

The seladang, *Bos gaurus hubbacki*

The seladang, one of the most impressive of all the large mammals in Malaysia, has declined to about 200 animals. It is now being multiplied by captive breeding.

By Mohd Momin Khan



A dominant bull with a shy female behind it.

The cattle family includes buffaloes, bisons and seladang. The seladang of the Malay Peninsular belongs to the same species, *Bos gaurus*, as the gaur of India. The natural range of *Bos gaurus* extends from India to Nepal, and across continental South East Asia, into tropical and sub-tropical China. The population in the Malay Peninsula is considered to constitute a

subspecies, *Bos gaurus hubbacki*, named after T.R. Hubback.

Hubback was a big game hunter who served as Chief Game Warden of what was then the Game Department of Malaya, set up to regulate and issue licenses for hunting. This Department has evolved into the present-day Department



L to R: Mohd Momin Khan, former head of DWNP and Ahmad Azhar Mohammad, head of NWRC Sungkai.

of Wildlife and National Parks (DWNP), now responsible for wildlife conservation.

The seladang has been popular with big game hunters for reasons that are well-expressed by Sir George Maxwell in his classic book *In Malay Forests* (1907):

A big bull seladang, the largest and noblest of all the splendid creatures of which the tribe of oxen and bisons is composed, stands eighteen hands, or six feet, at the shoulder. But it is the animal's massive bulk rather than its height that is impressive. The forelegs are short, and the body comes down to within two feet of the ground at the shoulder, therefore the seladang presents an expanse whose breadth and depth are most imposing, and suggestive of enormous weight and power. A big bull will weigh nearly a ton...

Except on its forehead and below its knees, the colour of a bull seladang is a rich black, the hair being fine and sleek, and so short that the hide shows through it. The legs have cream-coloured stockings, which well set off the prevailing black. The hooves are fine and neatly shaped, and very small in proportion to the size of the heavy animal they have to carry—much smaller than the splayed-out hooves of the buffalo, which is a far smaller animal. The head is very broad, the distance between the eyes being exceptionally wide, and the muzzle is very square. The forehead rises between the horns into a high arched ridge that gives the animal a peculiar look of lofty dignity, and this frontlet is covered with short, crisp curls of ash-grey hair. Lower on the forehead the hair gets shorter, and at the level of the eyes gradually shades into the glossy black of the rest of the body.



Seladang herd in NWRC, Sungkai.

But it is in the massive girth and shapely curve of the horns that the great beauty of the seladang lies. At their base, the base of an old bull's horns are deeply annulated and indentated, and covered with many scars and rugged pits that would seem to tell of much battering. The horns sweep out boldly from the brow, curving in again at their extremities; and in a most beautiful head, belonging to the first seladang that I shot, the distance between the points is exactly the same as the distance between the eyes—thirteen inches. These horns measure six feet and a few inches from tip to tip along the outer curve and across the forehead, and their circumference at the base is nineteen inches. But on the living animal the head looks small in proportion to the gigantic bulk of the body. It is the relatively small head and extraordinarily small hooves that give the seladang an appearance of high breeding, which goes far to make it so noble-

looking a creature. The disproportion between the size of the head and the bulk of the body is so marked, that my disappointment at the head of the first seladang that I shot is still fresh in my memory. It was a splendid animal, exactly eighteen hands at the shoulder, and of enormous girth; but I had not seen a seladang before, and the head looked very small. T. and I were in the wilds of the forest of the Semantan district, and when we returned to the boat we sent his five boatmen to get the head and as much of the meat as they required. I was surprised to find on their return that it was as much as they could do to carry the head alone, and still more astonished to discover later that, with the luck of a beginner, I had obtained one of the finest heads ever seen in Pahang.

T.'s head boatman, whose visions of preparing a vast supply of sun-dried meat were dispelled,



Cow and calf; the mother was one of three juvenile animals captured in 1992 and the baby was the first seladang to be born in captivity.



Juvenile.

was seriously annoyed. "The meat is left in the forest while the bones are preserved in the house", was his scathing comment.

Distinctive markings to differentiate cows from bulls are lacking and as the animals are generally met in the thick jungle, picking out the bulls in a herd is a difficult task. However, the mature bulls are certainly larger than the cows, weighing up to 900 kg compared to 600 kg for the cows. The bulls are recorded to stand up to 6 feet 4 inches at the shoulder and would stand out from the cows in a herd. An old bull seladang is a magnificent animal and almost entirely black except for his legs, which, from the knees downwards appear to be covered in cream-coloured stockings. Hubback had also seen bulls with almost white stockings. The cows are as black as the bulls, and also have cream-coloured stockings.

There is no hump in a seladang as in the domesticated cattle, but a distinctive dorsal ridge runs from the neck nearly to the middle of the back where it terminates abruptly. The height of the dorsal ridge is about 4–5 inches. This dorsal ridge is formed from the third to the eleventh vertebrae (Ebil, 1981)

The seladang as a big game animal

Because the seladang is big, strong, alert and fast, tracking and hunting seladang is difficult and dangerous. Local guides familiar with the terrain and habitat of the species used to be hired for tracking and guiding the hunter to the seladang. There were many such hunts that had close shaves and one resulted in the death of a chief police officer by the name of Sythe. The herds were wary of people even in the latter part of 1902 and the early part of 1903 when T.R. Hubback went hunting in Negeri Sembilan.

The best-described seladang hunting expedition is that of T.R. Hubback in 1899. Hubback considered the beauty of the seladang to lie chiefly in his head and shoulders. The great length of body and somewhat low quarters give the seladang a somewhat clumsy appearance—an appearance quite at variance with its nature, as it is anything but a clumsy animal.

Malay guides who knew the home range of the seladang were hired by Hubback. These guides were hunters themselves and knew the feeding areas and most of the salt licks visited by these large wild cattle. They would track an animal immediately after it was shot, and ignoring the serious dangers of confronting a wounded animal, slaughter it in accordance with sharia law. They were strict Muslims who would only eat meat from animals slaughtered in accordance with sharia law. The carcass would be cut up into small pieces and dried to save the meat from rotting. Three seladangs were killed during this hunting expedition.

Population past and present

There were good populations of seladang until they were subjected to hunting and poaching during the immense development of the country in the mid-1900s.

Salt licks are very important to the seladang; the animals would visit them even when their habitat was greatly damaged. They became easy targets to poachers waiting at the salt licks. Many herds were completely wiped out. A population of ninety six animals in Ulu Lepar was reduced to less than twenty.

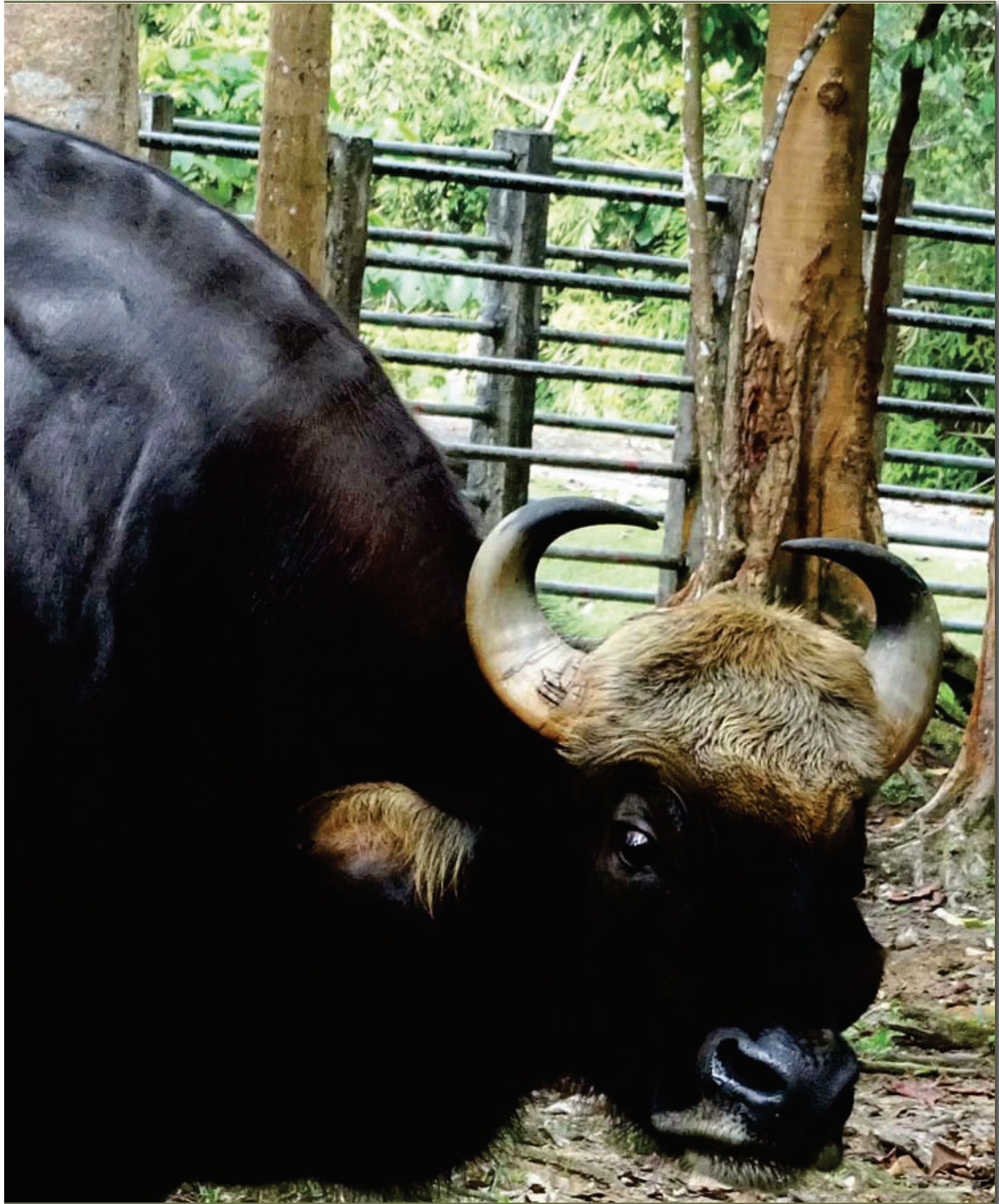
There are now probably no more than two hundred seladangs left in the Malay Peninsula, in remote parts of the country. The animals are still subjected to poaching by locals who ignore the dangers to themselves and are oblivious the fate of this critically endangered species.

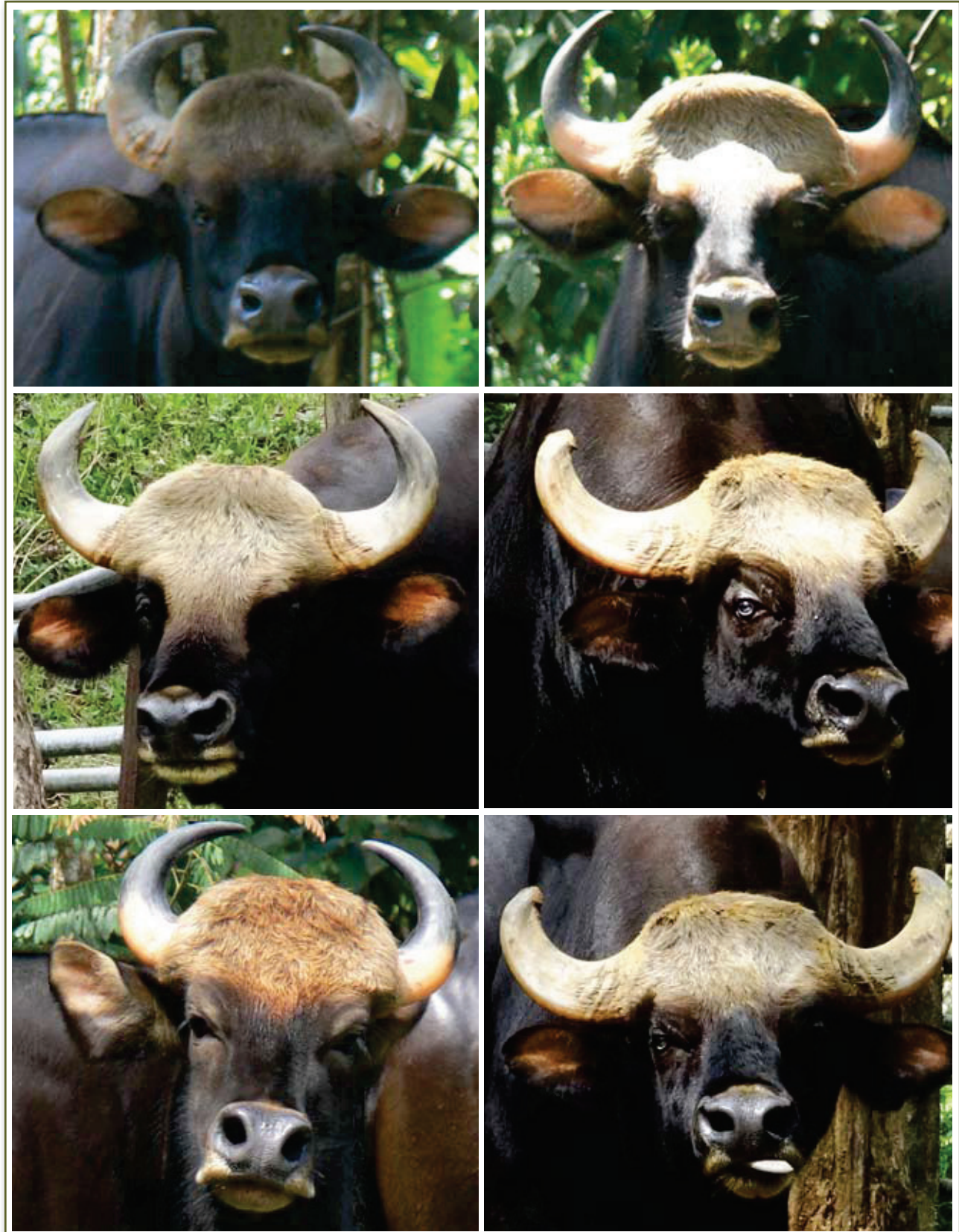
Studies by the Department of Wildlife and National Parks (DWNP) have shed a lot of light on the habitat parameters and behaviour of the species. A herd of about eight animals found in the Kuala Tahan area of Taman Negara (Malaysia's oldest national park) were lured into the secondary forest (*belukar*) behind the homes of park rangers and close to the Rest House. Grass was planted and the herd grew in size to 24–30 animals. They became a great attraction to visitors who enjoyed the rare sight of these magnificent wild cattle.

Captive breeding

A very bold step has been taken to breed the seladang in captivity. The Department of Wildlife and National Parks (DWNP) had officers and wildlife rangers who could track these animals down and drug them. The first adult seladang was successfully drugged and tied to a tree. The next day it was found dead. Samples of its meat and organs were taken for examination. The meat had turned white—an indication that the animal had died of stress myopathy. The officers and wildlife rangers changed their strategy and went instead for very young animals of one to three months of age. In just a week in 1982, three young were captured, two males and one female, and brought into captivity and raised by wildlife rangers to maturity. The female give







birth to her first calf eighteen months later, in April 1984. In total she produced 15 calves at the rate one a year. Captive breeding has been a great success!

The first captive-born were extremely wild and exceedingly fierce even though their parents had themselves been reared in captivity from the time when they were only one to three months of age. The males, and even the females, showed aggressive behaviour towards people. The first baby made its parents even more possessive and intolerant to visitor-approach.

In a recent visit to the National Wildlife Rescue Centre (NWRC) in Sungkai, where there are 19 seladangs kept in small groups, we found that the animals showed more tolerance and acceptance of people. The males appeared suspicious as they looked at the visitors with their heads and horns held in attack positions. They then led their herds away from the visitors but there were some animals that came close to the visitors.

The captive animals depend entirely on the keepers for their food. Pig starters or pellets have become a very important part of their diet. The pellets are those that are fed to domestic cattle. Greens in the form of grass and leaves are also fed to the captive animals.

A crossed-breed named selembu

At one time, a bull seladang entered a cattle farm in the Kluang area of Johore and mated with the Friesian cows to produce more than twenty calves. This greatly excited the Veterinary Department. The hybrid animals were larger than the Friesians and efforts were made to produce more of them. The bull seladang was lured into captivity but

the hybrid animals, given the name of selembu, were not reproductively fertile.

The work was to be continued by another agency making use of animals from Jenderak. Jenderak then had the largest captive herd of seladang but the project was aborted because of foot and mouth disease.

The effort to produce selembu has not been revived although it had potential for success. The priority to produce selembu is low as the country has adequate beef.

Reintroduction of captive-bred seladang to the wild

The aim of reintroduction should be to create self-sustaining herds of this unique species in natural habitats. Reintroduction to the wild will be difficult because the animals born in captivity do not know the habitat of their wild relatives.

A few animals were released in the Kenyir Lake area where they were monitored. They lost weight probably due to poor ability to find food, and are believed to have died of drowning during a flood.

The NWRC in Sungkai is located in the Sungkai Wildlife Reserve that once had a large herd of about thirty seladangs. Poaching took a heavy toll of these animals and about ten died of arsenic poisoning in a rubber estate close to the Reserve. As a result, wild seladang is probably extinct in this Reserve. Since NWRC is located in the same area that used to be populated by wild seladang, knowledge about the present habitat in Sungkai can be used to create the habitats that will in time be used by reintroduced herds. A

habitat suitability index is being developed and it is hoped that this project will be included in future Malaysia Plans on a long term basis.

Habitat parameters

The seladang is sensitive to disturbance. Herds remain near the foothills of dipterocarp forests to an altitude of 333m (1000 feet) asl. They bed near their pastures of dense secondary growth.

In studies on the seladang in its habitat, 70% of the animals were encountered at an elevation of 0–250 feet and the incidence was almost zero above 1000 feet. Seladang eat grass, herbs, vines and trees. They move to the edge of the forest or agriculture schemes and begin to feed at about 5.00 am on grass, herbs and legumes (e.g. *Centrocema pubesens*) and bamboo grass. The herd returns to the forest at about 6.30 am and continues to feed there on shrubs, plants, trees, woody vines and creepers. The most browsed items include *mengkirai* (*Trema* spp.) *mahang* (*Macaranga* spp), fruits of *simpoh* (*Dillenia ovata* and *Dillenia indica*), and *petai kerayong* (*Parkia javanica*).

Future possibilities

About seventy animals are available for the purpose of reintroduction. A reintroduction project can be implemented with the information now gathered from studies by the Department for Wildlife and National Parks and various published sources. Great care must be taken to select unrelated animals to be taken to the project area. The project could be started in Sungkai with a view to expand to other areas that used to form part of the former home range of the species.

A large fenced area would be needed for the release area and a suitable time of release must be considered. A smaller area is needed to be fenced off inside the large area and the captives to be reintroduced should be housed first in this smaller area. Five animals (two males and three females) are recommended for the new herd. In the beginning the animals would have to be provided with same food that that they have been fed in captivity. The released animals should gradually learn to feed themselves. New plant growth will need to be encouraged to provide substantial food for the seladang.

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