



Red-Cockaded Woodpeckers¹

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Description

The red-cockaded woodpecker (*Picoides borealis*) is approximately seven inches long. Their backs and tops of their heads are black and there are small white spots arranged horizontally across their backs. Black dots speckle the sides of their white chests. Their cheeks are marked by two white patches and males have a red streak (the cockade) above the cheek, which becomes visible when they are agitated.

Range/Habitat

The southeastern United States is home to the red-cockaded woodpecker. Most populations reside in national forests, wildlife refuges, state lands, and military bases. These birds inhabit open old-growth pine forests, preferably longleaf pine (*Pinus palustris*). Red-cockaded woodpeckers need living pines that are at least 85 years old and infected by heartrot. Heartrot is a disease that causes decay in the heartwood of pines. This deterioration in the heartwood makes it easier for red-cockaded to excavate cavities in trees.

Food

Insects and spiders are the main meals for red-cockaded woodpeckers. Males explore the limbs and upper trunks of pine trees for food, while females canvass the lower branches and trunks for their meals. This method of feeding helps to eliminate competition for food sources between males and females.

Reproduction

Red-cockaded woodpeckers live in clans. Clans consist of one female and two to five males. Only one male in the clan breeds with the female. The other males are offspring from previous years and have remained with their parents to assist with excavating cavities and caring for nestlings. These extra males are referred to as "helpers".

The clan's breeding pair nest once a year, between April and July, and produce a clutch of two to four eggs. The female lays the eggs in the breeding male's roost cavity. Helpers aid with the incubation of the eggs during the day, however, the breeding male incubates the eggs overnight. Within 10 to 12 days the eggs hatch. Helpers also assist the parents with feeding the nestlings. After approximately 26

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days, the nestlings will leave the nest. Female offspring leave the clan, after their first winter, to find a new clan to breed with. Dispersal of the females helps facilitate gene flow and minimize inbreeding. When the breeding male dies, one of the helpers inherits the position of breeding male.

Roosting

Each individual red-cockaded woodpecker has a cavity in which it roosts. These cavities are excavated in old-growth living pine trees. The clan's cavity trees are located in "clusters". Clusters are also referred to as colonies; however, the term colony misleads by perpetuating a false sense of the red-cockaded's abundance--when, in reality, there are only two to six per colony. Clusters may consist of one or two cavity trees and can contain up to twelve. Only one clan occupies a cluster of cavity trees. Cavities are time-consuming to construct, and so there are usually some cavities that are in the construction stage. Red-cockaded, without a cavity tree to roost in, will roost in crevices between branches of live pines or use a cavity in a dead pine until they finish excavating a cavity in a live pine.

These birds must defend the cavities in their clusters from competitors. Although the red-cockaded woodpecker is usually the only species that excavates cavities in live pines, there are approximately 19 other species that will take up residence in these cavities. Major competitors include other types of woodpeckers, bluebirds, and flying squirrels.

Causes of Declining Populations

The main reason the red-cockaded woodpecker has been forced to the brink of extinction is habitat loss. This loss of habitat can be attributed to clearcutting for agriculture and logging, plus the unchecked growth of the hardwood understory. Historically, fires swept through pine forests killing this understory. Today, fire is repressed in these forests and the hardwood understory is able to grow and create shade, preventing young pines from growing.

For the red-cockaded woodpecker, loss of habitat means fewer trees suitable for excavating and fewer

trees in which to forage for food. These factors make it difficult for a healthy population of red-cockaded to be sustained. Loss of old-growth pine forests has led to fragmentation of populations. This happens when remaining pine forests become habitat islands surrounded by housing, parking lots, crops, and other invasive human developments.

Fragmented habitats can only support a small number of creatures and isolates populations from one another. This leaves fragmented populations vulnerable to extinction from inbreeding, predation, and disease.

Other factors contributing to the decline are the use of pesticides, nest predation, and competition for cavities by other species.

Solutions

Biologists dealing with the problems facing red-cockaded have suggested these to help curtail this species' declining population.

- **Selective Cutting:** Instead of clearcutting land for agriculture or logging purposes, pines should be selectively cut.
- **Wildlife Habitat Corridors:** Fragmented populations should be linked with wildlife habitat corridors.
- **Managed Burning:** Hardwood understories in pine forests should be controlled with managed burning.
- **Artificial Cavities/Starter Holes:** In forests where there are not enough old-growth trees for cavity excavation, artificial cavities should be used. Starter holes for cavities should be made in standing pines.
- **Safeguarded Cutting of Hardwood for Firewood:** Hardwood understories may be cut for firewood by the citizens under close supervision. This is a relatively inexpensive way to help keep the pine forests healthy. This cutting ought not take place during nesting season and cavity trees should be marked off limits.

- **Movement of Juvenile Females:** Clans lacking a female can be greatly helped when biologists transfer a female into the clan. The female should be taken and transported during the time period when she would be leaving her birth clan.

Legal Aspects

The red-cockaded woodpecker is protected by the **Endangered Species Act**. This protection makes it illegal to possess, transport, molest, harass, kill, or sell red-cockaded woodpeckers or their parts such as feathers, nests or eggs except as authorized by specific permit from the Florida Game and Fresh Water Fish Commission and U.S. Fish and Wildlife Service.