

Trade in Borneo's orang-utans and gibbons

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In 2003 and 2004 we made an assessment of the trade in Bornean gibbons and orang-utans by surveying animal markets and zoos on Kalimantan (Indonesian Borneo), Java and Bali. Trade on these islands – where the apes are mostly traded as pets – was widespread, with most forest-dwelling people knowing the commercial value of a young orang-utan or gibbon. Law-enforcement safeguarding the orang-utans and gibbons and their habitat was almost completely lacking. We conclude that since the trade in apes derives largely from the destruction of habitat due to logging, conversion, and encroachment, addressing trade in isolation is futile. Reducing the trade in orang-utans and gibbons can only be achieved by protecting the remaining forest, which must be enforced by the relevant authorities and implementing agencies of the Indonesian government, land concession holders and landowners.

Introduction

The sale and exchange of wild animals and plants – ‘wildlife trade’ – is an issue at the very heart of the relationship between biodiversity conservation and sustainable development. Directly and indirectly, increasing demand and consumption are depleting the earth's living natural resources at an alarming rate, even though it is well-known that these resources form the biological foundation upon which human society depends (Broad *et al.* 2003).

Among the wildlife traded (inter)nationally, primates have received a disproportionate amount of attention from animal welfare groups, conservationists, legislators, international donor agencies and the general public. Thus primates make excellent flagship species for conservation (Cowlshaw and Dunbar 2000) and this is especially apparent for our close relatives, the apes. Among the 17 species of apes (gibbons, orang-utans, chimpanzees and gorillas) recognised by the IUCN (2004), three are listed as vulnerable, seven as endangered and two as critically endangered. One species is listed as data deficient indicating that its status is so uncertain that any category is plausible. The apes are clearly facing difficult times and the future is not looking bright.

There is a high degree of agreement on what are the most severe threats to apes. For most species, habitat loss is the number one threat; many of the additional threats are secondary and often a direct result of habitat loss. For all apes, the forest is their main habitat; habitat loss is the result of forest clearing, logging for fuel and timber, and degradation of the forest due to (selective) logging, collection of non-timber forest products, and forest fragmentation.

The hunting, capturing, and subsequent trade in apes is another serious threat to the survival of primates. Hunting and trade are often linked: to obtain the juvenile for trade, the mother has to be killed first. Alternatively, when an adult ape is hunted for its meat, the juvenile may end up in trade rather than in the pot. The trade in apes has both domestic and international markets; the relative contribution of domestic and international trade differs greatly between regions and between species. The international trade was previously driven by biomedical research, although the trade in pets and zoo and circus animals contributed, as did the trade in primate parts for traditional medicines. In many countries the majority of live primates are traded as pets (Cowlshaw and Dunbar 2000) although data on the domestic trade in apes and other primates are often difficult to obtain (Mittermeier 1991).

Here we document trade in two of the most readily identifiable primate families – the gibbons and the orang-utans – on the island of Borneo, in particular trade within and from Kalimantan, the Indonesian part of the island. More specifically, our aims were to: 1) gather, compile and analyse information on the trade dynamics of gibbons and orang-utans on Borneo; 2) document those Bornean gibbons and orang-utans that were once traded and are now held in zoological gardens.

Methods

Study area

The island of Borneo, at 746,305 km², is the third largest island in the world (after Greenland and New Guinea). Administratively it is divided into the four Indonesian provinces of West, Central, East and South Kalimantan, the two autonomous Malaysian states of Sabah and Sarawak, and the Sultanate of Brunei Darussalam. Borneo supports the largest expanse of lowland evergreen rain forest in the western Indo-Malayan region. In Kalimantan alone, some 267,000 km² is still under forest, or about 50% of the land surface (Fuller *et al.* 2004), though this is dwindling. Lowland forests in particular are threatened by these practises due to their accessibility and soil fertility. Less than 10% of the forest on Borneo is formally protected, and most of this is concentrated in the mountains.

Gibbons and orang-utans

Two species of gibbons occur allopatrically on Borneo, the Bornean white-bearded gibbon *Hylobates albibarbis* in the southwest and the Müller's gibbon *H. muelleri* in the remaining three-quarters of the island. The Bornean orang-utan *Pongo pygmaeus* has a patchy distribution throughout the island. All three species are endemic to Borneo – that is, they are not found anywhere else than on Borneo. Without going into too much detail, there are some biological characteristics of gibbons and orang-utans that are relevant to the current study: 1) they are completely arboreal, i.e. they cannot survive in the absence of closed-canopy forest; 2) they typically occur at low densities in the lowlands, and decrease with increasing altitude so that no viable populations exist above 500 m (orang-utans) or above 1,000 m (gibbons); and 3) they are typical K-strategists – that is, they start breeding late, have long inter-birth intervals, produce only one young at a time and few overall (Chivers 1992; Rijksen and Meijaard 1999).

Throughout their range gibbons and orang-utans enjoy the highest form of legal protection; it is illegal for private persons to keep or trade in these species. Indonesia, Malaysia and Brunei are signatories to the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES). All species of gibbon and orang-utan are listed in CITES Appendix I which prohibits among contracting parties all international trade in these species and their parts and derivatives, except under specific circumstances (Soehartono and Mardiasuti 2002).

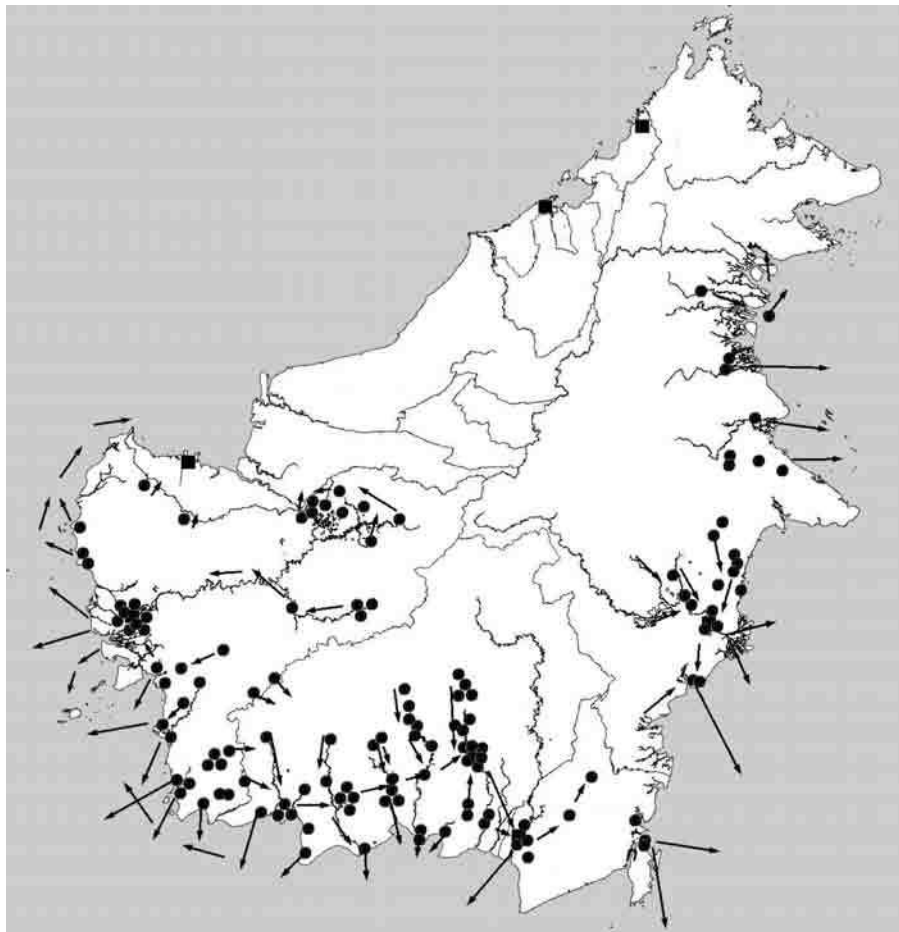
Data acquisition

As part of a larger TRAFFIC (the wildlife trade monitoring network) research and monitoring programme (the results of which are in part presented in Nijman 2005a, 2005b), data on the trade in gibbons and orang-utans were collected during an island-wide survey in June-September 2003 and June-October 2004. Additional data on Bornean gibbons and orang-utans were collected during a survey on Java and Bali in August-October 2003. We visited wildlife markets (*pasar burung/pasar satwa*) and petshops, where information was requested from vendors and shop owners; in towns and villages we searched for private owners of pet gibbons and orang-utans. From the owner we tried to obtain data on the history of the animal, where and how it was acquired, and at what price. Aware of our interest, these animals were then often offered for sale, in which case we noted the requested price. No gibbons or orang-utans were purchased during the survey. A proportion of traded gibbons and orang-utans end up in zoos, and we surveyed zoos to obtain data on the origins of their animals. This included four zoos on Kalimantan, and eleven additional zoos on the islands of Java and Bali.

Results

Numbers and extent of trade

The trade in orang-utans and gibbons is widespread throughout Kalimantan, even in areas where the species is not present in the wild (map 6.1). Unlike the situation in Java, where trade is concentrated in a relatively small number of wildlife markets (the so-called bird markets), the buying and selling of orang-utans and gibbons on Kalimantan is diffuse. This is more the case for orang-utans than for gibbons, in areas where the species occurs in the wild, and especially in the interior of Kalimantan, where forest-dwelling people are well aware of the value of an infant ape. As there is no moral stigma attached to killing or capturing orang-utans and gibbons and law enforcement is lacking, few will resist when the op-



Map 6.1 ■ Locations from where information was received on trade in orang-utans or orang-utan parts, and orang-utans in private hands in 2001-2004 (from Nijman 2005b). Arrows indicate the general direction of trade.

portunity arises. Thus – and more so in the interior than along the coast – a young orang-utan, and to a slightly lesser degree a young gibbon, is a commodity. In the villages, many people keep, at one time or another, an orang-utan or gibbon as a ‘pet’, not necessarily due to fondness for the animal (although there may be), but as it represents something that can be sold for money or bartered.

Throughout Kalimantan in 2003-2004, we recorded or received reliable reports of 74 Bornean orang-utans, 79 Bornean white-bearded gibbons, 54 Müller’s gibbons, and 24 gibbons of the two aforementioned species in trade. Trade was present in all four provinces of Kalimantan, although the degree of its openness differed between regions. On Java we recorded 18 Bornean orang-utans, 3 Bornean white-bearded gibbons and 10 Müller’s gibbons in trade.

Zoological gardens

Bornean orang-utans are among the most common apes in Indonesian zoos, and in the 15 zoos that we surveyed, we recorded a total of 62 individuals (table 6.1). The majority of them were still young, although a fair number had reached adulthood. Although some were kept alone, we often found groups of more than five animals in a single enclosure. Almost equal numbers of Bornean white-bearded gibbons and Müller’s gibbons were observed in zoos. They were often housed alone, though sometimes in groups (including congenics) of up to ten individuals.

Table 6.1 ■ Bornean gibbons (*Hylobates albibarbis* and *H. muelleri*) and orang-utans (*Pongo pygmaeus*) in zoological gardens on Java, Bali, and Kalimantan, and their reported origin.

Origin	<i>H. albibarbis</i>	<i>H. muelleri</i>	<i>P. pygmaeus</i>
Confiscated	1	0	16
Donated	6	0	5
Captive-bred	2	0	4
Transfer	9	2	2
Unknown	10	23	40
Total	28	25	67

The zoos are: Pusat Primata Schmutzer, Jakarta, Ragunan, Jakarta, Taman Safari Cisarua, Kebun Binatang Bandung, Gembiraloka, Yogyakarta, Taru Jurug Surakarta, Kebun Binatang Tinjomoyo, Semarang, and Taman Kaloko Widya Mandhala, Purwokerto, Kebun Binatang Surabaya, Taman Safari Pasuruan, Bali Zoo Park, Kebun Binatang Pontianak, Taman Ria Wisata Agro, Kebun Binatang Gunung Bayan, and Kebun Raya Samarinda.

Of the gibbons and orang-utans whose origins were reported, 17 were confiscated by the forestry department and handed over to the zoo, 11 were directly donated to the public, 13 were the result of transfers between zoos (hence their origin was

not known), and 6 were allegedly captive-bred in the zoo. From discussions with the keepers and zoo staff it turned out that the majority of orang-utans and gibbons currently in the zoo were at one time traded.

Discussion

The present study shows that trade in orang-utans and gibbons is widespread throughout Kalimantan, Java and Bali (cf. Malone *et al.* 2002). Most forest-dwelling people know the commercial value of an infant orang-utan or gibbon, and trade flourishes in the absence of effective law enforcement. The battle against the primate trade in Indonesia is failing at different levels: without adequate monitoring and law enforcement, protected areas do not provide sufficient protection while the poaching of legally protected species is systematic outside protected areas. Prosecution of the violators of wildlife conservation laws is absent, and despite hundreds of orang-utans and gibbons being confiscated over the past decade, few people have been prosecuted while even fewer have been sentenced (Nijman 2005ab). As Foead *et al.* (2005) concluded, the orang-utan is still threatened by poaching for trade and by conflict with humans, and the situation is aggravated by the lack of resources and commitment to develop, implement and enforce environmental policy and regulations to protect orang-utans throughout their remaining range. We may add that the same holds true for gibbons.

The hunting and capturing of orang-utans and gibbons for trade is often associated with the timber trade, with many apes reported killed inside logging concessions or forest areas being logged. The active protection of protected areas (national parks, strict nature reserves) is lacking in all but a few gazetted areas (Jepson *et al.* 2001) while hunting levels inside protected areas may be as high as in non-protected forests (e.g. Nijman 2005c). We received numerous reports of orang-utans and gibbons being hunted inside protected areas, including Betung Kerihun National Park, Kayan Mentarang National Park and Danau Sentarum National Park. Conversion of prime forest into (oil palm or other crop) plantations creates another source for orang-utans appearing in trade (Buckland 2005) – given the absence of planning for what to do with affected wildlife, many orang-utans are either killed locally or end up in trade. Likewise, forest fires associated with the El Nino Southern Oscillation Event regularly claim numerous orang-utans, with at least some of them ending up in trade.

Despite legal protection since the first half of the last century and the best efforts of some, the trade in orang-utans and gibbons remains omnipresent in Indonesia. While government agencies and NGOs are trying to curb the illegal trade in wildlife (and programmes exist to reintroduce confiscated animals into forest areas without resident populations), the same or other government agencies en-

sure a steady supply of new wildlife by granting permits allowing the destruction of the habitats of the largest remaining orang-utan and gibbon populations. To tackle this problem and to reduce the trade in orang-utans, gibbons and many other species of wildlife, we have to realise that trade occurs as a consequence of habitat destruction due to logging, conversion, encroachment, and arson, and that addressing trade in isolation is futile. Reducing the trade in orang-utans and gibbons can only be achieved with a concurrent increase in the protection of the remaining forest, which must be enforced by the relevant authorities and implementing agencies of the Indonesian government, land concession holders and landowners.

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