

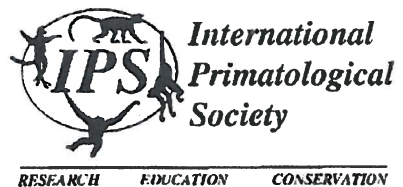
PRIMATES IN PERIL

THE WORLD'S TOP 25 MOST ENDANGERED PRIMATES



Photo: Tilo Nadler

Delacour's Langur,
Trachypithecus delacouri -
Found only in Vietnam in the
Indo-Burma Hotspot, this large
leaf-eating monkey is often
hunted for use in the traditional
medicine trade.



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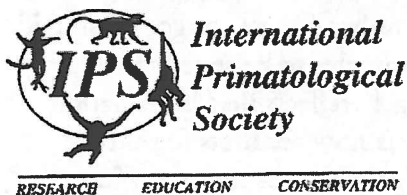
Conservation International (CI) applies innovations in science, economics, policy and community participation to protect the Earth's richest regions of plant and animal diversity in the hotspots, major tropical wilderness areas and key marine ecosystems. With headquarters in Washington, D.C., CI works in more than 30 countries on four continents. For more information about CI's programs, visit www.conservation.org.



Established in 1995, the Margot Marsh Biodiversity Foundation was created to help safeguard global biodiversity by providing strategically-targeted, catalytic support for the conservation of endangered non-human primates and their natural habitats. The foundation gives highest priority to those projects in areas of high biodiversity under the greatest threat, thereby benefiting other groups of wildlife and plants.



The Species Survival Commission (SSC) is one of six volunteer commissions of IUCN-The World Conservation Union, a union of sovereign states, government agencies and non-governmental organizations. SSC's mission is to conserve biological diversity by developing and executing programs to save, restore and wisely manage species and their habitats. Survival of the world's living primate species and subspecies is the principal mission of the IUCN/SSC Primate Specialist Group, over 300 volunteer professionals who represent the front line in international primate conservation.



The International Primatological Society was created to encourage all areas of non-human primatological scientific research, to facilitate cooperation among scientists of all nationalities engaged in primate research, and to promote the conservation of all primate species. The Society is organized exclusively for scientific, educational and charitable purposes.

<u>Region</u>	<u>CR</u>	<u>EN</u>	<u>Total</u>
Neotropics	17	17	34
Africa	10	33	43
Madagascar	10	21	31
<u>Asia</u>	<u>18</u>	<u>69</u>	<u>87</u>
	55	140	195

Within these regions, a total of 49 countries harbor wild populations of the world's most endangered primates: eight countries in the Neotropics, 24 in Africa, 16 in Asia, and Madagascar (which is considered a major primate region as well as being a country). According to the most recent assessments, the top 10 nations, in terms of endangered primates, are as follows:

<u>Country</u>	<u>CR</u>	<u>EN</u>	<u>Total</u>
Indonesia	4	31	35
Madagascar	10	21	31
Brazil	10	9	19
China	5	10	15
India	2	13	15
Vietnam	5	10	15
Equatorial Guinea	0	11	11
Nigeria	1	9	10
Sri Lanka	1	8	9
Cameroon	1	7	8

Madagascar and Brazil have long led the list of countries having the most endangered primates, but both have now been overtaken by Indonesia, based on the results of a workshop held by the IUCN Conservation Breeding Specialist Group (CBSG) in January 2001. Included on the new list of threatened primates are six endangered tarsier species found only in Indonesia. Tarsiers are small, nocturnal, insectivorous Asian primates with large, owl-like eyes, long propulsive hindlegs, and a thin, snake-like tail that they use to prop themselves up against stems and tree trunks. Prior to the Indonesian workshop, none had been considered endangered. However, all six of the newly-added species represent small, isolated, island populations; three of the six are new to science and, as yet, un-named. Firmly in the middle of the pack of nations are China, India and Vietnam, each with 15 endangered primate species and subspecies. Such significant levels of primate endangerment have been recognized for China and Vietnam for a number of years, but India's elevated standing stems from another recent CBSG workshop that focused on South Asian primates. Workshop results also placed Sri Lanka on the Top 10 list, as that island nation's primates are largely endemic and highly threatened. Four Sri Lankan lorises, in fact, represent the only members of the primate family Loridae that have been categorized as endangered at this time.

The larger primates, especially the colobines (commonly referred to as leaf-eating monkeys) and lesser apes, represent the majority of Asia's most threatened species. Forty-eight (48) members of the Asian colobine genera *Nasalis*, *Presbytis*, *Pygathrix*, *Rhinopithecus*, *Semnopithecus*, *Simias* and *Trachypithecus* are either endangered or critically endangered, representing just over half of their 90 recognized species and subspecies. This situation parallels that of the gibbons, of which 15 of 28 recognized taxa are now considered among the world's most endangered primates.

Survival of the world's living primates is the principal mission of the IUCN/SSC Primate Specialist Group, more than 300 volunteer professionals who represent the front line in international primate conservation. The Primate Specialist Group helps to compile the IUCN Red List of Threatened Animals, which was last published in 2000 and is now being updated, produces regular reports on the conservation status of key species and geographic region through a series of newsletters and journals, and periodically publishes action plans for primate conservation in specific regions of the world (Africa - 1986, 1996; Asia - 1987; Madagascar - 1993).

Information from this report will help to update the IUCN Red List of Threatened Animals, though we realize that our assessment efforts to date have not examined all primate habitat regions sufficiently and still probably underestimate the number of endangered species, as well as the extent to which they are threatened. We recognize that new information continues to appear regarding the conservation status of threatened taxa and we do not consider any single document to be the final determinant of such a list. Also, we appreciate that our ability to safeguard primate diversity will depend not only on developing comprehensive lists of those species and subspecies we consider to be threatened, but on drawing attention to those whose situation is most critical, highlighting the kinds of efforts that are being undertaken to save them, acknowledging both our successes and our failures, and continually re-examining the situation on a global scale so that we remain confident in establishing priorities for action.

The World's Top 25 Most Endangered Primates - 2002 is more than a tally of those species with the fewest numbers of individuals remaining. We also recognize the importance of:

- primate species recently discovered or rediscovered and known from only a few localities;
- species whose populations may have been considered stable only a few years ago but are now under severe pressure, in rapid decline and under serious threat of extinction; and
- varieties of primates that traditionally have not been recognized as distinct but are likely to be so as the result of ongoing genetic and field research.

In addition, we feel that it is important to remove species from the Top 25 list, at least temporarily, as their situation becomes less urgent or we feel that sufficient efforts and resources are being directed to their survival. While their conservation status and numbers may not change appreciably because of our efforts, we may remove them in favor of other species to which we feel more attention should be given, or whose situations highlight conservation techniques or accomplishments that need to be shared with broader audiences. To arrive at the current list, we decided to drop species such as the golden lion tamarin, black lion tamarin, yellow-tailed woolly monkey and golden-crowned sifaka, since we consider that good progress has been or is being made to ensure the survival of each. For species that remain from the original Top 25 of 2000, we have provided details about conservation efforts on their behalf, pointed to reasons for any observed declines in their numbers, or simply acknowledged that greater attention must be paid to their plight.

range over an area of up to 30 hectares (almost 75 acres), and it eats a variety of leaves, unripe fruit, stems and flowers. Like much of Madagascar's wildlife, Perrier's sifaka is threatened by slash-and-burn agriculture or *tavy*, timber-cutting for charcoal production, fire to clear pasture for livestock and, most recently, small-scale mining for gemstones. This may very well be the rarest, least studied and most endangered of all Madagascar's sifakas. The last published study of wild populations was one done by primatologists Mireya Mayor and Shawn Lehman from the State University of New York at Stony Brook in 1998 with support from Conservation International. While it is locally taboo or *fady* to hunt this species within its restricted range, old beliefs are yielding to new ones and putting larger-bodied lemurs such as this one at greater risk.

Silky Sifaka

Propithecus candidus

Madagascar

In physical appearance, this completely white animal contrasts greatly with the previously-described, all-black species, but in terms of geography they are essentially neighbors and in terms of conservation status they are very similar indeed. What we know about the ecology and behavior of the silky sifaka has come from short-term research efforts conducted in the mountainous forests of Marojejy, which was recently elevated from nature reserve to national park status. Marojejy is located in far northeastern Madagascar. It and the Anjanaharibe-Sud Special Reserve are the only officially protected areas in which Perrier's sifaka occurs, but their forests are not immune from habitat disturbance and hunting that accompanies encroaching human settlements. As a result, the remaining silky sifaka population, which is estimated at perhaps only several hundred and no more than a thousand individuals, continues to be at high risk of extinction. Field studies conducted by students from the State University of New York at Stony Brook and Cornell University have successfully habituated a few sifaka groups at Marojejy, where Cornell researchers hope soon to begin population censuses and behavioral research with support from the Margot Marsh Biodiversity Foundation.

Black-faced Lion Tamarin

Leontopithecus caissara

Brazil

Save for rediscovery of the yellow-tailed woolly monkey in the Peruvian Andes in the 1970s, the discovery of Brazil's black-faced lion tamarin in 1990 was perhaps the most newsworthy event in Neotropical primatology of the 20th century. Despite extensive exploration and development in the Atlantic forest region of southeastern Brazil, this diminutive, yet conspicuous, species remained undetected in coastal forests that are incredibly close to São Paulo, South America's largest city. The discovery was made in Superagüi National Park, a protected island in the Brazilian state of Paraná and still the single most important stronghold for this species more than a decade after it was found. Surveys in the mainland forests of Paraná and the neighboring state of São Paulo have dismissed earlier claims of populations in Jacupiranga State Park and have narrowed the presumed range of this lion tamarin. Population estimates remain in the low hundreds, but there is hope that continued field research will lead to the discovery of new mainland populations. The little that we do know

Miss Waldron's Red Colobus

Procolobus badius waldroni

Côte d'Ivoire

This monkey is teetering on the very brink of extinction. Primatologists have been searching its known range in eastern Côte d'Ivoire and western Ghana since 1993, but have failed to see a living animal. A single skin found by Dr. Scott McGraw (Ohio State University) in possession of a hunter in southeastern Côte d'Ivoire in early 2002 has raised hopes that at least one population of Miss Waldron's red colobus still hangs on, but if it does a heroic effort will be needed to ensure its survival. Conservation International will support continued searches for living animals. The plight of this monkey highlights threats faced by red colobus generally. Several distinct forms inhabit the forests of Africa, but they have patchy distributions and are particularly vulnerable to human hunters. Many red colobus are endangered, including three other forms in West Africa: Pennant's red colobus (*Procolobus pennantii pennantii*) of Bioko Island, Preuss's red colobus (*P. p. preussi*) of Cameroon, and the Niger River Delta red colobus (*P. p. epieni*). In addition, Bouvier's red colobus (*P. p. bouvieri*) from the Congo Republic has not been seen for 30 years.

Roloway Guenon and White-naped Mangabey

Cercopithecus diana roloway and *Cercocebus atys lunulatus*

Ghana and Côte d'Ivoire

There are two subspecies of *Cercopithecus diana*, both highly attractive, arboreal monkeys that inhabit the Upper Guinean forests of West Africa. The Roloway subspecies is distinguished by its broad white brow line, long white beard and yellow thighs. Of the two forms, the Roloway, which is known from Ghana and eastern Côte d'Ivoire, is more seriously threatened with extinction. The white-naped mangabey (*Cercocebus atys lunulatus*) seemed relatively common during the 1950s and was considered a crop pest at that time. However, surveys and systematic censuses carried out in the 1990s indicate that this subspecies is now very rare, being a target species of the relentless bushmeat trade, along with the Roloway guenon. Surveys conducted in the latter half of last year by Lindsay Magnuson (Humboldt State University) confirmed the presence of both species in Ghana's Ankasa Resource Reserve, Dadieso Forest Reserve, Krokosua Hills Forest Reserve and Yoyo Forest Reserve. Their occurrence in several other forests was also considered possible based on interviews in local communities, but it is just as likely that they have been extirpated from a number of protected areas in which they formerly were recorded, including Bia National Park. The Roloway guenon is not known from any protected areas in Côte d'Ivoire, whereas the white-naped mangabey has been reported from Marahoue National Park.

Tana River Mangabey and Tana River Red Colobus

Cercocebus galeritus galeritus and *Procolobus rufomitratatus*

Kenya

The gallery forests of Kenya's lower Tana River are home to two severely threatened primates, the Tana River mangabey and the Tana River red colobus. Along with six other primate species, they inhabit a 60-kilometer stretch of forest on both sides of the river, from Nkanjonja to Mitapani.

military presence on Natuna and the island is the site of a large natural gas extraction project. Anticipated profits from gas production might actually provide the opportunity for saving some of the leaf monkey's tropical forest habitat from future logging operations.

Pig-tailed Snub-nosed Monkey or "Simakobu"

Simias concolor

Indonesia

The genus *Simias* is known only from Indonesia's Mentawai Islands, situated off the west coast of Sumatra. Until humans arrived approximately two millenia ago, its only predators were probably large constricting snakes and birds of prey. Today, however, hunting is considered a serious threat to the four indigenous Mentawai primates, all of which are endemic to these islands. *Simias concolor* was originally considered monotypic, but is now believed to include two subspecies, *S. c. concolor* from the Pagai islands and Sipora, and *S. c. siberu* from the island of Siberut. The common English name of this large-bodied monkey is derived from its short pig-like tail and its shortened nose, which very much resembles that of the Tonkin snub-nosed monkey (*Rhinopithecus avunculus*) of Vietnam, another critically endangered species. *Simias concolor concolor* occurs in the Betumonga Wildlife Sanctuary on the island of North Pagai and in Siberut National Park on the island of Siberut. It is also known to occur in a number of forests reserves on the islands of South Pagai, Sipora, Simalegu and Sinakak. However, while the simakobu apparently can adapt to some human encroachment and habitat disturbance, almost all its remaining natural habitat that lies outside officially protected areas is now included in logging and mining concessions and could very well be lost.

Delacour's Langur

Trachypithecus delacouri

Vietnam

Delacour's langur is one of the most highly endangered of Southeast Asia's colobine monkeys. It is distinguished from other largely black-colored Asian langurs by its white cheek bands, the large white saddle on its outer thighs and lower back, and its thickly-furred tail. The species is endemic to Vietnam and was first described in 1932. Like most of Vietnam's primates, it is threatened not only by habitat loss, but also by hunting, which is often done not primarily for meat, but for bones, organs and tissues that are used in the preparation of traditional medicines. Based on recent surveys, the presence of nine wild populations of Delacour's langur can be confirmed, the largest being perhaps 40 to 50 animals, and at least an equal number are believed to still exist, most in unprotected forests. The total population is not believed to exceed 300 individuals. Protected populations are found in Cuc Phuong National Park, the Pu Luong Provincial Nature Reserve, and the newly-established Van Long Provincial Nature Reserve, which is believed to harbor the largest remaining population. Efforts to save this species are being led by Dr. Tilo Nadler, director of the Endangered Primate Rescue Center at Cuc Phuong National Park, established in the 1990s primarily to safeguard the future of this langur and other endangered Vietnamese primates.

Gray-shanked Douc

Pygathrix nemaeus cinerea

Vietnam

Colobine monkeys of the genus *Pygathrix* are native to Southeast Asia. Up until only a few years ago, two distinct taxa were recognized, the red-shanked douc (*Pygathrix nemaeus*), which was named by Linnaeus in 1771, and the black-shanked douc (*P. nigripes*) that was described exactly a century later. From August 1995 through January 1998, however, six male specimens of a new and distinctive *Pygathrix* were confiscated by Vietnamese wildlife authorities or donated by private individuals and placed at the Endangered Primate Rescue Center of Cuc Phuong National Park. The animals had evidently originated in the southeastern part of Vietnam's Central Highlands where field primatologists had also identified wild populations of the same description in a region occupied by red- and black-shanked monkeys. The gray-shanked douc appears to be restricted to mountainous regions of Vietnam's Quang Nam, Quang Ngai, Binh, Kon Tum and Gai Lai provinces, a range throughout which it is threatened by habitat loss and hunting. Forest loss within at least part of its range is attributable to the expansion of fruit tree plantations, illegal logging, and rattan and firewood collection. Hunting is done both with guns and with baited traps. This subspecies is currently known to occur in a single protected area, the Ngoc Linh I Nature Reserve (41,424 hectares) in Kon Tum Province. However, two new nature reserves have been proposed within its range, Ngoc Linh II (18,430 hectares) and Song Thanh (93,249 hectares), both in Quang Nam Province. No reliable population estimates for the gray-shanked douc currently exist.

Tonkin Snub-nosed Monkey

Rhinopithecus avunculus

Vietnam

The Tonkin snub-nosed monkey is one of four unusual, large Asian colobine monkeys of the genus *Rhinopithecus*, all of which possess a characteristic turned-up nose. The three other species are endemic to China while the Tonkin snub-nosed monkey is found only in northern Vietnam. This species was discovered in 1910, collected on perhaps no more than two occasions over the course of the next 50 to 60 years, and subsequently presumed to be extinct by a number of primatologists until it was rediscovered in 1989. Based on surveys conducted a decade ago, the government of Vietnam created the Na Hang Nature Reserve specifically to safeguard this species, and its protection there has been undertaken by Vietnamese provincial authorities and local communities, working in collaboration with Bettina Martin (Allwetter Zoo Muenster and the Zoological Society for the Conservation of Species and Populations) and supported by Conservation International. Since the creation of a protected area at Na Hang, the existence of two additional Tonkin snub-nosed monkey populations has been confirmed, one in the forests of Cham Chu and another in Du Gia Nature Reserve. Conservation patrols are already underway in the forests of Cham Chu, as an extension of the Na Hang program, and the area is in the process of being declared a new nature reserve. Public awareness and community participatory activities are also being linked to increased protection efforts at Du Gia under the supervision of Fauna and Flora International.

Eastern Black Crested Gibbon

Nomascus nasutus

China and Vietnam

As a group, the black crested gibbons of Southeast Asia must be considered among the rarest primates in the world. Their taxonomy is currently in debate, but experts believe that there may be two species, including *Nomascus nasutus*. Matters are complicated by the fact that the different types are difficult, if not impossible, to distinguish based upon field sightings. As a result, primatologists have come to rely on vocal patterns and geographic location to identify the scattered populations that remain in the wild. *Nomascus nasutus* has apparently been hunted out or has disappeared due to habitat destruction in southern China. In that country, it is now represented by an isolated population of approximately two dozen animals in the Bawangling Nature Reserve on the island of Hainan. In Vietnam, a small mainland population of similar size was recently reported from the northeastern part of the country, where it is also isolated and unprotected. Efforts are underway by Fauna and Flora International, however, to create new protected areas in forests such as those of Che Tao, Vietnam, where local support for the protection of endangered gibbons is evidently on the rise.

Mountain Gorilla

Gorilla beringei beringei

Democratic Republic of Congo, Rwanda, Uganda

The mountain gorilla is the world's largest living primate, one of the best studied, and unfortunately, one of the most endangered. Approximately 320 mountain gorillas survive in the montane tropical forests that cover the Virunga volcanoes in east-central Africa. The Virungas are shared by three countries – Democratic Republic of Congo (formerly Zaire), Rwanda and Uganda. The gorillas and their habitat are protected to some degree within three national parks – Virungas National Park (DRC), Parc National des Volcans (Rwanda) and Mgahinga Gorilla National Park (Uganda) - but they are also entirely surrounded by dense human settlements and agricultural lands, as the volcanic soils of this region are among the richest in the world. The region also has been the site of incredibly devastating human conflicts in recent decades. Despite these threats, the International Gorilla Conservation Program (African Wildlife Fund, Fauna and Flora International and the World Wildlife Fund) and the Dian Fossey Gorilla Fund International have maintained long-term studies of the mountain gorilla, sustained anti-poaching efforts against relentless pressure, and have successfully established this magnificent primate as one of the premier tropical forest tourism attractions on the African continent.

Cross River Gorilla

Gorilla gorilla diehli

Nigeria and Cameroon

Up until very recently, this had been the most neglected subspecies of gorilla. It was originally named in 1904 as a distinct species, *Gorilla diehli*, based on a few specimens collected in the vicinity of what is today the Takamanda Forest Reserve in Cameroon, close to the Nigerian border at the headwaters of the Cross River. Based on recent morphological studies, it is now considered a

Most Endangered Primates by Major Region and Country

Region/Country	Critical	Endangered	Total
NEOTROPICS			
Brazil	10	9	19
Colombia		6	6
Costa Rica	1	2	3
Ecuador	1	0	1
Panama	2	4	6
Peru	1	0	1
Trinidad & Tobago	1	0	1
Venezuela	1	2	3
AFRICA			
Angola	0	2	2
Benin	0	2	2
Burkina Faso	0	1	1
Cameroon	1	7	8
Central African Rep	0	3	3
Congo	1	2	3
Dem. Rep. Congo	1	6	7
Equatorial Guinea	0	11	11
Gabon	0	2	2
Gambia	0	2	2
Ghana	3	1	4
Guinea	0	3	3
Guinea-Bissau	0	2	2
Côte d'Ivoire	4	3	7
Kenya	2	1	3
Liberia	1	3	4
Mali	0	1	1
Nigeria	1	9	10
Rwanda	1	3	4
Senegal	0	2	2
Sierra Leone	0	3	3
Tanzania	0	5	5
Togo	0	1	1
Uganda	2	2	4
Madagascar	10	21	31
ASIA			
Afghanistan	0	1	1

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Glossary

Bushmeat hunting: The killing of primates and other wildlife for food; a threat to wild primate populations, particularly in Central and West Africa, even in existing parks and reserves.

Endemic: Restricted to a certain region, not occurring anywhere else.

Family: A group of closely related genera; the 13 primate families include more than 60 genera.

Genus (Genera): A group of related species (and perhaps subspecies); *genera* refers to more than one *genus*.

Great apes: Chimpanzees, gorillas and orangutans; the primates most closely related to man.

Hectare: A measurement of area equal to 2.47 acres; 100 hectares equals one square kilometer (km²).

Hotspot: An area that includes at least 1,500 species of vascular plants (0.5 percent of Earth's total plant diversity) as endemics and has lost 75 percent or more of its original vegetative cover.

Lemurs: General name for primates endemic to Madagascar; also includes the avahis, indris, sifakas and the aye-aye.

Lesser apes: Tailless primates known as gibbons that are native to Asia and more closely related to chimpanzees, gorillas and orangutans than they are to other primates.

Monkeys: The "typical" primates; Central and South American species include the marmosets, tamarins, night monkeys, titi monkeys, squirrel monkeys, capuchins, sakis, bearded sakis, uacaris, howling monkeys, spider monkeys, woolly monkeys and the murrelet; African and Asian species include the baboons, macaques, mangabeys, patas, guenons, vervets, colobus, leaf monkeys, langurs, proboscis and snub-nosed monkeys.

Order: A group of closely related families; the Order Primates is composed of 13 families (including that of man).

Primates: The order of mammals that includes man, the lesser and greater apes, monkeys, prosimians and tarsiers.

Prosimians: The group of primates that includes lemurs, lorises, pottos and galagos.

Sifaka: A long-tailed, large-bodied lemur from Madagascar that moves through the trees by clinging and leaping.

Taxon (Taxa): A taxon is a level of scientific classification, the ones most commonly used being *species* and *subspecies*, but the word can also refer to a *genus*, *order* or *family*; *taxa* refers to more than one taxon.