

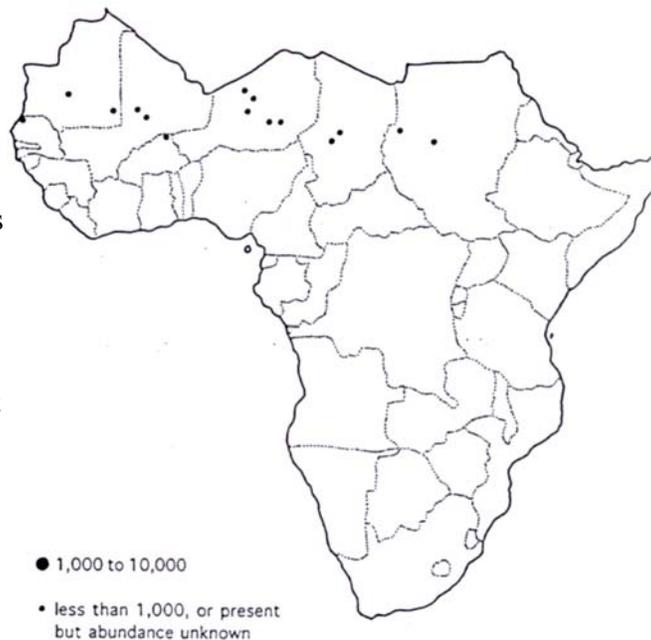


ADDRA GAZELLE, *Gazella dama ruficollis*

Legal Status: International trade in Addra gazelles is regulated by Appendix I regulations of CITES. The red-necked subspecies, *ruficollis*, is not protected by the United States Fish and Wildlife Service although two other subspecies, *lozani* and *mhorr*, are listed as Endangered. It should be noted that the *lozani* 'form' may not be valid or otherwise have ever existed and the Mhorr gazelle is extinct in nature and today is found only in captive collections or reintroduced populations. IUCN lists all forms of Addra gazelles as Endangered.

Description: *Gazella dama* is the tallest and largest species of gazelle. Addra gazelles stand between 34- 42 in. (88-108 cm) at the shoulder. Addra gazelles are the lightest in coloration of the various subspecies of *Gazella dama*, their body coloration being almost entirely white. The neck is reddish-brown in color with a white spot just below the throat. The reddish-brown coloration on the rest of the body is variable and may occur on the forehead, back, fetlocks, and on the front of the forelegs. Both males and females have horns that curve flat back with the tips curving upwards, occasionally curving further forward and inward. Horns of the males have 18 to 23 distinct rings and smooth tips. The female's horns differ slightly in that they are typically smaller, thinner, and the rings are less distinct. Nearly all forms of *Gazella dama* maintained in captivity are of the *ruficollis* subspecies and easily distinguished from the only other subspecies kept in captivity, the Mhorr gazelle, which is nearly all red.

Range: Addra gazelles' historical range included the desert and arid zones of Chad, and the Darfur and Kordofan Provinces of the Sudan. Other populations were found all the way to Senegal. Prior to 1978, Addra gazelles, most of the world's population, estimated to have numbered in the thousands, were found in the in the Ouadi Rime-Ouadi Achim Faunal Reserve (80,000 sq. km), a desert-subdesert area in Chad. Between 1978-1987, this area was severely impacted by that country's civil war and the Addra gazelle population nearly extirpated. Today Addra gazelles are extremely rare in the reserve and occur only as vagrants. As of the mid-1980's, Addra gazelles were found to still survive in northern Darfur in Sudan. Their decline in the region has been due to habitat destruction, desertification, human and livestock population expansion, and over-hunting. Overall, the total population of Addra gazelles is estimated at less than 2,500 individuals. Although they probably still exist throughout most of their historical range, the gazelles are limited to only small, isolated herds.



Habitat: Addra gazelles inhabit the sahel, the sub-Saharan desert/semi-desert regions characterized by low and erratic rainfall with little vegetation, of which, most is seasonal.

Diet: Addra gazelles are a desert/semi-desert species and famous for their drought resistance. Most of their water is obtained from the plants. Addra gazelles browse on various desert shrubs and acacias, standing up on their hindlegs in the same manner as gerenuks. In times of drought they also eat rough desert grasses.

Social Organization: The social organization and behavior of Addra gazelles is greatly affected by the seasons. Herds typically spend the dry season in the sahel where they occur in small groups (up to 15 individuals) or singly. With the rains, they migrate north into Chad where in the past, groups could swell to 200 or more individuals. It is also believed that males are seasonally territorial. In the wild, offspring are usually born from April through June. The newborns are hidden away from the herd, but a couple of days after birth, the offspring is usually strong enough to follow the dam.

Little else is known about Addra gazelles in the wild. In captivity, the males especially, show marking behavior (defecation, urination, and scent glands). Addra

gazelles have very well developed pre-orbital glands. It is believed that Addra gazelles communicate through vocalizations, body position, and scent glands/markings. In nature, Addra gazelles live for as long as 12 years; in captivity some reached their late teens. Males reach sexual maturity at around one year of age and females around one and a half years. The gestation period is approximately five and a half to six months, resulting in a single offspring. Twinning is a very rare occurrence in this species. In captivity, births occur year a round.

Threats to Survival: The greatest natural factor affecting Addra gazelles is the seasonality of rainfall. While Addra gazelles are a desert/semi-desert species, they are not as drought resistant as some other desert species and droughts, in combination with overgrazing, can have an extreme impact on the species. There is also the potential for disease, which at today's depressed population levels, could easily decimate the entire remaining population. Addra gazelles' most devastating contention is habitat destruction. Cattle farming, and overgrazing by other domestic livestock, has caused immense destruction to the habitat Addra gazelles rely on for their survival. Addra gazelles' historical range has been devastated by war, Chad's Ouadi Rime-Ouadi Achim Faunal Reserve a war zone for over ten years. General political unrest in Chad and Sudan has also taken a large toll on all native species of that country and the region continues to be unstable. Finally, Addra gazelles are hunted for sport, an activity that has severely impacted Addra gazelles severely even as it continues to reduce the population size.

Zoo Programs: A North American Regional studbook is maintained for Addra gazelles and the Antelope Taxon Advisory Group's Regional Collection Plan has recommended that this species be managed by a Species Survival Plan (SSP). In 2000, there are approximately 205 individuals within North America's managed population. Additional animals are held by the private sector.

Conservation: This species numbers has declined rapidly over the last twenty years, now numbering less than 2500 and declining. Habitat destruction, hunting, and civil unrest continue to be their primary threats. While addra gazelle still exist in a few reserves throughout its' former range, they are not well protected. The survival of this species depends on our ability to maintain a healthy and stable captive population, as well as protecting the few populations that still exist and increasing the amount of protection provided to those populations.

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