Conservation news

First national conservation strategy for the pygmy hippopotamus in Liberia

The Endangered pygmy hippopotamus *Choeropsis liberiensis* is one of the least known mammals. It is hunted for its meat and its habitat has been severely reduced by wide-scale deforestation, resulting in a serious population decline. With a highly restricted range in the Upper Guinea rainforest of West Africa, Liberia is one of its last strongholds.

Recognizing the need for urgent and coordinated action, Liberia has become the first country to develop a national strategy for the conservation of the pygmy hippo. A workshop, co-organized by Fauna & Flora International and the Forestry Development Authority of Liberia, and funded by the Flagship Species Fund and BHP Billiton, was held in Monrovia in December 2012. Attended by 25 participants, including representatives from the Environmental Protection Agency, the national police service, the private sector, civil society and international NGOs, the workshop built on the 2011 framework Regional Action Plan to produce the first National Conservation Strategy for the pygmy hippopotamus.

The Strategy, finalized on 1 July 2013, follows the Species Conservation Strategy process developed by the IUCN Species Survival Commission Species Planning Subcommittee. It provides an up-to-date assessment of the conservation status of the pygmy hippo and its habitat in Liberia, outlines current threats and identifies critical activities needed to address them. It also identifies the bodies and organizations central to ensuring these activities are implemented effectively.

Stakeholders in Liberia are committed in their efforts to work towards a vision in which viable populations of pygmy hippos thrive throughout their range in healthy ecosystems, acting as a flagship species for the Upper Guinea Forest, coexisting in harmony with human populations, and retaining cultural importance for the benefit of present and future generations. This new Conservation Strategy will support the stakeholders to coordinate current and future conservation work and provide a mechanism for a regular monitoring of progress.

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A non-native population of the Critically Endangered Sulawesi crested black macaque persists on the island of Bacan

The Sulawesi crested black macaque *Macaca nigra* is a Critically Endangered primate found naturally only on the northern peninsula of Sulawesi, Indonesia. The species has undergone an apparent decline of $>80\%$, attributed to habitat loss and hunting, since the first surveys were undertaken in the 1970s. The IUCN Red List assessment excludes an introduced population on the island of Bacan in the North Maluku archipelago.

Black macaques have been reported from Bacan, c. 300 km from North Sulawesi, since the mid 1800s. Although there has been speculation about the origin of this population, it has generally been concluded, based on morphology, that this macaque species is *M. nigra* (*American Journal of Primatology*, 15, 487–493). A survey in 1994 estimated a density of 170 individuals per km^2 in Gunung Sibela Nature Reserve and 133 km^{-2} in unprotected logged forest near the village of Wayamiga (*American Journal of Primatology*, 44, 89–106).

We visited Bacan in February 2013 to assess the current status of the population and identify potential threats to its persistence. We conducted 18 reconnaissance walks (a total of 80 km) in the forests of the central portion of the island, including Gunung Sibela Nature Reserve. Our surveys predominantly sampled secondary forest interspersed with crops (coconut, cocoa, banana and vegetables), and primary forest (often at higher altitude). We recorded frequent signs of logging and clearance for crop production, although it was difficult to establish the legality of such activities as the boundaries between village land, protected forest and protected areas were unclear. We also interviewed 200 people from five nearby villages to quantify their use of forest resources and their attitudes towards the macaque and its habitat.

We encountered macaques on all but two reconnaissance walks, with an overall group encounter rate of 3.5 km^{-2}. Although our methods are not directly comparable to those of surveys in the 1990s, this rate is lower than that previously reported for Bacan (6.8 km^{-2}) but higher than that for North Sulawesi (2.7 km^{-2}). The majority of encounters were visual and the macaques exhibit those morphological traits considered diagnostic for *M. nigra*, including the crest of hair and pink heart-shaped bottom (reports with photographs are available at www.selamatkanyaki.com).

Most people interviewed did not consume macaques (93%), although we observed that young macaques were kept as pets in three villages. The majority of people interviewed demonstrated positive attitudes towards forests and the

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macaques despite reporting that the species frequently raids their crops and that lethal traps are sometimes set for the macaques. These findings are in contrast to those for Sulawesi, where macaques are a favoured bushmeat species.

Our findings are limited by the briefness of our visit but indicate that a substantial population of *M. nigra* persists in central Bacan. If this situation is similar in northern and southern Bacan, as appears to have been the case in the 1990s, then the population of *M. nigra* on Bacan probably exceeds that in its native range. The Bacan population also appears to be less directly threatened than in Sulawesi. We recommend monitoring of the Bacan population to establish the impacts of any threats and to investigate any potential genetic effects of the presumably small number of founders.

The case of *M. nigra* on Bacan is unusual: a species that is Critically Endangered in its native range appears to have a much larger, potentially less threatened population hundreds of kilometres away as the result of an undocumented introduction. The role of this population for the conservation of the species warrants careful consideration, and the species' abundance, ecological impact and genetic status on the island requires further research.

The Bacan expedition was undertaken by Selamatkan Yaki, an initiative dedicated to the conservation of *M. nigra* and its habitat, and was funded by the North of England Zoological Society–Chester Zoo, with additional support from the Whitley Wildlife Conservation Trust and Taronga Conservation Society Australia.

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Mystery of giant rays off the Gaza strip solved

There have been recent reports of an apparent mass stranding of dozens of the Endangered large devil ray *Mobula mobular* on beaches of the Gaza Strip in Palestine (Daily Mail, 27 February 2013). This species is categorized as Endangered on the IUCN Red List and is likely to be the rarest of the nine species of *Mobula*. There was much public and scientific speculation about the causes of the stranding. Cetaceans can strand as a result of the sonar activity of ships and submarines but there is no evidence that elasmobranchs, the group that includes *Mobula*, are affected by such activities. A mass stranding or disease are improbable because elasmobranchs are negatively buoyant and thus do not generally wash up on beaches. Suspicions about the cause of the deaths were raised by video footage (published online by the Daily Mail) of local people on the beach cutting out the gills, removing fins and filleting the rays, with some proficiency.

It has now been confirmed by Dr Mohammed Abudaya (United Nations Relief and Works Agency), through Professor Dani Kerem (University of Haifa) and Dr Notarbartolo-di-Sciara (Tethys Research Institute) that this was a fishery operation. Palestinian fishermen, recently allowed to fish up to 7 nautical miles offshore, noticed a large aggregation of *M. mobular* at the surface in an area close to the Egyptian border on 26 February 2013. They caught about 500 rays weighing 150–250 kg each. Dr Argyris Kallianiotis (National Agricultural Research Foundation) mentioned in a message sent to the Italian Society for Marine Biology that *M. mobular* was considered a valuable species for the local fish market. Local fishermen described the importance of the *M. mobular* fishery, which is conducted around the end of February each year, during a visit by FAO experts earlier this year. This species receives some protection in the Mediterranean Sea as it is listed under Annex II of the Barcelona Convention and Appendix II of the Bern Convention but the Gaza Strip is not a signatory to either of these. Waters off this region appear to be an important aggregation site for *M. mobular*. Our concern is that even before we understand the reasons for what appears to be a large seasonal aggregation, whether for reproduction or feeding, it could be lost.

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Curtailment of run-of-the-river power projects brings respite to the Western Ghats

Public resistance to large hydroelectric dams in India has compelled the government to provide subsidies for so-called green energy projects, such as run-of-the-river power generation. Such works, popularly referred to as mini-hydel projects, are increasing in number and are potentially threatening wildlife and habitats. One area where mini-hydel projects are being implemented is the Western Ghats