

An Unusual Red-bellied Woodpecker Nest

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On 18 April 1986, we discovered an active Red-bellied Woodpecker (Melanerpes carolinus) nest in a large southern red oak (Quercus falcata) in the corner of a 1 ha field adjacent to Mississippi highway 12 in Starkville, Oktibbeha County, Mississippi. What was unusual about the nest was that it was in a horizontal limb and the cavity opened almost directly downward. The limb was dead, yet retained most of its bark, characteristics typical of Red-bellied Woodpecker nest limbs (Reller 1972, Jackson 1976, Kilham 1977). We climbed to the nest which was 5.6 m above ground and 3.8 m from the trunk. The diameter of the limb was 29 cm at the cavity entrance. The entrance opening was 5.2 X 5.5 cm. The cavity extended distally along the bottom of the limb. Cavity dimensions are similar to those reported by Bent (1939), Jackson (1976), and others. Of 47 Red-bellied Woodpecker nests located in east Mississippi in the past 15 months (most found by Ingold), only two had cavity entrances that were oriented at an angle of more than 45 degrees downward, and neither of these faced directly downward.

Although the cavity was nearly horizontal, there was a slight "lip" such that eggs or small young could not easily fall out. The nest contained three young of approximately 21 days of age. We banded all three, and all fledged within six days.

Conner (1975) suggests that a woodpecker nest opening that is oriented moderately downward offers protection from rain and aids in nest defense. However, he also suggests that nests with a greater downward orientation could require more energy to excavate and be more difficult to enter or to defend. Most woodpecker nests, including ones that angle moderately downward, can be entered by adult birds that simply land at the lower lip of the cavity entrance. In the case of this nest, the adults had to land on the upper surface of the limb and then hitch around to the underside in order to enter.

Short (1979) notes that the smaller Red-crowned Woodpecker (Melanerpes rubricapillus) of Middle and South America often

excavates its cavities on the underside of small branches and suggests that such a site may be less attractive to cavity competitors because of its relative inaccessibility.

Literature Cited

- Bent, A.C. 1939. Life histories of North American woodpeckers. U.S. Natl. Mus. Bull. 174.
- Conner, R.N. 1975. Orientation of entrances to woodpecker nest cavities. *Auk* 92:371-374.
- Jackson, J.A. 1976. A comparison of some aspects of the breeding ecology of Red-headed and Red-bellied woodpeckers in Kansas. *Condor* 78:67-76.
- Kilham, L. 1977. Nest-site differences between Red-headed and Red-bellied woodpeckers in South Carolina. *Wilson Bull.* 89:164-165.
- Reller, A.W. 1972. Aspects of the behavioral ecology of Red-headed and Red-bellied woodpeckers. *Am. Midl. Nat.* 88:270-290.
- Short, L.L. 1979. Burdens of the picid hole-nesting habit. *Wilson Bull.* 91:16-28.