

## **Asian Elephant**

*Elephas maximus*

**Asian or African?** - Asian elephants are smaller than their African cousins. They have smaller ears and the top of their head has two rounded domes. Asian elephants have rounded backs and shorter legs than African elephants and on average weigh 2,000 pounds less. Asian elephants have a single finger-like projection on the end of the trunk; African elephants have two. Both male and female African elephants have tusks but only male Asian elephants have visible tusks.

**Have Trunk Will Travel** - The most distinctive feature of an elephant is the amazing multifunctional trunk. The trunk enables the elephant to breathe, locate scents, drink, and seize and manipulate objects from a small coin to a large tree branch. The trunk is used to make sounds, greet or comfort other elephants, guide a calf and even as a snorkel when swimming.

### **Classification**

Also referred to as the Indian elephant, it is in the same family as the African elephants. Interestingly, *Elephas maximus* is a monotypic genus, meaning the Asian elephant is the only species within its genus.

Class: Mammalia

Order: Proboscidea

Family: Elephantidae

Genus: *Elephas*

Species: *maximus*

### **Distribution**

The Asian elephant range covers India, Nepal, Bhutan, Bangladesh, Sri Lanka, Myanmar, Thailand, Cambodia, Laos, Vietnam, China, Malaysia, Indonesia, Borneo and Brunei Darussalam.

### **Habitat**

The habitat of the Asian elephant covers a variety of terrain from thick jungle to open grassy plains at all elevations. Elephants are more likely to be found in scrub forest, especially near grassy areas.

### **Physical Description**

- Asian elephants are 18-21 feet (5.5-6.4 m) long.
- Male Asian elephants average 11,500 pounds (5,221 kg) and may weight up to 15,000 pounds (6,810 kg); females average 7,700 pounds (3,465 kg) but may weigh up to 9,000 pounds (4,050 kg).
- Male Asian elephants average 10.5 feet (3.2 m) tall at the shoulder; females average eight and a half feet (2.6 m) tall at the shoulder
- Their thick skin is dark gray and wrinkled.
- The distinctive trunk is an extended muscular lip and nose.
- Female Asian elephants do not have tusks but do have small tushes inside the mouth.
- They have large floppy ears to help regulate body temperature.

### **Diet**

What Does It Eat?

*In the wild:* Leaves, roots, grasses, fruits and bark.

*At the zoo:* Grass hay, textured grain, alfalfa, greens (spinach, kale and lettuces), apples, carrots, corn and sweet potatoes. Supplements include Vitamin E and mineral salts. Treats include horse candy and ice treats. Browse is provided when available.

## What Eats It?

Asian elephant calves are subject to predation by lions and tigers. Adult Asian elephants have no known predator other than humans.

## Social Organization

Female Asian elephants live in herds of a dozen or more related females of all ages led by the largest, oldest female called the matriarch. All females in the herd help raise the young. Males remain with the herd until they reach puberty at about 12 years. Then they are forced out of the herd and may join a loose group of young bulls, although most mature bulls are solitary.

## Life Cycle

Males are sexually mature at eight to 12 years; females at six to 10 years. Males are usually not large enough to compete for females until they are in their mid-20's. After a gestation of 22 months, female elephants give birth to a single calf weighing 200-250 pounds (90-113 kg). Newborn calves are capable of walking within an hour of birth. Baby elephants suckle with their mouth, not their trunk, and consume two to three gallons of milk daily. By four months, calves begin feeding on vegetation in addition to milk. Due to the long period of dependency, females only give birth once every four to five years. Female calves remain in their natal group but males are forced out when they reach puberty at about 12 years. Elephants may live as long as 60 years.

## Adaptations

### Have Trunk Will Travel

The most distinctive feature of an elephant is the amazing multifunctional trunk – a combination of the nose and upper lip. The trunk enables the elephant to breathe, locate scents, drink, and seize and manipulate objects from a small coin to a large tree branch. The trunk is also used to make sounds, greet or comfort other elephants, guide a calf, and even as a snorkel while swimming. Asian elephants have *one* finger-like projection at the end of the trunk used for picking up small objects. Because of the wrinkled structure of the trunk it is even slightly telescopic allowing the elephant to reach food high in the trees! Baby elephants can walk within an hour of birth but it takes months before they figure out how to control their trunk.

### Tiptoe

Like a ballerina, elephants walk on tiptoe. The weight of the elephant rests on the tips of the toes and on a fatty, fibrous pad under the heel. Elephants make little sound as they walk because the fibrous pad acts like a shock absorber to cushion the impact of the foot on the ground. The sole of the foot spreads out to help take the elephant's weight with each step.

### Hello, hello!

Elephants communicate in several ways. Visual signals, smell and touch are used to convey information. They use body language to send messages by the position of their ears, trunk or tail. But the main means of communication is by sounds ranging from high pitched squeaks to deep rumbles, even including infrasound – low-frequency sounds too low for humans to hear. These low frequency sounds can travel up to five miles and serve as a means of long distance communication.

### Teeth

Elephants have unique teeth. They have four molars in the back of their mouth – two upper and two lower molars on each side. During their lifetime, they grow six sets of molars that grind the coarse food they consume. As a tooth wears out it is replaced by a

larger molar moving forward to push out the old tooth. Male Asian elephants also have continuously growing front teeth called tusks. Female Asian elephants do not have tusks; instead they have small tushes that do not extend outside the lips. If an elephant lives long enough to use all its teeth, it starves to death.

### **Conservation Connection**

*IUCN Status: Endangered.*

Asian elephants are endangered due to loss of habitat because of increasing human populations in Asia. Fragmentation of elephant habitat, poaching for ivory, and mortality resulting from capture of wild animals for domestic use are contributing factors in the decline of elephant populations. It is estimated that only 30,000 Asian elephants remain in the wild.

### **Fun Facts**

- Elephants can run up to 24 miles per hour.
- An elephant can eat up to 300 pounds of food and drink 25-50 gallons of water a day.
- The elephant trunk is composed of over 100,000 muscles and ligaments. The entire human body has only 639 muscles.
- Elephants use one tusk more than the other.
- Elephants are the largest living land mammals in the world.