Norris, R. A. 1958. Comparative biosystematics and life history of the nuthatches Sitta pygmaea and Sitta pusilla. Univ. Calif. Publ. Zool. 56:119– 300.

Sydeman, W. J., M. Guntert, and R. P. Balda. 1988. Annual reproductive yield in the cooperative Pygmy Nuthatch (*Sitta pygmaea*). Auk 105:70–77.

Roof-nesting Least Terns from Craven County, North Carolina

SAMUEL COOPER 5425 Andover Road Wilmington, NC 28403

In the southeastern United States, Least Terns (*Sterna antillarum antillarum*) have typically nested on bare sand or shell substrates in open coastal areas (Bent 1963). In this note, the presence of roof-nesting Least Terns is documented from Craven County, North Carolina (35°06'N, 77°09'W).

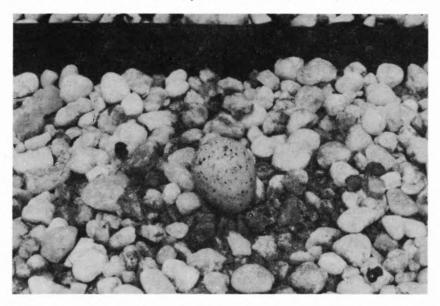


Figure 1. Nest and egg of Least Tern on roof in New Bern, Craven County, N.C. (Photo by author).

The roof-nesting terns were initially discovered in May 1989 at the Twin Rivers Shopping Mall in New Bern. Photographs of several nests were taken (Figure 1) and a survey of the roof revealed 8 nests with eggs. The single-story building contains several elevations of relatively flat roofs covered with tar and gravel (Figure 2). Air-conditioning units provide a source of shade and moisture near the condensation drains. The building is surrounded by pavement and the

closest open water creeks are Wilson Creek and the Trent River, both over a mile to the south of the nesting site. Observations of adults flying east from the site suggest the birds may be feeding in the Neuse River, approximately 3 miles away.

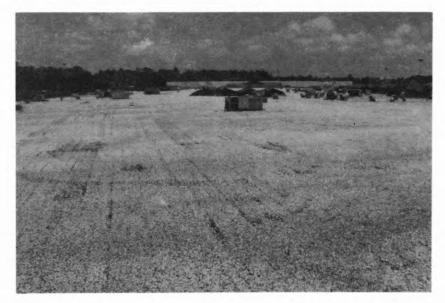


Figure 2. Habitat of roof-nesting Least Terns in New Bern, Craven County, N. C. (Photo by author).

Observations of courting birds, birds carrying fish to the site, and colony defense behavior suggest that nesting occurred in subsequent years (1990, 1991, 1992, 1993). Although the nests have not been surveyed since 1989, counts of adult birds indicate that colony size has been relatively stable. The success of the nesting birds is unknown. Fish Crows (*Corvus ossifragus*) appear to be common in the area and were seen being harassed by Least Terns on several occasions.

The roof-nesting colony represents not only an unusual nesting site, but also a location rather far inland. Least Terns were first documented nesting in the New Bern area near a quarry in 1988 (LeGrand 1989; Robert Holmes, pers, comm.). Birds seeking new sites away from traditional nesting areas suggest that favorable, undisturbed habitat along the coast is limited. Natural beaches, where many colonial waterbird species formerly nested, have been developed or are subject to human-related disturbances.

In recent years, nesting Least Terns have shifted from traditional beach sites (Soots and Parnell 1975). In 1976, 71.7% of Least Terns nesting in North Carolina were on dredged-material islands (Jernigan et al. 1978). The use of rooftops by nesting Least Terns has been documented in other states and is frequent in Florida (Fisk 1978a, Spendlow & Patton 1988). A 1975 survey of all nesting Least Terns on Florida's Atlantic coast estimated 21% (614 pairs) were in 16 roof colonies (Fisk 1978b). A survey of Least Terns in the Florida Keys

during 1987 found 692 pairs in 38 colonies; 71% of the birds and 38% of the colonies were on rooftops (Paul 1987). Over one-half of Maryland's Least Tern population nested on building roofs during 1991 (Armistead 1991). The opportunistic nesting behavior of the Least Tern may result in additional rooftop colonies in North Carolina.

LITERATURE CITED

- Armistead, H. T. 1991. Middle Atlantic Coast Region. American Birds 45(5):1101-1106.
- Bent, A. C. 1963. Life histories of North American gulls and terns. U.S. Natl. Mus. Bull. 113. Dover Publ., New York. 337 pp.
- Fisk, E. J. 1978a. Roof-nesting terns, skimmers, and plovers in Florida. Fla Field Nat. 6:1–8.
- Fisk, E. J. 1978b. The growing use of roofs by nesting birds. Bird-Banding 49:134-141.
- Jernigan, L. S., Jr., R. F. Soots, Jr., J. F. Parnell, and T. L. Quay. 1978. Nesting habits and breeding populations of the Least Tern in North Carolina. UNC Sea Grant Publ. UNC-SG-78-07. 39 pp.
- LeGrand, H. E., Jr. 1989. Southern Atlantic Coast Region. American Birds 43(1):86-89.
- Paul, R. T. 1987. Florida Region. American Birds 41(5):1425-1428.
- Soots, R. F., Jr., and J. F. Parnell. 1975. Ecological succession of breeding birds in relation to plant succession on dredge islands in North Carolina. UNC Sea Grant Publ. UNC-SG-75-27. 91 pp.
- Spendelow, J. A., and S. R. Patton. 1988. National atlas of coastal waterbird colonies in the contiguous United States: 1976–82. U. S. Fish Wildl. Serv. Biol. Rep. 88(5). x + 326 pp.

BRIEFS FOR THE FILES

RICKY DAVIS (All dates Spring 1993)

- RED-THROATED LOON: Usually single birds are found inland, so somewhat surprising was the presence of two in the Greensboro, N.C. area in late March to early April with one at Lake Townsend and one on Lake Brandt (Henry Link, Herb Hendrickson).
- PACIFIC LOON: A bird was picked up at Atlantic Beach, N.C. and was taken to a local wildlife shelter on 24 March and was released on 3 April after being photographed and measured (Paul Spitzer). Another or the same individual was observed near Cape Lookout bight on 30 April by Spitzer (fide John Fussell). Also Derb Carter found a Pacific at Figure 8 Island on 18 April which was subsequently seen by Sam Cooper and Kevin Markham. This species is very rare in the Carolinas even though records are occurring more frequently in the last couple of years. Observers should