

Table 14 b: Threat due to predation, poaching and similar causes

1, 2, ...: source, author quoted.

| (Sub-)Species, form, subpopulation | Natural causes of losses such as predation | Recorded causes of threat caused by human activities such as poaching, trade (Threat due to habitat destruction see table 14 c) |
|--|---|--|
| Lorises, pottos in general | During a survey in Sri Lanka in 2001, presence of <i>Loris</i> seemed to be negatively associated with potential predators and competitors ²¹¹ . | Contact with uninsulated power lines is may be fatal for the slowly climbing lorises and pottos who are specialized on bridging over substrate gaps with their long limbs. Death of lorises on power lines are reported from Sri Lanka, India and Malaysia (see also below) ^{207, 66, 211} . From Africa, no data concerning pottos or angwantibos are available, but the problem with power lines apparently also exists, regular deaths of colobus monkeys have been reported ²⁰⁸ , regarded as the main cause of colobus monkey mortalities in Diani; other monkeys are also affected. The Kenya Power and Lighting Company engineers spent a day with coworkers of the Colobus Trust exploring ways to solve the problem. Victims of electrocution showed amputated limbs ²⁰⁹ . |
| Asian lorises | | |
| L I Slender lorises, genus <i>Loris</i> To avoid confusion, the old taxonomic names (above) are listed here in addition to the new names based on Groves 2001 because taxonomic research may lead to further changes. | | In India , in 1981 "lorises belong to India's most endangered species" ¹¹⁶ . There are very few Slender lorises left in the wild ¹²¹ . Slender lorises belong to the animals found in illegal ownership (pets) ¹¹⁰ . It was also a popular cage animal. Twenty-five years ago, one could buy a loris for a few rupees in Chennai Moore market or Bangalore Russel market. Since very few knew about its diet most of them died within a short while in captivity, to be soon replaced by freshly caught ones ¹²¹ . There are very few slender lorises left in the wild. Added to habitat destruction is the traditional use in medicine. Each part was credited with some magical property. Skull in powder form was considered a potent aphrodisiac. If the left leg is eaten, it would cure leprosy and the right leg is an antidote for persistent cough. Rubbing ones head with the bones of its spine would make carrying of the ritual fire pot possible without any difficulty. In every village shandy, one could see the loris man holding a pole with the poor creature crouching on it. He sold coloured ropes, touched by the loris, to be worn around the waist of sick children ¹²¹ . Saving of slender Lorises supposed to be used for ritualistic purposes by tribal people is mentioned in the website of the CUPA Trust for the welfare of animals ¹⁴⁶ . India is becoming a conduit to smuggle wildlife and its products nationally and internationally (includes loris trade); exports takes place through the "porous borders" ^{284, 285} . Wildlife for Chinese markets is imported from neighbouring countries up to India and Nepal; Chinese traders order the goods and pay a deposit in advance, after which the wildlife is transported to the port areas of Yunnan ²⁸³ . Electrocution when crossing power lines has been observed ⁶⁶ . In Sri Lanka , the major obvious cause for <i>Loris</i> mortality is death by electrocution, each month numerous lorises and even more flying foxes are killed. If the lorises survive, they may be terribly maimed. The policy of Sri Lankan Electricity Board is to clear up the trees close to power lines (not because of animals), but but often this does not work well ^{207, 66, 211} . There are no plans to insulate the power lines ²¹¹ . Osman Hill mentioned regular keeping of slender lorises as pets by British planters. Phillips wrote in 1931 about Ceylonese lorises that "Sinhalese villagers sometimes treat this harmless animal with gross cruelty, using its eyes in native medicines and love potions" ¹⁷ . According to Devaraj Sarkar <i>et al.</i> , 1981, lorises are decreasing in number due to hunting as they are believed to be a potent love charm and of medicinal importance in the treatment of eye diseases ¹¹⁶ . Coworkers of a zoo rescued two slender lorises near Wilpattu, Sri Lanka, from being stoned by villagers who believed them to be witches ¹¹² . A ranger at Anuradhapura met during a survey in 2001 said lorises are commonly stoned to death for they are believed they are witches ²¹¹ . During a survey in 2001, questioning of local people led to the result that, unlike in India, lorises in Sri Lanka are not captured for biomedical experiments or for ayurvedic medicines any more ²¹¹ . Wildlife rangers of Yala and Horogolla Sanctuary said that pesticide use has increased in the southeast of Sri Lanka, and that corresponding to this use, population numbers of certain insectivorous songbirds have declined. Consumption of poisoned insects, or selective destruction of certain insects via pesticide, may have played a role in loris decline in this area, perhaps explaining why several people reported seeing them "two years ago". Human induced dangers to <i>Loris</i> also include being struck by vehicles in the road, and a ranger at Anuradhapura reported killing of many lorises by domestic cats ²¹¹ . |
| L II a Old name: <i>L. t. tardigradus</i> ¹ Groves 1998, 2001: change into distinct species <i>L. tardigradus</i> ^{64, 65, 233}). Including several phenotypically distinct-looking forms: see for instance ²²⁷ , L II b, L II c and loris identification key in this database. | | |

Table 14 b: Threat due to predation, poaching and similar causes

1, 2, ...: source, author quoted.

| | (Sub-)Species, form, subpopulation | Natural causes of losses such as predation | Recorded causes of threat caused by human activities such as poaching, trade (Threat due to habitat destruction see table 14 c) |
|--------|--|---|---|
| L II b | Small form with the appearance of a shorter muzzle ¹⁵ . | | |
| L II c | Small form with longer-looking muzzle / heart-shaped (<i>L. t. grandis</i> -like) face ¹⁵ . | | |
| L II d | (<i>L. gracilis zeylanicus</i> : synonym?) ^{2, 14} . | | |
| L III | <i>Loris lydekkerianus</i> ²³³ . Groves 1998, 2001: species including all formerly known <i>Loris</i> subspecies except from the former <i>L. t. tardigradus</i> ^{64, 65, 233} . | | |
| L IV | Old name: <i>Loris tardigradus malabaricus</i> (Wroughton, 1917) ¹ . Groves 1998, 2001: <i>L. lydekkerianus malabaricus</i> ^{64, 65, 233} . | | |
| L V | Old name: <i>Loris tardigradus lydekkerianus</i> (Cabrera, 1908) ¹ . Groves 1998, 2001: <i>L. lydekkerianus lydekkerianus</i> ^{64, 65, 233} . | | At Southern Andhra Pradesh: Humans tend to tolerate the presence of lorises because they do not compete with humans for resources. But people in some areas catch lorises as pets which then quickly die ¹⁰² . At Dindigul: deaths due to road accidents, illegal trapping for "medicinal" purposes (eyes believed to have medicinal value) ¹⁰¹ . Lorises electrocuting themselves while bridging over electric cables ⁶⁶ . |
| L IX | (? Still unidentified lorises, possibly <i>lydekkerianus</i> or intermediate <i>lydekkerianus</i> / <i>malabaricus</i> ? On Mundanthurai Plateau, Tamil Nadu, India ¹⁴⁴ . | | |

Table 14 b: Threat due to predation, poaching and similar causes

^{1,2,...}: source, author quoted.

| | (Sub-)Species, form, subpopulation | Natural causes of losses such as predation | Recorded causes of threat caused by human activities such as poaching, trade (Threat due to habitat destruction see table 14 c) |
|--------|--|---|---|
| L VI | <p>Old name: <i>Loris tardigradus nordicus</i> (Osman Hill, 1933) ¹. Groves 1998, 2001: museum specimens indistinguishable from / synonym of <i>L. lydekkerianus grandis</i> ^{64, 65, 233}. May turn out to be <i>L. lydekkerianus nordicus</i> in the future if further studies prove distinctness. .</p> | | |
| L VII | <p>Old name: <i>Loris tardigradus grandis</i> (Osman Hill and Phillips, 1932) ¹ Groves 1998, 2001: <i>L. lydekkerianus grandis</i> ^{64, 65, 233}.</p> | | |
| L VIII | <p>Old name: <i>L. tardigradus nycticeboides</i> (Osman Hill, 1942) ¹. Groves 1998, 2001: <i>L. lydekkerianus nycticeboides</i> ^{64, 65, 233}.</p> | | |

Table 14 b: Threat due to predation, poaching and similar causes

^{1, 2, ...}: source, author quoted.

| | (Sub-)Species, form, subpopulation | Natural causes of losses such as predation | Recorded causes of threat caused by human activities such as poaching, trade (Threat due to habitat destruction see table 14 c) |
|--------|---|---|---|
| Nx | <i>Nycticebus</i> E. Geoffroy 1812 ²³³ . Genus <i>Nycticebus</i> in general, lesser slow lorises included or species not mentioned | | Use in traditional Asian medicines (Primates including lorises in alcohol: "energy drinks" ⁶³); pet trade. Pet trade not only in the native countries; confiscations are reported from many countries such as Russia, Australia, European countries. There is evidence that the Middle East may play a role as a major trade avenue between Asia or Africa and Europe, also used for illegal wildlife trade, which may add to the risk for some old world primate populations ²⁵⁴ . Recent reports of confiscations of lorises for instance in Israel, on Dubai airport or of galagos and tarsiers in Dubai seem to confirm this danger. At Jakarta airport, slow lorises supposed to be smuggled to Kuwait have been confiscated ²⁹⁶ . Japan : several online shops permanently offer lorises (<i>N. pygmaeus</i> , <i>N. bengalensis</i> and <i>N. coucang</i>), pottos, tarsiers and other protected primates ²⁹³ . |
| Np | Lesser slow lorises | | Hunting (¹⁶⁰ , quoting ¹⁹⁴). Use in traditional Asian medicines (primates including lorises in alcohol: "energy drinks" ⁶³ , ⁷⁹). Pet trade; pygmy lorises are often kept as domestic pets ³⁸ , not only in the countries where they naturally occur; illegally imported pet lorises are also reported for instance from Moscow (anonymous private information), Israel ¹⁹⁵ and Germany ¹⁹⁶ . In Vietnam pygmy lorises are severely threatened. Probably the biggest hazard to these animals is the fact that they're in such demand in China that they're offering a lot of high prices to have lorises smuggled over there for medicinal purposes ¹⁵³ . Local hunters capture lorises primarily because they are valuable in the Chinese medicine market. A local villager can get approximately \$3 (American) for a pygmy loris ¹⁵⁴ . They're also kept as pets and sold to tourists. These unfortunate lorises are usually kept in tiny cages, and are given little more than white rice and bananas to eat ¹⁵⁴ . On Hanoi animal market during surveying 3 animals were seen, on Ho Chi Minh City animal market 43 lorises (no animals were found on the market in Dalat) ¹⁹⁷ , ¹⁹⁰ . Continued trade with lorises in summer 2001 is reported from Ho Chi Minh City (animals offered nearly every day) ¹⁹² and Hanoi ⁷⁹ . The Vietnamese government has set aside several reserves, but hunting continues to put them at risk ¹⁵³ . The forest protection forces do not regard these species to be in danger, and so takes no specific steps for their conservation ²⁶⁷ . In addition, forestry officials rarely have the time to confiscate illegally kept lorises because most of their efforts are focused on protecting the forest itself ¹⁵⁴ . Continued trade with lorises in summer 2001 is reported from Ho Chi Minh City (animals offered nearly every day) ¹⁹² and Hanoi ⁷⁹ . During a survey in 1993-1994 in southern Vietnam a rapid decrease of populations, partly due to poaching, was stated ¹⁹⁷ . Ethnic minority people in Vietnam hunt lorises for food. Because of higher body weight, slow lorises are the preferred hunting target as compared to pygmy lorises ²⁶⁷ . Minority people in the Nui Chua area (central Vietnam) said they don't like to trap lorises because the meat is not appreciated ¹²⁹ , ¹⁹⁰ . At Kon Chu Rang heavy hunting of pygmy lorises by Banah tribal people was reported ¹⁹⁷ . |
| Np I | <i>Nycticebus pygmaeus</i> (Bonhote, 1907) ³ , ¹ , ² , see also ³⁸ . (<i>N. intermedius</i> and other possible <i>pygmaeus</i> -like forms included). | | |
| Np I b | <i>N. pygmaeus</i> (Bonhote, 1907) ⁴ , distinguished from <i>N. intermedius</i>). | | |
| Np II | Synonym / proposed species: <i>Nycticebus intermedius</i> (Dao, 1960) ⁴ . | | |
| Np III | Proposed species: <i>Nycticebus sp.</i> New species proposed 1997, possibly corresponding to <i>N. intermedius</i> ⁴⁶ , ⁴⁷ . | | |

Table 14 b: Threat due to predation, poaching and similar causes

^{1, 2, ...}: source, author quoted.

| | (Sub-)Species, form, subpopulation | Natural causes of losses such as predation | Recorded causes of threat caused by human activities such as poaching, trade (Threat due to habitat destruction see table 14 c) |
|-------|--|---|---|
| Np IV | <i>(Nycticebus chinensis?</i> New species proposed? Based on newspaper reports) ^{96, 161} . | | |
| N | Slow lorises (lesser slow lorises not included) | | <p>"The species <i>N. coucang</i> not considered as in danger of extinction in the near future, so conservation efforts have been limited" (¹⁶⁰ quoting ¹⁹¹). Preliminary comment: in this judgement apparently the devastating illegal trade with lorises and new taxonomic research is not yet considered; some populations, maybe including undescribed or newly proposed species, are probably be highly endangered by local trade. The second statement is certainly true: conservation efforts for lorises have been limited to almost absent.</p> <p>A mortal danger to primates in Indochina is the area's proximity to China, where the appetite for exotic meat, medicine and aphrodisiacs seems insatiable, and growing as the country's economic prosperity increases. Global extinction is likely to occur first in Indochina, says Frank Momborg of Fauna and Flora International ¹⁵⁰. Local traditional medicines, too, threaten lorises. Primates including lorises in alcohol are used as "energy drinks" ^{63, 79}. The fur is used as dressing for wounds by natives from Burma to Borneo (¹⁶⁰, quoting ¹⁹⁰). Thadou tribesmen believe that slow loris flesh can cure epilepsy and its meat can cure stomach ailments ¹⁶⁰. Live lorises or dead lorises' remnants are kept as charms ¹⁵¹. Another important cause of the decline of populations is pet trade (^{78, 151, 66}).</p> <p>Export of lorises: particularly slow and pygmy lorises are apparently not only sold locally, but also transported to markets in distant regions for illegal sale ^{78, 117}. On Java, a variety of different-looking lorises, some resembling java lorises in old collection ²¹⁸, some of unknown origin, are offered ^{78, 151, 226}. Some slow lorises offered on Malang bird market, Java, seemed to have come from Kalimantan (Borneo), supplied by someone speaking Banjar language (Borneo local language) ²²⁴. In Ujung Pandang, the capital of south Sulawesi, slow lorises were the most frequently traded primates. The price for a slow loris was Rp 25.000 (\$5). According to one of the traders, slow lorises are very interesting for wealthy people, probably because they are cute and seem to be tame. Slow lorises were also traded in Simboro Port, Mamuju, south Sulawesi ²²⁵. At Jakarta airport, some 117 lorises supposed to be smuggled to Japan and Kuwait have been confiscated in 2003. Almost all of them had their teeth pulled and many had bad infections ²⁹⁶. Websites in Japan offer pet lorises ²⁹³. See also above, under genus <i>Nycticebus</i>: trade via the Middle East.</p> <p>Threat to local slow loris populations by lorises from other regions escaping or released after confiscation without sufficient taxonomic knowledge or disease control?</p> <p>In Indonesia, in 1987 the slow loris was said to be at risk due to habitat destruction, illegal trade and hunting (¹⁶⁰, quoting ¹⁸⁹). On a survey on birds market in Java and Bali, June to July 1999 conducted by the NGO Konus, at least 40 slow lorises were found being traded. A networking named "Pantau", consisting of 25 NGO's in Indonesia including WWF Indonesia, monitored the animal trade in big cities in Indonesia such as Medan (North Sumatra), Padang (West Sumatra), Tanjung Karang (Lampung); Jakarta, Banjarmasin, Martapura and Banjar Baru (South Kalimantan), Bandung (West Java); Semarang, Yogyakarta, Solo and Magelang (Central Java), Mojokerto (East Java) and Denpasar (Bali). During surveys by the networking from October 2001 to March 2002 at least 95 slow lorises were found, not only in birds market, but also on the street. The highest number, 43 animals, was found in Jakarta of because this city receives animal from many other cities in Indonesia. In Bandung, during October 2001 to February 2002 the NGO Konus found at least 30 slow lorises offered in two places in the city. The real number of slow loris traded is certainly higher than the number of animals discovered during these surveys ²⁵⁹.</p> <p>In Malaysia the protection of lorises seems to be relatively efficient ¹⁵², but in the course of a slow loris field study, one study animal vanished, reportedly it was caught and sold as a pet ²⁶³.</p> <p>India, Vietnam, Thailand, Cambodia: see also below, under <i>N. c. bengalensis</i> (¹⁶⁰ quoting ¹⁹⁸).</p> |

Table 14 b: Threat due to predation, poaching and similar causes

^{1, 2, ...}: source, author quoted.

| | (Sub-)Species, form, subpopulation | Natural causes of losses such as predation | Recorded causes of threat caused by human activities such as poaching, trade (Threat due to habitat destruction see table 14 c) |
|-------|---|---|--|
| N I | <p><i>Nycticebus bengalensis</i> ^{64, 65}, Old name: <i>N. c. bengalensis</i>. ²³³. Includes N I b to N I d ^{2, 3}; Osman Hill distinguished <i>tenasserimensis</i> from this form ¹.</p> | | <p>See also above, under slow lorises in general.</p> <p>In India: despite slow lorises being listed under Schedule I of the Indian Wildlife Protection Act of 1972, they are also hunted in almost the entire distribution range for various purposes, such as for food, medicine and religious ceremonies ²²³. Marring Nagas, for instance, grind the loris skull, mix it with water and take it orally to cure epidemics like cholera (¹⁶⁰, quoting ¹⁹⁸). Primate hunting is difficult to control because, in many cases, it is a part of a traditional way of life and because much of it occurs in remote areas ²²³. India is becoming a conduit to smuggle wildlife and its products nationally and internationally (includes loris trade); exports takes place through the "porous borders" ^{284, 285}. Wildlife for Chinese markets is imported from neighbouring countries up to India and Nepal; Chinese traders order the goods and pay a deposit in advance, after which the wildlife is transported to the port areas of Yunnan ²⁸³.</p> <p>Indochina: see also above, under "slow lorises in general": medicine trade to China. Cambodia along with neighboring Vietnam and Laos are being rapidly emptied of primates by meat poachers, traditional medicine merchants and villagers encroaching on their ranges ¹⁵⁰.</p> <p>In China, during a survey of trade in Guangdong, Guangxi and areas along the border with Vietnam in 1994, slow lorises belonged to the species most often offered in restaurants and were frequently seen in most markets surveyed along the Guangxi-Vietnam border. According to local wildlife officers, between 30% and 40% of confiscated primates died, following poor treatment and transportation facilities ²³⁰. Hunting and deforestation have reduced the number in southeastern China to a few hundred ²⁴¹.</p> <p>In Vietnam slow lorises are severely threatened ¹⁵³, becoming extinct south of Quang Nam Province (15°N latitude) and in parts of the Central Highlands (main cause: poaching, trade) ²⁶⁷. Probably the biggest hazard to these animals is the fact that they're in such demand in China that they're offering a lot of high prices to have lorises smuggled over there for medicinal purposes ¹⁵³. In China they are also used for food or pets or sold onwards to other countries ²⁶⁷. Local hunters capture lorises primarily because they are valuable in the Chinese medicine market. A local villager can get approximately \$15 (American) for a slow loris (more than for a pygmy loris because they are larger). This amount is comparable to two weeks' salary for the average Vietnamese person. Locals also use lorises for food and medicine ¹⁵⁴.</p> <p>They're also kept as pets and sold to tourists. These unfortunate lorises are usually kept in tiny cages, and are given little more than white rice and bananas to eat ¹⁵⁴. The Vietnamese government has set aside several reserves, but logging and hunting continue to put them at risk ¹⁵³. The forest protection forces do not regard these species to be in danger, and so takes no specific steps for their conservation ²⁶⁷. In addition, forestry officials rarely have the time to confiscate illegally kept lorises because most of their efforts are focused on protecting the forest itself ¹⁵⁴. Continued trade with lorises in summer 2001 is reported from Ho Chi Minh City (animals offered nearly every day) ¹⁹² and Hanoi ⁷⁹.</p> <p>Ethnic minority people in Vietnam also hunt lorises for food. Because of higher body weight, slow lorises are the preferred hunting target as compared to pygmy lorises ²⁶⁷. Minority people in the Nui Chua area (central Vietnam) said they don't like to trap lorises because the meat is not appreciated ¹²⁹.</p> <p>In Thailand there are high fines on trade with lorises and gibbons, so trade, if it occurs, will rather take place secretly ¹²⁰. More severe threat most probably by hunting for food by local people ¹²⁰.</p> <p>In Cambodia lorises are persecuted more than most other animals in Cambodia for medicinal use ²⁸². Slow lorises are sold by roadside vendors to be burned alive and churned into purported Chinese medicine. A trader in Phnom Penh's Chinatown, around Orasay Market, said that burning them alive increases the potency of the medicine, and drinking their blood mixed with rice wine is great for stomach aches. Skins of slow lorises are sold to Chinese medicine traders in the Cambodian capital for \$50 apiece ¹⁵⁰.</p> |
| N I b | <p>Synonym (subpopulation): <i>N. c. cinereus</i> (A. Milne-Edwards, 1867) ¹.</p> | | |
| N I c | <p>Synonym (subpopulation): <i>N. incanus</i> (Thomas 1921) ¹</p> | | |

Table 14 b: Threat due to predation, poaching and similar causes

^{1,2,...}: source, author quoted.

| | (Sub-)Species, form, subpopulation | Natural causes of losses such as predation | Recorded causes of threat caused by human activities such as poaching, trade (Threat due to habitat destruction see table 14 c) |
|---------|--|---|--|
| N I d | Synonym (subpopulation): <i>N. c. tenasserimensis</i> (variable population with <i>coucang</i> -like features in some specimens, possibly including <i>bengalensis-coucang</i> transition forms (Elliott, 1912) ²⁶⁵ . | | See above, under <i>N. c. bengalensis</i> , threat in Thailand. |
| N II | <i>Nycticebus coucang</i> (Boddaert, 1784) <i>N. bengalensis</i> no longer included ^{2, 64, 233} . | | See above, under slow lorises in general, threat in Thailand, Indonesia. . |
| N III | <i>N. c. coucang</i> (Boddaert, 1785) ² (includes Nc III b-e; compare with Nc III b). | Something like 15 times cases of predation on slow lorises by wild Sumatran orangutans (<i>Pongo pygmaeus abelii</i>) have been described. So far, no such reports for Bornean orangutans are known ²⁹⁴ . Published reports about meat-eating in orangutans: ^{258, 295} . | See above, under slow lorises in general, and below under <i>N. c. javanicus</i> . Threat in Indonesia . <i>N. c. coucang</i> are also affected by illegal pet trade on Java and elsewhere ²⁵³ . 2004: The Loris trade in Sumatra is huge and nobody ever confiscates them ²⁹⁴ . 1987: Reserves with estimated 157,980 animals (all subspecies), but not all protected areas can be regarded as well-protected and secure for primates, and in areas with high population density even a large guard force may be insufficient to prevent poaching and illegal logging. Any primate species that does not have at least 10 % of its remaining habitat protected or a freely interbreeding population of at least 5,000 animals should be considered endangered (breeding population of at least 5000 individuals believed to be necessary to maintain genetic diversity) ²⁵⁵ . |
| N III b | Synonym (subpopulation): <i>N. c. coucang</i> (Boddaert, 1785) ¹ . | One slow loris of a study population in Selangor was killed and eaten by a reticulated python ¹⁶⁴ . | |
| N III c | Synonym (subpopulation): <i>N. c. hilleri</i> (Stone et Rehn, 1902) ¹ . | | |
| N III d | Synonym (subpopulation): <i>N. c. insularis</i> (Robinson, 1917) ¹ . | | |
| N III e | Synonym (subpopulation): <i>N. c. natunae</i> (Stone et Rehn, 1902) ¹ . | | |
| N IV | <i>N. c. menagensis</i> (Lydekker, 1893) ² ; (including N IV b-d). | | |
| N IV b | Synonym (subpopulation): <i>N. c. borneanus</i> (Nachtrieb, 1892; Lyon, 1908) ¹ . | | Slow lorises from Borneo are apparently sold on the bird markets on Java: some in Malang birdmarket seemed to have come from Kalimantan, supplied by someone speaking Banjar language (Borneo local language) ²²⁴ . In Malaysian Borneo (Sabah and Sarawak), primates are hunted for food and sport, as pets, medicine, crop pests and for selling skulls to tourists. Hunting is deeply ingrained in all cultures. With few traditional controls, and the almost universal availability of shotguns and cartridges, the effect on primate populations is devastating. Although largely protected by law, in practice the only safeguard for most species is inaccessibility. But with the spread of logging roads and improved river transport no areas are now safe (details on some simian primate species; lorises are not mentioned) ²⁵² . |

Table 14 b: Threat due to predation, poaching and similar causes

1, 2, ...: source, author quoted.

| | (Sub-)Species, form, subpopulation | Natural causes of losses such as predation | Recorded causes of threat caused by human activities such as poaching, trade (Threat due to habitat destruction see table 14 c) |
|--------|---|---|--|
| N IV c | Synonym (subpopulation): <i>N. c. menagensis</i> (Lydekker, 1893) ⁶ (only from Tawitawi Archipelago; compare with N IV). | | |
| N IV d | Synonym (subpopulation): <i>N. c. bancanus</i> (Lyon, 1906) ¹ . | | |
| N V | <i>Nycticebus coucang javanicus</i> (E. Geoffroy, 1812) ^{1, 2, 3, 4, 233} . May turn out to be a distinct species, <i>Nycticebus javanicus</i> , in the future ^{64, 65, 233} . | | <p>See also above, under slow lorises in general, threat in Indonesia</p> <p>Pet trade. Slow lorises regularly found on markets in Java (according to sellers not necessarily animals from Java, but also said to be imported from Borneo and Sumatra or elsewhere, origin of animals often unknown, information about origin may be wrong)⁷⁸.</p> <p>On Java and Bali, there are about 10-20 big bird markets and hundreds of small bird markets. During monitoring of wildlife trade by the KSBK (January to May 1999), 109 slow lorises were offered on these markets, particularly on Kupang birdmarket. In big cities in Java, such as Surabaya, in addition lorises are offered in supermarkets or malls. Common prizes for a slow lorises were for instance 55,000-150,000 Rp. in the Tunjungan Plaza, 80,000.00 Rp. in the Surabaya Plaza and 60.000-100.000 RP. in bird markets (7000 Rp. = 1 US \$). All primates sold in birdmarkets were taken from the wild. The high rate of slow loris trade arose the question where the animals came from. KSBK had earlier presumed that they were only from Java, but some in Malang birdmarket seemed to have come from Kalimantan (Borneo), supplied by someone speaking Banjar language (Borneo local language). Slow lorises are protected in Indonesia, but lack of law implementation by the PKA (Forestry Department) was observed during the study, protected species were sometimes hidden, but often freely traded. In 1998, KSBK built a big information board for the Malang birdmarket showing a slow loris with warning message which said that the slow loris is protected by law; and sellers, buyers and traders could be put in jail or fined up to Rp 100 million (based on act. no. 5 1990). But slow loris traders often sold animals under this information board. One trader, interviewed by a KSBK's investigator disguised as a buyer, said: "<i>Please don't worry to buy slow loris, it is not protected yet and they still plenty in nature. The board is untrue. There is no fine at all!</i>". The crisis is probably aggravated by rising prices and increasing numbers of unemployed people²²⁴.</p> <p>Besides pet trade, part of slow loris bodies are used as traditional medicine. In some big cities, for instance Malang, Surabaya and Denpasar, often people travel around, selling medicine with parts of slow loris bodies as the basic material. Slow loris skin and bone is believed to prevent danger and to bring peace to families. Slow loris oil is regarded as medicine for skin and hair grower. One small bottle of slow loris oil sold for Rp 10.000,00²²⁴.</p> <p>In addition to threat by hunting, wild populations might be affected by imported animals from other regions which escape from captivity.</p> |

Table 14 b: Threat due to predation, poaching and similar causes

1, 2, ...: source, author quoted.

| (Sub-)Species, form, subpopulation | Natural causes of losses such as predation | Recorded causes of threat caused by human activities such as poaching, trade (Threat due to habitat destruction see table 14 c) |
|--|---|---|
| African forms | | <p>The bush meat trade (illegal commercial hunting of wildlife for meat) is the most significant current threat to wildlife populations in Africa. With steady income, loggers and their families can better afford the cost of meat, as well as the purchase of guns and motorized transportation that aids commercial trade in game. The building of logging roads into the forest improves hunters' access to wildlife and makes it easier to reach distant markets. Hunting has put a considerable number of animals at serious risk of extinction¹⁵⁷. Mammals, birds, and reptiles are concerned. Hunters snare or shoot everything from rodents to elephants, and transport the meat to market. The process began some 20 years ago in Asia, giving rise to a new conservation term: empty-forest syndrome. Annual consumption by 25 million people has reached more than 1 million metric tons in the Congo Basin alone - the equivalent of 4 million cattle - and wildlife is now the primary source of protein for increasing numbers of people in sub-Saharan Africa¹⁵⁸.</p> <p>Species like galagos which are arboreal and nocturnal are probably very difficult to hunt, and hunters may not bother about shooting animals which in addition are too small²⁰⁴. But for instance in a study of the impact of village hunting and trapping on wildlife populations near Makokou, Gabon (1988 to 1991), not only intense hunting pressure on larger animals was observed, but also severe disturbance of populations of some small mammals by village activities. Permanent settlement had resulted in fixed hunting zones around villages which were systematically exploited; on surveys, in non-village sites six times as many prosimians (galagos, pottos, angwantibos) were observed. Besides a possible habitat differences, hunting was regarded as a cause of this decline in the proximity of settlements; the skins of small species are very valuable. This study took place in an area with low human population density which had never been commercially logged; impact is probably much higher in other areas²²⁸.</p> <p>Electrocution during climbing on uninsulated power lines: see above, under „Lorises, pottos in general” and below under “Genus potto”</p> |
| A I Genus <i>Arctocebus</i> (formerly believed to consist of 1 species, <i>A. calabarensis</i> , compare with A II) ³³ . | | <p>Rather small species (reported weight about 150 - 465 g), therefore maybe not too interesting for hunters, but of course traps set for bushmeat do not distinguish between animal species, and a secretive nocturnal life is no protection against being killed by them. Because of frequent stay on the ground (see under <i>A. aureus</i>) angwantibos might be threatened by traps set for other animals. Examples for traps and their effect on wildlife see for instance in¹⁹⁹.</p> <p>Vanishing of forest elephants because of poaching may affect angwantibo habitats¹⁵⁸; forest elephants are not only important seed dispersers for the African rain forest, but also contribute to the maintenance of clearings by heavy trampling; they create and maintain a system of regularly used wide paths along which secondary vegetation can spring up. Such vegetation might play a role in distribution and genetic exchange of angwantibos. Vanishing of elephants certainly leads to considerable changes in the composition of forest (vanishing of tree species, lack of undergrowth)^{158, 15, 286}.</p> |
| A II <i>A. calabarensis</i> (J.A. Smith, 1863) ^{33, 1, 2} (formerly regarded as subspecies <i>A. c. calabarensis</i>). | | |
| A III <i>A. aureus</i> De Winton, 1902 ^{33, 1, 2} . | Visits to the ground expose the anwantibo to predation against which it has developed a unique defensive behaviour ^{91, 213} . | <p>Protected in Gabon, too small and cryptic to face much danger from human predation. The longterm safety of this species is of concern mainly because of its biological uniqueness and relatively restricted range²¹³.</p> <p>Around Makokou, Gabon, prosimians were hardly ever hunted by local people because of the availability of larger game⁹¹.</p> <p>Occasionally moving on the ground^{91, 93}; mostly below 5 m, frequently descends to the forest floor for fallen fruits and invertebrates²¹³; danger by bushmeat snares on the ground?</p> |
| P I Genus <i>Perodicticus</i> Bennett, 1831; <i>Perodicticus potto</i> (P. L. S. Müller, 1776) (possibly including unrecognized species such as the proposed new genus <i>Pseudopotto</i> ? See below). | Owls, pythons, genets and perhaps monitors are the potto's most likely predators ⁹⁴ . | <p>With an arboreal, nocturnal and cryptic lifestyle pottos are probably very difficult to hunt²⁰⁴. (Annotation: the reported weight of about 600 - 1600 g might make pottos more interesting for bush meat hunters than smaller species, hunting pottos at night with a torchlight might be dangerous for them, but see under <i>P. p. potto</i>: no reports about such hunting methods)</p> <p>Bushmeat traps might be less dangerous for pottos than for angwantibos because of preferred stay in high trees (in Gabon, <i>P. p. edwardsi</i> was usually found more than 10 meters above ground^{91, 93}). Bushmeat trade with pottos, however, has occasionally been reported, see below under <i>P. p. potto</i>.</p> <p>Pottos are occasionally electrocuted on high tension cables or run over on roads⁹⁴.</p> |

Table 14 b: Threat due to predation, poaching and similar causes

^{1,2,...}: source, author quoted.

| | (Sub-)Species, form, subpopulation | Natural causes of losses such as predation | Recorded causes of threat caused by human activities such as poaching, trade (Threat due to habitat destruction see table 14 c) |
|---------|---|---|--|
| P II | <i>P. p. potto</i> (P. L. S. Müller, 1766) ² (includes P II b - P II c). | | Since most wild meat is considered to be edible, it [<i>the potto</i>] would be eaten if it were caught. Since they are nocturnal and live in the tall trees of the gallery forest, they cannot easily be hunted. The Gbaya (living in the grasslands north of the rainforest) and other savannah peoples tend to stay out of gallery forest at night, except when on fishing expeditions, greatly preferring to hunt at night in the brush and grassland areas for antelope and other larger open country animals ²⁰⁵ . During a study about bushmeat use in 1995, pottos had occasionally been offered on the market at Toumodi (Ivory Coast, although less than an average of 0.1 animals per day) ²⁰⁰ . All 130 mammal species recorded from Gabon, apart from the very smallest, are used as food by humans. Some species sold are fully protected, including for instance Bosman's potto and Demidoff's galago ²⁰¹ (quoting ²⁰²). |
| P II b | Synonym (subpopulation): <i>P. p. potto</i> (P. L. S. Müller, 1766) ¹ (not including P II c). | | |
| P II c | Synonym (subpopulation): <i>P. p. juju</i> (Thomas, 1910) ¹ . | | |
| P III | <i>P. p. edwardsi</i> (Bouvier, 1879) ² (includes P III b - P III c). Possibly including other species. | | Around Makokou, Gabon, prosimians were regarded as hardly ever hunted by local people because of the availability of larger game (based on studies in 1965 - 1973) ⁹¹ . But see above, under "African forms": in a study of the impact of village hunting and trapping on wildlife populations near Makokou (1988 to 1991), a considerable reduction of population density of prosimians (galagos, pottos, angwantibos) in the proximity of village sites in an area with low population density was observed, hunting was regarded as one cause, much higher impact in areas with higher population density seems likely ²²⁸ . |
| P III b | Synonym (subpopulation): <i>P. p. edwardsi</i> (Bouvier, 1879) ¹ . | | |
| P III c | Synonym (subpopulation): <i>P. p. faustus</i> (Thomas, 1910) ¹ . | | |
| P IV | <i>P. p. ibeanus</i> (Thomas, 1910) ² . | | |
| Ps | <i>Pseudopotto martini</i> : new genus proposed in 1996 ³⁴ . Current data insufficient ⁶⁸ . | | |