



# TRUNKS AND TUSKS

## Elephants Through Time

BY LUCILLE YAP

The largest and heaviest living land animals, elephants are mammals belonging to the family Elephantidae. They are the only surviving members of the order Proboscidea, which is named after the group's most distinguishing organ – the proboscis or trunk. In prehistoric times, the order contained many species of large elephant-like creatures that lived in Africa, North America, Europe and Asia. Today, only two species survive: the African elephant (*Loxodonta africana*) and the Asian elephant (*Elephas maximus*).

Extinct cousins of the two extant elephantids include the mammoths (*Mammuthus* spp.). These huge elephant-like beasts, of which there were seven species, thrived in cool climates and fed largely on grass. The most well-known representative of this genus is the woolly mammoth (*Mammuthus primigenius*), which had a long coat of shaggy hair that helped it survive harsh winters in the Arctic.

Mastodons are distant cousins of modern-day elephants that belong to their own family, Mammutidae. Unlike mammoths, which graze on low vegetation, mastodons are adapted for browsing on leaves and lived in more wooded habitats. The most famous species is probably the American mastodon (*Mammut americanum*), a massive, hairy animal with tusks that could reach 5 metres in length.



### BIG ANIMALS, SHRINKING HABITATS

Mammoths and mastodons roamed the earth until they became extinct about 10,000 years ago. Present-day elephants are also fast disappearing. From millions of elephants living in Asia and Africa in earlier centuries, there are only 25,000 to 35,000 left in the wild in Asia and 400,000 to 650,000 individuals in Africa. The African elephant has become extirpated from North Africa, while Asian elephants are no longer found in West Asia (from Iran to Pakistan), Java and most of China.

Asian elephants can be found in isolated populations in areas as shown on the map below. Their habitats are mainly grasslands, tropical forest, and scrubland. There are six subspecies of Asian elephants, two of which are extinct. The Sri Lankan elephant (*Elephas maximus maximus*) is found only on the island of Sri Lanka, where it lives in forests and grasslands. The Indian elephant (*Elephas maximus indicus*) is found in eleven mainland Asian countries: India, Nepal, Bangladesh, Bhutan, Myanmar, Thailand, Malaysia, Vietnam, Cambodia, Laos and southern China. The Sumatran elephant (*Elephas maximus sumatranus*) is restricted

to the island of Sumatra in Indonesia, where it survives in forested regions and patchy habitats.

On the island of Borneo lives the Borneo Pygmy elephant (*Elephas maximus borneensis*), a dwarf subspecies confined to the northern and northeastern parts of the island. These animals are possibly descended from the now-extinct Javan elephant. The Chinese or Pink-tusked elephant (*Elephas maximus rubridens*) once ranged across Central and Southern China, but was hunted to extinction for the ivory trade. Another extinct subspecies is the Syrian elephant (*Elephas maximus asurus*), which formed the westernmost population of the Asian elephant and vanished by around 100 BCE as a result of excessive hunting for its ivory.

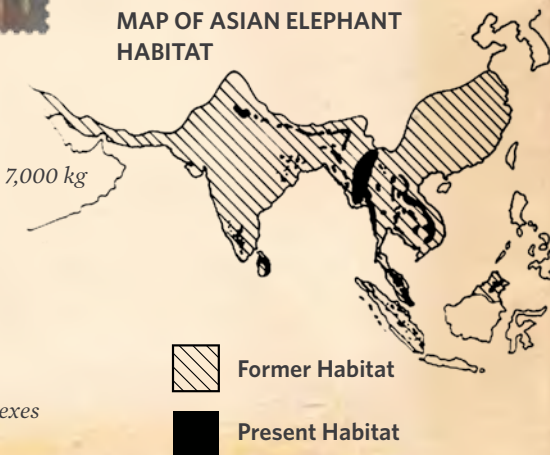
African elephants can still be found in 37 countries on the continent, mainly in central and southern Africa. There are two subspecies. The African Savannah or Bush elephant (*Loxodonta africana africana*) lives in open grasslands, deserts and wet marshes, while the smaller African Forest elephant (*Loxodonta africana cyclotis*) is restricted to forests in central and western Africa.

### African or Asian? Know the Difference



Asian	- Body Size -	African
Smaller Height: 2 - 3.5m Weight: 3,000 - 5,000 kg		Bigger Height: 3 - 4m Weight: 4,000 - 7,000 kg
Convex or level back	- Body Shape -	Concave back
Small	- Ears -	Large
'm' Shaped Top	- Head -	Round Top
Small or absent in the female	- Tusk -	Large for both sexes
One finger at the tip	- Trunk -	2 fingers at the tip
Smoother skin and slightly hairier	- Skin -	Wrinkled skin and less hairy
5 Toenails	- Feet -	4 Toenails
Grass, leaves and the twigs and bark of trees. Favourite food are wild bananas, bamboo shoots and sugarcane.	- Diet -	Soft fruit and the inner bark of trees such as <i>Acacia gerardi</i>

MAP OF ASIAN ELEPHANT HABITAT





**SYMBOLISM AND SIGNIFICANCE IN ASIA**

Elephants have a strong presence in the religions, art and culture of Asia. They are respected as sacred animals, especially in Hinduism and Buddhism, and are ancient symbols of strengths, royalty, luck and wisdom.

In the Indian Epic *Ramayana*, Airavata is a white elephant who carries the Hindu god Indra. Airavata has four tusks and seven trunks and is totally white. In Indochina, Airavata is known as the three-headed Erawan. The three heads represent the three major Hindu gods: Brahma, Vishnu and Siva. Depictions of Erawan can be seen in many religious art forms.

In Buddhism, the elephant Chaddanta is said to be a reincarnation of Lord Buddha before he was born as

a man. The legendary elephant has a white body and six tusks. It appeared in a dream to Queen Maya (the mother of Gautama Buddha) before Buddha was born.

White elephants are therefore received with utmost care and respect in Buddhist countries. They are regarded as auspicious. Kings in Thailand have always maintained a herd of white elephants as a symbol of royalty. The white elephants are actually not white, but rather albino elephants that come in shades of grey or pink.

Another religious form of the elephant is Ganesha, a Hindu god. The deity is easily identified by his elephant head and human body. He is worshipped as the god of education, knowledge, wisdom and wealth.



A familiar sight to Singaporeans, the bronze Elephant Statue outside the High Street entrance of Parliament House was given to the people of Singapore by Thai King Chulalongkorn (Rama V) as a token of his gratitude for the hospitality he had received during his visit between 16 and 23 March 1871.

King Chulalongkorn or King Rama V, who reigned from 1868 to 1910, was the fifth sovereign of the royal dynasty which founded Bangkok and is credited for modernising Thailand. His visit to Singapore in 1871 marked the first time a Thai monarch had ever visited a foreign country. King Chulalongkorn's official state visit marked the start of close friendship ties between Thailand and Singapore, which is still enjoyed by both countries today. King Chulalongkorn made a second visit to Singapore on 30 May 1890.

The statue originally stood in front of Victoria Memorial Hall when it was erected on 25 June 1872. In 1919, when Sir Stamford Raffles' statue was put in its place for Singapore's Centenary Celebrations, the Elephant Statue was moved to the Court House, which later became the Assembly House and is now the Old Parliament House or Arts House.



The pedestal bears inscriptions in Siamese, Jawi, Chinese, and English and reads: "His Majesty Somdetch Paramindr Maha Chulalongkorn, the Supreme King of Siam, landed at Singapore, the first foreign land visited by a Siamese Monarch, on the 16th March, 1871"

**FACING EXTINCTION**

In the past 100 years, the Asian elephant population has declined by 90% and their available habitat has shrunk by 95%. Only 25,000 to 35,000 Asian elephants remain in the wild compared to approximately 200,000 a century ago. There are also approximately 15,000 Asian elephants living in captivity.

If this trend continues, the Asian elephant could be extinct within the next 30 years. This rapid decline in numbers led to the inclusion of the Asian elephant to the IUCN's (International Union for Conservation of Nature) red list of endangered species in 1986.

**ELEPHANTS AND HUMANS**

The Asian elephant was the first elephant species to be tamed. It was domesticated by the peoples of the Indus Valley (now Pakistan) and nearby regions over 4,000 years ago. Domesticated elephants are used as vehicles to transport people and goods. Given their strength, elephants are also used to do laborious work. They are popularly used in the timber industry for logging.

Elephants were also used in battles as early as 1,100 BCE. Their intelligence and massiveness made them powerful weapons against troops that were not trained to deal with them. War elephants in Southeast Asia were used until the end of 19th century. Non battle-trained elephants were used for other military purposes as late as World War II.

**HABITAT LOSS AND FRAGMENTATION**

This is the biggest threat to the continuing survival of Asian elephants. Asian elephants are found in countries with the fastest growing populations and high rates of economic development. Natural forests are being cleared at alarming rates to develop towns and cities to house these growing populations. Well-drained lowland forests, which are the elephants' prime habitat, are being cleared for agricultural cultivation. Logging carried out by timber industries is also responsible for deforestation.

One country noted for its abundant elephant population in the past is Cambodia. Unfortunately, Cambodia has suffered disastrous environmental losses in the past 30 years due to war which ravaged the country and its forests.

These human activities displace many forest-dependent animals, including elephants. Such acts also affect the environment, giving rise to many issues including soil erosion and flash floods due to the loss of plant cover. The shrinking of elephant habitats and forest fragmentation cause food supplies to be reduced, migration routes to be cut off, and living spaces to be more crowded. This is detrimental to the elephants because they are large animals which require vast living areas and abundant food supplies.

As a result, some elephants have been driven to seek for food in human settlements. They destroy crops and cause human deaths. Farmers chase and shoot them as they regard them as pests.



### ELEPHANT POACHING

Elephants are hunted primarily for their ivory tusks, meat, hide and other body parts. Asian elephants, which have smaller or no tusks may be less vulnerable to poaching than African elephants. But Asian ivories are preferred for intricate carving as they are softer. Studies have shown that ivory poaching is responsible for a decrease in the elephant population, in particular male animals, in India, Cambodia, Vietnam and Laos.

One of the problems associated with poaching male Asian elephants is the creation of serious imbalances in the ratio between the sexes. This affects not just the rate of reproduction but also leads to a decline in the necessary genetic diversity required to ensure healthy populations. This phenomenon is being demonstrated by the growing numbers of male elephants without tusks as the 'tusk gene' is disappearing.

Despite worldwide protection through the Convention on International Trade in Endangered Species (CITES) Treaty, elephants are still being killed for profit. This is mainly due to the high value being offered for elephant products, particularly ivory, the lack of effective enforcement, and the remoteness of areas of elephant habitat. Despite growing public awareness, there is still enormous demand in China and Japan for ivory products, particularly *netsuke* (ivory sculptures) and personal name seals.

### HOW DO WE SAVE THE ELEPHANTS?

First and foremost, we should conserve the elephants' habitats and prevent further encroachment and destruction of their natural homes. We must also prevent the destruction or obstruction of their migration routes so that elephants are able to seek out fresh sources of food.

Secondly, it is important to manage the human-elephant conflict by educating local communities and creating awareness on the need to conserve the elephant species. We must prevent the illegal killing of wild elephants and combat the mistreatment of elephants in captivity.

Thirdly, there must be support for organisations set up to better protect the elephants through improved legislation and law enforcement, improved and enhanced field patrols, and the regulation or curbing of trade in ivory and other elephant products.

Conservation centres have been set up in many countries to conserve elephants, shelter injured and abandoned animals, conduct programmes to educate the people and generate awareness of the elephants' plight, and raise funds to conserve the largest animal on land.

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### Elephant Stampede

11 November 2011 - 15 January 2012

This exhibition at the Singapore Philatelic Museum is organised in conjunction with *Elephant Parade Singapore 2011*, the first parade in the series to be held in Asia from November 2011 to January 2012.

Through stamps, the exhibition traces the evolution of mammoths and elephants, the shrinking of the elephant habitats, and factors that have caused the reduction in elephant populations. The plight of elephants facing extinction, in particular Asian elephants, and the need for elephant conservation are also highlighted. In addition, the exhibition will display a small natural history collection from the Raffles Museum of Biodiversity Research, National University of Singapore.

The star of the exhibition is a unique

elephant sculpture specially created for *Elephant Parade Singapore 2011*. The sculpture was creatively and artistically presented by local sculptor and artist Sun Yu-li in collaboration with the Singapore Philatelic Museum. Thousands of postage stamps from around the world were used to dress the elephant sculpture before Mr Sun added the creative touch of his signature *Universal Symbols* - the dots and lines.

This elephant sculpture, named Baby Emily, is part of a herd of over 150 life-size baby elephants that will go on parade in January 2012 at a selected venue in Singapore. All the elephant sculptures will be auctioned off on 12 January 2012 to raise funds for the conservation of Asian elephants.



The creation of the unique elephant sculpture by Mr Sun Yu-li in progress.

### The origin of ELEPHANT PARADE

Elephant Parade was founded by father and son duo Marc and Mike Spits. They were inspired after meeting Soriada Salwala, the founder of the first elephant hospital in the world in Lampang, near Chiangmai, Thailand. At the elephant hospital, Marc was introduced to a baby elephant named Masha who had lost her leg after stepping on a landmine. Masha inspired Marc to create Elephant Parade.

Elephant Parade is the world's largest open air art exhibition in support of the conservation of the Asian elephant. During a period of several months, brightly painted life-size model elephants decorate the streets of selected cities. Painted by local and international artists, each elephant is a unique piece of art. After the exhibition, all elephants are auctioned off by a leading auction house. Part of all proceeds from Elephant Parade is donated to The Asian Elephant Foundation ([www.theasianelephantfoundation.org](http://www.theasianelephantfoundation.org)) the main beneficiary of Elephant Parade.