

I.P.S. Presentations - South Asian Abstracts

Note: Zoo Outreach Organisation, publisher of ZOOS' PRINT magazine, is host to the South Asian regional network of the IUCN SSC Primate Specialist Group (PSG). ZOO also maintains a website

www.southasianprimatenetwork.org

upon which news of the South Asian attending the IPS conference will appear, much like what is in this issue of ZOOS' PRINT. We began publishing South Asian abstracts two years ago after the IPS Congress in Uganda, as well as other information about the networks activities. The network accepts members from the expert to the enthusiast to whom we send news bulletins that we get from PSG's indomitable Deputy Chair, Anthony Rhylands.

DEMOGRAPHIC, REPRODUCTIVE AND BEHAVIOURAL RESPONSES OF LION-TAILED MACAQUES TO ALTERED HABITATS IN THE WESTERN GHATS, INDIA.

Mridula Singh, Mewa Singh, Werner Kaumanns
Maharaja's College, University of Mysore, Mysore, India; Department of Psychology, University of Mysore, Mysore; Cologne Zoo, Germany
Presenter email: mridulasingh15@gmail.com

The lion-tailed macaque (*Macaca silenus*), an endangered species, is endemic to the rainforests of the Western Ghats in southern India. The Western Ghats have been heavily exploited, and as a result, the remaining rainforests have become highly fragmented. Nearly 40% of the remaining 3500 or so animals inhabit fragments ranging from a few hectares to a few square kilometres. The groups in forest fragments are either small or extremely large than those inhabiting more contiguous forests; they also have large number of adult males compared to forest groups which are usually uni-male. In most fragments, the birth rate has been negatively affected.

However, in one privately owned forest fragment (Puthuthotam) where a large number of cultivated fruit trees have been planted, the birth rate has registered a significant increase. The monkeys in this fragment have become totally commensal as a large number of people reside in this fragment. The monkeys here have started to feed on coffee berries and also to accept food from people.

Most of their diet now comes from exotic or pioneer plants. Because of the large distances among the remaining tall trees, these largely arboreal animals now spend most of their time on ground. Our long term data from Puthuthotam have, on one hand, demonstrated the flexibility and capacity of the species to adapt to major changes in the habitat, and on other

hand, the data also show that a species can respond or adapt differently depending on the nature of fragments and the resource quality therein.

Keywords: fragmentation, rainforests

SLEEPING TREE SELECTION BY SYMPATRIC PRIMATES IN GIBBON WILDLIFE SANCTUARY, ASSAM, INDIA.

Dilip Chetry, Rekha Chetry, Kumud Ghosh
Gibbon Conservation Centre, Gibbon Wildlife Sanctuary, Mariani, Assam, India; Aaranyak, Guwahati, Assam; J.N.College, Boko, Assam.
Presenter email: dilip@aaranyak.org

Habitat loss being the primary threat, identification and conservation of the lodging trees is essential for the conservation of primate diversity in their natural habitats. Gibbon Wildlife Sanctuary of Assam is the only sanctuary in India to be named after a primate species. With seven species of non-human primate the sanctuary is one of the highest primate diverse areas in the country. During 2006, the study was carried out to know the diversity and selection of the sleeping trees used by five diurnal primates viz. *Macaca mulatta*, *Macaca arctoides*, *Macaca leonina*, *Trachypithecus pileatus* and *Hoolock hoolock* in the sanctuary.

The primates used 28 species of trees for night sleeping during the study period. Of these 28 species, *Castanopsis indica* was used by all the five primate species. A highest 23.33% of sleeping was recorded on *Castanopsis indica* followed by 13.33% on *Artocarpus chama*. The average diameter at breast height (DBH) of the sleeping trees was 99cm and average height was 28m. The study also records species-specific variations in selection of sleeping trees. *Trachypithecus pileatus* used the highest number of 14 species as sleeping trees, while *Macaca arctoides* used lowest number of 6 species. Differences in selection of sleeping trees allow these sympatric primates to share the same habitat without any major conflict.

Therefore, the conservation of sleeping trees should be a priority for any primate orientated conservation initiatives. This study was supported by USFWS grant agreement No. 98210-5- G-091

Keywords: *Macaca mulatta*, *Macaca arctoides*, *Macaca leonina*, *Trachypithecus pileatus*, *Hoolock hoolock*

FRUGIVORY IN A LEAF MONKEY, *SEMNOPITHECUS VETULUS NESTOR*, LIVING IN HUMAN MODIFIED ENVIRONMENTS, SRI LANKA:

IMPLICATIONS OF SEVERE HABITAT CHANGE

J.D.S. Dela, Open University, Nawala, Sri Lanka
Presenter email: jini@sltnet.lk

Semnopithecus vetulus nestor, the western purple-faced langur of Sri Lanka, inhabits an area with high human population densities and very low forest cover. I investigated the feeding behaviour of two free ranging groups of *Semnopithecus vetulus nestor* living in home gardens and rubber monocultures at Panadura and Piliyandala, Sri Lanka, for 19 and 13 months respectively, using the scan sampling method. Monitoring of habitat change is continuing. In sharp contrast to earlier studies that reveal pronounced folivory among *Semnopithecus vetulus* in natural forests, fruit comprised >50% of the diet of both groups, and significantly exceeded proportional use of foliage (Panadura group: M-W U=12, P=0.0001; Piliyandala group: M-W U=32, P=0.007).

Both study groups fed selectively on fruit over leaves, and fruit-use was independent of young leaf availability. *Artocarpus heterophyllus* (Moraceae; jakfruit), a cultivar, with edible fleshy fruits was the main food species of both groups. Although other colobine frugivores feed mainly on seeds and/or unripe fruit, over 75% of fruit consumed by the study groups was fleshy, human-edible fruit, most of which was ripening or ripe. The use of human-edible fruit by the langurs was, however, a major cause of monkey-human conflict. The study also suggests that changes in modified environments with loss of prime food sources can have serious implications for langur diet.

This study also highlights the need for more research on colobine dietary and digestive flexibility in response to major human-induced changes in their natural habitats in order to formulate conservation action. My attendance at the conference is being supported by the Rufford Small Grants Foundation.

Keywords: *colobine frugivory, ripening/ripe fruit, digestive flexibility*

A COMPARISON OF GROUP SIZE AND COMPOSITION BETWEEN TWO NEWLY DESIGNATED PARAPATRIC LANGUR SPECIES, *SEMNOPI-THECUS PRIAM* AND *S.ACHATES*, IN SOUTHERN INDIA.

D. Vasudev, A. Kumar, A. Sinha
Wildlife Conservation Society India Program, Bangalore, Karnataka, India; Centre for Wildlife Studies, Bangalore, Karnataka, India; National Institute for Advanced Studies, Bangalore, Karnataka, India.
Presenter email: vasudev.divya@gmail.com

Recent taxonomic changes have lent a new perspective to research on variation in social systems in the langurs of the genus *Semnopithecus*. We compare group size and composition of two recently designated parapatric species, *Semnopithecus priam* and *S. achates*, in relation to differences in predation risk and abundance and distribution of food resources. Between

January and May 2006, we obtained group counts and composition for *S. priam* from Bandipur National Park and Mudumalai Wildlife Sanctuary (N=57) and for *S. achates* from the adjoining Nagarhole National Park (N=36). We sampled vegetation from 204 plots (25 m x 25 m) and used published data on densities of tiger and leopard as an indicator of predation risk. *S. priam* lived in larger groups (median=20) with more adult females (median=9) and males (median=3) than *S. achates* (median=14, 6 and 1, respectively). *S. achates* had a higher adult female to male ratio and more single-male groups (52.8% of bisexual groups) than *S. priam* (10.5%). *S. achates* also had more all-male groups (30.7% of all groups encountered) than *S. priam* (11.5%).

The habitat of *S. achates* had more tree species and higher basal area of food trees per sample plot, and a more uniform distribution of these as indicated by a lower coefficient of variation among plots. The diverging social organisations of these two closely related parapatric species is thus more likely related to the abundance and distribution of food resources; in contrast, *S. achates* lived in smaller groups despite a higher predation risk.

Keywords: *social organisation, all-male groups, predation risk, resource distribution*

IMPORTANCE OF AND CHALLENGES TO STATUS ASSESSMENTS OF SOUTH ASIAN PRIMATES AND ITS IMPACT ON PRIORITIZATION

Sanjay Molur, Sally Walker, Mewa Singh
Zoo Outreach Organisation, Coimbatore, Tamil Nadu, India; Department of Psychology, University of Mysore, Mysore, India. Presenter email: herpinvert@gmail.com

For a long time, primates have been thought to be one of the better-studied and well-known taxon groups in South Asia and that common langur was one such species. In 2003, however, South Asia's most knowledgeable primatologists gathered at a Conservation Assessment and Management Plan (CAMP) Workshop and in the process of assessing threat status, the many gaps and inconsistencies in current information became apparent, in particular for the langurs. The workshop output provided an adequate foundation for conservation action as well as a useful resource for future research. In the evolution of South Asian primate studies, however, future research is dependent upon recognition of subtle differences in taxa, so that accurate distribution ranges and behavioural differences between conspecifics can be detailed.

The South Asian primate poster published in 2004 was helpful to researchers in this regard, but more consolidated efforts are needed. In order to develop holistic conservation prioritization and planning taxonomic and conservation issues need to be more accurately identified. Establishment of differences in variables such as biology, utility, economics, conflict,

religion and aesthetics is critical in determining prioritization approaches, so that exclusivity in the use of only one or a few of these is minimised. A radical change in approach is required so that assessment and prioritization exercises are taken seriously by drivers of official policy.

Keywords: CAMP, gaps, langurs, distribution

MIND YOUR MONKEY MANNERS: ADDRESSING PPC – PEOPLE/PRIMATE CONFLICT IN INDIA

Sally R. Walker, Sanjay Molur, Janaki Lenin
Zoo Outreach Organisation, Coimbatore, Tamil Nadu, India; Wildlife Information Liaison Development Society, Coimbatore, Tamil Nadu, India; 3Draco Films, Chennai, Tamil Nadu, India Presenter email: sallyrwalker@aol.com

In India there is a tradition of feeding monkeys in holy places, roadsides or wherever monkeys gather. Last two decades monkeys gather more in cities, towns and villages. Human beings themselves may be the root cause of this problem as they have encouraged the animals on the one hand by feeding them while usurping primate habitat on the other. Complex solutions (sterilisation, translocation, etc.) provide only temporary relief here and create more problems there. Oddly, there has been very little systematic public education offered and precious little literature.

To fill this gap, and to introduce common sense, basic behavioural information, and personal responsibility to address this issue, Zoo Outreach Organisation developed a simple education program which is popular with forest departments, educators, NGOs, etc. The program is called "Monkey Manners" stresses that human beings must mind their own manners in monkey locales instead of expecting monkeys to change. A variety of components make it suitable for a range of ages and educational levels. It is written in a popular style using humour, rap and rhyme combined with sensible "rules" called "monkey do's and monkey don'ts" that promote understanding, tolerance and peaceful coexistence. The program is in its third print run in English and has been translated on request into two Indian languages.

Reliance on complicated solutions while ignoring simple measures, such as education and simple, practical actions has not worked. Although not a complete solution, more sensible behaviour may prevent or mitigate some conflicts, injuries and even deaths.

Keywords: human-wildlife, outreach, public education, India

STATUS AND DISTRIBUTION OF NON-HUMAN PRIMATES OF FOUR DISTRICTS OF ARUNACHAL PRADESH, INDIA.

Jayanta Das, Jihosuo Biswas, Dhiraj Borah, P.C. Bhattacharjee.
Wildlife Areas Devel. and Welfare Trust, Guwahati, Assam, India; Primate Research Centre, NE India, Guwahati, Assam, India; Animal Ecology and Wildlife Biology Lab, Gauhati Univ., Guwahati, Assam, India.

Survey of four districts (Tawang, West Kameng, Changlang and Lohit) of Arunachal Pradesh were carried out from January, 2005 to May, 2006. Nearly 600 km of transects were laid down and 500 km drive transects were surveyed. We recorded eight species and three sub species for primates from these four districts. Eight species of primates from Lohit, seven species from Changlang districts and three species from Tawang and West Kameng districts. In this survey we recorded the eastern Hoolock gibbon and blond bellied capped langur from Arunachal Pradesh for the first time. We also confirmed the range extension of Tenebrous Capped langur upto Nameri Pakke WLS complex. This study was supported by Margot Marsh Biodiversity Foundation, PCI, and U.S. Fish and Wildlife Service.

Key Words : Status, Distribution, Arunachal Pradesh

COUNTDOWN 2010 * SAVE BIODIVERSITY POSTER/2+YEARS CALENDAR ... TIL 2010



The Zoo Outreach Organisation / Wildlife Information Liaison Development **Countdown 2010** Calendar will carry you through to the end of the CD 2010 Campaign. This 2+ years calendar will remind you to *Think Globally but Act Locally* in order to impact biodiversity. No one entity, be it continent, region, country, state, city, village, organisation, institution, club, groups, couple, or individual can 'Save Biodiversity' or even a single species alone. Do your bit but work with others on projects that are achievable. For a free calendar you have to pay postage. Email us at zooreach@zooreach.org.