



## Red-Cockaded Woodpecker (*Picoides borealis*)



Male red-cockaded woodpecker. Males have a red-patch located on their head (photo by John Hammond)

Status: [Endangered](#)

**Description:** The red-cockaded woodpecker is about the size of the common cardinal or robin, approximately 7 inches long, with a wingspan of about 15 inches. There are black and white horizontal stripes on its back, and its cheeks and underparts are white. Its flanks are black streaked. The cap and stripe on the side of the neck and the throat are black. The male has a small red spot on each side of the black cap. After the first post fledgling molt, fledgling males have a red crown patch. Red-cockaded woodpeckers are very social birds who live in family groups which may include the male and female, their chicks, and young adult "helpers". These "helpers," typically related young from previous nesting seasons, help build cavities and care for the future chicks. Pecking a cavity in a live tree takes a long time, since the wood is very hard. The woodpeckers make their cavity nests in living pine trees and it can take up to 7 years to finish. The birds peck the bark around the entrance to get the sap (resin)

flowing around the hole. The sticky sap keeps predators like snakes away from the nest cavity. They also eat insects found under the bark and along the branches of pine trees. Females lay 2 to 4 eggs during breeding season.

**Habitat:** Red-cockaded woodpeckers need live, large older pines in which to excavate their cavities. Longleaf pines (*Pinus palustris*) are most commonly used, but other species of southern pine are also acceptable. Dense stands (stands that are primarily hardwoods, or that have a dense hardwood understory) are avoided. Foraging habitat is provided in pine and pine hardwood stands 30 years old or older with foraging preference for pine trees 10 inches or larger in diameter.

Roosting cavities are excavated in living pines, and usually in those which are infected with a fungus producing what is known as red-heart disease. Cavity tree ages range from 63 to 300 plus years for longleaf, and 62 to 200 plus years for loblolly (*Pinus taeda*) and other pines.

**Listing:** Date Listed: Oct 13, 1970 States/US Territories in which the Red-cockaded woodpecker is known to occur: Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Texas, Virginia



Map Date Oct. 2003

**Distribution and Range:** Species Distribution from known occurrences. Species may occur in similar habitats in other counties. Green counties indicate observed within 20 years. Yellow counties indicate an obscure data reference to the species in the county. Red counties indicate observed more than 20 years ago.



Observed within 20 years.



Observed more than 20 years.

**Threats:** Loss of habitat is the greatest threat to the survival of the Red-cockaded woodpecker. The longleaf pine forests used by Red-cockaded woodpeckers once covered an estimated 92 million acres across the Southeast, but only about 3 percent of that acreage remains. Mature pine forests are often converted to housing developments, agricultural fields and short-rotation timber stands that are unsuitable for red-cockaded nesting and foraging habitat. In the remaining habitat, fires are often suppressed, changing the forests' natural composition of plants. Fire in the long-leaf forest promotes the development of a grassy groundcover and pine canopy while maintaining the open conditions needed by the woodpeckers for nesting and foraging. In the absence of fire, hardwoods will encroach upon pine savannas and flatwoods, creating a dense midstory and a tree canopy that is unsuitable for the red-cockaded.

**Management and Protection:** Some of the recommendations included in the species' recovery plan are:

- Survey, monitor, and assess the status of individual populations and the species - The Service does this in North Carolina by working with state, federal, private conservation group along with landowners. Some of its partners in the recovery of the woodpecker include the U.S. Fish and Wildlife Service, U.S. Army at Fort Bragg, U.S. Army Environmental Command, North Carolina Wildlife Resources Commission, North Carolina Division of Parks and Recreation, The Nature Conservancy, Sandhills Area Land Trust and the Sandhills Ecological Institute.



**Two juvenile red-cockaded woodpeckers after they have been banded. Some red-cockaded woodpeckers some are banded shortly after birth and before they fledge. Banding helps biologists understand the red-cockaded woodpecker. (photo by Patty Matteson)**

- Implement protection and management of nesting and foraging habitat on Federal lands – the Service is working with U.S. Army at Fort Bragg and the U.S. Marine Corps at Camp Lejeune to recover its population on the military installations and lands surrounding each installation. Fort Bragg met its recovery goal for the Red-cockaded woodpecker five years earlier than anticipated.

- Encourage protection and management on private lands – The Safe Harbor Program was born in the Sandhills to address management and protection of the red-cockaded woodpecker. Pinehurst Golf course was the first private landowner to sign-up for the program in 1995. Currently in the North Carolina Sandhills there are 108 agreements with landowners participating in the Safe Harbor Program protecting over 51,028 acres. These lands are comprised of private forests, golf courses, town parks, residential areas, horse farms, school property and a private foundation. There are 59 active red-cockaded woodpecker groups located (wholly or partially) on these enrolled properties. The program is now statewide in North Carolina.

- Conduct research on habitat needs and management, population dynamics, and genetic variation. The Service is working with its partners to gather this valuable information.

- Inform and involve the public – The public needs to be involved in the protection of habitat of old-growth longleaf pine forests from destruction. The Service is also working through numerous partnerships to make this happen.

**Why Protect the Red-cockaded Woodpecker:** Extinction is a natural process. Normally, new species develop through a process known as speciation at about the same rate they go extinct. However, because of air and water pollution, over-hunting, extensive deforestation, the loss of wetlands, and other human-impacts, extinctions are now occurring at a rate that far exceeds speciation. These actions are reducing the biodiversity on Earth. The reduction of biodiversity reduces the ecological integrity of our environment. All living organisms perform a function in our environment and are dependent on the functions of other organisms. In turn, there is interconnectedness among species including us in the environment. In addition, the red-cockaded woodpecker plays a vital role in the intricate web of life of the southern pine forests. Besides being unique among North American woodpeckers, red-cockaded woodpeckers are 'primary' cavity nesters, meaning they are responsible for the construction of cavities. In the southern pine ecosystem there are many 'secondary' cavity users that benefit from the woodpeckers. Red-cockaded woodpeckers are considered a 'keystone' species because use of their cavities by these animals contributes to the species richness of the pine forest. At least 27 species of vertebrates have been documented using woodpeckers cavities, either for roosting or nesting. Species include birds, snakes, lizards, squirrels, frogs and a number of other birds such as chickadees, bluebirds, titmice, and several other woodpecker species, including the downy, hairy, and red-bellied woodpecker.

**What You Can Do to Help Protect the Red-cockaded woodpecker:**

- Educate yourself and others on woodpecker identification, biology and population trends.
- Join a conservation organization to remain updated on current conservation efforts.

If you live in a longleaf pine forest keep some pine trees that are 10 inches or more in diameter at breast height (4.5 feet): Maintain pine forests in an open, park-like condition with minimal hardwood midstory, and, if possible, use and promote prescribed burning.

**For More Information on the Red-cockaded woodpecker contact John Hammond in the Raleigh Field Office at [john\\_hammond@fws.gov](mailto:john_hammond@fws.gov) or (919) 856-4520 (ext. 28)**

