

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 brevity 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

of Karnataka. This biodiverse area harbours sizeable populations of threatened species such as the tiger and Asian elephant, and endemic species such as the lion-tailed macaque, Ceylon frogmouth and Travancore flying squirrel. The forests of the Western Ghats are one of the main water catchments in India, feeding perennial rivers that sustain a human population of 350–400 million in the south of the country.

Run-of-the-river power generation is presumed to be environmentally friendly but the impacts of these projects in ecologically sensitive areas are yet to be assessed. Studies of individual projects have documented a number of negative effects on terrestrial and aquatic ecosystems. Although these projects are relatively small their cumulative impact can be considerable, especially if there are numerous projects, such as in the Western Ghats of Karnataka where 72 such projects have been permitted.

Run-of-the-river projects with a power generation capacity capped at 25 MW are eligible for government subsidies. Only above 25 MW is there a compulsory public hearing and an Environmental Impact Assessment prior to construction. To bypass these legal requirements some large single projects have masqueraded as multiple smaller projects. There is also evidence of failures to document the presence of rare, threatened or unique species of flora and fauna where the projects have been implemented, even when species under various schedules of the Wildlife Protection Act 1972 were present.

To halt the detrimental effects of some of these projects Prashant Yavagal, a wildlife enthusiast, and the Western Ghats Environment Forum filed a Public Interest Litigation in the High Court of Karnataka on 3 January 2011. In February 2013, based on ecological evidence presented by the petitioners, such as the location of projects in important wildlife habitats and elephant migratory corridors, the occurrence of threatened species, felling of old-growth trees and cutting of roads on steep slopes (which results in severe soil erosion), the state government withdrew permission formerly given to 10 projects. Later, in April 2013, the existing leases of two projects were cancelled. The government indicated in the court that mini-hydel projects would no longer be permitted within the forests of the Western Ghats of Karnataka. This is a landmark case in a country where there is great pressure for development and enhanced energy generation.

Scientific and technical inputs for the litigation were provided by the Nature Conservation Foundation and Panthera, and several conservation enthusiasts worked collectively to highlight the impacts of these projects on the local wildlife.

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Photographic evidence of the swamp deer in Manas National Park

The swamp deer (or barasingha) *Rucervus duvaucelii* is categorized as Vulnerable on the IUCN Red List but the conservation status of its three subspecies, including *R. duvaucelii ranjitsinhi* of Assam, India, has not been assessed separately. *R. duvaucelii ranjitsinhi* was once common in the Brahmaputra valley in Assam but its populations declined as a result of habitat loss, over-hunting, poaching and disease transmitted from cattle. It is now confined to Kaziranga and Manas National Parks. The 500 km² Manas National Park is the core area of Manas Tiger Reserve and is also a UNESCO World Heritage Site. There is a viable population of the swamp deer in Kaziranga and there were healthy populations of swamp deer in Manas prior to civil unrest in the 1990s, with a population of > 500 individuals in 1987. During the civil unrest of 1989–1990, however, poachers almost wiped out the population of swamp deer in Manas.

There have since been indirect reports of the presence of the swamp deer in Manas but no sightings. However, during a joint tiger and prey monitoring exercise carried out by WWF India, Aaranyak, ATREE and the Forest Department, swamp deer were photo-captured twice, on 14 and 23 January 2013, in the Kanchanbari area of the Bhuyanpara range. This proof of the continued existence of the swamp deer in Manas is heartening news. However, a systematic survey is required to determine the status of the population. The UNESCO World Heritage Site committee has advised that a Species Recovery Plan is required, and the Forest Department at the State and Central levels has initiated plans to work for the recovery of this subspecies, in association with other stakeholders.

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Declaration of a new sanctuary creates largest protected area network in India

A new protected area, the 906 km² Sri Malai Mahadeswara Swamy Wildlife Sanctuary, was declared in May 2013 in Karnataka, southern India. This Sanctuary is part of the Eastern Ghats, where conservation-dependent species such as the tiger, wild dog, Asian elephant and four-horned antelope can be found. The new wildlife sanctuary lies between the 539 km² Biligirirangaswamy Temple Tiger Reserve and 1,027 km² Cauvery Wildlife Sanctuary, and the Guttialattur, and North and South Baragur multiple-use forests in the state of Tamil Nadu lie adjacent to the