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WOODPECKERS

IN THE

SOUTHERN REGION

Recovery through management
R(red) AN C(cockaded) ENDANGERED W(woodpecker) SPECIES

RCW National Forests
Non-RCW National Forests

Cover: First flight. A juvenile male launches himself from the cavity. (Note the color bands on the RCW's right leg. Color bands help biologists monitor populations.) © Photo by Derrick Hamrick
The red-cockaded woodpecker (RCW) is an endangered bird that was once common throughout the pinelands of the South. The settling and clearing of the Southeast undoubtedly resulted in the loss of much RCW habitat. Habitat loss probably peaked during the massive timber harvest that swept this region in the early part of this century. Practically all old, mature pines, on which the RCW depends for cavity trees, were cut. By 1970, RCWs had declined to such low numbers that it was included on the Federal Endangered Species list, where it remains today.

Southern national forests currently host about 2,000 active RCW clusters (a small stand of trees containing the RCW's cavity trees). This represents more than half of all known RCWs in existence. Researchers, Forest Service and others, have studied the species and its habitat very carefully for several years. With a more fully developed understanding of the birds' social behaviors, foraging needs, and the biological ecosystems that support the RCW, the Forest Service is developing a strategic plan for the protection and recovery of the red-cockaded woodpecker on national forest lands in the South.
A PLAN TO INCREASE POPULATIONS

The Forest Service's plan, when implemented, will increase the numbers of RCW on southern national forests. To reach this goal, Forest Service managers must continually monitor the RCW and manage its habitat to ensure a perpetual supply of suitable nesting and foraging trees. One way to provide adequate habitat is to manage relatively large blocks (10,000 acres or more) of land in a way that will provide the RCW with all its needs.

Because the RCW evolved in open, piney woods that lightning fires periodically burned clear of underbrush, prescribed fire is now used to maintain low ground vegetation. In fact, fire is a good management tool for maintaining suitable RCW habitat over most of the bird's range. The highly flammable cavity trees are carefully protected during a prescribed fire. Brush is
removed from the base of cavity trees and the fire is then set so that it burns away from the tree.

In clusters where competing wildlife species are taking over and enlarging cavities, metal restrictor plates are installed over cavity en-

trances to permanently reduce the hole size. This keeps out larger competitors, such as fox squirrels or pileated woodpeckers, leaving more cavities available for RCWs.

Small populations of RCWs, widely scattered over the forest, face a number of challenges that threaten their survival. As populations get larger, with groups (RCW family units) spaced more closely, their chances of long-term survival get better. For this reason, smaller populations need more protection and more intensive management. This is similar to how a hospital treats patients based on the seriousness of their illness or injury: emergency, intensive care, general care, and outpatient services.

The open park-like setting the RCW prefers can be economically maintained with prescribed fire.
The moving of juvenile RCWs to known single-bird groups (translocation) to create breeding pairs, produce young, and subsequently increase the population, is another management activity that will speed up recovery of this species.

Where trees old enough to become natural cavity trees are unavailable, artificial (man-made) cavities can be installed. These artificial cavities can be used by the RCW until trees get old enough to become natural cavity trees.

Combining these management activities — prescribed burning, growing older trees, and forest management that mimics natural disturbances — on large blocks of land is an attempt to restore, to the degree practicable, the fire-maintained, pine ecosystems in which the RCW evolved.

A variety of both plants and animals benefit from ecosystem management related to the RCW.

Top: Harper's beauty
Center: Northern Bobwhite
Bottom: Panhandle Spiderlily
The RCW has a social system that centers around a family unit called a "group." A group usually includes one pair of breeding birds, the current year's offspring, and could include several male adults called "helpers." A group may have two to nine birds but never more than one breeding pair. Young males from previous years may become helpers, assisting the breeding pair by incubating eggs and feeding the young. Young females do not remain in the group, but leave after several months, apparently to find a mate. The Forest Service sometimes help the young RCW in this search by trapping them and relocating them at a cluster known to contain a single bird. Frequently the two birds pair and raise young. These moves are called translocations.
A single group uses 1 to more than 10 cavity trees, termed a "cluster," for nesting and roosting. The cavities in these pine trees may range anywhere from newly started to completely finished. Furthermore, these cavities may be active — being used by an RCW at this time—or it may be inactive.

RCWs may abandon a cavity if brushy undergrowth reaches cavity height. Such undergrowth blocks the entrance to RCW cavities, and attracts other cavity dwelling animals that can force the RCW out and enlarge the cavity holes to suit their own needs. On the southern national forests, such cavity competing animals include all larger species of woodpeckers; many songbird species, including bluebirds; and some mammals, including the southern flying squirrel. Some snakes, tree frogs, and lizards also make use of RCW cavities.

In southern pine forests, cavities are often in short supply, leading to competition for them. The southern Fox Squirrel is one of many species that competes for RCW cavities.
Only the RCW regularly makes its cavity in a living southern pine tree. Most cavity trees are more than 80 years old and many are infected with redheart, a wood-decaying fungus. Making a cavity can take several years, and the excavation process is easier and faster if the tree is infected with redheart. RCWs show a strong preference for trees with this fungus. Few southern pines get redheart before the age of 80 to 90 years.

Active cavity trees are often coated with resin making them look like candles. They are visible for long distances in open forests.

Once a cavity is complete, the RCW creates "pitch wells" near the entrance causing a flow of pine resin that coats the trunk of the tree. Resin coating prevents many predators such as rat snakes from reaching the cavity entrance and eating any eggs or young that may be in the nest. The white resin covering the bark makes the active cavity trees look like large candles. This distinctive feature makes cavity trees easier to locate in a forest.

Because most trees were cut on lands throughout the Southeast in the early part of this century, few trees old enough to become cavity trees exist at this time. Researchers have perfected artificial cavities that are frequently used to provide nesting and roosting cavities in the young
Installing artificial cavities requires patience, skill, and a lot of safety equipment. Forest. Use of these cavities for the next 20-40 years will be essential to the survival and recovery of the RCW.

WHEN DO RCWs NEST?

RCWs nest between March and July. Females usually lay two to four eggs in the breeding male's roosting cavity. Members of the group take turns sitting on the eggs during the day while the breeding male sits on the eggs at night. The eggs hatch in 10-12 days. Baby birds are very vocal, especially during feeding time. Quiet listening during the nesting season will allow you to hear the nestlings from the ground as they call within the nest tree.

WHAT DO RCWs EAT?

RCWs spend a great deal of time scaling trunks and branches of living pine trees in search of insects, insect eggs, and larvae. Each group establishes a foraging area and defends this territory against other RCWs. Territory size depends on the quality of habitat surrounding the cluster. Birds might frequent a particularly productive insect hot spot such as a dying, lightning-struck pine. RCWs also occasionally feed in areas where hardwood trees are found.
A FEW BIRDING TIPS

Many forest visitors wish to see this unusual woodpecker in its natural habitat. The best time to see RCWs is at sunrise or sunset near their cavity trees. During the nesting season (March through July) they may be seen during the day if they are feeding young. Please use caution during this period to avoid disturbing the birds! Contact any of the following Forest Service offices for additional information about these interesting birds and where they may be seen:

National Forests in Alabama
2946 Chestnut
Montgomery, AL 36107
205-832-4470

Chattahoochee/Oconee National Forests
508 Oak Street NW,
Gainesville, GA 30501
404-536-0541

Cherokee National Forest
2800 N. Ocoee St. NE
Cleveland, TN 37320
615-476-9700

Daniel Boone National Forest
100 Vaught Rd
Winchester, KY 40391
606-745-3100

National Forests in Florida
Woodcrest Office Park
325 John Knox Rd., Suite F-100
Tallahassee, FL 32303
904-942-9300

Francis Marion/Sumter National Forests
1835 Assembly St., Rm. 333
Columbia, SC 29201
803-765-5222

(Continued on back cover)
Kisatchie National Forest
2500 Shreveport Hwy.,
P.O. Box 5500
Pineville, LA 71361
318-473-7160

National Forests in Mississippi
100 W. Capitol St., Suite 1141,
Jackson, MS 39269
601-965-4391

National Forests in North Carolina
100 Post and Otis Sts.,
P.O. Box 2750,
Asheville, NC 28802
704-257-4200

Ouachita National Forest
P.O. Box 1270,
Hot Springs, AR 71902
501-321-5202

National Forests in Texas,
Homer Garrison Federal Bldg.,
701 N. First St.,
Lufkin, TX 75901
409-639-8501

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Forestry Report R8-FR 36
July 1993