



**Common Name:** RED-COCKADED WOODPECKER

**Scientific Name:** *Picoides borealis* Vieillot

**Other Commonly Used Names:** RCW, red-cockeyed woodpecker, red-cockadaded woodpecker,

**Previously Used Names:** *Picus borealis*

**Family:** Picidae

**Rarity Ranks:** G3/S2

**State Legal Status:** Endangered

**Federal Legal Status:** Endangered

**Federal Wetland Status:** N/A

**Description:** The red-cockaded woodpecker has a black back with broken white horizontal stripes ("ladder-back" pattern). The head is black except for a large white cheek patch on each side. The chest is dull white with small black spots, and the total length is about 20 cm (8 in). Adult males have a tiny patch of red feathers (cockade) behind the eye, but the cockade is not displayed unless the bird is excited. The juvenile male has a red spot on top of his head. With a little practice, the red-cockaded woodpecker can be easily distinguished from the seven more common species of woodpeckers found in Georgia.

**Similar Species:** Both the downy woodpecker (*Picoides pubescens*) and hairy woodpecker (*Picoides villosus*) are similar to the red-cockaded woodpecker in size and coloration, but these two species have a large vertical white patch on their backs rather than the black and white horizontal stripes of the red-cockaded. The downy and hairy woodpeckers also have broad black stripes on their face from the eye to the back of the head. Male downy and hairy woodpeckers have a red patch on the back of their heads. Juvenile male downy and hairy woodpeckers have a red patch that extends from the forehead to the front portion of the crown. Juvenile red-cockaded woodpeckers also have a red patch on the forehead, but it is smaller and does not extend as far back as the crown. The adult yellow-bellied sapsucker (*Sphyrapicus varius*) also looks similar to the red-cockaded with alternating dark and light horizontal barring on the back, but this barring tends to be less distinct than that of the red-cockaded and often the lighter bars are brownish in color. Adult sapsuckers have a thick dark line extending from the eye to the back of the head and then down to the shoulder. The adult female sapsucker has a red cap and the male has a red cap and red throat patch.

**Habitat:** This small woodpecker needs large expanses of mature, open pine forest, particularly longleaf, slash, or loblolly pine. Nest and roost cavities are excavated only in old living pines, and the process may take several years to complete. Trees selected for cavities are usually infected with red heart fungus, which softens the heartwood, making excavation easier. The habitat that probably supported the largest populations historically was the fire-maintained longleaf pine forest of the Coastal Plain.

**Diet:** Ants, wood roaches, wood-boring beetles, and other insects; spiders, millipedes, and other invertebrates found on and within pine bark; occasionally corn earworms, fruits and seeds.

**Life History:** Unlike other woodpeckers that excavate cavities almost entirely in dead wood, red-cockaded woodpeckers make their roosting and nesting cavities almost exclusively in living pine trees 60-80 years old and older. Cavity trees are usually infected with red-heart fungus, which softens the heartwood and facilitates vertical chamber excavation. Still, it can take several years for a bird to complete a cavity because the entrance tunnel must extend through living sapwood. The birds also excavate characteristic resin wells around the cavity entrance. These wells drip sticky resin onto the surface of the tree, which helps exclude tree-climbing rat snakes. These snakes are major predators of tree cavity inhabitants, especially nesting birds. Many other species of wildlife also make use of red-cockaded woodpecker cavities. Cavity klepto-parasitism, in which red-cockaded woodpecker cavities are usurped by other species, is a significant problem in some populations. Other woodpeckers such as red-headed (*Melanerpes erythrocephalus*) and red-bellied (*Melanerpes carolinus*), as well as songbirds and flying squirrels are the chief culprits. Additionally, pileated woodpeckers (*Dryocopus pileatus*) often enlarge red-cockaded woodpecker cavities, making them suitable for species such as raccoons, wood ducks, and screech owls, but rendering them useless for red-cockaded woodpeckers. Red-cockaded woodpeckers are cooperative breeders. They exist in family groups that typically consist of an adult breeding pair and 1-3 helpers that are male offspring from previous years. The group roosts in a cluster of cavity trees and forages together up to 0.8 km (0.5 mi) from the cluster. Most food is found beneath pine bark. In the spring, the breeding female lays 2-5 eggs in the tree cavity of the breeding male. Incubation takes 10-11 days and both adults and helpers participate. This is one of the shortest incubation periods documented for any woodpecker species. All members of the group assist in caring for the young, which fledge in 26-29 days, but often remain partially dependent on the parents for several more months. Juvenile females usually disperse from the cluster site during their first fall or winter to look for single males with territories. Some of the male offspring remain as helpers, and some disperse in an attempt to establish new territories. Each family group requires 24-240 ha (60-600 acres) of habitat depending on the quality.

**Survey Recommendations:** Cavity tree occupation can be determined by the freshness of resin wells and by observing the presence of roosting birds in late afternoon or early morning. Conduct counts of known family groups at active nest sites from April-May. Nesting success, survivorship, and productivity can be monitored at some sites as an index to overall population health. Peeper cameras can be used to view nest contents and determine the number of eggs or young present.

**Range:** Historically this bird was common in mature pine forests throughout the southeastern U.S. from eastern Texas and Oklahoma to the Atlantic Coast and north to Missouri, Kentucky, and Maryland. The current range is much reduced and fragmented due to loss of habitat. The northern and western edges of its range have contracted and today the largest populations are found mostly on large expanses of public lands where management objectives have not included maximum timber production. Historically, this species probably occurred throughout Georgia where suitable open, mature pine forests were found, except in the Blue Ridge Mountains. Georgia has five remaining population centers that comprise the vast majority the state's red-cockaded woodpecker population including Fort Benning, Fort Stewart, Okefenokee National Wildlife Refuge, Piedmont National Wildlife Refuge/Brender Experimental Forest/Oconee National Forest, and plantations in the Red Hills region of Thomas and Grady counties where red-cockaded woodpecker habitat maintenance had been incidental to land management for quail hunting and aesthetics. Translocation efforts have re-established several family groups on Joseph Jones Ecological Research Center and Silver Lake WMA. A few scattered groups may remain elsewhere on private land.

**Threats:** Destruction and fragmentation of mature, open pine forest habitat has been the greatest threat to the red-cockaded woodpecker. The species has been virtually eliminated from most private land by incompatible management practices, such as clearing, agriculture, urbanization and short-rotation pine silviculture. The few scattered red-cockaded woodpecker groups remaining on private lands, exclusive of the Red Hills region, are continuing to disappear because of habitat problems and the detrimental demographic effects of isolation. Juveniles dispersing from isolated clusters very rarely encounter suitable habitat, much less others of their kind; and once a breeding female dies, there is little chance of a replacement immigrating to the group.

**Georgia Conservation Status:** Ft. Stewart, Ft. Benning, Fort Gordon, Okefenokee NWR, Piedmont NWR, Oconee NF, Silver Lake WMA, Joseph Jones Ecological Research Center, the Red Hills region, Moody Forest NA.

**Conservation and Management Recommendations:** Many red-cockaded woodpecker populations on public land are being intensively managed in an attempt to reach population recovery goals. Use of artificial cavities has proven to be a very valuable management technique for expanding populations. Translocation is also being used. Management agreements and habitat conservation plans (HCPs) are being used to conserve red-cockaded woodpeckers on private lands. Georgia has a statewide HCP for small, demographically isolated groups of red-cockaded woodpecker on private land. After mitigation through formation of a replacement red-cockaded woodpecker group at a site where the birds can contribute to a recovery or support population that should remain viable permanently, landowners will be permitted to "incidentally take" isolated red-cockaded woodpeckers that are sure to disappear shortly anyway. This benefits landowners by removing costly recommended management restrictions intended to avoid violation of the Endangered Species Act, and it benefits the overall red-cockaded woodpecker population by building viable populations. An attempt is made to translocate all impacted birds, so actual "take" should be very small or non-existent. The HCP also includes provisions for "safe harbor" agreements. Participating landowners who agree to maintain suitable habitat are protected from additional management responsibilities should the red-cockaded woodpecker population on their land increase above the baseline level. Over the last several years the number of birds on public lands had been increasing due to intensive management efforts. In 1998 there were approximately 665 family groups. By 2002 the number had grown to 794 groups and within a few years had risen to an estimated 895 groups, a result of continuing growth in most managed populations. It appears numbers may have stabilized recently with about 872 family groups found in 2010.

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**Date Compiled or Updated:**

J. Ozier-Original Account: 1999

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M. Camp, October 2010: updated status and ranks, added pictures

