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**R E P O R T**

# APES IN DEMAND

For zoo and wildlife attractions in Peninsular Malaysia and Thailand

NOVEMBER 2016

*Claire A. Beastall, Jamie Bouhuys and Anna Ezekiel*





## TRAFFIC REPORT

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Southeast Asia Regional Office  
Unit 3-2, 1st Floor, Jalan SS23/11  
Taman SEA, 47400 Petaling Jaya  
Selangor, Malaysia  
Telephone : (603) 7880 3940  
Fax : (603) 7882 0171

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Front cover photograph: Orangutan used as a photo prop at a theme park in Thailand

Credit: Jamie Bouhuys/TRAFFIC

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**Orangutan used as a photo prop at a theme park in Thailand**

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# EXECUTIVE SUMMARY

This report investigates the species, numbers and sources of apes held in zoos and wildlife attractions in Peninsular Malaysia and Thailand and responds to concerns over the global high demand for apes, especially juveniles, for display in zoos and wildlife facilities, and the illegal removal of these apes from the wild.

The illegal ape trade in Southeast Asia has received considerable international attention for at least the past 20 years, with high profile examples occurring in Peninsular Malaysia and Thailand. For much of this time, zoos in both locations have been heavily criticized over the questionable legality of animals and the conditions in which they are kept.

The sourcing of young apes for zoos and wildlife attractions, including for use in performances, is particularly worrying. Not only is it unclear what happens to animals once they are too old for these activities, but the removal of young animals from the wild is likely to have especially detrimental effects on the wild population. In general, the number of apes that appear in trade is thought to be far smaller than the quantity that die in the process of capture and transit and with the final consumer. Losses associated with the removal of young apes are likely to be even higher than for adults, since the removal of young animals will usually involve the death of at least that animal's mother. In the case of orangutans, estimates range from two to 11 animals lost from the wild for every wild caught juvenile.

This report uses information collected from surveys of zoos and wildlife attractions, online surveys, trade data from the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and international studbooks for orangutans *Pongo* spp. and Western Gorilla *Gorilla gorilla* to identify numbers, origins and, where possible, approximate ages at capture of great apes and gibbons in zoos and wildlife attractions in Peninsular Malaysia and Thailand. The findings indicate that a significant proportion of apes in zoos and wildlife attractions in these countries originated from the wild or are of unknown origin, a significant proportion of which entered captivity while still infants or juveniles. In Peninsular Malaysia in particular, many of these animals were transferred to the zoos from government rescue centres. Whilst it is likely that some of these individuals came to be in captivity through the illegal trade, it is important to note that the acquisition of such animals by the individual zoos was legal.

Surveys were conducted between November 2013 and March 2014 of 35 zoos and wildlife attractions in Peninsular Malaysia and 59 zoos and wildlife attractions in Thailand. A total of 48 great apes and 51 gibbons were seen in zoos and wildlife attractions in Peninsular Malaysia, and 88 great apes and 162 gibbons in Thailand. This does not include animals that were not on display at the time of visit or that are held as pets, or those in private or government-run rescue centres that are generally closed to the public.

Eleven species of ape were observed during the surveys, including four species of great apes: Bornean Orangutan *Pongo pygmaeus*, Sumatran Orangutan *P. abelii*, Chimpanzee *Pan troglodytes* and Western Gorilla, and seven species of gibbon: Agile Gibbon *Hylobates agilis*, White-handed Gibbon *H. lar*, Pileated Gibbon *H. pileatus*, Javan Gibbon *H. moloch*, Müller's Bornean Gibbon *H. muelleri*, Siamang *Symphalangus syndactylus*, and crested gibbons *Nomascus* spp. of undetermined species. All species of ape are listed in CITES Appendix I and assessed on the IUCN Red List as either Critically Endangered (including Sumatran Orangutans, Western Gorilla and some species of crested gibbon) or Endangered (including all other species observed during the surveys).

The origins of the apes observed during the survey were investigated on the basis of questions posed to zoo staff, entries in international studbooks for species for which these are available, and import and export records on the CITES trade database. Information on the origin of apes was difficult to obtain or confirm from zoo personnel, but in Peninsular Malaysia the few apes whose origins were claimed to be known by staff were primarily said to have originated from the wild.

In Thailand in particular, the numbers of non-native apes seen during the survey were much higher than those recorded as legally imported, raising concerns that at least some of these animals arrived in captivity illegally. There are no data to show that Western Gorillas or crested gibbons have ever been imported into Thailand, yet both were found during the survey. In addition to this, CITES data record the import of just five orangutans into Thailand since 1975.

More than half of the 180 orangutans listed in the international studbook as linked to Peninsular Malaysia and Thailand are described as being of wild or unknown origin. The average age at which these were first recorded in captivity is six years for Peninsular Malaysia and five for Thailand. Whilst it is likely that the studbook records the vast majority of orangutans in Peninsular Malaysian zoos, the same cannot be said for Thailand. The survey recorded 51 orangutans in Thailand, but the studbook includes only 21. The collection of animals from the wild is a serious concern, particularly where these were collected as infants or juveniles.

The survey found a far greater proportion of great apes which, based on visual estimates were infants/juveniles (under ten years of age) in facilities in Thailand (51%), in comparison to Peninsular Malaysia (25%). Although it is likely that some of the great apes seen were born in captivity, in three institutions in Thailand, researchers saw no adults and at one other, the number of young was more than five times that of adults observed.

While there was no sign of the use of apes in performances in Peninsular Malaysian zoos and wildlife attractions, the surveys found that juvenile great apes in Thailand were mainly held at facilities that were also observed to use apes in performances and photography sessions. This raises concerns about what happens to these animals once they are too old to be used in these ways, as well as about the sourcing of young animals from the wild and the associated detrimental effects on the wild population.

The enforcement authorities in both Peninsular Malaysia and Thailand have made efforts to act against some incidences of illegal trade in apes. Most recently the Department of Wildlife and National Parks (PERHILITAN) in Peninsular Malaysia brought charges against four suspects under the Wildlife Conservation Act in relation to the seizure of two Sumatran Orangutans in 2015 and repatriated the animals to Indonesia just three months after they were confiscated. In Thailand, although some seizures have been made, efforts against the illegal trade in non-native apes appear to be hampered by weak legislation.

The findings of this report point to likely failures by some zoos and other wildlife attractions to uphold industry standards and in many cases adhere to legal requirements for sourcing animals under their care. In Thailand in particular, the absence of clear origins for apes in many zoos and wildlife attractions falls short of industry standards as articulated in the World Association of Zoos and Aquariums' (WAZA's) 2014 *Resolution 69.1*. In Thailand, it appears that the presence of legislative loopholes is in part responsible for the low numbers of investigations into and prosecutions of facilities that keep illegally sourced wildlife. In particular, Thailand's main legislation designed to protect wildlife, the *Wild Animal Reservation and Protection Act B.E. 2535 (1992) (WARPA)*, does not cover non-native species of ape. In addition, even for species of animals covered by Thai legislation, the Government faces a high burden of proof in obtaining prosecutions, as the onus is on the Government to prove that wildlife has been obtained illegally, rather than on the owner of wildlife to demonstrate its legal origins.

This report shows the importance of a reliable and transparent system for tracking the births, transfers and deaths of apes in zoos and wildlife attractions. The absence of such a system provides opportunities to conceal the acquisition of animals that have been illegally sourced.

## RECOMMENDATIONS

In order to ensure that apes in Peninsular Malaysian and Thai zoos and wildlife attractions are sourced legally and sustainably, and to encourage the proper care and treatment of these animals, TRAFFIC makes the following recommendations.

### Legislation and guidelines

Thailand's enforcement agencies should be given the powers necessary to discourage the illegal import and possession of non-native ape species and promote the proper care and treatment of apes in captivity. The *Wild Animal Reservation and Protection Act* does not currently provide protection for non-native apes nor allow for penalties to be imposed against those found in possession of these animals where they have been illegally imported.

In Thailand, the onus of proof to demonstrate that non-native ape species of questionable origin have been illegally acquired or kept lies with the Government. Changes should be made to wildlife legislation in Thailand to include the presumption that unlicensed possession of non-native apes is for the purpose of, or product of illegal trade, unless the possessor can prove to the contrary.

In Thailand, the Ministry of Natural Resources and Environment should explore options for repatriation of animals soon after seizure or rescue rather than waiting for five years in situations where there is no criminal prosecution. This would alleviate the burden on Government-run rescue centres.

The Department of National Parks, Wildlife and Plant Conservation (DNP) in Thailand should adopt additional requirements for zoo standards such as those introduced in Peninsular Malaysia in the Guidelines for Zoo Standards in Malaysia (*Garis Panduan Standard Zoo Malaysia*). This should include guidelines for the use of wild animals in performances.

Performances and photography sessions that use apes should be banned by the Ministry of Natural Resources and Environment / DNP, as it appears that these activities may drive the demand for young animals. If these performances are allowed to continue, the relevant Authority should be notified when apes that have been used in performances are being retired. This Authority should also be informed of plans for their future care and housing, as recommended by the CITES/Great Ape Survival Partnership (GRASP) mission to Thailand and Cambodia (Anon., 2007b).

### Enforcement

TRAFFIC supports the efforts by PERHILITAN in Peninsular Malaysia and the DNP in Thailand in monitoring zoos and wildlife attractions under their jurisdiction and encourages regular and unannounced inspections of all such facilities. TRAFFIC recommends that as part of these inspections, the origins of all apes should be ascertained where this is not already known.

Facilities found to be in violation of Act 716 or Act 686 in Peninsular Malaysia, or WARPA or the Customs Act in Thailand, including in regard to the sourcing of apes, should have their permits and licences revoked.

Animals held or obtained in violation of these Acts should be confiscated and placed in suitable accommodation or repatriated, where appropriate.

Prosecutions should be brought against all those who are found committing offences against Act 686 or Act 716 in Peninsular Malaysia or against WARPA or the Customs Act in Thailand.

Collaboration and co-operation between enforcement agencies at both a domestic and international level should be increased.

## Tracking and monitoring

Records on the acquisition, births, deaths and disposition of all apes held in zoos and wildlife attractions in Peninsular Malaysia and Thailand should be submitted to PERHILITAN and DNP to assist in their monitoring of these facilities.

The use of microchips and DNA testing to aid in the identification of captive orangutans was first used by PERHILITAN in 2004. The CITES/GRASP mission on orangutans to Cambodia and Thailand noted the value of collecting biological samples from each animal in case these are needed for DNA profiling (Anon., 2007b). Where this is not already occurring, these measures should also be implemented.

## Promotion of zoo industry standards

WAZA's goal is to provide guidance and support to the world's zoos and it is strongly recommended that it increases its level of engagement with zoos in Southeast Asia. The Association provides assistance, largely relating to improvements in animal husbandry, welfare and presentation, to zoos in need of help where this has been requested by the zoo concerned. This assistance should be extended to include providing guidance on the legal and sustainable sourcing animals to facilities that are currently reliant on illegal sourcing of stock.

WAZA should strongly encourage that members comply with its resolutions and guidelines, including, where possible, through partner organizations such as SEAZA. This includes Resolution 69.1 on the Legal, Sustainable and Ethical Sourcing of Animals. Although WAZA only has five institutional members in Thailand (all ZPO facilities) and one in Malaysia (Zoo Negara), SEAZA has more members, which allows WAZA to have a wider reach.

In Thailand in particular, many zoos operate in isolation of the international and regional zoo community. Efforts should be made by the international and local zoo community to encourage their increased involvement, including the submission of data on their animals to the relevant studbooks.

## Public engagement

If any law is to act as a deterrent against illegal activity, enforcement action and the consequences of illegal trade must be clearly and publicly communicated. PERHILITAN and the DNP should publicize enforcement actions against wildlife criminals and details of prosecutions on a more regular basis. This should include information on the applicable penalties under Acts 686 and 716 in Peninsular Malaysia and WARPA and the Customs Act in Thailand.

The media should assist in publicizing enforcement actions and prosecutions against wildlife criminals, and in calling for more transparency and consistency in dealing with wildlife crime.

The authorities and media in Peninsular Malaysia and Thailand are urged to promote public awareness of the illegal trade in primates and the risks this poses.

# INTRODUCTION

There is a general consensus that the main threats to most primate species come from habitat loss and hunting, but for some, the leading threat is trade (Nijman *et al.*, 2011). Apes are highly valued in trade for exhibition, biomedical research, food, medicine and as pets. Between 2005 and 2011, around 1800 great apes (Chimpanzees *Pan troglodytes*, Bonobos *Pan paniscus*, gorillas *Gorilla* spp. and orangutans *Pongo* spp.) were trafficked from the wild, mostly Chimpanzees and orangutans (Stiles *et al.*, 2013). These likely represent a small proportion of the animals that died throughout the trade chain, with mortalities occurring at capture, in transit, on arrival at market and after reaching the final consumer. Estimates of losses associated with the removal of young apes have been made to extrapolate effects on the wild population, but these are based on few hard data (Nijman, 2009). Estimates of deaths associated with the removal of young orangutans range from two to 10 animals for every individual in trade (Cantor, 1999; Anon., 2006a; Anon., 2015a).

In Southeast Asia, the illegal ape trade has received considerable international attention over the past 20 years at least, with high profile examples occurring in both Peninsular Malaysia and Thailand (see Boxes 1 and 2). In both countries, prosecutions for violations of laws regulating the trade and possession of primates are rare and generally not publicized. In the absence of any official confirmation, it is also difficult to establish the number of animals in Malaysia or Thailand that have been seized, relocated and/or repatriated.

Concern has been raised over the continuing global demand for live apes, particularly juveniles. In 2007, technical missions were carried out by CITES and the Great Ape Survival Partnership (GRASP) to Thailand and East Malaysia (Anon., 2007a and 2007b). In Thailand recommendations were made for the improvement of tracking and monitoring of wildlife in zoos, inspecting facilities housing wildlife, and penalizing individuals and organizations that contravene laws regulating the sourcing and treatment of wildlife (Anon., 2007b).

Apes are popular zoo exhibits and both Malaysia and Thailand have faced intense criticism in the past over the welfare conditions and legality of animals in their zoos (Anon., 2003a; Anon., 2007b; Corrigan, 2010; Yoga, 2012).

This report investigates the sources of native and non-native great apes and gibbons held in zoos and wildlife attractions in Peninsular Malaysia and Thailand, the numbers of juvenile apes present in these facilities and the prevalence of their use in performances. This is the fourth TRAFFIC report to concentrate on the trade of apes in Southeast Asia. The previous three reports focused solely on the trade in orangutans and gibbons in Indonesia, examining trade in, respectively, Kalimantan (Nijman, 2005a), Java and Bali (Nijman 2005b) and Sumatra (Nijman, 2009).

### **Box 1: Examples of illegal ape trade in and linked to Peninsular Malaysia**

There have been few official announcements on the illegal trade in apes in Peninsular Malaysia and much of the information below is based on domestic and international press reports.

- 2001** Four gorillas were imported from Nigeria for the Taiping Zoo using genuine CITES import and export permits declaring the animals as captive bred. It was later found that the animals were wild caught from Cameroon (Stiles *et al.*, 2013). The animals were sent to South Africa in 2004 and to Cameroon in 2007. No prosecutions were brought in Malaysia.
- 2004** The Peninsular Malaysian Department of Wildlife and National Parks (PERHILITAN) conducted an inventory and collected DNA samples from 58 captive orangutans in seven zoos (Anon., 2006b). Forty six were found to be Bornean and 12 Sumatran. Five of the latter species had been imported into Malaysia before 1975 (pre-CITES). The remaining seven were seized, six from A'Famosa Safari World and one from the Johor Zoo (Gerald, 2005). Most were returned to Indonesia in December 2005 and one was sent back in 2006 (Anon., 2013a). No official announcements of prosecutions have been made in connection with these activities.
- ~ **2008** Two smuggled orangutans were seized from Saleng Zoo. In 2009, the zoo announced that they had already received a replacement female from the Department and were awaiting the arrival of a male (Anon., 2009a). In 2010, PERHILITAN confirmed that the seized animals had been replaced with a pair from Bukit Merah Orangutan Island (referred to as Bukit Merah Lake Town Resort). Press reports suggested that the zoo's special permit to keep orangutans was not revoked after the seizure of the original pair of animals (Chew, 2010). No official information on prosecutions appeared and it is unclear from press reports if the zoo was ever penalized.
- 2009** Three baby orangutans, believed to be part of a group of five smuggled into the country (Chew, 2009) were seized; one from a deer breeder who was later prosecuted for illegal possession of a juvenile orangutan and the other two from the Taiping Zoo. The zoo claimed they were left by an anonymous donor two or three weeks prior to the confiscation (Koh, 2009). The outcome of the single prosecution was not made public and no information has surfaced to suggest that the missing two animals were ever located.
- 2013** Three Sumatran Orangutans said to have been seized in 2006, 2007 and 2009 were repatriated to Indonesia from Malaysia (Anon., 2013a). No information on the origins of the animals, nor the circumstances relating to their acquisition were issued by PERHILITAN. No announcements were made of any prosecutions relating to the confiscation of these animals.
- 2015** Two young orangutans advertised through a clandestine Facebook group were found at a hotel outside Kuala Lumpur; the result of a joint operation between PERHILITAN's cybercrime division, the Malaysian Communications and Multimedia Commission, Cyber Security Malaysia and Interpol (TRAFFIC, 2015). Two Malaysians and two Indonesians were arrested and charged, with the latter facing an extra charge of illegal import carrying a mandatory fine of MYR30 000 to MYR100 000 (USD6840–22 800) and jail of up to three years. One pleaded guilty and received a six month sentence which is being appealed. DNA testing identified the animals as Sumatran Orangutans and both were repatriated to Indonesia on 20th October (PERHILITAN, 2015).

## Box 2: Examples of illegal ape trade in and linked to Thailand

- 2003** Thirty six orangutans were illegally imported from Thailand to Cambodia's Koh Kong Safari World in 2003 and 2004 (Anon., 2006c). The Cambodian Ministry of Agriculture gave permission for the first import on condition that the company cooperate with the Forestry Administration and CITES to ensure legality (Cochrane, 2004). The Park was fined and allowed to retain the animals (Anon., 2007b). In 2007, the CITES/GRASP technical mission, were shown 34 orangutans and told that two had died (Anon., 2007b).
- 2003** A baby orangutan was found frozen at the house of a suspected illegal wildlife trader. A local official noted that the animal had been illegally shipped from Indonesia at the same time as two which were rescued from an illegal slaughterhouse a week earlier (Hongthong and Kaewmorakot, 2004).
- ~ **2003** Between 2003 and 2004, four baby orangutans were found in a house near Bangkok with six Tigers, five bears, a number of Tiger carcasses and 21 bear paws (Anon., 2004).
- 2004** Safari World, near Bangkok (not thought to be connected to the Cambodian park of the same name) was investigated and raided by the Forest Police in July after information sent to the CITES Secretariat by a number of NGOs reported the presence of numerous orangutans. In September, 102 orangutans confiscated by the police were received by the Country's Management Authority (Anon., 2007b). Forty five were "beyond the legal powers of the authorities" as 14 had been imported prior to enactment of the Country's CITES-implementing legislation and 31 were their offspring (Anon., 2007b). The company was charged for possession of 57 animals under the *Customs Act, 1926* and surrendered them to the authorities (Anon., 2007b). Four reportedly died while in government care, five were sent by the authorities to the new Chiang Mai Safari Park (Anon, 2006c), the other 48 were repatriated to Indonesia in 2006.
- ~**2004** The report of the CITES/GRASP Technical Mission to Thailand stated that ten orangutans were found during checks of private and state zoos ordered by the Minister of Natural Resources and Environment. Five were declared by a zoo after they were anonymously abandoned, with the others said to be the subject of court proceedings to challenge the Department of National Parks, Wildlife and Plants Conservation' (DNP) confiscation at the time the CITES/GRASP report was written (Anon., 2007b).
- 2008** A single Bornean Orangutan was seized in Chumphon Province (Anon., 2010a). Reports suggest that the animal was confiscated from a private zoo/resort. No prosecution occurred (Wiek, 2015).
- 2009** Thailand's 2007–2009 biennial report to CITES listed the seizure of 11 Bornean Orangutans in Phuket Province (Anon., 2010a) reportedly found in crates at the side of a road (Wiek, 2012, Wipatayotin, 2015). In November 2015, 14 orangutans were repatriated from Thailand to Indonesia (one seized in 2008, see above), 11 seized in Phuket and two born whilst at the breeding centre) (Wiek, 2015). No charges were ever brought.
- 2011** An Emirati man was arrested at Bangkok's Suvarnabhumi Airport after a gibbon and other wildlife was found in his luggage. He was charged and released on bail. Press reports suggest that after intervention from a politician, his passport was returned and he was able to leave the country without facing prosecution. No further investigations appear to have been conducted (Anon., 2011).



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Fourteen orangutans *Pongo* spp. await repatriation from Thailand to Indonesia in November 2015



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One of two Sumatran Orangutans *Pongo abelii* seized in 2015 by PERHILITAN and repatriated to Indonesia shortly after

## BACKGROUND

Four of the six species of great ape species are found in Africa, the two species of orangutans and all 17 gibbon species are native to Asia. All apes are forest dwellers and as such are vulnerable to activities such as forest conversion, logging and other extractive industries such as mining and oil and gas (Rainer *et al.*, 2014). They are also impacted by illegal trade and since all have very low reproductive rates (e.g. O'Brien *et al.*, 2003, Kormos *et al.*, 2014 etc.), the loss of even a few individuals can impact a population for many years.

Four species of great ape and at least seven gibbon species were observed during the surveys conducted for this report in zoos and other wildlife attractions in Peninsular Malaysia and Thailand.

Two of the great ape species seen are listed as Endangered by the IUCN (Bornean Orangutan and Chimpanzee) (Ancrenaz *et al.*, 2008 and Oates *et al.*, 2008) and two as Critically Endangered (Sumatran Orangutan and Western Gorilla) (Singleton *et al.*, 2008 and Walsh *et al.*, 2008). The populations of all four are thought to be decreasing. The illegal pet trade is listed as a specific threat to both species of orangutan (Ancrenaz *et al.*, 2008 and Singleton *et al.*, 2008) and poaching for bush meat (through which young apes enter the illegal trade) noted as major concerns for both Western Gorillas and Chimpanzees (Walsh *et al.*, 2008 and Oates *et al.*, 2008).

Of the gibbon species seen; six are listed as Endangered (Anon., 2014), with the populations of all said to be decreasing. The pet trade is specifically noted as a major threat to the survival for four of these (Agile Gibbon *Hylobates agilis*, White-handed Gibbon *H. lar*, Müller's Bornean Gibbon *H. muelleri* and Pileated Gibbon *H. pileatus*) (Anon., 2014), with the remaining two (Javan Gibbon *H. moloch* and Siamang *Symphalangus syndactylus*) found in trade in Indonesia at least (Nijman, 2005b and pers. comm., cited in Nijman and Geissmann, 2008). The other gibbons seen were crested gibbons *Nomascus* spp. found only in Viet Nam, Lao PDR, Cambodia and Southern China. Although it is suspected that these came from four species (Northern White-cheeked Gibbon *Nomascus leucogenys*, Southern White-cheeked Gibbon *N. siki*, Black Crested Gibbon *N. concolor*, and Red-cheeked Gibbon *N. gabriellae*), identification, particularly of hybrids is difficult; so all crested gibbons are recorded as *Nomascus* spp. The populations of all four species are said to be declining with hunting for the pet trade, food and medicine listed as major threats to survival. Two; the Northern White-cheeked Gibbon and the Black Crested Gibbon are listed as Critically Endangered (Bleisch *et al.*, 2008a and 2008b), with the remaining two listed as Endangered (Manh Ha *et al.*, 2008 and Geissmann *et al.*, 2008).

### Native species

Six species of ape are found in Malaysia and Thailand. The Bornean Orangutan and Müller's Bornean Gibbon are found in the East Malaysian States of Sabah and Sarawak. Three species of gibbon are found in both Peninsular Malaysia and Thailand: the Agile Gibbon, White-handed Gibbon and Siamang. The Pileated Gibbon is native to Thailand.

### Legislation in Malaysia

Wildlife protection in Malaysia is conducted through the efforts of three separate departments under the Ministry of Natural Resources and Environment (NRE) which also serves as the central Management Authority for CITES, to which the Country became Party in 1977 (Anon., undated a). The eleven Peninsular Malaysian States and federal territories share a single wildlife department; the Department of Wildlife and National Parks (PERHILITAN), responsible for the implementation and enforcement of the *Wildlife Conservation Act, 2010* (Act 716). Matters relating to wildlife in Sabah and Sarawak, Malaysia's Bornean States (collectively known as East Malaysia), are the responsibility of single State departments bound by their respective State legislation.

Act 716 lists all species of ape as totally protected with possession or use requiring a special permit, only issued with approval from NRE (Anon., 2010b). A number of additional regulations relating to zoos and other wildlife attractions exist, including the *Wildlife Conservation (Operation of Zoo) Regulations, 2012* which fixed the cost of a permit to operate a zoo permit at MYR1000 (USD228). This also specified minimum cage sizes specific to various taxa and other aspects of running a zoo, including husbandry, record keeping and staff training etc. The *Guidelines for Zoo Standards in Malaysia (Garis Panduan Standard Zoo Malaysia)* provide additional information (Anon., undated b). In May 2012, NRE's Minister stated that zoos which failed to abide by the new regulations would be denied a licence at the end of the six month grace period following their introduction (Sukumaran, 2012). Six zoos were shut down by PERHILITAN, with the Department stating that the affected animals would be released after rehabilitation (for local species) or handed to other zoos (Ng, 2012).

In 2011, 44 facilities were categorized as zoos in Peninsular Malaysia (Ismail, 2011). In 2013, an amendment to the *Wildlife Conservation (Operation of Zoo) Regulations* changed the definition of a zoo from "any area or premises where the wildlife is kept or placed whether for the purpose of conservation, education, research or recreation, and is open to the public" (Anon., 2012) to "any area or premises which keeps or places 50 or more wildlife species which the total number is 100 or more whether for the purposes of conservation, education, research or recreation, and is open to the public" (Anon., 2013b). Twelve zoo permits were issued in 2013 and periodic monitoring of wildlife attractions was conducted (Anon., 2013c). Facilities no longer categorized as a zoo are now classified as permanent or mobile exhibitions ("exhibiting wildlife on a [permanent/temporary] basis in any premises and is open to the public") (Anon., 2013d). In 2013, PERHILITAN issued 21 permits for permanent exhibitions and 10 for mobile exhibitions from a total of 38 applications (Anon., 2013c). A total of 43 permits were issued to Peninsular Malaysian zoos and wildlife attractions in 2013.

The *Wildlife Conservation (Exhibition) Regulations 2013* specifically exclude mobile exhibitions from keeping ape species and exhibitions of any type may not conduct wildlife performances. These can be held by zoos, provided they first apply for permission from PERHILITAN. The *Guidelines for Zoo Standards* provide fairly detailed information on permitted training methods and care of the animals to be used in these activities, with the use of costumes and make-up or the demeaning of animals not allowed (Anon., undated b).

Act 716 requires far more of the country's zoos and wildlife attractions than its predecessor, the *Protection of Wildlife Act, 1972* (Act 76). Few prosecutions relating to the illegal trade in apes were brought under Act 76 (see Box 1) and since Act 716 is not a retrospective law, offences committed under its predecessor cannot be prosecuted under the current legislation (Seong, 2012).

Guidelines have also been issued for the submission of wildlife by the public to a zoo or public or private agency (Anon., undated c). Malaysian zoos fairly regularly receive displaced or injured wildlife found by members of the public which may include unwanted pets (pers. obs.). It seems likely that the formalization of these procedures is linked to the seizure of two orangutans from Taiping Zoo in 2009 that were subsequently claimed to have been anonymously donated (see Box 1).

The *International Trade in Endangered Species Act, 2008* (Act 686); Malaysia's CITES-enabling legislation, is a Federal Act and applicable to the Peninsula and East Malaysia. This Act allows for charges to be brought against individuals and the body corporate and provides identical penalties for a number of violations (illegal import or export, possession, sale, advertisement, display to the public, transport within Malaysia without a valid permit, captive breeding without Management Authority registration and the possession, sale, advertisement or display of animals produced from such breeding, imported in contravention of the Act). Violators face fines of MYR100 000

(USD22 800) per individual specimen up to MYR1 000 000 (USD227 800) and/or a prison term up to seven years for individuals, rising to MYR200 000 (USD45 600) per animal up to MYR2 000 000 (USD 455 996) for a body corporate. The Act includes a list of scheduled species to which this applies which includes all apes.

## Legislation in Thailand

Thailand became party to CITES in 1983. In 1991, following concerns over poor legislation and the frequent re-export of illegally obtained specimens (including apes), the CITES Secretariat recommended that all Parties suspend trade with Thailand in all CITES-listed species. The ban was lifted in 1992 following the introduction of the *Wild Animal Reservation and Protection Act B.E. 2535 (1992)* (WARPA), the Country's CITES-enabling legislation which also governs the domestic protection of wildlife. Some years later the Government of Thailand acknowledged that this ban had resulted in the loss of billions of Thai Baht (THB) (Rubthong, 1999). WARPA is administered by the Ministry of Natural Resources and Environment's Department of National Parks, Wildlife and Plant Conservation (DNP).

The CITES National Legislation Project, which evaluates the ability of national legislation to implement the Convention, has assessed Thailand's legislation as category one; the highest possible score. WARPA lists around 1300 species, but includes just 11 non-native CITES-listed vertebrates. The most recent non-native species to be added was the African Elephant *Loxodonta africana* which was included in 2015 to combat the ivory trade in the Country. In 2007, the CITES/GRASP technical mission noted that new legislation was being drafted, this process is still ongoing.

A four month amnesty for owners of protected wildlife in 2003 resulted in the registration of over 1.1 million animals (Anon., 2003b). A number of zoos were raided during the amnesty prompting a meeting between zoo operators and directors with NRE's Minister to request that the raids be stopped, citing a 30% drop in tourist revenues. The Director of the Zoological Park Organisation (ZPO), which runs Bangkok's Dusit Zoo, Khao Kheow Open Zoo, Khon Kaen Zoo, Korat Zoo, Chiang Mai Zoo and Songkhla Zoo under the patronage of the King, acknowledged that the use of wildlife without the proper permits should be stopped, but argued that sending 100 armed police to zoos was not the best way to achieve this (Anon., 2003c).

WARPA is also relevant to the establishment and running of zoos. Zoos must obtain a licence which should be renewed every five years (Sukpanich, 2013a). Information on the type and number of protected wildlife or their carcasses must be submitted after permission has been given, but prior to the opening of the zoo and any changes in the number of animals must be reported. In 2013, National Parks, Wildlife and Plant Conservation Department records indicated that there were 40 legally operated private zoos in Thailand (Sukpanich, 2013b).

Following the discovery of large numbers of illegally imported orangutans at Safari World in Thailand, the CITES Secretariat was informed that the possession of illegally imported CITES-listed specimens is not an offence in Thailand. In order to bring charges, the authorities would need to demonstrate that the accused was personally responsible for the original import of the specimen(s). This loophole has been highlighted in relation to a number of CITES-listed species (Shepherd and Nijman, 2008; Stiles, 2009; Todd, 2011, Doak, 2014; Nijman and Shepherd, 2014 and 2015).

The prosecution brought against Safari World near Bangkok for the possession of 57 orangutans found there in 2004 (see Box 2) was conducted under Thailand's *Customs Act, B.E. 2469 (1926)* (Anon., 2007b). Under Section 27 of this act, fines of up to four times the value of smuggled goods, including duty, and prison terms of up to 10 years, can be given for any form of smuggling (Anon., 2009b).

## Professional standards for zoos

The World Association of Zoos and Aquariums (WAZA) has more than 280 institutional members with a number of national and regional associations, such as the Southeast Asian Zoo Association (SEAZA), amongst its membership. The WAZA *Code of Ethics and Animal Welfare* was adopted in 2003 and requires that members “endeavour to ensure that the source of animals is confined to those born in human care” and be confident that the acquisition of animals from the wild “will not have a deleterious effect upon the wild population” (Anon., 2003d). In 2014, WAZA passed *Resolution 69.1 on the Legal, Sustainable and Ethical Sourcing of Animals*. This recommends that members investigate the source of animals and any commercial entities involved in sourcing and transport before acquisition; even when the associated documents appear valid or they are said to be captive bred (Anon., undated d). WAZA has also called for its members not to conduct or be involved in shows where animals are required to perform unnatural behaviours (Mellor *et al.*, 2015).

## Rescue centres in Peninsular Malaysia

In Malaysia, seized or rescued animals seized become the property of the Government. PERHILITAN operates a number of small centres, none of which focus on primates. Before January 2013, the care of larger seized animals was conducted largely by Melaka Zoo, but with the transfer of this from PERHILITAN’s management into local government and private hands, the Department has lost this resource.

In 2013, local press claimed that animals (including White-handed Gibbons) remained at Mines Wonderland (a small city zoo next to a shopping mall), some two years after it had closed (Panirchellvum, 2013a), TRAFFIC researchers visited the facility around this time and confirmed the presence of a number of gibbons. The facility fell far short of the requirements listed in the *Guidelines for Zoo Standards*, but a Department spokesperson said that since the facility was no longer open, there was no obligation to comply with the regulations on enclosure sizes (Panirchellvum, 2013b). The gibbons were later ordered to be relocated to Taiping Zoo (Panirchellvum 2013b).

## Rescue centres in Thailand

The Thai Government funds 26 wild animal rescue centres which are operated by DNP. The vast majority of wildlife seized by, found or handed over to the authorities will, if immediate release is not possible, be placed in one of these facilities. Under the Country’s Civil and Commercial Code (Section 1327), if an owner is unknown, the Government is required to keep such property (including animals) for five years before repatriation or other placement is possible (Wipatayotin, 2015). In 2013, the DNP seized over 10 000 live animals of a wide range of species from the illegal trade and arrested 642 people (Sarnsamak, 2014). In 2012 THB20 000 000 (USD555 221) was allocated to cover the cost of caring for the animals in the Government-run breeding centres (Sukpanich, 2013a). In 2013, the cost to the Government of just feeding these animals was given as THB1 700 000 (USD47 194) per month (Fuller, 2013).

There are also a number of privately funded and operated rescue centres in Thailand, some of which concentrate on a limited range of taxa, with two focusing largely on gibbons. Whilst DNP does have MOUs with two universities (Kasetsart and Mahidol) allowing them to provide temporary care for injured wildlife (Anonymous pers. comm., 27th June 2014), there is currently no mechanism in Thailand by which a privately-run wildlife rescue centre can register with the DNP or obtain a permit or official permission to operate. The result of this is that all of the privately funded and operated centres are all, to some extent, conducting their activities without permission.

Generally these facilities report that they do co-operate with DNP in some aspects of their work, either through local DNP offices or the headquarters in Bangkok. Those which spoke to TRAFFIC’s

researchers said that they always submit a report on the acquisition of gibbons to the authorities, but that action was rarely taken (Anonymous pers. comm. June 2014). Some reported that they receive animals that have been donated by the public or seized by local DNP officers (Anonymous pers. comm., June 2014). Raids have been conducted on NGO-operated rescue centres by DNP, with animals seized and placed in Government rescue centres which have been widely reported in local and foreign media.



**White-handed Gibbon *Hylobates lar* at Damnoen Saduak Tiger Zoo, Thailand**

# METHODS

## Surveys

Surveys were undertaken between September 2013 and March 2014 by two researchers who entered each facility as general visitors and paid entrance fees where required. All public access areas were surveyed and all shows or other displays were attended. Facilities that had ceased business or that were closed on the day of the visit were entered where possible or viewed from the outside when this was not feasible.

The surveyors recorded all apes seen and took photographs where feasible. Visual estimates of the age of all great apes observed were made, with animals assigned as either infant/juvenile (under 10 years of age) or sub-adult/adult (10 years or older). All apes were identified to species level where possible. Orangutans seen in Thailand were recorded as *Pongo* species, but since PERHILITAN conducted DNA testing on zoo orangutans in 2004, it was felt that these animals could reliably assigned to a species. Identification of gibbon species followed Mootnick (2006). Crested gibbons were recorded as *Nomascus* spp. as those recorded could not be reliably identified to species level from photographs taken at the time (T. Nadler and V. Nijman, pers. comm., 2014).

Additional information on the animals was recorded from zoo staff and zoo signs when possible, but verification of this was generally not possible. In all cases, animals that were said to be present but were not observed by researchers were recorded, but distinguished in the findings from those animals that were actually seen. The numbers given in this report therefore represent the minimum number of apes present at each facility at the time of the survey.

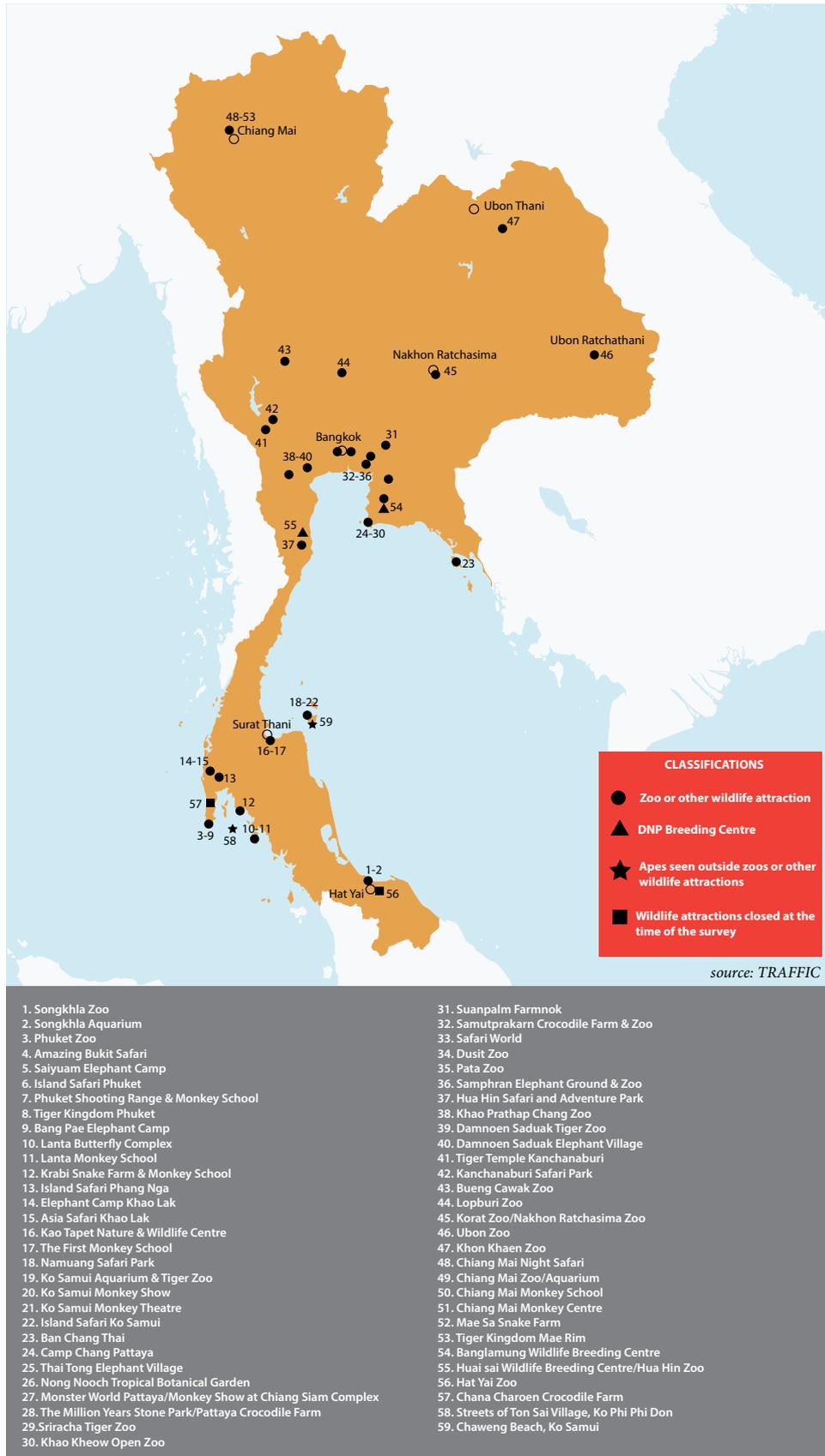
An initial list of wildlife attractions was compiled for Peninsular Malaysia and Thailand based on local knowledge, discussions with other NGOs and individuals, information collected from media sources, internet searches and, in Thailand, a list of DNP licensed facilities. This amounted to 124 facilities, 46 in Peninsular Malaysia and 78 in Thailand ranging from traditional zoos, aquaria, butterfly farms, petting zoos, crocodile farms etc. This was further refined by desktop research using online reviews, blogs, zoo-related chat-sites etc. to exclude facilities unlikely to keep apes. In addition to this, some facilities were contacted by phone.

Researchers became aware of an additional two facilities in Malaysia and five in Thailand during the surveys and these were also visited. Facilities that were known to have closed were also surveyed as this was felt to be no guarantee that the animals would have been removed (Panirchellvum, 2013a). Surveys were carried out in 35 wildlife attractions in Peninsular Malaysia in September and November 2013 (Figure 1).



Figure 1: Map of zoos and other wildlife attractions visited in Peninsular Malaysia

In Thailand, visits were made to 59 zoos and other wildlife attractions (Figure 2).



**Figure 2 : Map of zoos and other wildlife attractions visited in Thailand**

## International studbooks

Studbooks are used to manage ex situ populations of some species with data on the source, birth, transfers and death of individual animals used to assess the size and demographic status of the focal taxon and the level of genetic diversity of a captive population. Studbooks rely on institutional involvement and reporting for their data. Information collected during the survey on great apes was compared to the *2010 International Studbook for the Western Lowland Gorilla* (Wilms, 2011) and the *2014 International Studbook of the Orangutan* and its associated origins report (Elder, 2015).

## CITES trade data

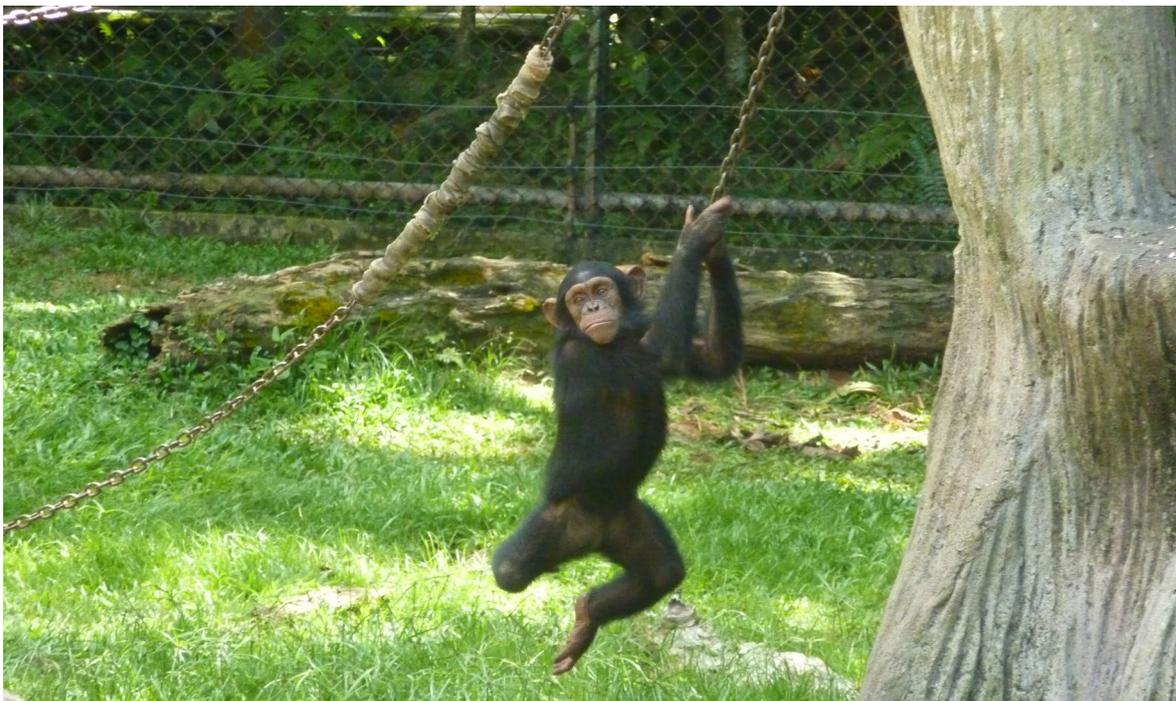
Each year, CITES Parties must submit an annual report detailing all international trade in CITES-listed species. This is entered into the CITES trade database, managed by the United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC) and holds 15 million records starting in 1975. The CITES trade database was queried for all international movement of apes in and out of Thailand and Malaysia since 1975. The database cannot be used to identify the domestic movement of specimens or from where an import, export or re-export took place within a country; making it impossible to determine from this data which of Malaysia's trades involved Peninsular Malaysia rather than East Malaysia.

## Online trade

Searches were conducted of online classified advertising sites and social media in Peninsular Malaysia and Thailand for the presence of great apes and gibbons. Between August and October 2015 monitoring of trade in Thailand through social media was carried out. The key words used for this were gibbon (ชะนี), orangutan (อุลิ่งอุตัง), Chimpanzee (ลิงไม่มีหาง), ape (สัตว์ป่า), wildlife (สัตว์หายาก), rare animals (ซื้อ), buy (ขาย), sell (พรานป่า), hunter (ล่าสัตว์), hunting (สัตว์ป่าสงวนตามใบสั่ง), wildlife for hunting (สัตว์ป่าสงวนตามใบสั่ง)

## Exchange rates

Exchange rates were taken from [www.oanda.com/currency/converter](http://www.oanda.com/currency/converter) on 17th November 2015



The only young Chimpanzee *Pan troglodytes* seen in Malaysia was at Taiping Zoo and Night Safari.

# RESULTS AND DISCUSSION

## PENINSULAR MALAYSIA

### Survey

In total 99 apes of eight species were observed in 13 of the 35 wildlife attractions visited in Peninsular Malaysia and an additional 26 were reported as present, but not seen by researchers. Eight attractions (23%) were found to keep great apes (Table 1) and 12 (32%) kept gibbons (Table 2). The Sumatran Orangutan, Chimpanzee and Javan Gibbon were the only non-native species observed. Melaka Zoo had the largest number of ape species present with six: two species of great apes and four of gibbons. Forty-eight great apes were seen by researchers in eight wildlife attractions, an additional 23 were reported as present by facility staff.

The Bornean Orangutan was the most commonly kept great ape with 31 animals observed, followed by the Chimpanzee with 14 seen. Bukit Merah Orangutan Island had the greatest number of great apes with an observed count of 14 Bornean Orangutans. Zoo Negara was the only zoo where all three species of great ape were seen, this was also the only facility with Sumatran Orangutans. All wildlife attractions found with great apes kept more than one individual, with the exception of the single female orangutan seen at Kuala Lipis Mini Zoo which was moved to Taiping Zoo in February 2015, after the completion of this survey (Anon., 2015b).

**Table 1: Great apes in Peninsular Malaysian zoos and wildlife attractions**

Name of wildlife attraction	Sumatran Orangutan	Bornean Orangutan	<i>Pongo</i> spp.	Chimpanzee	Total
A'Famosa Animal Safari		5(7)			5(7)
Bukit Merah Orangutan Island*		14(24)			14(24)
Johor Zoo*				3	3
Kuala Lipis Mini Zoo*			1		1
Melaka Zoo		2(3)		1	3 (4)
Taiping Zoo and Night Safari		3		8	11
Zoo Kemaman		6			6
Zoo Negara	2(5)	1(3)		2(7)	5(15)
<b>Total</b>	<b>2(5)</b>	<b>31(46)</b>	<b>1</b>	<b>14(19)</b>	<b>48(71)</b>

Note: Figures outside the brackets indicate numbers of animals directly observed by researchers; those in brackets include these animals plus additional individuals that staff claimed were present but that were not directly observed.

\* Denotes an attraction classified as a permanent exhibition under the 2013 Amendment to the *Wildlife Conservation Act, 2010 (Act 716)*.

Eleven of the 34 orangutans observed by researchers in Peninsular Malaysia were assessed as infants/juveniles. Eight were recorded at Bukit Merah Orangutan Island, and one each at A'Famosa Animal Safari, Zoo Negara and Zoo Kemaman. Information submitted by the first three facilities to the International Studbook of the Orangutan (Elder, 2015) suggests that all of these animals were likely captive bred in these locations. Zoo Kemaman does not share information on their animals with the studbook at present. Only one of the 14 Chimpanzees directly observed during the survey (seen at Taiping Zoo), was assessed as being an infant/juvenile. There was no evidence that any apes were being used in performances at any of the facilities in Peninsular Malaysia.

Fifty-one gibbons of five species were found in 12 wildlife attractions with an additional three reported but not seen (Table 2). The most commonly kept gibbon species was the White-handed Gibbon, with 37 observed at 11 facilities, five of which only kept this species of ape. Melaka Zoo had the largest number of gibbon species with four and the greatest number of animals present at 12. Only one non-native gibbon was seen; a single Javan Gibbon at Johor Zoo.

**Table 2: Gibbons in Peninsular Malaysian zoos and wildlife attractions**

Name of wildlife attraction	White-handed Gibbon	Agile Gibbon	Javan Gibbon	Müller's Gibbon	Siamang	Total
A'Famosa Animal Safari	1					1
Bukit Merah Ecopark*	3					3
Johor Zoo*	4	1	1			6
Kuala Lipis Mini Zoo*					1	1
Kuantan Mini Zoo*	2					2
Melaka Zoo	5	4		1	2	12
Mines Wonderland*	2(5)					2(5)
Perlis Snake and Reptile Farm*	1					1
Sunway Lagoon Wildlife Park	2					2
Taiping Zoo and Night Safari	9				2	11
Zoo Kemaman*	2					2
Zoo Negara	6				2	8
<b>Total</b>	<b>37(40)</b>	<b>5</b>	<b>1</b>	<b>1</b>	<b>7</b>	<b>51(54)</b>

Note: Figures outside the brackets indicate numbers of animals directly observed by researchers; those in brackets include these animals plus additional individuals that staff claimed were present but that were not directly observed.

\* Denotes an attraction classified as a permanent exhibition under the 2013 Amendment to the *Wildlife Conservation Act, 2010 (Act 716)*.

Information obtained from zoo staff and sign boards suggested that many zoos had obtained their apes from either Melaka Zoo or Zoo Negara. Former staff from Zoo Negara suggested that at least one Chimpanzee originated from London Zoo and another from the long since closed Johor Safari Park (Anonymous pers. comm., 2015). Some gibbons were said to have been sourced from the wild (all White-handed Gibbons at Kuantan Mini Zoo and Perlis Snake Farm, the Müller's Gibbon at Melaka and the Javan Gibbon at Johor Zoo) or even handed in by the public (one at Kuantan Mini Zoo and two at Johor).

### CITES trade database

The CITES Trade Database shows live imports to Malaysia of all native ape species observed during the survey, plus Chimpanzee, Western Gorilla and Javan Gibbon. Up to 37 Chimpanzees are recorded as having been imported to Malaysia and 22 as having been exported since 1975. Eight Bornean Orangutans were imported between 1986 and 1997, and 20 exported from 1995 to 2007. Six seized Sumatran Orangutans were exported to Indonesia in 2005, and Singapore reported receiving one captive bred Sumatran Orangutan from Malaysia in the same year. No Sumatran Orangutans are recorded as having been imported by Malaysia. Only White-handed Gibbons were exported in large numbers, with 21 exported between 1980 and 2009 and just one is recorded as having been imported, in 1991. This strongly suggests that the 37 White-handed Gibbons observed during the survey were of domestic origin. Although no gorillas were observed during the survey of Peninsular Malaysia, four captive bred Western Gorillas are recorded as imported from Nigeria in

2001 (three wild caught individuals are also recorded as imported in 2002, also from Nigeria). The four were accompanied by genuine CITES permits, but were later deemed to have been wild caught in Cameroon rather than captive bred in Nigeria as claimed. CITES trade data records the export of four Western Gorillas from Malaysia to South Africa in that year from where they were returned to Cameroon (see Box 1). There is no record of the export of the three animals that were imported in 2002 and this was the only reference to these animals that could be found.

## International studbooks

The 2014 International Studbook of the Orangutan (Elder, 2015) links 141 animals with nine locations in Peninsular Malaysia. Twenty of these arrived prior to or during 1975 (the year that CITES entered into force). Forty five animals are recorded as still located on the Peninsula, in five facilities: Bukit Merah Orangutan Island, Zoo Negara, Melaka Zoo, A'Famosa and Taiping Zoo. Orangutans were seen at two other facilities (Kuala Lipis Mini Zoo and Zoo Kemaman) during the survey, neither of which have provided information to the studbook. The single orangutan seen at Kuala Lipis Mini Zoo during the survey is recorded in the 2014 studbook as being transferred to Taiping Zoo in 2015.

The studbook indicates that 75 of the 141 orangutans recorded as having been kept in Peninsular Malaysia are listed as wild caught or of unknown origin. Information from the studbook origin report shows that some of these are linked to enforcement action. In total 52 seem to have links to enforcement agencies, or were first recorded at Melaka Zoo (which was operated by PERHILITAN until 2013). Although these 52 may have first arrived in captivity as a result of illegal action, there is no evidence to suggest that any of the zoos in which they were later housed acted illegally in their acquisition.

In 2004, when PERHILITAN carried out the DNA testing of 58 zoo-held orangutans, 24 of the 26 animals of unknown or wild origin and with no apparent links to enforcement are recorded as present in Malaysian zoos. Among these are six Sumatran Orangutans transferred from A'Famosa to Melaka Zoo in 2005; most likely the seized animals which were repatriated to Indonesia that year. It is reasonable to assume that PERHILITAN had no reason to question or take action over the legality of the remaining 18 animals.

The data description fields in the studbook state that the birth dates for captive born orangutans are “typically known” while those for orangutans of wild or unknown origin are estimated. The age at which animals recorded as wild caught or of unknown origin were first transferred into captivity was estimated using the estimated date of birth and the first dated record of transfer. Estimates of birth date vary by a matter of months in some cases, but more often by one or two years. In each case, the earliest estimated year of birth was used. Eighteen animals were excluded from the calculations because no birth date estimate had been entered in the studbook. The age at first record in captivity for the other 60 ranged from under one year to 25 years of age, with an average of 6 years old; irrespective of whether there was any involvement of enforcement agencies. Forty-nine animals (82%) were aged ten years or under when they were first recorded as present in captivity.

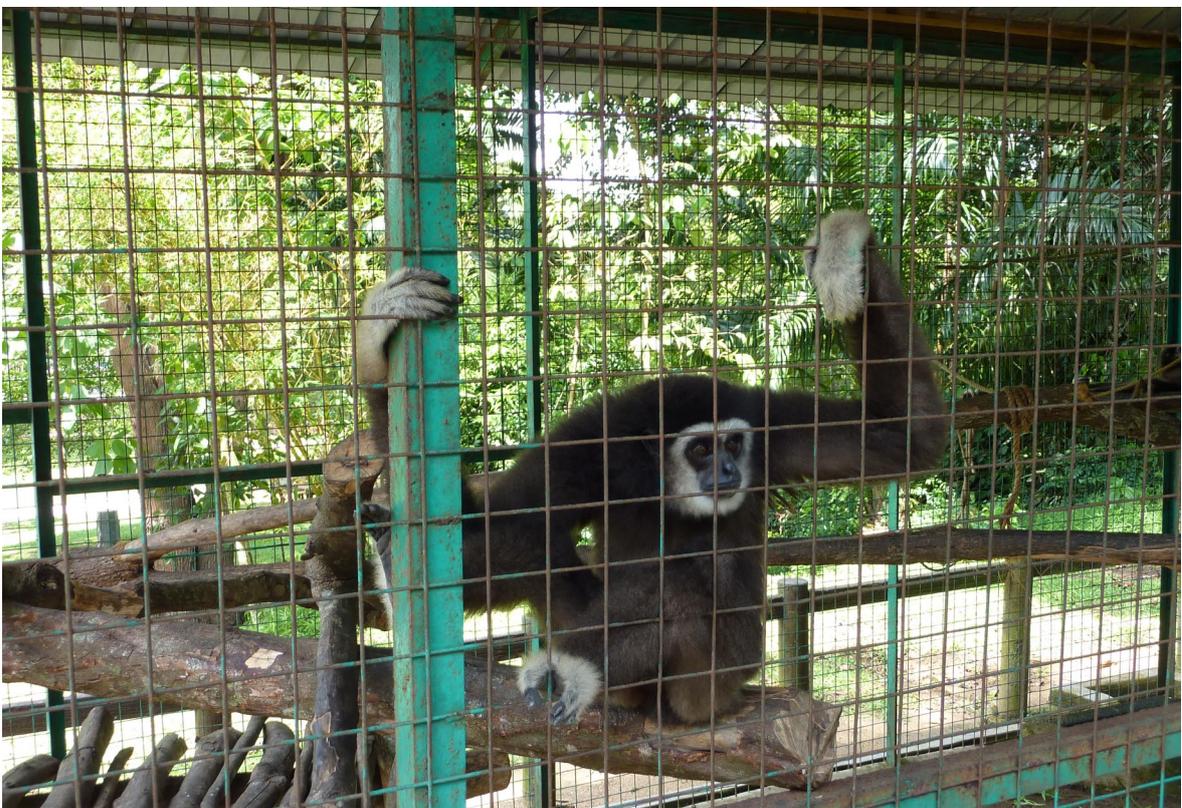
## Online trade

Internet searches of popular online sale websites were conducted, but no evidence of the illegal trade in apes was found, though researchers did find some evidence of gibbons being offered for sale online through social media. The seizure of two baby orangutans advertised on Facebook in July 2015 further confirm that illegal trade is facilitated through the use of online media.



© Jamie Bouhuys / TRAFFIC

Orangutan *Pongo* spp. nursery at Bukit Merah Orangutan Island, Malaysia



© Jamie Bouhuys / TRAFFIC

White-handed Gibbon *Hylobates lar* at Kuantan Mini Zoo, Malaysia

## THAILAND

### Survey

In Thailand, 250 apes were observed in 30 of the 57 wildlife attractions visited. Six taxa were identified to species and two for which only the genus could be assigned. An additional 22 animals were reported as present, but not seen by researchers. Thirteen attractions (23%) were found to be keeping great apes (Table 3), and gibbons were seen in 26 (46%) of the locations visited (Table 4). None of the great ape species recorded (orangutans, Chimpanzee and Western Gorilla), nor the 14 *Nomascus* spp. gibbons, are native to Thailand. The researchers also saw an additional seven White-handed Gibbons and were told about one other at two areas popular with tourists where the animals were being used as photographer's props. These seven animals are not included in the results of this report.

A total of 51 orangutans, 36 Chimpanzees and one Western Gorilla were seen during the survey. Orangutans were observed in 11 wildlife attractions in Thailand, six of which are operated by the ZPO (Anon., undated e).

According to zoo personnel, a number of great apes are kept in zoo-linked facilities that are not open to the public, which therefore were not included in the survey. Pata Zoo which exhibits animals on the top two floors of a department store, also maintains animals above these on the roof to which there is no public access. Researchers were told by staff there that the zoo also keeps three male orangutans and an unspecified number of elderly Chimpanzees and gibbons at a location in Nonthaburi. Mention of a Nonthaburi facility owned by the operators of Pata Zoo appeared in the Thai press in connection with an enforcement raid, noting that Chimpanzees were amongst the animals kept there (Anon., 2003e). No other information on the source of any apes was collected from zoo staff in Thailand. Researchers observed 26 orangutans at Safari World, but were told by staff that there were 30 kept at the park. An undated video purchased during the visit claimed that the park has 60 orangutans, which are referred to as the "largest troop in Thailand" (Anon., undated f).

**Table 3: Great apes in Thai zoos and wildlife attractions**

Wildlife Attraction	Orangutan	Chimpanzee	Gorilla	Total
Bueng Chawak Zoo	2			2
Chiang Mai Night Safari		1(2)		1(2)
Chiang Mai Zoo	1			1
Dusit Zoo	1	4		5
Khao Kheow Open Zoo	4(7)	2(4)		6(11)
Khon Kaen Zoo	1	(1)		1(2)
Korat Zoo	2	4(9)		6(11)
Lopburi Zoo	4(7)	3		7(10)
Pata Zoo	5	2	1	8
Phuket Zoo	1			1
Safari World	26(30)	1		27(31)
Samutprakarn Crocodile Farm and Zoo	4	18		22
Songkhla Zoo	(1)	1(2)		1(3)
<b>Total</b>	<b>51(26)</b>	<b>36(42)</b>	<b>1</b>	<b>88(109)</b>

Note: Figures outside the brackets indicate numbers of animals directly observed by researchers; those in brackets include these animals plus additional individuals that staff claimed were present but that were not directly observed.

**Table 4: Gibbons in Thai zoos and wildlife attractions**

Name of wildlife attraction	White-handed Gibbon	Agile Gibbon	Pileated Gibbon	<i>Hylobates</i> spp.	<i>Nomascus</i> spp.	Siamang	Total
Asia Safari & Mini Zoo Khao Lak	2						2
Bueng Chawak Zoo	5		2				7
Banglamung Wildlife Breeding Centre*	17		1				18
Chiang Mai Zoo	4	1	1		2		8
Damnoen Saduak Tiger Zoo	2						2
Dusit Zoo	5		7		3		15
Hua Hin Safari and Adventure Park	(1)						(1)
Huai Sai Wildlife Breeding Centre/Hua Hin Zoo*	18		3				21
Island Safari Ko Samui	1						1
Khao Kheow Open Zoo	2		2		3	3	10
Khao Tapet Nature & Wildlife Centre	3						3
Ko Samui Monkey Theatre	1						1
Krabi Snake Farm & Monkey School	2						2
Lopburi Zoo	8				2		10
Chiang Mai Monkey School	2						2
Monster World Pattaya	1						1
Korat Zoo	10		9		2		21
Nong Nooch Tropical Botanical Garden			1				1
Pata Zoo	1		3	2	1		7
Phuket Shooting Range & Monkey School	2						2
Phuket Zoo	5						5
Kanchanaburi Safari Park	1						1
Safari World					1		1
Samphran Elephant Ground and Zoo	3						3
Samutprakarn Crocodile Farm & Zoo	3		3				6
Songkhla Zoo	7	1	2				10
Thai Tong Elephant Village	2						2
<b>Total</b>	<b>107 (108)</b>	<b>2</b>	<b>34</b>	<b>2</b>	<b>14</b>	<b>3</b>	<b>162 (163)</b>

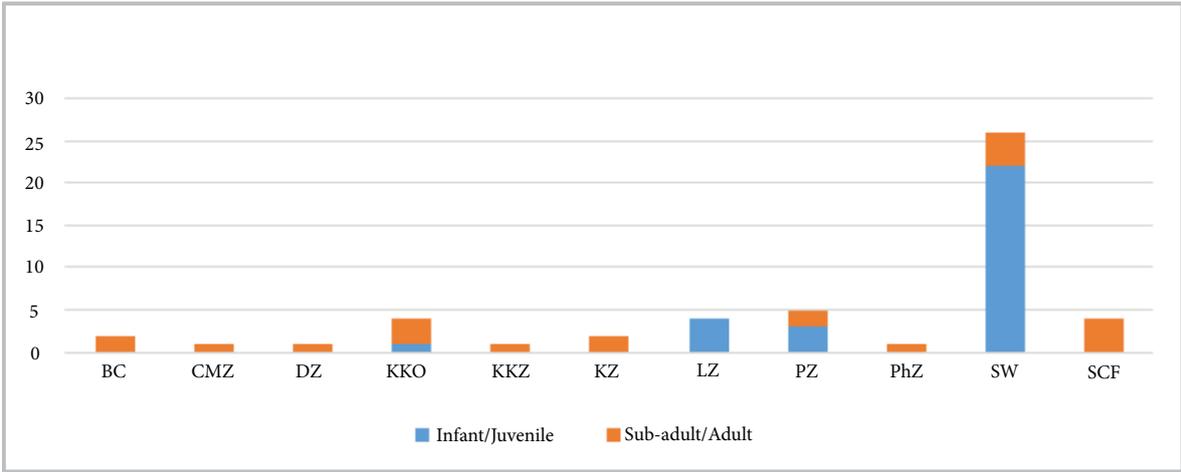
Note: Figures outside the brackets indicate numbers of animals directly observed by researchers; those in brackets include these animals plus additional individuals that staff claimed were present but that were not directly observed.

\* Denotes a Government breeding centre that is open to the public.

A total of 162 gibbons were seen in 26 of the wildlife attractions surveyed in Thailand (Table 4). Four species were recorded, and 16 animals were identified to genus level only (14 *Nomascus* spp. and two *Hylobates* spp.). Two facilities were found to have 21 gibbons, the largest numbers recorded in one location. All of Thailand’s four native gibbon species were observed, with the White-handed Gibbon seen most frequently (107 animals across 24 locations). For 15 facilities, this was the only gibbon species kept. The second most commonly encountered gibbon species was the Pileated Gibbon, with 34 animals found in 11 locations. Just two Agile Gibbons and three Siamang were seen. Fourteen non-native crested gibbons were observed in seven attractions.

Of the 51 orangutans seen in Thailand’s zoos and wildlife attractions, more than 30 (58%) were visually categorized as infants/juveniles. All but one of these were kept at just three facilities: Safari World, which had 22 young animals; Lopburi Zoo, with four; and Pata Zoo, with three, one of which was a young infant under the care of its mother. All of these facilities kept more infant/juvenile orangutans than sub-adults/adults (Figure 3) and conduct animal shows and/or photography sessions using orangutans. The remaining young animal was seen at Khao Kheow Open Zoo which has reported captive births.

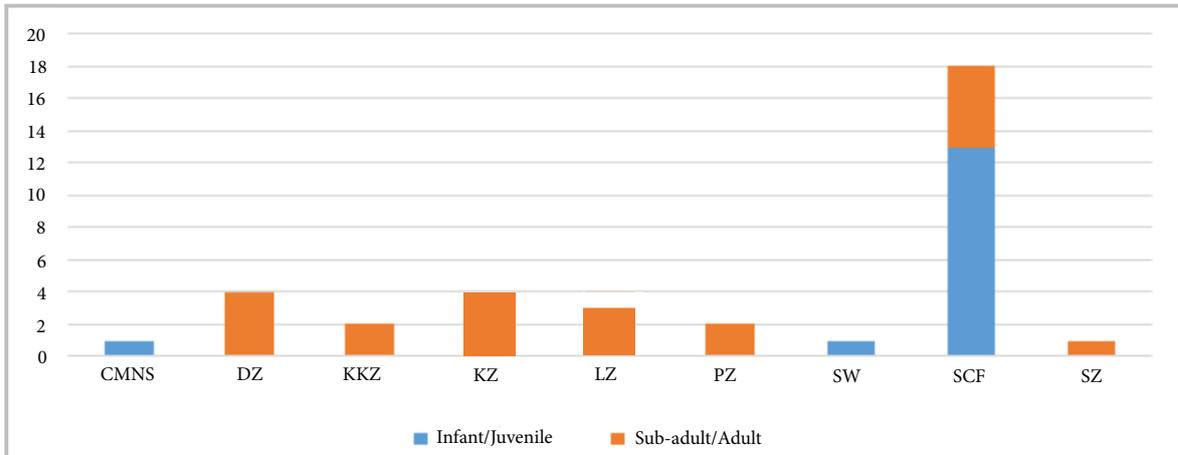
**Figure 3: Numbers of infant/juvenile and sub-adult/adult orangutans seen in zoos and other wildlife attractions in Thailand**



Key: **BC**: Bueng Chawang, **CMZ**: Chiang Mai Zoo, **DZ**: Dusit Zoo, **KKO**: Khao Kheow Open Zoo, **KKZ**: Khon Kaen Zoo, **KZ**: Korat Zoo, **LZ**: Lopburi Zoo, **PZ**: Pata Zoo, **PhZ**: Phuket Zoo, **SW**: Safari World, **SCF**: Samutprakarn Crocodile Farm & Zoo.

Fifteen (42%) of the 36 Chimpanzees seen in Thailand were assessed as infant/juvenile (Figure 4). Thirteen at Samutprakarn Crocodile Farm and Zoo, which also had five sub-adult/adult animals and one each at Chiang Mai Night Safari and Safari World where they were the only Chimpanzees seen. Samutprakarn Crocodile Farm and Safari World both hold shows and/or photo opportunities using Chimpanzees.

**Figure 4: Numbers of infant/juvenile and sub-adult/adult Chimpanzees seen in zoos and wildlife attractions in Thailand**



Key: **CMNS**: Chiang Mai Nigh Safari, **DZ**: Dusit Zoo, **KKZ**: Khao Kheow Open Zoo, **KZ**: Korat Zoo, **LZ**: Lopburi Zoo, **PZ**: Pata Zoo, **SW**: Safari World, **SCF**: Samutprakarn Crocodile Farm & Zoo, **SZ**: Songkhla Zoo,



Crested gibbon *Nomascus* spp. at Lopburi Zoo, Thailand

### CITES trade database

The CITES Trade Database records live imports of just three species of ape into Thailand since 1975, one native (White-handed Gibbon) and two which are not (Chimpanzee and Bornean Orangutan). Exports of 109 live apes from Thailand are recorded since 1975, 61 (56%) of which are listed with the source code I; indicating a seizure or confiscation. These include 58 Bornean Orangutans sent to Indonesia in 2006 and 2007. CITES records show the imports of up to 20 Chimpanzees into Thailand between 1979 and 2001, none of which originated from that species' range states. These include five which arrived from Israel in 2001, one of which is recorded as a seizure (purpose code "I"). Chimpanzee exports from Thailand total eight animals, including six which originated from Russia and were sent to the Philippines in 1994 under a "Q" purpose code indicating that they were for a circus or traveling exhibition.

There are no import records for two taxa observed during the survey, the Western Gorilla and the crested gibbons. Four Black-crested Gibbon are recorded as exported from Thailand. In total only five orangutans are reported as imported into Thailand. Two arrived from Switzerland in 1982 and died after producing only one offspring (which has not bred). The remaining three were imported from Taiwan in 2001. They produced three offspring, of which only one is still living. Of particular note are the absence of any trade data concerning the 14 orangutans said to have been imported for Safari World before Thailand enacted CITES implementing legislation in 1992 or the 36 sent from Thailand to Cambodia in 2003 and 2004 (see Box 2).

## International studbooks

The 2014 international orangutan studbook links 39 animals with seven locations in Thailand. Two orangutans arrived in the Country prior to the establishment of CITES. All six of the ZPO facilities share information on their orangutans with the Studbook and one other location (Pata Zoo) is also recorded as keeping the species. Pata Zoo is linked to five animals, two living and three which are listed as “lost to follow up”, a designation used when no recent data is available and it is not possible to determine whether the animal is living or dead.

Of the 39, 13 are recorded as captive born, 12 as wild caught and 14 as being of unknown origin. Twenty-one living orangutans are recorded by the studbook in Thai facilities, representing 41% of the number observed during the course of the survey. No new acquisitions or births have been recorded in the studbook since the survey ended.

Additional details from the studbook origins report revealed that four animals were received from public or private hands and three came from Taiwanese rescue centre(s), one of which was born there. Seven were obtained from enforcement agencies in Thailand, two which were handed in by the police after being found in a sack. It is not possible to ascertain the origins of any of the other orangutans seen during the survey.

Since so few of the orangutans observed during the survey are recorded in the studbook, it is not possible to estimate the likely age of arrival for most of the captive population in Thailand using this data. For the 26 animals of wild or unknown origin which are listed, only one has no estimated birth date. The age at which the other 25 animals were first recorded in captivity range from under one to fifteen years of age, with an average of five years old. The two animals which were first recorded in captivity at more than ten years of age came to Thailand from Taiwan and there is no data to show how old these were when they first arrived at the rescue centre(s) there.

The 2010 International Studbook for the Western Lowland Gorilla (Wilms, 2011) lists just two gorillas in connection with Thailand, both linked to Pata Zoo and captured from the wild. The male arrived in Thailand in 1984 at around ten years of age, but was first recorded in captivity in Germany at just four years old. The zoo tried to source a female from another zoo, but in the end obtained one from “a source in which we had confidence” (Anon., undated g). The estimated birth date of the female observed during the survey is 1981. She arrived at the Zoo from Guinea at around seven years of age and has been alone since the death of the male in 2007.

## Online trade

A search of classified advertisements online in both Thai and English revealed only one offering a gibbon for sale. The animal was advertised for THB 6500 (USD 180.45). The age of the animal was not stated. Another site provided information on care for pet gibbons, with the writer mentioning that he had purchased a gibbon at a market from a seller who was trying to conceal it in a bag. No indication was given of the price paid for this animal. These findings indicate at least a small illegal trade in apes online. No great apes were found on sale, but gibbons were found in three sites, one of which was a public group with over 18 500 members. Most of these sites were selling small animals such as marmosets Callitrichidae which are not listed as protected in Thailand.



© Jamie Bourhuys/TRAFFIC

Young orangutan *Pongo* sp. at Pata Zoo, Bangkok



© Jamie Bourhuys/TRAFFIC

Pata Zoo, Thailand, the only Western Gorilla *Gorilla gorilla* seen during the surveys

## DISCUSSION

This survey collected information from zoos and other wildlife attractions that were accessible to the public and did not include animals held with or without permits as pets, in private rescue centres, in government-run rescue centres that are generally closed to the public or in other facilities such as temples. In both countries, the numbers of apes in captivity are therefore likely much larger than those considered in this report. Furthermore, in any zoo, not all animals will be on display all the time and, although the surveyors noted numbers of animals claimed to be present at wildlife facilities but not seen, the report confirms the presence only of those animals actually observed. The availability of detailed information from the International Studbook of the Orangutan allowed researchers to determine ages and origins of many animals of these species in both locations.

During the survey, 349 apes were recorded; 99 in Malaysia and 250 in Thailand. Whilst the situation in the two locations differed in many respects, the survey did find some similarities. All native ape species were recorded, along with three others in Malaysia and four in Thailand. For the non-native species, there are no CITES import records for the import of Sumatran Orangutans into Malaysia, or for Western Gorilla and any crested gibbon species in Thailand. All of the species considered in this report are listed in Appendix I of CITES and as such are subject to the strictest of international trade regulations. Despite this, the import of 14 orangutans into Thailand prior to 1992 and the export of 36 orangutans from Thailand to Cambodia between 2003 and 2004 appears to have gone unreported as did the arrival of the two Western Gorillas into Thailand in 1984 and 1987. At the time when these trades occurred, Thailand, Cambodia and Germany were all Party to CITES.

In both locations, orangutans were the most numerous great apes seen and the number of White-handed Gibbons observed in both places was higher than those of other gibbon species.

Some evidence of illegal trade online was found for gibbons in both countries and the 2015 seizure of the two Sumatran Orangutans in Malaysia which were offered for sale on Facebook shows that for great apes, this is also a concern.

Analysis of information from international studbooks was used to estimate the numbers of orangutans of wild or unknown origin and their age at first captive record in both Peninsular Malaysia and Thailand. This data can be considered as largely complete for Peninsular Malaysia since all but one of the zoos known to have orangutans submit information on their animals. In Thailand out of the 12 zoos where orangutans were seen, only the six ZPO zoos provide details of their animals to the studbook.

For both locations, studbook data showed that a significant proportion of orangutans in zoos and other wildlife attractions are of wild or unknown origin. The studbook origin report includes direct mention of enforcement agency involvement for a number of animals and in Peninsular Malaysia, this was also inferred where there was mention of Melaka Zoo in an animal's records. There are enforcement links for most animals of wild or unknown origin in Malaysia and for some in Thailand. Although these animals may have been brought into captivity through illegal actions, their acquisition by the zoos holding them cannot be said to be illegal. It should be recognised that the origin report data is unlikely to be exhaustive, but the collection of so many animals from the wild is a major concern.

Estimates of the average age at which orangutans of wild or unknown origin were first recorded in captivity was made through analysis of studbook data and confirmed the demand for young orangutans. Estimates of the ages of great apes seen during the survey showed that in Thailand there is a demand for young animals for zoos and other wildlife attractions. Where wild apes are

collected as infants or juveniles, it is likely that their removal is associated with the deaths of other apes, not least their mothers.

The large numbers of young orangutans and Chimpanzees seen in zoos and wildlife attractions in Thailand is therefore a serious problem, as is the fact that most of these were observed in facilities that hold ape shows and/or provide photo opportunities for tourists. This raises concerns not only about the numbers of apes removed from the wild, but also about what happens to these animals once they are too old to be used for these purposes and the standard of care that they receive.

The adoption of *Resolution 69.1* by WAZA in 2014 provides clear leadership to the zoo industry on determining the legal origins of all animals, including apes. The presence of so many apes of unexplained origin in the zoos and other wildlife attractions of both Peninsular Malaysia and Thailand shows that at least some of the region's facilities are failing to abide by what should now be seen as industry standards.

Efforts have been made by the authorities in Peninsular Malaysia and Thailand to confiscate, care for and repatriate illegally traded apes, but in both locations, it is possible that enforcement efforts may be limited by the situation with regard to rescue centres. In Peninsular Malaysia, the handing over of Melaka Zoo to private hands in 2013 means that the Government now has limited options for housing seized or rescued wildlife. Malaysia's new, tougher guidelines for zoo standards, while leading to improved conditions, may deter zoos and wildlife facilities from taking in animals that have been confiscated. In Thailand, the breeding centres paid for and operated by the authorities place a considerable strain on the DNP's human resources and budget, while the rescue centres operated by NGOs operate without certification. In both Peninsular Malaysia and Thailand, it is possible that this lack of resources acts as a disincentive for the authorities to confiscate illegally sourced or kept apes, or may result in seized animals being housed in inadequate conditions.

In any country, corruption is a potential hindrance to the effective enforcement of legislation intended to protect wildlife and to the prosecution of wildlife criminals, and Malaysia and Thailand are not exceptions. Zoos and wildlife attractions in both countries, as well as enforcement agencies, should be aware of the possibility of the involvement of corruption in the sourcing of wildlife. The use of falsified CITES documentation to import four gorillas into Malaysia in 2001 (Anon., 2003a) demonstrates that corruption may be involved in the sourcing of some apes for zoos and wildlife attractions, even where valid paperwork seems to have been obtained.

## RECOMMENDATIONS

In order to ensure that apes in Peninsular Malaysian and Thai zoos and wildlife attractions are sourced legally and sustainably, and to encourage the proper care and treatment of these animals, TRAFFIC makes the following recommendations.

### Legislation and guidelines

Thailand's enforcement agencies should be given the powers necessary to discourage the illegal import and possession of non-native ape species and promote the proper care and treatment of apes in captivity. The *Wild Animal Reservation and Protection Act* does not currently provide protection for non-native apes nor allow for penalties to be imposed against those found in possession of these animals where they have been illegally imported.

In Thailand, the onus of proof to demonstrate that non-native ape species of questionable origin have been illegally acquired or kept lies with the Government. Changes should be made to wildlife legislation in Thailand to include the presumption that unlicensed possession of non-native apes is for the purpose of, or product of illegal trade, unless the possessor can prove to the contrary.

In Thailand, the Ministry of Natural Resources and Environment should explore options for repatriation of animals soon after seizure or rescue rather than waiting for five years in situations where there is no criminal prosecution. This would alleviate the burden on Government-run rescue centres.

The Department of National Parks, Wildlife and Plant Conservation (DNP) in Thailand should adopt additional requirements for zoo standards such as those introduced in Peninsular Malaysia in the Guidelines for Zoo Standards in Malaysia (*Garis Panduan Standard Zoo Malaysia*). This should include guidelines for the use of wild animals in performances.

Performances and photography sessions that use apes should be banned by the Ministry of Natural Resources and Environment / DNP, as it appears that these activities may drive the demand for young animals. If these performances are allowed to continue, the relevant Authority should be notified when apes that have been used in performances are being retired. This Authority should also be informed of plans for their future care and housing, as recommended by the CITES/Great Ape Survival Partnership (GRASP) mission to Thailand and Cambodia (Anon., 2007b).

### Enforcement

TRAFFIC supports the efforts by PERHILITAN in Peninsular Malaysia and the DNP in Thailand in monitoring zoos and wildlife attractions under their jurisdiction and encourages regular and unannounced inspections of all such facilities. TRAFFIC recommends that as part of these inspections, the origins of all apes should be ascertained where this is not already known.

Facilities found to be in violation of Act 716 or Act 686 in Peninsular Malaysia, or WARPA or the Customs Act in Thailand, including in regard to the sourcing of apes, should have their permits and licences revoked.

Animals held or obtained in violation of these Acts should be confiscated and placed in suitable accommodation or repatriated, where appropriate.

Prosecutions should be brought against all those who are found committing offences against Act 686 or Act 716 in Peninsular Malaysia or against WARPA or the Customs Act in Thailand.

Collaboration and co-operation between enforcement agencies at both a domestic and international level should be increased.

### Tracking and monitoring

Records on the acquisition, births, deaths and disposition of all apes held in zoos and wildlife attractions in Peninsular Malaysia and Thailand should be submitted to PERHILITAN and DNP to assist in their monitoring of these facilities.

The use of microchips and DNA testing to aid in the identification of captive orangutans was first used by PERHILITAN in 2004. The CITES/GRASP mission on orangutans to Cambodia and Thailand noted the value of collecting biological samples from each animal in case these are needed for DNA profiling (Anon., 2007b). Where this is not already occurring, these measures should also be implemented.

### Promotion of zoo industry standards

WAZA's goal is to provide guidance and support to the world's zoos and it is strongly recommended that it increases its level of engagement with zoos in Southeast Asia. The Association provides assistance, largely relating to improvements in animal husbandry, welfare and presentation, to zoos in need of help where this has been requested by the zoo concerned. This assistance should be extended to include providing guidance on the legal and sustainable sourcing of animals to facilities that are currently reliant on illegal sourcing of stock.

WAZA should strongly encourage that members comply with its resolutions and guidelines, including, where possible, through partner organizations such as SEAZA. This includes Resolution 69.1 on the Legal, Sustainable and Ethical Sourcing of Animals. Although WAZA only has five institutional members in Thailand (all ZPO facilities) and one in Malaysia (Zoo Negara), SEAZA has more members, which allows WAZA to have a wider reach.

In Thailand in particular, many zoos operate in isolation of the international and regional zoo community. Efforts should be made by the international and local zoo community to encourage their increased involvement, including the submission of data on their animals to the relevant studbooks.

### Public engagement

If any law is to act as a deterrent against illegal activity, enforcement action and the consequences of illegal trade must be clearly and publicly communicated. PERHILITAN and the DNP should publicize enforcement actions against wildlife criminals and details of prosecutions on a more regular basis. This should include information on the applicable penalties under Acts 686 and 716 in Peninsular Malaysia and WARPA and the Customs Act in Thailand.

The media should assist in publicizing enforcement actions and prosecutions against wildlife criminals, and in calling for more transparency and consistency in dealing with wildlife crime.

The authorities and media in Peninsular Malaysia and Thailand are urged to promote public awareness of the illegal trade in primates and the risks this poses.

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Chimpanzee *Pan troglodytes* used for photographs with visitors at a zoo in Thailand

TRAFFIC, the wildlife trade monitoring network, is the leading non-governmental organization working globally on trade in wild animals and plants in the context of both biodiversity conservation and sustainable development.

For further information contact:

TRAFFIC  
Southeast Asia Regional Office  
Unit 3-2, 1st Floor  
Jalan SS23/11, Taman SEA  
47400 Petaling Jaya  
Selangor, Malaysia

Telephone: (603) 7880 3940

Fax : (603) 7882 0171

Website: [www.traffic.org](http://www.traffic.org)

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