Nesting of the Winter Wren (*Troglodytes hiemalis*) in the Black Mountains of North Carolina

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On 19 June 2010, the authors visited Balsam Gap in the Black Mountains of North Carolina. About 17:00 EDT, while walking down the forested, southwestern slope of Bearwallow Stand Ridge between the Mountains-to-Sea hiking trail and the Blue Ridge Parkway, just within Buncombe County, we saw a Winter Wren (*Troglodytes hiemalis*) flush suddenly about a meter ahead of us and quickly disappear in the undergrowth. Shortly afterward, Mays found the well-concealed, dome-shaped nest from which the bird had evidently flown. The nest was placed 0.9 m from the ground amongst the southwest-facing upturned roots of a large yellow birch (*Betula alleghaniensis*) that appeared to have fallen several years earlier. It was tucked in a cavity formed by large, divergent roots at the base of the fallen tree and was partially sheltered from above by several strips of loose bark and clumps of overhanging soil, moss, and debris adhering to other roots and rootlets. Growing on the wood just below the base of the nest was a small polypore fungus, tentatively identified as *Piptoporus betulinus*. The exterior of the nest was composed entirely of green mosses and red spruce twigs, with perhaps a few Fraser fir twigs intermixed. Its outer dimensions were estimated as follows: height 12-14 cm, width 11-13 cm.

Mays carefully inspected the nest proper and found that it contained six white eggs. To see the eggs and count them, it was necessary to very slightly enlarge the small entrance hole of the nest with one finger and then use a flashlight to brighten the interior. It was still not possible, however, to tell if the eggs might have had any pale speckling on them. Upon touching the eggs, Mays could tell that they were warm, which seemed to indicate that the female had indeed been incubating. The cup was lined extensively with a mixture of soft, grayish down and body contour feathers. At least one contour feather near the entrance was about 3 cm in length. The distinctive and familiar coloration pattern of rufous, black, and white markings on this latter feather made it instantly recognizable as that of a Ruffed Grouse (*Bonasa umbellus*).

After Mays inspected the contents of the nest, Neas photographed it (Figs. 1, 2). However, because the eggs were resting just below the rim of the entrance hole and the angles from which he could hold the camera were greatly limited, the eggs could not be seen in the resulting photographs. Less

than five minutes after locating, examining, and then photographing the nest, the authors proceeded down the slope.

The nest site was located in an old-growth spruce-fir-northern hardwood forest at an elevation of approximately 1650 m. Dominant trees in the immediate vicinity were large red spruces (*Picea rubens*) and yellow birches, and there were also a few Fraser firs (*Abies fraseri*) standing nearby. The understory at the site was relatively open, but there were several moss-covered fallen trees, tangles of fallen branches, and large boulders lying about on the forest floor. Catawba rhododendron (*Rhododendron catawbiense*), dense patches of intermediate wood ferns (*Dryopteris intermedia*), and a few hobblebushes (*Viburnum lantanoides*) surrounded the site.

This article places on record what appears to be one of only eight active Winter

Figure 1. The Winter Wren nest with six eggs found on 19 June 2010 in the spruce-fir northern hardwood forest at Balsam Gap in the Black Mountains of North Carolina. This nest was placed in typical Winter Wren fashion in the upturned roots of a fallen yellow birch. Photograph by Aubrey O. Neas, Jr.

Figure 2. Another view of the Winter Wren nest found on 19 June 2010, showing more of the root wad surrounding it and the polyporus fungus growing on the wood. Photograph by Aubrey O. Neas, Jr.

Wren nests found in the southern Appalachians (Mays 2015). It was the first nest observed in this southernmost portion of the species' breeding range in eastern North America since June 1933.

Literature Cited

Mays, R. S. 2015. A review of Winter Wren (*Troglodytes hiemalis*) breeding records from the Southern Appalachians. Chat 79:109-115.