## **Conservation news**

## Surveys in southern Myanmar indicate global importance for tigers and biodiversity

Myanmar's Tanintharyi Region is part of the Indo-Burmese biodiversity hotspot, at the Indochinese–Sundaic faunal transition. This region contains the largest remaining areas of biologically rich Sundaic lowland forest in mainland South-east Asia. Over one third of Tanintharyi Region's remaining lowland evergreen forest falls within the boundaries of the Lenya Proposed National Park and extension, first nominated for National Park status in 2002. These forests are home to the world's largest population of the Endangered Gurney's pitta *Pitta gurneyi*, now endemic to Tanintharyi, and support one of the three most significant tiger *Panthera tigris* populations in Myanmar. In spite of the known biodiversity value of the area, decades of armed conflict previously restricted access for scientific study and biological monitoring.

Tanintharyi remains predominantly forested, although large areas have been selectively logged since at least the 1800s, and there has been widespread land-use change in recent years. Since the 1990s the introduction and subsequent rapid expansion of oil palm plantations has been the single biggest threat to these forests. Over 400,000 ha of land was allocated to the crop by 2015, just over one third of which is reportedly planted, although this is almost certainly an underestimate. In addition, new road development and forest clearing for other agricultural products, particularly rubber and areca (betel) nut, have caused additional habitat loss and fragmentation for forest-dependent species.

The need to balance ongoing development with traditional livelihoods and biodiversity conservation requires reliable baseline information on the distribution of priority species. In response, and with the support and permission of the Myanmar Forest Department, Fauna & Flora International (FFI) and partners have so far conducted five camera trap surveys targeting large mammals within lowland areas of the Lenya forests. These surveys were conducted during May 2014–May 2016, spanning 91 camera trap locations and 6,542 trap-nights. We primarily used grid-based survey designs to guide overall camera spacing, but typically deployed cameras near ridge lines, footpaths, animal trails, streams or salt-licks that were likely to be used by wildlife.

Results confirmed a total of 45 mammal species, including many that are globally threatened. The Critically Endangered Sunda pangolin *Manis javanica* was detected at two camera trap stations. We also recorded the Endangered tiger, dhole *Cuon alpinus*, Asian elephant *Elephas maximus*, Malayan tapir *Tapirus indicus* and banteng *Bos javanicus*. A number of bird species were also identified from cameratrap data, including several Sundaic lowland forest species

such as the Endangered Gurney's pitta and Storm's stork *Ciconia stormi*.

A primary objective of this research is to assess the conservation status of tigers in southern Myanmar. We successfully confirmed the continued presence of tigers in the southern Tanintharyi Region and individually identified a minimum of five individuals in the Lenya Proposed National Park, based on their stripe pattern. For the 16 trap stations at which tigers were detected, the mean number of days until the first observation was 15  $\pm$  SD 12.7. The maximum time to first detection was 45 days. Hunting was also observed to be widespread within lowland areas of the Lenya Proposed National Park. Hunters were detected at a total of 41.8% of camera trap stations, including 10 of 16 locations where tigers were observed.

The results of these surveys indicate that the Lenya forests still retain a unique assemblage of globally threatened wildlife, including at least a small but possibly globally significant population of tigers. Surveys are ongoing but deforestation is widespread and accelerating in the surrounding landscape. High hunting pressure, logging, forest clearing and mining activity are commonly observed within the proposed protected area boundaries during surveys and pose a considerable risk to sensitive wildlife populations. We and our partners are slowly addressing these threats. Following a review of oil palm by FFI, for example, the new government of democracy icon Daw Aung San Suu Kyi has revoked some oil palm licences as a result of legal infractions, and has declared that it intends to review the remainder. With financial support from the KfW-funded Integrated Tiger Habitat Conservation Project, FFI is currently helping establish education, law enforcement and sustainable buffer zone management to support these efforts, while building multi-stakeholder support for conservation in this globally irreplaceable paradise of biodiversity.

Saw Soe Aung, Nay Myo Shwe, Jackson Frechette and Mark Grindley Fauna & Flora International Myanmar Programme, Yangon, Myanmar E-mail mark.grindley@fauna-flora.org

Grant Connette Conservation Ecology Center, Smithsonian Conservation Biology Institute, Front Royal, USA

## Projet Faux Gavial reduces commerce of slendersnouted crocodile in Gabon

Lambaréné, at the crossing of the Ogooué River with National Highway 1, has long been an important market for wildlife trade in Gabon. When the Gabonese NGO