# THE **HEAT** IS **ON**

Species feeling the effects of climate change



## **Red Wolf**

Canis rufus

### Region:

Southeast

#### Area affected:

Coastal North Carolina

#### Climatic change:

Sea-level rise

#### Impact:

Habitat loss

#### **ABOUT THIS SPECIES**

The red wolf is the largest native canid in the southeastern United States and one of the most imperiled mammals in North America. Hunted nearly to extinction, red wolves were included on the original federal endangered species list in 1967 and rescued through an intensive captive-breeding program. Reintroduction has been challenging, however, and fewer than 45 red wolves exist in the wild today. The species faces continued threats from habitat loss, vehicle collisions and conflicts with local communities that can lead to wolf mortality, which increases the possibility of the remaining wolves hybridizing with the much more common coyote. Red wolves are primarily nocturnal and hunt alone or in small packs for rabbits, rodents and occasionally deer. Each pack consists of a breeding pair and its offspring. Wolf pairs generally mate for life and produce litters of two to eight pups each year.

#### **DESCRIPTION OF IMPACT**

Like gray wolves, red wolves are tremendously adaptable and can live in a wide range of habitat and climate conditions. They once occurred over an extensive area stretching from Texas to Florida to Pennsylvania, which would imply a greater tolerance to climate change than other species that depend on a narrower range of suitable habitat conditions. The problem for red wolves is that their current range in the wild is severely restricted. Still misunderstood by many and hemmed in by development and agriculture to the west, the tiny population is found only in a low-lying, 1.7 million-acre coastal zone in northeastern North Carolina. This area, which includes Alligator River National Wildlife Refuge and Pocosin Lakes National Wildlife Refuge, is already showing the effects of climate change-induced sea-level rise, evinced by storm surges from hurricanes, saltwater intrusion and the transition of forest habitats to marsh. Red wolves are now facing the inundation of their habitat: Within the next 150 years, 80 percent of Alligator River National Wildlife Refuge is projected to be submerged by rising seas.

#### References

Bryant, M. et al. 2012. National Wildlife Refuges and Sea-Level Rise: Lessons from the Front Lines. Defenders of Wildlife. <a href="http://www.defenders.org/sites/default/files/publications/national-wildlife-refuges-and-sea-level-rise.pdf">http://www.defenders.org/sites/default/files/publications/national-wildlife-refuges-and-sea-level-rise.pdf</a>

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