



Asian Elephant

Kingdom: Animalia
 Phylum: Chordata
 Subphylum: Vertebrata
 Class: Mammalia
 Order: Proboscidea
 Family: Elephantidae
 Genus: *Elephas*
 Species: *maximus*



Photo courtesy of Michele Delperuto

Habitat

- **In the Wild:** The Asian elephant is found in a wide range of forest habitats in parts of India, Nepal, Bhutan, Bangladesh, Sri Lanka, Myanmar (Burma), Thailand, Laos, Cambodia, Vietnam, China, Malaysia, Borneo, and Sumatra. It prefers areas that combine grass, low woody plants, and forest.
- **Exhibit Location(s):** Adjacent to the Courtyard next to the Domestic Animal Barn (also Wildlife Trails - elephant day yard next to the bison exhibit in summer)

Characteristics

- The Asian elephant has a shoulder height from 8 ft. to 10 ft. The female weighs 6,000 to 8,000 lbs. and the male weighs 6,000 to 11,000 lbs.
- The thick, dry skin has a few long, stiff, bristly hairs. The skin color varies from gray to brown. Patches of pink may exist on the forehead, ears, base of the trunk, and/or the chest.
- The ears enable the elephant to have a well-developed sense of hearing. The fan-shaped ears have prominent blood vessels close to the skin surface. By frequently flapping its ears, the elephant can rid its body of heat, which allows itself to cool down.
- The trunk is a prehensile (grasping) elongation (extension) of the nose and upper lip. It can be manipulated by over 100,000 muscles and tendons. An elephant breathes through two nostrils at the end of the trunk. The sensitive “finger-like” projection at the trunk’s tip is used to pick up food, pull up grasses and to break off twigs. To drink, the elephant sucks water into its trunk and squirts the water into its mouth.
- **Lifespan: In the Wild-** 40+ years; **In Captivity-** mid 40’s, though some do live into their 50’s.

Behaviors

- An elephant is a highly sociable animal. Cows (females) form family units, or matriarchal groups. This unit is usually led by the oldest female (matriarch), who coordinates the group’s movements as they search for food and water. A family unit usually consists of 10 animals (cows and calves). Sexually mature bulls (males) leave the family unit and form their own loosely structured herd. Solitary bulls are not uncommon. Sometimes males are found within the herd of cows and calves, especially when a female is in estrus (the period of maximum sexual receptivity).
- An elephant uses its tusks to dig for water, to remove bark from trees, to maneuver branches and/or fallen trees, to mark trees, to rest its trunk on, to fight with, and, if domesticated, for various kinds of work. The tusks are also used to protect the trunk.
- The trunk is used for feeding, smelling, drinking, touching, vocalizing, dusting, breathing, lifting, bathing and fighting.
- An elephant has a large repertoire of sounds. It trumpets to show excitement, purrs for happiness, and toots or barks when greeting. It also uses infrasound, which is a series of low frequency sounds below the range of human hearing. Infrasonds have many different meanings and may travel for up to five miles spacing groups of animals and warning of danger from predators.

- Due to the elephant's massive size, it is easier to keep its body warm than to keep it cool. During the heat of the day an elephant seeks shade, wallows, bathes, sprays water and/or dust on itself. During dry seasons, an elephant will dig water holes in dry river beds where water flows under the sand.
- Observations have proven that elephants have altruistic (unselfish) behaviors. Cows have been known to endanger themselves to rescue their calves and have been observed fondling, examining and then carrying bones and tusks of dead elephants a good distance from the carcass. A young elephant follows its mother or older sisters. If a potential predator threatens a calf, the adults form a defensive circle around the calf.
- **Enrichments at the Zoo:** Boomer balls, hay nets, barrels, plastic tubing

Reproduction

- An elephant becomes sexually mature between 8 and 13 years of age. Since there is no specific season for reproduction, births may occur throughout the year.
- Usually, a single calf, weighing between 170 and 300 pounds, is born after a gestation period of 20 to 24 months. This newborn calf is about 3 feet tall at its shoulder. It is capable of standing and walking soon after its birth. Weaning is gradual, beginning during the calf's first year and often lasting into the fourth year. After several months, the calf begins to eat grass. Infants are grouped together and watched over by their mothers and other females (called "aunties") in the herd.

Diet

- **In the Wild:** grasses, bamboo, roots, bark, fruits, leaves, vines, shrubs and sugar cane
- **At the Zoo:** hay, grains, fruits, and vegetables

Conservation Status

- IUCN status: Endangered; CITES Appendix I
- A major threat is the loss of habitat due to deforestation for agriculture and hardwoods. The ever-increasing human populations have affected lands that once were their migratory routes. Poaching for meat, hides, and ivory continues to be a widespread problem. Mining for iron ore and flooding by hydroelectric projects have also added to the loss of elephant habitat.
- The Asian elephant is part of a Species Survival Plan (SSP). Many zoos, including Rosamond Gifford Zoo, are now actively involved in an intensive breeding program to assure its survival.
- To help with conservation efforts, buy no products made of ivory, hide, and/or other elephant body parts.
- Predators of the Asian elephants are humans.

Did You Know?/Fun Facts

- Elephants are the largest land mammals. Asian elephants are smaller than African elephants.
- An elephant is either right or left tusked. The one that is shorter, more rounded, and grooved at the tip, distinguishes this.
- An elephant has unique teeth. (See attachment.) It has 6 sets of molars throughout its lifetime. As the animal ages and the teeth wear away with use, the molars are replaced. When the last set of molars wears out, the animal will starve to death.
- The forefathers of living elephants originated about 50 million years ago. There were 352 species of Proboscidae recognized, and all but two became extinct.
- Elephants were trained as early as 3,500 B.C. and have been used as work animals and in war. They are still maintained as work animals in parts of Asia.
- An elephant can lift up to 3.7% of its body weight with its trunk.
- The trunk can hold 1.5 gallons of water.
- Elephants are inefficient digesters; only about 65% of their food intake is actually digested.

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COMPARISON OF ASIAN AND AFRICAN ELEPHANTS

Characteristic	Asian Elephant	African Elephant
Average height at shoulder	Male: 9.5 feet Female: 8.5 feet	Male: 10.5 feet Female: 9.5 feet
Average weight	Male: 10,000 pounds Female: 8,000 pounds	Male: 11,000 pounds Female: 9,000 pounds
Ears	Small; shaped like India	Large; shaped like Africa
Head shape	Two bulges at top of head	Sloping forehead, with no bulges
Back shape	Convex or rounded	Concave or dished
Trunk	One “finger-like” projection at the tip of the trunk	Two “finger-like” projections at the tip of the trunk
Tusks (continuously growing incisors (teeth) composed almost entirely of ivory)	Male: some have full tusks Female: small pointed tusks, which seldom can be seen	Both males and females have tusks
Hind feet	Four nails on each foot	Three nails on each foot

ELEPHANT TEETH

Birth	first 2 sets of molars functional
3-4 years of age	first molars lost
6-7 years of age	second molars lost
3-13 years of age	third set of molars functional
6-26 years of age	fourth set of molars functional
16-43 years of age	fifth set of molars functional
33 years of age	sixth (and last) set of molars functional