Conservation news

First survey of threatened trees in Childukhtaron Sanctuary, Tajikistan

The fruit-and-nut forests of Central Asia are of global conservation importance, being a centre of plant diversity. Situated on the lower and middle slopes of the Tien Shan and other mountain ranges and characterized by their ancient walnut and maple stands they contain a wide variety of fruit- and nut-bearing trees, including endemic species of wild apple, pear, plum, cherry, pistachio and almond, as well as hawthorn and barberry. Many of these tree species are the ancestors of the domesticated varieties that are now cultivated and consumed around the globe. These wild relatives are of global significance as they represent an important store of genetic variety, of which to date only a minor fraction has been studied.

Childukhtaron (also known as Chil'dukhtaronsky) Zakaznik (Sanctuary or Nature Refuge), an IUCN Category IV protected area, is one of three wildlife sanctuaries in Tajikistan that contain intact remnant walnut-maple forests. Located 270 km to the south-east of Dushanbe in the Darvaz Mountains, this 14,600 ha sanctuary was established in 1959 to conserve mid altitude forest ecosystems, part of which form the fruit-and-nut forests. The sanctuary was also designated to conserve the specific geological landscape monument for which Childukhtaron is named. This is a ridge of weathered red and grey sandstone that is said to resemble 40 women in national dress. One legend is that these 40 ladies blocked the way of the advancing army of Genghis Khan, perished, and became petrified into this mountainous ridge as stone sculptures, which have become a monument to them.

Fauna & Flora International has been working to conserve these fruit-and-nut forests in Kyrgyzstan and Tajikistan. We commissioned the first survey of threatened trees in Childukhtaron, led by scientists from the Institute of Botany of the Academy of Sciences and the Forest Institute, which took place during May-July 2011. National scientists confirmed the presence of four species that are categorized as threatened on the IUCN Red List: the Critically Endangered Bukharan pear Pyrus korshinskyi, the Vulnerable Bukharan almond Amygdalus bucharica, the Vulnerable wild apple Malus sieversii and the Near Threatened walnut Juglans regia. An additional 14 tree species were recorded, along with the declining endemic Pamir-Alai shrub Calophaca grandiflora and the endemic Darvaz iris Iris darwasica, listed in the Red Data Book of Tajikistan. Notably, the Critically Endangered endemic pear species Pyrus tadshikistanica, expected to occur in this area, was not located.

The most significant result of the survey is that at least 65 individuals of the Bukharan pear were recorded. Threats to

this species include overgrazing, fruit harvesting and the illegal collection of saplings for root stock. Throughout Tajikistan individuals are sporadically distributed in very small, fragmented populations; without intervention the species is expected to continue declining. Poorly regulated and uncontrolled use, driven primarily by poverty, limited livelihood opportunities and a lack of knowledge and understanding, put many tree species under severe and immediate threat. Overharvesting and overgrazing prevent natural regeneration, resulting in forest fragmentation and decreasing forest cover.

Fauna & Flora International will continue its work to conserve these threatened fruit-and-nut forests and in particular the Bukharan pear. This work will include support to local forestry units to undertake conservation interventions and training in tree conservation skills (identification and monitoring of threatened tree species, trialling of direct protection methods for threatened trees within the forest, and assisting in the establishment of local state forestry unit nurseries for growing threatened and rare trees for population reinforcement). A similar approach has been successful for the Endangered apple *Malus niedzwetzkyana* in Kyrgyzstan, increasing the wild population tenfold in the last few years.

SUZANNE TOM Fauna & Flora International, Jupiter House, Station Road, Cambridge, CB1 2JD, UK E-mail suzanne.tom@fauna-flora.org

Media attention promotes conservation of threatened Asian slow lorises

The five species of Asian slow lorises (Nycticebus spp.) were transferred to CITES Appendix I in 2007 and researchers are finally undertaking systematic studies of the threats to this group. Many surveys have now been conducted throughout the species' ranges, revealing that in most areas slow lorises occur at very low densities. In Cambodia the larger of its two species, N. bengalensis, has been nearly extirpated, and its smaller species, N. pygmaeus, is in decline, mainly because of use in traditional medicines. Although researchers have long reported dried loris skins in Indo-Chinese markets, no quantitative reports had been available. Interviews with practitioners, hunters and retailers of traditional medicines reveal that lorises are believed to cure 100 diseases. Users feel that medicines that include loris parts cure diseases whereas western medicines only alleviate symptoms. However, although this medicinal trade is a grave problem it is not the one that has caught the world's attention.