

WILDLIFE MANAGEMENT IN MAINLAND MALAYSIA WITH EMPHASIS ON LARGE MAMMALS

Mohd. Khan bin Momin Khan

Zaaba bin Zainol Abidin

Pan Khang Aun

Department of Wildlife and National Parks

Km. 10, Jalan Cheras,

56100 Kuala Lumpur,

Malaysia.

ABSTRACT

Mainland Malaysia has a very long coastline comprising some of the most attractive beaches, mangroves, and freshwater swamps. Presently, fresh-water swamps cover approximately an area of 459,000 ha while mangroves cover a considerably smaller area of 100,000 ha. Forests cover about 44% of the total land area of which about 6% or 832,000 ha are covered by the national parks, wildlife reserves, and other protected areas.

The forests are species rich with records 2500 trees, 800 orchids, 60 palm, and 600 ferns. Equally rich in species are the animals with a record of 200 species of mammals, 600 species of birds, 130 species of snakes, more than 1000 species of butterflies, and many thousands of species of insects.

Malaysia has gone through a very rapid rate of development resulting in large areas of forests having been cleared for agriculture and human settlements. As much as 30% of the total land area has been cleared of the most fertile lowland forest since 1957. These lowland forests were also the homes of large numbers of species of wildlife.

With the destruction of their habitats, wildlife became vulnerable to many dangers which resulted from the development. The use of poisons, steel-wire snares, poaching, and illegal trade are some of these dangers. Populations of most large species of animals, especially those which are edible, declined rapidly. In view of the large number of fragmented forests existing because of agricultural schemes, wildlife protection is not only a massive task but it is also very challenging.

Crop depredation by wildlife is the most serious problem that must be solved if wildlife is to be conserved. With the large areas of habitat loss, it is not surprising to see the large number of herds of elephants being responsible for crop damage. The current value of crops which have been destroyed by elephants is estimated at US\$120 million. Less serious crop depredation problems are caused by wild pigs, sambar deer, long-tailed macaque, and leaf-monkeys.

With the exception of the national park and other protected areas, wildlife management is carried out through a number of activities, namely in-situ and ex-situ conservation, law enforcement, research and management, training, and extension programmes. Projects designed to conserve wildlife are developed to assist in the management of wildlife. In the national park and other protected areas a holistic approach to conservation is made.

Peninsular Malaysia has a total land area of 131,587 sq km with a population of thirteen million. At the time of independence in 1957 as much as 75% of the total land was under forest. The country went through very rapid development over the past 32 years resulting in enormous areas of fertile and flat land being cleared for agriculture and human settlement. These fertile and flat lands were also the homes of seladang, elephant, rhinoceros, and countless other wildlife.

Today about 44% of Peninsular Malaysia is still under forests. Mangroves and fresh water swamps cover areas of 100,000 ha and 459,000 ha respectively. Whatever the views of conservationists, a pragmatic approach to wildlife conservation is necessary.

There are far too many people in Malaysia who indulged in pointing out the problems of wildlife conservation but these same people do not have the answers or solutions to the problems. Staff of the Department of Wildlife and National Parks are more familiar with these problems and they have the difficult task to solve them.

Wildlife habitats were considerably reduced forcing animals to come into cultivated areas

in search of food. These areas were also parts of their former territories where salt licks were located. There are also stranded wildlife in pockets of forests completely cut off from the main forests. These animals cannot survive into the future due to inbreeding and other demographic problems.

The elephant problem was the most serious that needed to be quickly taken care of if the animals were to be protected. It is impossible for any country no matter how rich it is to bear the heavy losses of agricultural crops valued at a few hundred million dollars. Many elephants had to be killed before effective solutions were found.

An effective capture and translocation technique was eventually developed. The dosage of a suitable drug immobilon/revivon was perfected for the immobilization of elephants of all ages including very young animals. These animals have to be sedated for long periods of time during transport and the drug rompun was used for this purpose.

The next step was suitable areas for translocation. Elephants are sagacious animals and will return to their old homes unless there are physical barriers to prevent them from doing so. Rivers that are deep and wide or the lakes of large dams have proved to be effective. The areas these animals are released into have to be suitable and adequately large to support them.

The electric fence was used against the elephant and has had a good measure of success. There are more than one thousand kilometres of electric fences used in the defence of crops all over Peninsular Malaysia. The electric fence is effective only if it is properly maintained. Undergrowth or fallen branches or leaves can affect the voltage and render the fence ineffective. It is equally important for the elephants to get food and other living requirements from the adjoining forests. In the absence of adequate forests, elephants have been found to break the fences with large branches or with the use of their tusks.

Elephants are still being driven and occasionally killed by wildlife rangers in places where villages are fringed by large forests. A great deal of time is spent in these places to protect life and the crops of kampung folks. It is not uncommon for wildlife rangers to spend up to twenty days of each month doing elephant control work. They have to produce results to satisfy rural folks whose worldly possessions are no more than a few acres of land planted with assorted crops and small attap houses.

The elephant population presently stands at one thousand animals. The ideal population is two thousand animals. We need therefore to apply management techniques to ensure the population is genetically viable. Injection of new blood is needed periodically until the population of two thousand is reached. At a population of two thousand animals the species can survive without being manipulated.

There is still a lot to be done. Capture and translocation has to be continued. The forest would be ideal if it is contiguous. Otherwise corridors have to be developed for elephants to get from one forest area to another. Alternatively the technique of small population management has to be applied. This will be both expensive and difficult to do.

The seladang or gaur has severely suffered from land development. Large populations of 16-20 animals were reduced to 5-6 animals by settlers who killed them for food. Even in non-developed but accessible areas poachers pose a real threat to the seladang populations.

Serious studies of seladang which were started in 1966 have been continued to this day. Data that were collected over the years are useful in the protection and management of the species. The existing herds and threats to them are known to the staff of the department who are responsible for seladang management. Efforts to conserve seladang are more successful due to the information that is now available. The home range, food habits, and numbers of seladang are adequately known for its management.

The species is known to be high strung, and efforts to bring adults into captivity were unsuccessful. Very young animals of about 3-5 months of age were captured and raised in captivity. Presently there are twelve seladang in captivity with five females. The rate of increase will soon be five young a year with good prospects of more in the future.

The aim naturally is to put the animals back into specially selected areas of forests. The national park, wildlife reserves, and forest areas where the animals would be safe are being

identified for the purpose. In a few years it should be possible to reintroduce a herd of 6-8 animals each year. This would be a breakthrough in the conservation of seladang:

A similar project was started for the sambar deer which now has a captive population of one hundred animals. This population is increasing at a faster rate with the increase in breeding stock. Like the seladang, a great deal has been learned about the sambar deer to assist ex-situ conservation.

The river terrapin is another species that was studied extensively. Hatchery projects that were started for them from as early as 1967 have resulted in the release of more than twenty thousand young terrapins into the rivers.

This species faces a lot of problems from people who eat both the animals and their eggs. Without these hatchery projects the species would become extinct. There may be other problems that do not exist today but may well do so in the future. One of these may be the disappearance of sand bars used by wild terrapins to lay eggs. Dams that were built upriver have slowed the flow of the Perak River in the lower reaches that will result in the loss of wash-up sands on the banks of the river.

The Sumatran rhinoceros is the most endangered species in Peninsular Malaysia with just about one hundred animals left in the more inaccessible parts of the country. Studies of the rhino were started as early as 1965 and have continued to this day. Our knowledge of the species has increased considerably over the years. No fewer than three hundred species of plants were identified as rhino food. The home range and habitat requirement of the species have been studied. The use of salt licks and wallows and the frequency of visits by the animals to these areas are well known.

Attempts to capture these animals were started in 1984. Since then a total of eleven Sumatran rhinos have been captured of which four were lost later in captivity. One of these was a very young male that was abandoned by its mother. Another died in the Dusit Zoo in Thailand and two females died in the Malacca Zoo.

A baby was born in captivity from a wild caught pregnant female in 1987. She has grown into a subadult. From this animal that was born in captivity a great deal of information has been collected on growth and weight. Presently there are six females and one male in captivity. Breeding is expected in the near future.

The Malayan tiger is another species that receives a lot of attention for its conservation. The species first enjoyed protection in 1972 when the Protection of Wildlife Act was passed. Prior to 1972 the tiger was considered a pest and was killed whenever problems were faced. Its population was down to about 250 - 300 animals in 1976 when it was given total protection. The population has since increased to about 600 animals over a period of seventeen years.

Problem animals are no longer killed but are instead captured for captive breeding. The department has successfully bred the Malayan tiger which are now being exchanged or given to good zoos for further breeding.

Though uncommon there have been several cases of poisoning involving elephant, seladang, and tiger. Angry planters have used sodium arsenite to poison elephants in a number of states including Kedah and Perak. As many as four elephants were found dead at one time. Six seladang were found dead from the same herbicide in Sungkai, Perak. The carcass of a cow that was killed by a tiger was sprayed with poison that later killed the animal when it returned to eat.

These problems are serious and must be solved quickly if wildlife are to be saved. Crop depredation and cattle lifting must be solved promptly and to the satisfaction of planters and ranchers to prevent them from taking irresponsible measures to solve the problems. Legal action can be taken against the violators, but in the interest of the animals prevention would be better.

The law enforcement division of the department is responsible for an average of five thousand cases of wildlife violations each year. These cases involve many species of animals and birds.

It is obvious that education of the public is important to enlighten the public. The department actively carries out extension programmes for students in selected schools in Peninsular Malaysia. Field officers are being trained to do extension work while carrying out their duties which bring them into contact with the public.

The department also has a very active research, development, and management division that looks into this very important function of wildlife management. Wildlife projects have been developed to breed various species of animals and pheasants in captivity. Studies of these animals and birds are carried out in both in-situ and ex-situ situations. Research results are applied to management.

The elephant is a dominant species. Its conservation requires large tracts of forests which include the habitat requirements of most other species. Success in the in-situ conservation of the elephant will mean success in the conservation of most of the other species. The department has rightly put a great deal of work to conserve the Malayan elephant since these efforts will conserve other species as well.