

The trade in pet lorises has been cited as a key threat to their decline. The species noted as hardest hit is the Javan slow loris *N. javanicus*, which was included on Conservation International's biennial list of the *World's 25 Most Endangered Primates* in both 2008 and 2010. Long-term data on loris trade, rescue and rehabilitation from Java, Indonesia, reveal the impact. Cutting of teeth by traders, inability of reintroduced animals to survive in the wild, and lack of enforcement of animal protection laws were clarified as key threats, and are representative of the region in general.

In 2009 the threat of the pet trade to slow lorises was highlighted at a global level when a *YouTube* video of a pet pygmy slow loris being tickled went viral, achieving nearly 15 million hits by 2012. Pet slow lorises on *YouTube* were nothing new: before 2009 a survey of *YouTube* and *FlipClip* found 75 videos of loris pets. The worrying aspect of the tickling video was the immediate reaction of the thousands of commenters, one in 10 of whom indicated they would like a loris as a pet.

For 3 years various animal rights groups petitioned *YouTube* to remove the video, which shows a highly overweight loris in a brightly lit room on a bed with no substrates to grasp, tagging it as animal abuse. The video remained and *YouTube* refused to comment. Although the owners of the animal in the video claimed that in Russia it is legal to own lorises as pets, other groups pointed out that only 12 pygmy lorises had ever been legally imported into Russia, and these had been for scientific or zoo-breeding purposes, thus questioning the legality of Russian breeding facilities for lorises. The zoo community pointed to the low reproductive rate in captivity, and the small worldwide captive population, all indicating an illegal origin for most of the loris pets seen in videos.

On 25 January 2012 the UK-based BBC Natural History Unit aired a programme in its Natural World series entitled *The Jungle Gremlins of Java*. Although principally a film about the ecology of the Javan slow loris the film highlighted the tickling video, and showed nearly 10 minutes of footage of animal markets in Indonesia offering for illegal sale more than 30 slow lorises of three species, but mainly Javan slow lorises. The reaction was immediate.

Within the next 2 weeks more than 1,500 comments appeared on the main *YouTube* video. Rather than wanting one as a pet the public outcry had turned to conservation, informing viewers of the cruel trade, the removal of teeth for use in medicines, and the death usually faced by animals in markets; viewers also implored those responsible for uploading the video to remove it. On 9 February, after 3 years and being one of the most popular animal videos on *YouTube*, the main video was removed.

Many copies of the video remain on *YouTube*, however. Whether *YouTube* videos of threatened species as pets imperils them and encourages their trade is difficult to

quantify. The case of the slow loris illustrates, however, how providing the public with correct information on threatened species can have immediate and direct impact on attitudes and opinions.

K.A.I. NEKARIS and N. CAMPBELL Nocturnal Primate Research Group, Oxford Brookes University, Oxford, OX3 0BP, UK  
E-mail [anekaris@brookes.ac.uk](mailto:anekaris@brookes.ac.uk)

## From Alaska to Patagonia: the IUCN Red List of the Continental Ecosystems of the Americas

In October 2008 the IUCN launched a process for establishing an IUCN Red List of Ecosystems. For most of 2009 and 2010 members of a working group organized by IUCN's Commission on Ecosystem Management and Ecosystem Management Programme focused on developing preliminary quantitative criteria for categorizing ecosystems according to their risk of collapse (i.e. disappearance or transformation into another ecosystem), using a process analogous to that used for the IUCN Red List of Threatened Species (Rodríguez et al., 2011, *Conservation Biology*, 25, 21–29).

With major support from the MAVA Foundation, and co-sponsorship from the Smithsonian Institution, EcoHealth Alliance, Provita and the Fulbright Program, an ongoing global consultation was launched to test preliminary criteria in a range of ecosystem types and in different regions and institutional settings. Additional feedback will be sought during the IV World Conservation Congress (Jeju, Korea, 6–15 September 2012), with the aim of having a revised set of quantitative criteria available to the scientific community by 2013.

Over the next decade the hope is to assess all the world's land masses and oceans, leading to complete coverage of terrestrial, freshwater, marine and subterranean ecosystems. We anticipate a significant expansion in existing institutional and technical capacity, especially in biodiversity-rich countries in the developing world, for assessing risk to ecosystems and for using this information for conservation decision-making by all sectors of society.

With the generous support of the Gordon and Betty Moore Foundation we will undertake a new challenge during 2012–2014: the IUCN Red List of the Continental Ecosystems of the Americas. Activities will be structured around three themes that can be broadly defined as science, public awareness, and biodiversity policy. The scientific aim will be to assess fully the conservation status of the continental ecosystems of the Americas by developing a series of baselines across the continental distribution of each type, assessing land cover change against these baselines, quantifying the drivers of change, and applying the Red List criteria to ecosystems at the regional and national level. Our public awareness aim is to improve public access to

information on the status of ecosystems by creating an online open-access toolbox for housing and analysing scientific data, developing a portfolio of scientific and popular publications, improving public knowledge, and integrating the Red List of Ecosystems with the IUCN Red List of Threatened Species and World Database of Protected Areas to enhance biodiversity conservation planning. The biodiversity policy aim is to use the Red List of Ecosystems to engage actively with governments in the region in the development of national Red Lists of Ecosystems, informing regional economic, social and environmental cooperation organizations, and maintaining a high profile at key global biodiversity-related scientific meetings.

By using the experience of the IUCN Red List of Threatened Species as a model, the present effort has the potential to influence allocation of conservation resources to threatened ecosystems throughout the world, and to influence the policy process of biodiversity-related international conventions such as the Convention on Biological Diversity (e.g. Aichi Biodiversity Target 5 adopted in Nagoya in October 2010) and the Ramsar Convention on Wetlands of International Importance. Similar effects could also be expected at the national level, as public knowledge of ecosystem risk increases and countries around the world implement Red Lists of Ecosystems. An IUCN Red List of Ecosystems also has the potential to serve as an important instrument to guide investments for several Millennium Development Goals, as poverty reduction and improvements in health are dependent on properly-functioning ecosystems that provide important goods and services for human well being. For more information, updates and information on how to become involved please visit [http://www.iucn.org/about/union/commissions/cem/cem\\_work/tg\\_red\\_list/](http://www.iucn.org/about/union/commissions/cem/cem_work/tg_red_list/)

JON PAUL RODRÍGUEZ\* and KATHRYN M. RODRÍGUEZ-CLARK *Centro de Ecología, Instituto Venezolano de Investigaciones Científicas, Apdo. 20632, Caracas 1020-A, Venezuela*  
E-mail [jonpaul@ivica.gob.ve](mailto:jonpaul@ivica.gob.ve)

DAVID A. KEITH *Australian Wetlands and Rivers Centre, University of New South Wales, Sydney, Australia, and New South Wales Office of Environment & Heritage, Hurstville, New South Wales, Australia*

EDMUND G. BARROW *IUCN Ecosystem Management Programme, Gland, Switzerland*

PATRICK COMER *NatureServe, Boulder, Colorado USA*

MARÍA A. OLIVEIRA-MIRANDA *Provita, Caracas, Venezuela*

\*Also at Provita, Caracas, Venezuela, and IUCN Commission on Ecosystem Management and IUCN Species Survival Commission, Gland, Switzerland

## Mangrove conservation amidst land sharks

Mangroves in and around Mumbai, India, have undergone massive destruction and c. 70% of Mumbai's mangroves have been destroyed by various development activities. In spite of the protection afforded by several Acts, mangroves in the city continue to face destruction. Since 2005 the Conservation Action Trust, a registered non-profit organization formed to protect the environment, and particularly wildlife and forests, with a focus on mangroves, has been handling a number of cases that were filed by the Bombay Environmental Action Group prior to the formation of the Trust. The Trust is dedicated to providing assistance in the form of technical information, legal advice, aid and equipment to those who are confronting environmental problems. It works closely with Forest Departments and NGOs working to protect nature and natural resources.

To protect the remaining mangroves in and around Mumbai, Debi Goenka, the Executive Trustee of the Conservation Action Trust, filed a Writ Petition in the Bombay High Court seeking the Court's intervention to inhibit the destruction of mangroves. The result was an order passed by the Honourable High Court on 6 October 2005 that states: (1) There shall be a total freeze on the destruction and cutting of mangroves. (2) All construction and rubble/garbage dumping on the mangrove areas shall be stopped forthwith. (3) Regardless of ownership of the land, all construction taking place within 50 m on all sides of all mangroves shall be forthwith stopped. (4) All Government owned land will be notified as Protected Forests and handed over to the Forest Department.

However, there was a delay in notifying the areas as Protected Forests, in view of which a further order dated 27 January 2010 was passed to protect the mangroves in Raigad, Ratnagiri and Sindhudurg Districts. As per this Order, 'no non forests activity should be permitted by the respondent state in these mangrove areas throughout the state of Maharashtra which shall be subject to section 2 of the Forests (Conservation) Act 1980 and Environment Protection Act and Rules, without taking permission from the competent authority'.

Based on these orders and the efforts of the Conservation Action Trust for protection and conservation of mangroves, in November 2011 the Supreme Court rejected a plea by a local builder to convert the mangroves to salt pans (at Dahisar, Mumbai). The builder had already constructed new bunds and dumped thousands of truck loads of debris so as to take over a 430-acre mangrove-covered site for private development. In the field the Trust's team was repeatedly threatened, attacked at least twice and had equipment stolen. However, the Trust continued the campaign along with a local residents' group and was able to halt the destruction of these mangroves.