

Red-breasted Nuthatch and Golden-crowned Kinglet: The First Nests for South Carolina and Other Chattooga Records

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Introduction

The Chattooga Recreation Area (referred to as CRA for purposes of this article), located adjacent to the Walhalla National Fish Hatchery (780 m) within Sumter National Forest, Oconee Co., South Carolina, has long been noted as a unique natural area within the state. The picnic area in particular, situated along the East Fork of the Chattooga River, contains an old-growth stand of White Pine (*Pinus strobus*) and Canada Hemlock (*Tsuga canadensis*) with state records for both species as well as an impressive understory of Mountain Laurel (*Kalmia latifolia*) and Great Laurel (*Rhododendron maximum*) (Gaddy 2000). Nesting birds at CRA not found outside of the northwestern corner of the state include Black-throated Blue Warbler (*Dendroica caerulescens*) and Dark-eyed Junco (*Junco hyemalis*). Breeding evidence of two other species of northern affinities, Red-breasted Nuthatch (*Sitta canadensis*) and Golden-crowned Kinglet (*Regulus satrapa*) has previously been documented at this location (Post and Gauthreaux 1989, Oberle and Forsythe 1995). However, nest records of these two species have not been documented prior to this study. The summer occurrence of two other northern species on the South Carolina side of the Chattooga River, Brown Creeper (*Certhia americana*) and Winter Wren (*Troglodytes troglodytes*) has not been previously recorded. Only a few summer records of the Blackburnian Warbler (*Dendroica fusca*) have been noted for the state.

Extensive field observations were made by the author in the Chattooga River area of Georgia and South Carolina during the breeding seasons of 2000, 2002 and 2003 in order to verify breeding of bird species of northern affinities. Results include first nest records for Red-breasted Nuthatch and Golden-crowned Kinglet for South Carolina as well as first summer records for Brown Creeper and a 24 May 2002 record for Winter Wren.

Two first state nest records

On 28 April 2003, a pair of Red-breasted Nuthatches was observed as they foraged and called within the picnic area at CRA. The female was then seen going to a dead snag in a live Sweet Birch (*Betula lenta*). The female went directly to a 2.5 cm round hole (15 m height), and began dabbing at the lip of the hole with her bill, apparently applying conifer resin. The male was calling from a nearby twig while she continued smearing the sap. For the next hour and a half the pair was observed as they came to the hole at

intervals of every 15–30 minutes. The gleaming sap at the hole entrance was very apparent, with a circle of droplets reflecting brightly in the late afternoon sun. This species is known to habitually smear conifer resin around the nest entrance, presumably as a strategy to deter predators (Kilham 1972, Harrison 1975, Harrap and Quinn 1995).

While scanning the treetops in the vicinity of the Red-breasted Nuthatch nest, I located a green, cup-shaped nest in an old growth Canada Hemlock about 18 m height and only about 10 m from the nuthatch nest location. A Golden-crowned Kinglet nest was suspected, as the nest was a compact structure composed primarily of mosses and hemlock-needled twigs. The nest was anchored to twigs below a horizontal branch as described in Harrison (1975). A Golden-crowned Kinglet was seen and heard nearby, but it was not actually observed entering or leaving the nest on this trip.

On 29 April the female Red-breasted Nuthatch was observed tapping vigorously at the hole lip. She did this in intervals of 2–3 minutes, while alternately gleaning insects from the smaller branches of the birch. After some time elapsed the male was seen coming to the hole every 10–20 minutes, apparently to feed the female. However it was not until about 40 minutes later that the female was observed exiting the hole, confirming that she had definitely been sitting inside. The female flew back into the nest hole a few minutes later, and then turned to peer out from the hole entrance for a minute before disappearing inside. After a thunderstorm passed through in the late afternoon, the female was observed going into the nest hole, while the male perched on an adjacent twig.

Upon a return trip to CRA on 2 June 2003, I observed a pair of Golden-crowned Kinglets going back and forth to the nest in the hemlock that had been located on 28 April. They were busily feeding the young with at least one nestling partially visible as it took food from the adults. The kinglets were noted removing fecal sacs about every 15–20 minutes. Each visit to the nest by the kinglets was preceded by high thin calls rapidly ascending in pitch. A bird would then appear at the rim of the nest with the other member of the pair usually following a few minutes after. Otherwise these birds were quite secretive, and were seldom observed near the nest between visits. In one instance the adult was observed feeding the nestling and quickly swooping to catch the fecal sac as it was evacuated. This was accomplished in one smooth and precisely executed maneuver. These details were noted while I observed the nest with a 20 x 60mm spotting scope from a distance of about 24 m.

No activity was noted at the Red-breasted Nuthatch nest until evening, when the male Red-breasted Nuthatch began vocalizing nearby and then perched at the nest hole and began daubing more sap around the hole. A quick check along South Carolina Route 107 north of the hatchery entrance revealed an additional male Red-breasted Nuthatch calling north of the Sloane Picnic Area at a pull-off just before the North Carolina state line. On 4 June a pair of Red-breasted Nuthatches was observed feeding two recently fledged young on the South Carolina side of Burrell's Ford. Also on this date

a survey of Red-breasted Nuthatches along Burrell's Ford Road from Burrell's Ford up to the King Creek bridge-culvert (3 km distance) yielded a count of three additional individuals in three widely spaced locations.

Considerable fieldwork was also conducted to determine the breeding status of the Red-breasted Nuthatch along the Chattooga during trips to the area in 2000 and 2002. On 12 June 2000, a male Red-breasted Nuthatch was observed possibly collecting sap from a broken branch base of a White Pine on the South Carolina side of Burrell's Ford. Between 12 and 15 June 2000 a total of 11 Red-breasted Nuthatches were counted on the South Carolina side of the Chattooga from Burrell's Ford to Earl's Ford. In 2002 the first documented Georgia nesting of this species was confirmed at the Nicholson Tract of the Chattooga Wild and Scenic River Area. Also in 2002, breeding was suspected in the Russell Farmstead area on the South Carolina side of the river. Red-breasted Nuthatches were also found a considerable distance from the Chattooga with one at Mountain Rest 22 May 2002 and a pair at Oconee State Park 1 May 2002 (Renfrow 2002).

Suspected breeders

On 28 April 2003 two Brown Creepers and two Blackburnian Warblers were found at CRA, while one Winter Wren was observed near the Burrell's Ford Campground parking area and another Brown Creeper was observed near King Creek Falls. On 2 June 2003 at least four Brown Creepers in total were noted in the CRA area. During the midday period, considerable Brown Creeper activity was noted with two singing males vigorously chasing each other, rapidly darting from tree to tree. However, a concerted search of trees with loose bark failed to disclose any evidence of a creeper nest such as nesting material sticking out from under the bark, as might be expected where a nest is present (Harrison 1975, Gorney 2000). On 4 June 2003, one Blackburnian Warbler was observed singing repeatedly from a large White Pine at Burrell's Ford on the South Carolina side. Also at Burrell's Ford on this date, two Brown Creepers were observed singing repeatedly. These species were also noted during previous trips to the area in 2000 and 2002. On 13 June 2000 two Brown Creepers were heard singing near Burrell's Ford on the South Carolina side, and two Blackburnian Warblers were seen and heard along the entrance road to the fish hatchery on 1 May 2002. On 20 May 2002, two singing Brown Creepers were seen along the entrance road to the fish hatchery. One creeper seemed to disappear beneath some loose bark on a dead deciduous tree, but no definitive nest was located. A Winter Wren was heard singing near a pile of fallen trees in a ravine at the Russell Farmstead on 24 May 2002, with a Brown Creeper heard nearby (Renfrow 2002).

Discussion

Breeding of the Red-breasted Nuthatch has previously been suspected in the Chattooga River area of Oconee County, with one CRA observation

dating back to 10 June 1910 (Sprunt and Chamberlain 1949). On 26 May 1986, two Red-breasted Nuthatches were seen inspecting cavities at CRA (Post and Gauthreaux 1989). Field observations indicate that the breeding population of the Red-breasted Nuthatch is well distributed along the South Carolina side of the Chattooga and East Fork of the Chattooga Rivers from the North Carolina line south to Earl's Ford. Additionally, the Red-breasted Nuthatch has been listed as rare in summer in areas of Virginia (*Pinus virginiana*) and Pitch (*P. rigida*) Pine in Greenville County by Carter (1993).

This constitutes the first Golden-crowned Kinglet nest record for South Carolina although breeding was confirmed at CRA on 18 June 1995 with an observation of adults feeding fledglings (Oberle and Forsythe 1995). The Golden-crowned Kinglet has also been found in summer in Greenville County (Carter 1993).

The populations of both Red-breasted Nuthatch and Golden-crowned Kinglet in northeastern Georgia and northwestern South Carolina form an extension of the breeding range from the higher elevation spruce-fir forests (above 1680 m) to the White Pine-hemlock forests of the southern Blue Ridge. Both species are documented breeders in White Pine-hemlock and old-growth hemlock forests in western North Carolina and eastern Tennessee (Oberle and Haney 1997, Nicholson 1997). Both species also nest in the transitional zone of spruce-hemlock forest, ranging between 1370 and 1680 m in the Blue Ridge (Catlin 1984, Simpson 1992, Renfrow unpubl. notes). A Red-breasted Nuthatch nest located in North Carolina at the Mt. Pisgah picnic area (1500 m) on 26 June 2003 was similarly situated to the CRA nest at 8 m height in a dead section of a live Sweet Birch. This was within a dense area of spruce-hemlock forest with an understory of Mountain Laurel, Catawba Rhododendron (*Rhododendron catawbiense*) and Great Laurel. Breeding Golden-crowned Kinglets were also present at this location (Renfrow unpubl. notes).

There have been no previous documented records of Brown Creeper or Winter Wren for the summer period in South Carolina although they have both been known to occur rarely in summer in Rabun County, Georgia (Oberle and Haney 1997, Renfrow 2002). Post and Gauthreaux (1989) list late spring records of 2 May 1965 for the Brown Creeper and 4 May 1976 for the Winter Wren. Summer Blackburnian Warbler records within the state include three collected at Pickens County between 18 and 24 June 1889 and one collected at CRA on 24 June 1940 (Wayne 1910, Sprunt and Chamberlain 1949). There is also a casual observation of possible breeding of the Blackburnian Warbler at Greenville County listed in the South Carolina Breeding Bird Atlas (www.dnr.state.sc.us/wild/bbatlas/bba.html). Although no definitive breeding evidence of the Brown Creeper was noted during the course of these observations, the numerous sightings well into the summer period indicate probable breeding status in South Carolina. The sporadic presence of Winter Wren and Blackburnian Warbler certainly indicates that additional fieldwork is needed to determine whether breeding might occur within the state.

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