



GREATER ONE-HORNED RHINO

Perissodactyla
Family: Rhinocerotidae
Genus: *Rhinoceros*
Species: *unicornis*



Range: Nepal and Northeastern India (Assam). Limited to 10 sites in India and 2 in Nepal

Habitat: floodplains of large rivers, swampy and tall grass areas, reed beds, grasslands and wooded meadows

Niche: crepuscular terrestrial herbivore

Wild diet: grass, fruit, leaves, branches of trees and shrubs, and cultivated crops.

Zoo diet: horse chow, alfalfa, oats, hay, fruits, vegetables, acacia

Life Span: (Wild) 35-40 years
(Captivity) 47 years

Sexual dimorphism: male is larger

Location in SF Zoo: Lion Fountain Trail in pachyderm building

APPEARANCE & PHYSICAL ADAPTATIONS:

The greater-one horned rhinoceros or Indian rhino is the largest Asian rhino, and is characterized by skin folds that resemble armor plating with wart-like bumps that cover the shoulder and upper leg region. They have a single blunt, somewhat stubby horn that sits on a bony knob and is composed of hardened, compressed keratin (hair-like) fibers.

Indian rhinos have a prehensile (grasping) upper lip that is flexible and is used to grasp bunches of grass in a browsing motion or can be tucked out of the way for grazing short grasses. Their excellent sense of smell and hearing gives rhinos information about their surroundings and help them detect danger. Rhinos have poor vision, and are extremely near-sighted, making them very dangerous and unpredictable and likely to charge unfamiliar sounds and smells.

Weight: M 4,800 lbs. F 3,500 lb
Length: 7-14 ft
SH: M 5.9' / F 5.2'
TL: 28 in.

Like horses, rhinos run and walk on their toes, and can run a surprising 28 to 35 miles per hour for short distances.

STATUS & CONSERVATION

Greater one-horned rhinos are holding their own through intensive conservation and management efforts in Nepal and India. However, the IUCN lists them as "Vulnerable." Estimations by the World Wildlife Fund number them at around 2,500. Poaching, poisoning and other problems still threaten the rhino. In Taiwan, rhino horn sells for \$9,000 a pound and is the most sought after horn in the world by Asians. Though the use of substitutes for rhino horn is advocated by doctors, pharmacists and conservationists, populations of Chinese in overseas countries insist on using rhino horn as opposed to a substitute material such as water buffalo horn.

COMMUNICATION AND OTHER BEHAVIOR

Urine spraying of plants, foot-dragging tracks and dung heaps are important forms of communication. Rhinos mark their paths by secretions from a gland located above and behind the ball of their foot. Communal dung heaps near wallows and on public paths become enormous and act as an updated directory of animals in the area.

The Indian rhino is active mostly at night, in early morning and in the late afternoon. The middle of the day is usually spent resting, either in the shade or in wallows. Apart from cow-calf pairs, Indian rhinos rarely form groups. Adult males are usually solitary, but they sometimes occur in temporary associations of up to nine rhinos at wallows and grazing grounds where they often feed or rest together but move independently of each other.

The Indian rhino is not territorial. Their home ranges are overlapping with each other. Dominant males tolerate males passing through their territory except when they are in mating season, when dangerous fights break out.

COURTSHIP AND YOUNG

A calf is born with all the skin-folds of an adult and a smooth plate on its nose where the horn will grow. Newborns gain 4 to 6 pounds daily and remain with their mother until shortly before the next birth. Male calves leave their mothers at an average age of 39 months compared with 34 months for female calves. A calf is driven away by its mother at least one week before the birth of the next calf.

Estrous Polyestrous ~ 24 hr every 5-8 wks	
Gestation: 480 d / 16 months	Sexual Maturity: M 7-9 yrs / F 3-4 yrs
# of Mammae: 1 pr	Weaning Age: 18 months
# of Young: 1	Weight at birth:

MISCELLANEOUS

As an indication of the incentive for poaching of rhino horns, consider that the wholesale value of Asian rhino horn increased from US \$35/kg (\$16/lb) in 1972 to \$18,000/kg (\$8000/lb) in 1991. The retail price, after the horn has been shaved or powdered for sale, has at times and in some East Asian markets exceeded \$50,000/kg (\$23,000/lb). By contrast, in November 1996 pure gold was worth about \$12,000/kg (\$5500/lb) (about one quarter of the maximum value of rhino horn).

The scientific name *Rhinoceros unicornis* is from Greek and Latin, and means, roughly, "one horn upon the nose."

Sources:

Updated: 12/95, 9/07, 6/13

Macdonald 1984 / Novak 1991 / Penny 1987 / Wright 1991 / Zoobooks 1991

Collins Guide to the Rare Mammals of the World © 1987; Burton & Pearson

<http://www.animalinfo.org/species/artiperi/rhinunic.htm>

<http://www.rhinos-irf.org/rhinoinformation/indianrhino/index.htm>