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ON INDIAN ANIMALS**

PART 1 : VERTEBRATA

(Mammalia, Aves, Reptilia and Amphibia)



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Great One-horned Rhinoceros Order PERISSODACTYLA
Rhinoceros unicornis Linnaeus, 1758 Family RHINOCEROTIDAE

Common local names : Gainda (Hindi), Gondar (Bengali), Gor (Assamese).

Diagnostic characters : Largest among the Asiatic rhinoceroses. Characterised by a long horn on the snout, skin folded into shields and studded with wart like tubercles ; fold in front of shoulders not continued up to the back. Tail short and tufted. Each foot has three digits, and hooves distinct. Horns present in both sexes, grow throughout life, and if lost, reproduced (Prater 1980, Mukherjee 1982).

Measurements : Length from snout to tail 210-420 cm; height at shoulder 170-180 cm; length of horn 30-60 cm.

Intraspecific variation : No subspecies.

Distribution : Several centuries ago, the One-horned Rhinoceros had a wide distribution throughout the northwestern, northern and eastern India, including parts of Nepal and Bhutan (Mukherjee 1982, Rookmaaker 1984). The present distribution is limited to east of Gandak river (Chitawan N.P.) in Nepal (Mishra and Mishra 1982), and northern West Bengal and Brahmaputra valley in Assam (North Kamrup, Nowgong, Sibsagar and Darrang districts) (Ali 1985).

Habitat and ecology : Inhabits wooded jungles up ravines and low hills ; prefers tall grass and reed beds in swampy areas. Mostly early hours of the morning and from late afternoon to evening are its feeding time. It is a grazer and subsists on a variety of succulent vegetation, chiefly grass; often visits cultivation. Mating takes place between February and April and the young is born after a gestation of about 485 days. It gives birth in captivity. The female attains sexual maturity in 4 years and the male in 7 years (Prater 1980). The one-horned rhinoceros lives for about 70 years (Mukherjee 1982).

Wild population : The population of rhinoceros in India and Nepal was estimated to be 669 in 1966 (Spillet 1967), and 745 in 1969 (Sheshadri

1969). Lahan and Sonowal (1973) gave the census count of 658 rhinos in Kaziranga National park alone in 1972. There had been a substantial increase in the number since 1972. There were about 1300 rhinos in Assam (Kaziranga 1080, Laokhowa 5, Pabitra 40, Orang 65 and Manas 80) (Khan 1985) and about 400 in Nepal (Chitawan and Bardia) in 1984 (Chaudhury 1985), besides a few in Jaldapara in West Bengal. The density of rhino was reported to be 2.78 - 3.13 per sq. km. in Kaziranga (Chaudhury 1985). Recently, three pairs of rhinos have been introduced in Dudwa National Park, Uttar Pradesh.

Captive population : There are about 75 animals in captivity. It is present in many zoos in India (Calcutta, Gauhati, Delhi, Mysore, etc.) (Khan 1985) and abroad.

Economic value : Rhinoceros is commercially a valuable animal. Every part of its body has a market ; the flesh as invigorating tonic, blood offered in religious ceremonies, hide used in making war-shields, urine as antiseptic and cure of gout, nasal horn as of aphrodisiacal value and also renders poison innocuous, etc. Of all the parts of this animal, horn fetches fabulous amount and today it is worth its weight in gold.

Trade data : Trade in this species or its part is completely banned in India. However, there is great demand of rhino-horn in China.

Threats to survival : Shrinkage of habitat as a result of tremendous increase in human population, destruction of grassland for agriculture in fertile lowlands, and tea plantation in hilly areas, excessive grazing by domestic cattle, poaching of rhinos mainly for its horns, low breeding rate, transmission of foot and mouth disease from domestic cattle, are the main threats to its survival.

Conservation measures taken : The animal is enlisted in Schedule I of the Indian Wildlife (Protection) Act and Appendix I of CITES.

The areas where rhinoceroses occur have been declared as sanctuaries or national parks.

Efforts are being made to reallocate it at a number of places in its former range of distribution, the first being at Dudwa National Park in Uttar Pradesh. Other areas proposed are Madanpur forest in West Champaran

district of Bihar, Lali Wildlife Sanctuary in Arunachal Pradesh, and Intaki Sanctuary in Nagaland (Chaudhury 1985).

Conservation measures suggested : Habitat modification should be minimised as far as possible.

Strict vigilance be maintained to stop poaching.

Livestock in no case be allowed in rhino territory to prevent the spread of viral infections to wild animals.

The captive population be increased to at least 150 rhinos mainly through propagation already in zoos.

To continue efforts to establish other wild populations elsewhere in India and Nepal through translocations.

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Compiled by V. C. Agrawal