

The Southeast



COURTESY U.S. FISH AND WILDLIFE SERVICE

The red wolf, a Southeast native, was saved from extinction by a captive-breeding and reintroduction program.

The red wolf (currently recognized as a different species than the gray wolf) once ranged as far north as Pennsylvania and as far west as central Texas. Because of its wide distribution, the red wolf played an important role in a variety of ecosystems, from pocosin lowlands to forested mountains. Persecuted like their gray cousins, by the 1970s red wolves existed only along the Gulf Coast in southeastern Texas and southwestern Louisiana.

In a last-ditch effort to save the species, U.S. Fish and Wildlife Service (FWS) biologists captured the few remaining wild red wolves to start a captive-breeding program. Today, as a result of that program, approximately 100 to 120 wild red wolves roam 1.7 million acres in northeastern North Carolina, and about 166 red wolves reside in 41 captive-breeding facilities.

Reintroduction in the wild began in the late 1980s with a successful but limited release of captive-born red wolves on Bulls Island, part of the Cape Romain National Wildlife Refuge off the coast of South Carolina. This experiment was followed by releases of captive-bred red wolves in two national wildlife refuges in North Carolina: Alligator River beginning in 1987 and later in Pocosin Lakes.

In 1990, FWS adopted a red wolf recovery plan that called for releases at three separate sites to create a total wild population of 220 red wolves while maintaining a captive population of 330 red wolves in at least 30 captive-breeding facilities for future releases. A second reintroduction in 1991 released red wolves in Great Smoky Mountains National Park along the North Carolina-Tennessee border. However, these animals could not find sufficient food or raise young successfully and were removed from the park in 1998.

The Potential

For recovery to continue, red wolves need additional recovery areas. Studies have identified numerous promising sites throughout the

southeastern United States that require further evaluation (Carley and Melcher 1983, Van Manen et al. 2000).

In 2005, Defenders commissioned a study of the potential economic contribution of red-wolf-based ecotourism (Lash and Black 2005). The results showed that landowners and residents were interested in locally based tourism efforts that would benefit communities and protect the natural beauty of their counties. Tourists also expressed interest in participating in red-wolf-related activities, a finding borne out by the popularity of “howlings,” guided nighttime wolf tracking and listening tours of Alligator River National Wildlife Refuge in the heart of the region’s red wolf habitat. To promote the howlings and provide general information about red wolves, Defenders and our partners created and installed six kiosk-style displays in tourist areas near red wolf country.

The Challenges

Red wolves face myriad threats to their recovery, including hybridization with coyotes, illegal killings, severe weather, sea-level rise, motor vehicles and development that fragments and degrades their habitat.

To reduce hybridization—interbreeding between coyote and red wolf populations—FWS is intensely managing known breeding groups of red wolves and coyotes, an effort that has shown promise and must be maintained to ensure the genetic purity of the red wolf population.

North Carolina's already liberal coyote hunting policies are poised to expand to include night hunting, which will only increase the risk of hybridization. Coyotes and red wolves—particularly juveniles—can be difficult to tell apart. As a result, hunters can mistakenly shoot breeding red wolves, making way for coyotes to move into wolf territories and interbreed. Defenders and our partners successfully went to court to challenge a state rule to allow night hunting of coyotes, but a similar measure is now pending in the state's legislature.

Severe weather patterns are a constant and uncontrollable threat to red wolf recovery. In September 2003, Alligator River National

Wildlife Refuge and the recovery program suffered a direct hit from Hurricane Isabel, resulting in the loss of two red wolves and destroying the Sandy Ridge captive-breeding facility. Climate change may increase the number and frequency of catastrophic weather events that set back red wolf recovery. The refuge is also extremely vulnerable to sea-level rise, which could eventually put nearly all of the red wolf's current range underwater (Tucker 2010; Lawler et al. 2010).

Meeting these challenges requires the tolerance and support of people. Defenders will continue to work in partnership with the North Carolina-based Red Wolf Coalition, FWS and others to educate the public about red wolves and the benefits of restoring them.

Current Red Wolf Habitat in the Southeast



Defenders advocates the restoration of red wolf populations in appropriate suitable habitat in numbers sufficient to ensure long-term survival of red wolves and maintenance of the critical role they play in the ecosystem. In addition to the area of northeastern North Carolina where red wolves are now present (defined by solid red line on map), researchers have identified potential reintroduction sites that have yet to be thoroughly evaluated.

References

- Carley, C. J. and J. L. Mechler. 1983. *An Experimental Reestablishment of Red Wolves (Canis rufus) on the Tennessee Valley Authority's Land Between The Lakes*. Unpublished.
- Lash, G. Y. B. and P. Black, Ursa International. 2005. *Red Wolves: Creating Economic Opportunity Through Ecotourism in Rural North Carolina*. Report prepared for Defenders of Wildlife. 97 pp. Unpublished.
- Lawler, J. J., Tear, T. H., Pyke, C., Shaw, M. R., Gonzalez, P., Kareiva, P., Hansen, L., Hannah, L., Klausmeyer, K., Aldous, A., Bienz, C., and S. Pearsall. 2010. Resource management in a changing and uncertain climate. *Frontiers in Ecology and the Environment* 8(1): 35-43.
- Tucker, A. 2010. "Rising Seas Endanger Wetland Wildlife," *Smithsonian Magazine*. Accessed 1/16/13 www.smithsonianmag.com/specialsections/40th-anniversary/Rising-Seas-Endanger-Wetland-Wildlife.html.
- Van Manen, F. T., A. Barron, A. Crawford and J. D. Clark. 2000. Predicting Red Wolf Release Success in the Southeastern United States. *Journal of Wildlife Management*. 64(4): 895-902

