ecological Transition (currently MAE)
- IGO** Intergovernmental Organisations
- NGO** Non-Governmental Organisations
- GNP** Galapagos National Park
- RCODA** Reglamento al Código Orgánico del Ambiente (Regulation for Ecuador's Organic Environmental Code)
- GMR** Galapagos Marine Reserve
- SNAP** Sistema Nacional de Áreas Protegidas (National Protected Areas System)
- SRP** Subsecretaria de Recursos Pesqueros (Undersecretary of Fisheries Resources)
- IUCN** International Union for Conservation of Nature
- UNODC** United Nations Office on Drugs and Crime
- VU** Vulnerable
- WITIS** Wildlife Trade Information System
- WWF** World Wildlife Fund

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RECOMMENDATIONS

FOR GOVERNMENT BODIES AND AGENCIES
(REGULATORY, ENVIRONMENTAL AND AIRPORT AUTHORITIES)

ADAPTATION OF THE NATIONAL CHAIN OF CUSTODY PROTOCOL FOR OFFENCES INVOLVING WILD FLORA AND FAUNA IN THE CONTEXT OF PORTS AND AIRPORTS IN THE GALAPAGOS

To adapt the National Protocol for the Handling of Indicia and/or Evidence Related to Offences and Crimes Against Wild Flora and Fauna – approved by the regulatory and environmental authorities on 15 July 2024 – to the specific contexts of port and airport operations in the Galapagos. For example, TRAFFIC, in collaboration with the United Nations Office on Drugs and Crime (UNODC-Ecuador) and ECOGAL Airport, adapted the protocol for use at Baltra Airport with the aim of strengthening the response to incidents of wildlife trafficking and ensuring the chain of custody is properly maintained.

This process requires the leadership of control authorities (National Police, Ecuadorian Navy, Ecuadorian Air Force), airport authorities (General Directorate of Civil Aviation), environmental authorities (Galapagos National Park Directorate), judicial authorities (Attorney General's Office), local authorities (Galapagos Special Regime Governing Council, Decentralised Autonomous Governments), and port and airport administrators.

MECHANISMS FOR INFORMATION EXCHANGE BETWEEN ENFORCEMENT AND ENVIRONMENTAL AUTHORITIES

Develop and implement a mechanism (agreements and tools) for the exchange of inter-institutional information related to crimes and infractions against wild flora and fauna to ensure their safe, timely and systematic flow and improve investigations and prosecution of cases related to wildlife in the Galapagos. The development of these mechanisms requires the participation of the National Police, the Ecuadorian Navy, the Galapagos National Park Authority, and the Attorney General's Office.

DEVELOPMENT OF REGULATORY FRAMEWORK FOR THE EX SITU CONSERVATION OF TORTOISES

Establish a specific rule to regulate the *ex situ* possession and conservation activities of the Galapagos giant tortoises in breeding centres located on the Isabela, San Cristóbal and Santa Cruz islands, as well as on private property. This standard would have to be aligned with the Organic Law of the Special Regime for Galapagos (LOREG), as well as the Organic Code of the Environment. This process requires the leadership of the GNPd.

IMPLEMENT ANTI-CORRUPTION MEASURES IN PORTS AND AIRPORTS

Identify and analyse the critical points of vulnerability where corruption can facilitate wildlife trafficking in the airports and ports of Baltra, San Cristóbal, Santa Cruz and Isabela. To this end, the implementation of specific methodologies are proposed, including carrying out a Corruption Risk Assessment (CRA), in order to detect structural weaknesses, operational gaps and practices that can be exploited by corrupt actors. It is important that this assessment covers all levels of the airport and port process, from cargo and baggage checks to personnel involved in inspections and clearances. The results will allow the design and implementation of effective mitigation measures such as internal control protocols, random audits, protected reporting systems and personnel rotation processes.

This process requires the leadership of ECOGAL airport, San Cristóbal Airport, the Directorate General of Civil Aviation (DGCA), the Ecuadorian Navy, the Ecuadorian Police and representatives of the Galapagos Islands' ports.

ENHANCE INVESTIGATIVE AND INTELLIGENCE CAPABILITIES TO IDENTIFY TRANSNATIONAL CRIMINAL NETWORKS ENGAGED IN WILDLIFE TRAFFICKING

Strengthening the capacity to investigate and gather intelligence on international wildlife trafficking networks operating in the Galapagos archipelago requires a strategic, coordinated and multi-sectoral approach. This effort should articulate a close collaboration between the National Police through the Ecuadorian Environmental Protection Unit and National Environmental and Nature Crime Investigation Unit, the Attorney General's Office, the GNPd and the Ecuadorian Navy. It is also essential to enhance international cooperation through mechanisms such as Red Jaguar, SudWEN and joint work with INTERPOL, in order to ensure an effective and timely exchange of information to dismantle these criminal networks.

It is essential to prioritise building up knowledge about the transnational links between criminal organisations, identifying trafficking routes, smuggler profiles, *modus operandi* (including shipping and concealment methods), as well as the use of digital platforms and technologies for illegal trade. A comprehensive, intelligence-based approach will enable more accurate law enforcement, disrupt supply chains, and enhance the ability of authorities in the Galapagos Islands to prevent and combat wildlife crime.

RECOMMENDATIONS

FOR CITES AND INTERNATIONAL TRADE AUTHORITIES

REVIEW OF TRADE IN GALAPAGOS IGUANAS REPORTED TO CITES AS CAPTIVE-BRED

For the trade of Galapagos iguanas (*Conolophus subcristatus*, *C. marthae*, *C. pallidus* and *Amblyrhynchus cristatus*) from countries outside Ecuador (Uganda, Switzerland, Mali and Japan), the application of the tool for reviewing trade in animal specimens declared as produced in captivity, established in Resolution Conf. 17.7 (Rev. CoP19) of CITES¹, as a way to help understand the situation and origin of these organisms. This procedure could be formally requested by the Ecuadorian government, through the National Environmental Authority CITES (Ministry of Environment, Water and Ecological Transition) in order to verify the legal origin of the specimens that are being marketed with CITES permits.

CITES COMPLIANCE

It is important that countries that internationally trade CITES-listed species comply with the resolutions that have been adopted by the Parties. For example, Resolution Conf. 12.10 (Rev. CoP15) establishes criteria and procedures for the registration of operations, such as hatcheries, zoos or breeding centres, that breed Appendix I species in captivity for commercial purposes. Currently, it has been identified that some exporting countries of Galapagos endemic tortoises do not comply with these provisions. In addition, it is essential to improve the traceability of the parents of endemic species involved in trade, ensuring that their origin and management are verifiable and legal. Importing countries must also take responsibility for verifying the legal origin of the specimens entering their countries and markets, ensuring that trade complies with the regulations established by CITES.

ACCURACY IN REPORTING TRADE IN CITES-LISTED SPECIES

It is recommended that the CITES Management Authorities of the countries that trade Galapagos wildlife report the annual trade reports sent to the CITES Secretariat with the greatest accuracy. For this, it is essential that the origin, purpose, unit, quantity and other attributes of the exported specimens are specified with the highest level of detail and precision possible. This practice will improve the quality of information, strengthen analyses and increase monitoring of international trade in CITES-listed species.

Galapagos giant tortoise *Chelonoidis nigra*



A large marine iguana is the central focus, resting on a dark, rocky shore. Its body is covered in dark, scaly skin with prominent spines along its back and head. The background shows a calm blue ocean under a clear sky, with distant land visible on the horizon.

EXECUTIVE SUMMARY

**THIS DOCUMENT CONTAINS
RELEVANT INFORMATION ON
WILDLIFE TRAFFICKING AND
INTERNATIONAL TRADE IN
SPECIES ORIGINATING FROM THE
GALÁPAGOS PROVINCE, ECUADOR.**

Although it includes data on illegal fishing within the Galapagos Marine Reserve (GMR), this is not the main focus of the report. The report is based on an open-source literature review, and on three databases: the database of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)², which contains records of the legal international trade in CITES-listed species; the WiTIS Database (TRAFFIC's Wildlife Trade Information System)³; and the EU-TWIX Database (European Union Trade in Wildlife Information Exchange), which were used to analyse trafficking involving Galapagos species. Additionally, the document incorporates a consultation and validation process with key stakeholders, which made it possible to cross-check the information and strengthen the findings identified.

The report analyses the main CITES-listed species traded from Ecuador between 2016 and 2022, aiming to contextualise the current situation of legal trade in the country and compare it with the wild species involved in the legal and illegal trade from the Galapagos province. During this period, the country exported over 1.5 million kilograms of sharks, mainly *Alopias pelagicus*, *Isurus oxyrinchus*, *Carcharhinus falciformis*, and *Alopias superciliosus*. Terrestrial trade focused on captive-bred amphibians such as *Oophaga sylvatica*, *Epipedobates tricolor*, and *Epipedobates anthonyi*, while plant trade was primarily based on artificially propagated orchids, particularly of the genus *Phragmipedium*.

Among the main findings, it was identified that endemic Galapagos species, such as land and marine iguanas, have been reported as legally traded from other countries, primarily Uganda since 2017, using CITES permits, despite the fact Ecuador has never authorised the export of live specimens of these species: *Conolophus subcristatus*, *C. marthae* and *Amblyrhynchus cristatus*. Furthermore, between 2010 and 2022, five cases of trafficking of land and marine iguanas hidden in luggage or vessels were recorded. Regarding the Galapagos giant tortoise *Chelonoidis niger* traded under CITES permits, Switzerland appears as the main

exporter and Germany as the main importer, while illegal trade has particularly affected *C. chathamensis*, *C. guntheri*, and *C. niger*, including confirmed thefts from the Arnaldo Tupiza Chamaidán (Isabela Island) and David Rodríguez (San Cristóbal Island) breeding centres. Finally, the legal trade of endemic flora such as *Opuntia galapageia* shows a 55% discrepancy between export and import data, although no seizures of this species have been reported.

It was identified that the main route for smuggling trafficked wild species out of Galapagos is by sea, while air transport accounts for a smaller percentage. Traffickers use various camouflage methods to evade controls, including hiding species in cardboard boxes, wrapping them in plastic, or hiding them among legal goods. These species are sent to other Ecuadorian cities such as Guayaquil or Manta. It is also recognised that there is an international network of traffickers operating in the archipelago, which includes Peru as a transit country and European and Asian countries as final destinations.

Among the main factors facilitating wildlife trafficking in the Galapagos are the following: a) Corruption, which permeates the entire chain of trafficking at various levels, also involving the public function; b) Legal gaps and obstacles, among which certain limitations of the *Organic Law of the Special Regime for the Province of Galapagos* (LOREG) stand out, which does not regulate some activities related to wildlife trafficking, in addition to the lack of specific regulations for wildlife breeding and reproduction centres; c) Institutional weaknesses, such as lack of coordination between institutions, poor controls, fragmented or non-existent information, and a shortage of personnel in the justice system. Additionally, socioeconomic, behavioural, and cultural factors such as the demand for species in international black markets, cultural beliefs and uses associated with wildlife, social cover-up, and social pressure within the fishing sector also drive this illegal activity.

In addition, the main consequences of wildlife trafficking were analysed, including:

- a) Ecological impacts that affect populations of wild species, including endemic ones, disrupt food chains, and damage ecosystems;
- b) Social impacts, such as the promotion of organised crime, which threatens the livelihoods of local communities and weakens the judicial system; and
- c) Economic impacts on tourism, since it is the main productive activity in the Galapagos and could be affected by the reduction of species such as iguanas and tortoises, which are important tourist attractions. This could decrease visitors' interest in traveling to the archipelago.

It is recommended that the government agencies involved in combating the illegal trafficking of Galapagos wildlife adapt the National Chain of Custody Protocol to the specific conditions of the islands' ports and airports, strengthen information exchange among authorities, establish clear regulations for the *ex situ* conservation of giant tortoises, enhance intelligence efforts to identify criminal networks, and implement anti-corruption measures at critical control points. Regarding the international trade of Galapagos wildlife, countries are urged to strictly comply with CITES resolutions, reinforce the traceability and verification of the legal origin of specimens, review the trade of iguanas declared as captive-bred in accordance with CITES procedures, and improve the accuracy of annual reports submitted to the Secretariat, in order to strengthen the control and monitoring of legal trade.



Attempted illegal transfer of 185 tortoises from Seymour Galapagos Ecological Airport (Baltra)

INTRODUCTION

The illegal wildlife trade involves hundreds of species of wild flora and fauna worldwide (Gentile and Tapia, 2013). Crimes against wildlife involving criminal groups are considered serious. In this regard, no country is immune to these crimes, which have an impact on biodiversity, human health, national security and socio-economic development (UNODC, 2020). Illegal wildlife trade is valued between USD 7 and 23 billion annually (CITES Secretariat, 2022) and is not limited only to countries with high biodiversity. In fact, in most countries there is illegal export, transit and/or import of wild species. Some regions are hotspots for specific taxa. For example, Oceania for corals and South and Central America for birds. On the other hand, plants and fungi are often undervalued in wildlife trafficking reports, orchids (Orchidaceae),

cacti (Cactaceae) and truffles have a significant illegal market globally (Mozer and Prost, 2023).

As for the legal wildlife trade, which includes animals and plants, it covers thousands of species and generates significant revenues worldwide, estimated between USD 2.9 and 4.4 trillion between 1997 and 2016 (about USD 220 billion a year) of CITES and non-CITES-listed species. Timber represents the most valuable wildlife commodity in global trade, with exports estimated at USD 244 billion (CITES Secretariat, 2022). In many developing countries, rural communities benefit from international trade in wildlife specimens, derivatives and products, which generate income and employment. In addition to its economic value, this trade encourages

the conservation of the species involved and their habitats, as well as strengthening local capacities and the management of natural resources and offering accessible opportunities, especially for women and low-income groups (Cooney *et al*, 2015).

On the other hand, the wildlife of Latin America, like several other regions in the world, has been greatly affected by the illegal trade in species. In this context, the main challenges to address this problem in the region are: a) The lack of information on the scope of this crime, the dynamics and structure of the supply chain; b) The fact that this problem is not a priority on the agenda of governments; and c) The complexity and lack of understanding of legal frameworks and the limited capacity of the main judicial bodies (Reuter *et al*, 2020).

According to data from the Ecuadorian Ministry of Environment, Water and Ecological Transition (MAATE), between 2003 and 2014, wildlife trafficking in the country has led to the seizure of a total of 1,709 mammals and 1,526 birds. However, this figure represents only a small fraction of the total wildlife traded illegally, since many of the animals trafficked are not intercepted by the regulatory authorities (Crespo-Gascón *et al*, 2021). As for the province of Galapagos, its unique biodiversity makes it an attractive target for collecting specimens for private collections. In addition, it is widely recognised that areas with high endemism, such as the Galapagos, arouse particular interest among wildlife traffickers (Gentile and Tapia, 2013). In this context, the majority of seizures reported for Galapagos target reptiles, particularly iguanas and tortoises.

According to Auliya *et al*. (2016), there are species with certain characteristics that make them vulnerable to overexploitation by traffickers, such as long-lived species with long gestation periods and low fertility which are rare and endemic to specific islands and habitats. These characteristics are present in many Galapagos species.

In light of this, TRAFFIC works at a global, regional and local level to reduce illegal wildlife trade. Among its regional actions, it implements the project "Working to Reduce Illegal Wildlife Trafficking in the Main Airports of Latin America", funded by the U.S. Department of State, which aims to strengthen the application of national and international law to combat wildlife trafficking in the air sector of countries such as Ecuador, Colombia, Brazil, Mexico and Peru. It also seeks to support control agencies in the effective interception of illegally traded wildlife using technological solutions, improving the capacities of national authorities and establishing adequate regulatory processes.

In this context, this report aims to provide a comprehensive overview of the dynamics of trafficking and international trade in CITES-listed species, with special emphasis on wildlife in the Galapagos. The document presents an analysis of current environmental regulations, both internationally and nationally, and identifies the main trends, most affected focal species, illegal trade routes and factors that facilitate or drive this illicit activity. It also gathers information on the main CITES-listed species exported from Ecuador and on the wild species endemic to the Galapagos Islands involved in trafficking.



Endemism
makes the species unique, but also makes it a target for trafficking.



Santa Cruz Island coast

ENVIRONMENTAL LEGISLATION

The following summarises the international and national environmental regulations related to the protection of wildlife, legal and illegal trade of wildlife in Ecuador, with emphasis on the province of Galapagos.

INTERNATIONAL ENVIRONMENTAL LEGISLATION

The main international treaties that Ecuador has ratified and that are applicable to the province of Galapagos are detailed.

THE CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA (CITES)

CITES is an international agreement between governments that entered into force on 1 July 1975 and whose objective is to ensure that international trade in specimens of wild animals and plants does not threaten the survival of wildlife populations. Currently, the Convention has 185 Party countries and regulates international trade in 40,920⁴ species, including 6,610 animal species and 34,310 plant species (CITESa, 2024). Ecuador has been part of this international agreement since 1 July 1975, the year in which it entered into force (Torresa, 2023). Regarding the country's legislative progress for the implementation of CITES, Ecuador is classified

in Category 2 (out of 3), indicating that its legislation generally meets between one and three of the four requirements established for the effective implementation of the Convention (CITESa, 2024). According to the Species+⁵ platform, in Ecuador there are 3,789 native species of flora and fauna included in the CITES Appendices, of which 3,019 correspond to orchids.

In March 2024, the CITES Standing Committee recommended that Parties suspend trade in CITES Appendix II specimens of sharks and rays (Annex 1) from Ecuador or whose country of origin is Ecuador prior to CoP19 (CITESb, 2024). Subsequently, on 20 March 2025 (Notification to the Parties No. 2025/036), the Standing Committee agreed that Ecuador maintain the suspension of trade in shark and ray specimens, specifically *Carcharhinus falciformis*, *Alopias spp.* and *Isurus spp.* (CITES, 2025). At the request of Ecuador, the Notification to the Parties No. 2025/071 of 2

June 2025 reported that, as of 1 July 2025 and until further notice, the Ecuadorian Management Authority would not issue CITES permits or certificates for commercial purposes for the shark species listed in the appendices to the Convention. Subsequently, it was reported that as of 22 July 2025, the issuance of said permits will be resumed for all shark species, except those that remain under suspension according to Notification to the Parties No. 2025/036 of 20 March 2025.

On the other hand, the proposed amendment presented by the Ecuadorian Government to transfer endemic Galapagos land and marine iguanas from Appendix II to Appendix I was approved at CITES during the twentieth Conference of the Parties (CoP20).

THE CONVENTION ON BIOLOGICAL DIVERSITY (CBD)

The Convention on Biological Diversity is an international agreement ratified by 196 countries, whose main objective is to promote the conservation of biodiversity, the sustainable use of its components and the fair and equitable distribution of benefits derived from genetic resources. This agreement covers all levels of biodiversity, including ecosystems, species and genetic resources, and seeks to promote concrete actions that contribute to a sustainable future (Campaign, 2022). Ecuador signed this agreement in 1992 and ratified it in 1993 (Ministry of the Environment of Ecuador, 2016).

The Kunming-Montreal Global Biodiversity Framework, adopted at the 15th Conference of the Parties (COP15) of the CBD, sets 23 global targets. Among them, Target 5 seeks to ensure that the use, collection and trade of wild species are sustainable, safe and legal. This goal aims to avoid overexploitation, minimise impacts on non-target species and ecosystems, and reduce the risk of pathogen spread. In addition, it promotes the ecosystem approach, respecting and protecting the traditional sustainable use of indigenous peoples and local communities (Hughes and Grumbine, 2023).

CONVENTION FOR THE CONSERVATION OF MIGRATORY SPECIES OF WILD ANIMALS (CMS)

The CMS is an international treaty specialised in conserving migratory species, their habitats and migration routes. This convention entered into force in Ecuador in 2004 and has two appendices containing threatened migratory species (Echeverria, 2015). Among the Galapagos migratory species listed in Appendix I of this Convention are: Green Sea Turtle *Chelonia mydas*, Olive Ridley Sea Turtle *Lepidochelys olivacea*, Hawksbill Sea Turtle *Eretmochelys imbricata*, Leatherback Sea Turtle, *Dermochelys coriacea*, and Humpback Whale *Megaptera novaeangliae*.

CONSERVATION OF WETLANDS OF INTERNATIONAL IMPORTANCE, ESPECIALLY AS WATERFOWL HABITAT (RAMSAR CONVENTION)

The RAMSAR Convention is an intergovernmental treaty adopted on 2 February 1971 for the conservation and rational use of wetlands. Ecuador was annexed to this convention on 7 January 1991 (Molina, 2012; Secretariat of the Ramsar Convention, 2016). Galapagos has the South Isabela Wetlands, declared a RAMSAR site, which are home to endemic species classified as vulnerable or endangered according to the International Union for Conservation of Nature (IUCN) Red List of threatened species. These include: *Larus fuliginosus* Lava Gull, *Spheniscus mendiculus* Galapagos Penguin, *Zalophus wolfebaeki* Galapagos Sea Lion, *Chelonia mydas* Green Turtle, *Amblyrhynchus cristatus* Marine Iguana and *Isostichopus fuscus* Brown Sea Cucumber. In addition, the site supports more than 22.5% of the population of a subspecies endemic to the Greater Flamingo *Phoenicopterus ruber* (Cunalata and López, 2020).

INTER-AMERICAN SEA TURTLE CONVENTION (IAC)

The IAC is an intergovernmental treaty whose objective is to promote the protection, conservation and recovery of sea turtle populations and the habitats on which they depend, based on available scientific data and considering the environmental, socio-economic and cultural characteristics of the party countries. Since 2000, Ecuador has been working with 15 other Latin American countries to coordinate actions for the conservation of sea turtles, both nationally and regionally. These actions include the protection of nesting beaches, the mitigation of bycatch in fisheries, attention to beachings, and the promotion of environmental education (Ministry of Environment and Water et al, 2020). In the Galapagos, the following species included in this convention are present: *Lepidochelys olivacea* Olive Ridley Sea Turtle, *Dermochelys coriacea* Leatherback Sea Turtle, *Eretmochelys imbricata* Hawksbill Sea Turtle and *Chelonia mydas* Green Turtle (Ministry of the Environment of Ecuador, 2014).

THE UNITED NATIONS CONVENTION ON THE LAW OF THE SEA (UNCLOS)

UNCLOS has an extensive regulatory regime for the world's oceans and seas and establishes rules governing all uses of the

oceans and their resources. This convention entered into force in Ecuador in 2012 and has an annex listing highly migratory species (Echeverria, 2015).

THE PROTOCOL FOR THE CONSERVATION AND MANAGEMENT OF MARINE AND COASTAL PROTECTED AREAS OF THE SOUTHEAST PACIFIC

In 1989, the protocol was adopted in which the parties (Colombia, Chile, Ecuador, Panama and Peru) recognised the need to establish marine and coastal protection areas, such as reserves, wildlife sanctuaries, and parks, with the aim of ensuring the protection and conservation of fragile and vulnerable ecosystems, as well as endangered species of wild flora and fauna. In addition, this international instrument prohibits certain activities within coastal marine protected areas, such as exploration and mining of the soil and subsoil (Gálvez, 2022). In Ecuador, this protocol came into force in 1995 and is aligned with the management plans of the National System of Protected Areas (SNAP), sharing objectives such as the conservation of biodiversity, the sustainable management of marine-coastal ecosystems and the promotion of community participation.

NATIONAL ENVIRONMENTAL LEGISLATION

At the national level, the legal approach promoted by the 2008 Constitution led to the drafting of specific laws to comply with the constitutional mandate. Laws of different types emerged: civil, administrative, environmental and criminal, among which the issuance of the Comprehensive Organic Criminal Code (COIP) stands out, which includes criminal types related to the environment and nature. This typification goes beyond the anthropocentric view that protected the environment solely for its usefulness to humans, extending protection to nature for its inherent value (Arias and Etcheverry, 2024).

As for the province of Galapagos, it has a special regime organic law due to its importance as a natural heritage of humanity. This law establishes a form of government that confers political, administrative and financial autonomy, constituted mainly for reasons of conservation and particular environmental characteristics, sustainable development, integrated management of populated areas and protected areas, as well as obtaining a balance in the mobility and residence of its visitors and residents, and their preferential access to natural resources and environmentally sustainable activities (Organic Law of the Special Regime of the Province of Galapagos, 2019).

CONSTITUTION OF THE REPUBLIC OF ECUADOR

The 2008 Constitution of the Republic of Ecuador, in its articles 71 to 74, establishes the "right to integral conservation; right to restoration; precaution of extinction of species and non-introduction of genetically modified organisms; and non-appropriation of environmental services", making it clear that the Constitution protects nature and, above all, recognises it as a subject of rights.

COMPREHENSIVE ORGANIC CRIMINAL CODE (COIP)

Illicit conduct against nature, and especially against wildlife, is regulated and sanctioned by the Comprehensive Organic Criminal Code in Article 247, which establishes the following:

Crimes against wild flora and fauna.- *The individual who hunts, extracts, fishes, captures, transports, collects, stores, traffics, introduces, fells, possesses, provides, mistreats, obtains benefit, changes or markets, specimens or their parts, their constituent elements, products and derivatives, of terrestrial, marine or aquatic wild flora or fauna, of species listed as protected by the National Environmental Authority, by international instruments or treaties ratified by Ecuador, will be punished with imprisonment of 1 to 3 years.*

- The maximum penalty will be used when:
- a. The offence is committed during the period or in the area designated for seed production, reproduction, incubation, nesting, birthing, rearing or growth of the species; or during the closed season.
 - b. The offence is carried out on threatened, endangered, endemic, transboundary or migratory species.
 - c. The offence is carried out within the National System of Protected Areas, special areas for the conservation of biodiversity, national forest heritage or in fragile ecosystems.
 - d. The offence causes serious damage to biodiversity or natural resources.
 - e. The act is committed using techniques or means not allowed by national regulations (Flores, 2022).



Bartolomé Island



Greater flamingo (*Phoenicopterus ruber*), Isabela Island

ORGANIC CODE OF THE ENVIRONMENT (CODA)

The CODA regulates the areas of environmental quality, climate change, natural heritage, marine and coastal zones, urban wildlife, strict liability and environmental remediation in Ecuador. In this code the following rights of nature are ratified:

i. Comprehensive respect for their existence;
ii. The maintenance and regeneration of life cycles, structure, functions and evolutionary processes; and iii. Its restoration. In addition, this organic code establishes environmental administrative infractions (Velasco *et al*, 2022).

With regard to wildlife trafficking, Article 317 considers the following as a serious offence: *"Hunting, fishing, capturing, collecting, extracting, holding, exporting, importing, transporting, mobilising, exploiting, managing and trading wildlife species, their parts, constituent elements, products or their derivatives, without administrative authorisation"* (Organic Environmental Code, 2017).

REGULATIONS TO THE ORGANIC ENVIRONMENTAL CODE (RCODA)

The RCODA was approved by Executive Decree 752, published in the Official Register 507 on 12 June 2019, and is a regulatory body that aims to develop and structure the necessary regulations to provide applicability to the provisions of the CODA (Jáuregui, 2020).

Articles 101, 102 and 103 of this regulation establish the types of uses and sustainable use of wild specimens, allowing their use for research, traditional and subsistence purposes. Article 210 prohibits the unregulated hunting of wildlife specimens throughout the national territory, including on private property, and article 211 defines subsistence hunting⁶ and establishes the uses of hunted specimens for: i. Subsistence food purposes, and II. Cultural, medicinal, artisanal, festive or ritual practices. In addition, Article 213 establishes that two types of fishing are allowed within SNAP: i. Fishing for subsistence purposes, and cultural, medicinal and ritual practices⁷; and ii. Artisanal fishing (Regulations to the Organic Code of the Environment, 2019).

ORGANIC LAW OF SPECIAL REGIME OF THE PROVINCE OF GALAPAGOS (LOREG)

The LOREG establishes the administrative legal framework to which the Governing Council of the Special Regime of the Province of the Galapagos, the Decentralised Autonomous Governments and the bodies responsible for all State functions are subject, within the scope of their respective powers, as well as all domestic and foreign natural and legal persons located within or carrying out activities in the Province of the Galapagos (Torres_v, 2023).

Regarding administrative infractions, they establish the following for wildlife:

- a. The following are considered in Article 92 on Serious Administrative Offenses :
 - i. The carrying out of fishing activities in the Marine Reserve of the province of Galapagos, without the corresponding authorisations.
 - ii. The use of unauthorised fishing gear, methods or equipment for the harvesting of aquatic species in the Galapagos Marine Reserve.
 - iii. The capture or commercialisation of species during close seasons or whose fishing is expressly prohibited in the Galapagos Marine Reserve.
 - iv. The unauthorised collection, mobilisation or transportation between islands of endemic, vulnerable, threatened or endangered indigenous organisms, according to the lists established in domestic legislation, adopted in accordance with CITES and other international parameters; as well as their hunting and trading.

b. In Article 93 on Administrative Offences, the following are considered very serious:

- i. The carrying out of fishing activities in the protected areas of the province of Galapagos, without the corresponding authorisations that use prohibited fishing instruments or gear and that cause very serious environmental damage.
- ii. The unauthorised collection, mobilisation or transportation, outside the islands, of indigenous, endemic, vulnerable or endangered organisms, according to the lists established in domestic legislation adopted in accordance with CITES and other international parameters, as well as their partial or total destruction, hunting or commercialisation for the purpose of export or industrialisation.



Galapagos Obuntia

METHODOLOGY

This report was prepared through a documentary investigation that was divided into the following phases: a) Collecting information b) Processing information, c) Information Analysis and d) Information Synthesis. The phases used are detailed below:

DATA COLLECTION

Secondary bibliographic sources were used for data collection. Information from academic publications, reports from non-governmental organisations (NGOs), intergovernmental organisations (IGOs), and media reports that are freely accessible on the internet were reviewed. Information from Ecuador related to the legal and illegal wildlife trade was sought to contextualise the problem at the national level, then an exhaustive search was carried out for information related to the province of Galapagos.

Relying on data on the legal trade of wild species in Ecuador that are regulated by CITES, information from the CITES Wildlife Trade View was analysed with the following parameters:

- **Country:** Ecuador
- **Taxon:** All (The species that have the highest number of commercialised specimens were analysed)
- **Time period:** 2016 to 2022 (Ecuador reports until 2022)
- **Importing Country:** All
- **Unit:** Specimen numbers (kilograms for sharks)
- **Importer:** All
- **Exporter:** Ecuador
- **Geographical origin:** Direct
- **Trade Term:** Live (For sharks, fins (FIN), meat (MEA), and body (BOD) are included)
- **Origin:** Wild Harvested (code W), Captive-Bred Animals (code C) and Artificially Reproduced Plants (code A)
- **Purpose:** Commercial (T-code)
- **Appendices:** I, II, III

Regarding wild species from the Galapagos, information from the CITES Database was analysed and the following parameters were used:

- **Time period:** 1975 to 2023
- **Country of export:** All (For the species *Isostichopus fuscus* only, Ecuador was specified)
- **Importing Country:** All
- **Origin:** Artificially Propagated Plant (code A), Captive-Bred Animals (code C), Captive-Bred/Artificially propagated (Appendix I) (code D), Born in Captivity (code F), Confiscated or Seized specimens (code I), Ranches specimens (code R), Wild (code W), Source Unknown (code U), Assisted Production (code Y).
- **Purpose:** Breeding in captivity or artificial propagation (code B), Botanical Garden (code G), Personal (code P), Commercial (code T), Zoo (code Z).
- **Terms of trade:** Live (LIV), with the exception of *Isostichopus fuscus*, for which bodies (BOD) were used.
- **Search by taxon:** The species *Chelonoidis niger*⁸, *Amblyrhynchus cristatus*, *Conolophus subcristatus*, *C. marthae*, *C. pallidus*, *Isostichopus fuscus*, and *Opuntia galapageia*⁹ were searched.

Once the search was carried out with the aforementioned parameters, the type of output and the type of report were chosen:

- **Output Type:** Comma Separated CSV
- **Report Type:** Comparative Tabulations¹⁰

The quantity reported by the exporting country was taken as a reference for the number of live specimens. This is because many countries base their annual reports on CITES export permits issued. For Appendix II species, CITES regulations do not require the issuance of import permits. Therefore, the information provided by exporting countries is usually more complete, as they must issue CITES export permits for all transactions involving Appendix II species.

For wildlife trafficking data related to seizures, the TRAFFIC Wildlife Trade Information System (WiTIS) database was used and the following parameters were taken into account:

- **Timeframe:** 2010 to 2025
- **Species:** *Chelonoidis niger*, *Amblyrhynchus cristatus*, *Conolophus subcristatus*, *C. marthae*, *C.pallidus*, *Isostichopus fuscus*, *Opuntia galapageia*.
- **Country:** Ecuador

To complement the information from the WiTIS database, information from the EU-TWIX (European Wildlife Trade Information Exchange) Database was used. A search was also carried out in online newspapers and in the Robin des Bois On the Trail digital newsletters.

PROCESSING INFORMATION

Once the secondary information was collected, a prioritisation of the sources was carried out based on their thematic relevance, reliability and level of detail, selecting those that contained data on traded species, routes, drivers and facilitators of trade, and consequences of species trafficking for the Galapagos.

Regarding Ecuador's legal wildlife trade, the CITES Wildlife TradeView tool was used to identify the species with the highest number of records of specimens exported from 2016 to 2022. Subsequently, these data were cross-checked with the CITES Database in order to verify their consistency and accuracy.

To analyse the legal international trade of species from the Galapagos, records for the period 1975 to 2023 for the species *Chelonoidis niger*, *Amblyrhynchus cristatus*, *Conolophus subcristatus*, *C. marthae*, *C. pallidus* and *Opuntia galapageia* were extracted from the CITES Database. At the same time, seizure records related to these same species were analysed in the WiTIS Database (Wildlife Trade Information System) and the information provided through the EU-TWIX Database. Finally, the data collected were systematised and verified by cross-review with secondary information and input from key actors, thus ensuring the reliability of the results.

INFORMATION ANALYSIS

Qualitative and quantitative information previously prioritised and categorised according to the subject was examined, interpreted and systematised. Information on legal trade was transformed into graphs. The information of the internationally traded

species of the Galapagos Islands reported in the CITES Database was consolidated in tables of contents (included in the annexes), considering the following variables for analysis:

- **Year**
- **Exporter**
- **Importer**
- **Quantity reported by the exporter**
- **Trade terms**
- **Origin**
- **Objective**

A quantitative analysis of the reported live specimens was carried out, identifying the main exporting and importing countries and calculating percentages according to the origin and purpose of the trade. Likewise, a comparative analysis was carried out between the data reported by the exporting

and importing countries. In cases where significant discrepancies were detected, the review was deepened to identify possible inconsistencies. Additionally, the temporal evolution of the trade was evaluated, identifying trends and variations in volumes of specimens reported in the trade.

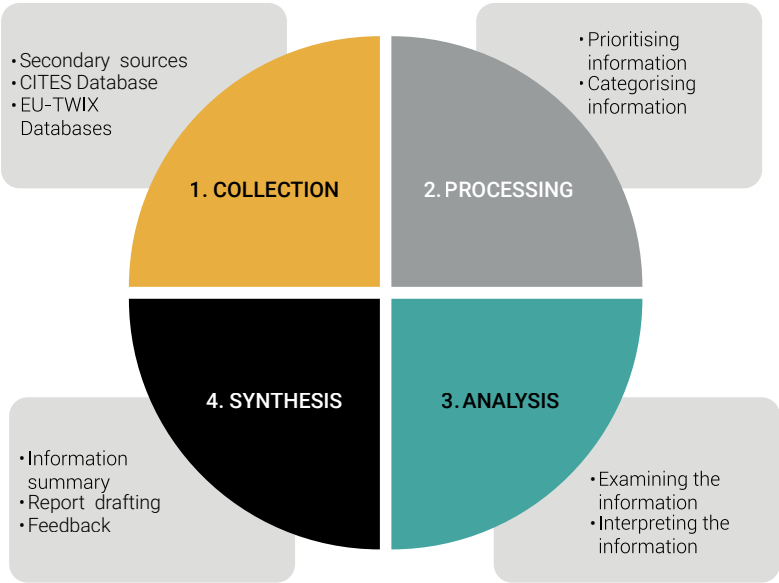
For the analysis of wildlife trafficking in the Galapagos, a systematic evaluation of seizure records was carried out, considering key variables such as year, species involved, geographical location of the find and other contextual elements that would allow each trafficking event to be characterised.

INFORMATION SYNTHESIS

A document was prepared that summarises the most relevant information on the dynamics of trafficking and international legal trade in species endemic to the province of Galapagos. This report was submitted to a feedback process with key actors from public institutions, control bodies and staff at Galapagos airports, collecting and analysing their opinions, suggestions and observations. Through this collaborative approach, it was

possible to optimise the quality, relevance and clarity of the report, ensuring that it more accurately reflected the reality of wildlife trafficking in the Galapagos. For the development of this process, a questionnaire was used that addressed the most relevant aspects of the report (see Annex 2). Figure 1 summarises the main phases for the preparation of this report.

FIGURE 1.
Methodology used for the development of the report



Galapagos Land Iguana (*Conolophus subcristatus*)

RESULTS

This section presents the results of the documentary research carried out on trafficking and international trade in Galapagos wildlife, with a particular focus on wildlife species, mostly terrestrial. It begins with a summary of the legal CITES wildlife trade in Ecuador and the endemic species of the Galapagos, followed by a detailed analysis of the current situation of the species involved in the illegal trade in the Galapagos province. In addition, the main trafficking trends, the methods of concealment used, as well as the factors that facilitate and drive this activity are addressed, and the consequences of this crime on the biodiversity of the Galapagos are examined.

TRADE OF CITES WILDLIFE FROM ECUADOR

The legal trade of wild species in Ecuador has a minimum value of USD 35 million per year, of which most of it (USD 29 million) corresponds to the export of wood. Excluding wood products, shark exports¹¹ represent

the most valuable commodity (Sinovas and Price, 2015). In 2021, shark exports from Ecuador tripled compared to the average of the last eight years, according to data from the National Customs Service, reaching

223 tonnes worth USD 6.5 million. **78% of these exports (equivalent to 173.94 tonnes)** corresponded to four species classified as threatened and protected by CITES: the Pelagic Thresher *Alopias pelagicus* and the Shortfin Mako Shark *Isurus oxyrinchus*, both classified as Endangered, as well as the Silky Shark *Carcharhinus falciformis* and the Bigeye Thresher Shark *Alopias superciliosus*, both classified as Vulnerable according to the IUCN (Loaiza, 2022).

Between 2016 and 2022, **Ecuador exported approximately 1,564,987 kilograms (kg) of shark products (meat, bodies and fins)**, as reported by Ecuador to CITES, the main ones being the Pelagic Thresher *Alopias pelagicus* with 1,179,593 kg, the Shortfin Mako Shark *Isurus oxyrinchus* with 302,225 kg, the Silky Shark *Carcharhinus falciformis* with 51,350 kg and the Bigeye Thresher Shark *Alopias superciliosus* with 31,819 kg. As depicted in Figure 2.

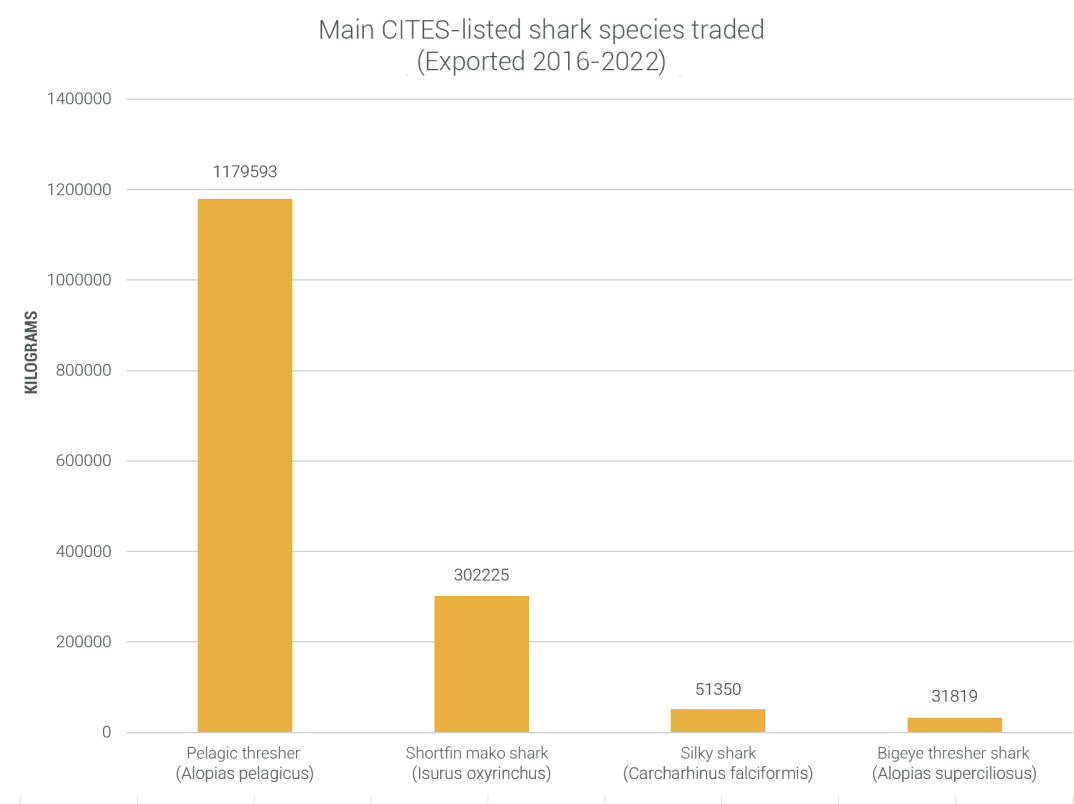


FIGURE 2.
Main CITES-listed shark species reported as exported from Ecuador from 2016 to 2022 (in kilograms)
Source: CITES Wildlife Trade View (2016 – 2022).

According to the CITES Database, between 2016 and 2022, the five main wild species of Ecuadorian fauna bred in captivity for commercial purposes and exported as live specimens are: the Little-Devil Poison Frog *Oophaga sylvatica* with 334 specimens, the Phantasmal Poison Frog *Epipedobates*

tricolor with 205 specimens, Anthony's Poison Arrow Frog *Epipedobates anthonyi* with 140 specimens, the Brilliant-Thighed Poison Frog *Allobates femoralis* with 91 specimens and the Darwin Wallace Poison Frog *Epipedobates darwinwallacei* with 84 specimens, as shown in Figure 3.

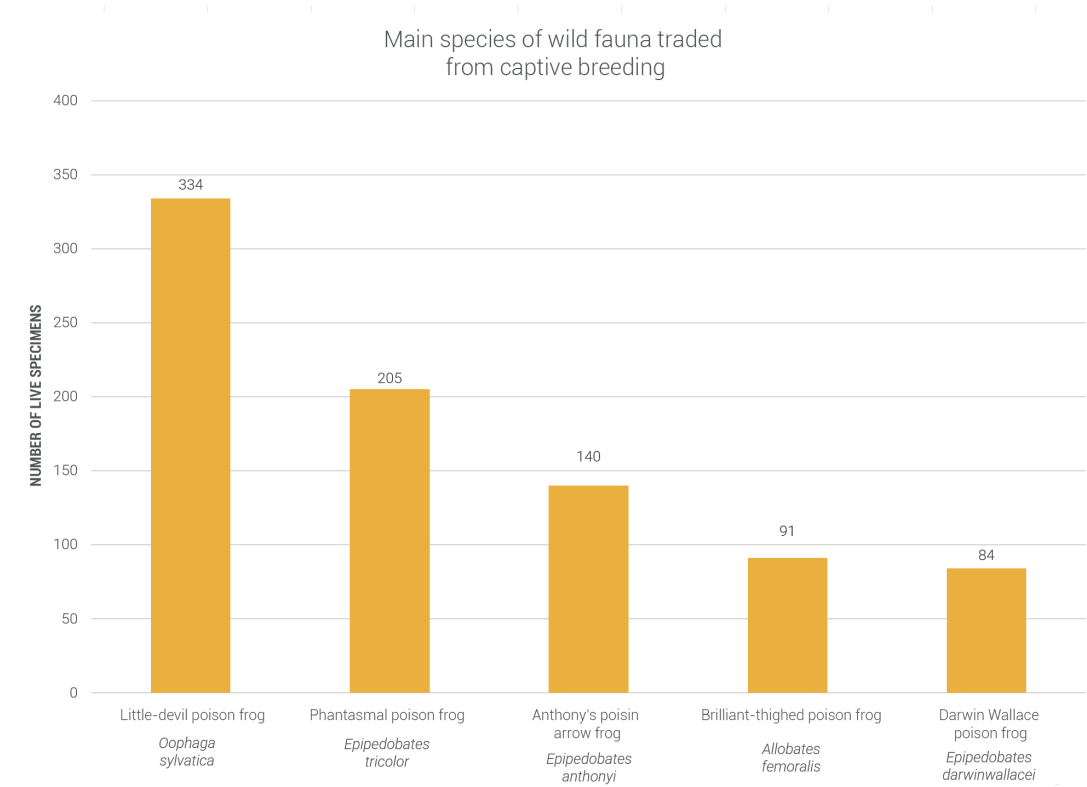


FIGURE 3.
Main CITES-listed species reported as exported from Ecuador from 2016 to 2022 (number of live specimens) Source: CITES Wildlife Trade View (2016 – 2022).

Between 2016 and 2022, the main CITES-listed species of artificially reproduced wild flora exported from Ecuador for commercial purposes as live specimens corresponded to the Orchidaceae family with 599,307 specimens, followed by *Phragmipedium* *besseae* with 3,545 specimens, *Phragmipedium* *dalessandroi* with 3,489 specimens, *Cymbidium hybrid* with 3,002 specimens and *Phragmipedium* *humboldtii* with 2,909 specimens, as shown in Figure 4.

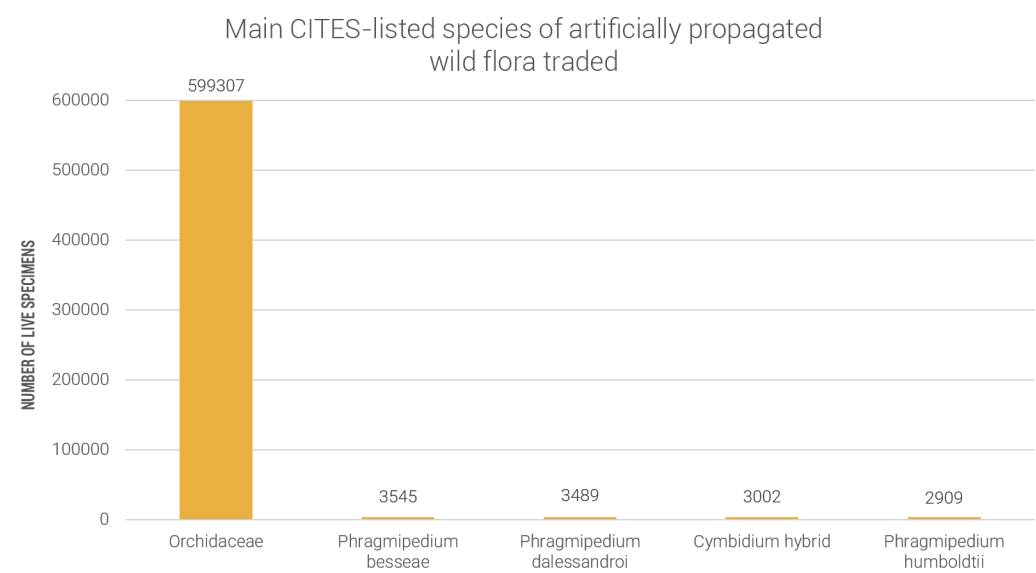


FIGURE 4.
Main CITES-listed species of artificially propagated wild flora reported as exported from Ecuador from 2016 to 2022 number of live specimens
Source: CITES Wildlife Trade View (2016 – 2022).

According to the CITES Database, between 2016 and 2022 only two taxa of wild species from Ecuador of wild origin were registered for commercial purposes and marketed as live specimens: the Orchidaceae family, with 912 live specimens, and the *Vicugna vicugna*, with five live specimens.

Trade in CITES-listed species in Ecuador demonstrates the economic and regulatory relevance of the export of wild fauna and flora, including both marine and terrestrial species. The presence in international trade of sharks classified as Endangered and Vulnerable, as

well as amphibians (*Epipedobates tricolor*, *E. darwinwallacei*) and endemic orchids (*Phragmipedium dalessandroi*) reproduced in captivity, shows the need for accurate records, duly issued permits and monitoring mechanisms to verify the legal origin of the specimens and ensure compliance with the provisions of the Convention. In addition, the data show that Ecuador has few species collected directly from the wild that are traded internationally, since most of the exports correspond to specimens bred or reproduced in captivity.

CURRENT SITUATION OF THE MAIN WILD SPECIES INVOLVED IN THE INTERNATIONAL LEGAL TRAFFIC AND TRADE IN THE GALAPAGOS.

The province of Galapagos has approximately 329 native vertebrate species (birds, reptiles, amphibians and mammals), 1,900 invertebrate species and 560 plant species. As for endemism, 59% of vertebrates are endemic, as well as 47% of invertebrates and 32% of plants (Dueñas *et al*, 2021). Marine biodiversity is extensive and about 20% of marine species are endemic – 2,900 species of fish, invertebrates and marine mammals have been reported. One of the most unique characteristics of the Galapagos is the unconventional coexistence of tropical, temperate, and Southern Ocean species in a small geographical area (Schiller *et al*, 2013).

GALAPAGOS GIANT TORTOISES

Galapagos giant tortoise populations have experienced anthropogenic pressures for the past 400 years. In the 18th century, an estimated 90% of the original tortoise population was decimated by whalers and seal and sea lion hunters, who considered them a food source on their long ocean voyages. Some giant tortoise species went extinct, and

the number of other populations declined dramatically (Blake *et al*, 2021; Nieto Claudin, 2022). In total, there are 14 species of giant tortoises, all of them included in some category of threat according to the Red List of Threatened Species of the International Union for Conservation of Nature (IUCN) (Annex 3).

INTERNATIONAL TRADE

Between 1982 and 2023, according to CITES Database records, a total of 109 live specimens of *Chelonoidis niger* (CITES Appendix I species) were reported in international trade, according to information provided by exporting countries. Switzerland recorded the highest number of specimens exported, with 54 individuals, followed by the United States with 28, and by Germany, Jersey (British Crown Dependency) and the United Kingdom, with four specimens each. The importing countries that reported the highest number of live specimens were Germany (21), the United Kingdom (18), and the United States (11). In the case of Ecuador, where this species is endemic, two live specimens of wild origin were reported to have been exported to South Korea in 2001 for display in a zoo.

Switzerland, the USA and Germany are the leading exporters of live giant tortoises from the Galapagos within the framework of international legal trade.

Regarding the records of the importing countries, there is a discrepancy in the number of live Galapagos tortoises reported. Importing countries report a total of 177 live tortoises, which represents a difference of 68 specimens compared to the data from exporting countries. For example, in 2005, the United Kingdom reported that 17 live giant Galapagos tortoises were imported, while Switzerland, a country designated as an exporter, did not register that international commercial transaction. Similarly, in 2011, Mexico reported that 18 live specimens were reported, but the United States, which is listed as an exporting country, did not report them.

in different years. The first significant record corresponds to 1982, with 10 live specimens exported, followed by a series of years with low and dispersed volumes (between 1 and 7 individuals) during the 1980s and mid-1990s.

As of 2009, there was a slight increase, with nine specimens exported, a figure that was repeated in 2015 and 2016. Subsequently, in 2019 there was again an increase to 10 specimens, while the historical maximum of the period reached in 2023, with 16 individuals exported. In contrast, 2021 and 2022 recorded a notable drop, with only four and one specimen, respectively, as shown in Figure 5.

The analysis of *Chelonoidis niger* exports recorded in the CITES Database reveals a fluctuating trend over the period from 1982 to 2023, with several peaks of increase

Trade in *Chelonoidis niger*
(1982-2023)
CITES Database

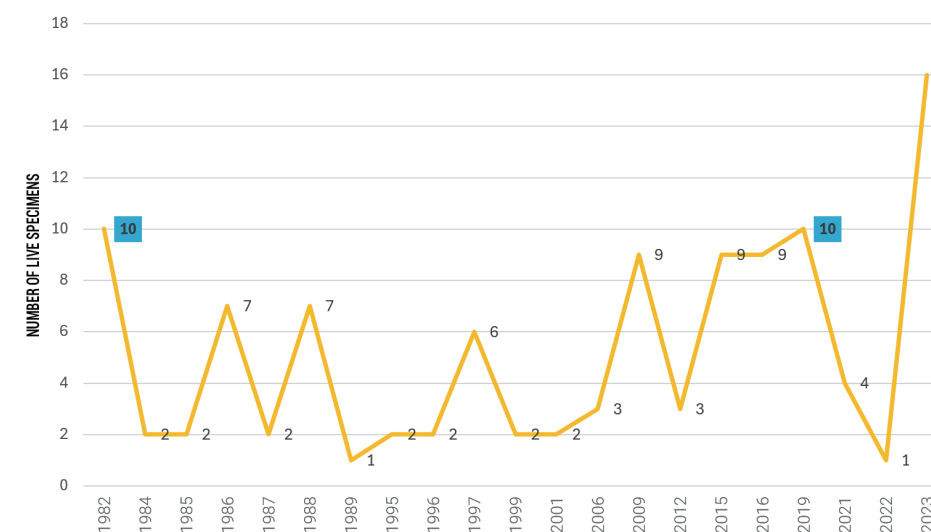


FIGURE 5.
Trade in *Chelonoidis niger* (1982 – 2023) CITES Database, as reported by exporting countries.

Germany, United Kingdom and the USA are the main importers



Regarding the origin of the 109 specimens, as reported, 52% (57 specimens) come from animals raised in captivity (code C), followed by 27% (29 specimens) born in captivity (code F), 5% (6 specimens) collected in the wild (code W), and 16% (17 specimens) whose origin was not reported.

Regarding the purpose, 67% (73 specimens) were destined for zoos (code Z), 25% (26 specimens) for commercial purposes (code T), 8% (9 specimens) for captive breeding or artificial reproduction (code B), and less than 1% (1 specimen) for use as a personal object (code P).

Since 2003, Resolution Conf. 12.10 (Rev. CoP15) of CITES established the criteria and procedures for the registration of operations, such as hatcheries, zoos or breeding centres, that breed in captivity animal species included in Appendix I for commercial purposes. However, in 2019 and 2023, Switzerland reported the export of three and five live specimens of *Chelonoidis niger*, respectively, for commercial purposes, to Germany. However, Switzerland does not have any CITES registered hatcheries or zoos for breeding of this species, which constitutes a breach of the provisions set out in the Convention.

The complete history of international transactions of *Chelonoidis niger* according to the CITES Database can be found in Annex 4.

CONSERVATION MEASURES

There are currently several activities, programs, processes and projects focused on the conservation of Galapagos giant tortoises, including: a) the Galapagos Tortoise Movement Ecology Programme, which aims to improve knowledge on the movement ecology of tortoises to apply it in management and conservation decision-making (Blake *et al*, 2021); b) the census of ten tortoise populations on Isabela Island, which allows immediate conservation actions to be implemented (Galapagos Conservancy, 2023); c) the establishment of giant tortoise breeding and nursery centres; d) the restoration of populations on islands where they were extinct, with the reintroduction of approximately 7,000 young specimens; e) the evaluation and mitigation of human interactions with giant tortoises and their impacts; and f) studies of giant tortoise populations on different islands (Tapia *et al*, 2017; Vega-Mariño *et al*, 2024).



98%
of the iguanas
that are part of
the international
legal trade are
declared "born in
captivity".

GALAPAGOS IGUANAS

In the Galapagos there are four species of iguanas, three of them terrestrial (*Conolophus subcristatus*, *C. marthae*, *C. pallidus*) and one marine (*Amblyrhynchus cristatus*). All are included in the IUCN Red List and their international trade is regulated by CITES, as they are listed in Appendix I of the Convention (Gentile and Tapia, 2013).

TERRESTRIAL IGUANAS

Galapagos Land Iguana

Conolophus subcristatus

The Galapagos Land Iguana, *Conolophus subcristatus*, is the most widely distributed species of iguana in the Galapagos and is found on the Baltra, Fernandina, Isabela, Plaza Sur, Santa Cruz and North Seymour islands. In 2019, a population of *C. subcristatus* was reintroduced to Santiago Island, where the species had become extinct by the end of the 19th century, likely as a result of predation and competition from introduced species (Ortiz-Catedral *et al*, 2023). Human activities since 1700 caused a decline in populations in Isabela and Santa Cruz islands, as well as the extinction of the species in Baltra, Rabida and Santiago islands.

The best estimate of the population of *C. subcristatus* is 11,581 mature individuals (with a range of 8,618-17,917), with the largest subpopulation being that of North Seymour with a total of 7,581 individuals (with a range of 3,555 -16,169) (Kumar *et al*, 2020). Likewise, according to a 2023 study, the adult population of this species on Fernandina Island is 45,600 individuals (Ortiz-Catedral *et al*, 2023).

In the past, the Galapagos land iguana was captured as a food source and currently the main threat is the introduction of invasive mammals such as wild dogs, cats, goats and donkeys (Kumar *et al*, 2020). As for its conservation status, *C. subcristatus* is categorised as Vulnerable (VU) on the IUCN Red List and is included in CITES Appendix I.

INTERNATIONAL TRADE

According to the records of the CITES Database, between 2010 and 2023 a total of 84 live specimens of *Conolophus subcristatus* were reported in international trade, according to the information declared by the exporting countries. Uganda recorded the highest number of live specimens exported, with 64, followed by Japan with 12 and Switzerland



Galapagos Land Iguana (*Conolophus subcristatus*)

with four. As for the importing countries, Thailand leads with 22 specimens, followed by India with 14, and Japan and Indonesia, with eight specimens each. Ecuador, a country where this species is endemic, does not register any exports of live specimens.

International trade in *Conolophus subcristatus* shows an increasing trend over the period 2010–2023, according to export records reported in the CITES Database. Only two specimens were exported in 2010,

and a similar figure was again observed in 2017. However, from 2014 (with four specimens) there is evidence of a progressive and sustained increase in subsequent years. The most significant increase is observed between 2019 and 2023, when the number of exported specimens increases from eight to 22 specimens, remaining at that maximum value during the last two years analysed, as expressed in Figure 6.

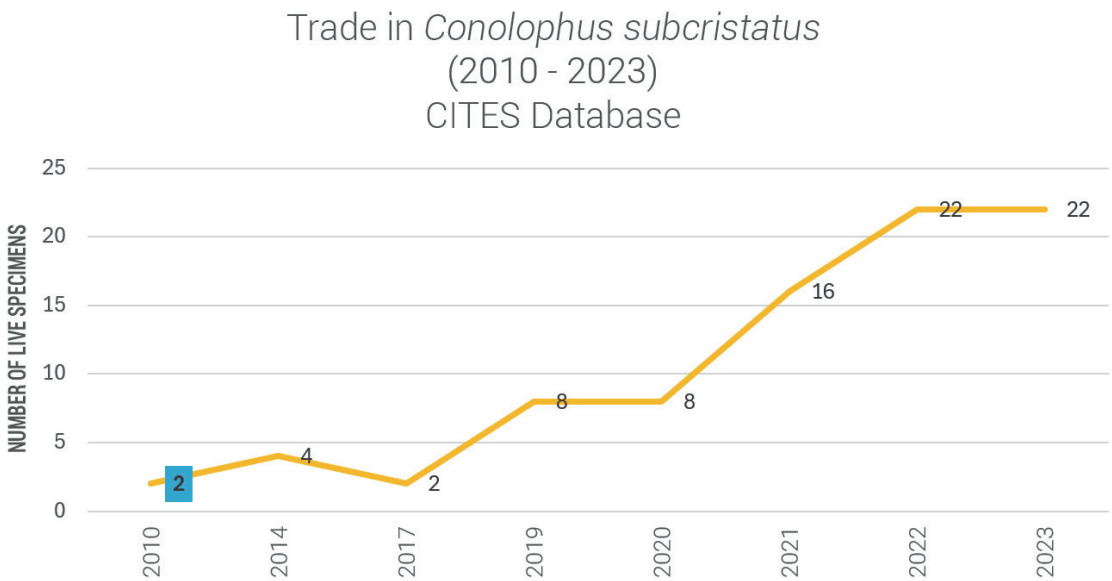


FIGURE 6.
Trade in *Conolophus subcristatus* (2010 – 2023) CITES Database, as reported by exporting countries.

Regarding the origin of the 84 live specimens reported, 98% (82 specimens) corresponded to animals bred in captivity (code C), while 2% (2 specimens) were born in captivity (code F). Regarding the purpose of exports, 64% (54 specimens) were destined for captive breeding or artificial reproduction (code B), 24% (20 specimens) were destined for zoos

(code Z), 7% (6 specimens) for commercial purposes (code T), and 5% (4 specimens) were registered as personal property (code P).

The complete history of international transactions of *Conolophus subcristatus* according to the CITES Database can be found in Annex 5.



Santa Fe Land Iguana (*Conolophus pallidus*)

Galapagos Pink Land Iguana
Conolophus marthae

The Galapagos Pink Land Iguana *Conolophus marthae* has a limited range of less than 25 km², with a central area of 10 km² at Wolf Volcano on Isabela Island. The estimated population of this species is 192 mature individuals. The main threats to this species include demographic and genetic stochasticity, as well as environmental stochasticity (volcanic eruptions, droughts), the presence of ectoparasites and possible endoparasites. As for exotic species, the Black Rat *Rattus rattus* and wild cats *Felis catus* represent potential predators of eggs and offspring of this species (Gentile, 2012).

INTERNATIONAL TRADE

According to the CITES Database, in 2010 the export of two live specimens of *C. marthae* from Mali to Switzerland was reported. These specimens were declared animals bred in captivity (code C) and intended for commercial purposes (code T). Ecuador, the country where this species is endemic, has not reported any exports of live specimens in the CITES Database.

Santa Fe Land Iguana
Conolophus pallidus

The current population of the Santa Fe Land Iguana *Conolophus pallidus* is unknown. In the last census conducted in 2005, a total population of 5,016 individuals was identified. One of the main problems facing this population is a genetic bottleneck, which has caused low genetic variability. No invasive species have been reported that directly affect this population (Gentile and Grant, 2020). The CITES Database between 1975 and 2023 does not report the export of live specimens of *C. pallidus*

CONSERVATION MEASURES

Galapagos land iguanas are included in the Native Endemic Species Management Program as part of the Galapagos National Park Management Plan (Gentile, 2012). To conserve land iguana species, various actions, processes, programs and projects have been implemented, including: a) Eradication of invasive alien species that affect or prey on iguanas; b) Establishment of iguana breeding centres and nurseries; and c) Iguana translocations (Gentile and Grant, 2020; Kumar *et al*, 2020).

MARINE IGUANAS

Marine Iguana
Amblyrhynchus cristatus

The Marine Iguana *Amblyrhynchus cristatus*, listed in Appendix I of CITES, is an endemic species of Galapagos. It is estimated that there are less than 210,000 individuals, of which approximately 60% are adults. In a monitoring exercise carried out by the Galapagos National Park (PNG) in 2021, 27,758 individuals were visually recorded in 33 colonies on 13 islands. The main threats to this species include urban development, the introduction of invasive species (dogs, cats, rats, pigs), pollution and climate change. For example, the survival of marine iguanas has been adversely affected by organic hydrocarbons derived from fuel spills. This species is categorised as Vulnerable on the UICN Red List, with six of its 11 subspecies considered Endangered (EN) and four recognised as Critically Endangered (CR) (MacLeod *et al*, 2020; Álava *et al*, 2023; Varela-Jaramillo, 2023).

INTERNATIONAL TRADE

According to the records of the CITES Database, between 2013 and 2019, a total of eight live specimens of *A. cristatus* were reported in international trade, according to the information declared by the exporting countries. Uganda recorded the highest number of specimens exported, with four specimens, followed by Austria and Japan, with two specimens each. As for importing countries, Japan was the main recipient of live specimens, with a total of four, followed by Uganda, with two. Ecuador, an endemic country of the species, does not report any exports of live specimens.

On the other hand, there are discrepancies in the number of live specimens reported by the importing countries, which register a total of 11 specimens, with a difference of three individuals with respect to the data declared by the exporting countries. This discrepancy consists of the import of three specimens from Mali, declared as captive-bred (code C) and for the purpose of personal property (code P), in 2012.

Of the eight live specimens exported, 100% were registered as captive-bred animals (code C). Regarding the purpose, four specimens (50%) were destined for commercial purposes (code T) and the remaining four (50%) for captive breeding or artificial reproduction (code B).

The history of international transactions of *Amblyrhynchus cristatus* reported in the CITES Database is in Annex 6.

CONSERVATION MEASURES

Regarding conservation measures, it is known that the GNPD monitors marine iguana colonies through periodic censuses. Several invasive species eradication programs have also been implemented, including wild goats on several islands, cats from Baltra and Venice, and black rats from North Seymour and Bainbridge (MacLeod *et al*, 2020).



Marine Iguana (*Amblyrhynchus cristatus*)

BROWN SEA CUCUMBER

Isostichopus fuscus

The species *Isostichopus fuscus* included in Appendix III of CITES by Ecuador since 2003, is categorised as Endangered (EN) according to the IUCN Red List. Sea cucumber fishing began in 1991 in the Galapagos and persisted illegally until the establishment of the Galapagos Marine Reserve in 1998, which preceded the start of the first regulated fishing season in 1999 (Pines, 2023). During the period of greatest activity, between 1999 and 2005, almost 30 million individuals were legally captured from the Galapagos Marine Reserve (Wolff *et al*, 2012). Subsequently, between 2016 and 2020, fishing was prohibited, and after technical and scientific studies, the possibility of reopening under an artisanal approach and meeting certain specific considerations was determined (Viteri, 2023).

INTERNATIONAL TRADE

According to the records of the CITES Database, between 2004 and 2022, a total of 5,755,246 dead specimens of *I. fuscus* were exported in international trade, according to the information declared by Ecuador. As for the importing countries, China recorded the

highest volume with 4,118,820 specimens, followed by the Hong Kong Special Administrative Region (HKSAR) with 804,184 and the United States with 720,515 specimens.

Available CITES data shows a general downward trend in sea cucumber exports from Ecuador between 2004 and 2022. In 2004, the highest volume was recorded with 2,584,899 units, which marks the maximum export point in the period analysed; however, a sharp drop was already observed for 2007, with a decrease of more than 58% compared to the initial value (1,064,463 units). The decreasing trend continued in 2008, with just 499,020 units, which could reflect greater control over extraction and trade, or a reduction in natural populations due to overexploitation in previous years. In 2015 and 2016, relatively low levels of trade were maintained (526,285 and 364,838 units, respectively). Subsequently, in 2021 the lowest value of the period was reached (168,702 units), which indicates a historical minimum in commercial activity. However, in 2022 there was a slight recovery with 547,039 units, although still well below the initial levels of 2004, as shown in Figure 7.

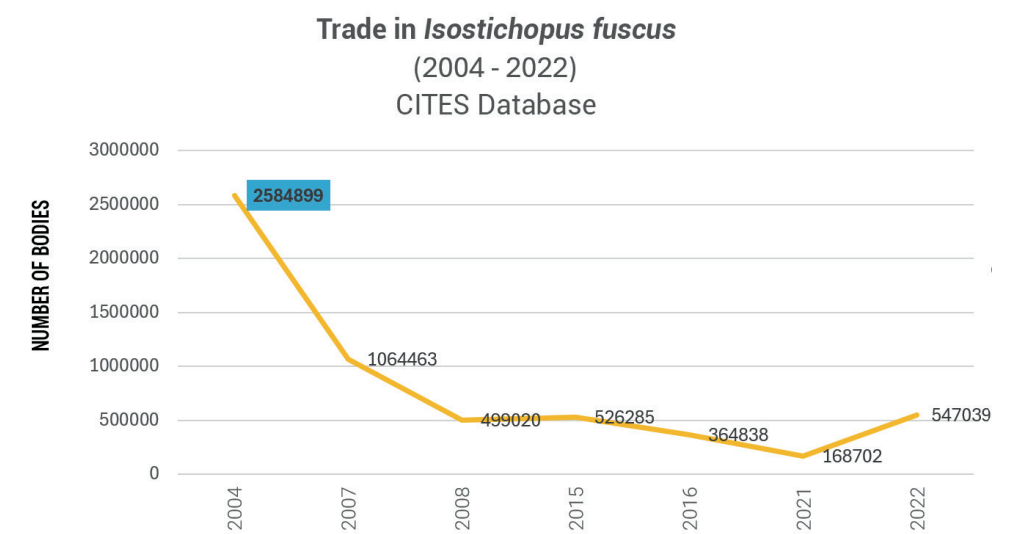


FIGURE 7.
Trade in *Isostichopus fuscus* (2004 – 2022) CITES Database, as reported by Ecuador as an exporting country.

As for the origin of the specimens, all were reported as collected in the wild (code W) and for commercial purposes (code T).

The history of international transactions of *Isostichopus fuscus* reported in the CITES Database is in Annex 7.

CONSERVATION MEASURES

Regarding conservation measures for this species, public institutions and Non-Governmental Organizations (NGOs) have developed population studies of sea cucumber in the Galapagos to guide sustainable management decisions. Among these efforts, the Interdisciplinary Fisheries Project of the Charles Darwin Foundation stands out, which contributes to the knowledge and conservation of this species through a comprehensive approach (Viteri, 2023).

GALAPAGOS OPUNTIA

Six species of the genus *Opuntia* are found in the Galapagos, including long-lived trees and shrubs. These species are considered key in the ecological dynamics of lowland ecosystems because they provide food and maintain important ecological interactions with various vertebrates and invertebrates, which act as seed dispersers and pollinators (Charles Darwin Foundation and WWF-Ecuador, 2018).

The endemic species present in the Galapagos are: *O. echios*, *O. galapageia*, *O. helleri*, *O. insularis*, *O. megasperma*, and *O. saxicola*. All are listed in CITES Appendix II since 1975 which included the entire Cactaceae family.

- a. *O. echios* has five varieties (barringtonensis, echios, gigantea, inermis and zacana), distributed on the islands of Isabela, Santa Cruz and Santa Fe, and 15 islets. Some populations have declined due to predation by wild animals, especially donkeys. It is categorised as Least Concern (LC) in the Red Book of Endemic Plants of Ecuador (León-Yáñez et al, 2019).
- b. *O. galapageia* has three varieties (macrocarpa, profuse and galapageia), it is found on Pinta, Pinzón, Rábida, Santiago

and five islets. Populations have declined in the Santiago and Pinta islands due to the action of wild animals. According to the Red Book of Endemic Plants of Ecuador, it is categorised as Vulnerable (VU) (León-Yáñez et al, 2019; Charles Darwina Foundation, 2024).

- c. *O. helleri* inhabits Darwin, Wolf, Marchena and Genovesa islands and an islet, where it is common, although in small populations. The islands they inhabit are untouched and this species does not suffer the impacts of human activities. It is categorised as Vulnerable (VU) in the Red Book of Endemic Plants of Ecuador (León-Yáñez et al, 2019; Charles Darwinb Foundation, 2024).
- d. *O. insularis* distributed in the Fernandina and Isabela islands (Sierra Negra, Alcedo, Darwin and Wolf volcanoes). At the Alcedo volcano, populations have declined due to the action of wild animals. According to the Red Book of Endemic Plants of Ecuador, it is categorised as Vulnerable (VU) (León-Yáñez et al, 2019; Charles Darwina Foundation, 2024).
- e. *O. megasperma* has three varieties (megasperma, mesophytica, orientalis) and inhabits Hispaniola, Floreana, and San Cristobal, as well as several islets. The conversion of habitats for agricultural use and the presence of feral animals have caused a significant reduction in their populations. Its conservation status is Endangered (EN), according to the Red Book of Endemic Plants of Ecuador (León-Yáñez et al, 2019; Charles Darwind Foundation, 2024)
- f. *O. saxicola* is restricted to Isabela Island, specifically the Cerro Azul volcano, where its population has declined due to pressure from feral animals. It is classified as Endangered (EN) according to the Red Book of Endemic Plants of Ecuador (León-Yáñez et al, 2019; Charles Darwine Foundation, 2024).

5.7 million specimens of Brown Sea Cucumber and legally exported between 2004 and 2022



Opuntia (Opuntia echios)

INTERNATIONAL TRADE

According to the records of the CITES Database, international trade in 74 live specimens of *O. galapageia* was reported, according to the information declared by the exporting countries. Among these, Spain recorded the highest number of exports, with 48 specimens, followed by the United States with 21 and Thailand with three specimens. As for the importing countries, Switzerland led imports with 34 specimens, followed by the United Kingdom with 18 and South Korea with 12 specimens. Ecuador, the country of origin of

this species, does not report any exports of live specimens of this species.

The first trade record of *O. galapageia* dates back to 1982, when 19 specimens were exported, followed by reduced volumes in 1983, 1989, 2001, 2012, 2014 and 2023, with one to three specimens per year. The highest export peak was recorded in 2011, with 36 specimens. As of 2012, exports decline again, reflecting reduced legal trade, as expressed in Figure 8.

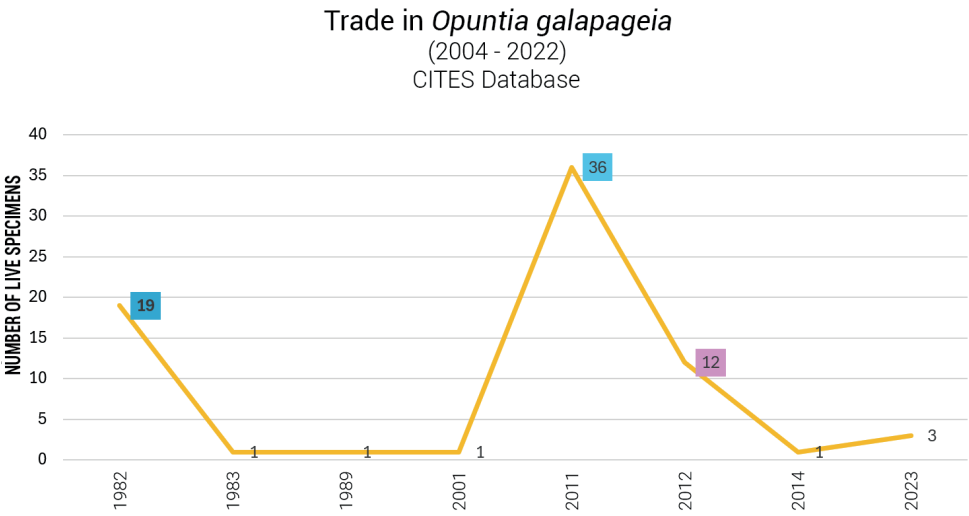


FIGURE 8. Trade in Opuntia galapageia (1982 – 2023) CITES Database, as reported by exporting countries.

Significant differences are observed between the records of importing and exporting countries. While importers report a total of 165 live specimens, exporters only record 74 specimens, which represents a discrepancy of 91 specimens, equivalent to approximately 55% of the total reported by importing countries. For example, in 2011 Switzerland reported the import of 34 live specimens from Spain, without the latter country registering the corresponding export in its CITES reports. Similarly, in 2022 Switzerland declared the import of 36 live specimens, while the Netherlands, identified as an exporting country, did not report such a transaction.

As for the origin of the 74 living specimens, all are reported as artificially reproduced plants (code A) and as for the purpose, 73 were for commercial purposes (code T) and one specimen for a botanical garden (code G).

Annex 8 contains the international transactions of *Opuntia galapageia*, according to the CITES Database.

CONSERVATION MEASURES

As far as conservation measures are concerned, the entire natural range of the genus *Opuntia* in the Galapagos is protected within the Galapagos National Park. In addition, eradication campaigns have been implemented for wild goats considered to be one of the main non-natural predators of these species. At the same time, the "Galapagos Verde 2050" Project has promoted *Opuntia* ecological restoration activities on different islands (Tye and Kling, 2017; Jaramillo *et al*, 2020).



Opuntia (Opuntia echios)

TRAFFICKING TRENDS IN GALAPAGOS

Due to its geographical location and the high degree of endemism of its species, Galapagos is particularly vulnerable to wildlife trafficking and illegal fishing. For example, one of the most representative seizures occurred in 2021, when 185 giant Galapagos tortoises were found being transported illegally. Another significant case is that of the 300 tonnes of

sharks being illicitly transported by a Chinese vessel. These facts show the magnitude of wildlife trafficking in the Galapagos and are described in greater detail below.

The main illegal activities affecting wildlife in the Galapagos, specifically those related to illegal trafficking, are detailed below.

7,080 sharks seized in six operations between 2011 and 2022



Galapagos shark (*Carcharhinus galapagensis*)

SHARK CATCHES BY MAINLAND ECUADORIAN AND FOREIGN FLEETS

Illegal fishing in the Galapagos Marine Reserve (GMR) represents a serious threat to the conservation of marine ecosystems and emblematic species such as sharks (Zambonino, 2023). Despite the control efforts implemented by the authorities, since 2011 there have been reports of incursions by foreign vessels, especially of Asian origin, in particular from China, which put pressure on shark populations (López and Suarez, 2021). The hammerhead shark species present in the GMR are particularly threatened by directed fishing and the shark fin trade, due to their high value in the Asian market. It is estimated that annually more than 12,000 sharks are illegally extracted from the GMR by Chinese vessels (de Mitchesona *et al*, 2018; Zambonino, 2023).

The following summarises the Galapagos shark seizures reported in the *Robin des Bois On the Trail* online newsletter and other sources, chronologically:

- In **2011**, the Ecuadorian Navy seized 357 sharks (subclass Elasmobranchii) on the longline vessel *Fer Maty*. Of the total seized, 286 belonged to the species of Bigeye Thresher *Alopias superciliosus*, 22 to the Blue Shark *Prionace glauca*, 40 to the Galapagos Shark *Carcharhinus galapagensis*, six to the Scalloped Hammerhead *Sphyrna lewini*, two to the Tiger Shark *Galeocerdo cuvieri* and one to the Shortfin Mako Shark *Isurus oxyrinchus*.

- In **2016**, 70 Galapagos sharks¹³ *Carcharhinus galapagensis* were seized from the Maria Tatina IV vessel within the GMR.
- In August **2017**, the Chinese vessel Fu Yu Leng was intercepted at the GMR carrying 300 tonnes of sharks (estimated at around 6,623 sharks¹⁴) including five species: *Sphyrna lewini*, *Carcharhinus falciformis*, *Alopias superciliosus*, *Alopias pelagicus*, and *Isurus oxyrinchus* (Tapia, 2022).
- In December **2017**, near Genovesa Island, the vessel El Don Gerard V was intercepted by the Ecuadorian Navy with 30 sharks¹⁵ in its hold, belonging to the species: *Alopias* sp., *Carcharhinus falciformis*, and *Prionace glauca*.
- In **2019**, the Ecuadorian Navy inspected five Peruvian vessels (Juan Carlos II, María Bonita I, Paloma I, Lariza and Angela) in front of the GMR. Approximately

- 1,100 kilograms of the following species were seized: *Prionace glauca*, *Carcharhinus falciformis*, *Isurus oxyrinchus*, *Sphyrna mokarran*, *Alopias superciliosus*, and *Manta birostris*.
- In January **2022**, the Environmental Protection Unit (UPMA) of the National Police in coordination with the Ecuadorian Navy seized 58 pieces of sharks¹⁶ of the species *Alopias* sp.

Between 2011 and 2022, six seizures were recorded in which a total of 7,080 sharks of nine different species and one species of manta ray were recorded. In a 2019 seizure, only the seized weight, equivalent to 1,100 kilograms, was reported, and in 2022 the seizure of 58 pieces of shark was recorded.

Information on seizures recorded between 2011 and 2022 is summarised chronologically in Figure 9.

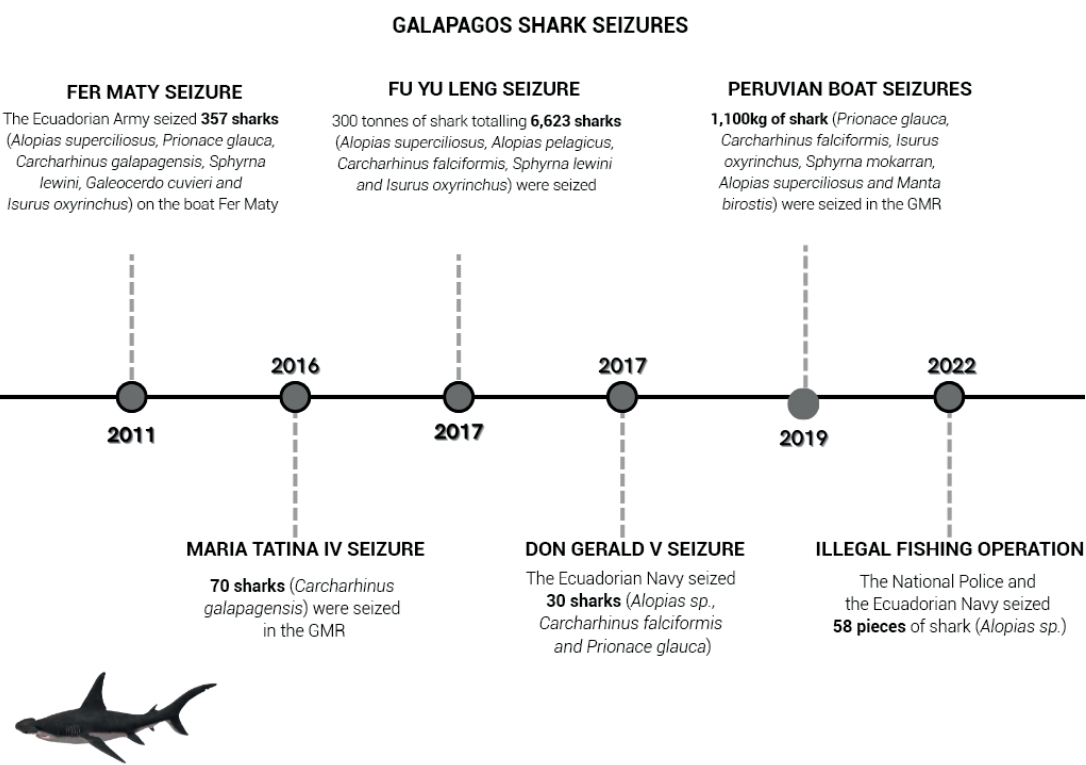


FIGURE 9.
Timeline of Galapagos shark seizures



Sea cucumber (*Isostichopus fuscus*)

SEA CUCUMBER HARVESTING DURING THE CLOSED SEASON

The Galapagos sea cucumber fishery is one of the oldest in South America and has served as a model for other countries interested in developing this activity. This has been marked by conflicts, negotiations and a participatory and adaptive management that is still incipient and inefficient. The extraction of *Isostichopus fuscus* in the GMR has caused a drastic decrease in its populations (Toral-Granda, 2008).

The GNPd, on behalf of the Ministry of Environment and Energy (MAATE), is the authority in charge of establishing the guidelines for this fishery. In 2023, by official resolution, a maximum catch quota of 600,000 individuals was established, with a minimum size of 20 centimetres in the fresh state and seven centimetres in the cooked/brined state (MAATE and PNGa, 2023). In 2025, according to the official resolution, the maximum quota was 850,000 individuals, with a minimum size of 20 centimetres in the fresh state and seven centimetres in the cooked/brined state (MAATE and PNG, 2025), this represents a 41.7% increase in the authorised catch quota between 2023 and 2025.

However, it has been documented that the closed season is not always respected. In many cases, sea cucumbers are harvested months before the official start of the season, processed in brine and dried, and then stored in the Galapagos or transported by sea or air clandestinely to mainland Ecuador. For example, in 2021, a large proportion of the illegally caught

sea cucumbers were allegedly "laundered", and the fishing season ended unexpectedly just 20 days after its opening, despite an authorised quota of 500,000 individuals. There is a suspicion that sea cucumbers were "laundered" through the use of falsified or fraudulently issued monitoring and transport permits (Castrejón *et al*, 2021).

Below are the sea cucumber seizures in the Galapagos reported in the online newsletter *Robin des Bois On the Trail* and other sources:

- In June **2013**, 1,313 sea cucumbers (20 kg)¹⁷ of the species *Isostichopus fuscus* were seized in a processed dry state at the Galapagos Ecological Airport when they were found in suitcases of Asian citizens.
- In October **2013**, the Galapagos National Park Authority seized 32,477 sea cucumbers *Isostichopus fuscus*¹⁸, in Puerto Grande, San Cristóbal. They were dried and destined for Asian communities in Asia and North America.
- In January **2016**, during a cargo control operation at the Galapagos Ecological Airport, three boxes containing 3,600 sea cucumbers of the species *Isostichopus fuscus* and *Stichopus horrens*¹⁹, whose destination was the city of Guayaquil, were seized.

- In June **2016**, two people attempted to illegally transport 10,852 sea cucumbers in a salty dry state of the species *Isostichopus fuscus*, through the Puerto Baquerizo Moreno Airport, San Cristóbal, Galapagos. To do this, they transported the cucumbers around the city to the airport, where they were stored in boxes that were discovered in the facilities of an airline, by the National Police, bound for Guayaquil (Kauffman *et al*, 2022).
- In **2024**, 725 sea cucumbers of the species *Isostichopus fuscus* were seized in an illegal camp on Isabela Island, during the closed season (Vega, 2024).

Between 2013 and 2024, a total of 48,967 Galapagos sea cucumbers have been seized in five different seizures, the most recurrent species being *Isostichopus fuscus*.

Figure 10 summarises chronologically the recorded seizures of Galapagos sea cucumber between 2013 and 2024.

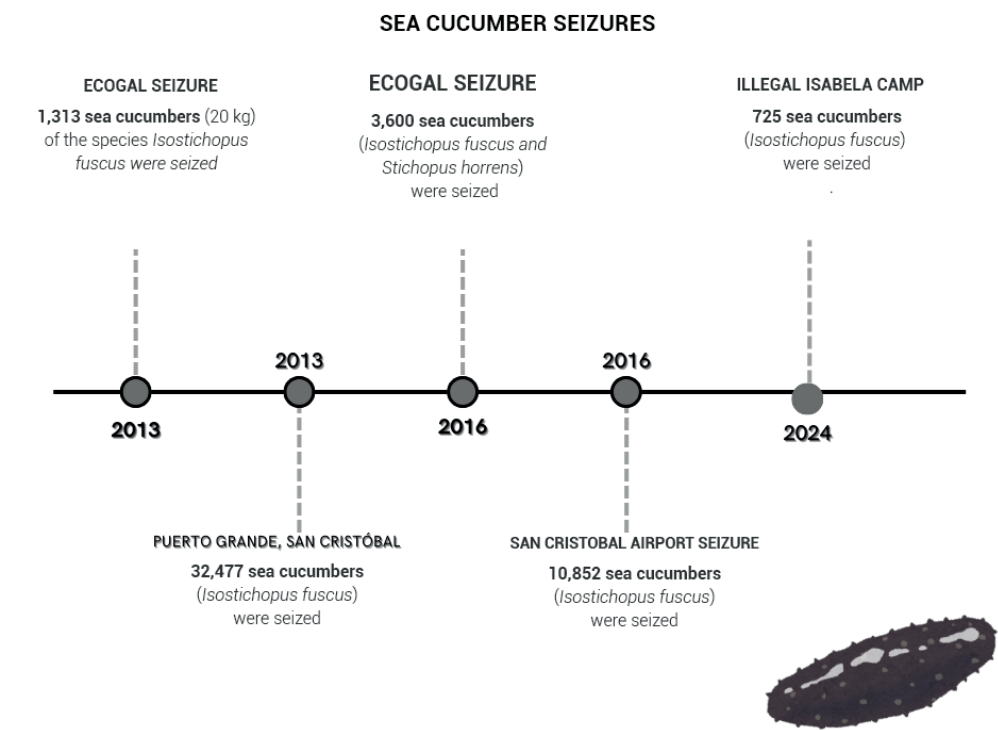


FIGURE 10
Timeline of Galapagos sea cucumber seizures

HARVEST OF LOBSTERS DURING THE CLOSED SEASON

Pronghorn Spiny Lobster *Panulirus penicillatus* and Green Spiny Lobster *Panulirus gracilis* have been fished for commercial export since the 1960s. Previous estimates suggest that Galapagos has historically contributed more than 90 to 95% of Ecuadorian spiny lobster exports (Schiller *et al*, 2013).

In 2023, by means of a resolution issued by MAATE and the GNP, the authorised fishing season for both species was established,

as well as the minimum catch sizes: 26 centimetres in total length for whole specimens and 15 centimetres for tails (MAATE and PNG, 2023). However, the capture of lobsters outside the allowed period has been reported, as well as confiscations from Galapagos residents who did not have the necessary authorisations or who fished specimens below the minimum allowed size (Castrejón *et al*, 2021).



GALAPAGOS GIANT TORTOISE TRAFFICKING

The availability of official and scientific information on the Galapagos giant tortoise trade is limited. However, there is knowledge of the operation of an international criminal network that involves residents of the archipelago, who know the tortoise nesting sites in Isabela, Santa Cruz and San Cristóbal, or have access to the Tortoise Breeding and Management Centres of the DPNG (Castrejón *et al*, 2021). A genetic study using nuclear and mitochondrial microsatellites applied to trafficked Galapagos giant tortoises determined that these came from the San Cristóbal and Isabela breeding centres (Quinzin *et al*, 2023).

Likewise, the existence of internal trafficking of giant tortoises has been identified, used for the consumption of their flesh and blood, as well as for the commercialisation of elements or constituent parts that include skulls and shells that are exhibited in properties or tourist sites (Castrejón *et al*, 2021). As for the poaching of land tortoise, this is an illicit activity documented on Isabela Island. A report prepared by the PNG from 1990 to 2013 reported that park rangers found a total of 309 tortoises in a state of decomposition during their patrols (Ministry of the Environment and Galapagos National Park, 2013). In 2021, 15 giant tortoises of the species *Chelonoidis guntheri* were found slaughtered on Cerro Grande, near the Sierra Negra volcano, south of Isabela Island (Zurita, 2021).

Regarding seizures in the WiTIS Database and other sources, cases related to Galapagos giant tortoises are reported, which are summarised below:

SEIZURES OF LIVE SPECIMENS

- In **2017**, 29 tortoises were seized on a bus in Peru, on the Piura - Lima route. Of the 29 tortoises seized, "26 were repatriated to Ecuador. Through examinations carried out by technicians and individual reviews, it was determined that eight belonged to the species *Chelonoidis chathamensis* of San Cristóbal Island, where the David Rodríguez breeding centre is located, and the remaining 18 belonged to the species *C. guntheri* of the Sierra Negra volcano of Isabela. The 18 tortoises from Isabela even bore hot-iron brands and paint markings, which are the distinctive marks of the Arnaldo Tupiza breeding centre" (Zurita, 2021).
- In **2018**, a Galapagos tortoise was seized in a parcel in Las Vegas, United States that came from Miami.
- In **2021**, 185 giant tortoises of the species *C. niger* were seized at the Galapagos Ecological Airport. These were found inside a passenger's suitcase in the cargo area, and were estimated to be between two and twelve months old. These had as

their final destination the city of Guayaquil, and were wrapped in plastic. Ten were found dead. The estimated value of these tortoises on the black market amounted to approximately US \$1,295,000.

- In early June **2022**, giant juvenile tortoises of the species *C. niger* were seized in Mexico City. The exact number, origin and destination are unknown²⁰.
- On 25 June **2022**, 84 tortoises were seized on a Xavier III tourist boat heading to Guayaquil. These tortoises belonged to the species *C. chathamensis*.
- In **2023**, 16 Galapagos tortoises of the species *C. niger* were seized in a house in the city of Guayaquil.

Between 2017 and 2023, six seizures were documented in which 315 live specimens of three species of giant Galapagos tortoises (*Chelonoidis chathamensis*, *C. guntheri*, *C. niger*) were confiscated, with the exception of the case registered in Mexico in 2022, of which insufficient details are available.

Seizures of Galapagos giant tortoises between 2017 and 2023 are summarised chronologically in Figure 11.

315 live giant tortoises seized between 2017 and 2023

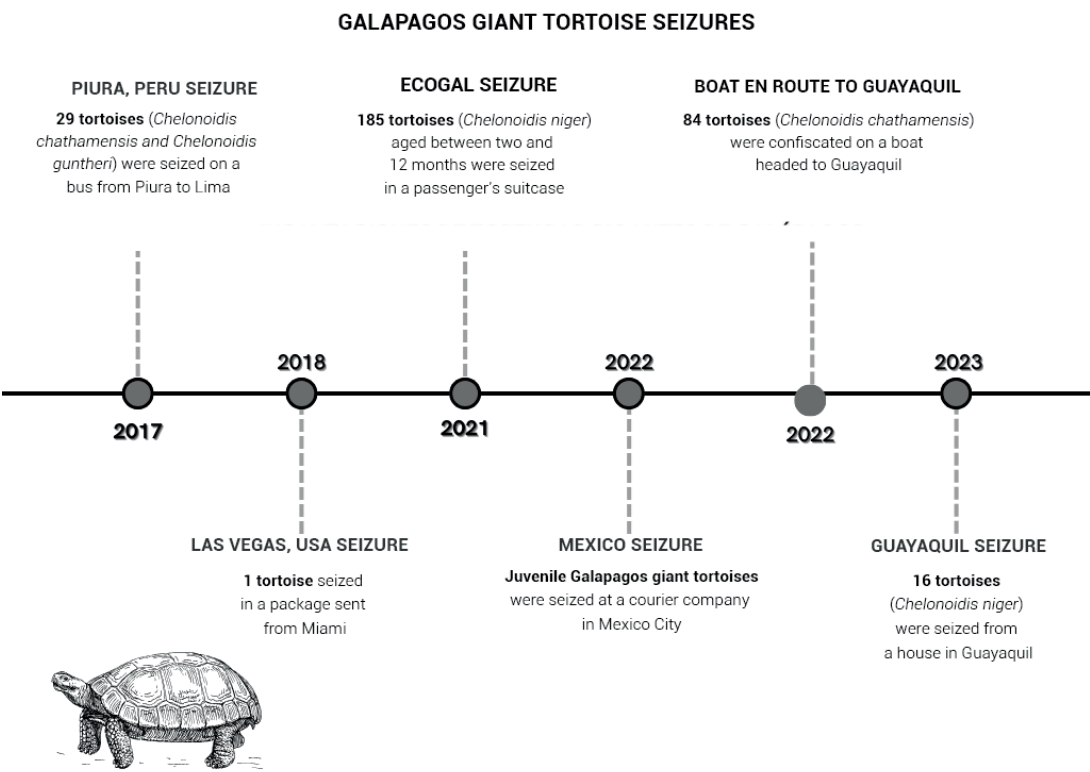


FIGURE 11. Timeline of Galapagos giant tortoise seizures

In addition to the seizures made, it is known that between 2017 and 2018, 123 small and juvenile tortoises disappeared from the

breeding centre on Isabela Island; 29 were found in Peru and repatriated to Ecuador (Zurita, 2021).

TRAFFICKING IN LAND AND MARINE IGUANAS

Land and marine iguanas endemic to the Galapagos are also part of the wildlife trade. According to Vega₆ (2022), a laundering process of specimens²¹ of the Galapagos land and marine iguanas in Uganda has been identified, where a hatchery operates that exports juvenile specimens through CITES permits. According to Auliya et al. (2025), all the extractions of marine iguanas recorded since 1936 were carried out without the corresponding permits and were, therefore, illegal. Likewise, since the creation of the Galapagos National Park in 1959, any extraction of iguanas is considered an illicit activity (Raman, 2025).

The Government of Ecuador, through its CITES Management Authority, has warned about the detection of exports of live specimens

of endemic Galapagos iguanas covered by CITES permits and declared as captive-bred by countries where they are not native. This situation is inconsistent, considering that Ecuador has never reported the export of live iguana animals for commercial purposes since 1975, the year it joined CITES. This activity is prohibited by national legislation both for the transfer of live specimens to the mainland and abroad. This prohibition was established since 1998 in the *Special Law for the Conservation and Sustainable Use of the Province of Galapagos*, which expressly prohibits the transport of wild flora and fauna from the islands, and was later reinforced with the entry into force of the *Organic Law of the Special Regime of the Province of Galapagos* (LOREG) in 2015.



Hatchling of a tortoise seized in Baltra.

In this context, Ecuador submitted an information paper to the 74th Meeting of the CITES Standing Committee, held in March 2022 (*CITES SC74 Inf. 26*), in which it warned about the illegal trade in marine and land iguanas from the Galapagos Islands, and made recommendations to the Parties regarding the regulation and control of trade in these species. Subsequently, in May 2025, through the Notification to the Parties No. 2025/063, Ecuador formally requested international cooperation to strengthen controls over trade in endemic Galapagos iguanas (*Amblyrhynchus cristatus*, *Conolophus subcristatus*, *C. marthae*, and *C. pallidus*). In December 2025, during the Twentieth Meeting of the Conference of the Parties to the CITES Convention, held in Uzbekistan, proposals 22 and 23 were approved by consensus, aimed at strengthening the protection of marine and terrestrial iguanas of the Galapagos. These species were transferred from Appendix II to Appendix I of CITES, subjecting their trade to stricter restrictions.

The records of live specimens of *C. subcristatus* reported as born in captivity in the CITES Database are questionable, given that Ecuador has never exported live individuals of this species, there are therefore no records of legal exports of parent

stock or founder populations. The trade in *C. subcristatus* began in 2010, with the export of live specimens from Mali to Switzerland. According to Raman (2025), researchers suggest that the parents may have been illegally removed from the Galapagos and transferred to Mali at some point, subsequently obtaining a CITES export permit from this country before being sent to Switzerland. Likewise, in 2012 and 2013, researchers found social media posts from a Swiss resident showing photographs of Galapagos land and marine iguanas, which belong to his private collection.

Subsequently, in 2014, Switzerland exported specimens to Uganda. As of 2017, the latter country assumed the leadership in the export of the species, with a total of 64 specimens. In terms of imports, Thailand consolidated itself as the main importing country, with 22 live specimens, followed by India (14 specimens), Indonesia and Japan (eight specimens each), and Ukraine (six specimens).

Table 1 presents the summary of international trade in live specimens of the Galapagos land iguana *Conolophus subcristatus* by country from 2010 to 2023.

TABLE 1.
International trade in live specimens of Galapagos land iguana *Conolophus subcristatus* reported as bred in captivity by exporting country, according to the CITES Database (2010–2023).

		Importing countries														
		Canada	North Korea	South Korea	India	Indonesia	Japan	Malaysia	Sudan	Sweden	Switzerland	Thailand	Taiwan	Ukraine	Uganda	Total
Exporting countries	Mali	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
	Switzerland	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
	Uganda	2	2	2	2	8	8	4	2	2	0	22	4	6	0	64
	Japan	0	0	2	10	0	0	0	0	0	0	0	0	0	0	12
	Togo	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Total		2	2	4	14	8	8	4	2	2	2	22	4	6	4	

Source: CITES Database (2010 to 2023 data)

Since 2017, Uganda has consolidated itself as a transit and export point for Galapagos iguanas



Galapagos Land Iguana at Seymour Airport (Baltra)

In the case of *C. marthae*, the export of two live specimens from Switzerland to Mali, reported as captive-bred, was recorded in 2010, just one year after the species was formally described as new. Regarding *A. cristatus*, eight live specimens have been reported, the first two being live specimens exported from Austria to Japan in 2013. All these data were extracted from the information provided by the exporting countries.

The possibility that the parental specimens of the land and marine iguanas of the Galapagos were exported before the entry into force of CITES is unlikely considering that the Convention has been in force for 50 years. In addition, authorities have documented cases in which people of Ugandan origin were detained in the Galapagos Islands for sending packages with juvenile iguanas to Uganda (Auliya *et al*, 2025).

According to recent media reports, complemented by a video posted on the YouTube platform, Uganda has established itself as a transit point and collection centre for illegally obtained Galapagos iguanas, as well as possibly their offspring. The CTC Conservation Centre is the only facility in the world that holds marine iguanas in captivity; its founder was convicted in 2010 for his involvement in a reptile trafficking case in New Zealand (Auliya *et al*, 2025; Raman, 2025).

According to Cayot (2008), Galapagos land iguanas are considerably more difficult to maintain and reproduce in captivity than giant tortoises, due to the need to precisely control the physical conditions of the enclosures and incubation techniques, which include variables such as temperature and water potential of the substrate, in addition to an adequate diet. At the iguana breeding centre established in 1965 in the Galapagos, food proved to be a determining factor, to the point that it was necessary to hire a nutrition specialist to optimise the conditions of the land iguanas, which were initially not the most suitable.

According to Auliya *et al*. (2025), captive breeding of *Amblyrhynchus cristatus* is complex under *ex situ* conditions. From 1925 to 1965, three U.S. zoos (Philadelphia, Los Angeles, and Chicago) maintained a total of 21 marine iguanas, most of which survived from a few days to 11 months.

Taken together, all these antecedents constitute evidence that reinforces the low probability that Galapagos land and marine iguanas kept outside their natural range come from legitimate captive breeding programs.

SEIZURES OF LIVE SPECIMENS

With regard to land iguanas, the following seizures have been identified in WiTIS as summarised below:

- In **2012**, four land iguanas of the species *C. subcristatus* were seized at the Galapagos Ecological Airport in the possession of a German citizen.
- In **2013**, according to information from the EU-TWIX database, two Santa Fe land iguanas *Conolophus pallidus* were seized at Heathrow Airport in the United Kingdom, as part of a cargo from the United States that did not have the corresponding CITES permits.
- In **2015**, two juvenile land iguanas of the species *C. subcristatus* were seized, which were hidden in the backpack of a Mexican citizen on Santa Cruz Island, together with nine marine iguanas, which were destined to be sent to Uganda²².
- In **2022**, four iguanas of the species *C. subcristatus* were retained aboard the vessel Xavier III, which was 30 nautical miles from La Puntilla de Santa Elena and was destined for Guayaquil.

In relation to the seizures of marine iguanas, according to the WiTIS the following are reported:

- In **2010**, two marine iguanas were seized at Galapagos Ecological Airport inside a secret box compartment identified by a canine unit. The perpetrator was not identified (Auliya *et al*, 2025).
- In **2015**, nine juvenile marine iguanas, found in the backpack of a Mexican citizen on Santa Cruz Island, were seized together with two juveniles of *C. subcristatus*, which would be sent to Uganda.

Between 2010 and 2022, 12 Galapagos land iguanas and 11 marine iguanas have been confiscated in five seizures.

Figure 12 presents a chronological summary of Galapagos-endemic land and marine iguana seizures recorded between 2010 and 2022.

GALAPAGOS LAVA LIZARD TRAFFICKING

Information available on the illegal trade of the Galapagos Lava Lizard *Microlophus albemarlensis* in secondary sources, such as online publications and journals, is limited. However, existing evidence indicates the presence of digital platforms where this species is promoted. For example, in the European pet market, its sale has been registered through the website "terrariumistik.com". The illegal sale of specimens of this species in Ukraine has also been documented, although it has not been possible to determine how it arrived in this region of Europe (Vega_a, 2022). It should be noted that this species is endemic to the Galapagos and its export for commercial purposes is not allowed (Altherr *et al*, 2022).

CORAL TRAFFICKING

The commercial collection of black coral *Antipathes galapagensis* in Ecuador was documented from the 1960s to the 1980s, a period during which this species was intensively exploited in the Galapagos, causing its complete disappearance in several sites (Cannas *et al*, 2019). Currently, it is known that

fragments of white coral are trafficked, mainly extracted by tourists (Castrejón *et al*, 2021). However, the impact of this illegal activity has not been measured.

OPUNTIA TRAFFICKING

Information available on the illegal trade of Galapagos-endemic Opuntias is virtually non-existent. However, evidence of its trade on various online platforms at different price ranges has been identified. For example, on the website "Desertscape"²³ offers have been recorded with values ranging between USD 100 and 300, while on the eBay platform approximate prices of USD 100 per specimen are reported.

The CITES database does not record exports of live specimens of *Opuntia galapageia* from Ecuador since the entry into force of the Convention in 1975, the year in which the entire Cactaceae family was included in Appendix II, which raises doubts about the legal origin of the specimens that are marketed under CITES permits.

TERRESTRIAL AND MARINE IGUANA SEIZURES

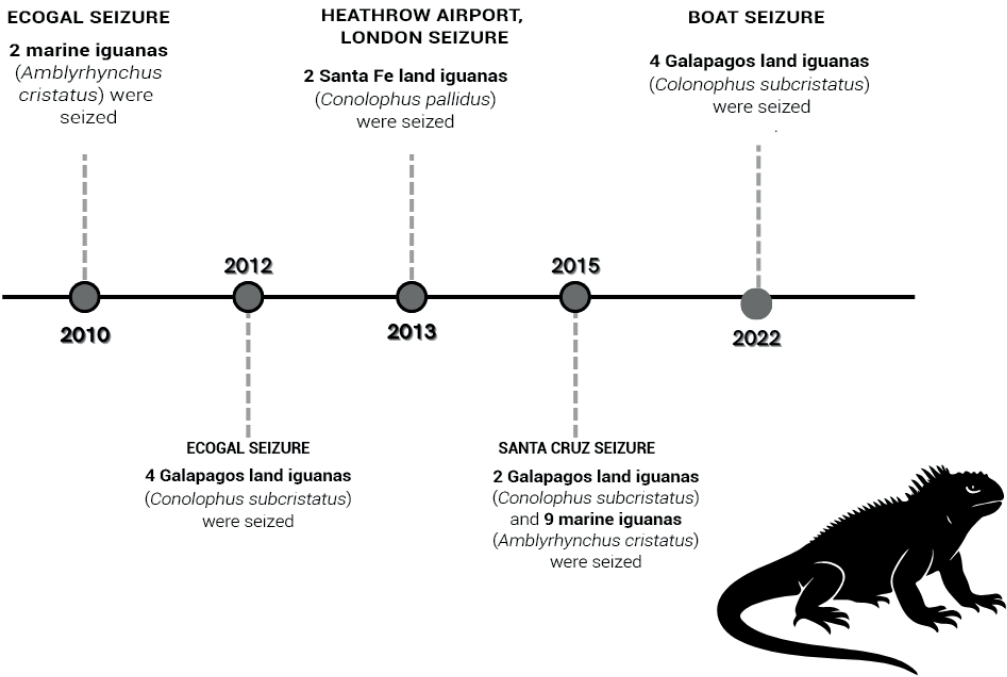


FIGURE 12.
Timeline of seizures of Galapagos land and marine iguanas.



GALAPAGOS WILDLIFE TRAFFICKING ROUTES

According to information obtained from wildlife seizures in the Galapagos, it has been determined that the vast majority of the specimens are transported by sea.

The maritime routes, as well as the identified air routes, are described below.



SHIPPING ROUTE

Puerto Ayora (Santa Cruz) and Puerto Baquerizo (San Cristobal). These two ports are the main points from where specimens of wildlife are illegally transported aboard fishing boats, cargo ships or small boats that operate outside the radar of the competent authorities. These trafficked species are transferred to continental ports such as Guayaquil or Manta, from where they can be distributed to countries in Asia, Europe or North America. On some occasions, it has been identified that Peru acts as an intermediary country in these illegal trade routes (López, 2017; Loaiza, 2023).

AIR ROUTES

Baltra and San Cristobal airports. They are the two operational national airports of the Galapagos archipelago. Traffickers use these airports to illegally transport the specimens to the Ecuadorian continent, specifically to the cities of Guayaquil and Quito. From there, the trafficked species can be sent to other countries by international flights or by land to border countries. At the Galapagos Ecological Airport, according to secondary information from sources such as official records and journalistic publications, five relevant seizures of endemic species have been recorded, including giant tortoises, iguanas and sea cucumbers, the most significant being the case of the 185 Galapagos tortoises that was previously described.

CONCEALMENT METHODS

Wildlife traffickers in the Galapagos employ various techniques to hide specimens and evade detection by environmental and control authorities. At airports, species can be moved in personal luggage, checked baggage or as part of commercial cargo. In maritime transport, specimens are strategically hidden inside vessels to avoid detection during official inspections. Below are some of the most common concealment methods:

- a. Sea cucumbers: They are transported in cardboard boxes similar to those used for fish products such as swordfish and tuna.
- b. Shark fins: Often hidden along with specimens from legal fishing or bycatch. Most of these fins are transported dry in boats.
- c. Galapagos tortoises and iguanas: They are hidden in boxes, backpacks or wrapped in plastic.

During the feedback process to the report on trafficking and legal trade of wild species in the Galapagos, comments and observations were collected from the staff of institutions that combat trafficking of species in the Galapagos and other conservation experts. This information revealed that traffickers use ingenious tactics to camouflage illegally collected specimens. One of the most common strategies is to hide the species inside sacks commonly used to transport goat meat or other food products. This type of concealment is especially effective, as the high volume of legal goods makes it difficult for the authorities to inspect each load carefully.

In addition, it has been identified that many cargo vessels inspected in ports are subsequently contaminated on the high seas with specimens whose trade is prohibited. According to these sources, fish products such as shark fins or sea cucumbers are usually transferred to Chinese fleets in the island area, which then head for Peru.



MAIN FACILITATORS AND DRIVERS OF WILDLIFE TRAFFICKING IN GALAPAGOS

Below is a summary of the main facilitators and drivers of wildlife trafficking in the Galapagos, where corruption, prices of Galapagos wildlife in the international market, weak controls, legal gaps and obstacles, and socio-economic factors are considered a major factor.

Among the factors facilitating illegal trade in Galapagos, the following were identified:

CORRUPTION

Corruption, defined as the abuse of power for personal gain, is one of the main facilitators of wildlife trafficking. This phenomenon can occur at any stage of the trafficking chain, from illegal harvesting or fishing, through the transport and processing of products to their export and final sale. In addition, corruption is frequently associated with money laundering and obstruction of justice, by influencing the actions of law enforcement agents, prosecutors, judges through bribery or undue pressure (WWF and TRAFFIC, 2015).

Based on the document "Strategies to Combat Corruption in Wildlife Conservation", prepared by WWF and TRAFFIC in 2015, the phases of trafficking, the individuals or organisations involved and the forms of corruption that could be part of the dynamics of wildlife trafficking in the Galapagos are contextualised. Corruption within wildlife trafficking can range from:

- a. **Establishment of policies and legislation.**
At this stage, risks may be generated due to decisions or the creation of regulations adopted by government authorities that favour illicit activities. Forms of corruption include nepotism, influence peddling, conflict of interest, and bribery. These practices can arise at both local and national levels, if decision-making processes lack transparency and accountability

- b. **Issuance of permits and authorizations.**
Public officials in charge of granting artisanal fishing licenses, movement permits for fishery products or scientific export permits could face risks or pressures that generate possible administrative or documentary irregularities, and acts of corruption such as falsification of documents, false statements and bribes. Some reports have mentioned potential inconsistencies in the issuance and control of official permits in Galapagos (Zurita, 2021), which shows the need to strengthen traceability, audit and license supervision systems, as well as the continuous training of responsible personnel.

- c. **Illegal harvesting or fishing of specimens.** During the extraction phase, illegal fishermen, harvesters, intermediaries and even public officials responsible for surveillance or control may be involved. Acts of corruption may include wilful non-compliance with violations, direct involvement in unlawful activities, falsification of documents, or payment or collection of bribes. An illustrative case is the systematic theft of giant tortoises at the Arnaldo Tupiza Breeding Centre, on Isabela Island, where inconsistencies in inventories and records were identified, a situation that led to a fiscal investigation and linked public officials (Zurita, 2021).

- d. **Transport and export of wildlife.** This stage may involve transporters, control agents, inspectors and customs or airport personnel, who are responsible for controlling the transfer and export of species. Corruption risks include non-observance of crimes, document forgery and bribery. In 2021, the involvement of a police officer was reported in the case of

International demand
transforms unique species into assets of high criminal value

the trafficking of 185 tortoises from the Galapagos Ecological Airport to Guayaquil. Likewise, in 2024, "Ecuador was the subject of observations by CITES, due to weaknesses in the control of the shark and ray trade, where possible administrative and supervisory irregularities by public officials were identified" (Chunga, 2024).

- e. **Trade.** During the sale of products or specimens of wildlife, traders, intermediaries, and inspectors may be involved. The forms of corruption detected include document fraud, non-observance of the crime, bribery and collusion. In 2020, "Europol reported an international trafficking network that used forged veterinary documents to legalise reptiles and tortoises, including Galapagos species" (Frost, 2020). This type of scheme demonstrates the need to strengthen international cooperation in the traceability and verification of origin of marketed specimens.

- f. **Investigation and prosecution.** In the criminal prosecution phase, judicial officials may be compromised. The most common corruption practices include failures in investigations, leakage of information, loss of evidence, procedural delay, release of suspects, imposition of minimal sanctions, unjustified dismissals or bribes. In the case of the investigation into the theft of tortoises on Isabela Island, one of those involved received precautionary measures and another was dissociated from the process, while the case for illicit association was dismissed, without a conviction being issued (Zurita, 2021). This example reflects the need to strengthen judicial independence and specialisation in environmental crimes.

Table 2 summarises the phases of wildlife trafficking, actors involved and forms of corruption.

TABLE 2.
Wildlife trafficking phase, actors involved and forms of corruption
Source: Adapted from WWF and TRAFFIC, 2016

TRAFFICKING PHASES	ENGAGED PARTICIPANTS	FORMS OF CORRUPTION
Establishment of policies and legislation	Government authorities	1. Nepotism 2. Influence peddling 3. Conflict of interest 4. Bribery
Issuance of fishing permits and export of scientific samples	Public officials in charge of issuing licenses or permits	1. Document forgery 2. False statements 3. Bribery
Illegal harvesting or fishing	Illegal fishermen, harvesters, brokers, public officials responsible for surveillance or control	1. Turning a blind eye 2. Participating in illegal harvesting or fishing. 3. Bribery 4. Document forgery
Transportation and exportation of illegal wildlife	Carriers, control agents, inspectors and customs or airport personnel	1. Turning a blind eye. 2. Document forgery. 3. Bribery
Trade of illegal wildlife	Merchants, brokers, and inspectors	1. Document fraud 2. Turning a blind eye 3. Bribery 4. Collusion
Investigation and prosecution of the crime	Public officials in charge of investigation and prosecution	1. Failures in investigations. 2. Disclosing confidential information 3. Loss of evidence 4. Delay cases. 5. Release of suspects 6. Impose low or no penalties 7. Bribery

In the case of the air sector, because air routes are one of the most common means for illegal wildlife trade, airports become a frequent target for criminals. Most strategies consist of bribing security officials to allow the passage of illegal goods, recruiting control operators to evade detection, bribing air traffic monitoring personnel to obtain confidential information, and even influencing officials of airport security systems (Dobuzinskis, 2012; Environmental Investigation Agency, 2021; Burt, 2023; Wildlife Justice Commission, 2023).

Taken together, these identified cases and risks show that corruption can manifest itself at different institutional levels, involving both public officials and private actors. However, this does not imply a structural responsibility of the Ecuadorian State, but the presence of specific vulnerabilities that require attention. A number of challenges persist in terms of environmental governance and effective law enforcement, particularly in island contexts such as the Galapagos, where logistical and geographical conditions complicate control and oversight.



LEGAL GAPS AND OBSTACLES

In general, the regulations in force for the province of Galapagos establish strict regulations essential for good environmental management, but in practice have not been able to avoid the problems that cause the loss of biodiversity (Robles, 2022). In a study conducted by Castrejón et al, 2021, the following was identified:

a. LOREG and its Regulations. This law and its regulations do not directly regulate fishing as a productive activity, nor does it regulate the control and management of wildlife. With regard to sanctions, only specific sanctions are established for the

collection, handling or transport of wild species of commercial interest during closed season or for fishing in prohibited areas, as well as for non-compliance with the provisions related to species regulated by CITES or other international conventions. However, no specific sanctions are contemplated for the illegal collection, handling or transport of endemic and native species of wild flora and fauna of the Galapagos province. Additionally, the citizen participation mechanisms established by the LOREG have not been implemented, which limits the contribution of citizens in matters that

affect the management of Galapagos protected areas, including species trafficking and illegal fishing. Finally, there is a dichotomy between fishing and wildlife regulations because fishing activity has its own regulations, while the special regime lacks instruments or guidelines to regulate wildlife.

b. GMR Fisheries Regulations. According to Castrejón *et. al* (2021), the Regulations for the Fishing Activity in the Galapagos Marine Reserve of 2008 presented several regulatory gaps. Although it established the fishing register as a control tool, it was not refined or updated. In addition, there were no effective reporting channels or a program of fisheries observers. These gaps limited the administrative control capacity and allowed people who were not artisanal fishermen to access licenses, while others exercised fishing without authorisation, encouraging illegal practices. In 2025, the Regulations for commercial artisanal fishing in the Galapagos Marine Reserve came into force, which incorporates more detailed requirements for the management of licenses and additional obligations for fishing actors. However, it still does not contemplate complaint mechanisms or a fisheries observer program, so the omissions identified in the 2008 regulatory framework persist.

c. Wildlife regulations. For the Galapagos giant tortoise breeding centres, there is no protocol to regulate the activities that are implemented in them and there is also no regulatory system for the control of wild specimens that are on private property.

d. Criminal punitive power. Custodial sentences are low for crimes against wildlife in the Galapagos. Another weakness of the judicial system is the legal concept of "conditional suspended sentences" for wildlife crimes that allows the person who was convicted of committing a crime to be granted an alternative sentence, which frees them from being in prison if their sentence does not exceed five years. In the specific case of crimes against wild flora and fauna, as established in article 247 of the COIP, the custodial sentence will be between one and three years.

e. Administrative punitive power. The governing provisions covered by the LOREG are insufficient to impose sanctions and in some cases do not correspond to the activities that arise in the territory. Likewise, the governing provisions are subject to the interpretation of the officials on duty, who do not always take into account previous cases and/or the very essence of the current legal system. On the other hand, there is a high probability that administrative sanctions will not be implemented. Although Article 21 of the LOREG empowers the GNPD to exercise enforcement jurisdiction²⁴, it currently does not have a resolution or the necessary personnel to structure and execute this type of procedure.

INSTITUTIONAL WEAKNESSES

The most relevant weaknesses in the control of wildlife trafficking in the Galapagos are the Galapagos judicial system, actions focused on the GMR, weak controls, non-existent, fragmented or inaccessible information and limited inter-institutional coordination:

- a. Judicial personnel.** The main problem of the judicial system of the Galapagos province is the lack of personnel (such as judges) that directly affects the prosecution of cases of wildlife trafficking and illegal fishing that occur in the archipelago (Castrejón *et al*, 2021). There are three multi-jurisdictional courts in the archipelago (San Cristóbal, Santa Cruz and Isabela Cantons), each seat has two judges who attend to the requirements in civil and commercial matters, tenancy and neighbourhood relations, work, traffic violations, criminal, family, woman, childhood and adolescence, infractions by adolescents, gender and constitutional violence (Ricaurte, 2022).

In addition, it is known that prosecutors in most cases do not have the necessary expertise in wildlife crimes (Castrejón *et al*, 2021)
- b. Actions focused on GMR and charismatic species.** Most conservation efforts in the Galapagos supported by international cooperation have focused on the GMR and its charismatic species, such as mammals, tortoises, seabirds and even some species of sharks and pelagic fish (Charles Darwin Foundation, 2019). According to Castrejón *et al*. (2021) since the 1990s, control and surveillance efforts have been aimed at strengthening marine protection, especially through the equipment and technology granted to the GNPD. This has allowed them to have one of the most advanced monitoring systems in the Eastern Tropical Pacific. However, in the terrestrial areas of the PNG there was not the same effort, nor support in equipment and technology, this situation

- c. Non-existent, fragmented or inaccessible information.** The Galapagos monitoring and surveillance system lacks shared information systems and, consequently, up-to-date statistics and analyses due to a lack of data. Likewise, data processing and analysis are slow due to insufficient resources or limited institutional capacities. This situation makes it difficult to clearly understand the conditions that favour illegal fishing and wildlife trafficking (Castrejón *et al*, 2021).
- d. Weak controls.** The Special Examination of the Comptroller's Office (2017–2022) applied to filters and exit inspection points in the province of Galapagos identified weaknesses in the regulations of the GNPD. Among these, at the Santa Rosa checkpoint, checks are limited to users with extractive permits, reducing their ability to detect the exit of protected species. In the cargo yard of Puerto Ayora there is no approved procedure to review the outgoing cargo. The area lacks adequate security, the containers are not sealed after inspection and the chain of custody is lost during their transfer to the Itabaca canal.

The report also points out the absence of a coordinated patrol strategy, the lack of night operations and limitations in vessel inspections due to the shortage of personnel and the absence of a procedures manual. In addition, according to Álava and Paladines (2017), the Ecuadorian State does not have sufficient technological and financial resources to implement an effective control system to deter foreign vessels in the Galapagos Marine Reserve.

Without effective coordination and integrated information systems crime operates faster than the State's response

- e. Limited and insufficient inter-agency coordination.** Coordination mechanisms between control and environmental agencies such as the GNPD, the National Police and the Ecuadorian Navy are limited and insufficient. Likewise, the collaboration between the DPNG and the Undersecretary of Fisheries Resources (SRP) is not effective despite the powers that the SRP has over the maintenance of the chain of custody, the implementation of CITES and the design and implementation of a national strategy to combat illegal fishing. Furthermore, contact has not been established with INTERPOL and the Inter-American Tropical Tuna Commission (CIAT) (Castrejón *et al*, 2021).

Key drivers include:

SOCIO-ECONOMIC AND CULTURAL FACTORS

The main socio-economic, behavioural and cultural factors of wildlife trafficking in the Galapagos include the following:

- a. International demand.** There is a large and growing demand globally for wild plants and animals and products made from them. Wild species are used as a source of a wide variety of products, including food, medicine, pets, and private collections (TRAFFIC, 2008).

This phenomenon is not isolated to Galapagos where it is known that some collectors from European and Asian countries look for endemic species to incorporate into their private collections or exhibitions.

Some Galapagos species, due to their rarity and threat level, can reach extremely high prices on the international black market. For example, a Galapagos iguana can cost between USD 25,000 and 500,000 (the latter value specifically for *C. marthae* Galapagos pink land iguana), although these prices are speculative due to the lack of previous commercial exchanges (Hughes *et al*, 2022; CITES, 2022; Vegab, 2022; Plan Verde, 2023).

In the case of Galapagos giant tortoises, it is estimated that a juvenile can cost between USD 5,000 to 7,000 and adult tortoises USD 60,000 (Jones, 2021; Zambrano, 2021). For shark fins it is known that a pound can be traded for USD 500 in the Hong Kong SAR and hammerhead shark soup can be sold for USD 100 (Zambonino, 2023). Likewise, the price of a kilogram of sea cucumber can cost up to USD 170 in Asia (Schiller *et al*, 2013). These high prices in international markets encourage the increase in the supply of specimens, products or their derivatives of Galapagos wildlife.



Hammerhead shark (*Sphyrna lewini*)

In the case of illegal fishing, due to the demand for fish and marine species from Asian countries, foreign fishing vessels mainly from China have been generating pressure on the marine biodiversity of the Galapagos, especially sharks (López and Suarez, 2021).

- b. Cultural perceptions.** Another important driving factor within the illegal wildlife trade is the cultural perceptions and traditions associated with the use of wildlife (Casas, 2007). In several Asian countries, traditional medicine practices attribute healing properties to various parts of the body of wild animals, which directly influences the demand for specimens, parts and derivatives of species such as those of the Galapagos (Lee *et al*, 2020).

Likewise, the World Wildlife Crime Report 2024 prepared by UNODC points out that the drive to collect species is an age-old, common phenomenon with, in part, neurological roots. In the case of specialised wildlife collectors, this desire is manifested in the search for rare and unique specimens, motivated by completing collections, obtaining status within amateur communities and accessing the novelty that little-known species represent. This behaviour is reinforced socially and culturally, especially through the internet, orienting demand towards wild and scarce specimens even when their acquisition is illegal, as is the case with the Galapagos land and marine iguanas particularly sought by European and Asian collectors. On the other hand, at the local level, for example, the inhabitants of Isabela Island believe that the consumption of meat and blood of Galapagos tortoises contributes to greater longevity (Castrejón *et al*, 2021).

- c. Social and group pressure.** In the specific case of illegal fishing, artisanal fishermen in the Galapagos have historically exerted strong social pressure on environmental authorities, which has on numerous occasions led to decisions based on their interests rather than technical criteria (Charles Darwin Foundation, 2019). In addition, there is group pressure among fishermen themselves against those who promote actions to combat this crime, which inhibits citizen initiatives aimed at promoting sustainable fishing practices (Castrejón *et al*, 2021).
- d. Social cover-up.** In the Galapagos archipelago there is a marked cover-up within the community, characterised by close family and social ties that hinder the development of a culture of denunciation. On the contrary, a tendency to cover up crimes prevails. This dynamic represents a significant challenge for the authorities, who face serious limitations in obtaining the collaboration of citizens in reporting crimes against wildlife.
- e. Normalisation of crime.** In Galapagos society, crimes against wildlife have become normalised over time, in part due to the perception that certain traditional practices, such as the consumption of giant tortoises on Isabela Island, should be preserved. This social acceptance of the crime complicates the work of the authorities since, in trying to legally prosecute these activities, the community tends to support the offender rather than law enforcement.



Marine Iguanas on the beach

CONSEQUENCES OF WILDLIFE TRAFFICKING IN THE GALAPAGOS

The main threats to wild fauna and flora species have multiple origins, including climate change, human intrusions and disturbances, the introduction of invasive species, and pollution, geological phenomena and the loss of genetic diversity (Jiménez-Uzcátegui *et al*, 2019). Wildlife trafficking contributes significantly to aggravating these threats through poaching, illegal fishing or the extraction of significant quantities of threatened or endangered species. In addition, these crimes do not only affect the trafficked

species, but also the livelihoods and rights of the inhabitants, the ecological balance, and governance of the Galapagos province.

The negative pressure that wildlife trafficking exerts on terrestrial and endemic species in the Galapagos is not well documented. However, this illegal activity is known to directly affect fragile populations of tortoises and iguanas. Populations of these species play key roles in the archipelago's ecosystems.

For example, Galapagos tortoises and iguanas are seed dispersers and nutrient transporters, being considered engineers of the terrestrial ecosystems²⁵ of the archipelago, affecting the ecology and biodiversity of other species, modifying habitats and altering the availability of resources (Hunter *et al*, 2021; Albertson *et al*, 2022; Tapia and Gibbs, 2022; UNODC, 2022).

Regarding illegal fishing, one of its consequences is that the extraction of large fish not only directly affects the health and abundance of the target populations, but also triggers indirect cascading effects that cause a decrease in the natural diversity in the structure of fish communities in areas with high levels of fishing exploitation (Schiller *et al*, 2013).

Wildlife trafficking has ecological but also social consequences, as it fosters organised crime, which threatens the livelihood of local communities and exposes them to other associated crimes. It also affects stability and national security, given that corruption within government authorities, law enforcement and the judiciary weakens legal systems, further impeding the functioning of legitimate structures and destabilising governments (Mozer and Prost, 2022).

Trafficking could also generate economic consequences, especially in the tourism sector, which is the main source of income in the Galapagos (Pesantez, 2020). Endemic species, such as giant tortoises and land and marine iguanas, are one of the main attractions for visitors, so their decline could significantly reduce tourist interest. Likewise, scientific tourism, which attracts specialists from various disciplines, could also be affected, potentially decreasing the number of these types of tourists to the archipelago.

Furthermore, the illegal trade in species could affect the DPNG, not only financially – that is, in terms of the resources that support its operations – but above all in its core mission to conserve the archipelago's ecosystems and species. The loss of biodiversity and ecological change derived from this crime could weaken the institutional capacity for protection and, at the same time, have an impact on the local economy and on jobs that depend on a natural environment in good ecological condition (World Travel & Tourism Council, 2021; Mozer and Prost, 2022).

CONCLUSIONS

The Galapagos Province is threatened by wildlife trafficking due to the presence of endemic species of high international commercial value, such as giant tortoises, land and marine iguanas, and *Opuntia* species. In addition to this, the international trade in species endemic to the Galapagos from other countries, according to the analysis of the CITES Database, shows that, despite the fact that Ecuador does not report exports of the founding breeding stock of *Conolophus subcristatus*, *C. marthae* and *A. cristatus*, there are international commercial transactions of these species declared as bred in captivity in countries such as Uganda. This discrepancy suggests the need to review the procedures for verification of legal origin and traceability considering that CITES regulations require that both the specimens marketed and their founders come from legally obtained sources.

The analysis of international wildlife trade in the Galapagos shows that, even when carried out through CITES permits, there are inconsistencies in the information reported. There are discrepancies between the volumes declared by exporting and importing countries, as well as records of specimens reported as born in captivity, as is the case of land and marine iguanas in the Galapagos. These divergences highlight limitations in the verification processes of the legal origin of the species, and in the traceability mechanisms used. Consequently, international trade transactions that are carried out through CITES permits do not solely constitute a guarantee of trade integrity or protection of threatened species. In a context of high ecological vulnerability such as the Galapagos, these regulatory breaches compromise the reliability of the regulated trading system and reflect the need to strengthen controls and monitoring at the international level.

The dynamics of wildlife trafficking in the Galapagos are influenced by a combination of economic, legal, social and global factors. Among the economic factors, high financial incentives stand out, while in the legal field, the inefficient application of regulations and sanctions contributes to perpetuating this problem. Social factors, such as corruption, cultural beliefs, and behavioural factors also play a role. Added to this is globalisation, which has facilitated the transport of species to markets in Europe and Asia. This situation is further strengthened by international criminal networks employing strategic methods to evade detection, further weakening governance in the Galapagos archipelago.

Wild species from the Galapagos involved in illegal trade are mainly transported by sea, as this mode of transport poses greater challenges for enforcement and environmental authorities than air transport. The available official records do not allow to accurately estimate the total magnitude of illegal extraction, due to limitations in detection, operational capabilities and availability of specialised personnel. Although the GNPD has implemented control and surveillance efforts, documented cases, such as the seizure of 29 giant tortoises in Peru, show the need to continue strengthening procedures and resources for the prevention, detection and management of this type of crime.

The ecological consequences of trafficking endemic wildlife species, such as those found in the Galapagos, on their populations, trophic chains, ecosystem functionality, and even carbon storage are not adequately documented. Although there is some general scientific research on the impact of this crime on global biodiversity, specific studies that

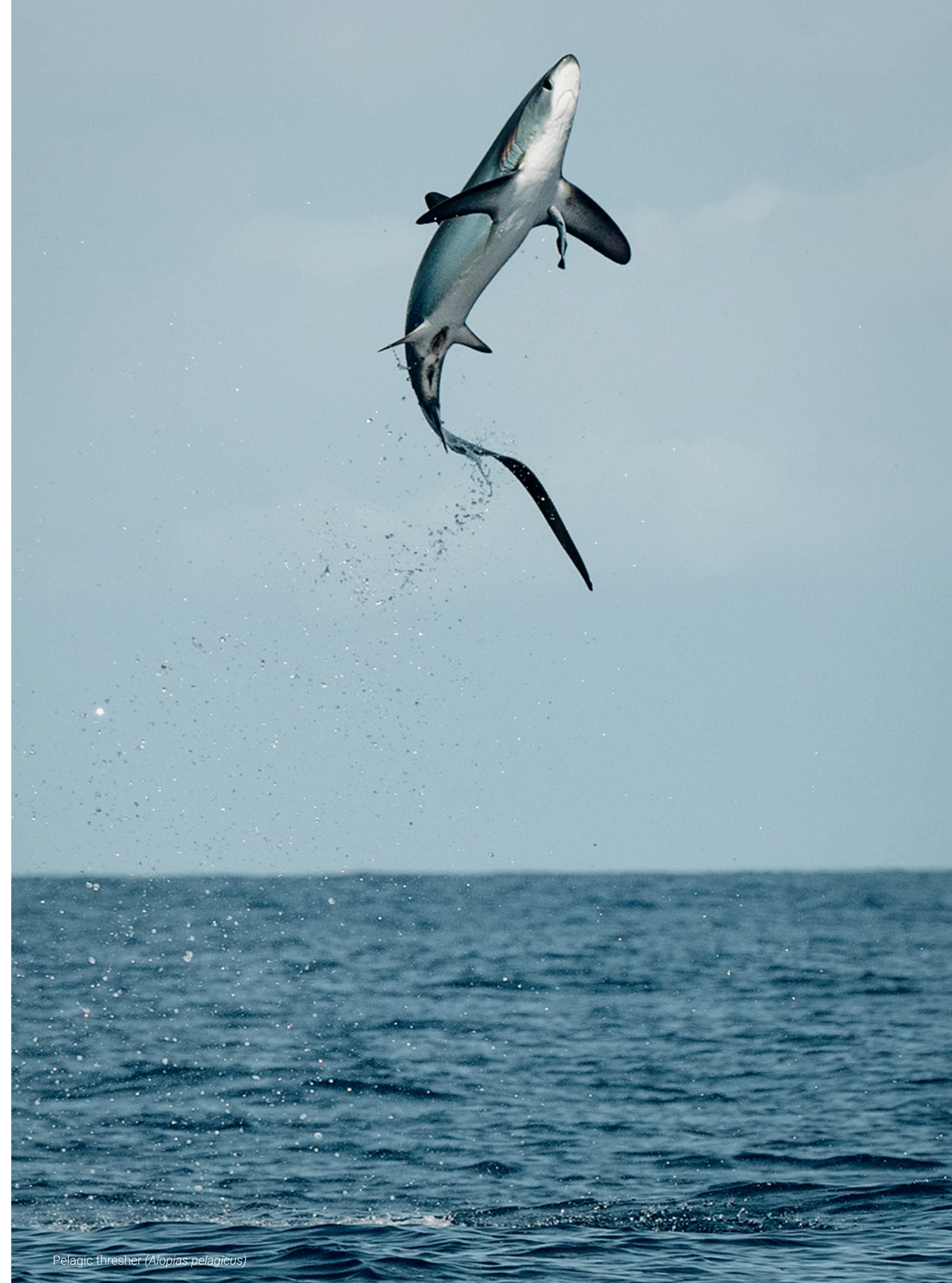


Lava gull (*Larus fuliginosus*)

analyse in detail the effects of this activity on the endemic species of the islands are still lacking. This information gap limits the comprehensive understanding of how animal extraction and trafficking affect ecological balance in altering species interactions and ecosystem regeneration. In addition, impacts on carbon storage could be significant, given that the loss of key species can modify the biological processes that contribute to carbon fixation in local vegetation. The absence of concrete data hinders the design of effective conservation policies and the implementation of effective protection measures that mitigate the negative effects of illegal trafficking on the biodiversity of the Galapagos.

The social, cultural, and behavioural factors driving wildlife trafficking in the Galapagos at the local level require a comprehensive behaviour change strategy. This should include education and communication

(edu-communicational) initiatives that strengthen environmental awareness, incentives that encourage citizen denunciation and economic sanctions that act as deterrent mechanisms. Likewise, the promotion of positive conservation benchmarks and the installation of strategic signage in ports and airports and other key transit points can reinforce social norms and make visible the collective commitment to the protection of biodiversity. Communicating clearly and directly the relevance of conservation and the consequences of species trafficking is essential to consolidate a culture of respect and co-responsibility towards the natural heritage of the Galapagos.



Pelagic thresher (*Alopias pelagicus*)

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ENDNOTES

¹ Resolution Conf. 17.7 (Rev. CoP19) of CITES establishes a mechanism to review trade in animals declared as bred in captivity, in order to prevent illegal trafficking. It defines criteria to identify possible irregularities, allows the intervention of the Animals Committee in the evaluation of suspected cases and recommends corrective measures when necessary. It also urges countries to improve traceability and controls to ensure that specimens traded under this category meet legal requirements and are not fraudulently sourced from nature.

² CITES Trade database. It is a publicly accessible database, which records the legal trade (imports and exports) of threatened species reported by the signatory countries of the Convention.

³ Wildlife Trade Information System (WiTIS). A database managed by TRAFFIC that contains information on cases of seizures, poaching and observation measures in relation to wild species.

⁴ This figure may refer to species, subspecies, or populations. They include some whole groups, such as primates, cetaceans (whales, dolphins and porpoises), sea turtles, parrots, corals, cacti and orchids. However, in some cases only a subspecies or geographically separate population of a species (for example the population of just one country) is listed.

⁵ Species+. It is an online platform that provides official information on protected species. It contains data on all species included in the CITES and CMS Appendices, other lists of CMS families, and species included in the Annexes of the European Union Wildlife Trade Regulation. The platform allows you to consult the status of species, their legal requirements for international trade and other data relevant to the management and conservation of wildlife.

⁶ Subsistence hunting. The extraction of wild animals carried out by members of communities belonging to indigenous peoples and nationalities recognised by the Ecuadorian State, for the purpose of self-consumption and carried out within the limits of their territories.

⁷ Fishing for subsistence purposes, and cultural, medicinal and ritual practices. Fishing carried out by members of communities belonging to indigenous peoples and nationalities recognised by the Ecuadorian State, for the purpose of self-consumption and carried out within the limits of their territories.

⁸ The following species are reported as *Chelonoidis niger* in the CITES Database: *C. becki* *C. chathamensis*, *C. darwini*, *C. duncanensis*, *C. hoodensis*, *C. porteri*, and *C. vicina*.

⁹ The following species are reported as *Opuntia galapageia* in the CITES database: *O. helleri*, *O. insularis*, *O. megasperma*, and *O. saxicola*.

¹⁰ Comparative tabulations provide important information such as: reported origins (e.g., wild, captive-bred, artificially reproduced, etc.) and purposes (e.g., commercial, scientific, personal, etc.) of the trade.

¹¹ By Ministerial Agreement No. MPCEIP-MPCEIP-2023-0016-A all information related to fishing in Ecuador was declared confidential.

¹² Robin Des Bois On The Trail No. 10 p. 7

¹³ Robin Des Bois On The Trail No. 13 p. 10

¹⁴ Robin Des Bois On The Trail No. 18 p. 9

¹⁵ Robin Des Bois On The Trail No. 19 p. 11

¹⁶ Robin Des Bois On The Trail No. 35 p. 201

¹⁷ Robin Des Bois On The Trail No. 1 p. 2

¹⁸ Robin Des Bois On The Trail No. 3 p. 3

¹⁹ Robin Des Bois On The Trail No. 12 p. 3

²⁰ Robin Des Bois On The Trail No. 36 p. 165

²¹ Wildlife laundering. The practice used to include illegally harvested wildlife in a country's legal system.

²² This seizure is not part of the WiTIS database and was compiled from Report SC74 Inf. 26 of CITES 2022. <https://cites.org/sites/default/files/eng/com/sc/74/Inf/S-SC74-Inf-26.pdf>

²³ <https://desertscaresfl.com/galapagos-prickly-pear-opuntia-galapageia.html>

²⁴ Enforcement jurisdiction. A power granted to state administrative bodies enabling them to collect debts, taxes and fines owed to them without first having to apply to a court, through an administrative enforcement procedure known as “compulsory collection”, which allows them to take measures such as the seizure of the debtor’s assets.

²⁵ Ecosystem engineer. Any species that creates, significantly modifies, maintains or destroys a habitat. These organisms can have a great impact on species abundance and on the heterogeneity of the landscape of an area.

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Annex 1. Sharks and rays included in CITES
Appendix II prior to CoP19

Table 3. List of sharks and rays included in CITES Appendix II prior to CoP19

Scientific name	Common name	IUCN Red List
<i>Carcharhinus falciformis</i>	Silky shark	Vulnerable
<i>Carcharhinus longimanus</i>	Oceanic whitetip shark	Critically Endangered
<i>Sphyrna lewini</i>	Scalloped hammerhead	Critically Endangered
<i>Sphyrna mokarran</i>	Great hammerhead	Critically Endangered
<i>Sphyrna zygaena</i>	Smooth hammerhead	Vulnerable
<i>Alopias</i> spp.	Bigeye thresher	-----
<i>Cetorhinus maximus</i>	Basking shark	Endangered
<i>Carcharodon carcharias</i>	Great white shark	Vulnerable
<i>Isurus oxyrinchus</i>	Shortfin mako shark	Endangered
<i>Isurus paucus</i>	Longfin mako shark	Endangered
<i>Rhincodon typus</i>	Whale shark	Endangered
<i>Mobula</i> spp.	Devil rays	-----

Source: CITES, 2024

Annex 2. Base questionnaire for the Feedback of the
Report on the International Traffic and Legal Trade of
Wild Species of the Galapagos.

Table 4. Galapagos Wildlife Trafficking and International Legal Trade Report Feedback Questionnaire.

Subject	
1. Trafficking trends in species, routes and concealment methods	
Shark catches by mainland Ecuadorian and foreign fleets	Guiding questions
	Do we know of any other seizures?
	Main methods of processing shark fins
	Main methods of hiding shark fins
	Main methods of transport
	Routes and destinations
	Main extraction sites
	Are there effective penalties for those involved in the illegal capture of sharks?
	Other questions
Sea cucumber harvesting during the closed season	How common is the harvest of sea cucumber outside the closed season in the Galapagos?
	What is the most common means of transport for the illegal transport of sea cucumbers? Sea or air
	Is it known whether the sea cucumber that is extracted from the Galapagos through CITES permits is marketed?
	What are the main routes through which illegally caught sea cucumber is transported?
	Are the main concealment methods known for the illegal transport of sea cucumber?
	What is the final destination of illegally traded sea cucumbers?
	Other questions
Galapagos giant tortoise trafficking	Do we know of any other seizures?
	What methods do traffickers use to capture and transport giant tortoises undetected?
	Main methods of transport
	Routes and destinations
	Main extraction sites
	Why are they traded illegally? Is there a local demand for its constituent parts?
Terrestrial and marine iguana trafficking	Do we know of any other seizures?
	What methods do traffickers use to capture and transport Galapagos iguanas undetected?
	Main methods of transport
	Routes and destinations
	Main extraction sites
	Are Galapagos iguanas laundered using CITES permits?
	Other questions

Opuntia Trafficking	Information about opuntia trafficking is known.
	Opuntias are laundered in a similar way as iguanas through CITES permits
	Other questions
	Which entry and exit points (ports, airports, sea routes) are most commonly used for species trafficking?
Illegal routes	Which countries or regions are the main destinations for species trafficked through the Galapagos routes?
	Are there international networks that facilitate species trafficking through the Galapagos, and how do these networks operate?
	What type of vessels are most commonly used on species trafficking routes?
	How frequent are sea and air traffic routes, and how are they distributed throughout the year?
	Other questions
Subject 2. Drivers	
Socioeconomic factors	
Supply and demand	What economic or social factors motivate people to get involved in wildlife harvesting?
	What role does poverty or lack of economic opportunity play in the supply of species for trafficking?
	What characteristics of Galapagos species make them vulnerable to trafficking (e.g., accessibility, market value)?
	How are these species traded (physical markets, online, private networks)?
	What role does tourism play in wildlife demand? Are there documented cases of tourists buying illegal wildlife?
	What impact do fluctuations in international demand (e.g., trends in traditional medicine, luxury markets) have on local supply?
	Other questions
Cultural perceptions	Is species trafficking seen as a serious crime, an economic activity or just a common practice?
	How important does the community consider the conservation of species compared to other priorities such as employment or economic development?
	Are there local beliefs that support or contradict the idea that certain species are endangered?
	Other questions
Peer pressure	Do community leaders or authority figures influence the decision to engage in illegal activities?
	How does participation in illegal fishing affect social cohesion within the community, and how does peer pressure play a role in sustaining these activities?
	Other questions
Subject 3. Consequences	
Economic consequences	What role does biodiversity play in the local economy, particularly in tourism, fisheries and other industries?
	How does wildlife trafficking impact the Galapagos economy, the family economy, tourism and GNP revenues?
	Has wildlife trafficking and related news affected the perception of Galapagos as a safe and sustainable place?

Ecological and environmental consequences	What impact does species trafficking have on ecological balances, such as food chains and nutrient cycles?
	What long-term effects could biodiversity loss have on the resilience of Galapagos ecosystems to climate change?
	Which species have shown a significant reduction in their populations due to trafficking, and what ecological implications does this have
	How does species trafficking affect pollination processes, seed dispersal or other critical ecosystem services?
Social impact	What impact does species trafficking have on the perception of safety and governance among Galapagos residents?
	How do illicit activities associated with species trafficking affect social cohesion in local communities?
	What challenges do communities face in reporting or resisting species trafficking activities?
Subject 4. Recommendations	
Strengthen inter-agency coordination mechanisms and develop response protocols	What protocols are needed?
Strengthening the control and surveillance systems of the Galapagos National Park	Are there specific tools being used to track key species or suspicious activity?
	What technologies (e.g., drones, surveillance cameras, satellite systems) could be implemented or improved to strengthen control?
Development of regulations for the conservation of <i>ex situ</i> tortoises	What are the main challenges facing the <i>ex situ</i> management of giant tortoises?
	What would be examples of good practices in other breeding centres or tourist places that could be adopted in the Galapagos?
Increase citizen participation in decision making on the use and management of Galapagos biodiversity and fisheries	How accessible are consultation and decision-making spaces for the general population?
	What measures could be implemented to increase citizen participation in these issues?
	Are there community leaders or local networks that can act as intermediaries in promoting participation?
Update of the fisheries registry for artisanal fishers	What technologies could be implemented to improve the fishing record (e.g., digital platforms, mobile applications, geospatial systems)?
	How can it be ensured that fishermen see logging as a useful tool and not just a requirement?
Behavioural change strategies	What economic, social or cultural incentives could motivate people to abandon wildlife trafficking?
	Which communication channels are most used by local communities and other key actors?
	How could sanctions be combined with rewards to motivate positive behaviours?
Traceability in giant tortoise breeding centres	Is the traceability of tortoises in breeding centres regulated by specific regulations?
	Are there experiences or models of other traceability systems that could be adopted in Galapagos? Detail
	Do current systems allow to integrate historical, current and future data of each tortoise?

Annex 3. List of Galapagos Giant Tortoise species

Table 5. List of Galapagos Giant Tortoise species

Scientific name	Common name	Conservation status
<i>Chelonoidis becki</i>	Volcán Wolf giant tortoise	Vulnerable (VU)
<i>Chelonoidis chathamensis</i>	San Cristóbal giant tortoise	Endangered (EN)
<i>Chelonoidis darwini</i>	Santiago Galapagos tortoise	Critically Endangered (CR)
<i>Chelonoidis donfaustoi</i>	East Santa Cruz Galapagos tortoise	Critically Endangered (CR)
<i>Chelonoidis duncanensis</i>	Pinzon giant tortoise	Vulnerable (VU)
<i>Chelonoidis ephippium</i>	Pinzon giant tortoise	Critically Endangered (CR)
<i>Chelonoidis guntheri</i>	Sierra Negra giant tortoise	Critically Endangered (CR)
<i>Chelonoidis hoodensis</i>	Hood Island giant tortoise	Critically Endangered (CR)
<i>Chelonoidis microphyes</i>	Volcán Darwin giant tortoise	Endangered (EN)
<i>Chelonoidis niger</i>	Galapagos giant tortoise	Critically Endangered (CR)
<i>Chelonoidis phantasticus</i>	Fernandina Galapagos tortoise	Critically Endangered (CR)
<i>Chelonoidis porteri</i>	West Santa Cruz Galapagos tortoise	Critically Endangered (CR)
<i>Chelonoidis vandenburghi</i>	Alcedo Galapagos tortoise	Vulnerable (VU)
<i>Chelonoidis vicina</i>	Cerro Azul Galapagos tortoise	Endangered (EN)

Source: Charles Darwin, Foundation, 2024 (datazone)

Annex 4. Trade history of the Galapagos Giant Tortoise *Chelonoidis niger* in the CITES Database

Table 6. History of the trade of Galapagos Giant Tortoise *Chelonoidis niger* in the CITES Database

Year	Exporter	Importer	Quantity reported by the exporter	Terms of Trade	Origin	Objective
1982	United States	Australia	6	Alive	Not reported	Zoo
1982	United States	Singapore	4	Alive	Not reported	Zoo
1984	United States	Colombia	2	Alive	Not reported	Commercial
1985	United States	Japan	2	Alive	Not reported	Commercial
1986	Bermuda	United States	6	Alive	Animals bred in captivity	Breeding in captivity or artificial propagation
1986	Canada	United States	1	Alive	Not reported	Breeding in captivity or artificial propagation
1987	Bermuda	XX	2	Alive	Not reported	Breeding in captivity or artificial propagation
1988	United States	Austria	6	Alive	Animals bred in captivity	Commercial
1988	United States	Germany	1	Alive	Animals bred in captivity	Commercial
1989	United States	United Kingdom	1	Alive	Animals bred in captivity	Commercial
1995	United States	Switzerland	2	Alive	Animals bred in captivity	Commercial
1996	Germany	Czech Republic	2	Alive	Animals bred in captivity	Zoo
1997	United States	Netherlands	2	Alive	Animals bred in captivity	Commercial
1997	Bermuda	United States	4	Alive	Collected in the wild	Zoo
1999	United States	Bermuda	2	Alive	Animals born in captivity	Commercial
2001	Ecuador	South Korea	2	Alive	Collected in the wild	Zoo
2006	Switzerland	France	3	Alive	Animals bred in captivity	Zoo
2009	Switzerland	United Kingdom	1	Alive	Animals bred in captivity	Zoo
2009	Switzerland	United Kingdom	4	Alive	Animals born in captivity	Zoo
2009	Switzerland	Poland	4	Alive	Animals born in captivity	Zoo
2012	Switzerland	Germany	3	Alive	Animals bred in captivity	Zoo
2015	Switzerland	Germany	3	Alive	Animals bred in captivity	Zoo
2015	Switzerland	France	6	Alive	Animals bred in captivity	Zoo
2016	Switzerland	Denmark	1	Alive	Animals born in captivity	Zoo
2016	Switzerland	United Kingdom	8	Alive	Animals born in captivity	Zoo
2019	Switzerland	Germany	3	Alive	Animals bred in captivity	Commercial
2019	Switzerland	Germany	2	Alive	Animals born in captivity	Zoo
2019	Switzerland	Denmark	4	Alive	Animals bred in captivity	Zoo
2019	Germany	Miscellaneous (XV)	1	Alive	Animals born in captivity	Personal item
2021	Germany	Australia	1	Alive	Animals bred in captivity	Zoo
2021	Switzerland	Spain	3	Alive	Animals bred in captivity	Zoo
2022	Switzerland	Germany	1	Alive	Animals bred in captivity	Zoo
2023	Switzerland	Germany	5	Alive	Animals bred in captivity	Commercial
2023	Switzerland	Germany	3	Alive	Animals born in captivity	Zoo
2023	United Kingdom	Denmark	4	Alive	Animals born in captivity	Zoo
2023	Jersey (UK)	United Kingdom	4	Alive	Animals bred in captivity	Zoo

Source: CITES Database, 2025

Annex 5. Trade history of the Galapagos Land Iguana
Conolophus subcristatus in the CITES Database

Table 7. History of trade of the Galapagos Land Iguana *Conolophus subcristatus* in the CITES Database

Year	Exporter	Importer	Quantity reported by the exporter	Terms of Trade	Origin	Objective
2010	Mali	Switzerland	2	Alive	Animals bred in captivity	Commercial
2014	Switzerland	Uganda	4	Alive	Animals bred in captivity	Commercial
2017	Uganda	Japan	2	Alive	Animals bred in captivity	Zoo
2019	Uganda	Japan	2	Alive	Animals bred in captivity	Breeding in captivity or artificial propagation
2019	Uganda	Sudan	2	Alive	Animals bred in captivity	Zoo
2019	Uganda	Thailand	4	Alive	Animals bred in captivity	Breeding in captivity or artificial propagation
2020	Uganda	India	2	Alive	Animals bred in captivity	Zoo
2020	Uganda	Sweden	2	Alive	Animals bred in captivity	Breeding in captivity or artificial propagation
2020	Uganda	Thailand	4	Alive	Animals bred in captivity	Breeding in captivity or artificial propagation
2021	Uganda	Canada	2	Alive	Animals bred in captivity	Breeding in captivity or artificial propagation
2021	Uganda	Indonesia	4	Alive	Animals bred in captivity	Breeding in captivity or artificial propagation
2021	Uganda	Thailand	10	Alive	Animals bred in captivity	Breeding in captivity or artificial propagation
2022	Uganda	Indonesia	4	Alive	Animals bred in captivity	Breeding in captivity or artificial propagation
2022	Japan	South Korea	2	Alive	Animals bred in captivity	Zoo
2022	Uganda	South Korea	2	Alive	Animals born in captivity	Breeding in captivity or artificial propagation
2022	Uganda	Malaysia	4	Alive	Animals bred in captivity	Breeding in captivity or artificial propagation
2022	Uganda	Taiwan	4	Alive	Animals bred in captivity	Breeding in captivity or artificial propagation
2022	Uganda	Ukraine	6	Alive	Animals bred in captivity	Breeding in captivity or artificial propagation
2023	Japan	India	10	Alive	Animals bred in captivity	Zoo
2023	Togo	India	2	Alive	Animals bred in captivity	Zoo
2023	Uganda	Japan	4	Alive	Animals bred in captivity	Personal item
2023	Uganda	North Korea	2	Alive	Animals bred in captivity	Breeding in captivity or artificial propagation
2023	Uganda	Thailand	4	Alive	Animals bred in captivity	Breeding in captivity or artificial propagation

Source: CITES Database, 2025

Annex 6. Trade history of the Marine Iguana
Amblyrhynchus cristatus in the CITES Database

Table 8. Trade history of Marine Iguana *Amblyrhynchus cristatus* in the CITES Database.

Year	Exporter	Importer	Quantity reported by the exporter	Terms of Trade	Origin	Objective
2013	Austria	Japan	2	Alive	Animals bred in captivity	Commercial
2014	Switzerland	Uganda	2	Alive	Animals bred in captivity	Commercial
2019	Uganda	Japan	4	Alive	Animals bred in captivity	Breeding in captivity or artificial propagation

Source: CITES Database, 2025

Annex 7. Trade history of the Brown Sea Cucumber
Isostichopus fuscus in the CITES Database

Table 9. Trade history of Brown Sea Cucumber *Isostichopus fuscus* in the CITES Database

Year	Exporter	Importer	Quantity reported by the exporter	Terms of Trade	Origin	Objective
2004	Ecuador	China	2548672	Body	Collected in the wild	Commercial
2004	Ecuador	Peru	36227	Body	Collected in the wild	Commercial
2007	Ecuador	China	1043017	Body	Collected in the wild	Commercial
2007	Ecuador	Peru	10500	Body	Collected in the wild	Commercial
2007	Ecuador	United States	10946	Body	Collected in the wild	Commercial
2008	Ecuador	China	374880	Body	Collected in the wild	Commercial
2008	Ecuador	United States	124140	Body	Collected in the wild	Commercial
2015	Ecuador	China	61391	Body	Collected in the wild	Commercial
2015	Ecuador	Hong Kong	464894	Body	Collected in the wild	Commercial
2016	Ecuador	Hong Kong	13166	Body	Collected in the wild	Commercial
2016	Ecuador	United States	351672	Body	Collected in the wild	Commercial
2021	Ecuador	Hong Kong	157739	Body	Collected in the wild	Commercial
2021	Ecuador	United States	10963	Body	Collected in the wild	Commercial
2022	Ecuador	Canada	65,000	Body	Collected in the wild	Commercial
2022	Ecuador	China	90860	Body	Collected in the wild	Commercial
2022	Ecuador	Hong Kong	168385	Body	Collected in the wild	Commercial
2022	Ecuador	United States	222794	Body	Collected in the wild	Commercial

Source: CITES Database, 2025

Annex 8. Trade history of Galapagos Opuntia

Opuntia galapageia in the CITES Database

Table 10. Trade history of Galapagos Opuntia *Opuntia galapageia* in the CITES Database

Year	Exporter	Importer	Quantity reported by the exporter	Terms of Trade	Origin	Objective
1982	United States	United Kingdom	17	Alive	Artificially propagated plants	Commercial
1982	United States	Netherlands	2	Alive	Artificially propagated plants	Commercial
1983	United States	Phillippines	1	Alive	Artificially propagated plants	Commercial
1989	United States	United Kingdom	1	Alive	Artificially propagated plants	Commercial
2001	Monaco	France	1	Alive	Artificially propagated plants	Botanical garden
2011	Spain	United Arab Emirates	2	Alive	Artificially propagated plants	Commercial
2011	Spain	Switzerland	34	Alive	Artificially propagated plants	Commercial
2012	Spain	South Korea	12	Alive	Artificially propagated plants	Commercial
2014	Japan	United States	1	Alive	Artificially propagated plants	Commercial
2023	Thailand	Slovakia	3	Alive	Artificially propagated plants	Commercial

Source: CITES Database, 2025

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