# The rare large mammals of Malaya

by

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In Malaya, attempts to conserve the wildlife of the country have a history going back to the turn of the century. That Malaya had a rich and varied fauna can be read in the books of Sir George Maxwell (1907) and T.R. Hubback (1905) who, before they became interested in preservation of the wild fauna, had been hunters of such large game as the Malayan gaur or seladang Bos gaurus hubbacki, elephants Elephas maximus indicus and even the Sumatran rhinoceros Didermoceros sumatrensis. They realised that the animals were becoming scarce, not only from poaching and hunting for sport but also from the pre-emption of their habitat for agriculture.

Maxwell (1927) deplored the loss and wrote that 'there appear to be four reasons for preventing the total extermination of an animal. First, the national sense of regret at the disappearance of an animal. which once was, but no longer is, to be found in the land; secondly. the loss to science; thirdly, the loss, in some cases, to the scenic effect of the country deprived of the life that once beautified it; and fourthly, and least important of all, the loss to sport'. He recommended the establishment of permanent reserved areas so that the wildlife could be segregated from the agricultural interests. Hubback also stressed the need for reserves and was instrumental in establishing several, the most important of which was the National Park (Taman Negara). Even with the reserves, however, there remained the need to protect the species therein and to see to their welfare. In 1936 he expressed the view that 'to conserve wildlife resources you must have a fairly accurate idea of what you are to conserve and what you wish to conserve. In other words, you should know what your stock consists of; you should know where it is to be found; you should have a knowledge of its ecology, numbers and status. These alone are questions which cannot be answered except after careful research and skilled enquiry.'

In Malaya such knowledge has been slow in coming and most of it remains to be collected. Talbot (1960) made a quick tour through Asia and stressed the need for immediate action to protect several species of large mammals that were becoming very rare indeed. For Malaya those included the Javan rhinoceros, the Sumatran rhinoceros and the seladang. Oliver Milton (1963) followed him and endeavoured

to collect factual information about the Sumatran rhinoceros and several other species. In the 1961 Special Issue of the *Malayan Nature Journal* various authors expressed their concern about the bleak future for several species: Foenander wrote about elephants, Kitchener about seladang and Metcalfe about rhinoceroses. Their information, while useful, was tentative so Medway (1965) tried to get numerical data from the State Game Departments. Their information no doubt varied in its authenticity but it was the best available then, and some of it is the best available now.

What follows is an attempt to bring some of the data up-to-date (see Fig. 1). During the course of a two-year study of wildlife reserves in Malaya (1966-68) it was possible to visit areas where rare wild animals had been reported and to revise some of the numerical estimates in the light of current developments. Three species only will be considered here: the elephant, the seladang and the Sumatran rhinoceros. The Javan rhinoceros is more than likely extinct in Malaya; in fact, T.R. Hubback as Chief Game Warden may well have shot the last one in Ulu Bernam in 1932 for the British Museum.

Outline maps of each State were sent to the several Game Departments and the present location and numbers of each of the three large mammal species were marked thereon. The data received were adjusted to account for movements of animals across State boundaries. In addition tentative assessment of the population of the three species in the National Park is also given because it may be that eventually the Park will be the last stronghold for such species as the seladang.

The ecology of these rare species is being studied under the auspices of the Game Departments and the University of Malaya: rhinoceroses by Strickland (1967), seladang by Weigum (1968) and elephants by Khan (1965 and 1967). At last a start is being made, however belatedly. But in addition to the three mammal species covered in this report there are others about whose status and distribution far too little is known. These include the Golden cat Felis temminckii, the Clouded leopard Neofelis nebulosa, the Malayan tapir Tapirus indicus, the Bearded pig Sus barbatus and the Sumatran serow Capricornis sumatraensis. None of these is common and field research is urgently needed if they are to be adequately protected in suitable habitat where their survival can be ensured.

# ELEPHANT Elephas maximus indicus

The elephant is the most controversial of the three species under consideration. It is large, it is intelligent and it lives a long time; thus it can do a lot of damage to agriculture, it is hard to discourage and it returns periodically to known areas. No one has studied the ecology of wild

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elephants though Hubback (1905) and Foenander (1952) knew their habits and needs about as well as anyone from their considerable hunting experiences. But they did not supply much information about numerical status and those data still need to be collected in detail.

It is estimated by the Game Departments that there are about 500 elephants in Malaya, distributed as shown in Table 1. The major changes from Medway's report are Kedah and Pahang where fewer animals are recorded. For Kedah the reduction may represent a migration of animals to adjacent Thailand, or it may result from an overestimation by the Game Department in the first place. In Pahang the reduction stems in part from optimism in the 1965 data and in part because the State Game staff have shot 70 elephants in the last eight years.

| STATES         | <b>ELEPHANTS</b> |      | SELADANG |      | RHINOCEROS |      |
|----------------|------------------|------|----------|------|------------|------|
|                | 1960–631         | 1968 | 1960-631 | 1968 | 19632      | 1968 |
| JOHORE         | 43               | 53   | 50       | 13   | 10         | 5    |
| PAHANG         | 229              | 127  | 405      | 121  | 8          | 3    |
| NEGRI SEMBILAN | 39               | 8    | 26       | 0    | 0          | 0    |
| SELANGOR       | 11               | 5    | 0        | 0    | 5          | 3    |
| PERAK          | 82+              | 97   | 45+      | 91   | 10         | 5    |
| TRENGGANU      | 119              | 111  | 36       | 10   | 5          | 0    |
| KELANTAN       | 57               | 36   | 74       | 57   | 5          | 1    |
| KEDAH          | 90               | 23   | 70       | 17   | 4          | 0    |
| PERLIS         | 12               | 3    | 0        | 0    | 0          | 0    |
| NATIONAL PARK  | n.a.*            | 23   | n.a.     | 37   | n.a.       | 3    |
| TOTALS         | 692              | 486  | 706      | 346  | 47         | 20   |

<sup>1 -</sup> Medway (1965)

TABLE 1. Estimated numbers of elephants, seladang and rhinoceroses in Malaya compared with previous reports.

The figures given on the map (Fig. 1) do not indicate where the elephants now are, but only give a total number for each State. Currently the Game Departments shoot about 15 elephants per year in the name of crop protection. As more lowland forest is converted to agriculture it is likely that more animals will be shot, especially in Pahang and Johore, where the greatest amount of forest land is being cleared.

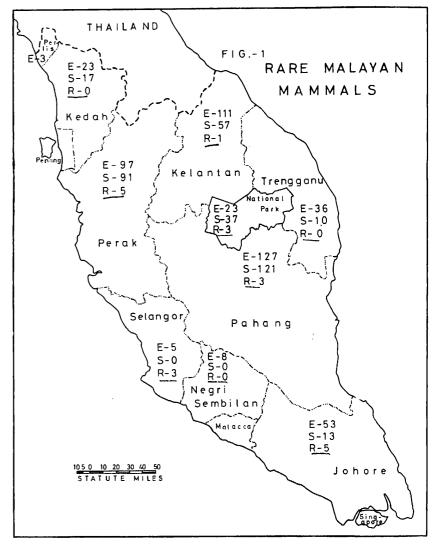


FIGURE 1. Distribution of elephants (E), rhinoceroses (R) and seladang (S) in Malaya.

<sup>2 -</sup> Milton (1963)

<sup>\* -</sup> Data not available

A herd of elephants seldom exceeds 8-10 animals, and many now are smaller, yet the area covered by each herd is as much as 200 square miles, according to Foenander (1961); or may be only 100 square miles as measured by Khan (1967). Food type and availability is the limiting factor. There are fewer than 30 elephants in the National Park (1,677 square miles), and that is probably a stable population because most of the Park is mountainous primary forest.

The future home of elephants in Malaya will be in the non-agricultural regions such as upper Perak, southern Kelantan, western Trengganu, and in the National Park.

The animals thrive in secondary forest so their future seems dependent on the managed wildlife and forest reserves, as long as they do not develop a taste for any exotic species that may be used in plantation forestry. As a species the elephant is not in immediate danger and will persist into the future as long as large blocks of suitable habitat are available to it.

## SELADANG Bos gaurus hubbacki

The Malayan gaur or seladang is a creature of the river banks and abandoned ladangs where it feeds on tender grasses and herbs. Hubback (1937) estimated that only 400 seladang existed in Malaya then, and that 25% of them would disappear in the next 20-30 years. Kitchener's figure of 300 animals in 1961 was quite realistic on that basis; and it is likely that Medway's (1965) estimate of 706 animals was optimistic. The large herds that were reported from Kedah and Pahang appear today to have been reduced to a fraction of their former numbers, and many smaller herds have been scattered or have disappeared. The Segamat Wild Life Sanctuary in Johore was reported to hold 70 animals by Milton (1963), but clearing and disturbance since that date have virtually eliminated those herds. There are no seladang left in Negri Sembilan and only one small herd of 10 in Trengganu. The figure of 91 animals in Perak is accurate but the building of hydroelectric dams on the Sungei Perak will inundate the flood plain of that river and deprive the seladang there of their pasture, and the mineral springs they use as salt licks. The same future is facing the small herd of 14 animals above the irrigation dam being constructed in the valley of the Sungei Muda in Kedah.

Another factor militating against the seladang is the decrease in shifting cultivation as more and more of the old ladangs are reclaimed by forest.

The Game Department is aware of the danger facing the species and has taken some action to create new habitats for the herds in the National Park and the Kerau Reserve. The studies by Weigum (1968)

are continuing and should lead to a much better understanding of herd structure, food habits and space requirements. Information about how to capture animals for transfer to more favourable sites is also required in order to salvage the scattered remnants in vulnerable areas.

There is no doubt that the seladang is in a precarious position in Malaya as its habitat disappears in the face of changing times and conditions. No one has yet tested its value as a domesticated animal for meat production. Such a study would require captive herds and a research programme under the supervision of agricultural scientists. The gaur is the largest member of the bovine family and its husbandry might prove most rewarding.

The figure of about 350 seladang given in Table 1 is subject to confirmation and probably is optimistic. A more detailed assessment is needed, especially in Kelantan and Pahang. The future of these magnificent but shy wild cattle appears to depend upon the development of adequate food resources in undisturbed nature reserves.

# SUMATRAN RHINOCEROS Didermocerus sumatrensis

Metcalfe (1961) estimated that there were 50 Sumatran rhinoceroses remaining in Malaya, though he conceded that the actual figure might lie between 30 and 70 animals. Milton (1963), after spending a year or so studying the situation, decided that Metcalfe was reasonably correct in his estimate, and presented his own figures by States (Table 1). Hislop (1968) was much less optimistic and suggested that the population was 10 animals, with a possibility of there being as many as 30. Strickland (1967) was wise enough not to make an estimate of total numbers and confined his efforts to recording the number in the Sungei Dusun Game Reserve (3–5 animals). He also was able to confirm the presence of 3 animals in Perak.

The information from the Game Departments, the field geologists, the Forest Department and from personal observations for 1967 and 1968 is presented in Table 1. It represents actual locations where rhinoceroses or their recent footprints were recorded; but with some guesses about duplication. So it is still an estimate and a more systematic recording of occurrences over a period of time is needed. The State Game Departments are the logical agencies to collect those data.

There are four areas where rhinoceroses are present in sufficient numbers that breeding might be possible — the National Park, the Sungei Dusun Reserve in Selangor, the Ulu Selama area of Perak and the Sungei Emas region of Johore. The last two have been recommended as permanent sanctuaries. Reports from Ulu Perak, Gunong Chamah in Kelantan, the Kerau Reserve and two other localities in Pahang, and the Johore coast south of Mersing are of one or two ani-

mals only. Those may be wanderers with little chance of contributing to an increase in population. No doubt a few more animals may be found in remote locations but they too may be no more than harried stragglers.

The species has come to its present precarious position through many years of persecution for its horn, and other body products to be used as medicine. Although the supply is all but finished the demand still remains, so the danger of losing more animals to unscrupulous poachers is as real as ever. Protection of the few remaining animals in strictly protected reserves appears to be the only solution to the problem. The situation is grave throughout the range of the Sumatran rhinoceros: in Burma, in Malaysia and in Sumatra. It may well be that the Sumatran form will disappear before the larger Javan species, lacking the concentration of animals and the protection necessary for reproduction. There is no room for complacency and little room for optimism.

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