THE RED-COCKADED WOODPECKER IN HALE AND BIBB COUNTIES, ALABAMA

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The Red-cockaded Woodpecker (<u>Dendrocopos borealis</u>) is a resident of mature southern pine forests and is considered an endangered species because of its declining populations (U.S.D.I. 1968, Jackson 1971). The major factor contributing to this species' decline has been a loss of habitat, which has been attributed to modern forestry practices. Imhof (1976) includes records of this species from several counties in central Alabama but none from Hale or Bibb Counties. We here document the occurence and will comment on the future of Red-cockaded Woodpeckers in these counties.

Methods

In early 1976 Jackson, through the Red-cockaded Woodpecker Endangered Species Recovery Team of the U.S. Department of the Interior, initiated a survey of Redcockaded Woodpecker populations. Federal and state agencies, industry, conservation groups and private individuals have cooperated by submitting reports of known colonies of this bird. Personnel from Talladega National Forest in Alabama submitted reports of 88 colonies located in Hale, Bibb, Perry, Chilton, Talladega, Cleburne and Clay Counties. Twenty-three of these colonies were reported in Hale County and 38 in Bibb County (Fig. 1). On September 17, 18 and 19, 1976, we searched for colonies reported in Hale and Bibb Counties in order to evaluate colony status and the general condition of the birds' habitat. In the time available, we were able to search for 20 of the colonies (13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 31, 32, 33, 34, 35, 36, 43, 56, 80; see Fig. 1). We were successful in locating all of these colonies except numbers 13, 14, 23 and 36. In searching for colonies we began at an approximate colony location that was indicated on a map by the Forest Service. If a colony was not immediately located, we each went in a different direction and systematically searched the area. Our efforts were facilitated by using walkie-talkies to maintain contact with one another. Though we spent approximately four hours searching for colonies 13 and 14 and an hour each searching for colonies 23 and 36, our failure to locate these colonies does not necessarily indicate that they no longer exist. Indeed, we observed one Red-cockaded Woodpecker near the mapped location of colony 14.

Status of Reported Colonies

We observed one Red-cockaded Woodpecker each at colonies 14, 16, 20 and 31, and two Red-cockadeds at colony 15. We judged colonies 19, 22, 33, 35, 43 and 80 to also be active on the basis of the presence of gum flowing from freshly worked (red-colored) resin wells; recent scaling of bark from the cavity trees, giving them a red, smooth appearance; and scaling of nearby trees, indicating recent foraging activity of Red-cockaded Woodpeckers. As a result of a lack of these features, we concluded that colonies 21, 34 and 56 have been abandoned. In addition, we feel that colony pairs 16-17, 19-20 and 31-32 each represent only one colony. In each case, the cavity trees of reported colonies were less than about 300 meters apart, one or both of these members of a pair was comprised of only one cavity tree, and the intervening habitat was not such that it would likely constitute a barrier that would ecologically separate close colonies. At colony 31-32, the Red-cockaded Woodpecker we observed flew from the cavity tree at reported colony 31 toward and apparently beyond reported colony 32. The cavity tree at reported colony 17 contained only a cavity start which did not appear fresh. Thus, for 17 reported colonies that we were able to evaluate, there were probably 11 (64.7% of those reported) that were active.

Status of Red-cockaded Woodpecker Habitat

We were impressed by the abundance of mature loblolly pines (<u>Pinus</u> <u>taeda</u>) in the Oakmulgee Game Management Area of the Talladega National Forest; we were also impressed by the lack of Red-cockaded Woodpeckers in these pines. Of the 16 reported colonies that we located, only 3 were in loblolly pines (19, 31, 56), and the cavity trees in the two active colonies (19, 31) were in open areas adjacent to roads. Most of the old-growth loblolly pine areas that we saw included a very dense hardwood understory - a habitat characteristic which Redcockaded Woodpeckers tend to avoid.

While 13 of 16 colonies were in longleaf pines (<u>Pinus palustris</u>), we were not impressed by an abundance of old-growth longleaf pine habitat. Most of the longleaf areas that we visited included only a few trees that could be considered old enough to be suitable for cavity excavation by Red-cockaded Woodpeckers. The understory of colonies in longleaf pine was open and included grasses, bracken ferns (<u>Pteridium aquilinum</u>), a few small oaks (<u>Quercus sp.</u>), gallberry (<u>Ilex glabra</u>), and persimmon (<u>Diospyros virginiana</u>). As would be expected by the characteristics of these pine species, the loblollies were more common in low areas and the longleaf pines were most common on the ridges. Most of the colonies were located on ridges.

Short rotations, extensive clear-cutting and conversion of forest lands to non-forest uses on private lands make the existence of colonies outside of the Talladega National Forest improbable. The concentration of Red-cockaded Woodpecker colonies on the Talladega National Forest represents an important segment of this species' gene pool, and we feel that management to benefit this population is very important. Such management should include: (1) a long-term goal of increasing the acreage of old-growth (80 years +) longleaf pine; (2) continued management of pines on rotations of 80 years or more; (3) increased use of prescribed burning in loblolly areas in order to control hardwoods; (4) selective removal of hardwoods which crowd the base of cavity trees and/or threaten to obscure cavity entrances; and (5) tailoring harvests so as not to isolate colonies from adequate foraging habitat or from trees which may be needed as replacement cavity trees.

Finally, in order to insure a future for the Red-cockaded Woodpecker, the major populations of the species should be reunited. This does not mean that all forest lands need to be managed for pines on long-term rotations, but that we plan corridors between major Red-cockaded Woodpecker population centers and manage for the species in these areas rather than trying to manage isolated small populations. Jackson (1976) has suggested that interstate highway rights-of-way might serve as a foundation for such corridors and that forest industry, private individuals, conservation groups and federal and state agencies might best contribute to the species' future by protecting and managing colonies along the corridors and by helping to complete gaps in the corridor system. Interstates 59 and 65 could serve as major corridors linking this Talladega National Forest population of Red-cockaded Woodpeckers to populations in south Alabama and Mississippi.

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