

ILLEGAL OTTER TRADE IN SOUTHEAST ASIA

JUNE 2018

Lalita Gomez and Jamie Bouhuys









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Published by TRAFFIC. Southeast Asia Regional Office Suite 12A-01, Level 12A, Tower 1 Wisma AmFirst, Jalan Stadium SS 7/15 47301 Kelana Jaya, Selangor, Malaysia Telephone: (603) 7880 3940

Fax: (603) 7882 0171

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Suggested Citation: L. Gomez., and J. Bouhuys (2018). *Illegal otter trade in Southeast Asia*. TRAFFIC, Petaling Jaya, Selangor, Malaysia.

Front cover photograph: A Small-clawed Otter pup for sale in Yogyakarta, Indonesia, November 2017.

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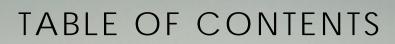
A Small-clawed Otter pup for sale in Yogyakarta, Indonesia, November 2017.











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ABBREVIATIONS AND ACRONYMS

BND	Brunei Dollar
CITES	Convention on International Trade in Endangered Species of Wild
	Fauna and Flora
DNP	Department of National Parks (Thailand)
EIA	Environmental Investigation Agency
ID	Indonesia
IDR.	Indonesian Rupiah
IFAW	International Fund for Animal Welfare
IOSF	International Otter Survival Found
IUCN	International Union for Conservation of Nature
JPY	Japanese Yen
KH	Cambodia
KHR	Cambodian Riel
LAK	Lao Kip
LA	Lao People's Democratic Republic (PDR)
LCES	Law for the Conservation of Endangered Species of Wild Fauna
	and Flora (Japan)
MA	Management Authority (CITES)
MM	Myanmar
MMK	Myanmar Kyat
MY	Malaysia
MYR	Malaysian Ringgit
NGO	Non-governmental organisation
OSG.	Otter Specialist Group
PDR	People's Democratic Republic (Lao)
PH	Philippines
PHP	Philippine Peso
SGD	Singapore Dollar
SSC	Species Survival Commission
TAR	Tibet Autonomous Region
TH	Thailand
THB	Thai Baht
USD	American Dollar
VN	Viet Nam
VND.	Vietnamese Dong
WCS	Wildlife Conservation Society
	Wildlife Friends Foundation Thailand
WPSI	Wildlife Protection Society of India

ACKNOWLEDGEMENTS

We owe many thanks to the TRAFFIC team in Southeast Asia for their invaluable time and effort in helping us undertake this study and put this report together. Particular thanks are owed to Maethinee Phassaraudomsak, Minh Nguyen and Emerson Sy who were integral to the online surveys and so very helpful on insights related to the trade of otters in Thailand, Viet Nam and the Philippines respectively. We thank Boyd Leupen and Richard Moore for their assistance in the market surveys, Kanitha Krishnasamy for her critical review of an earlier draft, Elizabeth John for her dedication to getting our work out there, and the talented Ageela for laying out this report. Our TRAFFIC colleagues in Japan, Tomomi Kitade and Keiko Wakao, are also thanked for sharing their recent findings of the flourishing otter pet trade in Japan with us. The time and assistance of Richard Thomas and Julie Gray at TRAFFIC in getting this report reviewed and ready for publication are always appreciated.

We thank the CITES Management Authorities of Indonesia, Malaysia and Myanmar for responding to our request for otter seizure data. Many thanks are also owed to the numerous individuals who were generous with their knowledge on the otter trade in Southeast Asia. This includes Department of National Parks (Thailand), Heng Sokrith, Hon Naven and Andrew Billingsley (Conservation International), Tom Gray (Wildlife Alliance), Sarah Brook and Simon Mahood (Wildlife Conservation Society), Camille Coudrat (Project Anoulak), Douglas Hendrie (Education for Nature – Vietnam), Irwansyah Reza Lubis (Wetlands International), and Marison Guciano and team at Scorpion Wildlife Trade Monitoring Group. Nat Yin, Director of the Tourism Investment Department, Orn Porsoeun, Director of Department of Tourism Stung Treng, Um Uch Phinisara, Director of Department of Tourism Battambang and Ngouv Sengkak, Director of Department of Tourism Siem Reap are thanked for their assistance and advice on survey logistics in Cambodia. Much appreciation also goes to our guides and translators during the market surveys, Wongpaseuth Paphatsalang, Yok Do and Eddie.

Nicole Duplaix, Chris R. Shepherd, Will Duckworth and Roland Melisch are owed a heartfelt thanks for their review and invaluable contribution to this report. We are also grateful to Nicole Duplaix and Melissa Savage of the IUCN Otter Specialist Group for their support throughout the project. Lastly, a big thank you to the Fondation Segré and Wildlife Reserves Singapore for funding and supporting our work on otters in Southeast Asia.

The Illegal Otter Trade in Southeast Asia

SEIZURE

LIVE OTTERS 59 SEIZED 2016-2017

KEY COUNTRY; SOURCE & DOMESTIC TRADE



High volume seized

5 seizures 35 live otters

KEY DESTINATIONS





Implicated in 3 seizures in Thailand amounting to 32 live otters

Viet Nam



Implicated in 3 seizures amounting to 15 live otters

HIGH



ONLINE TRADE

in Indonesia, Malaysia, Thailand, Viet Nam

560 advertisements over 4 months January - April 2018

Average of 960 observed for sale

KEY COUNTRIES

Indonesia

449 adverts with an average of

7 otters for sale

Thailand



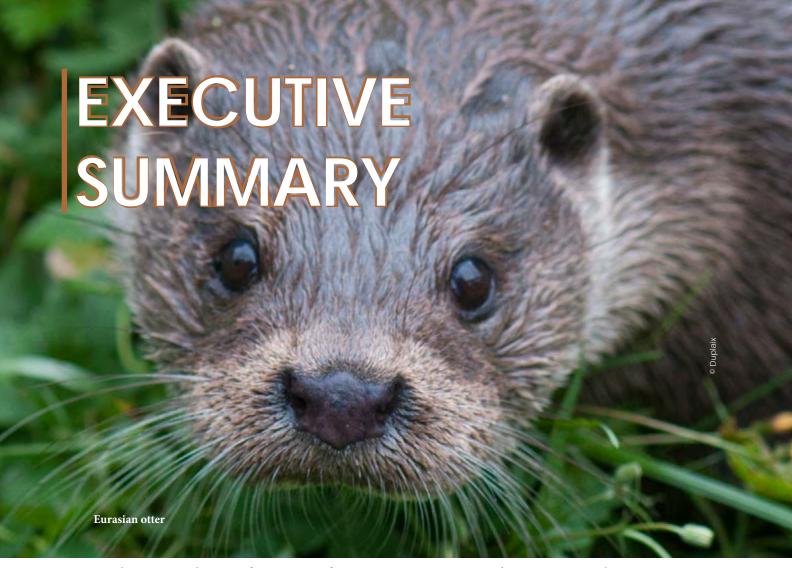
80 adverts with

an average of 204 otters for sale

Main species at risk: **Small-clawed Otter**

International trade regulated under CITES Appendix II





Southeast Asia is home to four species of otters: Eurasian Otter *Lutra lutra*, Hairy-nosed Otter *L.* sumatrana, Small-clawed Otter Aonyx cinereus and Smooth-coated Otter Lutrogale perspicillata. While information on the prevalence of all four species in this region is sparse, it is generally considered that populations are in decline due to the increasing loss of suitable habitat, the impact of pesticides on their wetland biomes and human-otter conflicts caused by perceived or actual threat to local and commercial fisheries. Also a significant threat to otters in the region, but less understood, is the poaching of otters for trade to meet the demand for pets, for their fur, and for parts used in traditional medicines.

This study was undertaken to provide a current understanding of the otter trade in Southeast Asia. It was underpinned by TRAFFIC's previous analysis of otter seizures from 1980-2015 that was published in 2016. Based on the findings of the seizure analysis, eight countries in Southeast Asia were recommended for further study—Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Thailand and Viet Nam. The current study focused on three areas of work i.e. an update of otter seizure analysis (August 2015-December 2017), physical market surveys in Cambodia, Indonesia, Lao PDR and Myanmar, and online trade surveys in Indonesia, Malaysia, Philippines, Thailand and Viet Nam.

Overall, the pet trade emerged as the most pressing threat to the survival of otters, particularly in Indonesia and Thailand. A total of 13 seizure records in four countries (Indonesia, Malaysia, Thailand and Viet Nam) were recorded from 2015–2017 involving the confiscation of 59 live otters, most of which were juveniles. Of these, at least 32 animals in three separate incidents were seized en route to Japan from Thailand. Most of the seizures occurred in Thailand, followed by Indonesia, Viet Nam and Malaysia. The exploitation of otters in these four countries was reinforced by observations of the online trade. Overall a minimum of 560 advertisements were analysed over a four-month period January-April 2018, with a minimum of 734 and a maximum of 1189 otters observed for sale. Most of these

advertisements were recorded from Indonesia (449 adverts amounting to, on average, 711 otters for sale), followed by Thailand (80 adverts, averaging 204 otters for sale), Viet Nam (21 adverts, averaging 27 otters for sale) and Malaysia (10 adverts, averaging 19 otters for sale). The Philippines was the only country examined where no online advertisements were found during this period.

Physical market surveys yielded very few observations of trade in Cambodia, Indonesia, Lao PDR and Myanmar, totalling five skins and two (juvenile) live otters, the latter recorded in Indonesia. Although low in numbers, otters are evidently being hunted to feed the demand, and hunting appears to target species not currently protected by national legislation such as the Small-clawed Otter and Smooth-coated Otter in Cambodia and Indonesia. In 2007, the Cambodian government removed these two species from its wildlife protection law, the reasons for which are unknown.

The Philippines was the only country that did not record a single otter seizure from 2015–2017, nor were there any trade observations in the markets or online. While Malaysia, Myanmar and Viet Nam were implicated in the illegal trade of otters, numbers recorded were small, mostly to supply the pet trade and to a lesser extent trade in skins (in reference to the two skins observed for sale in Myanmar). Overall trade data, whether from seizures, market surveys or online surveys, were however insufficient to draw any firm conclusions as to its extent.

The Small-clawed Otter was the most frequently encountered species in this study being exploited for the pet trade, followed by the Smooth-coated Otter. To a much lesser extent, the Eurasian Otter (in one incident in Myanmar) and Hairy-nosed Otter (in one incident in Indonesia) were also observed in trade. While otters are poached from the wild, it is also possible that some are being captive bred for trade. In both Indonesia and Thailand, there were unconfirmed/unverified reports of otters being bred for trade. Investigation is required to determine if captive breeding is indeed permitted and ongoing, particularly in Indonesia and Thailand, and if so, the scale of captive breeding and how this is being regulated by law—if at all.

This study shows that the commercial exploitation of otters is taking place both domestically and internationally in clear violation of national laws and Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). While few otters were observed in markets, the open nature of the observed trade online is considerable, clearly showing a blatant disregard for national legislation and regulations. The otter pet trade is a concern, particularly in Indonesia and Thailand, where the domestic and international demands of a flourishing exotic pet industry is a potential threat to wild otter populations. The trafficking of otters from these countries to Japan is especially concerning considering loopholes in laws in the three countries that prevent enforcement action. This, combined with loss and disruption of suitable habitat and human-otter conflict, is a risk to the survival of remaining wild otter populations in Southeast Asia.

As such, TRAFFIC makes the following recommendations to combat the illegal trade in otters and ultimately reduce the threat to this group of species:

Legislation

As the four otter species in Southeast Asia are listed in either CITES Appendix I and II, it is imperative that national legislation offers appropriate protection that enables the regulation of international trade. The high level of online trade observed in Indonesia, along with exports of reportedly captive-bred specimens, warrants the species to be regulated and protected by national legislation. *Government Regulation No. 7/1999 on Preservation of Flora and Fauna*, which is currently undergoing revision,

should list both the Small-clawed Otter and the Smooth-coated Otter as protected to prevent illegal hunting, trade and possession of these species. While Indonesia has regulations in place to control the trade of unprotected species by setting annual harvest quotas, there are no provisions in the law regarding penalties or fines against those found in violation of these quotas. The *Wildlife and Wild Plants and Conservation of Natural Areas Law (1994)* of Myanmar should list the Hairy-nosed Otter as a protected species. Although it is uncertain whether the species naturally occurs in the country, observations of trade in markets in Myanmar is an indication of international trade in a non-native CITES listed species, for which regulation is necessary. The removal of Small-clawed Otter and the Smooth-coated Otter as protected species in 2007 from Cambodia's *Law on Forestry (2002)* should be rectified, and the species should be afforded protection, as without it, illegal harvest and trade cannot be regulated.

National legislation in all countries should also include provisions to regulate online wildlife crime; this would also be in line with CITES Decision 17.92¹ on Combating wildlife cybercrime. The seriousness of the illegal trade should be reflected in both wildlife and online trade laws, particularly through high penalties for any transgressions of the law. Online trade undermines law enforcement efforts and complicates efforts to take regulatory action. Strong penalties could favour law enforcement agencies by serving as a strong deterrent, especially as online trade also encourages opportunistic trade, which should be weeded out.

Regulation and Law Enforcement

The high levels of online trade, particularly in Indonesia and Thailand, signal the need to enhance proactive investigation into the growing demand and online trade of otters as pets. Despite their protected status in most countries, otters are not only widely available, but easy to purchase. Arrests and seizures arising from online trade, for a range of species, are taking place in many Southeast Asian countries, but it is imperative that these arrests are followed through with investigations to determine players involved along the trade chain, from source to supply.

Claims of the existence of captive breeding activities taking place in Indonesia and Thailand need investigation and verification. Given there are no harvest quotas for wild otters in Indonesia, it should be made clear and transparent how parent stock is obtained for commercial breeding of otters.

Law enforcement knowledge and capacity should be enhanced across Southeast Asian countries to enable investigations, arrests and convictions of criminals trading in protected species to the full extent of the law. TRAFFIC and the IUCN Otter Specialist Group stand ready to assist relevant enforcement agencies in providing enforcement support and training with regards to identification of otter species and body parts, including distinguishing between the skins of the different otter species. Increasing the capacity of local law enforcement agencies has yielded positive results in curbing illegal trade of wildlife.

¹https://www.cites.org/eng/dec/valid17/81840

Collaboration between enforcement agencies in Indonesia, Malaysia, Thailand and Viet Nam should be enhanced to curb the illegal trading of wildlife occurring online. Incidents of illegal trade should be reported to the relevant law enforcement agencies for action. Alternatively, reports can be made directly to TRAFFIC, via the Wildlife Witness App which can be downloaded for iPhone https://itunes.apple.com/us/app/wildlife-witness/id738897823?mt=8) or Android (https://play.google.com/store/apps/details?id=com.taronga.wildwitness). If taking place on Facebook, a direct report there is in line with Facebook's Community Standards via its policy against any illegal activity, including wildlife crime (https://www.facebook.com/help/181495968648557?ref=communi%20ty_standards). Reports can involve posts, messages, groups and other elements that can be a violation of legislation.



Future Research

Conservation organisations, particularly those focussing on wetland conservation, and research institutions should continue monitoring and reporting on any trade and demand for otters in Southeast Asia. This will not only support enforcement efforts but aid in the effort to understand better and gauge levels of illegal offtake and trade and detect emerging trends. This will also help guide and shape enforcement actions, conservation actions, decision making, and policy interventions.



Further research by conservation organisations, particularly those focussing on wetland conservation, and academic institutions is urgently needed into the status of wild populations of otter species in Southeast Asia to establish national conservation threat levels and guide conservation and law enforcement actions. This should also be increased at known strongholds of otter populations (e.g. southern regions of Thailand, Prek Toal conservation area in Cambodia, Nakai-Nam Theun National Protected Area, Lao PDR).

Considering their threatened status in Southeast Asia, along with incidents of international trade (including from TRAFFIC's previous analysis of otter seizures from 1980–2015), the Parties to CITES should decide whether the up-listing of otters, from Appendix II to Appendix I is merited against criteria under CITES.

Public Awareness

Given that the observed trade is mostly illegal, governments and non-governmental organisations (NGOs) are encouraged to raise awareness and educate the public about the consequences of capture and trade of otters, particularly as online trade appears actively to target young animals for the pet trade. Arrests and criminalisation of those found to be hunting or trading in otters illegally should be publicised, along with the penalties being meted out, to serve as a deterrent to other would-be offenders.

Given the high demand in Indonesia and Thailand, governments and conservation organisations there are urged to explore and pursue avenues to educate consumers and reduce the demand for otters as pets. This may warrant the implementation of long-term consumer behaviour change campaigns on the live animal trade.







Southeast Asia is home to four species of otters: Eurasian Otter *Lutra lutra*, Hairy-nosed Otter *L. sumatrana*, Small-clawed Otter *Aonyx cinereus* and Smooth-coated Otter *Lutrogale perspicillata*. While information on the prevalence of all four species in the wild is sparse, it is generally considered that populations are in decline due to increasing loss of suitable habitat, influence of and misuse of pesticides in man-made and natural wetlands and human-otter conflicts caused by perceived or actual threat to local and commercial fisheries (Aadrean *et al.*, 2015; de Silva *et al.*, 2015; Roos *et al.*, 2015; Wright *et al.*, 2015). Also a significant threat to otters in the region, but less understood, is the poaching for trade to meet the demand for pets, furs, and for parts used in traditional medicine (de Silva, 2011; IOSF, 2014; Gomez *et al.*, 2016).

There is very little information on the illegal otter trade in the region (e.g. magnitude, trafficking hotspots, whether the trade involves wild or captive-bred otters), perhaps because they are relatively low-profile species and not high on the conservation agenda (de Silva, 2011; IOSF, 2014). The potential threat trade to wild otter populations in Asia became more evident in 2006 when remarkable quantities of otter skins were incidentally discovered during a joint study by the Environmental Investigation Agency (EIA) and the Wildlife Protection Society of India (WPSI) into the big cat skin trade in China (Banks et al., 2006). Openly for sale in local markets, otter skins were often found alongside Tiger *Panthera tigris* and Leopard *P. pardus* skins (in two years, no fewer than 1800 otter skins were recorded in a single market in Linxia, China) (Banks et al., 2006). In response to this, the International Union for Conservation of Nature (IUCN) Species Survival Commission (SSC) Otter Specialist Group (OSG) launched its Asian Otter Task Force in 2007 to develop recovery strategies for otters in Asia. In 2015, TRAFFIC in partnership with the IUCN-SSC-OSG, conducted an analysis of otter seizures in Asia between 1980 and 2015 to understand the scale of the illegal trade and species impacted in this trade (Gomez *et al.*, 2016)².

² The study titled Illegal Otter Trade – An analysis of seizures in selected Asian countries between 1980 and 2015, was published and launched at the 13th International IUCN Otter Congress that was held in Singapore in July 2016 and can be downloaded at: http://www.traffic.org/home/2016/7/5/otters-in-asia-at-risk-from-demand-for-their-skins-and-incre.html.

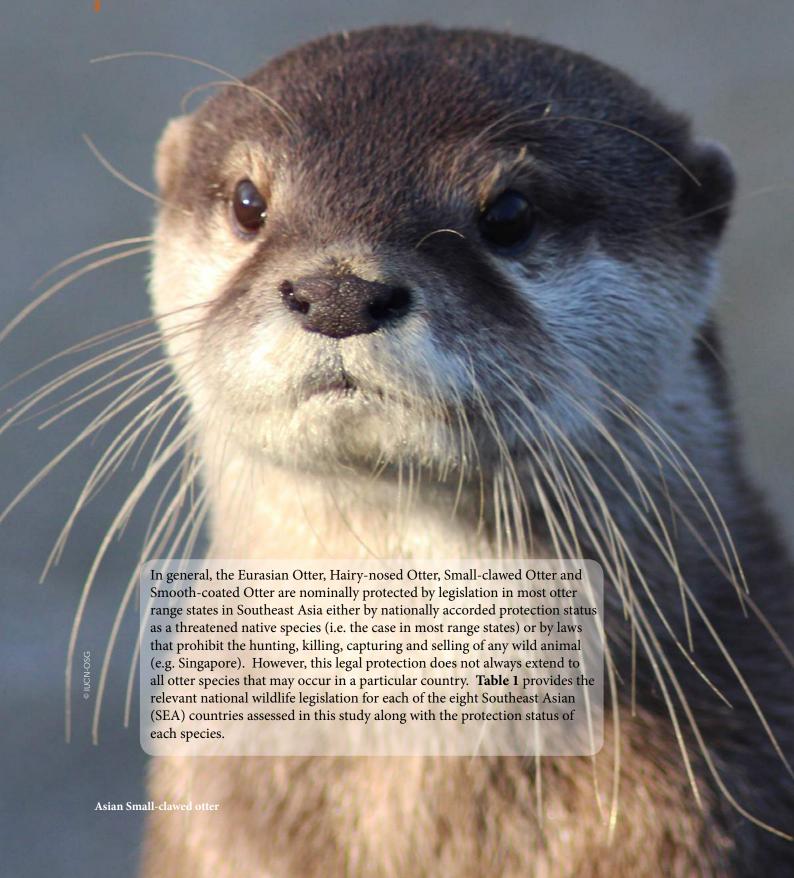
That study, hereinafter referred to as the "otter seizure analysis", revealed that tropical Asian otters were encountered in illegal trade, with 161 recorded otter seizures across 15 countries, involving an estimated 5881 individuals (Gomez *et al.*, 2016). Most of the cases involved skins, especially in China, India and Nepal, and mostly involved the Eurasian Otter and Smooth-coated Otter. That said, there was a large number of seized skins (82%) which were not identified to species level owing to the difficulty of distinguishing between the skins of different otter species, and possibly to a lack of interest/prioritisation by law enforcement agencies in determining the species. There was also a rise in the number of otter skin seizures over the study period, but a decrease in the quantities being seized i.e. from two to three cases a year averaging 50 individuals per seizure, to eight seizures a year of about 30 individuals each. While more seizures could mean an improvement in enforcement efforts or increasing trade in otters, the lower quantities could imply declining otter populations.

The otter seizure analysis also showed that in Indonesia, Malaysia, Thailand and Viet Nam, otters were being captured to supply demand for the growing pet trade, in which the Small-clawed Otter and Smooth-coated Otter were evidently popular. The emerging trend of otters being traded and kept as pets was further revealed through preliminary surveys of social media websites in 2016 (e.g. Indonesia and Viet Nam).

While this initial study provided a preliminary understanding of the illegal otter trade in parts of Asia, it also highlighted significant knowledge gaps in the trade of otters in many Southeast Asian countries. To fill this gap, this study examines the otter trade in eight Southeast Asian countries (i.e. Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Thailand and Viet Nam) encompassing updated seizure analysis, market surveys and online trade monitoring.



LEGISLATION



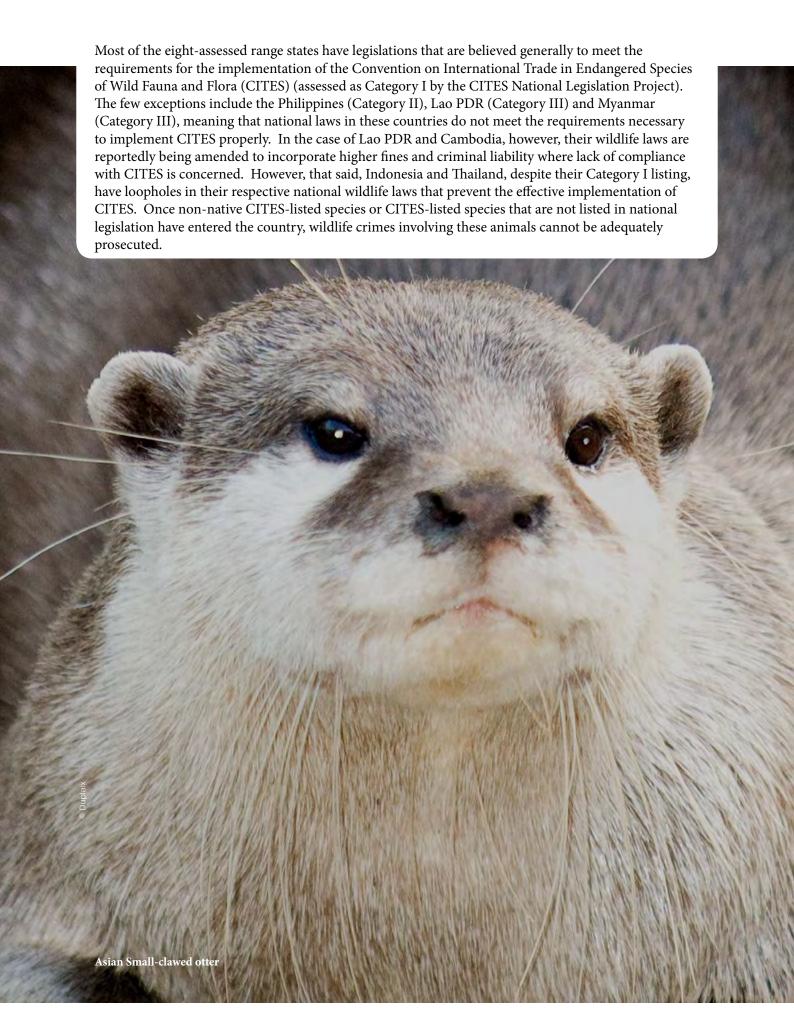


Table 1. Protection Status of Otters in Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Thailand and Viet Nam

Country/ territory	Otter Species Present	Protection Status	Legislation	Notes
Cambodia	Eurasian Otter Hairy-nosed Otter Small-clawed Otter Smooth-coated Otter	Protected Protected Not protected Not protected	Law on Forestry (2002)	Under this law it is prohibited to hunt, possess, process, transport, import and engage in trade of listed species or their parts and derivatives. Captive breeding of listed species is only allowed with a permit issued by the Forestry Administration upon agreement with the Ministry of Agriculture, Forestry and Fisheries. Violation of the law can result in fines of up to five years imprisonment and/ or a fine of up to KHR100 million (USD24 896). Both the Small-clawed and Smooth-coated Otters were removed from the revised Protected Species List (2007).
Indonesia	Eurasian Otter Hairy-nosed Otter Small-clawed Otter Smooth-coated Otter	Protected Protected Not protected Not protected	Act of the Republic of Indonesia No.5 of 1990 concerning conservation of living resources and their ecosystems	Calls for the legal protection of all Indonesian otter species (Kusumawardhani <i>et al.</i> 1994) led to respective commitments given at the First Symposium on Otters in Indonesia in 1994 to assign all four otter species the status as a protected species (Melisch <i>et al.</i> , 1994). However, legal follow-up by Indonesia in 1999 only partially implemented these steps by granting full protection status to two of the four species only.
			Government Regulation No 7/1999 on Preservation of Flora and Fauna. Government Regulation No.	Under the Conservation Act No 5/1990, wildlife falls into two categories i.e. protected or unprotected. Protected has been defined as wildlife that is considered endangered or rare (but the criteria used to classify them as such are unknown). Offences are punishable by a five-year prison sentence and a fine of IDR100 million (USD7 200).
			8, 1999 on Utilization of Wild Plants and Animals.	Government Regulation No 7/1999 lists species that are protected in the country in which the only otter species included are the Eurasian and Hairy-nosed Otters and states that it is prohibited to catch, keep, possess, care for or transport protected animals without permission. That said, under Government Regulation No. 8, 1999, the trade of a Protected species is permitted if the specimens are captive-bred. Captive-bred animals are also subject to regulations under the Decree of the Ministry of Forestry, No.P.19/Ministry of Forestry-II/2005 concerning captive management of wild plant and animal species which defines that only second and subsequent generations of captive-bred Protected animals may be traded. Hunting and trade in animals that are not protected is regulated under Regulation of the Minister of Forestry No. 447/Kpts-II/2003 concerning administration directive of harvest or capture and distribution of the specimens of wild plant and animal species. The regulation states that a yearly provincial quota is set for all animals that can be captured in the wild. Catching animals for which no quota has been set, in excess of quota that have been set, or outside provinces for which quotas have been set, is deemed illegal, even when the species concerned is not considered protected. No harvest quotas have been established for otters. No punishments for transgressions are stated however, and therefore this regulation is difficult to enforce.

Country/ Territory	Otter Species Present	Protection Status	Legislation	Notes
Lao PDR	Eurasian Otter Hairy-nosed Otter Small-clawed Otter Smooth-coated Otter	Protected Protected Protected Protected	Wildlife and Aquatic Law (2007) (currently being amended)	All otter species are protected under Category 1 (Prohibition) of this law which prohibits, the catching, hunting (including removal of carcasses, organs and parts), trading and possession of animals under this Category, unless authorised by the government. This Law also prohibits the trade of Category I species unless they are second or third generation captive-bred. Previously, violations in the law resulted in a penalty of about USD72. The Lao National Assembly is revising its Penal Code, to incorporate higher penalties for wildlife trafficking.
Malaysia	Eurasian Otter Hairy-nosed Otter Small-clawed Otter Smooth-coated Otter	Protected Protected Protected Protected	Wildlife Conservation Act (2010) Wild Life Protection Ordinance (1998) Wildlife Conservation Enactment (1997) International Trade in Endangered Species Act (2008)	All four otter species are listed in the highest protection category, Totally Protected, in the Wildlife Conservation Act 2010 of Peninsular Malaysia, whereby species may only be traded for non-commercial purposes, pending approval/permission from the Ministry. Hunting or keeping such wildlife without permits is punishable by a maximum fine of MYR100 000 (USD23 462) and/or a maximum jail sentence of three years. Under the Wild Life Protection Ordinance (1998) of Sarawak all otter species are listed as Protected, the second highest protection category. Hunting, capturing, possessing, selling, offering for sale or even claiming to offer such an animal for sale without a licence, is prohibited. Offences result in a one year prison sentence and a MYR10 000 (USD2346) fine. Sabah's Wildlife Conservation Enactment (1997) does not list Eurasian Otter (Southeast Asian subspecies L. lutra barang) as Protected, unlike the other three species. However, since CITES Appendix I listed species are treated similarly to Totally Protected species if the violation involves cross-border trade, and Eurasian Otter is listed in Appendix I, it is treated as Totally Protected in such cases. Hunting otters in Sabah results in a fine of up to MYR100 000 (USD25 644) and/or up to five years imprisonment. For the Eurasian Otter, fines of up to MYR250 000 (USD64 110) and up to five years imprisonment. Malaysia's CITES-implementing legislation, the International Trade in Endangered Species Act (2008) is applicable in Peninsular Malaysia, Sabah and Sarawak. Anyone found guilty, including businesses, of illegally importing or exporting any CITES-listed species can be liable to a fine of up to MYR2 million (USD516 941) and a seven year jail term.

Country/ Territory	Otter Species Present	Protection Status	Legislation	Notes
Myanmar	Eurasian Otter Hairy-nosed Otter Small-clawed Otter Smooth-coated Otter	Protected Not protected Protected Protected	Protection of Wildlife and Wild Plants and Conservation of Natural Areas Law (1994).	The Hairy-nosed Otter is not listed as a protected species as it is not recognised as occurring in Myanmar. The other three species are listed as Completely Protected whereby, hunting, killing, possession, selling, transport or transfer of wildlife and wildlife parts is prohibited along with commercial transactions. Conviction of such crimes results in a fine of up to MMK50 000 (USD37), a prison term of up to seven years or both.
Philippines (Palawan)	Small-clawed Otter	Protected	Wildlife Resources Conservation and Protection Act RA9147 (2001)	The Small-clawed Otter is protected under the Wildlife Resources Conservation and Protection Act, Republic Act No. 9147 (2001), which lists it as Endangered. Imprisonments of between one year and two years and/or fines of PHP20 000 (USD380) to PHP200 000 (USD3932) are adjudged on conviction of trading, collecting, hunting or possessing otters without a permit. Permits are only given for scientific or breeding purposes for endangered species if the best available information or scientific data show that these activities are not detrimental to the species's survival and its habitat. A permit is needed for commercial breeding and only progeny and unproductive parent stock may be traded.
Thailand	Eurasian Otter Hairy-nosed Otter Small-clawed Otter Smooth-coated Otter	Protected Protected Protected Protected	Wild Animals Preservation and Protection Act (1992)	This law prohibits the possession and trade of protected wild animals and their carcases unless listed in Section 17 of the Act (which pertains to wildlife that can be bred, however otters are not included). Protected species are listed in the Regulation annexing <i>List of Protected Species</i> , <i>B.E. 2546</i> and all otter species are listed as protected therein. Violations are punishable by a maximum prison sentence of four years and a maximum fine of THB40 000 (USD1278) or both.
Viet Nam	Eurasian Otter Hairy-nosed Otter Small-clawed Otter Smooth-coated Otter	Protected Protected Protected Protected	Decree No.32/2006/ND-CP Decree No.160/2013/ND-CP Decree 157/2013/ND-CP Law No. 12/2017/QH14 Penal Code No. 100/2015/ QH13	All species of otters in the country are protected under the list of endangered, precious and rare forest plants and animals. Decree 32 (Group IB) and Decree 160, prohibit the exploitation and use of otters for commercial purposes. Violations are punishable by measures set out in either the Penal Code No. 100/2015/QH13 (along with Law No. 12/2017/QH14 Amending and Supplementing a number of articles in the Penal Code No.100/2015/QH13) for criminal offences or the Government's Decree no. 157/2013/ND-CP for administrative offences. The highest penalties under the Penal Code are fines up to VND2 billion (USD87 817) and a prison term up to 15 years while the highest penalties under Decree 157 are fines up to VND500 million (USD21 954) for individuals and VND1 billion (USD43 908) for organisations.





Seizure Data

Following-on from the previous otter seizure analysis which covered the period between 1980 and July 2015, this study looks at otter seizures occurring between August 2015 and December 2017 for eight Southeast Asian countries assessed in this study i.e. Cambodia (KH), Indonesia (ID), Lao PDR (LA), Malaysia (MY), Myanmar (MM), Philippines (PH), Thailand (TH) and Viet Nam (VN). Data were extracted from various sources, including TRAFFIC seizure data records, CITES trade database, media reports, grey literature and records from other non-governmental organisations (NGOs). Formal requests for otter seizure data were also sent to CITES Management Authorities (MA) in each of the eight countries. Only the CITES MAs of Indonesia, Malaysia and Myanmar responded to our request with only Malaysia providing data, while Indonesia and Myanmar responded that they had no otter related seizure data. Records of seizures of live or dead otters, their parts and derivatives across Southeast Asia were collected and compiled including where available information on date and place of seizure, origin and destination as well as commodities and quantities seized. Where species identifications were reported, these were accepted as given without further verification.

A "seizure country" was defined as the country where the seizure took place and could be either a source, transit or destination country.

A "source country" was defined as the first known point of a trade route.

A "transit country" was defined as a country which had functioned or was intended to function as both an importing and a re-exporting country in the trade route.

A "destination country" was defined as the last known reported point of a trade route.

Given the inconsistent manner in which seizures, enforcement actions and resulting prosecutions are reported and recorded by the different countries, it is unlikely that this dataset is representative of the complete set of seizures involving otters in Southeast Asia. Due to the inherently covert nature of the illegal wildlife trade, its true extent is unlikely to be reflected by the reported seizure data alone. Seizure records are an indirect measure of trafficking levels, but the data are inherently biased. This is due to a number of factors, including varying levels of law enforcement in each country, different reporting and recording practices of both law enforcement and media, variability in NGO behaviour and advocacy, language biases etc. Therefore, more seizures in one country may not necessarily translate into higher wildlife trafficking levels in comparison to other countries. It is acknowledged that the abovementioned factors, among others, will ultimately influence the results of any seizure analysis, however, there is currently no comparable approach to gauge wildlife trafficking levels.

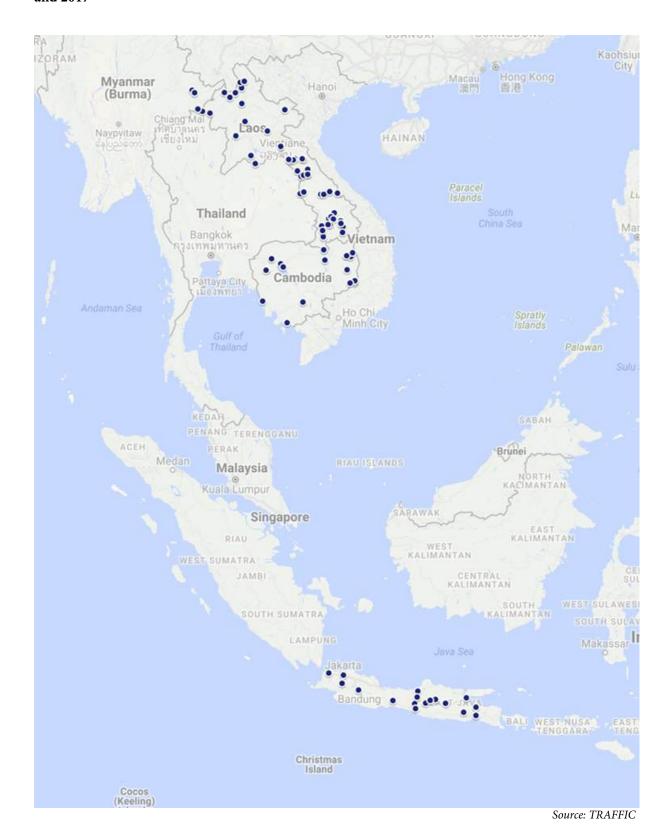
Market Survey

Surveys were conducted over a one year period between 2016 and 2017 in Cambodia, Indonesia, Lao PDR and Myanmar (Figure 1). These countries were chosen for market surveys based on the findings of the previous seizure analysis (1982-2015) i.e. in Cambodia, seizures were mostly of dead animals indicating otters being poached for their skin or traditional medicine trade; in Lao PDR and Myanmar, there was a scarcity of seizure data on otters but otters have been observed in trade in previous market survey studies in these countries; and in Indonesia, seizure data revealed a large domestic market for pet otters. Surveyed locations in each country were selected based on findings of previous research and market surveys undertaken by TRAFFIC and other organisations which had identified important wildlife trade areas. Information collected include price, origins and sources (wild or captive-bred), uses, turnover, etc. Table 2 provides details of areas surveyed for each country.

Table 2. Details of physical market surveys undertaken in each country between 2016 and 2017

Country	Dates	Locations Surveyed
Cambodia	2–21 Nov 2016	Based on otter research in the country (Dong <i>et al.</i> , 2010; Hon <i>et al.</i> , 2010: Royan, 2010; Heng <i>et al.</i> , 2016; Willcox <i>et al.</i> , 2016) and discussions with local NGOs on areas where otters are hunted and areas known for wildlife trade, 16 locations around the country were identified for surveys. At each location all wildlife markets were visited and, where possible, additional information was gathered on the otter trade from local wildlife vendors.
Indonesia	16 Nov-8 Dec 2017	Based on online surveys of the trade in otters, a large number of advertisements selling otters were located on the island of Java. Where this exceeded 10 or more advertisements, and where the presence of large wildlife markets have been recorded based on previous market surveys around the island (Profauna, 2009), 17 cities around the island of Java were selected for surveys. In each location, all wildlife pet markets were surveyed i.e. a total of 30 markets were visited.
Lao PDR	18–28 Apr 2016, 19–22 Jul 2016, 6–20 Dec 2016, 25 Feb–18 Mar 2017	Based on previous studies in selected locations that identify Lao PDR as an important/potential wildlife trade hub (Nijman and Shepherd, 2012; EIA, 2015) and the scarcity of otter trade data, a country-wide survey was conducted across Lao PDR in which 50 locations were surveyed around the northern, central and southern regions of the country. Surveyed locations were selected based on findings of previous research into Lao PDR's illegal wildlife trade, which had identified them as important/potential wildlife trade hubs. In the northern part of the country, a wider variety of retail outlets were encountered and surveyed, and included public markets, shopping malls, street stalls, traditional medicine shops, hotel shops, tourist markets and tourist shops. In the central and southern parts of the country, only markets and street stalls were surveyed as these were most prevalent. Shops/markets were selected based on the general type of wildlife product observed openly for sale and visited opportunistically, meaning that no predetermined list of shops was used during the survey.
Myanmar	19–22 Jun 2017	Based on previous market surveys in Myanmar, two wildlife trading hotspots were identified for surveys i.e. Tachilek and Mong La. Tachilek was successfully surveyed in June. Mong La however was inaccessible during the survey time due to political issues there and no foreigners were allowed access to Special Region No. 4 where Mong La is located. Surveys were instead undertaken in neighbouring Kengtung. A roadside stall near the village of Parng Law was opportunistically observed with otter skins and this too was recorded.

Figure 1. Market survey locations in Cambodia, Indonesia, Lao PDR and Myanmar between 2016 and 2017



Online Surveys

Based on the previous otter seizure report, five countries in Southeast Asia were selected for online surveys i.e. Indonesia, Malaysia, Philippines, Thailand and Viet Nam as seizures in these countries mostly involved live otters for the pet trade. Online surveys were conducted over a 19 week period, between 1 January and 13 May 2017, focussing on Facebook groups and commercial trade portals advertising otters for sale. Only advertisements posted from 1 January 2017 onwards were gathered. Surveys consisted of one hour of research per week, gathering as many adverts on otters as possible. Websites advertising otters for sale were identified using a search engine and searching for combinations of words like "otter", "sale", "buy", as applicable in the local language of each country. A similar method was used within Facebook to find groups in which trade of otters was likely to take place. Facebook groups were the main online market places that were looked at, with other commercial trade platforms only being looked at after Facebook groups had been surveyed. This protocol was maintained to maximise the number of advertisements that could be found in the allocated time.

Data extracted from each post/advertisement included location/base of operation of seller (if available), species of otter (accepted as stated where no pictures were provided), quantity, size and age of otters, price of item(s), method of communication and preferred method of payment. Posts/advertisements that did not display any intent of sale were left out of the data collection.

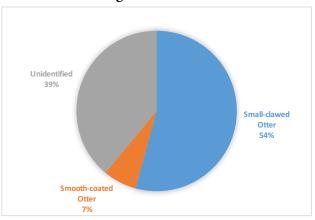
To avoid any inflation of numbers, care was taken to review every advertisement and eliminate all duplicates, including those that appeared with different dates. Different advertisements likely showcasing the same animals were marked as such i.e. estimations have been made both considering them as separate individuals and as the same individuals, to account for the fact that sometimes online traders re-use pictures for sale of different individuals. A distinction has also been made between actual number of otters advertised and where estimations have had to be made (not all posts/adverts relate the exact number of otters offered for sale). Estimations were based on the lowest number possible or counting them from pictures. For example, if a post advertised "otters" for sale without disclosing the numbers, a conservative estimate of a minimum and a maximum of two otters are recorded as being for sale.



Seizure Data Analysis

A total of 13 seizure records were found between August 2015 and 2017. The majority of these occurred in 2017 (n=10 incidents) with only two occurring in 2016 and one in 2015. All seizures involved live otters amounting to 59 individuals. A relatively large number of juvenile otters were seized in these incidents (n=6) incidents amounting to 37 individuals). The Small-clawed Otter was the most frequent species seized (identified in at least seven incidents), the Smooth-coated Otter was identified in one incident and in five incidents, the species of otter seized was not reported (Figure 2). There were only four countries in Southeast Asia that had recent records of otter seizures i.e. Indonesia, Malaysia, Thailand and Viet Nam (Table 4). These were the same countries identified in the previous otter seizure report as

Figure 2: Species of otter seized in Southeast Asia between August 2015 and 2017



Note: A total number of 59 seized specimens. Identification of species is based on information reported and is assumed to be accurate.

connected to a recent spike in the seizure of live otters i.e. the trade in live otters seemed to have begun in the early 2000s in Southeast Asian countries with numbers increasing in the four years (2011–2014) in terms of quantities being seized (averaging six individuals per seizure in comparison to previous years which averaged three to four individuals per seizure) (Gomez *et al.*, 2016).

Country	No. of Seizures	Species	Quantity	Total
Indonesia	3	Smooth-coated Otter	4	7
		Unidentified	3	
Malaysia	2	Small-clawed Otter	2	2
Thailand	5	Small-clawed Otter	24	35
		Unidentified	11	
Viet Nam	3	Small-clawed Otter	6	15
		Unidentified	9	
Total	13			59

There were at least five incidents indicating the international trafficking of otters for the pet market. Four of these occurred in Thailand and all in 2017 (n=2 incidents at Don Mueang Airport, Bangkok; n=1 incident at Suvarnabhumi Airport, Bangkok; and n=1 incident at Hat Yai Airport)—all three airports service international routes. In at least three of these incidents, Japan was the intended destination, with 10–12 otters seized within the personal luggage of Japanese passengers in each case. A Japanese national was arrested in one of these incidents and claimed to have bought the animals at the notorious Chatuchak weekend market (long known for the availability of wildlife being sold illegally) for THB15 000 (~USD475) with the intention of raising them as pets back home in Japan. In the fourth incident which occurred at Hat Yai Airport, two Small-clawed Otters were seized from an 18-year old passenger but the intended destination was not reported. The fifth incident occurred in Viet Nam in December 2015, in which a Vietnamese man was arrested in Ho Chi Minh City attempting to sell nine Small-clawed Otter pups and other wildlife species. He claimed to have smuggled the wild animals from Thailand to sell as pets in Viet Nam and is considered to be a member of a larger wildlife smuggling ring by the Vietnamese authorities who have fined him several times previously for selling protected wildlife (An, 2015).

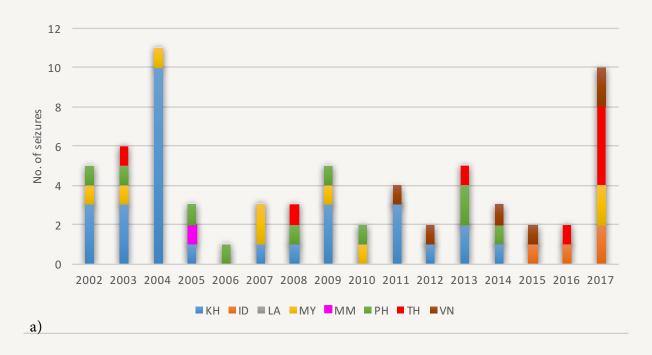
In an additional incident which occurred in Indonesia, four Smooth-coated Otters were seized from a truck at the Soekarno-Hatta Port in Makassar. While the shipment reportedly originated from East Kalimantan, the intended destination, whether catering to a domestic market or international market, was unknown.

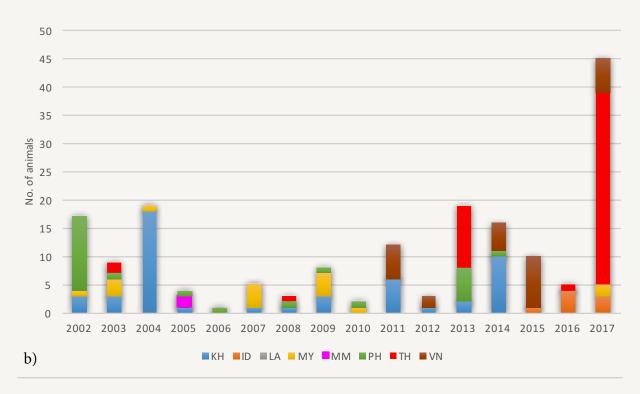
Comparing the data from the previous otter seizure report, most of the seizures in Southeast Asia took place in 2002 onwards (barring two incidents that occurred in Lao PDR in 1987 and 1999 which are not reflected in the figure below) (Figure 3). The data also include additional seizure records not included in the previous study as these were newly found records obtained after the study was completed. This involved four additional seizures for Cambodia that occurred in 2008 and 2009 of four live Hairy-nosed Otters; and eight additional seizures for the Philippines between 2002 and 2014 involving 20 Small-clawed Otters, although it was not reported whether these were of live or dead specimens.

In total, there were 67 seizure records involving 178 otters for the eight countries between 2002 and 2017. The data show that the number of otter seizures in Indonesia, Thailand and Viet Nam increased after 2016, with a notable rise in 2017, including in Malaysia, along with quantities of otters seized. Most of this was attributed to the three seizures in Thailand en route to Japan which, combined, totalled 32 live Small-clawed Otters.



Figure 3. The number of (a) otter seizures per country and (b) quantity of otters seized per country from 2000 to 2017





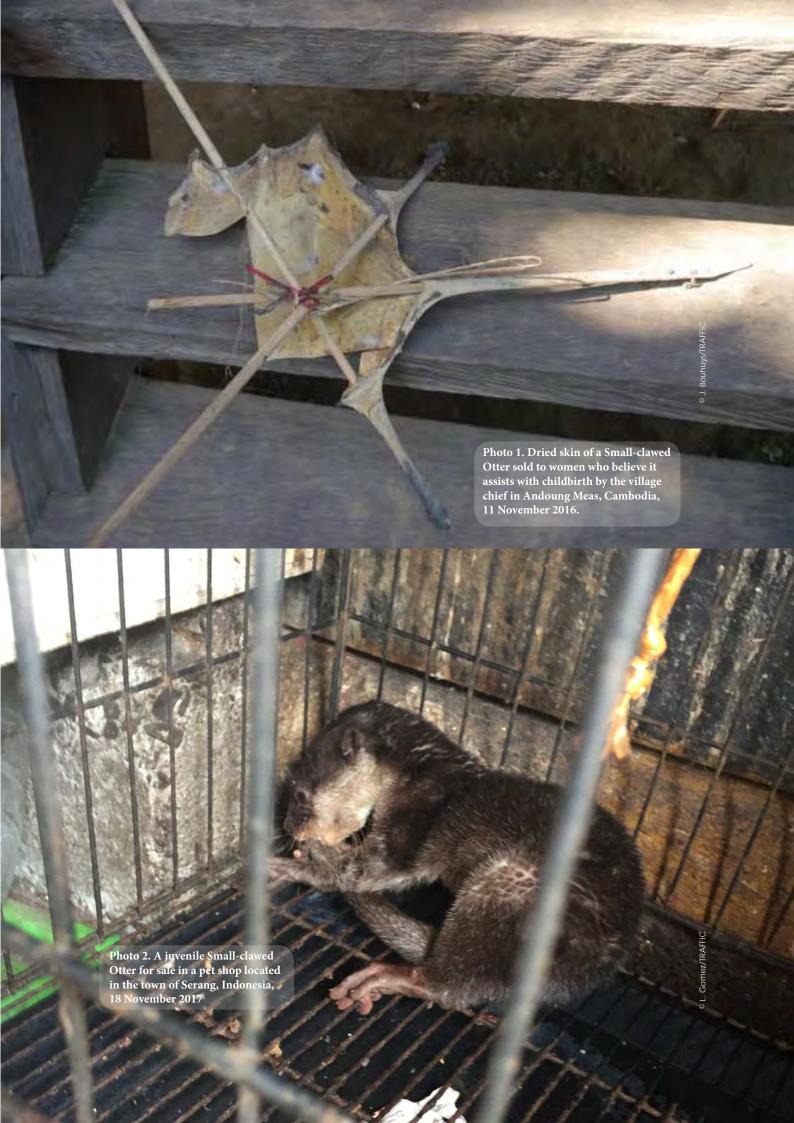
Notes: KH - Cambodia, ID - Indonesia, LA - Lao PDR, MY - Malaysia, MM - Myanmar, PH - Philippines, TH - Thailand, VN - Viet Nam

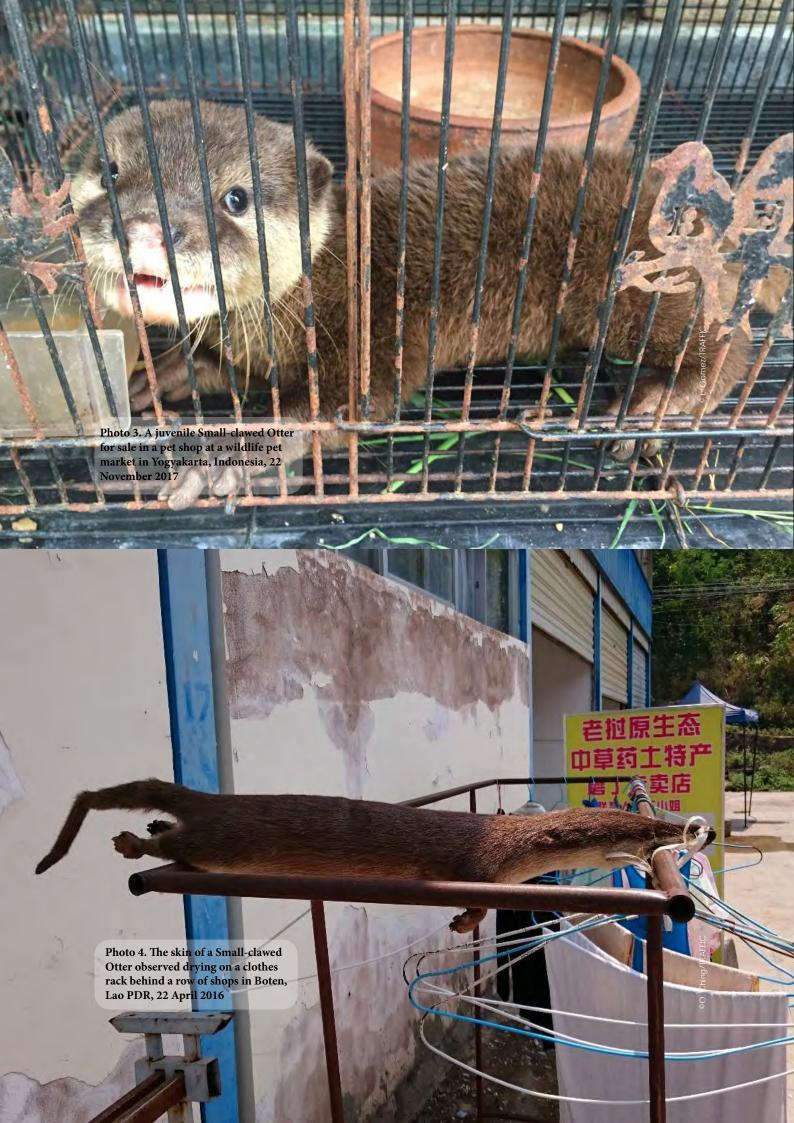
Market Survey Analysis

Otters were found in all four countries surveyed, albeit in relatively small numbers (Table 5). This included five skins and two live otters, the majority of which were identified as Small-clawed Otter (n=5 specimens) followed by Eurasian Otter (n=2 specimens).

Table 5. The open availability of otters observed during the market surveys between 2016 and 2017 in selected countries.

Date	Countries	No. of locations	Species	Commodity	Quantity	Notes
11 Nov 2016	Cambodia	1	Small-clawed Otter	skin	1	Village elder's home in the town of Andoung Meas (Photo 1). He reported that it was an old piece of skin that he had had for several years, bought from a local hunter for USD50. He sold the skin in small pieces to people in the village in the belief that it assists with childbirth.
11& 22 Nov 2017	Indonesia	2	Small-clawed Otter	live	2	Wildlife traders in Serang (Photo 2) and Yogyakarta (Photo 3), Java. Juveniles between three and five months old being sold as pets, priced between IDR1.2million and 1.5million (USD90–115). Trader in Serang claimed the otter was captive-bred, and the trader in Yogyakarta claimed it was wild-caught.
22 Apr 2016 & 8 Mar 2017	Lao PDR	2	Small-clawed Otter	skin	2	One skin was found in Boten, drying on a clothes rack behind a row of shops. The owner of the skin was not known (Photo 4). The second skin was found in a traditional medicine stall in a wet market in Phonsavan (Photo 5). The stall owner was not around for further information to be obtained
20 Jun 2017	Myanmar	1	Eurasian Otter	skin	2	Two stuffed otters were found in a shop in Parng Law (Photo 6). They were for sale for medicinal use for MMK300 000 (USD224) each. According to the owner, he bought the otters from local hunters from the Akka tribe. He said he had had them for two years.





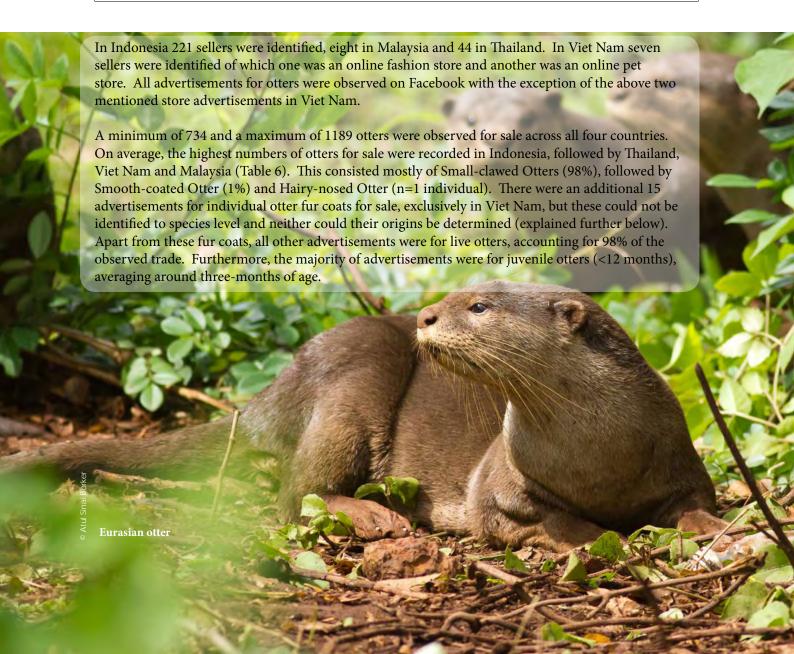


Online Survey Analysis

A minimum of 560 advertisements were recorded over a four month period (this excludes any duplicates or re-posting of the same advert). The majority of these were recorded in Indonesia, followed by Thailand, Viet Nam and Malaysia (Table 6). The Philippines was the only country surveyed where no online advertisements were found over the study period.

Table 6. The number of online advertisements and estimated minimum and maximum number of animals involved

Country	No. of traders	No. of Adverts	Species	Min No. of animals	Est. Max No. of animals	Average
Indonesia	221	449	Small-clawed Otter	503	917	710
			Hairy-nosed Otter	1	1	1
Thailand	44	80	Small-clawed Otter	182	221	202
			Smooth-coated Otter	3	3	3
Malaysia	8	10	Small-clawed Otter	14	16	15
•			Smooth-coated Otter	4	4	4
Viet Nam	7	21	Small-clawed Otter	12	12	12
			Unknown otter species	15	15	15
Total	280	560		734	1189	962



There were 449 advertisements recorded for Indonesia, offering a minimum of 504 and a maximum of 918 otters for sale over the 19 week study period. Barring one advertisement selling a Hairy-nosed Otter, all other advertisements were for Small-clawed Otters (Photo 7). The majority of online traders appeared to be located around the provinces of West Java (42.6%), followed by Jakarta (21.7%) and Banten (18.2%) (Figure 4).

Photo 7. Advertisements for (a) Small-clawed Otter (b) Hairy-nosed Otter posted on Facebook in Indonesia

Otter 2 ekor usia 3 bulanan mandiri udah makan ikan. Jenis kelamin belum





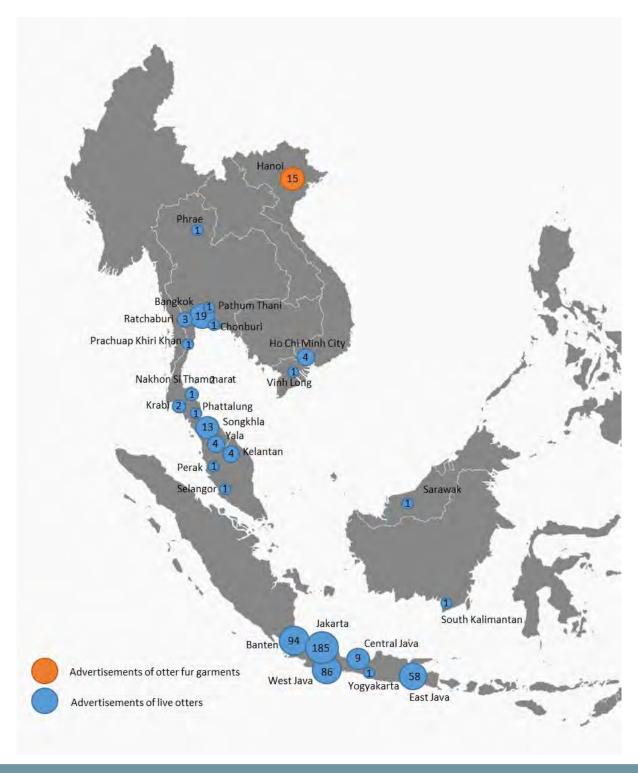


Photo 8. Advertisements for (a) Small-clawed Otter (b) Smooth-coated Otter on Facebook in Thailand



Most of the online advertisements in Thailand were from locations in Bangkok (39.6%) followed by Songkhla (27.1%) (Figure 4). The majority (90%) of otters offered for sale online however are reportedly sourced from the southern parts of the country (Department of National Parks (DNP) Thailand, pers comm, 2018). There were at least 80 advertisements recorded in Thailand offering a minimum of 185 and a maximum of 224 otters for sale over the study period (Photo 8). The majority of these were for Small-clawed Otters with only three animals identified as Smooth-coated Otters.

Figure 4: Location of online traders recorded in Indonesia, Malaysia, Thailand and Viet Nam between January and April 2017.



In Viet Nam, 21 advertisements were recorded over the study period. Six of these were for Small-clawed Otters amounting to at least 12 animals. A further 15 advertisements were for otter fur coats offered for sale by an online fashion store (Photo 9). It is impossible to tell from the advertisements whether the coats were made from genuine otter fur let alone from which otter species. There were also no other details regarding origins i.e. whether these were produced locally or imported (e.g. otter coats

are manufactured and traded legally from North America). There were only ten advertisements from Malaysia (Photo 10) over the study period offering a minimum of 18 and a maximum of 20 otters for sale. Two of these were for Smooth-coated Otters and the remaining were for Small-clawed Otters. In comparison to Indonesia and Thailand, the demand for otters as pets seems to be relatively low in scale in Malaysia and Viet Nam.

Photo 9. Advertisements for (a) otter fur coat (b) Small-clawed Otter for sale in Viet Nam



Photo 10. Advertisement of (a) Smooth-coated Otter (b) Small-clawed Otter for sale on Facebook in Malaysia









DISCUSSION

The primary threat to otters in Southeast Asia from the illegal wildlife trade would appear to be exploitation for the pet industry, evident through the seizure and online data analysis which revealed the relatively high demand for live otters, a large proportion of which were juveniles. The Small-clawed Otter was the species most encountered during this study i.e. it was the species with the highest number of online advertisements with over 900 individual animals recorded over the space of four months and a survey effort of one hour per week (Table 6). It was also the most seized species and the one most encountered during the market surveys.

Indonesia and Thailand appear to play the most active role of source and demand countries for otters in the region. The pet industry in both countries is flourishing. Indonesia dominated, by a high margin, in the number of online advertisements for otters in comparison to the other countries assessed. Here, there are numerous "pet lovers" groups on Facebook dedicated to otters i.e. in February 2018, at least 14 groups were observed specifically dedicated to the keeping of otters with a combined number of 19 514 members. While few otters were observed for sale during the market surveys, traders expressed a willingness to acquire otters for the right price. Several traders claimed to have sold otters in the months preceding the market surveys. At least five traders claimed that otters were sourced from the wild as well as bred in captivity but the latter could not be verified. One wildlife trader at the Sukahaji Market in Bandung in West Java believed that all otters were captured from the wild, caught by local people using targeted otter traps. He also claimed previously to breed otters for the pet trade but had since switched to the more profitable trade in birds. It is possible there may be some limited breeding of otters taking place although the scale of this cannot be quantified. It would appear to be cheaper to trap wild otters than breed them; in addition, there did not appear to be a steady supply of otters into the pet markets visited, suggesting that breeding was not actively and consistently supplying the market. While Indonesia is home to four species of otters, under the current wildlife

laws, only the Eurasian Otter and Hairy-nosed Otter are listed as protected species. That said, both the Small-clawed Otter and Smooth-coated Otter, are technically afforded some level of protection under Regulation of the Minister of Forestry No. 447/Kpts-II/2003 concerning administration directive of harvest or capture and distribution of the specimens of wild plant and animal species which governs the hunting and/or harvesting of non-protected species. Within this Regulation, yearly provincial quotas are set for all animals that can be captured in the wild. No harvest quotas have been established for either of the two unprotected otter species found in Indonesia and therefore it should technically be illegal to hunt/ or trade in these two species.

In Thailand, the Wildlife Friends Foundation, a non-governmental organisation that rescues captive animals, has steadily been receiving calls from owners seeking healthcare for their pet otters or refuge for unwanted pets, reportedly purchased from captive-breeders or off social media sites (WFFT, 2017). Exotic pet cafes (that display wildlife) have also become more prominent in Thailand (Yee, 2017), which could be fuelling the demand for exotic animals like otters. All four otter species are completely protected in Thailand and under current legislation they cannot be hunted, traded, owned, propagated/bred, imported or exported. Yet there seems to be little control or enforcement action taking place given their easy and open availability on social media. Much like Indonesia, there are unverified accounts of otter captive-breeding facilities that supply the market demand in Thailand. However, the DNP reports that there are no legal otter farms in the country and that only zoos have permits to keep otters (DNP Thailand, pers *comm.*, 2018).

Both Indonesia and Thailand are also implicated in the trafficking of otters to Japan. There were three seizures in Thailand alone of 32 live otters en route to Japan. Small-clawed Otters have also been observed for sale at exotic pet shops and reptile fairs in Japan (TRAFFIC, unpubl. data). In January 2018, a spot survey of Japan's biggest reptile fairs found two adult Small-clawed Otters for sale for JPY1.7mil/pair (~USD13 000) and three pups for JPY950 000/pup (~USD7 200). The seller claimed the two adults were a breeding pair and that the pups were bred domestically, although not from the two adults on display (Keiko Wakao and Tomomi Kitade, TRAFFIC, pers *comm.*, 2018). Additionally, there was one pet shop in Tokyo that reported to import captive-bred otter pups from what was claimed to be the only government approved otter breeding facility in Indonesia (Keiko Wakao and Tomomi Kitade, TRAFFIC, pers *comm.*, 2018). However, upon further questioning of staff at the shop regarding the licensed facility, the response received raised doubts as to whether the pups were actually bred in captivity or taken from wild parents and raised in captivity, making them illegal specimens.

In 2016, there were at least three records in the CITES Trade Database showing the export of captive-bred Small-clawed Otters from Indonesia; two were to Japan (eight animals reported to be for commercial and personal purposes), and one to China (six animals for commercial purposes). The existence or otherwise of a licensed captive-breeding facility in Indonesia is yet to be verified. However, given there are no harvest quotas for wild otters in Indonesia, it is highly questionable how parent stock would have been obtained for any captive-breeding facility. This is further compounded by loopholes in Japan's wildlife law i.e. the Law for the Conservation of Endangered Species of Wild Fauna and Flora (LCES), which only protects species that are listed in CITES Appendix I. There are no provisions in the law to take action against traders who illegally import and subsequently trade in CITES Appendix II species, like otters, once they are in the country. This also means that Japan is unable to implement and comply with CITES requirements effectively to regulate non-native CITES-listed species entering international trade.

There seems to be minimal open trade of otters in physical markets in Indonesia, Cambodia and Lao PDR. Despite the extensive areas covered during the market survey (with the exception of Myanmar), very few otters were observed openly for sale. This could be due to depleted otter populations in the







This assessment provides a snapshot of the commercial exploitation of otters taking place both domestically and internationally in clear violation of national laws and CITES regulations, with a large proportion of the trade apparently feeding a local demand within Southeast Asia. While few otters were observed in the markets, the online trade in otters is clearly considerable and appears to be the most immediate threat. The open nature of the observed online trade clearly shows a blatant disregard for national legislation and regulations. Otters' popularity as pets, especially Small-clawed Otters, is a concern, particularly in Indonesia and Thailand. This flourishing demand is not just illegal, but a potential threat to the long-term survival of wild otter populations. Regarding international trade, the trafficking of otters from these countries to Japan is especially concerning considering loopholes in Japanese law that prevent enforcement action. Unsurprisingly, there are few data available on the four otter populations that would allow understanding of population sizes or densities in the wild. This makes it difficult to determine how significantly otters are being impacted by trade. However, with the relatively high frequency (that is potentially increasing) of the trade in live animals, combined with the loss of suitable habitat, the impact of pesticides on wetlands and human-otter conflict, the trade is likely a risk to the long-term survival of remaining wild otter populations in Southeast Asia. In light of this, and the findings from this study, TRAFFIC makes the following recommendations:

Legislation

As all four otter species in Southeast Asia are listed in either CITES Appendix I or II, it is imperative that national legislation offers appropriate protection that enables the regulation of international trade. The high level of online trade observed in Indonesia, along with reported exports of captive-bred specimens, warrants the species to be regulated and protected by national legislation. Government Regulation No. 7/1999 on Preservation of Flora and Fauna, which is currently undergoing revision, should list both the Small-clawed Otter and the Smooth-coated Otter as protected to prevent illegal hunting, trade and possession of these species. While Indonesia has regulations in place to control the trade of unprotected species by setting annual harvest quotas, there are no provisions in the law regarding penalties or fines against those found in violation of these quotas. The Wildlife and Wild Plants and Conservation of Natural Areas Law (1994) of Myanmar should list the Hairy-nosed Otter as a protected species. Although it is uncertain whether the species naturally occurs in the country, observations of trade in markets in Myanmar is an indication of international trade in a non-native CITES listed species, for which regulation is necessary. The removal of Small-clawed Otter and the Smooth-coated Otter as protected species in 2007 from Cambodia's Law on Forestry (2002) should be rectified, and the species should be afforded protection, as without it, illegal harvest and trade cannot be regulated.

National legislation in all countries should also include provisions to regulate online wildlife crime; this would also be in line with CITES Decision 17.923 on Combating wildlife cybercrime. The seriousness of the illegal trade should be reflected in both wildlife and online trade laws, particularly through high penalties for any transgressions of the law. Online trade undermines law enforcement efforts and complicates efforts to take regulatory action. Strong penalties could favour law enforcement agencies by serving as a strong deterrent, especially as online trade also encourages opportunistic trade, which should be weeded out.

Regulation and Law Enforcement

The high levels of online trade, particularly in Indonesia and Thailand, signal the need to enhance pro-active investigation into the growing demand and online trade of otters as pets. Despite their protected status in most countries, otters are not only widely available, but easy to purchase. Arrests and seizures arising from online trade, for a range of species, are taking place in many Southeast Asian countries, but it is imperative that these arrests are followed through with investigations to determine players involved along the trade chain, from source to supply.

Claims of the existence of captive breeding activities taking place in Indonesia and Thailand need investigation and verification. Given there are no harvest quotas for wild otters in Indonesia, it should be made clear and transparent how parent stock is obtained for commercial breeding of otters.

Law enforcement knowledge and capacity should be enhanced across Southeast Asian countries to enable investigations, arrests and convictions of criminals trading in protected species to the full extent of the law. TRAFFIC and the IUCN Otter Specialist Group stand ready to assist relevant enforcement agencies in providing enforcement support and training with regards to identification of otter species and body parts, including distinguishing between the skins of the different otter species. Increasing the capacity of local law enforcement agencies has yielded positive results in curbing illegal trade of wildlife.

Collaboration between enforcement agencies in Indonesia, Malaysia, Thailand and Viet Nam should be enhanced to curb the illegal trading of wildlife occurring online. Incidents of illegal trade should be reported to the relevant law enforcement agencies for action. Alternatively, reports can be made

³-https://www.cites.org/eng/dec/valid17/81840

directly to TRAFFIC, via the Wildlife Witness App which can be downloaded for iPhone https://itunes. apple.com/us/app/wildlife-witness/id738897823?mt=8) or Android (https://play.google.com/store/ apps/details?id=com.taronga.wildwitness). If taking place on Facebook, a direct report there is in line with Facebook's Community Standards via its policy against any illegal activity, including wildlife crime (https://www.facebook.com/help/181495968648557?ref=communi%20ty_standards). Reports can involve posts, messages, groups and other elements that can be a violation of legislation.





Future Research

Conservation organisations, particularly those focussing on wetland conservation, and research institutions should continue monitoring and reporting on any trade and demand for otters in Southeast Asia. This will not only support enforcement efforts but aid in the effort to understand better and gauge levels of illegal offtake and trade and detect emerging trends. This will also help guide and shape enforcement actions, conservation actions, decision making, and policy interventions.

Further research by conservation organisations, particularly those focussing on wetland conservation, and academic institutions is urgently needed into the status of wild populations of otter species in Southeast Asia to establish national conservation threat levels and guide conservation and law enforcement actions. This should also be increased at known strongholds of otter populations (e.g. southern regions of Thailand, Prek Toal conservation area in Cambodia, Nakai-Nam Theun National Protected Area, Lao PDR, etc).

Considering their threatened status in Southeast Asia, along with incidents of international trade (including from TRAFFIC's previous analysis of otter seizures from 1980-2015), the Parties to CITES should decide whether the up-listing of otters, from Appendix II to Appendix I is merited against criteria under the CITES.

Public Awareness

Given that the observed trade is mostly illegal, governments and non-governmental organisations (NGOs) are encouraged to raise awareness and educate the public about the consequences of capture and trade of otters, particularly as online trade appears actively to target young animals for the pet trade. Arrests and criminalisation of those found to be hunting or trading in otters illegally should be publicised, along with the penalties being meted out, to serve as a deterrent to other would-be offenders.

Given the high demand in Indonesia and Thailand, governments and conservation organisations there are urged to explore and pursue avenues to educate consumers and reduce the demand for otters as pets. This may warrant the implementation of long-term consumer behaviour change campaigns on the live animal trade.

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

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