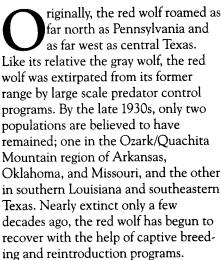
## ENDANGERED SPECIES

This Species is Protected Under the Endangered Species Act of 1973

## RED WOLF

Canis rufus



The red wolf derived its name from the reddish color of the head, ears, and legs. However, its coloring can range from very light tan to black. Weighing 45 to 80 pounds, the red wolf is smaller than the gray wolf and larger than the coyote. Also, the head is broader than the coyote's but more narrow than the gray wolf's. The red wolf's most distinguishing features are the long ears and legs.

The exact identity of the red wolf has been debated for decades, with some authorities considering it a species, some considering it a subspecies of the gray wolf, and some considering it a *hybrid*, or cross-breed, of the coyote and the gray wolf.

In the wild, red wolves normally establish life-long mates. They reach breeding

Extensive predator control programs in the early part of the 20th Century were a leading factor in the near extinction of the red wolf. At the same time, deforestation caused an eastward surge of the

coyote, resulting in red wolf and coyote interbreeding.

maturity in their second or third year, and breed in February or March of each year. The female wolf, sometimes assisted by the male, finds or digs a suitable den in areas such as hollow logs, ditch banks, or under rock outcrops. Two to six pups are born in March or April. The pups are born with their eyes closed and are completely dependent on their mother for about 2 months. They usually remain with the parents until reaching breeding maturity, forming small family groups, or packs. Red wolf packs generally use 10 to 100 square miles of habitat.

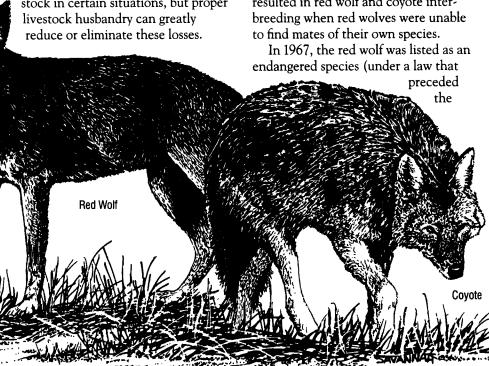
Red wolf packs are smaller than those of the gray wolf, and consist of an adult pair and young of the current and previous years. Similar to gray wolves, red wolves are very social and territorial, with aggression among pack members sometimes resulting in death.

White-tailed deer and raccoon are the most important part of the red wolf's diet, but smaller animals, such as rabbit and nutria, are eaten when available. Red wolves will prey on small livestock in certain situations, but proper livestock husbandry can greatly reduce or eliminate these losses.

With large livestock such as cattle, it is normally only the very young calves that are vulnerable.

Yet it was the belief that the red wolf caused widespread cattle losses that led to extensive predator control programs in the early part of the 20th Century. Fear and a misunderstanding of the animal led to indiscriminate killing for bounties. The red wolf was also affected by land clearing and drainage projects, logging, mineral exploration, and road development that encroached on its forest habitat.

As predator control programs were carried out with a vengeance, the red wolf was totally removed from extensive areas of its former range, while in other areas its social structure was destroyed by removal of pack members. At the same time, deforestation in eastern Texas and Oklahoma caused an eastward surge of the coyote. These factors resulted in red wolf and coyote interbreeding when red wolves were unable to find mates of their own species.



Endangered Species Act of 1973), meaning it is considered in danger of extinction throughout all or a significant portion of its range.

The U.S. Fish and Wildlife Service established a captive breeding program for the red wolf in 1973. Biologists began to remove remaining red wolves from the wild in an effort to save the species from extinction. These animals were taken to the Point Defiance Zoo and Aquarium in Tacoma, Washington. Over a period of 6 years, more than 400 wolf-like canids were captured in Louisiana and Texas, but of this number, only 43 were considered red wolves and were placed in captivity. Further, breeding experiments revealed that only 17 of the 43 were true red wolves, and only 14 of these successfully bred in captivity. By 1980, the red wolf was considered extinct in the wild.

In 1977, captive red wolf pairs produced their first litters. Biologists took great care to maintain the wild instincts of these animals and to avoid creating a dependence on man.

In 1987, four pairs of red wolves were reintroduced to the wild on the 120,000-acre Alligator River National Wildlife Refuge in northeastern North Carolina. Each wolf was equipped with a radio transmitter so that biologists could monitor their movements. Additional releases were made, and the first wild reproduction occurred in 1988. The reintroduction area has been

tion site was selected in the Great Smoky Mountains National Park to explore the feasibility of the red wolf's expanded to include re-establishment into the additional federal and Southern Appalachian private lands, and now Mountains. The objectives of the experiment were to evaluate the red wolf interaction with coyotes, livestock, and people. A 1-year experimental release of a

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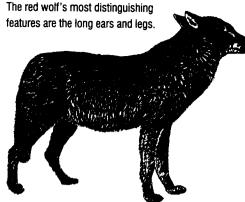
encompasses approximating 500,000 acres. Today, there are more than 50 red wolves at this location.

Early releases of red wolves at Alligator River resulted in high mortality, and some animals exhibited a tolerance of people considered to put them at risk because of potential conflict with human activities. Therefore, several island projects were established to serve as pre-reintroduction sites where the wolves could have their first experience in the wild with limited human contact. Wolves placed on these islands have reproduced, and the packs roam freely on the islands. The adults and/or young are subsequently captured and used in reintroduction projects such as the one at the Alligator River refuge. Bulls Island in the Cape Romain National Wildlife Refuge in South Carolina. Horn Island in the Gulf Islands National Seashore in Mississippi, and St. Vincent National Wildlife Refuge in Florida are the three island sites now used as pre-reintroduction sites.

Disease and parasites have also caused mortality among the reintroduced red wolf populations. Hookworm, heartworm, distemper, parvo virus, and others have taken their toll. Now, released and captive animals are vaccinated against such maladies.

A second, experimental reintroduc-

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family group in 1991 was successful and concluded by recapturing the animals. A full-scale reintroduction then began with the release of two family groups in 1992. Movement of members of one group outside the park and cattle depredation by the second group required temporary removal of these animals in 1994. The cattle depredations were largely a result of inadequate cattle husbandry practices and damage to fencing from flooding. The cattle operation is being evaluated for needed changes and another family group of wolves has been released in an adjacent area.

Biologists continue to monitor the two reintroduced populations of red wolves. The Fish and Wildlife Service also is working with the U.S. Forest Service to evaluate National Forest lands in the Southern Appalachians and elsewhere that may be suitable as future reintroduction sites.

There are now 270 to 300 red wolves, including 220 in captivity and the rest in the wild—quite a comeback from the 14 animals making up the original captive breeding population. There are currently 33 facilities nationwide where red wolves are captively bred.

## BIOLOGUE SERIES

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