

from government, universities, conservation NGOs, zoos, rescue centres and local communities. Following a series of presentations on gibbon status and genetics, conservation activities and viability concerns, participants identified potential threats, challenges and issues considered likely to affect Hainan gibbon population viability and conservation. Working groups discussed the main threats and developed conservation goals, along with recommendations for management and research actions to help achieve the goals. Recommended actions were evaluated for potential benefit, costs, risks and likelihood of success, and timelines, responsible parties/collaborators, resources required, and priority status were assessed where possible for each action.

The newly published bilingual *International Conservation Planning Workshop for the Hainan Gibbon: Final Report* (available from <http://www.cbgs.org> and <http://www.zsl.org>) details the 12 goals and 44 specific conservation actions. Key goals include: effective protection and enhancement of gibbon habitat and connectivity at Bawangling National Nature Reserve; expansion of gibbons into additional good-quality habitat; enhanced monitoring and improved understanding of factors affecting dispersal, group formation and colonization of new habitat; development of an emergency response plan for any future crisis; and improved communication to facilitate collaboration among stakeholders.

The report is being used as a guide to develop both a Chinese Species Conservation Action Plan and an IUCN Species Action Plan. Local and regional management teams are now working with Chinese and international collaborators to conduct activities considered beneficial for the long-term survival of the species. However, additional governmental and international support will be needed to implement all identified priority actions and thus safeguard the future of this rare, endemic Chinese primate.

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## 16th International Conservation Workshop for Arabia's Biodiversity

The 16th Annual International Conservation Workshop for Arabia's Biodiversity was held at the American University of Sharjah, in conjunction with the Breeding Centre for Endangered Arabian Wildlife in Sharjah, United Arab Emirates, during 2–5 February 2015. This forum brought together over 150 participants from UAE, Qatar, Jordan, Saudi

Arabia, Bahrain, Kuwait, Yemen and Oman, and from the UK, South Africa, Hungary, Australia and New Zealand. The Sharjah 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 Qasimi, Member of the Supreme Council and Ruler of Sharjah.

The 16th Workshop had four themes. The protected areas and planning theme looked at the assessment and management of human–wildlife conflict; a species assessment theme conducted a review of the conservation status, threats and management of marine turtles in the Arabian Peninsula region; a veterinary theme looked at the issue of herbivore health care; and a technical theme examined aspects of electronic data capture.

The topic of human–wildlife conflict had been raised as an important regional issue at previous workshops, in particular concerns about predation of livestock by native carnivores. In a series of sessions facilitated by Brandon Anthony of the Central European University, Budapest, Hungary, working groups looked at case studies relevant to the Arabian Peninsula: livestock predation and perceived threats to people from the leopard, wolf, hyaena, caracal and jackal; commensalism by *Hamadryas* baboons; and issues concerning goats in and around protected areas. The working groups looked at: identification of stakeholders; environmental and social risk factors; the perceived and real costs of conflict; policy and management options; contextual challenges; monitoring and evaluation; and research needs. It was recommended that stakeholder engagement strategies and tools for social scientists need to be further developed for the region in taking this subject further.

The species assessment theme covered the status and conservation of the five species of marine turtles (four of them breeding) in the Arabian Peninsula. Topics covered included identification of key nesting and foraging sites, a threat assessment at regional and national levels, research needs, identification of stakeholders, and listing of recent and current turtle conservation projects. A vision and a goal for marine turtle conservation were developed along with a set of objectives to provide a conservation strategy framework for integration into existing initiatives, such as the Convention on the Conservation of Migratory Species of Wild Animals Indian Ocean and South-east Asia Memorandum of Understanding.

The veterinary theme's main focus was herbivore health-care and in particular the state of emerging and re-emerging diseases in the region. Moritz van Vuuren, a veterinary virologist from the faculty of Veterinary Science, University of Pretoria, gave presentations on diseases in the region. During two interactive sessions diagnoses and decision making in relation to viral diseases such as foot-and-mouth disease, lumpy skin disease, Peste des Petits ruminants and others were discussed. Further presentations on disease

outbreaks in the region were followed by lectures and interactive sessions on post mortem examination and cytology. The latter sessions were led by June Williams, a pathologist from the Faculty of Veterinary Science, University of Pretoria. The veterinary theme closed with presentations on biosecurity and primary healthcare as well as some pointers on chemical capture.

The Workshop included a technical training component facilitated by Chenay Simms of the South African National Parks Scientific Services, comprising a day of hands-on exercises, regional case studies, and equipment assessments relating to the selection and application of electronic data capture, including smart-phone apps, global positioning systems, remote sensing and drones.

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## **A milestone for migratory waterbird conservation in Asia–Pacific**

Twenty years after hosting an influential meeting that catalysed migratory waterbird conservation in the Asia–Pacific region, the city of Kushiro in Japan again provided a spectacular wintry venue for the latest meeting of partners of the East Asian–Australasian Flyway Partnership. In December 1994 the workshop *Conservation of migratory waterbirds and their wetlands in the East Asian–Australasian flyway* was held in Kushiro, bringing together representatives of governments from 16 countries, two inter-governmental organizations, and two non-governmental organizations to discuss, for the first time, a multilateral approach to conserving migratory waterbirds in the region. Attendees agreed then that ‘the current decline in the numbers of migratory waterbirds in the flyway and the degradation and loss of wetland habitats on which these species depend, should be stopped and reversed’. Accordingly, a work plan was proposed for the establishment of a formal multilateral agreement to conserve these species (*The Stilt*, 1995, 26, 7–8). This arrangement crystallized in 2006 as the East Asian–Australasian Flyway Partnership, a non-legally binding agreement, with participation of state and non-state actors.

The 8th meeting of the Partnership was held in Kushiro in January 2015, bringing together representatives from 16 countries, two inter-governmental organizations, and eight non-governmental organizations. This meeting was attended by six people who were also present at the founding event in 1994 and who have been instrumental in waterbird conservation in this flyway.

Although many migratory waterbird species have declined in this region there is some hope of achieving conservation outcomes. This flyway encompasses the migratory range of c. 285 waterbird species that complete their life cycle anywhere from Australia and New Zealand to Siberia and Alaska. The Partnership covers 25 bird families, with four focal groups (Anatidae, seabirds, cranes and shorebirds). Fifty-five of the species are categorized as globally threatened on the IUCN Red List as a consequence of multiple threats, including habitat loss and hunting. However, conservation efforts already appear to have aided the recovery of at least one species, the black-faced spoonbill *Platalea minor*.

Some challenges of the Flyway Site Network, a habitat-based conservation approach, were addressed at the meeting. Currently, of 906 potential sites identified as part of the Network, only 13.6% have been designated as protected areas. Moreover, the boundaries of 73% of the designated sites are unknown, potentially undermining effective management. Recent cooperation with the Ramsar Convention has, however, facilitated training for Network site managers, potentially improving conservation outcomes. The need for a formal monitoring protocol for the Network, to identify and redress emerging management issues, was agreed at the meeting.

Since the last meeting of the partners, the Network and the Partnership membership have expanded. New sites have been designated in Mongolia (one site), Japan (two), Myanmar (three), Australia (one) and Thailand (two), and four new partners have joined (Myanmar, Vietnam, the ASEAN Centre for Biodiversity, and the Convention on Biological Diversity). The accession of the Convention on Biological Diversity is particularly important, as its national focal points are different to those of the Partnership, potentially leveraging its implementation through additional support from national governments.

Habitat loss is an important driver of shorebird population declines in this flyway (*Biological Conservation*, 2010, 143, 2238–2247; *Frontiers in Ecology and the Environment*, 2014, 12, 267–272), yet hunting may also warrant attention. A review of the hunting of migratory shorebirds was presented at the meeting and, although this activity has been widespread, the evidence is fragmented and no monitoring is in place. Consequently, delegates called for a flyway-wide situation analysis on hunting of migratory shorebirds and to extend it to include other waterbird species.

Several emerging topics were also discussed. As countries in the flyway transition to renewable energy, bird strikes