

Fig. 30. Past (striped area) and the present (black area) distribution of *Cursorius bi-torquatus*.

Cuddapah in the south and BLANFORD in 1898 obtained it in Sironcha, Bhadrachalam (north of the R. Godavari). Since then it was reported from Borgumpad in Hyderabad District and in Madras. The bird was last seen by H. CAMPBELL in 1900 near Anantapur, after which there has been no report. The last specimen collected was in 1871.

Recent surveys of the former Hyderabad State and the Eastern Ghats did not reveal even a single specimen and no sportsman has reported about it since 1900; it seems to have been totally exterminated. The size of the range, if at all the species still exists, is no more than 0.6 % of the former.

4. Some Vanishing Mammals

Equus hemionus khur

This species is the wild ass of the Rann of Cutch and Tibet, characterized by short erect dark mane, continuing as a dark brown stripe along the back to the root of the tufted brown tail. The shoulders, saddle and sides

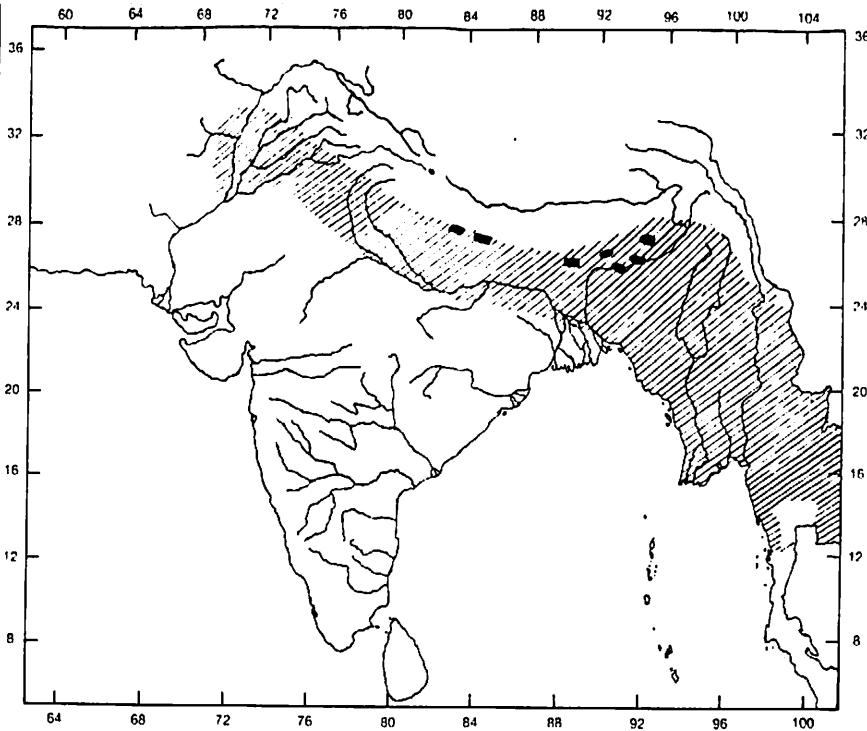


Fig. 31. Past (striped area) and the present distribution (black area) of *Rhinoceros unicornis*.

of the rump are fawn-coloured. The muzzle, legs and under parts are white. Its ears are short like those of zebra. There are callosities on the fore legs only. It stands 110-120 cm at shoulder.

The wild ass is generally found in small and large parties, of a pair to about three dozens, grazing throughout night in grass-covered expanses. In the Rann of Cutch, the hillocks of the dry weather turn into small islets, covered with scent grass and scrubs known as *bets*. The wild ass swiftly moves about here in search of food from place to place and thus covers long distances, maintaining an average speed of 50 km per hour. It often raids crops at night. Rutting starts in June-July, when the sociability of the wild ass ceases. The mare separates from the troop with a stallion, which fights viciously for her possession, the combatants rearing up on their hind legs. When the combat is over, the stallion takes to galloping around his harem, throwing himself on the ground, rolling over on his back and braying. Mating takes place during the rainy season. The period of gestation is eleven months. It never interbreeds or mixes with local domestic donkeys.

since been exterminated from Iran and perhaps a few stragglers may be found in the Thar Desert. The onager race has always been esteemed for sport and food. It has long been hunted by certain tribals for food. This animal was speared or shot by the Baluchis on horse back. Some were also trapped in pitfalls. It has become extinct in practically all over its range, except for the pocket in the eastern Rann. GEE estimated in 1962 that about 860 wild asses existed in India and about ten strayed into Pakistan (GEE, 1964). A number of wild asses died in 1960 and some in 1961 from *surra* disease. The wild ass now occurs in an area that is about 2.6 % of its former distributional range.

Rhinoceros unicornis

The one-horned rhinoceros, the largest of the three species of rhinoceros found in Asia, is a huge ungainly creature, with a blackish-grey hide, formed into characteristic folds or shields and devoid of hair except on the tail and ears. At the sides it is studded with convex tubercles. It possesses a horn on the snout, sharper and longer in the female but blunt and shortened in the male by frequent combat. A full grown rhino may attain a length of 3.9 m and height of 1.8 m, with the horn about 30 cm in length. The great one-horned rhinoceros is confined to the grassland and jungle areas of the foothills of the Himalaya (Central Nepal) and to isolated areas of the plains of West Bengal and Assam. It prefers swamps and open savannah, covered with the tall elephant-grass, but is also found in wooded forests along the low hills and river valleys. It is essentially a grazing animal that prefers young grass shoots, which grow up after the tall elephant grasses are burnt. It may also feed on reeds and cultivated crops. It is a slow, solitary animal and is strictly territorial. It has special places for dropping excreta, always tending to use a fixed mud wallow and moving along regular trails. The animal is neither fierce nor does it charge at sight, except when the female is with her calf. The Indian tiger seems to avoid the rhino, a fact which the deer and the buffalo take advantage of and graze in company of the rhino, for protection. The rhino is helpless in quicksands and shallow pits, and if caught it utters deafening cries and dies of exhaustion. Breeding is practically all the year round but in Assam, it generally mates in the spring (March–April). Generally a single calf is born about October. The life-span of the animal is about 50–70 years.

The great one-horned rhinoceros has been known to have once been extremely common and wide-spread throughout the Indo-Gangetic Plains (RAO, 1957) and the neighbouring countries, but by the end of the 18th century it had completely disappeared from most of its range, except Nepal, Bengal and Assam. In 1904 about a dozen rhinos alone remained in Kaziranga (Assam) and fewer in Bengal. Enforcement of protective

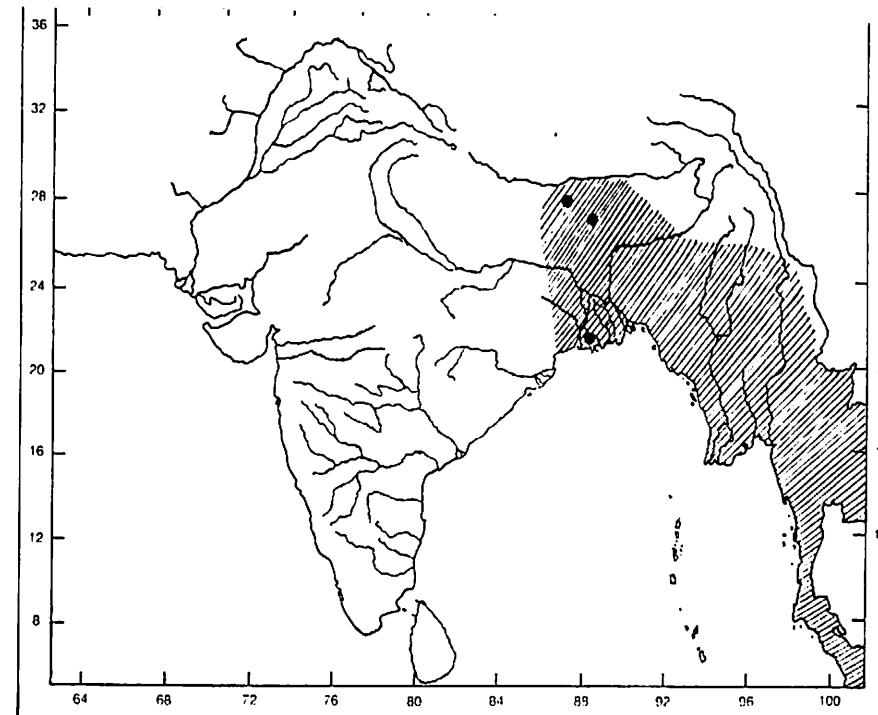


Fig. 32. Past (striped area) and the present (black area) distribution of *Rhinoceros unicornis*.

measures helped it to re-establish itself in Nepal, West Bengal and Assam. According to reliable estimates, there are three hundred individuals in Nepal, forty-five in West Bengal and three hundred and thirty in Assam. The animal exists at present only in a few sanctuaries, of which Kaziranga has the largest number. The species may soon be wiped out totally if a serious contagious fatal disease, carried by the grazing domestic cattle, spreads to the rhino. The distributional range of the one-horned rhino is at present about 0.97 % of its former vast size.

Rhinoceros is commercially a very valuable creature. Though every part of its body has a market, the horn is the most highly prized, because of its supposed aphrodisiac property. In Europe, during the middle ages, its horn was believed to have peculiar medicinal virtues. A cup made of the horn is still believed to render poison innocuous in China, so that a single horn often fetches Rs. 1500–2000. In Nepal the flesh and the blood of the rhino are considered highly acceptable as food by all classes. The blood is used in religious ceremonies and the urine is said to have antiseptic properties. From the hide war-shields and other kinds of articles are made.

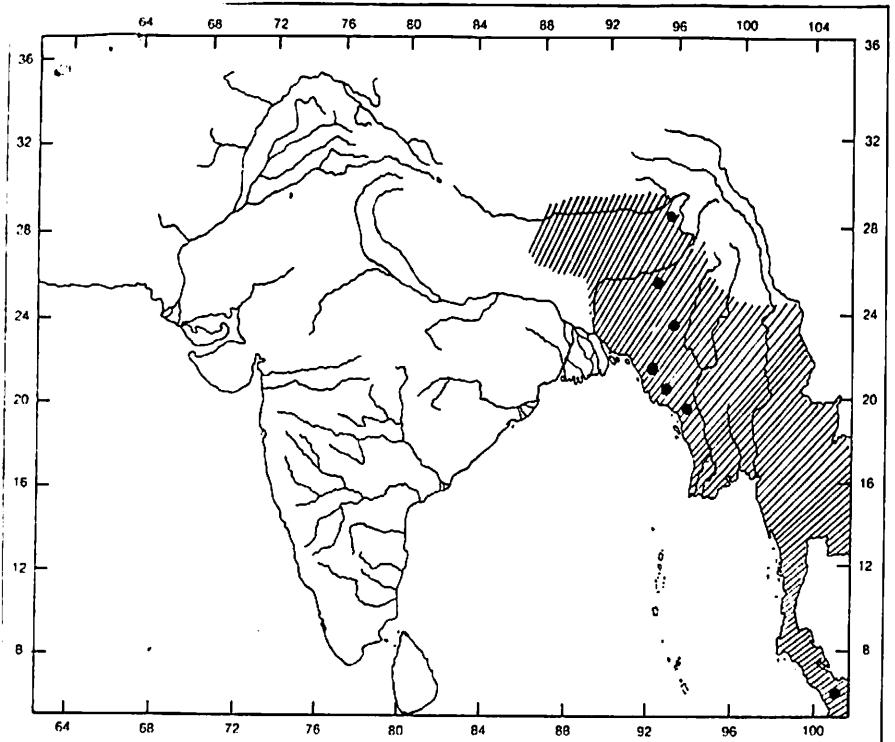


Fig. 33. Past (striped area) and the present (black area) distribution of *Rhinoceros sumatrensis*.

Senseless destruction of the animal was highly fashionable till 1958 in Nepal.

Another cause of the shrinking range of the rhino is the rapid expansion of cultivation in the rhino-territory in recent years. The introduction and vast development of the tea plantations in India have not only driven them out of many of their holds, but also served as incentive for the wanton destruction of the animal.

Rhinoceros sondaicus

This is the smaller one-horned rhinoceros, very similar in appearance to the great Indian rhinoceros, but slightly smaller. Its skin is dusky-grey like the other Indian rhino, but the skinfold in front of the shoulder continues right across the back. There are no tubercles in the skin, which is divided by cracks into small, polygonal, scale-like discs throughout. A median horn on the snout is present only in male.

In earlier times this species was widely distributed, from northern

India and southern China through southeast Asia to Sumatra and Java. Today it is, however, confined to Java, though a small number may have taken refuge in inaccessible parts of the Malaya Peninsula and in Sumatra. Even in Java, where it was quite common about fifty years ago and was seen throughout the island, it is now restricted to one small game reserve. The Javan rhinoceros inhabits forests rather than grasslands, hill tracts upto an elevation of 2330 m, but dense forests in lowlands are also included in its territory. It browses on the leaves of all kinds of forest trees and shrubs, and this habit may possibly have helped the animal to extend its range through the great forest tracts in northeast India, Malaya and southeast China.

The last specimen from Assam was reported from Manipur in 1874, and from the swamps of the Sundarban in Bengal in 1870. It was also reported from Chittagong in 1864. It was not uncommon in Sikkim Terai and Assam till the middle of the nineteenth century, but it was hunted beyond its thriving limit by the rhino-horn collectors. Serious attempts to preserve the species were made from 1921 in the Udjung Kulon Game Reserve, West Java and it is estimated that there may be no more than two dozens to eight animals surviving at present. The present range of the smaller one-horned rhino amounts to 0.5% of its former size.

Rhinoceros sumatrensis

This is the two-horned Asiatic rhinoceros, earthy-brown to almost black and covered with black or brown hair. It has a single pair of lower front teeth instead of two pairs as in the other Asiatic species; it is the smallest of all the five existing rhinoceros of the world, and attains a length of about 250 cm and a height of 110–135 cm. Its front horn rarely exceeds 30 cm in length.

The Sumatran rhinoceros prefers well-wooded forests, ascending upto an elevation of 1100 m. It loves shade and vicinity of water and bathes in streams at night and in hot part of the day. It has a habit of wallowing in mud, like the buffalo and pig. Its tracks, leading off from the wallows, appear like large tunnels hollowed out through forests. The wallows are usually visited singly or sometimes in pairs, the cow and the bull together. It descends to lower country during the monsoon and in winter. It is usually shy and timid but can also be tamed easily.

The original distribution of the two-horned rhinoceros was similar to that of the Javan rhinoceros and extended from eastern India through Burma to Sumatra and Borneo. It is now found in small numbers in scattered patches in Central and Lower Burma (in the Myitkina District, the Arakan and Pegu Yomas, Katha District and Lower Tenasserim). It is also found in small numbers in the Malaya Peninsula, Sumatra and Borneo.

The Sumatran rhinoceros probably no longer exists in any part of India or China, but about eighty years ago it was known to be sparse in Assam, Bhutan

and Northern Bengal. There is a possibility of small numbers occurring in remote parts of the Lushai Hills and the Chittagong Hill tracts. It is still believed to inhabit remote forest areas in Burma, Thailand, Cambodia, Laos, Vietnam, Malaya, Sumatra and Borneo, and the number may be very small even in these areas. In Burma there were about forty in 1959, in scattered pockets. It has not only been exploited by poachers for its horn and flesh but the military operations during the second World War, wiped it by the wanton destruction of the defenceless animal, when the soldiers operated through the dense forests where the rhino lived. The present distributional range is about 1.2 % of the past size of the range.

Bos grunniens mutus

The wild yak is a massive, short-legged, blackish-brown bison-like animal with drooping head and high-humped shoulder. Its coat consists of long, coarse hair, in shaggy fringes that hang from its flanks, shoulders and thighs. An adult bull stands about two metres at the shoulder and may weigh 600 kg. The smooth black horns may be a metre in length. To tide over the severe winter the yak has a dense undersur, soft and closely matted, which gives additional warmth. In spring, this undersur comes away in great masses. The domesticated yak is smaller, and has patches of white on the chest and tail, sometimes reddish-brown or black with the horn less developed, but the fur is much developed.

It inhabits the high, desolate and rugged snow-covered mountains and valleys of Tibet and adjoining western Indian borders (Changchen-mo Valley in Ladak, Sutlej Valley and Kangri-Bingi Pass of the Kumaon Hills) at elevations of 3300–4500 m.

The wild yak lives in small herds of two to five, but the cows, calves and young bulls gather in herds, of two thousand. Its food consists of tufts of grass, shrubs, salt encrusted earth and frozen snow, when water is not available; it can withstand starvation for days together. The herds wander for considerable distances, feeding during the early mornings and evenings and sleeping on the steep slopes during the day. Saddles, saddle-girth, bridle, reins, whips, boots and numerous other articles are made out of yak-hide. Its wool is used for rope and clothing and its tail is used as a flywhisk in religious ceremonies. Yak meat and fat are eaten and its heart and blood are used by the Mongols for medicinal purposes. The species has disappeared from most of its regular tracts and perhaps it is now restricted in very remote and inaccessible areas. The wild yak has been practically replaced by its domesticated cousin as a beast of burden for riding, for milk, meat and wool for the nomadic tribes.

Capra falconeri falconeri

This is the largest of the wild goats of the Pamir and its radiating

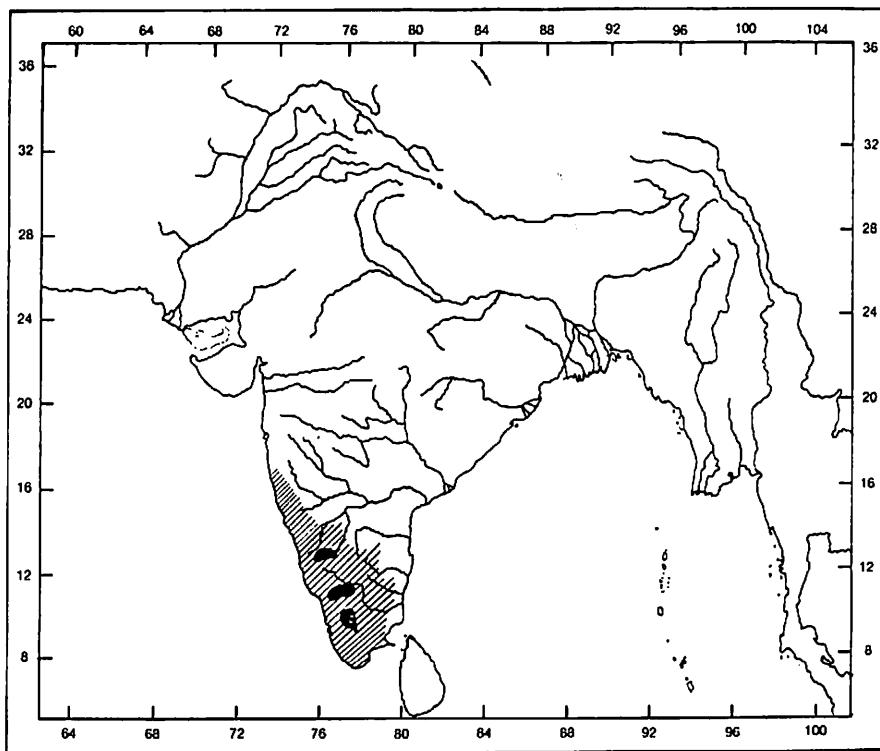


Fig. 34. Past (striped area) and the present (black area) distribution of *Hemitragus ylocrius*.

mountain ranges; its name markhor is derived from the Persian meaning a 'snake-eater'. It is a long silky-haired, thick-coated large and heavy animal, standing 90–100 cm at the shoulder. The magnificent horns of the male spread out in a heavy cork-screw and measure about 165 cm. The females are half the size of the male, and have short-twisted horns. The older males have a long black beard, which covers their throats throughout the year and also a shaggy grey mane. There are four distinct subspecies in the Himalaya, Kashmir, Hindukush and Sulaiman Ranges. The nominate race is represented within the Indian limits.

Markhor has as its natural predators the snow leopard and Asiatic wild dog. It has also been extensively hunted by man. About fifty years ago it used to roam about in large herds along the tributaries of R. Astor and Harmosh Nullahs, and on the Pir Panjal. Although the animal is gifted with incredible agility in climbing the most difficult and dangerous cliffs in order to avoid the predators, the use of modern long-range telescopic-sight fire-arms has decimated this species. Poaching by the nomads, and hunting by modern sportsmen and the increasing hum-

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