

General Field Notes

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First Breeding Records for Tree Swallows in South Carolina

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At the southeastern limits of their breeding range Tree Swallows (*Tachycineta bicolor*) nest sporadically in northeastern Louisiana, northeastern Mississippi, northern Alabama, northern Georgia, and western North Carolina (American Ornithologists' Union 1998). The first Tree Swallows nested in Georgia from 1982-1984 at Lake Chatuge in Towns County (Haney *et al.* 1986). The swallow has nested in Towns, Murray, and Floyd Counties in north Georgia and in Clayton, Greene, Monroe, and McDuffie Counties in the piedmont. Nesting has been continuous in those counties except for McDuffie and Monroe (Beaton pers. comm.). The first North Carolina nesting record was from Ashe County in 1979 (LeGrand and Potter 1980). Since then, nesting has occurred in other counties in the mountains of western North Carolina, including Buncombe, Transylvania, Henderson, Macon, and Alleghany (Lee 1993). There are also two nesting records from the piedmont of North Carolina, one from Jordan Lake in Chatham County in 1988, and the other from Vance County in 1990 (Lee 1993). In the North Carolina coastal plain, nesting has been reported in Currituck, Northampton, and Brunswick Counties (Lee 1993; Cooper and Markham 1994).

Throughout South Carolina, Tree Swallows are common spring and fall migrants, while on the coastal plain, they are fairly common winter residents (Post and Gauthreaux 1989). As of 2000, there were no confirmed breeding records for South Carolina. This note reviews 3 earlier reports of possible nesting in South Carolina and provides documentation for three nests found in 2001, one at Table Rock State Park in Pickens County and two in Oconee County. Another nesting record from Table Rock State Park in 2002 is also described.

Observations made during 1996-1998 suggest that Tree Swallows bred in South Carolina before 2001. In 1996, 1997 and 1998, Tree Swallows may have nested on Lake Russell in Abbeville County. During May of each year, Don Cox (pers. comm.) observed an adult male and female visiting cavities in dead snags that stood in a cove of the lake. Unfortunately, Cox made no further observations in 1996 and 1997. On 19 May 1998, Irvin Pitts (pers. comm.) saw a pair of Tree Swallows visiting a cavity about 2 m above the water in a slender, dead tree stub. The female entered the cavity several times from 09:25 to 14:45. Although the bird's behavior indicated nesting activity, Pitts was unable to confirm breeding.

On 13 May 2000, Wagner observed similar cavity attendance behavior near the Tugaloo River in Oconee County. During a 15 min. observation period, he watched a pair of adult Tree Swallows repeatedly visit a cavity in a dead tree in a beaver pond. The tree was about 4 m tall, and the cavity was about 3 m above the water. The female entered the cavity and remained inside for about 5 min., while the male perched on a nearby branch. Wagner was unable to confirm nesting.

At Table Rock State Park, Tree Swallows are seen during spring migration, from early April to mid-May, and on 10 June 2000, a single adult was sighted at the park. On 13 April 2001, Stegenga watched a male Tree Swallow inspecting a bluebird box near the entrance to the park office. The box entrance hole is 2 m above the ground. The surrounding habitat is open lawn.

On 18 April 2001, two to three swallows landed on the nest box closest to the building. On 22 April, Stegenga saw nest building at this box. By 2 May, the nest building was completed, although no eggs were present. Long pieces of grasses made up the bulk of the nest, and several feathers were added as well. During this period and into May, the swallows occasionally inspected two other boxes near the parking lot. They appeared to have added some nest material to one of the boxes. A Brown-headed Nuthatch (*Sitta pusilla*) attempted to nest in one of the boxes but abandoned the nest after laying four eggs.

On 4 May, three eggs were found in the Tree Swallow nest. By 12 May, six eggs had been laid. In the next few days a predator may have disturbed the nest, and some of the eggs had sunk into the nest cup. A nearby bluebird nest box was depredated during this same time period. A second Tree Swallow clutch may have been started on top of the first, as seven eggs were counted on the 26th. Stegenga added a predator baffle below the box on 26 May. On the 29th at least nine eggs were counted. Stegenga did not inspect the nest as several eggs had settled into the nesting material. He could not determine if these nine eggs were

a set that was laid during the same period or if it included some of the buried eggs.

On 14 June, five nestlings were found. The adults mobbed humans walking nearby. On 25 June the five nestlings were banded by Bill Hilton (Hilton 2001). By 07:30 on 27 June, the young had fledged. Ants and mites infested the nest material. No birds roosted in the box that night. We salvaged the nest on 28 June. It is now in the Vertebrate Collections at Clemson University (Acc. #986). At 08:45 on 28 June, the fledglings were sighted high in an oak perched on some exposed branches. The oak was between the lake and parking area. The adults appeared to be feeding the young. At 20:00 five fledglings were seen in the same tree

On 7 May 2001, Larry LeCroy found Tree Swallows using two boxes on the 8th and 9th fairways of Falcon's Lair Golf Course in Salem, Oconee County, SC. The nest on the 8th fairway appeared to be complete on 8 May and on 16 May contained at least four eggs. On 26 May, Wagner found that the nest contained five eggs and photographed them. On 9 June the nest was empty, apparently as a result of predation.

The nest on the 9th fairway also appeared to be complete on 8 May and on 14 May contained four eggs. On 26 May at 08:09 Wagner examined the box again and photographed a nest containing 4 nestlings. On 9 June the nest contained four nestlings that were almost fully feathered. The fate of these nestlings is unknown. Wagner salvaged the swallow nest from the 9th fairway on 28 June. The nest and photographs were placed in the Vertebrate Collections at Clemson University (Acc. #986).

Tree Swallows again nested at Table Rock State Park in 2002. On 19 April, Stegenga observed Tree Swallows entering a box to the north of the visitor center building. On 1 May a nest and two eggs were present. Five eggs were present on 7 May. The box was disturbed later in the day on 7 May, and all five eggs were broken. Swallows were seen going in the box on 10 May, but the birds did not attempt to nest in that box again.

The pair then built a nest in the same box that Tree Swallows had used in 2001. Nest building began after Eastern Bluebirds (*Sialia sialis*) completed fledging from the box on 14 May. The swallows had their nest built by 17 May. Three eggs were present on 23 May and five eggs were present on 25 May. The nest contained five nestlings on 11 June. Four swallows had fledged either on the 24th or on the morning of 25 June. The last fledgling was out of the box before 16:00 on the 25th. At least three of the fledglings were seen perched in small persimmon trees between the visitor center and the lake at about 17:30 on 25 June. Adults were also seen. Juvenile Northern Rough-winged Swallows (*Stelgidopteryx serripennis*) were also perched in the same trees. No Tree Swallows were seen on 26 June, but the Northern Rough-winged Swallows were in the persimmon trees again.

These breeding records from South Carolina represent a continuation of the breeding range expansion described by Lee (1993). The locations of these first nesting records are expected, as first nesting records for Georgia and North Carolina also were from mountain counties. Transylvania and Henderson

Counties in North Carolina, where swallows first nested in 1988 and 1989 (Lee 1993) adjoin Pickens and Oconee Counties in South Carolina. Given the number of records from Georgia and North Carolina in the past decade, it is surprising that nesting was not confirmed in South Carolina before 2001. If Tree Swallows follow the same pattern of nesting range expansion in South Carolina that has occurred in Georgia and North Carolina, we should expect additional nesting records from Oconee, Pickens and northern Greenville Counties in the coming years.

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