

Rhinoceros

Prehistoric rhinoceroses, some larger than elephants, some the size of wolves, were found on every continent except South America and Australia. Today, there are five species of rhino: two African species and three Asian. The African species are the white, or square-lipped, and the black rhinos. Both species have two horns. Of the Asian species, the Indian and the Javan each have a single horn, while the Sumatran rhino has two.

The word rhinoceros means "horn-nosed," and rhinos use their horns for several purposes. They use them to shovel the ground for mineral salt; to fight over territory or a female, or during courtship; and to defend themselves and their young against lions, tigers, and hyenas.

Like buffalos and elephants, rhinos are very near-sighted. They can only see clearly up to about 30 feet away. The lateral placement of their eyes causes them to turn their heads from side to side to see straight ahead.

Rhinos' extremely acute senses of hearing and smell compensate for their poor eyesight. Rhinos are able to pinpoint the origin of a sound and charge at it. They use their highly developed sense of smell to identify other rhinos, keep track of their young and identify predators.

Rhinos are herbivores, meaning they eat only plants. But each rhino species prefers something different. White rhinos eat primarily grasses, for which their square-shaped lips are ideally suited. Other rhinos prefer to browse on bushes or trees. They have a pointed prehensile upper lipthat is, their lip can actually grasp branches to help pull and break them. Javan and Sumatran rhinos prefer leaves in the upper-most parts of trees. They knock down trees to reach the upper branches, leaving the lower limbs uneaten.

Male and female rhinos both establish territories. Males, or bulls, mark and defend their territories viciously. Recent observations indicate females may fight over their territories as well. Bulls competing for females try to intimidate each other by

charging one another. Males and females often fight during courtship, too. Some of the fighting may turn violent and bloody from wounds inflicted with the horns. Once mating is over, males and females go their separate ways again.

Fourteen to eighteen months later, a calf is born. Calves are on their feet within hours of birth. And, although they nurse for a year, they begin eating vegetation in about a week.

Calves remain close to their mother until they are about 3 years old. At this time, another calf may have been born and the mother chases off her older offspring.

In captivity, rhinos may live for up to 40 years, but biologists estimate they live about 30 to 35 years in the wild. For the most part. rhinos are solitary animals. But white rhinos are known to form groups of as many as 18 animals and Indian rhinos sometimes form small groups, too.

Some people might be surprised when they see a rhinoceros because it might be any color from gray to red. The coloring comes

egrets, oxpeckers,

feed on ticks and

other insects and

the rhino's skin,

serve as an early

warning system,

danger when they

are startled.

parasites plaguing

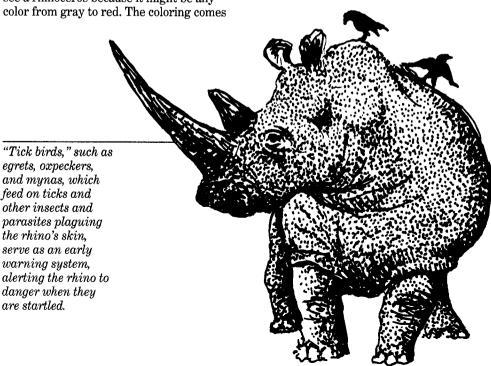
and mynas, which

from the mud rhinos wallow in each day. Mud baths are essential for the good health of all rhinos because they provide relief from biting insects, keep their skin in good condition and help keep them cool.

The only land animals larger than rhinos are elephants. The future of these giants is guarded as their habitat continues to be lost to agriculture and development, and a market for medicines made of rhino horn encourages poaching, or illegal killing.

In India, rhino grazing grounds have been converted to rice paddies to feed an ever-growing population. There rhinos are considered pests as they raid rice paddies and eat crops. In Java, rhinos have suffered from lumber demands that have led to deforestation of their habitat.

Poaching poses an even greater threat to rhino survival. For centuries, Asians have believed that powdered rhino horn could cure everything from fevers and nose bleeds to measles, diphtheria, and food poisoning. Many also believe



powdered rhino horn helps retain the vigor of youth and contributes to sexual stamina. And in the Middle East daggers made with rhino horn handles are a status symbol.

Some wildlife agencies in Africa have implemented programs to saw off the horns of rhinos in an attempt to eliminate the poachers' incentive to kill them. Unfortunately, since 1983, at least 94 de-horned rhinos have been killed by poachers.

Rhinos are protected under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), an agreement among more than 120 nations to eliminate illegal trade in animals and plants and their parts and associated products. The U.S. Fish & Wildlife Service is the federal agency responsible for the U.S. government's compliance with the CITES treaty.

Currently, some countries are threatening to impose trade sanctions against Yemen, South Korea, China and Taiwan for allegedly violating the CITES agreement. The United States imposed wildlife trade sanctions on Taiwan in 1994 for that country's illegal trade in rhino and tiger parts and products—the first time the U.S. government has taken such action on another country to penalize illegal trade in critically endangered wildlife.

In addition, all five rhinoceros species are listed as endangered species under the Endangered Species Act, prohibiting rhino parts and products from being imported into the United States except under certain conditions.

Endangered means a species is considered extinct in all or a portion of its range. The less dire *threatened* listing means a species is likely to become endangered in the foreseeable future.

The U.S. Fish & Wildlife Service also supports international rhino conservation efforts through funding and technical assistance that includes resource management, research, and educational programs.

Black rhinoceros

Diceros bicornis

The black rhino lives in Africa, in a variety of habitats from the dense rainforests to the dry scrublands. Once numerous in eastern and southern Africa, it is now only found in national parks and game reserves. The black rhino stands more than 5½ feet tall and weighs up to 4,000 pounds.

Wallowing in mud is an important activity for rhinos, since it gives them relief from biting insects, keeps their skin in good condition and keeps them cool during times of intense heat.

Indian rhinoceros

 $Rhinoceros\ unicornis$

The Indian rhino weighs the same as the black rhino—about 4,000 pounds—but stands about 6 feet tall. This rhino was once found throughout most of India, particularly in lush river valleys. Today, it survives only on eight reserves in India and Nepal. Living in swampy areas, it eats marsh grasses and aquatic plants.

Rhinos use their horns for several purposes: to shovel the ground for mineral salt, fight over territory or females, and defend themselves or their young from predators.

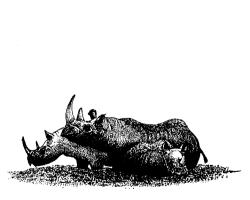
White or square-lipped rhinoceros

There are two subspecies of the white

 $Ceratotherium\ simum$

rhino—the southern white rhino, which is nearly extinct, and the northern white rhino, which is the most common of all rhinos. The white rhino is actually gray. Its name probably stems from the mistranslation of the Dutch word for "wide" describing its upper lip. It lives on the open plains of Africa. The largest of the rhinos, it stands more than 6 feet tall and weighs 6,000 to 8,000 pounds. It also has the longest horn, averaging 18 inches to 4 feet.

Rhinos are herbivores, meaning they eat only plants. The white rhino eats primarily grasses, for which its square-shaped lip is ideally suited.

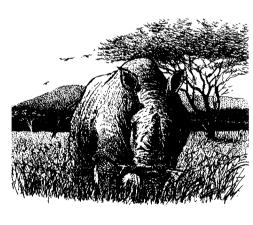


Javan rhinoceros Rhinoceros sondaicus

Sumatran rhinoceros Dicerorhinus sumatrensis

The Javan rhino lives in dense forests, feeding at forest edges and mountain clearings on bamboo, fruit, and other plants. There are fewer than 100 Javan rhinos on a game reserve in western Java, and many believe they are extinct in the wild. Javan rhinos weigh up to 3,000 pounds and measure 4½ to 5½ feet tall.

The Sumatran rhino is the only Asian rhino species with two horns and the only rhino with hair on its body. The front horn averages 15 to 20 inches and the second may be hardly noticeable. It stands about 4½ feet tall and weighs 750 to 2,000 pounds. There are a few Sumatran rhinos left in Burma, Malaysia, Thailand and Sumatra. They live in dense forests and feed on plants at the forest edges and in mountain clearings.



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