Previews: World's 25 Most Endangered Primates 2006–2008

Russ Mittermeier giving the introductory presentation before the scramble to select the 25 World's Most Endangered Primates. Photo by Christina mittermeier.

Editor's Note : *As mentioned before in ZPM, every alternate year at the International Primatological Society, year before last held in Uganda, the Primate Specialist Group met and selected 25 globally threatened primates which need attention and help. This year a species occurring in South Asia was selected which Zoo Outreach Organisation has been promoting for quite some time, that is the Western Hoolock Gibbon (Hoolock hoolock).*

PSG Coordinator for South Asia, Sally Walker attended the meeting held in Entebbe, Uganda last year and nominated Western Hoolock Gibbon for the list. It is to the credit of the members of PSG that they agreed and selected WHG as one of the 25. Zoo Outreach Organisation organised a PHVA in 2005 for WHG which provided all facts and figures for justification of the taxa being included on the list. The list and 25 profiles will be published soon as a scientific article. We have been permitted to pinch the Asian section and present it to South Asian conservation activers.

The meeting to select these 25 most endangered primates is always very exciting, a sort of scientific version of an auction or political rally. The publicity generated as a result of publication of the list event, the high profile players of PSG IUCN, IPS, and CI and the charisma of the entire progress is a boon to all who want to promote saving actions for primates.

ZOO, PSG SAPN passed out Hoolock Gibbon masks to get meeting attendees into a mood to support WHG. Photo by Christina Mittermeier.

PRIMATES IN PERIL

The World's 25 Most Endangered Primates 2006–2008

Russ Mittermeier, Jonah Ratsimbazafy, Anthony Rylands, Liz Williamson, John F. Rodríguez-Luna, Erwin Palacios, Eckhard W. Heymann, M. Cecília M. Kierulff, Long Yongcheng, Jatna Supriatna, Christian Roos, Sally Walker, Stephen D. Nash, 2007

The introduction below and the material on the following pages is taken directly from the article to be published and explains in brief the history of the "25 most". We have included the complete profiles only of South Asian species. You can find the whole article soon or perhaps by the time you read this, in a publication and on the PSG website - ***Editor.***

Introduction

Here we report on the fourth iteration of the biennial listing of a consensus of 25 primate species considered to be amongst the most endangered worldwide and the most in need of urgent conservation measures. The first was drawn up in 2000 by the IUCN/SSC Primate Specialist Group, together with Conservation International (Mittermeier *et al.* 2000). The list was subsequently reviewed and updated in 2002 during an open meeting held during the 19th Congress of the International Primatological Society (IPS) in Beijing, China (Mittermeier *et al*. 2002). That occasion provided for debate among primatologists working in the field and with first hand knowledge of the causes of threats to primates, both in general and in particular with the species or communities they study. The meeting and the review of the list of the World's 25 Most Endangered Primates resulted in its official endorsement by the IPS, and became as such a combined endeavour of the Primate Specialist Group, the IPS, and Conservation International. A third revision was carried out at a meeting in August 2004, at the 20th Congress of the IPS in Torino, Italy (Mittermeier *et al*. 2006). The list presented here, covering the biennium 2006-2008, is the result of a meeting held during the 21st Congress of the International Primatological Society (IPS), in Entebbe, Uganda, 26-30 June 2006. Our sincere thanks to William Olupot, the organizer of the congress, for making the arrangements.

The World's 25 Most Endangered Primates: 06–08

The 2006–2008 list of the World's 25 Most Endangered Primates has four species from Madagascar, seven from Africa, 11 from Asia and three from the Neotropics—four lemurs, a galago from Tanzania, three red colobus monkeys, the roloway monkey, a tarsier, a slow loris from Sri Lanka, three langurs, two snub-nosed langurs, two spider monkeys, the Peruvian yellow-tailed woolly monkey, two gibbons and two of the great apes (the Sumatran orangutan and the Cross River gorilla from Nigeria and Cameroon).

World's 25 Most Endangered Primates 06-08.

Madagascar
Prolemur simus, Greater bamboo lemur
Eulemur albocollaris, White-collared lemur
Propithecus candidus, Silky sifaka
Lepilemur sahamalazensis, Sahamalaza Peninsula sportive lemur

Africa
Galagoides rondoensis, Rondo dwarf galago
Procolobus pennantii pennantii, Pennant's red colobus
Procolobus rufomitratus, Tana River red colobus
Procolobus badius waldroni, Miss Waldron's red colobus
Rungwecebus kipunji, Kipunji
Cercopithecus diana roloway, Roloway monkey
Gorilla gorilla diehli, Cross River gorilla

Asia
Tarsius sp., Siau Island tarsier
Loris tardigradus nycticeboides, Horton Plains slender loris
Simias concolor, Pig-tailed langur
Trachypithecus delacouri, Delacour's langur
Trachypithecus poliocephalus poliocephalus Golden-headed Langur or Cat Ba Langur
Semnopithecus vetulus nestor, Western purple-faced langur
Pygathrix cinerea, Grey-shanked douc
Rhinopithecus avunculus, Tonkin snub-nosed monkey
Nomascus hainanus, Hainan black-crested gibbon
Hoolock hoolock, Western Hoolock Gibbon
Pongo abelii, Sumatran orangutan

Neotropics
Ateles hybridus, Variegated or brown spider monkey
Ateles fusciceps, Brown-headed spider monkey
Oreonax flavicauda, Peruvian yellow-tailed woolly monkey

Note:
The rest of this summary will include only Asian taxa.

Bangladesh, *Hoolock hoolock*
China, *Nomascus hainanus*
India, *Hoolock hoolock*
Indonesia, Tarsius sp. (Siau Island), *Simias concolor, Pongo abelii*
Myanmar, *Hoolock hoolock*
Sri Lanka -- *Loris tardigradus nycticeboides, Semnopithecus vetulus nestor*
Vietnam -- *Trachypithecus delacouri, Trachypithecus P.poliocephalus, Pygathrix cinerea, Rhinopithecus avunculus*

The following 2 species from Asia were placed on the list for the first time:

Tarsius sp., Siau Island tarsier
Hoolock hoolock, Western HoolockGibbon

The World's 25 Most Endangered Primates 2006–2008 are spread through 18 countries. Those which stand out are: Madagascar (four species), Vietnam (four species), and Indonesia (three species). In the Neotropical Region, the three species are all Andean.

Previous lists citation:
Mittermeier, R. A., W. R. Konstant and A. B. Rylands. 2000. The world's top 25 most endangered primates. *Neotropical Primates* 8(1): 49.
Mittermeier, R. A., W. R. Konstant, A. B. Rylands, T. M. Butynski, A. A. Eudey, J. U. Ganzhorn and R. Kormos. 2002. The world's top 25 most endangered primates – 2002. *Neotropical Primates* 10(3): 128–131. Reprinted in *Lemur News* (8): 6–9.
Mittermeier, R. A., Valladares-Pádua, C., Rylands, A. B., Eudey, A. A., Butynski, T. M., Ganzhorn, J. U., Kormos, R., Aguiar, J. M. and Walker, S. (eds.). 2006. Primates in Peril: The World's 25 Most Endangered Primates 2004–2006. *Primate Conservation* (20): 1–28.

The Table below illustrates four lists from 2000-06. The shaded taxa have been on the list since 2000: the silky sifaka (*Propithecus candidus*), four Asian colobines—Delacour's langur (*Trachypithecus delacouri*), Cat Ba langur (*T.p. poliocephalus*), the grey-shanked douc (*Pygathrix nemaeus cinerea*), and Tonkin snub-nosed monkey (*Rhinopithecus avunculus*)—Hainan gibbon (*Nomascus hainanus*), the Cross River gorilla (*Gorilla gorilla diehli*), and the Sumatran orangutan (*Pongo abelli*).

Asia			
2000	*2002*	*2004*	*2006*
			Tarsius sp. (Siau Is.)
		Loris tardigradus nycticeboides	*Loris tardigradus nycticeboides*
	Simias concolor	*Simias concolor*	*Simias concolor*
	Presbytis natunae		
Trachypithecus delacouri	*Trachypithecus delacouri*	*Trachypithecus delacouri*	*Trachypithecus delacouri*
Trachypithecus poliocephalus	*Trachypithecus poliocephalus*	*Trachypithecus p.poliocephalus*	*Trachypithecus p. poliocephalus*
	Trachypithecus leucocephalus	*Presbytis hosei canicrus*	
Pygathrix nemaeus cinerea	*Pygathrix nemaeus cinerea*	*Pygathrix nemaeus cinerea*	*Pygathrix cinerea*
Rhinopithecus avunculus	*Rhinopithecus avunculus*	*Rhinopithecus avunculus*	*Rhinopithecus avunculus*
	Rhinopithecus bieti		
	Rhinopithecus brelichi		
		Semnopithecus vetulus nestor	*Semnopithecus vetulus nestor*
Hylobates moloch			
Hylobates concolor hainanus	*Nomascus nasutus*	*Nomascus hainanus*	*Nomascus hainanus*
			Hoolock hoolock
Pongo abelii	*Pongo abelii*	*Pongo abelli*	*Pongo abelli*

The World's 25 Most Endangered Primates 2006–2008

Profiles

Note: due to the length of the Profiles, only Asian taxa have been included.

Asia

Siau Island Tarsier

***Tarsius sp.* Shekelle *et al.,* in prep.**

Indonesia, (2006)

The Siau Island tarsier is a new, undescribed species that is Critically Endangered (A1 acd) and faces an imminent threat of extinction. Shekelle and Salim (in press) used GIS data and field surveys to list specific threats. They include: a very small geographic range, of 125 km², and an even smaller area of occupancy, perhaps as little as 19.4 km²; a high density of humans (311 people per km²) that habitually hunt and eat tarsiers for snack food; and an extent of occurrence that is entirely volcanic in its geological composition, with Mount Karengetang, a massive and highly active volcano, dominating more than 50% of the geographic range of this species. Furthermore, there are no protected areas within its range (Riley 2002; Shekelle and Salim in press; Shekelle *et al*. 2007), and all captive breeding programs for tarsiers, including several by leading zoos and primate centers, have been dismal failures, leaving no *ex situ* conservation options for any tarsier species anywhere (Fitch-Snyder, 2003). The most reasonable interpretation of the scant data is that population size is very small, the low thousands at best, and declining (Shekelle and Salim, in press). Despite the fact that Sangihe Island is renowned for its Critically Endangered avifauna (Whitten *et al*. 1987; Whitten 2006), Shekelle and Salim (in press) found that the conservation threat for the tarsier on Siau Island was greater, for every variable measured, than that faced by *T. sangirensis* on Sangihe Island, which nevertheless is Endangered (B12a,b). Thus, in spite of the fact that this species has yet to be described and is almost unknown, sufficient available evidence indicates that it teeters on the brink of extinction on an island where the survival of the entire endemic fauna and flora is at risk (Shekelle *et al*. 2007).

In Meyer's (1897) description of *T. sangirensis*, from Sangihe Island, he included a single skull from Siau Island, (in the Dresden Museum, B321, from "Siao"). Sangihe and Siau Islands are part of a volcanic arc and are separated by approximately 60 km of deep ocean, greater than 1000 m in depth. There is no feasible means for recurrent gene flow between these islands today, nor is there any historical indication of a land connection between these islands. Accordingly, Brandon-Jones *et al.* (2004) suggested that the Siau Island population is taxonomically distinct. Shekelle visited the island in March 2005 and found acoustic and morphologic evidence that supported taxonomic separation of the Siau Island population. Aside from the skull in Dresden, there is no evidence in the literature of research on this species. Shekelle's surveys found evidence of tarsiers in only two places, on the shores of a small fresh water pond at the extreme southern end of the island, and on a steep cliff face along the east coast road where it runs next to the ocean. Numerous other sites that looked promising, based upon experience with *T. sangirensis*, turned up no evidence of tarsiers. Interviews with several locals indicated that tarsiers had formerly been common at these sites as recently as 10 years ago, but were now rare or non-existent. They also added that tarsiers were a popular snack food called "*tola-tola*", and that it had formerly been common to eat 5 to 10 at a single sitting after hunting them with air rifles. It is unsurprising that tarsiers are no longer found in these areas.

Myron Shekelle & Agus Salim

Horton Plains Slender Loris, Ceylon Mountain Slender Loris

Loris tardigradus nycticeboides Hill, 1942

Sri Lanka (2004, 2006)

Slender lorises are smal nocturnal primates occurring in southern In and Sri Lanka. The two recognized species, comprised of six subspecies, are readily distinguished from all other primate taxa by large, close-set eyes, pencil-thin limbs, and a long body with only a hint of a tail. Unable to leap, these ninjas of the night move with a fluid and noiseless locomotion. Though they may be slow when startled, all of the slender lorises studied so far can move several kilometers per night, and have home ranges of 1.5 to 10 ha—not small, considering that the various subspecies range in size from 110–350 g.

The smaller of the two species, *Loris tardigradus* (Linnaeus, 1758), is found only in Sri Lanka's diminishing rainforests. In the 1960s, W. C. Osman Hill used the loris as the symbol of the Wildlife and Nature Protection Society of Sri Lanka, stating that it, being the most mysterious and rarely seen creature of Sri Lanka's jungles, was the most apt symbol for a society dedicated to revealing the unknown in nature. Two subspecies of this taxon,

L. t. tardigradus and *L. t. nycticeboides*, are little better known today. The first long-term study of the red slender loris, *L. t. tardigradus*, was recently completed by Lilia Bernede of Oxford Brookes University, Oxford, UK. Continuing surveys of this subspecies by Nekaris and field assistants from the University of Ruhuna reveal that it is highly threatened, clinging to Sri Lanka's small remaining rain forest patches, which average only 1,300 ha in size.

The situation for the latter subspecies, *L. t. nycticeboides*, is no brighter. This rare little loris is found only in Sri Lanka's chilly highlands (where temperatures may drop to -4°C). To cope with these extremes, the Horton Plains slender loris has evolved a thick, woolly coat, which swathes its limbs, giving it the superficial appearance of its Southeast Asian counterpart, the greater slow loris, *Nycticebus coucang.* Even in 1942, Osman Hill wrote "That the animal is rare in the Horton Plains is evidenced by the fact that Mr. Tunein-Nolthenius has been on the look out for it for the previous twenty years without success." In 1980, this statement was further qualified by W. W. Phillips who stated that it "would appear to be the rarest of all mammals in Sri Lanka." This mysterious loris first appeared on this list of the World's 25 Most Endangered Primates in 2004, after Nekaris and Perera had carried out surveys for it at its type locality, the Horton Plains. They found only two animals after 60 km of surveys. This yielded an abundance estimate of 0.08-0.16 animals/km. A return visit in 2004 by Nekaris and colleagues from the Wildlife Heritage Trust yielded only one observation, giving an abundance estimate of 0.02 animals/km. These exceedingly low density estimates spurred Saman Gamage of the University of Ruhuna to lead a team in search of this most elusive of the lorises. Interestingly, after 21 nights of targeted efforts, abundance estimates generated in 2006 were same: 0.02 animals/km.

On the brighter side, Gamage's team have found this loris in two new localities, Haggala Strict Natural Reserve, and Bomburella forest. An unusual museum specimen uncovered in the Natural History Museum of Colombo examined by Colin Groves also suggests that the range of this species may extend as far as Sri Lanka's Knuckles Range, expanding its known area of extent from 30 km² to 250 km². A search to identify the lorises in this region will be instigated in 2007 by Sandun Perera of Sabaragamuwa University of Sri Lanka.

Although still imperilled by continued habitat loss, gem mining, agricultural encroachment and as well as being hunted and captured for medicines, as pets, and uses resulting from local folklore, there is a glimmer of hope for this small nocturnal primate. Virtually ignored since its discovery in the 1940s, media exposure from this list has now spurred two studies of this primate by local researchers. It is our hope that in 2008, more populations will be discovered, and that the Horton Plains slender loris can sink back into that dubious comfort of being 'only Endangered.'

K. Anna I. Nekaris & Vijitha Perera

Simakobu or Pig-Tailed Snub-Nose Langur
***Simias concolor* Miller, 1903**
Indonesia (Mentawai Islands) (2002, 2004, 2006)

The simakobu monkey is serving as the flagship species for a group of endangered primates endemic to the remnants of forest on the 7,000-km² Mentawai Islands. The four main islands are located 85–135 km off of the west coast of Sumatra and are home to three other primate species—Kloss's gibbon (*Hylobates klossii*), the Mentawai pig-tailed macaque (*Macaca pagensis*), and the Mentawai Island leaf langur (*Presbytis potenziani*). *Simias concolor concolor* Miller, 1903 inhabits the islands of Sipora, North Pagai, and South Pagai along with several small islets off southern South Pagai. *Simias c. siberu* Chasen and Kloss, 1927 occurs only on Siberut Island. Where *Simias* still occurs on the Pagai Islands, it exists at lower densities than on Siberut.

Although the first simakobu specimens were collected in 1902, researchers did not begin studying the Mentawai primates until the 1970s. In 1996, two simakobu groups were habituated to the presence of humans and studied in Betumonga, in the southwestern region of North Pagai Island. Researchers with the Siberut Conservation Project in the Peleonan Forest in northern Siberut are in the process of habituating more simakobu and other primate groups. Simakobus are arboreal quadrupeds that eat leaves, fruits, and flowers, and exhibit a variable social organization.

All four of the Mentawai primates are affected by habitat disturbance and hunting (Whittaker, 2006). Although hunting appears to be declining and opportunistic, human encroachment and timber removal are increasing. Of the four Mentawai primates, simakobus seem to be the most sensitive to logging. On the Pagais, density estimates range from a high of 5.17 simakobus per km² in unlogged forests to a significantly lower density of 2.54 ind/km² in forests that were logged in the 1980s (Paciulli, 2004). Twenty-five years ago, simakobus were found in areas of mixed primary and secondary forests on Siberut at densities as high as 220 ind/km² (Watanabe, 1981). In 1990, however, no evidence could be found of *Simias* inhabiting several areas on Siberut and the Pagais (Tenaza and Fuentes, 1995).

Today, the Mentawai primates continue to exist in some residual forest patches on the Pagais and Sipora, and parts of the 190,500-ha (470,735 acres) Siberut National Park (also a UNESCO Biosphere Reserve) that covers 47% of the island. Thus, while *Simias* and the other Mentawai

primates still survive in spite of human encroachment, hunting, and timber removal, the vast majority of the remaining natural habitat lies outside of officially protected areas. Most of these areas are in logging concessions and could very well be lost in the near future as there is talk of clear cutting in 2008 for oil palm plantations.
Lisa M. Paciulli

Delacour's Langur
***Trachypithecus delacouri* (Osgood, 1932)**
Vietnam (2000, 2002, 2004,2006)
Delacour's langur is endemic to Vietnam and occurs in a very restricted area of northern Vietnam which comprises about 5000 km² between 20°–21°N and 105°–106°E. The distribution is closely linked to the limestone mountain ranges in the provinces of Ninh Binh, Thanh Hoa, Hoa Binh and Ha Nam. Currently there are 19 locations where Delacour's langur is or was known to occur. They are isolated populations and combined total at most only 400 to 450 km². The extirpation of Delacour's langurs has been reported by local people in three localities that we know of. There is a smaller limestone mountain ridge to the west extending to a large limestone region north of Son La, but there is no evidence of Delacour's langurs in this area. The northwestern border of the distribution is Mai Chau between the Da River in the north and the Ma River in the south. The Da River appears to form the northern border of the species' range. The exact southern boundary is south, the unclear clear boundary. There are some smaller isolated limestone areas south of the Ma River. The only area south of the Ma River where Delacour's langurs have been confirmed is the limestone complex between Lang Chan and Ngoc Lan, but this population is now most probably extirpated. It seems that this species never occurred south of the Chu River.

During the decades following the discovery of Delacour's langur in 1930 there was only scanty information on its existence and distribution. The first sightings of live animals were reported in 1987 from Cuc Phuong National Park. The most important, and for some subpopulations the only, factor for the decline in numbers is poaching, which is not primarily for meat, but for bones, organs and tissues that are used in the preparation of traditional medicines. The 19 isolated wild populations of Delacour's langur have been confirmed over 10 years of surveys and monitoring by the Frankfurt Zoological Society. The total population counted in 1999/2000 was about 280 to 320 individuals. The recorded numbers of animals hunted over the 10 years totaled 320, an annual loss of more than 30 individuals, but the real number is undoubtedly higher. Sixty percent of all existing Delacour's langurs occur in isolated populations with less than twenty animals. The loss of these subpopulations, and consequently sixty percent of the entire population, is foreseeable without management, strict regulations and law enforcement. Surveys in 2004 in two protected areas with important subpopulations—Cuc Phuong National Park and Pu Luong Nature Reserve—showed a decline in numbers of 20% in the last 5 years. It is to be expected that the population in unprotected areas which have yet to be surveyed will show a similar tendency. A reasonable estimate of the current population indicates numbers no higher than 200 to 250 individuals.

Four areas where Delacour's langurs occur are protected: Cuc Phuong National Park, Pu Luong Nature Reserve, Hoa Lu Cultural and Historical Site, and the Van Long Nature Reserve (established in 2001). Van Long Nature Reserve is believed to harbor the largest remaining population of about 60 to 80 animals. They are well protected there due to patrols and close cooperation between the provincial forest protection authorities and Frankfurt Zoological Society. Currently two doctoral students are working in the area, studying the biology and population dynamics of the subpopulation. Efforts to save this species are being led by Tilo Nadler, manager of the Vietnam Primate Conservation program of Frankfurt Zoological Society and Director of the Endangered Primate Rescue Center at Cuc Phuong National Park, established in 1993 primarily to safeguard the future of this and other endangered Vietnamese primates. The Endangered Primate Rescue Center is the only facility which keeps this species. The center started a breeding program with five confiscated animals, and 11 individuals have been born since 1996. The aim is to reintroduce the langurs into well-protected areas to establish additional free ranging populations.
Tilo Nadler & William R. Konstant

Golden-headed Langur or Cat Ba Langur
***Trachypithecus poliocephalus poliocephalus* (Trouessart, 1911)**
Vietnam (2000, 2002, 2004, 2006)

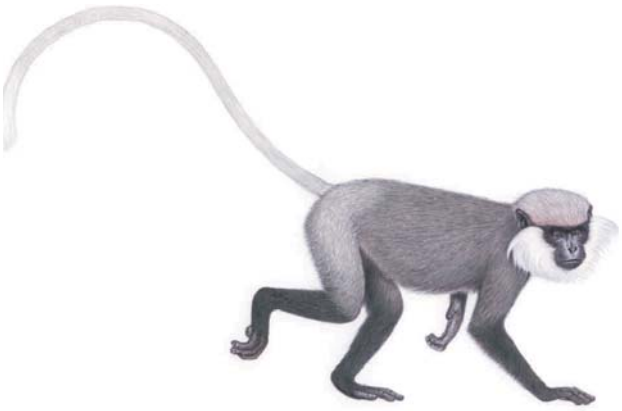
The golden-headed langur, *Trachypithecus p. poliocephalus*, is probably the most endangered of the Asian colobines. This species only occurs on the Island of Cat Ba in the Gulf of Tonkin, northeastern Vietnam. The Cat Ba Archipelago is in the world-famous Ha Long Bay, a spectacular karst formation that was invaded by the sea. The golden-headed langur inhabits tropical most forest on limestone karst hills, and shares this habitat preference with the six to seven taxa of the *T. francoisi* group. Among these so called karst langurs, the Cat Ba langur and its closest relatives, the white-headed langur, *T. p. leucocephalus* Tan, 1955, in southern China, and the wide-ranging Francois' langur, *T. francoisi* (Pousargues, 1898), the northernmost representative of the genus, display the strictest behavioural adaptations to their karst habitat.

There are no systematic and reliable data available on the historic density of the langur population on Cat Ba Island. According to reports of indigenous people the entire island of Cat Ba (140 km²) and some smaller offshore islands were previously densely populated by langurs. Hunting has been the sole cause for the dramatic and rapid population decline from an estimated 2,400–2,700 in the 1960s to only 53 individuals by 2000. The langurs were poached mainly for trade in traditional medicines. Since the implementation of strict protection measures towards the end of 2000, the langur population on Cat Ba Island increased to a current 65 individuals (+22.5%). Although the growth of the population is encouraging, the overall status of the species is most critical. As a result of habitat fragmentation, the remaining population is now divided into seven isolated sub-populations, five of which include or consist of all-female groups, thus non-reproducing social units. The estimated effective population size is 29 individuals at most. Only three groups are currently reproducing, and the total reproductive output in this species is accordingly low. Since a peak in births in 2003, the reproductive output of the Cat Ba Langur has stagnated at 1-2 offspring per year.

Cat Ba Island and the surrounding area are nationally and internationally recognized for their importance to biodiversity conservation. Cat Ba National Park was established in 1986. It presently covers more than half of the main island. The Cat Ba Archipelago (some 1500-2000 large and small islands, cliffs and rocks) was designated a UNESCO Man and Biosphere Reserve in 2004. Despite this, nature and wildlife protection on Cat Ba Island is deficient. Efforts to effectively conserve the langurs and their habitat face major obstacles because of the lack of partnership and commitment with the local communities and the need to better address their aspirations for development, and due to the steadily increasing human population, besides persistent, severe deficiencies in law enforcement. As elsewhere in the region, poaching is driven by increasingly attractive commercial gains in satisfying the immense local and regional demand for wildlife. The strictest protection regime possible is necessary for the survival of all the mammals and other species on Cat Ba that are, like the langurs, targeted by the Asian wildlife trade.

A conservation program for the golden-headed langur on Cat Ba was initiated in November 2000 by the Zoologische Gesellschaft für Arten-und Populationsschutz (ZGAP), München, in cooperation with Allwetterzoo, Münster, Germany. The aim is to provide for their protection, reduce population fragmentation, and contribute to the conservation of the biodiversity on Cat Ba Island in collaboration with Vietnamese authorities.

Roswitha Stenke, Phan Duy Thuc & Tilo Nadler



Western Purple-faced Langur
***Semnopithecus vetulus nestor* Bennett, 1833**
Sri Lanka (2004, 2006)
Endemic to Sri Lanka, this langur is restricted to a small area of the wet zone in the west of the country, most of which is threatened due to human activities (crops, infrastructure and industry, settlements, deforestation and forest fragmentation, and hunting). Colombo, the capital city of Sri Lanka, is in the center of its very limited range. Hill (1934) indicated that it was common around the capital, but this is no longer the case.

Forest cover in Sri Lanka has declined drastically since the late 1950s, and the area of occupancy of this langur has been reduced to a highly fragmented 1,900 km² (Molur *et al*., 2003). Although still quite numerous (>10,000), the declines in numbers are expected to have been precipitous—estimated at more 80% in three generations due to urbanization and development. Western purple-faced langurs are highly arboreal and need good canopy cover, and there are possibly less than three forests that can support viable populations, none of which are protected areas set aside for conservation. The human-modified areas that sustain much of the langur population, such as gardens and rubber plantations, are under private ownership and changing rapidly due to human population expansion and development; large trees are cut down and entire forest patches are destroyed for housing and development. This severely restricts home ranges, isolating the groups, and resulting in escalated conflict with humans and low juvenile recruitment rates (Dela, 1998). Long-term studies by Dela (1998) have shown that this taxon is unique in having subpopulations adapted to a diet high in mature/ripe fruit, a feature as yet unrecorded for any other colobine, and are dependent on fruits cultivated by humans.

The geographical range of the species has a very high human population density, and home ranges are being compressed due to loss of tree cover. Censuses are urgently needed identify forest areas for conservation and to better quantify the decline of subpopulations in space and time, and to

provide a better understanding of their demographics (especially reproductive rates, population turnover and dispersal) in the extremely disturbed habitats where they survive today.
Jinie Dela & Noel Rowe

Grey-shanked Douc
***Pygathrix cinerea* Nadler, 1997**
Vietnam (2000, 2002, 2004, 2006)
The colobine monkeys of the genus *Pygathrix* are native to Indochina. Until only ten years ago, just two distinct taxa were recognized: the red-shanked douc, *Pygathrix nemaeus*, named by Linnaeus in 1771, in the northern part of Central Vietnam and Central Laos; and the black-shanked douc, *P. nigripes*, from South Vietnam and east Cambodia, described exactly a century later by Milne-Edwards. The grey-shanked douc was first described as a subspecies of the red-shanked douc, but genetic studies have since demonstrated a divergence at species level. It occurs in Central Vietnam between 13°30' and 16°N, and has been recorded in five provinces: Quang Nam, Quang Ngai, Kon Tum, Gia Lai and Binh Dinh. Currently grey-shanked doucs are known only from Vietnam, but records exist close to the border to Laos, and there are photos of hunted animals from southeast Laos and far northeast Cambodia that suggest that the species occurs in small neighboring areas in both countries. Surveys and research on this recently discovered primate have been conducted by the Frankfurt Zoological Society, led by Tilo Nadler, manager of the Vietnam Primate Conservation Program of Frankfurt Zoological Society and director of the Endangered Primate Rescue Center at Cuc Phuong National Park, and Ha Thang Long, biologist at the Rescue Center. Grey-shanked douc populations are fragmented and estimated to total 600–700 individuals. Their occurrence has been confirmed in eight protected areas: Song Thanh Nature Reserve, Ngoc Linh Nature Reserve, Ba To Cultural and Historical Site, An Toan Nature Reserve, Kon Cha Rang Nature Reserve, Kon Ka Kinh National Park, Mom Ray National Park and A Yun Pa Nature Reserve. However, hunting, the principal threat to the species, is still a problem inside these parks and reserves. Snares are the most commonly used method since gun confiscation programs were carried out in a number of the areas. Often hundreds of traps are installed in trees frequently used by the langur groups, as well as on the ground where they are seen crossing between small forest patches. Trapped animals are often severely injured and mutilated. Forest loss within at least part of the species' range is attributable to the expansion of agriculture, illegal logging and firewood collection. Almost 10,000 ha of forest are destroyed every year in the Central Highlands. The Endangered Primate Rescue Center has received 37 confiscated grey-shanked douc langurs since 1995, and has begun a breeding program to provide stock for reintroduction in protected forests. Based on information from villagers and forest protection authorities, less than one-quarter of the hunted animals are confiscated alive. Ha Thang Long, the biologist of the Endangered Primate Rescue Center, is studying the species in Central Vietnam specifically to provide recommendations for the establishment of special "Species Protection Areas," which will promote connectivity between the currently isolated populations in the established parks and reserves.
Ha Thang Long & Tilo Nadler

Tonkin Snub-nosed Monkey
***Rhinopithecus avunculus* Dollman, 1912**
Vietnam (2000, 2002, 2004, 2006)
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 1911, 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. Historically the species occurs only east of the Red River between about 21°09'–23°N. Due to massive deforestation and intensive hunting in recent decades, its distribution has become dramatically restricted.

Currently, there are only four known locations with recent evidence where Tonkin snub-nosed monkeys occur, and these are completely isolated. In 1992, a population was found in Na Hang District, Tuyen Quang Province. As a result of the discovery, a nature reserve was established in 1994. The nature reserve comprises two separated areas the Ban Bung and Tat Ke sectors. A study in 1993 estimated a population of between 95 and 130 individuals in each sector, respectively, which was probably overestimated. A later study, in 2004–2005, found far lower densities, and estimated only 17–22 individuals in the Tat Ke sector. For the subpopulation of Na Hang Nature Reserve, the most serious threat was a hydropower and flood prevention dam project. Construction began in 2002. Some 10,000 workers moved into the area for dam construction. This increased the demand for wildlife products, firewood and increased human activities. Conservation activities carried out by several organizations have been unsuccessful, and resulted in a reduction of this subpopulation.
A population of about 70 individuals was estimated for Cham Chu Nature Reserve, also in Tuyen Quang Province. Based on local interviews during a survey reported in 1992 the population was believed to have dropped to only 20–40 individuals. A survey in 2006 provided no sightings and no reliable evidence of the survival of the population. Local reports indicate, however, a small group of 8-12 individuals still in the area. A population of about 60–90 Tonkin snub-nosed monkeys was discovered 2001 in Khau Ca, close to Du Gia Nature Reserve,

Ha Giang Province. This is the only population which is not immediately threatened. There, public awareness and community participatory activities are being linked to increased protection efforts under the supervision of Fauna & Flora International (FFI). The total population of the Tonkin snub-nosed monkey is believed to be less than 150 individuals.
Le Khac Quyet, Tilo Nadler & William R. Konstant

Hainan Gibbon
***Nomascus hainanus* (Thomas, 1892)**
China (Island of Hainan)
(2000, 2002, 2004, 2006)
The taxonomy of the crested black gibbons, genus *Nomascus* is still in debate, but experts now believe there are three species: the Hainan gibbon, *Nomascus hainanus*, the most endangered of any of the gibbons and restricted to the island of Hainan (Geissmann 2003; Geissmann and Chan 2004; Wu *et al.* 2004; Zhou *et al.* 2004); the eastern black gibbon, *Nomascus nasutus,* occurring in northeast Vietnam (Nadler 2003), and adjoining Guangxi Zhuang Autonomous Region, China (Chan *et al.* in prep.); and the western black gibbon, *Nomascus concolor,* occurring in central Yunnan, China, and Indochina. A recent study found no molecular differences between the putative subspecies of *N. concolor*, but significant genetic differences between the forms *hainanus* and *nasutus* (Roos *et al.* 2007). The Hainan gibbon and eastern black gibbon differ in their hair coloration (Geissmann *et al.* 2000; Mootnick, 2006) and territorial calls (La Q. Trung and Trinh D. Hoang, 2004). These characteristics, in association with the newly discovered genetic differences, suggest that the Hainan gibbon and eastern black gibbon be considered distinct species (Roos and Nadler 2005; Roos *et al.* 2007).

Adult male eastern black gibbons are black and can have a slight tinge of brown hair on the chest. Adult male Hainan gibbons are entirely black (Geissmann *et al*. 2000; Mootnick, 2006). Adult female Hainan gibbons and eastern black gibbons vary from a buffish to a beige brown and have a black cap (Geissmann *et al*. 2000; Mootnick, 2006). The adult female Hainan gibbon has a thin, white face ring that is thicker above the mouth and below the orbital ridge. The hair surrounding the face of the female Hainan gibbon creates a rounded appearance encircling the face. The hair grows outwards on the side of the face and in a more downward direction as it gets closer to the chin. This contrasts with the female northern white-cheeked gibbon *(Nomascus l. leucogenys)*, whose facial appearance is slightly similar to the female Hainan gibbon. The hair on the outer sides of the face of the female white-cheeked gibbon grows in a more upwardly direction giving the face a more triangular appearance. Depending on the amount of humidity, female *Nomascus* can acquire a more orangey color resulting from their sweat (Mootnick, 2006). The only account of a live female eastern black gibbon in close proximity was of a female "Patzi" in the Berlin Zoo whose vocalizations were similar to that of eastern black gibbon, but her pelage differed in that she had a very long and broad black crown streak that went past the nape, and extended to the brow, tapering to a thin face ring and becoming thicker at the chin (Geissmann *et al*. 2000; Mootnick 2006). This female had a narrow blackish-brown chest plate slightly wider than the face, beginning at the throat and tapering at the top of the abdomen. At this time Patzi had more black than what has been observed in the wild or in museum specimens of female eastern black gibbons.

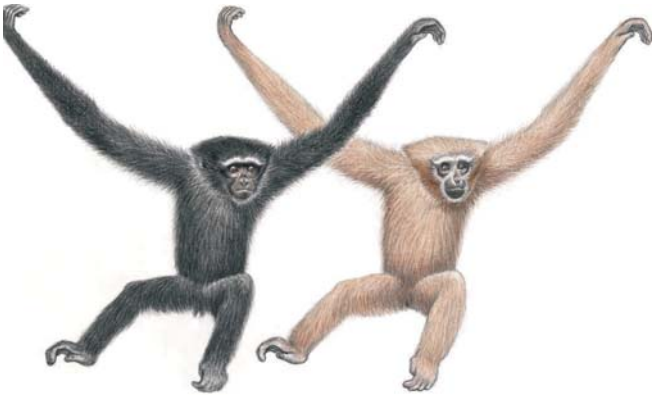
The eastern black gibbon was thought to be extinct in southwestern provinces of China in the 1950s. In the 1960s, it was also feared extinct in Vietnam, but was rediscovered after intensive searches in January 2002 by Fauna and Flora International (FFI) biologists La Q. Trung and Trinh D. Hoang (2004). They found five groups totaling 26 individuals in the remaining 3,000 ha of limestone forest of Phong Nam-Ngoc Khe Mountains, Trung Khanh District, northern Cao Bang Province bordering Guangxi in China. Further surveys by the Vietnam Primate Conservation Programme of FFI and Trung Khanh District rangers in November 2004 located 37 individuals (VNA 2004). Recently, a team of researchers from Kadoorie Farm & Botanic Garden (KFBG) and China confirmed 17 eastern black gibbons in three groups in the Bangliang limestone forest of Jingxi County in Guangxi, neighboring the Phong Nam-Ngoc Khe Mountains of Vietnam. Some of the gibbons observed in Bangliang may be the same individuals counted by Vietnamese counterparts as gibbon groups were seen traveling between the two countries (People's Daily Online 2006; Chan *et al.* in prep.). There is rumor that there might be some eastern black gibbons in Kim Hy Nature Reserve, Bac Kan Province, Vietnam, as well as other border areas in Guangxi, China.

In the 1950s there were estimates of >2000 Hainan gibbons on the island of Hainan in 866,000 ha of forests across 12 counties (Wang and Quan 1986). By 1989 the Hainan gibbon population was reduced to only 21 gibbons in four groups restricted to Bawangling Nature Reserve (Liu *et al.* 1989). In 1998 the population was said to be 17 (Kadoorie Farm & Botanic Garden 2001). A gibbon survey in October 2003 found two groups, and two lone males, comprising a total of 13 individuals (Geissmann and Chan 2004; Fellowes and Chan 2004; Chan *et al.* 2005; Zhou *et al.* 2005); another survey in 2001–2002 estimated 12–19 individuals in four groups (Wu *et al.* 2004). In recent months three newborns and at least one lone female have been observed, bringing the world total to 17 individuals (Hainan Daily Online 2007a).
Gibbons generally establish long-term pair bonds, but in Bawangling National Nature Reserve (BNNR)

there have been repeated observations of two females in the same group both carrying offspring (Liu *et al*. 1989; Bleisch and Chen 1991; Hainan Daily Online 2007a). This "non-traditional" group could be the result of older offspring being unable to locate appropriate mates (Wu *et al.* 2004), limited space to establish new groups (Liu *et al*. 1989), or could reflect habitual bigyny as in the crested black gibbons of Yunnan (Bleisch and Chen 1991; Fan *et al.* 2006). If fresh feces could be collected from these individuals, it is possible that nuclear DNA sequencing could determine the relationships and confirm if observations are being conducted on the same group in different locations. Since 2003, when the first Hainan Gibbon Action Plan was launched (Chan *et al.* 2005), several teams have continued to work roughly in line with the Plan, though with limited coordination. Conservation actions include surveying the distribution of the Hainan gibbon, providing training of staff to monitor the gibbons, restoring the forest, and community conservation work. One team consists of the KFBG, the Hainan Wildlife Conservation Centre of the Hainan Provincial Forestry Department (HWCC), and BNNR. The second (Franco-Chinese) team consists of East China Normal University of Shanghai (ECNU), the Zoological Society of Paris (PZS), and BNNR. A third team from Fauna and Flora International (FFI) China has also conducted monitoring, training and community work in the recent past.

With only 17 Hainan gibbons and 54 eastern black gibbons confirmed, each surviving in just one small forest block, the Hainan gibbon and eastern black gibbon are among the most critically endangered primates in the world. It is important to gain full support from the surrounding community for conservation of the gibbons and their habitat, possibly by ensuring benefits linked to their compliance with conservation goals, and ensuring longer-term commitment from the government and outside partners. Efforts are underway to contribute to the conservation of the eastern black gibbon in Vietnam with the establishment of community-based protection activities. Since there are unconfirmed reports of gibbon occurrences from other forests, additional surveys need to be conducted in both Guangxi and Hainan (Hainan Daily Online 2007b). There is an urgent need to secure and expand suitable forest habitats, for the survival of the few remaining gibbons and their habitats, which will require continued effort and cooperation among all parties.
Alan R. Mootnick, Xiaoming Wang, Pierre Moisson, Bosco P. L. Chan, John R. Fellowes & Tilo Nadler

Western Hoolock Gibbon
Hoolock hoolock (Harlan, 1831)
Bangladesh, India, Myanmar (2006)
The hoolock gibbon was formerly in the genus *Bunopithecus* with just one species and two subspecies: *B. hoolock hoolock*, the western hoolock gibbon, and *B. hoolock leuconedys* Groves, 1967,



the eastern hoolock gibbon from Myanmar and China. Mootnick and Groves (2005) informed that name *Bunopithecus* was not valid, and placed it in a new genus, *Hoolock*, and at the same time argued that the two forms were distinct species (but see Mootnick, 2006). The western hoolock gibbon (*Hoolock hoolock*) occurs in Bangladesh, northeastern India and western Myanmar, west of the Chindwin River. Its range in Myanmar, known from just a few field studies and mostly informal sightings, is restricted to the western parts, delineated from the populations of *Hoolock leuconedys* by the Chindwin River as far as the head waters in the north. In India and Bangladesh its range is strongly associated with the occurrence of contiguous canopy, broad-leaved, wet evergreen and semi-evergreen forests. The species is an important seed disperser, its diet including mostly ripe fruits, with some flowers, leaves and shoots. Western hoolock gibbons face numerous threats in the wild, and are now entirely dependent on human action for their survival. The debilitating threats include habitat encroachment to accommodate ever-growing human populations and immigration, forest clearance for tea cultivation, the practice of *jhum*ing (slash-and-burn cultivation), hunting for food and "medicine", capture for trade, the degradation and decline in quality of their forests that impacts fruiting trees, canopy cover and the viability of their home ranges. Isolated populations face the additional threats arising from the intrinsic effects of small populations. Some populations surviving in just a few remaining trees are subjected to harassment by locals and to lack of food, and are attacked by dogs while attempting to cross clearings between forest patches.

Based on habitat loss over the last 30-40 years, western hoolock gibbons are estimated to have declined from more than 100,000 (Assam state alone was estimated to have around 80,000 in the early 1970s) to less than 5,000 individuals (a decline of more than 90%). The species was known to occur in good numbers in contiguous forests, which have borne the brunt of persistent human impacts. Isolated forest fragments hold just some few families of numbers insufficient for survival in the mid-to long-term. Apart from some border forests between India and Myanmar, the

remaining habitat is fragmented, holding minimal populations of this sort. We have documented the extirpation of western hoolock gibbons from 18 locations over the last 3–5 years; eight in Bangladesh and 10 in India. Bangladesh has about 200 western hoolock gibbons in 22 separate locations, twenty of which have less than 20 individuals each: 17 of these have less than 15 individuals, and 14 have less than 10 individuals. About 100 locations with hoolock gibbons have been recorded in India; 77 have less than 20 individuals, and 47 of these have less than 10 individuals. The Population Viability Analysis (PVA) predicts a 95% decline in the population in Bangladesh and a 75% decline in the population in India over the next two decades based on the current effects of human impacts and the intrinsic factors acting on very small and isolated populations.

The population of the western hoolock gibbon in Myanmar has not been surveyed. West of the Ayeyarwaddy-Chindwin River, there is about 50,000 km² of forest in the Rakhine Yoma region, but much of it is degraded and hunted. The area includes the Rakhine Yoma Elephant Range (about 175,500 ha), managed by the Nature and Wildlife Conservation Division of the Forest Department of Myanmar, in Rakhine State, in the lower part of the country (about 17ºN). There are other forested areas farther to the north, including the Chin Hills Complex and the Naga Hills area, but they are considered unsafe for travelers. No published information is available on the current range and status of the western hoolock in Myanmar. Warren Brockelman has been carrying out surveys of the eastern hoolock, *Hoolock leuconedys* Groves, 1967, in accessible protected areas east of the Chindwin River in Myanmar since 2005, and preliminary results indicate that the situation there is considerably more encouraging, with relatively large populations still surviving. The population trends for the western hoolock observed over recent years in Bangladesh and northeast India indicate a very rapid decline in numbers and immediate measures are required by their governments, forest departments, local communities and NGOs.
Sally Walker, Sanjay Molur & Warren Y. Brockelman

Sumatran Orangutan
***Pongo abelii* Lesson, 1827**
Indonesia (2000, 2002, 2004, 2006)
Sumatran and Bornean (*Pongo pygmaeus* Linnaeus, 1760) orangutans, now recognized as two distinct species, comprise the genus *Pongo.* While there are considered to be three subspecies of *P. pygmaeus*, the Sumatran orangutan is regarded as a single taxonomic unit. The viability of all taxa is in question, but the Sumatran orangutan faces a more immediate extinction risk than the Bornean, and is considered Critically Endangered.
The species is endemic to Sumatra, Indonesia, and is now entirely restricted to remaining lowland forests in Nanggroe Aceh Darussalam (NAD) and North Sumatra Provinces. About 7,000 individuals remain (based largely on 2002 satellite imagery), surviving in 13 fragmented habitat units stretching from northern NAD, south to the Batang Toru river in North Sumatra, with a notable gap in their distribution immediately west of Lake Toba. The southernmost populations may be genetically and culturally distinct from their more northern relatives. The largest populations live within NAD province, where until recently, a separatist conflict made monitoring and conservation work problematic.

By far the most significant populations, totaling *circa* 5,600 animals, are found within the Leuser Ecosystem, a 26,000 km² conservation area established by presidential decree that encompasses the smaller Gunung Leuser National Park (10,950 km²; itself part of the Sumatran Rainforest World Heritage Site) and the 1,025 km² Singkil Swamps Wildlife Reserve within its boundaries. The Ecosystem and the national park within it form the only conservation area of note where viable wild populations of the Sumatran orangutan, Sumatran tiger, Sumatran rhinoceros and Sumatran elephant, each of which is endangered in itself, still occur living side by side.

The National Park, however, is predominantly high mountains, and as the orangutan is a predominantly lowland creature, rarely being found above 1,000 m asl, the majority occur within the larger Ecosystem but outside the National Park. For example, the Ecosystem harbors *c.*75% of the remaining 7,000 Sumatran orangutans whilst only 24% are found within the National Park and 20% within the Singkil Swamps Wildlife Reserve. Throughout its range, the primary threat to Sumatran orangutans is logging, both legal and illegal, which often leads to total conversion of forests for agriculture or oil palm plantations. Although exact figures are still unavailable, primary lowland forests in Sumatra have been devastated over the last 20 years. One analysis of satellite imagery concluded that habitat supporting around 1,000 orangutans was being lost each year in the Leuser Ecosystem alone during the late 90's (van Schaik *et al*. 2001). This was largely due to legal logging concessions and conversion of lowland forests to palm oil estates, but also illegal logging and encroachment in some places. Fortunately, however, the rate of habitat loss decreased markedly in many areas during the Aceh civil conflict, as activities in the forests became unsafe, and as a result of a moratorium imposed on logging in the province by the Aceh government.

Orangutan populations have nevertheless plummeted in regions that have been affected by logging. Even small scale illegal logging can reduce local orangutan densities by as much as 60% in Sumatra (Rao and van Schaik, 1997). At least six of the remaining seven populations containing over 250 individuals have experienced between 10 and

15% annual habitat loss due to logging. Encroachment and conversion, especially by settlers fleeing the conflict in NAD and migrants from Nias island, have accelerated habitat loss in some parts. Relocation of people from coastal areas and an increase in demand for timber after the 2004 Tsunami poses a significant new threat. Several proposed new roads (known as the Ladia Galaska project) will lead to a major increase in fragmentation of remaining orangutan populations. Throughout their range orangutans are sometimes killed as pests along forest edges as they raid agricultural crops, and in the far south of their range they are occasionally still hunted as food. A small but significant pet trade in young Sumatran orangutans also persists.

Key conservation interventions rely heavily on a dramatic and rapid improvement in enforcement of wildlife and forest laws and far greater consideration for environmental issues in spatial planning decisions. Implementing patrols, improving law enforcement, stopping illegal logging, halting legal logging and forest conversion to plantations, promoting forest restoration, halting road construction, addressing human-orangutan conflict, and providing connectivity in the landscape to allow for genetic exchange are all seen as pre-requisites for the species' survival. If current rates of habitat loss persist a further 50% of Sumatran orangutans will vanish within a decade. However, there is as much reason to believe the rate of decline will actually increase due to higher demand for timber, fragmentation by roads, expansion of plantations and general population pressure, as there is for mitigation of these threats. Solutions to conserve the remaining lowland primary forests are urgently needed.
Ian Singleton, Susie Ellis & Mark Leighton

Organisations cooperating for Primate conservation

IUCN/SSC PRIMATE SPECIALIST GROUP (PSG)

The Chairman is *Russell A. Mittermeier*, Conservation International, Arlington, Virginia. The **Deputy Chairman** is *Anthony B. Rylands*, Center for Applied Biodiversity Science, Conservation International, Arlington, Virginia.

Coordinator - Special Section on Great Apes, created in 2003 is *Liz Williamson*, Stirling University, Stirling, Scotland, UK. www.primate-sg.org

There are **Regional Coordinators** for the principle areas where primates occur, as follows: **AFRICA SECTION – West Africa** – *John F. Oates*, Hunter College, City University of New York (CUNY), New York, NY, USA, **East Africa** - *David Mbora*, Dartmouth College, Hanover, New Hampshire, USA; **MADAGASCAR** – *Jörg U. Ganzhorn*, Hamburg University, Hamburg, Germany; **NEOTROPICAL SECTION – Mesoamerica** – *Ernesto Rodríguez Luna*, Instituto de Neuroetología, Universidad Veracruzana, Xalapa, Mexico, **Andean Countries** – *Erwin Palacios*, Conservación Internacional Colombia, Bogotá, Colombia, and *Eckhard W. Heymann*, Deutsches Primatenzentrum, Göttingen, Germany, **Brazil and the Guianas** – *M. Cecília M. Kierulff*, Fundação Parque Zoológico de São Paulo, São Paulo, Brazil; **ASIA SECTION – China –** *Long Yongcheng*, Kunming Insitute of Zoology, Yunnan, China; **Southeast Asia** – *Jatna Supriatna*, Conservation International Indonesia Program, Jakarta, Indonesia, and *Christian Roos*, Deutsches Primatenzentrum, Göttingen, Germany; **South Asia** – *Sally Walker*, Zoo Outreach Organization, Coimbatore, India. **General Coordinator**: *John M. Aguiar*, Center for Applied Biodiversity Science, Conservation International, Arlington, USA.

INTERNATIONAL PRIMATOLOGICAL SOCIETY (IPS)

The **President** is *Richard Wrangham*, Harvard University, Cambridge, Massachusetts, USA. The **Secretary General** is *Elisabetta Visalberghi*, Istituto de Scienze e Tecnologie della Cognizione, Roma, Italy and the 5 Vice-Presidents are **Treasurer and Vice-President for Membership** – *Steven Schapiro*, Department of Veterinary Sciences, UTMDACC, Bastrop, Texas, USA; **Vice-President for Communications** – Katie Leighty, University of Georgia, Athens, Georgia, USA; **Vice-President for Conservation** – *Jonah Ratsimbazafy*, Interdepartmental Doctoral Program in Anthropological Sciences, SUNY Stony Brook, Stony Brook, NY, USA; **Vice-President for Captive Care** – *Colleen McCann*, Wildlife Conservation Society (WCS), Bronx, New York, USA; and the **Vice-President for Education and Outreach** – *Anne Savage*, Disney's Animal Kingdom, Florida, USA.

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 conservatio. Website: www.iucn.org/themes/ssc

The **International Primatological Society (IPS)** 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. For more information about IPS, visit <http://pin.primate.wisc.edu/idp/idp/entry/433>.

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 biodiversity hotspots, high-biodiversity wilderness areas and key marine ecosystems. With headquarters in Arlington, VA, CI works in more than 40 countries on four continents. For more information about CI, visit <http://www.conservation.org>.