

Saiga antelope facing catastrophe

As recently as 1958 saiga antelope *Saiga tatarica* were estimated to number over two million. However, annual counts of all five extant saiga populations every year from 1980 to 2000 (see *Oryx* 35(4), 340–345, and *Oryx* 36(1), 102) have indicated that this flagship species of the Central Asian steppe, so long a resource for the people of the region, has declined from an estimated total of a little over one million in 1993 to 178,000 in 2000. On the basis of this information the categorization of saiga on the 2000 IUCN Red List as Lower Risk, Conservation Dependent, was changed to Endangered on the 2001 IUCN/Species Survival Commission Antelope Action Plan. The reason for this dramatic decline is poaching for meat and horns, the latter being exported for use in traditional Chinese medicine. The underlying cause of the poaching is the economic collapse of the rural economy that occurred following the break-up of the Soviet Union and the ending of central political control.

The most recent news is even more bleak. According to the latest official counts from Kazakhstan for 2001 and 2002, supplied by the Institute of Zoology of the Ministry of Education of Kazakhstan, total numbers in their three populations, in Ustiurt, Betpak-dala and the Urals, have fallen from 148,000 in 2000 to 30,000 in 2002. Even with the population in Kalmykia of 19,500 (according to a census carried out during 12–22 May 2002 by staff of the Department of Hunting Management, Ministry of Agriculture, Russian Federation) and the small Mongolian population of *c.* 3,000 we face a situation where a major mammal species has crashed from one million to *c.* 50,000 in less than a decade, with no sign of a halt to the decline.

A number of organisations, including Fauna & Flora International, the Renewable Resources Assessment Group of Imperial College, and the European Sustainable Use Specialist Group of the IUCN Species Survival Commission, are currently seeking emergency funding for a Kazakhstan-based project to work with institutions and local communities to halt this catastrophic decline. Russian colleagues are engaged in similar efforts for the Kalmykian population. The time for action is exceedingly short.

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Good news for Liwonde National Park, Malawi

Liwonde National Park in southern Malawi occupies a predominantly flat tract of land at the southern end of the rift valley. The Park, lying to the east of the upper Shire River and extending along the south-eastern shore of Lake Malombe, has a total area of 548 km². A 5 km wide strip stretching northwards links the Park to the Mangoche Forest Reserve.

The area was formerly known for its exceptional wildlife. David Livingstone sailed past the area of the present-day Park on his way to explore Lake Malawi in 1861, having passed by it on foot 2 years earlier during the expedition on which he first set eyes on 'the lake of stars'. Faulkner commented on the abundance of game when, owing to a good wind, he reluctantly sailed past the area on the appropriately named vessel *Search* whilst looking for Livingstone. With the establishment of the British Protectorate and the creation of the capital town at nearby Zomba, European hunters started frequenting the area in the 1920s, and animal populations soon became severely depleted. Hippos *Hippotamus amphibius* were considered a threat to navigation and were shot. Concern for the remaining wildlife eventually led to the declaration of a controlled hunting area in 1962, followed by the declaration of a National Park in 1973 and its extension in 1977. In the meantime, however, buffalo *Syncerus caffer*, eland *Taurotragus oryx*, zebra *Equus burchelli*, hartebeest *Alcelaphus lichtensteini*, black rhinoceros *Diceros bicornis*, hunting dogs *Lycaon pictus*, and the Nyasa brindled gnu *Connochaetes taurinus johnstoni* were extirpated.

After independence in 1964 poaching was restrained and the existing animal populations stabilized, but eventually the fence built to protect the villagers' crops from elephants was torn down and the wire used for a massive snaring campaign that threatened the Park's survival. Fortunately the Frankfurt Zoological Society (FZS) funded the Liwonde Law Enforcement Project. This reduced poaching to a low level, and game populations gradually recovered. In 1993, two black rhinoceros were translocated from the Kruger National Park into a large, specially constructed and guarded Rhino Sanctuary within the Park and in 1999 a South African National Park's team translocated 91 buffalo, 27 roan *Hippotragus equinus*, 26 hartebeest, 17 zebra and 15 eland from Kasungu National Park into Liwonde, and all species have bred.

A 10-year agreement has now been signed between the Department of Forestry and FZS for the protection and conservation of Mangoche Forest Reserve which adjoins Liwonde National Park. The agreement includes plans to set up a trust fund to protect Mangoche Forest Reserve in perpetuity. The initial input of FZS will be the selection and training of Forest Guards, including the provision of equipment and proper housing. FZS thereby plans to replicate in Mangoche Forest Reserve the success it has achieved in Liwonde National Park. At present it is known that elephant, buffalo, sable and lion *Panthera leo* migrate between the two protected areas. The proper management of Mangoche Forest Reserve will in effect double the size of Liwonde National Park.

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First record in 68 years of Lowe's servaline genet

The Udzungwa Mountains of Southern Tanzania are widely recognised as possessing a unique and diverse fauna and flora, and the discovery of new vertebrate taxa such as the Udzungwa forest partridge *Xenoperdix udzungwensis* in 1994 and the Sanje crested mangabey *Cercocebus galleritus sanjei* in 1981 highlight the need for further research in this region. Lowe's servaline genet *Genetta servalina lowei*, a cat-like carnivore of the family Viverridae, was first collected from this area in 1932 by Willoughby Lowe. Lowe's incomplete specimen was until now the only verified record of this subspecies. However, on 29 July 2000 during Frontier Tanzania's Udzungwa Mountains Biodiversity Survey, carried out as part of the *Udzungwa Mountains Forest Management and Biodiversity Conservation* project supported by Danish International Development Assistance, a single individual of Lowe's servaline genet was trapped, representing the first verifiable record of this subspecies in 68 years.

The genet was caught in a baited 'Tomahawk' live trap at 1,930 m altitude in montane forest during surveys in West Kilombero Scarp Forest Reserve (WKSFR). This was the only individual caught during 2,808 trap-hours at 14 locations. The biometrics, coat colour and markings of the trapped individual, photographs of which can be viewed at <http://www.frontier.ac.uk>, were similar to Lowe's original record. Two further records of the genet were made from WKSFR during our surveys, although no photographs were taken. The first was sighted in a tree in riverine forest at 1,140 m, and the second on the ground in montane forest at 1,440 m. During 1,092 trap-

hours at five sites in montane forest in the nearby New Dabaga/Ulangambi Forest Reserve, no record of *G. s. lowei* was made, despite this being the approximate area of Lowe's original collection.

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Protection of threatened ducks in Daghestan Republic, Russia

The strongholds of ferruginous duck *Aythya nyroca*, marbled duck *Marmaronetta angustirostris* and white-headed duck *Oxyura leucocephala*, respectively categorized as Lower Risk, Vulnerable and Endangered on the 2000 IUCN Red List, are concentrated in the eastern parts of their wide Palearctic ranges. Within this range Adji lake on the western coast of the Caspian Sea is currently under threat from fluctuating water levels, recreation and pasture pressure. In 1998 the BP Conservation Programme (<http://conservation.bp.com>) funded a project to work on the conservation of the Adji lake ecosystem and surrounding semi-desert and coastal habitats, and in 2001 the Programme funded a 'follow-up' award to continue this work. A joint Ukrainian-Russian student team found that there is a viable breeding population of ferruginous duck but that the species is under constant threat from uncontrolled shooting. There is a small but growing population of white-headed duck (two adult birds were recorded in 1998 and 20–25 in 2001), and the team recorded the first breeding of this species in 40 years in the Daghestan Republic. The project was unable to make any confirmed records of marbled duck.

The activities of the 2001 project also focused on educating local people about the importance of this ecosystem. Target audiences included hunters, game-keepers and schoolchildren. In collaboration with the local authorities, conservation and management action plans have been developed, taking into account both ecological and socioeconomic issues. The findings of the project have now been recognised by both the Committee for Natural Resources and the Game Management Board of Daghestan Republic as a background for preparing and implementing adequate protection measures for this ecosystem and for populations of rare species of duck.

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The Global Strategy for Plant Conservation

The Global Strategy for Plant Conservation (GSPC), born out of the St Louis Botanical Congress in 2001, was adopted at the Conference of the Parties 6 of the Convention on Biological Diversity (CBD) in the Hague in April of this year. It is noteworthy in the history of the CBD because it is the first time that targets have been set as a measure of progress on achieving the Convention's objectives. The GSPC (<http://www.biodiv.org/decisions/default.asp?lg=0&m=cop-06&d=09>) has set a total of 16 targets to be met by 2010, which are reproduced in full below.

Understanding and documenting plant diversity

1. A widely accessible working list of known plant species, as a step towards a complete world flora;
2. A preliminary assessment of the conservation status of all known plant species, at national, regional and international levels;
3. Development of models with protocols for plant conservation and sustainable use, based on research and practical experience;

Conserving plant diversity

4. At least 10% of each of the world's ecological regions effectively conserved;
5. Protection of 50% of the most important areas for plant diversity assured;
6. At least 30% of production lands managed consistent with the conservation of plant diversity;
7. 60% of the world's threatened plants conserved *in situ*;
8. 60% of threatened plant species in accessible *ex situ* collections, preferably in the country of origin, and 10% of them included in recovery and restoration programmes;
9. 70% of the genetic diversity of crops and other major socio-economically valuable plant species conserved, and associated local and indigenous knowledge maintained;
10. Management plans in place for at least 100 major alien species that threaten plants, plant communities and associated habitats and ecosystems;

Using plant diversity sustainably

11. No species of wild flora endangered by international trade;
12. 30% of plant based products derived from sources that are sustainably managed;
13. The decline of plant resources, and associated local and indigenous knowledge, innovations and practices that support sustainable livelihoods, local food security and health care, halted;

Promoting education and awareness about plant diversity

14. The importance of plant diversity and the need for its conservation incorporated into communication, educational and public-awareness programmes;

Building capacity for the conservation of plant diversity

15. The number of trained people working with appropriate facilities in plant conservation increased, according to national needs, to achieve the targets of this Strategy;
16. Networks for plant conservation activities established or strengthened at national, regional and international levels.

It will be clear to conservation planners who try to incorporate these targets into their work that many will be difficult to achieve, particularly given the paucity of accessible, high quality plant diversity data. It is to be hoped that conservation organisations and botanical institutions will rise to the challenge and work together to produce the plant species information that is needed. For example, if the *in situ* and *ex situ* targets for threatened species are to be met, then conservation planners will need up to date information on those species (where they occur, how to identify them and so on). The COP was keen to stress that these targets 'are intended to provide a framework for policy makers and public opinion and catalyse the reforms necessary to achieve plant conservation.' However, if we are even half serious about achieving these targets then the conservation community and the botanical institutions must start to engage with each other immediately.

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The Society of Conservation Biology 2002 Annual Meeting

The 16th Annual Meeting of the Society for Conservation Biology (SCB) took place during 14–19 July 2002 at the University of Kent, Canterbury, UK, and was co-hosted by the Durrell Institute of Conservation and Ecology, and the British Ecological Society. A total of 1,049 delegates from 74 countries attended, including a total of 188 registered students. There were 580 spoken papers and 86 posters. During the meeting, there were plenary lectures by four distinguished speakers, reflecting the meeting's overall theme of People and Conservation. Sir Crispin Tickell, Chancellor of the University of Kent, spoke on sustainability and conservation in the context of the World Summit on Sustainable Development, Professor Fikret Berkes, University of Manitoba, spoke

on rethinking community-based conservation, Professor Richard Cowling, University of Port Elizabeth, spoke on planning for multiple biodiversity targets in the Cape Floristic Region of South Africa, and Professor John Lawton, Chief Executive, National Environment Research Council, UK, spoke on the subject of 'where next' in conservation biology.

SCB awarded 32 students and developing country professionals, originating from 21 different countries, full travel grants. The British Ecological Society, the Center for Applied Biodiversity Science of Conservation International, and WWF USA's Russell Train program also provided funds to cover the full costs of certain symposium speakers and mid-career professionals from developing countries. The National Science Foundation awarded 12 North American students full travel and registration costs.

There were many lively and vibrant sessions and symposia during the meeting. These included two related symposia on hunting and the conservation of exploited species that have given rise to the Forum section in this issue of *Oryx*.

It was agreed at the meeting to send the following declaration to the United Nations Secretary General:

'Our collective research and experience confirm that conservation of the diversity of life on earth, the lands and waters it needs to survive, and the natural processes that sustain it, are essential to long-term human survival and prosperity. A future for all humankind that nurtures the full potential and dignity of each individual is inseparably linked to robust, functioning ecological systems. With this knowledge, we, on behalf of our colleagues around the globe, urge the delegates to the 3rd United Nations World Summit on Sustainable Development to support the Secretary General and embrace and include conservation of biodiversity as a keystone element of the agenda emerging from your historic Summit. Alleviation of poverty and pursuit of a sustainable human future depend on a diverse, vibrant, and healthy planet. This can only be achieved by fully integrating the maintenance of biodiversity with sustainable development.'

Biodiversity Management and Sustainable Development in the Mekong River Basin

The first International Symposium on Biodiversity Management and Sustainable Development in the Lancang-Mekong Basin was held during 4–7 December 2001 in Xishuangbanna, Yunnan, China. The symposium, hosted by the Chinese Academy of Sciences and the Xishuangbanna Tropical Botanical Garden, brought together over 80 scientists from 12 countries, including China, Thailand, Lao PDR, and Cambodia. The purpose

of the symposium was to facilitate communication between countries within the Lancang-Mekong River Basin, discuss the possibility of transboundary international cooperation, and provide potential strategies for conservation and sustainable development in the context of rapid population growth, large-scale development, and unprecedented environmental change.

Scientists and researchers presented the results of studies and projects within the Lancang-Mekong River Basin, including work on fish migration, biodiversity, fisheries, the threat to the aquatic organisms of the Lancang river by the construction of hydropower stations, and debate about the downstream ecological implications of China's Lancang hydropower and Mekong navigation project. Participants also met as a group to discuss recommendations for biodiversity conservation and sustainable development within the Basin. They agreed to endorse three general goals: the need for all six countries within the Lancang-Mekong River Basin to work as equal partners in cooperation to protect biodiversity, the need to acknowledge that sustainable use of natural resources and conservation of biodiversity within the region can only be achieved by recognizing that humans are an integral part of the ecosystem, and the need to devise a management framework for biodiversity that can adapt and evolve to include all stakeholders. The specific recommendations of the participants included 11 priority activities, including the production of systematic inventories of biodiversity, enhancement of communication and networking among regional stakeholders, strengthening of international transboundary linkages and initiatives, and identification, designation, and establishment of additional protected areas within the Lancang-Mekong River Basin.

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Tanzania launches new forest conservation project

The Tanzania Forest Conservation and Management Project was launched in June 2002 in Dar es Salaam, Tanzania. The Global Environment Facility of the World Bank and the United Nations Development Programme, together with Danish International Development Aid are funding this large project, which aims to develop a holistic conservation strategy for the globally important Eastern Arc Mountains, finance a trust fund for long-term conservation in these mountains, support an Integrated Conservation and Development Project for the Uluguru Mountains, assist with the restructuring of the Tanzania Forestry Department, and develop participatory forest

management across several regions of Tanzania. Total funding committed is close to US \$40 million.

New and improved internet resources

The Uluguru Mountains (see *Oryx* 36(2), 140–152) are one of the mountain blocks in the globally important Eastern Arc Mountains chain of eastern Africa. A recent Danish International Development Aid funded project managed by BirdLife Denmark and BirdLife Tanzania has made available its project reports at <http://www.africanconservation.com/uluguru>. GIS map data and reports summarizing biodiversity, forestry, agriculture, education and ecotourism issues concerning the Uluguru Mountains are available.

Terrestrial Ecoregions of the World at <http://www.worldwildlife.org/ecoregions> provides descriptions all of the 867 'ecoregions' in the biogeographic regionalization of the Earth's terrestrial biodiversity devised by the World Wildlife Fund. This includes descriptions of each ecoregion, GIS maps, and key documentation relating to the WWF ecoregion programme.

The *Ocean Biogeographic Information System* (OBIS) at <http://www.iobis.org> is a web-based provider of global geo-referenced information on accurately identified marine species developed by the international research program Census of Marine Life. OBIS can be used to integrate information from a host of stand-alone databases including biological, physical, and chemical oceanographic data on a selected species and geographic range of interest.

The *World List of Cycads* at <http://plantnet.rbgsyd.gov.au/PlantNet/cycad/wlist.html>, developed at the Royal Botanic Gardens, Sydney, Australia, provides reports on the 250 species of cycads. Cycads were once abundant across the globe but are now greatly reduced in both numbers and distribution.

Carnivore Conservation at <http://www.carnivore-conservation.org> provides information on carnivore conservation and ecology. This resource includes news headlines and an extensive database of carnivore literature, with abstracts.

Environmental Change and its Impact on Species/Ecosystems/Agriculture at <http://eelink.net/~asilwildlife/bib.shtml> provides a bibliography of peer-reviewed and gray literature, including journal articles, newspaper articles, reports and materials on the Internet. This resource focuses on the effects of global warming and ozone depletion on species of flora and fauna and critical supporting ecosystems, as well as agricultural resources.

The Habitats Directive: Selection of Special Areas of Conservation in the UK launched by the Joint Nature Conservation Committee at <http://www.jncc.gov.uk/SACselection> is a new electronic information resource that describes sites in the United Kingdom recognized as internationally important for habitat and species conservation at the European level. This resource provides up-to-date details of the selected sites throughout the UK, information about the SAC (Special Areas of Conservation) selection process, the habitats and species represented by SACs, and a search and query facility.