

Sumatran tigers *Panthera tigris* and other critically endangered species.

Among the first results of the new 'immediate confiscation' policy were the seizure and release, in late August, of a rhinoceros hornbill *Buceros rhinoceros*, which was found by a park ranger patrol just after it had been shot with an airgun by a poacher in a park-edge village in West Sumatra. Rangers rescued the bird and took it to park headquarters for veterinary treatment before release, a week later.

Park authorities and FFI are urgently seeking funding for a simple holding centre and sanctuary in which animals and birds confiscated under the new policy can be temporarily placed prior to release. Lack of facilities to which confiscated animals can be sent for quarantine and later release are a major reason for non-enforcement of Indonesia's comprehensive laws on wildlife protection.

Source: Fauna & Flora International.

'Fossil' lizard found alive in the Canary Islands

A giant lizard, supposedly extinct and belonging to the genus *Gallotia* (Lacertidae) was discovered in June 1999 on La Gomera Island in the Canarian Archipelago (Plate 1). This genus is endemic to the Canary Islands and is a remarkable example of adaptive radiation (Arnold, 1989; González *et al.*, 1996; Rando *et al.*, 1997).

Several studies on fossil bones suggested that two species of these giant lizards *Gallotia goliath* (about 1.5 m long) and *G. simonyi* (50–70 cm long) inhabited the western islands (Tenerife, La Gomera, La Palma and El Hierro) of the archipelago (see review in Bischoff, 1998). However, some authors believe that the two lizards should be considered as the same species (*G. simonyi*), which suffered a reduction in body size after the arrival of humans in the islands about 2500 years ago (Mateo *et al.*, 1999; Barahona *et al.*, in press).

Until recent years the only known living giant lizard on these islands was *G. simonyi* from Roque Chico de Salmor off El Hierro. It disappeared from this rock about 65 years ago but a small population was found in 1974 on some cliffs (Fuga de Gorreta) on El Hierro itself (Machado, 1985). In May 1996 a new species, *G. intermedia*, was discovered in coastal cliffs on Tenerife (Hernandez *et al.*, in press).

That discovery led to the possibility that another species of giant lizard might still survive in remote parts of the island of La Gomera. Living giant lizards on this island, presumably of this group, were seen by Fritsch (1870) in the second half of the nineteenth century. Furthermore, Hutterer (1985) described two Gomeran



Plate 1 The new species of giant 'fossil' lizard, *Gallotia* sp., found on La Gomera, Canary Islands (A. Martín).

subspecies *Gallotia goliath bravoana* (snout-vent length estimated about 38 cm) and *G. simonyi gomerana* (21 cm) based on subfossil bones. Some bones of the latter subspecies were found in an archaeological site dated about BP 500 and Hutterer suggested that it might still survive in some inaccessible place of La Gomera.

In June 1999 a scientific team from the University of La Laguna started a systematic search of coastal areas of La Gomera (to 400 m a.s.l.). After searching many places, a large, recent, lizard faecal pellet was found and intensive trapping during 4 months (5 June–2 October) eventually resulted in the capture of one juvenile (probably female) and five adults (two males: 18.0 and 19.0 cm, snout-vent length; and three females: 13.5, 15.0 and 15.5 cm). The largest individual was 49.0 cm from nose to end of tail.

The new lizard is different from any other known species on the archipelago. The dorsal and lateral coloration is dark with small blue spots on the flanks, and the ventral parts (including the distinctive gular region, limbs and tail) are ivory white. Body size corresponds with the form described by Hutterer (1985) as *G. simonyi gomerana* from bone remains. Taking into account the morphological characters, this lizard belongs to the 'simonyi group' and may be a new species. Geneticists from the University of Laguna are carrying out DNA studies to compare them with other *Gallotia* species. Most of the main areas of La Gomera Island that might be suitable habitat have now been surveyed with no further success and it seems that this lizard could be one of the most endangered reptiles in the world. Introduced cats and rats are present in the small area where this lizard has been found and in a short period of time preliminary trapping yielded eight feral cats in this zone, so conservation measures require not only eradication or control of these predators but also an urgent captive breeding plan. The lizards must be raised *in situ* (Valle Gran Rey) to guarantee similar climatic conditions and to minimize

risk of foreign diseases. To ensure a future for this lizard it is also essential that the people of Gomera are fully aware of and involved with the conservation measures.

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Ambitious biodiversity inventory in Great Smoky Mountains

The All Taxa Biodiversity Inventory (ATBI) is an ambitious project, which is at present in a 2-year pilot phase in the USA. Led by the National Park Service and a non-profit organization, Discover Life in America, the project is inviting scientists to tally every species that occurs in the 2250-sq-km Great Smoky Mountains National Park, which straddles the border of Tennessee and North Carolina. So far scientists have identified only 9800 of an estimated 100,000 species (excluding bacteria and viruses) but have found at least five new species of Diptera, which were collected in just one weekend.

The original concept was conceived 6 years ago by Daniel Janzen of the University of Pennsylvania, who wanted to carry out an ATBI in an area of forest in Guanacaste, Costa Rica. However, it was estimated to cost \$US 90 million so Costa Rica officials opted for a limited survey instead.

The ATBI idea was revived in the USA with the Great Smoky Mountains National Park being selected because it is one of the most species-rich temperate areas in the world. Park officials have pledged to build a laboratory, which will be open to ATBI researchers, at a cost of \$US 3 million in 2001. Scientists are still working out the best methods to use, but 20 1-ha plots have already been delineated for sampling purposes. The project has a web site that logs all the species found and eventually this will include data on each species's range, behaviour and population dynamics (www.discoverlife.org).

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