


5-1-1978

Present Status of the Asian Elephant (*Elephas maximus* Linnaeus, 1758)

Robert C. D. Olivier

IUCN/WWF/Elephant Survey and Conservation Programme, Asian Division

Follow this and additional works at: <https://digitalcommons.wayne.edu/elephant>

 Part of the [Animal Studies Commons](#), [Biology Commons](#), [Environmental Studies Commons](#), [Population Biology Commons](#), and the [Zoology Commons](#)

Recommended Citation

Olivier, R. C. D. (1978). Present status of the Asian elephant (*Elephas maximus* Linnaeus, 1758). *Elephant*, 1(2), 15-17. Doi: 10.22237/elephant/1491234042

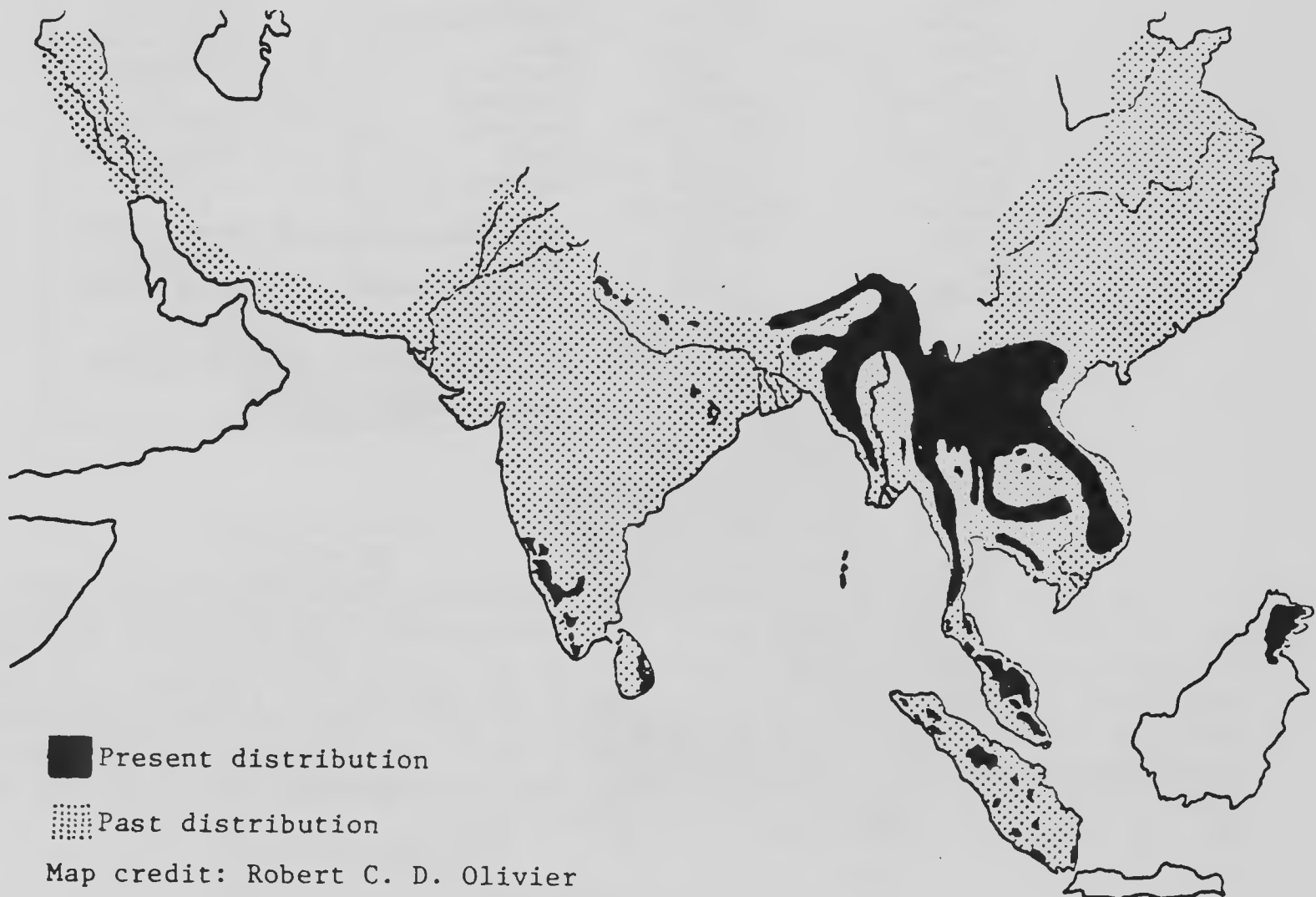
This Article is brought to you for free and open access by the Open Access Journals at DigitalCommons@WayneState. It has been accepted for inclusion in *Elephant* by an authorized editor of DigitalCommons@WayneState.

PRESENT STATUS OF THE ASIAN ELEPHANT (Elephas maximus Linnaeus, 1758).

by Robert C. D. Olivier

Summary: Endangered. Severe habitat destruction is leading to fragmentation and eventual extinction of wild populations. Those in Sumatra and West Malaysia are considered to be seriously endangered. Reserves are urgently needed to safeguard the remaining populations.

Distribution: (See map). Sri Lanka, India, Bhutan, Bangladesh, Nepal, Burma, Thailand, Malaya, Sumatra, Borneo, Vietnam, Laos, Democratic Kampuchea and China (Yunnan). Distribution within these countries is very restricted and limited mostly to hilly areas in the region of international boundaries. In former times, the range extended from the Tigris and Euphrates basin in the Middle East (where it became extinct by the 5th Century B.C.) through Asia south of the Himalayas and north into China, where it survived in the valley of the Yangtze Kiang up to the 10th century A.D., and in the rainforests of the coastal zone (southeast provinces) until the 11th century A.D. Within this range the elephant was widely distributed, particularly in lowlands and alluvial plains. Such areas are now largely denied to them by the activities of man (1).



Population: Declining. Accurate estimates of numbers are exceedingly difficult to obtain because of current political difficulties and the tendency for populations to span international boundaries. The numbers quoted here are essentially informed guesses: the lower figures may be taken as the most realistic, the higher figures as absolute maxima. There are estimated to be between 25,000 and 36,000 Asian elephants in total. These are divided up as follows: India, Bhutan and Bangladesh: 9,350 to 13,750 [Tamil Nadu, Kerala, Karnataka: 4,500; Uttar Pradesh: 500; Bihar, Orissa and W. Bengal: 400 to 800 (1); Andaman Islands: 30 (M.K. Ranjitsinh 1977 pers. comm.) — elephants are not indigenous to the Islands but are feral descendents of escaped timber elephants; Arunchal Pradesh, Nagaland Mizoram, Minipur, Tripura, Meghalaya, Assam, Bhutan and Bangladesh: 4,000 to 8,000.] Borneo: 2,000 — those present today are thought to be the feral descendents of elephants liberated in North Borneo in the 1750's, however, the existence of wild elephants on Borneo prior to this time is now in little doubt (1); Burma: 5,000 (U Hla Aung 1977 pers. comm.) China (Yunnan): 100; Democratic Kampuchea, Laos and Vietman: 3,500 to 5,000; Malaya: 500 to 1,000; Nepal: 50; Sumatra: 300; Thailand: 2,500 to 4,500. Few of the remaining habitats can be considered optimal for elephants and densities are relatively low. However, this varies seasonally and seasonal movements are common (1).

Habitat and Ecology: Occupies a wide range of habitat types from lowland and montane tropical evergreen and semi-evergreen to deciduous forests. Particularly favours mosaics of such forest formations with savannah forests and grasslands; these occur as deflected sub-climaxes, induced by fire and also flooding, especially in areas with marked dry and wet seasons (2). Such habitat adaptability has been a key factor in the continuing survival of the species (1). Asian elephants are gregarious, their social organization being based on a matriarchal family unit of about six animals. Diet is varied, with grass the most important component. Availability of grass is responsible for seasonal movements, which can also involve aggregation and dispersal of family units (1; M.K. Ranjitsinh 1977, pers. comm.) They have been domesticated for centuries and are used as draft animals particularly for timber operations (3).

Threats to Survival: Habitat destruction is the most serious threat to the Asian elephant. All the remaining habitats are threatened by exploitation which has been greatly facilitated by modern technology. Under this pressure, surviving wild populations are at varying stages of a discernible and well documented pattern of fragmentation leading to extinction. In its initial stages, the process may create local conditions indicative of an apparent population increase. This is not real and all populations are declining. When range fragmentation thwarts seasonal movement, crop raiding and conflict with man is the result (1).

Conservation Measures Taken: The Asian elephant is listed on Appendix I of the 1973 Convention on International Trade in Endangered Species of Wild Fauna and Flora, and therefore any trade in it or its products is subject to strict regulation by ratifying nations, and trade for primarily commercial purposes is banned. The elephant is protected by law in most of the countries within its range and such protection is often of long historical standing. However, much of the range is in areas beyond reach of the law, and nowhere is the elephant's habitat protected as such. The present legal status of protection in Vietnam, Laos, Democratic Kampuchea and China is unknown. In general, none of the parks and reserves containing elephants protect more than a portion of the local population for a part of the year (1).

Conservation Measures Recommended: To combat the major threat of habitat destruction, specific reserves should be established for the Asian elephant. As a first step, surveys are needed to identify the largest remaining discrete populations and action should then be taken to minimize or halt fragmentation of these key populations. This could be achieved by the creation of special, managed reserves (often incorporating existing parks and reserves) based on the total seasonal range requirements of the elephant population. Where this is impossible, forest corridors should be set aside at the very least to safeguard routes of major seasonal movements. Such action is only feasible if a multiple-use ethic towards land management is adopted involving compromise between conflicting demands of land use by humans and elephants (1).

Remarks: For description of animal see (3).

References:

1. Olivier, R.C.D. 1977. Distribution and conservation status of the Asian elephant (*Elephas maximus* Linn.). Oryx, (in press).
2. Olivier, R.C.D. (in prep.). On the ecology and behavior of the Asian elephant (*Elephas maximus* Linn.). - with particular reference to Malaya and Sri Lanka.
3. Walker, E.P. 1975. Mammals of the World. The Johns Hopkins University Press. Baltimore and London. 1500 pp.

The following two articles by D. J. Osborn were reprinted, with permission, from the "Brookfield Bison", Vol. 10, No. 5, 1975 and Vol. 9, No. 7, 1974 respectively (see references 373 and 372).

ELEPHANTINE ANIMALS

by Dale J. Osborn

A great many animals bear names borrowed from other totally unrelated species. Examples are Zebra Finch, Bullfrog, Kangaroo Rat, Lion Fish and Swallow Tail Butterfly. A commonly used prefix for vernacular as well as scientific names of many diverse forms of animals is "elephant."

Large size and any resemblance to the trunk or tusks are features that usually recall the name elephant in the animal kingdom.

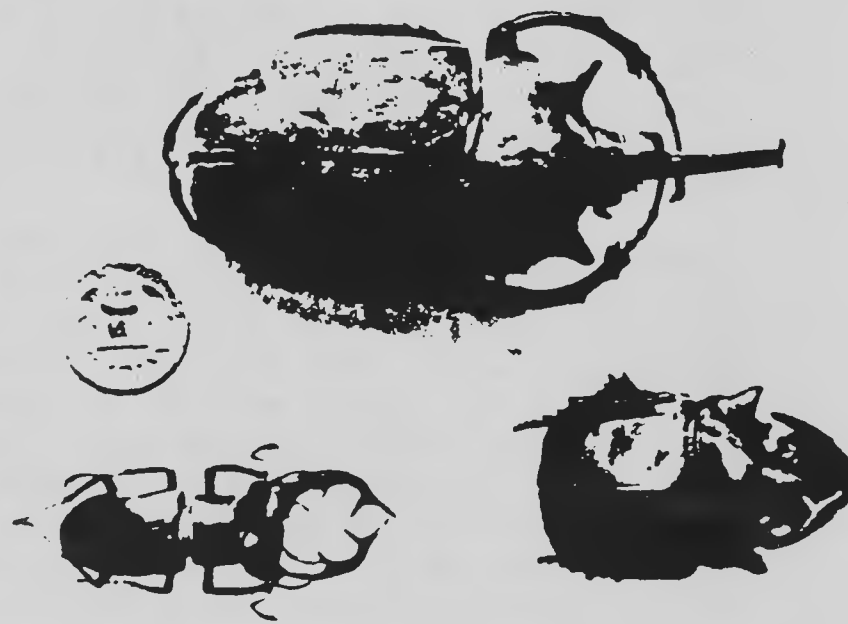
The largest shark is the Whale Shark (*Rhincodon typus*) which can grow to 60 feet and second largest is the Elephant, or Basking, Shark (*Cetorhinus maximus*) which reaches 30 - 40 feet in length. Similarly, *Testudo gigantea*, the world's largest tortoise is called the Elephant Tortoise, and the slightly smaller Galapagos Giant Tortoise is *Testudo elephantopus*. The world's largest birds, *Aepyornix*, a genus of extinct, flightless birds of Madagascar, are called Elephant Birds. One species stood 12 feet high and probably weighed 1,000 pounds.

The Elephant Dung Beetle (*Heliocopris gigas*) of Africa gets its name from its size (adult males may become 6 inches long) and tusk-like integumental horns. The Elephant Beetle of Europe (*Lucanus elephas*) is also large, but its enormous and formidable mandibles must have reminded early entomologists of tusks.

The huge Elephant Beetles of Mexico, Central America (*Megasoma elephas*) and Brazil (*M. anubis*) have large, proboscis-like integumental projections on the head. The Elephant Bug or Weevil, also called Acorn Weevil, (*Curculio elephas*) of Europe is about a half inch long and bears a "drill" or snout used in

piercing hard shells of nuts. The Elephant Louse (*Haematomyzous elephantis*) is a sucking louse with a tubular head forming a kind of beak and is a parasite of elephants in Africa and the East Indies. There are special Elephant Ticks and Elephant Bot Flies, but they are lacking in elephantine features.

The Elephant Hawk Moth, *Deilephila elpenor*, the most beautiful of all European hawk moths, was so named from the



Mexican Elephant Beetle (above). Elephant Dung Beetle (lower right). European Elephant Beetle (lower left).