

The Wildlife of South-east Asia: How Zoos Can Help to Save It

By Boonsong Lekagul

Many south-east Asian countries are well aware of the value of their wildlife and natural resources, but they have many problems which bedevil all attempts at conservation. Poverty combined with a population explosion leads to the notorious "slash and burn" shifting cultivation that destroys wildlife habitats; a surplus of war materials especially after the second world war led to easy and indiscriminate slaughter of wild animals so that many species now face extermination; lack of funds and trained personnel means that the laws that exist cannot be enforced; the demands of animal dealers to supply both zoos and research centres lead to high prices, a temptation that villagers cannot be expected to resist. All these facts, says Dr. Boonsong, who is Secretary General of the Association for the Conservation of Wildlife of Thailand, point to the urgent need for all zoos—not just the few conservation-minded ones—to breed their own stocks of rare animals.

BEFORE the last war many countries in south-east Asia were rich in natural resources, especially wildlife. Many species of mammals, birds, reptiles and amphibians were unique to this area—Asiatic elephants, Javan and Sumatran rhinoceroses, Malayan tapir, gaur, banteng, kouprey, Schomburgk's deer, thamin, Indo-Chinese hogdeer, tamarau, anoa, orang-utan, gibbons, monkey-eating eagle, Komodo giant monitor and many more. After the war, surplus vehicles and modern arms were dumped in these countries. Dense forests could then be penetrated more easily, and more animals were hunted, using jeeps with spotlights to shoot at night; any animals with eyes reflecting the light were killed at once without consideration of sex or size. Within a few years, the numbers of wild animals were so reduced that many species became scarce and faced extinction. Several governments tried to save their wildlife resources by passing game laws and setting up game reserves and national parks. But political and financial problems and the lack of trained personnel mean that there is no proper enforcement.

The population explosion increases the demand for land. Because of poverty, most villagers and hill tribes still depend on shifting or "slash and burn" cultivation, which is the main cause of the destruction of forests, the habitat of wildlife. They cut down big and small trees and burn them, grow crops for one or two years, and then move on to repeat the process.

The heavy demands of animal dealers for rare species to supply

Continued on page 108

THREATENED SPECIES OF SOUTH-EAST ASIA

Those starred are listed in the IUCN Red Book

MAMMALS

- ***Javan Rhinoceros** *Rhinoceros sondaicus*. Ujung Kulon, Java; Tenasserim Range. Doubtful if more than a very few survive.
- ***Sumatran Rhinoceros** *sumatrensis*. Burma; Malaya; Sumatra and North Borneo. Only a few heads in each locality.
- ***Seladang** *Bos gaurus hubbacki*. Malaya; Southern Thailand. Decreasing in numbers rapidly from loss of habitat.
- ***Banteng** a. *Bos banteng banteng*. Ujung Kulon and other reserves in Java.
 b. *Bos banteng birmanicus*. Burma; Thailand; Laos; S. Vietnam; Cambodia. Rapid decrease in numbers from poaching and loss of habitat.
 c. *Bos banteng lowi*. Borneo.
- ***Kouprey** *Novibos sauveli*. Cambodia. Only about 200 head left. Southern Laos and NW areas of S Vietnam. Few small herds. Thailand. Completely lost about 15 years ago.
- ***Anoa** *Anoa depressicornis*. Celebes, Indonesia.
- ***Tamarau** *Anoa mindorensis*. Mindoro, Philippines.
- ***Wild Water Buffalo** *Bubalus bubalis*. India; Burma; Laos; S. Vietnam; Cambodia. Almost lost from Thailand; reduced in numbers in other countries.
- ***Thamin or brow-antlered deer** a. *Cervus eldi thamin*. Burma. Largest numbers at Shwebo.
 b. *Cervus eldi siamensis*. Thailand. Very few heads left.
 c. *Cervus eldi eldi*. Manipur, India. About 100 left.
- ***Bawean Deer** *Cervus kuhlii*. Bawean Is. north of Java.
- Thai Hog Deer** *Axis porcinus annamiticus*. Thailand. Only a few heads left.
- ***Bali Tiger** *Panthera tigris balica*. A few may survive in the extreme west of Bali.
- ***Javan Tiger** *Panthera tigris sondaica*. Ujung Kulon in Java.
- Clouded Leopard** *Felis nebulosa*. S. China; Thailand; Malaya; Sumatra and Borneo. Rare.
- Marbled Cat** *Felis marmorata*. Nepal; Sikkim; Assam; N. Burma; Laos; S. Vietnam; Cambodia; Malaya; Sumatra; Borneo. Very rare.
- Flat-headed Cat** *Felis planiceps*. S. Thailand; Malaya; Sumatra; Borneo. Very rare.
- Banded Linsang** *Prionodon linsang*. Tenasserim; Malaya; Sumatra; Java and Borneo. Very rare.
- Babirusa** *Babyroussa babyrussa*. Celebes and Boru in Indonesia.

Mammals—Continued

- ***Serow** *Capricornis sumatraensis*. China; India; Burma; Thailand; Laos; S. Vietnam; Cambodia; Malaya; Sumatra. Seriously reduced in numbers.
- ***Orang-utan** *Pongo pygmaeus*. Sumatra and Borneo. Dwindled rapidly as a result of large demands from zoos. Sanctuaries just established in Sarawak and Sabah.
- Gibbons** *Hylobates lar*. Thailand. Seriously reduced because of demands of research institutes and pet shops.

BIRDS

- ***Imperial Pheasant** *Lophura imperialis*. Annam and adjoining Laos. Very rare in its old habitat but a good stock in captivity.
- ***Edwards' Pheasant** *Lophura edwardsi*. Central Annam. Very rare in its old habitat. A good stock raised in captivity.
- ***Giant Scops Owl** *Otus gugeyi*. Mindanao and Martinique of Philippines. Very rare.
- Chinese Egret** *Egretta eulophotes*. Breeds in China and Formosa and winters in SE Asia. Very rare, possibly extinct? (Deignan).
- ***Reuch's Blue Flycatcher** *Niltava ruecki*. Malaya. Very rare.
- Giant Ibis** *Pseudibis gigantea*. Very rare now in Thailand; a few in Cambodia.
- Sarus Crane** *Grus antigone sharpii*. Very rare now in Thailand; rare elsewhere.
- Burmese Grey Peacock Pheasant** *Polyplectron bicalcaratum*. Burma and Thailand. Rare.
- Malay Brown Peacock Pheasant** *Polyplectron malaense*. Malaya; S. Thailand. Rare.
- Monkey-eating Eagle** *Pithecophaga jefferyi*. Philippines. Very rare.
- ***Rothschild's Mynah** *Leucopsar rothschildi*. Endemic to Bali. Rare.
- ***Mindoro Imperial Pigeon** *Ducula mindorensis*. Confined to Mindoro. Rare.

REPTILES and AMPHIBIANS

- ***Leathery Turtle** *Dermochelys coriacea*. Lays eggs on the coasts of many countries in SE Asia.
- Big-headed Tortoise** *Platysternum megacephalum*. Found along running streams on high mountains of Thailand and Laos. Becoming rare in the last few years. Hunted for sale in pet shops.
- Thailand Giant Frog** *Rana macrodon*. From nose to vent 9 inches long. Found along running streams on mountains of Southern Thailand. Hunted for meat, and becoming rare in the last few years.
- ***Giant Komodo Dragon** *Varanus komodoensis*. Komodo and Rintja Isles, Indonesia. Seriously reduced in numbers, not more than 300 at present.

zoos is another serious cause of wildlife destruction. To capture babies the mother animal is usually shot. Even to catch a young gibbon, the mother is often shot down from high trees, and frequently both mother and baby die from shots, or the fall. Thus the demands of the zoos for rare animals have indirectly hastened the doom of these animals.

The reckless use of wild animals for research in many institutes is another factor. Tens of thousands of monkeys have been exported to the United States for the preparation of polio vaccine. Likewise, hundreds of gibbons have been exported for research in anthropology. Two years ago I heard that a university in the USA ordered 8000 monkeys a year for behaviour research. Demands like these have increased in the past ten years, so much so that monkeys and gibbons have been almost wiped out in many parts of some countries. The dealers' heavy demands for wild animals to supply to zoos and research institutes and for sale as pets send the prices higher and higher; it is difficult to stop very poor villagers and hill tribesmen from grabbing at what is to them a small fortune.

Several governments in south-east Asia understand the value of wildlife and the necessity for its protection, but most of them are facing the serious threat of communism. Nevertheless some of them have tried their best to protect their fauna, but some trappers and dealers continue to poach and smuggle animals out. Some countries have started to control the inter-port smuggling, but it is almost hopeless if the heavy demands of dealers and zoos cannot be stopped.

A Regional Working Group

During the 9th Pacific Science Congress at Hawaii, in 1962, a group of conservationists from south-east Asian countries met privately and expressed their worries on problems of conservation of wildlife and other major resources. They decided to form a special body to work on conservation in their region. This matter was brought up at the Pacific Science Congress Conference, and it was resolved that UNESCO should sponsor a special meeting for conservationists in the region to discuss and solve their own problems. The first regional meeting was held in 1963 at Djawi, where it was resolved to form the "Regional Working Group for the Conservation of Nature and Natural Resources in Tropical South-east Asia." The main purpose of this group is to urge various countries in the region to be more active and to work more efficiently in conservation. Meetings will be held every two years—the second meeting was held in 1965 at Bangkok, at the same time as the conference promoted by IUCN in cooperation with the World Wildlife Fund, IBP, UNESCO and FAO. The resolutions passed at these two meetings urged countries in south-east Asia to be more alert to conservation of nature, especially of wildlife and threatened species, and encouraged them to set up more nature reserves and national parks, and to manage them properly. It is

generally well understood that the best way to preserve threatened species is to give protection to their habitats, i.e., to set up reserves or sanctuaries and to prevent poaching. But with so many serious political and financial problems in south-east Asia it is likely that some species of wild animals will be close to extinction before any well-managed reserves or sanctuaries can be established for them. In such urgent cases, it will be necessary to capture a few pairs of the threatened species and to raise them in captivity before it is too late. This has already been tried and proved valuable in the case of Père David's deer, Mikado pheasants, Hawaiian ne-ne geese, and the Arabian oryx.

The Wild Cattle

In the past zoos have only had one aim—to exhibit wild animals to the people. Now it is most heartening to hear that some modern zoos have other aims, to educate the public and to raise rare species in captivity. Zoos could play an important part in saving wild cattle. The biggest concentration of the kouprey—the last big animal to be discovered by scientists—is now in Cambodia. About eight years ago it was only about 200 head. Formerly, we had it in Thailand too, but the last herd was shot about ten years ago and only a few head, in small herds, are left on the boundaries in the north-east of South Vietnam. This very rare and seriously threatened species is very easy to raise in captivity. The seladang and the banteng are both decreasing rapidly and so is the wild buffalo of Thailand and neighbouring countries, and they are not difficult to breed in captivity. I would like to ask the various zoos to raise them; we cannot supply them again and again forever.

The thamin, or brow-antlered deer, is now very rare in Thailand. Bangkok zoo has a pair of them, and is trying to breed them. The Thai hogdeer will be lost in the near future; Bangkok Zoo has a female, but no male yet. The Bali tiger is dwindling. The clouded leopard, the marbled cat, and the flat-headed cat are all very rare and very easy to raise in captivity. The Thailand giant frog, found only by the running streams of mountains, is becoming very rare because people like to catch it for meat.

I would like to express my sincere thanks to the San Diego Zoo, and to any other zoo that brings conservation into its education programme, and raises endangered species in captivity. But conservation is not just for those zoos with representatives at this meeting; it must be practised by zoos all over the world.