



Galapagos Tortoise Breeding Station

Six island races of the Galapagos giant tortoise are now being bred at this breeding station, built in 1969 with a grant from the San Diego Zoological Society and now run by the Ecuador National Parks Service. (See *Oryx* Dec. 1969, page 298). The six are from Española (Hood), San Cristobal (Chatham), Santiago (James), Pinzon (Duncan), Santa Cruz (Indefatigable) and Cerro Azul on Isabela (Albemarle). One group of 20, raised at the station from eggs taken in 1965, were returned to Pinzon in December 1970 and later reported to be thriving. This is one of the most endangered races, the problem being the introduced black rats which eat both eggs and young. The animals bred at the station are kept until they are big enough to withstand the rats. At the same time research is going on into methods of controlling the rats without affecting other wildlife. The estimated total tortoise population for all

Young tortoises from Hood Island bred at the Station
Photographs by Richard Fitter



the islands is between 6000 and 10,000, of which about 3000 are on Santa Cruz and up to 4000 on Volcan Alcedo on Isabela. The most endangered are those on Española and Pinzon, with estimated wild populations of about 10 and 150 respectively. The other great enemies of the tortoises are feral goats and pigs and large numbers of these have been shot by the National Park Service. In 1970 they accounted for 1470 pigs on three islands and 1916 goats on seven islands. Last year they completely cleared the goats on the badly overrun Santa Fé Island (Barrington) – this did not help any tortoises, which are extinct there, but it will allow the vegetation to recover and afford some useful studies for the scientists. On some islands goats have succeeded in exterminating some endemic plants.

Report from Cuba

Three endangered Cuban mammals, all legally protected, are reported to be holding their own – but only just.

Sr Luis Varona reports that the Cuban solenodon *Atopogale cubana* survives in the mountain forests in the north-east of Oriente province, around Baracoa and probably also in the Sierra Maestra in the south of the province. Deforestation is its chief enemy, for it is not hunted and the introduced mongoose does not penetrate the deep forests. The same is true for the bushy-tailed hutia *Capromys melanurus*, which rates a red page in the IUCN *Red Data Book*, which is also restricted to the forests of the Oriente where it is 'relatively common'. Seriously threatened is the dwarf hutia *C. nana* which survives on one swamp in central Cuba, living on dry islets, and threatened by the activities of local farmers (who burn the bushes) and charcoal makers.

Three hutia species described by Sr Varona only in 1970 are in danger of extinction, because of their very small numbers and restricted habitats, and the fact that they are hunted by fishermen: *C. auritus* is known only from Frago Key, north of Las Villas province, in central Cuba; *C. sanfelipensis* only on the tiny Juan García Key, on the south side of Pinar del Río province, and *C. garridoi* from Majas Keys, on the south side of Zapata swamp. All three are hunted by fishermen.

The manatee *Trichechus m. manatus* is seriously endangered in Cuba. Despite protection numbers are decreasing all the time, due to hunting (for food, oil, etc.) and also the pollution of the rivers.

Among reptiles, the Cuban crocodile *Crocodylus rhombifer* (another red page in the *Red Data Book*) is 'very endangered'. The surviving population are mixed with American crocodiles *Crocodylus acutus* in 'corrals' near a lake in the Zapata swamp and are interbreeding. It seems only a matter of time before the species is extinct. The American crocodile also is in danger in Cuba, being hunted wherever it is found. The Cuban ground iguana *Cyclura m. macleayi* is still common but declining and endangered by overhunting.

The Cuban boa *Epicrates angulifer* is heavily hunted and really big specimens are hard to find. Deforestation for agriculture is a real menace coupled with the fact that everyone tries to kill a boa at first sight.