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Extra-hole roosting and changes in hole use by two juvenile Red-cockaded Woodpeckers.—Red-cockaded Woodpeckers (*Picoides borealis*) typically roost in cavities excavated in living pines, but are known to roost elsewhere (Ligon 1970, Auk 87: 255-278; Baker 1971, pp. 44-59 in R. L. Thompson, (ed.). The ecology and management of the Red-cockaded Woodpecker, U.S. Dept. Int., Bur. Sport Fish. Wildl. and Tall Timbers Res. Sta., Tallahassee, Fl.; Hooper et al. 1979, U.S. Forest Serv., Genl. Rept. SA-GR 9, 8 pp.). During a study of Red-cockaded Woodpeckers conducted in summer, 1979, near the southern limit of the species' range on the C. M. Webb Wildlife Management Area, Charlotte County, Florida, we observed 2 juvenile woodpeckers, members of the same 4-bird clan, changing roost cavities or roosting outside their usual cavities on 9 separate occasions (20 July-14 August) as suitable cavities went unused. Both birds had been captured and individually color marked at least 2 weeks prior to these observations. Three, possibly more, clans of Redcockaded Woodpeckers occupied adjoining territories.

Between 20 July and 7 August, a juvenile male (A) of the clan was observed 5 times roosting in a crotch near the top of a large slash pine (*Pinus elliottii*) approximately 350 m NW of his usual cavity tree. His body was inclined vertically, close to the trunk with the head held forward. Roosting behavior on days between the 5 observations is not known. During 4 of the 5 observations, this roost cavity was unoccupied, as best we could determine. However, during the fifth observation (7 August), an unmarked "intruder" Red-cockaded Woodpecker was found roosting in the cavity. At sunrise, 14 August, the intruder was still using the cavity, but that evening, the second juvenile male (B) of the clan roosted in the cavity, apparently without encountering the intruder. On 13 and 14 August, juvenile male (A) used neither the usual cavity nor the exposed roost site and was not seen until the following morning when he was discovered working at juvenile (B)'s original roost cavity. On 16 August he began roosting in that hole.

Juvenile (B)'s roost cavity had been taken over by a Red-bellied Woodpecker (*Melanerpes carolinus*) on 2 August, and juvenile (B) roosted that evening at an unknown site. The following day the Red-bellied was captured and moved 10 km to the NE. That evening juvenile (B) inspected his cavity, but again roosted at an unknown site. Our next observation, 4 days later, found juvenile (B) roosting in the crotch of a bifurcated trunk near the top of another large slash pine. His posture was the same as described for (A). One week later juvenile (B) usurped the cavity of juvenile (A) (as described above).

Both extra-hole roosting sites were very similar and resembled the site described by Baker (1971). There is apparently a degree of tenacity associated with such sites. Though cavity roosting is, no doubt, important for avoiding nocturnal predators, changes of roost cavities and temporary use of extra-hole sites suggests that Red-cockadeds are not dependent on a specific cavity as a roosting site and changes in sites, at least among juveniles, may be a common occurrence. This study is the result of funds provided to the Florida Game and Fresh Water Fish Commission by the Florida Department of Transportation and the Federal Highway Administration.—BARBARA A. HARRIS AND ANN E. JERAULD, Florida Game and Fresh Water Fish Commission, Wildlife Research Laboratory, 4005 South Main Street, Gainesville, Florida 32601.