Allopreening by Brown-headed Nuthatches in South Carolina

JERRY NAGEL Department of Biological Sciences East Tennessee State University Johnson City, TN 37614

On 4 January 1993 I was birding on the grounds of the Presbyterian Home in Summerville, Dorchester Co., South Carolina when I observed two Brownheaded Nuthatches (*Sitta pusilla*) engaging in mutual preening (allopreening). I noticed the first bird when it emerged from a nestbox attached to the top of a 1.5 m fence and flew to a small nearby pine tree. While I was watching this bird, a second nuthatch flew in from the same direction and moved into shoulder-to-shoulder contact with the first bird. The second bird then began preening the feathers on the nape and top of the head of the first bird. This interaction continued for about two minutes, during which time the recipient bird remained motionless in a slightly hunched forward position with its eyes half closed. My observations of this interaction ended when the first bird flew to the top of a distant pine and was immediately followed by the second bird. This incident occurred at 0930 h on a calm, sunny day with a temperature of about 18°C and was observed with 8x40 binoculars at a distance of about 15 m.

Apparently this is only the third report of allopreening in the Brown-headed Nuthatch. Norris (1958) reported this behavior for two adult birds in Georgia in late summer of 1951 and regarded this to be evidence of retention of the pair bond after the breeding season. Barbour and DeGrange (1982) reported allopreening for Brown-headed Nuthatches on 8 November 1975 in Florida and noted that this behavior had never been reported for the sexually dimorphic White-breasted and Red-breasted Nuthatches (*S. carolinensis* and *S. canadensis*), implying that allopreening as a mechanism for establishing and maintaining a long-term pair bond may be restricted to the monomorphic Brown-headed Nuthatch.

Although it is plausible to hypothesize that the allopreening noted in these three reports has a pair-bonding function, there is no firm evidence in any of these cases that the birds observed were indeed a mated pair or even of opposite sexes. The closely related Pygmy Nuthatch (*S. pygmaea*) exhibits complex social behavior such as flock foraging, communal roosting, and cooperative breeding (Knorr 1957, Sydeman, et al. 1988) and if the Brown-headed Nuthatch shares these traits, allopreening may function as a more generalized social bonding mechanism.

Acknowledgments: I thank the staff and residents of Presbyterian Home (Summerville) for their hospitality while birding on their grounds. D. A. McCallum suggested that allopreening may function in the broad context of general sociality in this species.

Literature Cited

Barbour, D. B., and A. R. DeGrange. 1982. Reciprocal allopreening in the Brown-headed Nuthatch. Auk 99:171.

Knorr, O. A. 1957. Communal roosting of the Pygmy Nuthatch. Condor 59:398.

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