

THE WILD RHINO'S PAST AND FUTURE

Rhinoceroses and elephants—besides being two of the world's largest land animals—have at least two other things in common. One small part of each of their bodies is in high demand on world black markets and the populations of both species are being slaughtered faster than reproduction replacements can occur.

Rhinoceros horns and elephant tusks have enormous value in East Asia, while the remainders of their large bodies have little commercial value outside of the place they are killed. Rhino horns are ground and used in traditional Chinese medicine, while elephant tusks are mostly used for carvings of decorative figures and jewelry.

Rhino horns are composed of keratin, a compound similar to the human fingernail. Ground into a powder and consumed by humans, it has the unwarranted reputation for curing impotence, fevers, convulsions and a host of other maladies. Modern medical science has found no proof supporting its use to cure any illness.

The direct ancestors to the rhino first appeared in Eurasia and North America in the Late Eocene period about 30 million years ago. Most of its 26 species of ancestors were relatively small and quite numerous, resembling small horses or pigs in size and mobility. A wave of extinctions, however, eliminated most of the smaller species about five million years ago. The more modern rhinos with larger frames had already evolved in

Eurasia and had spread to Africa about six million years ago.

Today, there are five species of wild rhinos remaining, three in Asia and two in Africa. Two of the three Asian species are near extinction. The African species include the black rhino and the white rhino, which closely resemble each other. In fact, it is possible for them to cross breed. They evolved separately because one grazes mostly on grass, while the other can forage on leaves of woody plants. The result is that their mouth structures vary somewhat. All rhinos, however, are herbivorous.

The world's rhino populations in 2011 occurred in three basic concentrations: southern Africa, the Indian subcontinent and Southeast Asia and the East Indies.

Southern Africa has the largest rhino populations, with South Africa (21,000), Namibia (1,800), Zimbabwe and Kenya (500-999) containing the largest num-

several countries and many islands, with no large concentrations. Two of the three Asian rhinos—the Sumatran and Javan species—are nearing extinction.

Illegal poaching is the critical issue for the continuing loss of rhinos, particularly in parts of the lightly populated African bush and even in game preserves whose isolation makes it easy for poachers to work. Shooting the animals and removing the horn are relatively quick processes. The more dangerous part of the operation for the poachers is transporting and the sale of the horn through the international black market. The horns are worth up to \$100,000/kg (\$40,000/lb)—more than their weight in gold. The weight of the horns averages around 1 to 3 kilos (2.5 to 7.5 lbs.).

Nearly all poached rhino horns are destined for China, often transited through Vietnam. Historically, Vietnam has provided a relatively easy avenue to China, but international pressure has apparently slowed the process. Still the wild rhino population in the Indies is constantly threatened because of proximity to the Chinese market.

The Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES), now consisting of 175 countries and regions, banned trafficking rhino horns in 1993, slowing the trade briefly. Since then, however, illicit rhino horn trade has ballooned, according to *Time* (June 13, 2013), as the burgeoning Chinese economy

has increased the number of people willing and able to purchase expensive rhino horns, hoping to cure diseases of family members and friends.

The future for the wild populations of rhinos looks bleak. Only a massive international effort will preserve their habitat and save these incredible beasts.

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bers. Tanzania, Botswana and Swaziland each has fewer than 500 rhinos, while each of the other southern African countries, excepting Zambia, has fewer than 100 rhinos remaining in the wild.

The Indian subcontinent, specifically India (2,300), has the world's second largest wild rhino population, while neighboring Nepal has fewer than 500 and Pakistan is reported to have fewer than 100.

Rhino populations in Southeast Asia and the East Indies are scattered among

Sources: Beech, Hannah and Alex Perry, Killing Fields ("How Asia's growing appetite for traditional medicine is threatening Africa's rhinos"), *Time*, June 13, 2011; <http://ens-newswire.com/2013/05/15/california-father-and-son-rhino-horn-smugglers-imprisoned/>; and <http://qz.com/82302/theres-a-country-that-will-pay-300000-per-rhino-horn-to-cure-cancer-and-hangovers-and-its-wiping-out-rhinos/>



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