

feeding sites, pasturelands and others. They may cover as much or more of the world than official protected areas. ICCAs are embedded in territorial, resource, cultural and human rights, are the basis of survival and livelihoods for hundreds of millions of people, and help sustain ecosystems, species, and ecosystem functions. Their primary motivations and objectives are ethical, economic, political, cultural, material, and/or spiritual; often they are simply a people's or community's way of life. They are recognized in international policy, including in the CBD, and by global organizations such as IUCN. The term ICCA is used as a convenient umbrella (much like the term indigenous people or local community), and is not meant to displace the diversity of local terms.

ICCAs contribute to the CBD Strategic Plan of Action (and specifically the Aichi targets, <http://www.cbd.int/sp/targets/>) in many ways: they embody and help spread awareness of the values of biodiversity (Target 1), contribute to national development, sustainability, poverty reduction and biodiversity plans (Targets 2, 4, 17), involve systems of rules that combine incentives and disincentives for sustaining biodiversity (Target 3), contribute significantly to reducing natural habitat loss, sustaining fisheries and aquatic ecosystems, including coral reefs, and conserving threatened species (Targets 5, 6, 10, 12), are the world's best chance of achieving an increase in conservation coverage in ways that are equitable and effective (Target 11), encompass sustainably managed production ecosystems, including agriculture, aquaculture, forestry, and the domesticated and related wild diversity contained in them (Targets 7, 13), use innovative strategies to help restore and safeguard ecosystem functions, including through reducing or eliminating pollution and tackling invasive species (Targets 8, 9, 14), provide climate resilience through connectivity, migration corridors, mitigation and adaptation of various kinds (Target 15), are a powerful means of achieving equitable access and secure benefits for communities (Target 16), embody sophisticated and diverse forms of knowledge, including traditional and modern science and technology (Targets 18, 19), and present innovative means of financing and provisioning (including through non-financial, voluntary means) biodiversity conservation and sustainable use of biological resources.

Yet ICCAs face multiple threats from lack of tenurial security, the extractive industry and inappropriate development, imposition of inappropriate land uses, including government protected areas and industrial agriculture, internal inequalities and injustices relating to gender, class, caste, ethnicity, race and others, demographic and cultural changes eroding traditional cultural values, and incursion of external markets. These problems are often exacerbated, or occur, because of the lack of recognition of ICCAs, especially at national and sub-national levels. Despite 10 years of the existence of the CBD's Programme of Work on Protected Areas, which requires countries to provide

recognition to ICCAs, most countries are yet to provide adequate and appropriate recognition to ICCAs. More recently, ICCAs are facing the threat of commodification from programmes such as REDD, particularly when these are implemented in the absence of tenurial security and recognition of community governance.

The contribution of ICCAs to conservation could be significantly enhanced through recognition of collective territorial and resource rights, customary governance institutions, and local/traditional knowledge and practices. They also need facilitation in documentation, assessment, outreach, capacity enhancement and public awareness, help in resisting threats, and support for appropriate livelihood activities, skills and new knowledge, in particular for the younger generation. In many situations the empowerment of women, landless people, minorities and other weaker sections of peoples or communities is required to allow them to play an equitable part in decision-making.

ASHISH KOTHARI *Kalpavriksh Environment Impact Group, Pune, India. E-mail [chikikothari@gmail.com](mailto:chikikothari@gmail.com)*

### China renews its vertebrate Red List

Eleven years have elapsed since the last evaluation of the status of vertebrates in China. Now, however, a project launched in March 2013 under the Ministry of Environmental Protection and the Chinese Academy of Sciences has completed an evaluation of the status of the vertebrates of China, using the *IUCN Red List Categories and Criteria, Version 3.1*, and the *Guidelines for Application of Red List Criteria at Regional and National Levels, Version 4.0*.

The evaluation involved more than 200 zoologists, an advisory panel, workshops and the IUCN Species Survival Commission. Working groups were established for fishes, amphibians, reptiles, birds and mammals, and each group consulted zoologists nationwide, revising checklists and removing out-of-date species records. In total, the evaluation confirmed the existence of 1,499 fish species, 408 amphibian species, 471 reptile species, 1,372 bird species and 656 species of mammals. Each working group then sought comments from specialists on a draft Red List. Following consideration of the feedback, a revised Red List was discussed at two review meetings, followed by a final evaluation panel in June 2014. The summary Red List report was finalized in September 2014.

A comparison with China's 1998 Red Book of Endangered Species and the Species Red List of 2003 indicates that the status of vertebrates has worsened. Of the freshwater fish three species are now categorized as Extinct, one as Regionally Extinct and 292 as threatened (Critically Endangered, Endangered or Vulnerable); of the amphibians one species is categorized as Extinct, one as

Regionally Extinct and 175 as threatened; of the reptiles two species are categorized as Regionally Extinct and 136 as threatened; of the birds three species are categorized as Regionally Extinct and 146 as threatened; and of the mammals 169 are categorized as threatened. The main threats to China's vertebrates are human activities, habitat loss and overexploitation. For the mammals, overexploitation is the main threat, with 116 mammal species affected, followed by human interference and habitat loss.

ZHIGANG JIANG *Key Laboratory of Animal Ecology and Conservation Biology, Institute of Zoology, Chinese Academy of Sciences, Beijing, China. E-mail [jiangzg@ioz.ac.cn](mailto:jiangzg@ioz.ac.cn)*

### **A little-known blackbuck population in Chennai's suburban forests**

The blackbuck or Indian antelope *Antelope cervicapra* is a medium-sized ungulate now endemic to India (it is Regionally Extinct in Bangladesh and Pakistan). It has been placed under Schedule I of the Wildlife (Protection) Act, 1972, and is categorized as Near Threatened on the IUCN Red List.

Blackbuck formerly occurred across almost the whole of the Indian subcontinent but have disappeared from many areas as a result of habitat destruction through conversion to agricultural use.

In Tamil Nadu, the southernmost state in which blackbuck survive in the wild, there are a few widely separated populations. An additional group of blackbuck was discovered recently by KN in Chennai's suburban forests, in Thaiyur Reserve Land, c. 40 km from Tambaram, in Kanchipuram District. One adult male, one adult female and four juveniles were discovered in July 2014. In a subsequent visit three adult males, nine adult females, 11 juveniles and three fawns were seen.

Discussions with local people indicated that 200–250 blackbuck may inhabit this 8 km<sup>2</sup> degraded area. Further research is required within and around the Reserve Land to assess the population's size. Blackbuck inhabit grasslands that are relatively open, with short grass, and avoid thick cover. In Tamil the blackbuck is called *veli maan* (antelope of the open areas). The species is well adapted to semi-desert habitat and can tolerate heat and drought. Thaiyur Reserve Land is, however, threatened by urbanization and neighbouring industries, and the traffic on the nearby Thaiyur–Kelambakkam road is a direct threat to blackbuck. There is a need for immediate action from the appropriate authorities to take the necessary steps to conserve this population of blackbuck, which is one of the few thriving populations of the species outside protected areas in Tamil Nadu. This is also an opportunity: Thaiyur Reserve Land and the blackbuck could serve as an ecology laboratory

for local students and could be used to educate the suburban public about conservation.

KANNADASAN NARASIMMARAJAN and MANU THOMAS Mathai *Department of Zoology, Madras Christian College, Tambaram, Chennai, India. E-mail [wildlife9protect@gmail.com](mailto:wildlife9protect@gmail.com)*

### **The rare Kolar leaf-nosed bat**

India is home to 117 species of bats, of which only two species are included in the Wildlife Protection Act (1972). Bats in India are subjected to great pressures: they are hunted and eaten for their supposed medicinal properties, their roosting sites are marauded and burnt because of superstitious beliefs, and their habitats are destroyed to accommodate the ever-growing human population and other development activities.

The Endangered Kolar leaf-nosed bat *Hipposideros hypophyllus* is endemic to Kolar district, Karnataka, and is known from only two localities: Hanumanhalli and Therahalli. Since its description in 1994 this species had not been sighted and its conservation status was unknown. With the help of funding from The Mohamed bin Zayed Species Conservation Fund we conducted two surveys (during November–December 2013 and April–May 2014), to locate roosts and to conduct nocturnal acoustic monitoring, in both localities. We located a subterranean cave, the type locality of the species, on a granite hill in Hanumanhalli village, and were successful in mist-netting the species there. We estimate that this population may number no more than 200 individuals. We found the species sharing its roost with five other species of bats. In Therahalli, although we located a subterranean cave and other potential roost sites, we were not successful in finding the species. The cave at Hanumanhalli is threatened by illegal granite-mining activities in the immediate vicinity. Two other roost sites that we found on the same hill had been abandoned by bats.

Based on our findings, we recommend that the Red List category of the Kolar leaf-nosed bat is changed from Endangered to Critically Endangered. As there is only one known roost site, urgent steps need to be taken to halt nearby mining and quarrying activities. Failing this, the species will inevitably become extinct in the near future. Following a discussion with the Divisional Forest Officer of Kolar district, stone quarrying activity in the vicinity of the subterranean cave at Hanumanhalli has been halted, and the matter is now under further discussion with the appropriate authorities.

C. SRINIVASULU *Natural History Museum and Wildlife Biology & Taxonomy Lab, Department of Zoology, Osmania University, Hyderabad, Telangana, India, and Zoo*