

seed dispersal, pollination and other key forest processes, making it even more difficult to predict the future impacts of climate change.

In the face of such challenges, tropical ecologists face daunting pressures to answer not just fundamental questions about the distribution and biology of Asia-Pacific fauna and flora but many pressing practical questions as well—questions that require engaging in the pithy realities of conservation practice. With this in mind, the Asia-Pacific Chapter of the Association for Tropical Biology and Conservation held its 6th annual meeting in March 2013. Gathering under the theme Linking Biodiversity Science to Policy and Conservation Action, over 200 researchers from 25 nations met in Banda Aceh, in the far north of Sumatra, Indonesia.

Over four days more than 150 talks and posters highlighted cutting-edge issues in conservation and tropical biology. These were arranged within 13 symposia, such as Biogeography, Biodiversity and Bioinformatics of the Tropical Asian Flora, Species to Seascapes: Innovative Approaches to Managing Marine Ecosystems, and Transforming Conservation Science into Conservation Action. The Association's current President Lúcia Lohmann explained how her biogeographical studies of lianas could help untangle the complex history of tropical forests, and former President William Laurance spoke about growing pressures on biodiversity hotspots. Indian doctoral student Nandini Velho received the Outstanding Student Paper prize (From mosquito to Minister: malaria and the management of a tiger reserve in north-east India) and Manichanh Satdichanh from Lao PDR was awarded best Student Poster (Species composition of angiosperms in Phou Khao Khoauy National Park, Lao PDR).

In addition to the talks and posters seven workshops were run, by international experts, to enhance the capacity of regional scientists. These included training in Experimental Design and Data Analysis, Scientific Proposal Writing, SMART Conservation Software for Law Enforcement Monitoring, and Evolutionary Approaches to Biodiversity Science. In total, 27 fellowships were awarded for aspiring scientists and conservation researchers to attend these courses.

As researchers discussed the many challenges facing Asia-Pacific biodiversity and ecosystems, the local NGO community called stridently in the national press for the Association to take a formal position on the so-called Aceh Spatial Plan. Sentiments were running so high that over 70 local demonstrators gathered outside the conference venue on its opening night, urging the Association to act. Sumatra has suffered devastating forest loss and degradation in recent decades, with Aceh Province containing the largest surviving block of intact forest—and the only place where tiger, rhino, elephant and orang-utan still co-occur. The Plan will govern the fate of over 3 million ha of the

Province's forests and includes, in its present version, provisions to convert large expanses of forest to oil palm, pulpwood and paper plantations.

In the face of such urgency the Association elected to issue a formal statement—the Banda Aceh Declaration—after conferring with its Committee members, local NGOs and relevant members of the Aceh Government. The Declaration recommended that the Aceh Spatial Plan be based on the best scientific data available, and that it considers fully the environmental risks associated with the loss and degradation of ecological services that underpin Aceh's economy and the well-being of its citizens. It also stressed the need to enforce the law to halt ongoing illegal logging. The Declaration is an unprecedented achievement for Aceh because it is the first joint position that leading scientists, local conservation NGOs and the Government of Aceh have agreed upon. Such common ground should help these stakeholders as they engage in future debate and negotiations.

The Association for Tropical Biology and Conservation has historically had its greatest strength in Latin America but with recent annual conferences in Germany (2009), Bali (2010) and Tanzania (2011), the growth of its Asia-Pacific Chapter, and forthcoming conferences in Australia (2014) and Cambodia (2015), it has become a truly global organization for advancing tropical research and conservation.

MATTHEW LINKIE *Fauna & Flora International, Cambridge, UK.*
E-mail matthew.linkie@fauna-flora.org

WILLIAM LAURANCE *Centre for Tropical Environmental and Sustainability Science and School of Marine and Tropical Biology, James Cook University, Cairns, Queensland, Australia*

ANTONY LYNAM *Wildlife Conservation Society, Global Conservation Program, Bronx, New York, USA*

LÚCIA LOHMANN *Universidade de São Paulo, Instituto de Biociências, Departamento de Botânica, São Paulo, Brazil*

Strong evidence that the West African chimpanzee is extirpated from Burkina Faso

The Endangered West African chimpanzee *Pan troglodytes verus* is one of the most threatened subspecies of chimpanzee, with an annual decline of at least 4.7%; populations in its eastern range have been particularly vulnerable to local extinctions. Côte d'Ivoire has experienced a 90% population decrease over the past 20 years, and *P. troglodytes verus* is generally considered to be extirpated from Benin, Togo and Burkina Faso. Opinions in the literature are undecided, with inconsistent accounts and distribution maps. The 2003 IUCN Status Survey and

Conservation Action Plan for West African Chimpanzees named the investigation of the presence of the chimpanzee in Burkina Faso as a priority, as did the 2005 *World Atlas of Great Apes and their Conservation*. Following an alleged sighting of a chimpanzee in south-eastern Burkina Faso in 2011, and based on unconfirmed reports of the subspecies in the south-west, our research team aimed to investigate the status of *P. troglodytes verus* in Burkina Faso.

Between 11 May and 16 July 2012 we conducted reconnaissance surveys totalling 250 km in five forest reserves along the southern border of Burkina Faso: Arly National Park and Pama Partial Reserve in the south-east, Comoé-Léraba Partial Reserve in the south-west, and Koulbi Protected Forest and Nazinga Game Ranch and Reserve in the south central region. While conducting a preliminary primate survey we searched for any signs of the presence of chimpanzees; we found no chimpanzee faeces, tracks, feeding signs or nests, and made no sightings, across the five study sites.

We supplemented our surveys with interviews with seven farmers, 12 forestry guides, and five forestry officials. We presented each participant with a series of animal pictures, only one of which was *P. troglodytes verus*, to control for bias, asking for a yes/no answer as to whether they had ever seen each animal in the wild. We were prepared to follow up on any potential leads with forest surveys but no new leads were acquired. Only three individuals reported ever seeing chimpanzees in Burkina Faso. Two reports came from the region of Arly National Park, from 1999 and 2002, respectively. The third report was from Comoé-Léraba Partial Reserve more than 13 years ago. The positions of Arly National Park and Pama Partial Reserve north of Benin and Togo, from which chimpanzees are considered to be extirpated, and the lack of knowledge of chimpanzees amongst forestry officials and guides, makes the south-east an unlikely habitat for chimpanzees. Our findings suggest that chimpanzees may have never occurred in the south central region of the country, including Koulbi Protected Forest, which is close to both Côte d'Ivoire and Ghana.

Comoé-Léraba Partial Reserve seems to have harboured seasonal populations of chimpanzees in the past, as reported in multiple sources for 1969–1988. These groups were probably moving north from Comoé National Park in northern Côte d'Ivoire, just 35 km south of Comoé-Léraba. We suggest that this seasonal behaviour has ceased and/or the regional population has dramatically decreased because of three inter-related reasons: (1) the high degree of poaching in Comoé-Léraba (we encountered signs of poaching at a rate of 0.29 km⁻¹ surveyed); (2) the once well-protected Comoé National Park suffered a massive decline in its chimpanzee population after management was forced to leave the park during 2001–2011 during a period of political unrest; (3) the land between Comoé National Park and Comoé-Léraba is not protected or managed, leaving

large mammals in the area extremely vulnerable to habitat loss and poaching.

We suggest that, although confirmation of absence can never truly be made, the perennial or seasonal presence of *P. troglodytes verus* in Burkina Faso is unlikely. This Endangered great ape has lost its foothold in Burkina Faso, Togo, Benin and Gambia, remains in only a small section of Ghana, and is experiencing a catastrophic population decline in Côte d'Ivoire. These findings highlight the continually shrinking range of the West African chimpanzee, which has been increasingly fragmented, and the species locally extirpated, over the past several generations.

LAURA P. GINN, JOSH ROBISON, IAN REDMOND* and K.A.I. NEKARIS
Oxford Brookes University, Oxford, UK. E-mail anekaris@brookes.ac.uk

*Also at: UNEP/UNESCO Great Ape Survival Partnership and Ape Alliance

14th Conservation Workshop for the Biodiversity of Arabia

The 14th Annual Conservation Workshop for the Biodiversity of Arabia was held at the Breeding Centre for Endangered Arabian Wildlife in Sharjah, UAE, during 3–6 February 2013. This regional forum brought together 120 participants representing UAE, Algeria, Qatar, Jordan, Saudi Arabia, Bahrain, Kuwait, Iran, Iraq, Syria, Yemen and Oman, as well as from the USA, UK, South Africa, and New Zealand. The workshops are hosted by the Environment and Protected Areas Authority of the Government of Sharjah, under the patronage of His Highness Sheikh Dr Sultan bin Mohammed al Qassimi, member of the Supreme Council and Ruler of Sharjah. The 14th Workshop in 2013 had two parallel themes. The protected areas and planning theme looked at Bioregional Planning and Strategic Planning for Species Conservation. A species assessment theme conducted a formal regional Red List assessment of the breeding birds of Arabia.

Bioregional Planning had been introduced at previous workshops in 2010 and 2011, at which the Environment Agency–Abu Dhabi accepted a mandate to produce a regional biodiversity assessment, under the Abu Dhabi Global Environmental Data Initiative. In a series of meetings, workshops, and with extensive data sharing from across the region, the Initiative's team was able to undertake the first detailed systematic assessment for the entire Arabian Peninsula using six derived layers: integrated marine and terrestrial habitats, land use and marine condition, formal protected areas, species distributions, ecological processes, and opportunities and constraints. This assessment enabled the development of a comprehensive habitat map for the Peninsula and the identification