

# Elephant: A Symbol of Awe and Fascination

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**E**LEPHANTS have always been regarded with awe and fascination, mainly because of their great size. They are the largest living land mammals and a massive creation. Because of their trunk and formidable tusks and also their longevity, ability to learn and remember and adaptability as working animals, they generate so much attention. For millennia, their great strength has been exploited in agriculture and warfare and even today, notably in the Indian subcontinent, they are still important economically and as cultural symbols. But a continuing demand for elephant tusks, still the main source of commercial ivory, has been largely responsible for a drastic decline in elephant populations over the past hundred years.

In the recent past the Asian elephant was found in areas ranging from Mesopotamia (now Iraq) in the west, throughout South Asia in the Himalayas to northern China. Today, there are fewer than 50,000 wild Asian elephants remaining as isolated refuges in hilly or mountainous parts of India, Bangladesh, Sri Lanka, Indochina, Malaysia, Indonesia and Southern China. Among all other subspecies, the Savanna elephant is the best aware of simply because of its easier habitats in the open grasslands of eastern Africa than in the denser forest habitats of the Asian elephants.

Body size, the most conspicuous feature of elephants, continues to increase throughout life, so that the biggest elephant in a group is also likely to be the oldest. The largest and heaviest elephants alive today are African Savanna bulls. The largest known specimen killed in Angola in 1955 and now on display in the Smithsonian Institution, Washington DC, weighed 10,000 kg and measured 13.1 feet at the shoulder. There have been several reports in the past century of so-called *Pygmy elephants*, with an adult shoulder height of less than 6.6 feet. It has been suggested that these represent a separate species or subspecies, but the current view is that they are merely abnormally small individuals, which occasionally appear at random in herds of normal-sized individuals.

The characteristic form of the skull, jaws, teeth, tusks, ears and digestive system of elephants are all part of the adaptive complex associated with the evolution of large body size. The



skull, jaws and teeth form a specialised system for crushing coarse plant material. The skull is disproportionately large compared with the size of the brain and has evolved to support the trunk and heavy dentition. It is however, relatively light due to the presence in the upper cranium of interlinked air-cells and cavities. Asian elephants have two characterizing dome-shaped protuberances above the eyes.

Elephants have very poor eye-sight while the senses of smell and hearing are highly developed, more so than in most animals. Elephant ivory is a unique mixture of dentine, cartilaginous material and calcium salts, and a transverse section through a tusk shows a regular diamond pattern never seen in the tusks of any other mammal. The tusks are mainly used in feeding, for such purposes as prising off the bark of trees or digging for roots as well as an instrument of fighting. These are elongated upper incisor teeth. They first appear at the age of about 2 years and they grow throughout life, so that by the age of 60, a bull's tusks may average 60kg each and a cow's 9 kg each. In very old individuals they have been known to reach 130 kg and attain a length of 7.7 feet. Such massive 'tuskers' have always been prime targets for ivory and big game hunters, with the result that few such specimens remain in the wild, especially in Asia. In general, the tusks of Asian bull elephants are smaller than in their African counterparts. On the other hand, only two percent bull Ceylon elephants possess tusks. Among the Asian elephant, the tusks are thinner, more down-

ward pointing and composed of even harder ivory than in the Savanna subspecies.

When undisturbed, the herd pursues a regular and ordered routine, drinking and feeding themselves in accustomed places and taking rest in its usual retreat. Elephants sleep during the hot hours of the day, being intolerant of the sun, feed early in the morning and evening, and come out after night-fall to feed in open forest or to raid croplands, retiring to sleep after midnight. An elephant rests standing or stretched down on its side. The food consists of various kinds of grasses and leaves, stems and leaves of wild bamboos and plantations, all species of crops, and the bark of particular kinds of trees. A full-grown elephant will eat from 270 to 320 kg of green fodder a day.

The big tuskers are usually seen feeding themselves at some distance from the main herd. The bulls, when they arrive at a certain age, live as solitaries or two males of equal age may



form a small group. A solitary bull will graze with a herd when it happens to be in the same patch of jungle, and will seek the herd when stuck with the urge to mate and desert it again when his desire is appeased. Male elephants, while occasionally females, both tame and wild, on attaining maturity, are subject to peculiar periodical paroxysms of excitement. At such times, they are spoken of as being *musth*. The condition seems to have some connection with the sexual functions. It is probably analogous to the 'rut' in deer. It occurs most frequently during the cold season and may be due to ungratified sexual desire. At other times a *musth* elephant will seek a mate. However, this is not always so, since the society of a female will by no means quell or pacify the animal.

The exact breeding season is uncertain but, as most of the young are dropped in late autumn and the period of gestation lasts about 22 months, it is probable that the main breeding season is during the hot weather and at the commencement of the rains. While normally a calf only is born at a time, occasionally instances twins, and rarely triplets, are produced. The mother of a young calf is invariably assisted in caring for her young by another female, who takes on the duties of a guardian and is as assiduous in her care of the calf as the parent.

Today these pachyderms are moving on the path of extinction due to utter unfavorable activities of human population. These proboscides are today in direct conflict with the human populations. The rapacious human beings are continuously encroaching the elephant habitat for reasons ranging from increasing agricultural demands, human settlements and development which are also leading to loss of vital natural elephant corridors. It is evident from the history that the human population is increasing in leaps and bounds and the elephant population is declining sharply with the passing of everyday. Historians have recorded that more than 300,000 warrior elephants were used in the battle of the *Mahabharata*. Akbar maintained an army of 40,000 elephants in his Philkhana, specially trained for wars. Today, there are less than 40,000 wild elephants in Asia.

## Elephants Of The World: An Atlas

**Order:** Proboscida

**Family:** Elephantidae

Two species in 2 genera, (i) Asian Elephant and (ii) African Elephant

**Distribution:** Africa south of the Sahara; Indian Subcontinent, Malaysia, Indonesia, S. China.

### Asian Elephant

**Distribution:** Indian subcontinent, Indochina, Malaysia, Indonesia, South China.

**Habitat:** Mountainous and plain evergreen forest.

**Size:** Headbody length 18-21ft, height 8.2-9.8ft, and weight up to 5,000kg.

**Skin:** Sparsely endowed with hair, gray-black when young, becoming pinkish white with age.

**Gestation:** 22 months

**Longevity:** 60 years (more than 80 years in the captivity)

**Subspecies:** 4; (i) *Indian elephant*, (ii) *Ceylon elephant*, (iii) *Sumatran elephant*, (iv) *Malaysian elephant*

### African Elephant

**Distribution:** Africa south of the Sahara.

**Habitat:** Savanna grassland, forests.

**Size:** Male head-body length 20-24.5ft, height 10.8ft, weight up to 6,000kg; Female head-body length 2ft shorter, weight 3,000kg.

**Skin, gestation, and longevity:** Same as Asian Elephant.

**Subspecies:** 2, (i) *Savanna or Bush elephant*, (ii) *Forest elephant*