

Revealing the online trade of Sun Bears in Indonesia

Lalita Gomez, Chris R. Shepherd and John Morgan

INTRODUCTION

Sun Bears *Helarctos malayanus* are the only native bear species in Indonesia and are split into two subspecies—*H.m. malayanus*, which occurs on mainland Asia and on the island of Sumatra, and *H.m. euryspilus*, endemic to the island of Borneo. Indonesia is an important stronghold for Sun Bears, with one of the highest densities of this species compared with other range States (Scotson *et al.*, 2017). Nevertheless, Sun Bears are far from safe in Indonesia. Studies have shown that the country has one of the highest rates of deforestation globally (FWI/GFW, 2002; Margono *et al.*, 2014), resulting in diminishing habitat crucial for the species. Indonesia is also a major centre of poaching and the illegal wildlife trade is considered a prominent threat to a wide variety of species, and Sun Bears are no exception (Meijaard, 1999; Kurniawan and Nurashid, 2002; Nijman and Nekaris, 2014; Gomez and Shepherd, in prep.). The bears are being killed to meet both a domestic and international demand for gall bladders and bile for use in traditional medicine, meat and paws for the exotic food trade, and parts (e.g. claws, teeth, skin, skull) prized as talismans and trophies. Live cubs are also traded as pets. However, the extent and magnitude of the trade in Indonesia is unknown. In 2017, during a workshop organised by the IUCN SSC Bear Specialist Group to develop a Conservation Action Plan for Sun Bears, Indonesia was flagged as a country requiring further monitoring of and investigation into the poaching and trade of this species so that effective law enforcement and other conservation interventions can be determined.

Increasingly, illegal wildlife trade is being conducted on online platforms largely due to the low risk of detection, global reach and the anonymity it provides (Derraik and Phillips, 2009; IFAW, 2011; Lavorgna, 2014; Harrison *et al.*, 2016). According to WCS Indonesia, at least 40% of wildlife traders in Indonesia use online platforms for their transactions (Sinaga, 2017). Considering that much of Indonesia's wildlife trade is shifting from physical markets to online markets, it is suspected that trade in bears over the internet is also on the rise. Here, the authors attempt to address the paucity of information on the illegal trade of Sun Bears and related products by investigating the trade occurring online and identifying what action can be taken to reduce such demand and halt the decline in populations of this species.

LEGISLATION

Sun Bears are classified as Vulnerable by the IUCN Red List of Threatened Species (Scotson *et al.*, 2017) and the species is listed in Appendix I of CITES (Convention on

Yang Ada Stock Beruang Madu di tunggu komentarnya
Yang Bisa Transaksi REKBER
#MAMBA
#BerkasBerkas
MAKASIH ADMIN DAN JAJARANNYA



Sun yang sedang
Lukasi (REKBER)



Screenshots of a Sun Bear cub and a pendant carved from a Sun Bear tooth, for sale online.

International Trade in Endangered Species of Wild Fauna and Flora). Sun Bears have been completely protected in Indonesia since 1973 under the *Act of the Republic of Indonesia No. 5 of 1990 Concerning Conservation of Living Resources and their Ecosystems* and *Government Regulation No. 7 1999 Concerning the Preservation of Flora and Fauna*. It is prohibited to catch, injure, kill, keep, possess, care for, transport or trade protected species, whether alive or dead. Violation of the law carries a maximum penalty of five years in prison and a fine of IDR100 million (~USD7,100).

Cybercrime in Indonesia is governed by *Act No. 11 (2008), Concerning Electronic Information and Transactions*, and to a lesser extent, *Law No.7 (2014) about Trade*. These laws focus on managing trade and the protection of electronic information and transactions, with prohibitions on fraud. It is not a criminal offence to post offers of illegal products for sale; only the sale of such products is illegal. Further, authorities can only take enforcement action against a person in possession of protected species or when physically involved in an illegal transaction, gambling, defamation and extortion. Neither law specifically addresses measures to regulate online wildlife trade and related crimes.

METHODS

Online surveys were conducted between 1 November 2018 and 31 January 2019. All offers of bears or bear parts for sale obtained during this period were recorded along with screenshots of each post. Online surveys were focused on Indonesian Facebook wildlife trade groups encompassing Closed (n=10), Public (n=3) and Secret Groups (n=2) and consisted of four hours of research per week. A Public Group and its posts can be viewed by everybody; a Closed Group can be found by anyone on Facebook but only members of the Closed Group can see the Group's posts; a Secret Group and related posts are visible only to the group's members. Facebook search filters were used to narrow down searches by year and month, and by trade group. The search dated back

Commodity	2013	2014	2015	2016	2017	2018	2019	Total (posts)	Total quantity (specimens)
Claw			2	20	29	14	2	67	140
Live	1	3	18	12	1	5	2	42	47
Skull						1		1	1
Taxidermy (whole)					1			1	2
Taxidermy (paw)					1			1	1
Teeth			1	13	25	13		52	86
Total	1	3	21	45	57	33	4	164	277

Table 1. Bear commodities for sale in Indonesia on Facebook by year based on posts between 1 January 2013 and 31 January 2019. Note: $n=158$ Facebook posts, with several advertising more than one type of commodity.

to 2013 and was undertaken in the Indonesian language using the key word “beruang”, which means “bear” in Indonesian. Researchers collecting data were fluent in both Indonesian and English. Where possible, data were extracted from each posting and included location/base of operation of seller (if available), the type of commodity on sale (e.g. live or parts—teeth, claws, skin, skull, etc.), quantity, age, price of bears on sale, name of the Facebook group, date of post, etc. No personal data about the sellers were collected and no interaction with sellers took place. The number of bears or parts being offered for sale was extracted directly from the posts when provided or was estimated based on the pictures provided or otherwise estimated to involve a minimum of one item/individual. Care was taken to omit products that were obviously fake or likely parts of other animals. However, due to the difficulty in determining the authenticity of a bear part on sale from the images alone and considering some commodities had been altered (e.g. bear canines were sometimes found painted, polished or carved, for sale as pendants), it was generally assumed that commodities offered were genuine. Care was also taken to avoid inflation of numbers, with each post cross-checked to remove duplicate records.

RESULTS

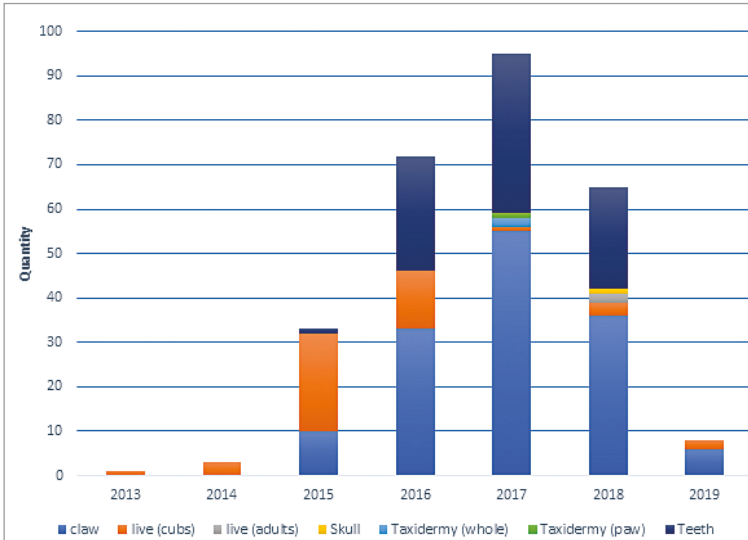
A total of 158 posts (six of which offered more than one item) offering either live bears or bear parts for sale were reviewed on Facebook for the period January 2013 to January 2019. This included 15 Facebook Groups and 111 individual sellers, of which seven were associated with online outlets. The Facebook Groups comprised 10 Closed ($n=143$ posts), three Public ($n=9$) and two Secret Groups ($n=6$). Information on the location of the seller was available in 149 posts with the highest number originating from Java (94.6%), the majority of which were reported to be based in Jakarta ($n=75$ posts), followed by West Java ($n=43$), Banten ($n=17$), East Java ($n=3$), Central Java ($n=1$) and Surabaya ($n=1$). The remaining 5.4% were based in Sumatra ($n=6$), Kalimantan ($n=1$) and Sulawesi ($n=1$).

The main commodities recorded for sale in terms of frequency and abundance were bear claws followed by bear teeth and live bears (Table 1). Fig. 1 gives a breakdown of the quantity of each commodity per year based on the posts recorded, while Fig. 2 lists a breakdown of the quantity of each commodity per province based on data extracted from seller locations.

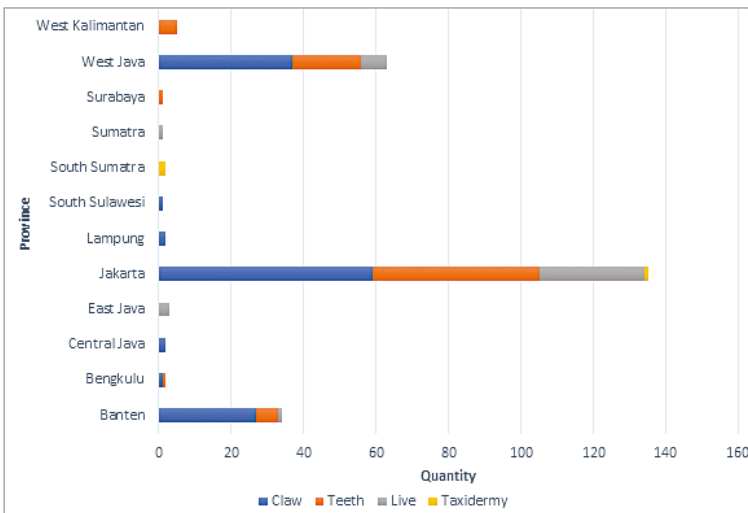
Commodity	Posts	No. of specimens	Price (IDR)	Price (USD)
Claw	26	69	50–450,000	4–32
Claw (key chain)	2	2	100–500,000	7–35
Claw (pendant)	39	69	140–300,000	10–21
Live (adult)	2	2	-	-
Live (cub)	40	45	6–13 million	424–918
Skull	1	1	450,000	32
Taxidermy (whole)	1	2	1.5 million	106
Taxidermy (paw)	1	1	-	-
Teeth	27	49	175–600,000	12–42
Teeth (carved pendant)	5	11	1–1.5 million	70–106
Teeth (pendant)	20	26	250,000–1.2 million	18–85

Table 2. The price range for bear commodities observed for sale in Indonesia on Facebook.

The majority of prices were found in posts obtained between 2016–2018 ($n=72$ of 79 posts obtained; none in 2013 and 2014). Note: currency conversion based on <https://www.oanda.com/currency/converter/> as of 11 April 2019.



◀ Fig. 1. The quantity of bear commodities for sale on Facebook in Indonesia by year based on posts between 1 January 2013 and 31 January 2019.



◀ Fig. 2. The quantity of bear commodities for sale on Facebook in Indonesia by province based on posts between 1 January 2013 and 31 January 2019.

The claws offered for sale were either described as bear claws (n=26) or as pendants (n=39) and key chains (n=2). Similarly, teeth were for sale (n=27) or as pendants/necklaces, some of which were carved (n=25). The live bears offered for sale represented 47 individuals, mostly bear cubs (n=40 posts; 45 individuals), with two posts each offering one adult Sun Bear.

The Facebook posts obtained covered a period between 1 January 2013 and 31 January 2019. The majority were obtained for 2017 (n=57) followed by 2016 (n=45) and 2018 (n=33) and primarily involved bear teeth and claws. Posts offering live bear cubs for sale were mainly observed in 2015 and 2016. Prices for the different bear commodities were available in 79 of the 158 posts obtained. It is unclear how prices are determined for the various bear parts on sale as the range varies and overlaps between the different commodities (Table 2). Nevertheless, the most expensive commodity on sale were live bear cubs, with prices ranging between IDR6 million and IDR13 million (~USD424–USD918).

DISCUSSION

Illegal wildlife trade in Indonesia is widespread and online platforms are used to buy and sell myriad live animals and their parts and derivatives. This study shows that Sun Bears are being offered for

sale online in violation of national law and provides evidence of a continuing domestic demand for bear parts (mostly teeth and claws) for trophies and talismans. It also reveals a high number of live bears are being traded for the local pet trade, with 42 posts documented, representing 45 bear cubs and two adult bears for sale. While the posts offering live bear cubs for sale peaked in 2015, with 18 posts amounting to 22 cubs (averaging two to three cubs/month), in just the first month of 2019, there were at least two posts each offering a bear cub. Continued monitoring of the online trade in bears as pets is therefore warranted to assess trends and the potential impact on future wild bear populations in Indonesia. It is also consistent with other identified markets in the region (e.g. Malaysia and Thailand) which found a high number of live animals for sale on Facebook (Bouhuys and Scherpenzeel, 2015; Krishnasamy and Stoner, 2016; Gomez and Bouhuys, 2018).

Screenshots of raw and worked Sun Bear teeth and claws for sale online, featuring some items fashioned into jewellery.



No gall bladders or bile-based products were observed for trade online. Bear seizure data for Indonesia were recently analysed for 2011 to 2018 and the findings were similar to this study, with domestic demand primarily involving bears as pets and for bear parts (claws and teeth) for ornamental purposes (Gomez and Shepherd, in prep.). However evidence was also found of bears being killed for food and for their parts used in traditional medicine which were being traded locally as well as to foreign markets, namely Cambodia, China, Kuwait, Malaysia and Viet Nam (Gomez and Shepherd, in prep.), despite legislation in place prohibiting such practices. Such activities were not apparent on the Facebook groups investigated in this study, perhaps due to the fact that demand for bear bile, which is used primarily in traditional Chinese medicine, serves a more niche market. A study in 2002 found that 78 of 124 outlets selling traditional medicine surveyed in eight large cities across Indonesia sold bear gall bladders and derivatives (Kurniawan and Nurashid, 2002).

The online trade appears to be occurring predominantly on the island of Java where the species has long been considered extinct (Scotson *et al.*, 2017); this suggests illegal trade links with Sumatra and Kalimantan where Sun Bears do occur (Scotson *et al.*, 2017). Java has been identified previously as the main hotspot for online trade for other species, including live Ploughshare Tortoises *Astrochelys yniphora* (endemic to Madagascar and assessed as Critically Endangered by IUCN) (Morgan and Chng, 2017; Lauteriz and Pedrono, 2008), otters (Gomez and Bouhuys, 2018) and Sulawesi tortoises (Morgan *et al.*, in prep.). With Java's dense human population, its relatively central location and long-established trade routes with other islands, a long cultural tradition of bird- and animal-keeping, and with animal markets found in almost every major city, it is no surprise that much of the online trade in wildlife appears to be focused here too. Due to weak legislation and lax enforcement, illegal trade in wildlife flourishes in Java, with well-organised networks of traders operating openly, taking advantage of high profit margins and a low risk of detection and/or prosecution.

In 2013 and 2014, online posts on Facebook for Sun Bear commodities were still fairly low (n=1 and n=3 respectively). In 2015, a sharp increase in the number of posts (n=21) was observed, which continued to rise until it peaked in 2017 (n=57), before decreasing slightly in 2018 (n=33). This rapid growth in wildlife trade on social media after 2014 is consistent with other studies of online trade in Indonesia (Morgan and Chng, 2017; Morgan *et al.*, in prep.) and Malaysia (Bouhuys and Scherpenzeel, 2015; Krishnasamy and Stoner, 2016) and probably coincided with improved internet accessibility, the introduction of smart phones and the huge popularity of social media in Indonesia, especially Facebook and Instagram (Scheepers *et al.*, 2014). Furthermore, during 2015 and 2016, following a string of law enforcement efforts targeting illegal wildlife trade in physical markets, including a raid in February 2016 on Jakarta's Jatinegara animal market (PN Jakarta Timur, 2016)—notorious for openly trading in protected species—it is likely that some traders switched to the safer option of online trade.

It is not a criminal offence to post offers of illegal products for sale in Indonesia, only the sale of such products is illegal.

Facebook and other social media platforms are more difficult to monitor and regulate. Fake accounts can easily be set up to maintain traders' anonymity, and closed and secret trade groups make it difficult for law enforcement authorities to collect evidence and take action. Face-to-face meetings between the seller and the buyer are no longer required: payment can be transferred via online banking and the goods shipped direct to the buyer's address. Commonly, traders specify in the posts that they will only accept payments via "REKBER" (*Rekening Bersama*), which involves the payment being sent to the bank account of a trusted third party. When the payment has been made, the goods will be shipped. The REKBER payment system makes it more difficult to police money transfers and connect the buyer and the seller, which could later be used as evidence in court.

In April 2019, a new feature appeared on Facebook that enables users to report “Unauthorised Sales” and “Endangered Animals”. This appears to have had an immediate impact, with numerous wildlife trade groups swiftly deleted by Facebook. However, early anecdotal indications suggest that many trade groups have migrated to other social media platforms.

This study shows that live Sun Bears and their parts are persistently being offered for sale in Indonesia although it was not possible to ascertain how many offers resulted in sales. There are no known bear farms in Indonesia, and certainly none that are registered with the authorities; all live bears or their parts being offered for sale are therefore likely sourced from the wild. Given the relative ease with which the illegal bear trade was detected in Indonesia, it is clear poachers and wildlife traders are not fearful of enforcement action or prosecution. Findings from an analysis of bear seizure data for Indonesia between 2011 and 2018 showed that only 32% of incidents resulted in successful prosecution and only one of those cases came close to the maximum penalty afforded by the law, and in that particular case frozen pangolins were included in the seizure (Gomez and Shepherd, in prep.). More effort from enforcement agencies is clearly called for if this trade is to be significantly reduced and if the negative impact of poaching for commercial trade is to be addressed.

The fact that bears are for sale on social media points to a fundamental flaw in the wildlife legislation. It is not a criminal offence to post offers of illegal products for sale (or it is at least deemed as insufficient evidence to bring charges), only the sale of such products is illegal. Further, authorities can only take enforcement action against a person in possession of protected species or when physically involved in an illegal transaction. The monitoring and detection of illegal activities on social media already pose significant challenges for enforcement authorities. One means of meeting some of these challenges would be to improve wildlife laws and policies concerning the regulation of online wildlife trade that supports and empowers enforcement authorities to investigate and take action against illegal wildlife traders operating online.

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Editor's note: The Coalition to End Wildlife Trafficking Online, launched in March 2018, is a collaboration of 34 global e-commerce, tech and social media companies working to reduce wildlife trafficking online. Facebook has been a key partner, and over the past 18 months, has made substantial efforts to tighten its global wildlife policies, streamline the reporting of illegal wildlife activity, and develop a staff wildlife detection training programme with the guidance of TRAFFIC, WWF and IFAW.