

one-half grown; #1,3, and 7 were new. Left rectrices #2 and 4 were three-fourths grown; #5 and 6 were breaking sheaths; #1,3, and 7 were new. She was undergoing light to moderate body and neck molt.

Great Cormorants have been sighted with increasing frequency in North Carolina since first discovered here in 1970 (Teulings, *Am. Birds* 25:562-567, 1971). Photographic verification of the presence of this species in North Carolina was first provided in 1973 by Grant and Grant (*Chat* 39:39-40, 1975).

I frequently observed Great Cormorants and Double-crested Cormorants (*P. auritus*) perching on the pilings of the New River Inlet Pier during the winter, spring, and summer of 1990. Up to seven Great Cormorants were present here on 8 May 1990 and two were present as late as 4 July 1990.

Three additional Great Cormorant specimens from North Carolina were collected on 28 March 1986 near Southport, Brunswick County, N. C., by James F. Parnell and David S. Lee. A female (NCSM 11811) with heavy body fat and undergoing molt weighed 7 pounds 2 ounces. A 9-pound male (NCSM 11812) with testes measuring 41 x 11 mm (left) and 31 x 12 mm (right), had heavy body fat and was undergoing molt at the time of collection. The third specimen was an adult male that was deposited in the University of North Carolina at Wilmington collection (UNCW B951).

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Inland Records of Brant in the Carolinas and Observations of Kleptoparasitic Behavior

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On seven dates from 1-29 December 1989, I watched a light-bellied Brant (*Branta bernicla hrota*) feed among a flock of American Coots (*Fulica americana*) at Lake Paul Wallace, Bennettsville, Marlboro County, South Carolina. The blackish head, neck, and breast, fairly evenly barred sides, and evenly barred mantle and wing coverts with grayish or grayish-buff margins indicated the bird was in basic plumage (see Palmer, 1976, *illus.*, pp. 247). The small incomplete whitish necklace on each side of the neck below the throat was present though not overly distinct. The bird swam and flew well and was apparently uninjured. I discovered the Brant on 1 December when I did not observe any visible migration in the area; the Brant probably arrived between 17 and 30 November when a series of cold fronts passed through the region. On 29 December, the Brant was present at Lake Wallace which was almost frozen over with only one small open area where all the waterbirds congregated. Two days later, the entire lake had frozen over, and the Brant was gone, though a flock of 40 feral Canada Geese (*B. canadensis*) remained.

On 22 January 1990, the same Brant, with the necklaces a bit more distinct, was again present at Lake Wallace with a flock of 450 coots. The flock of coots returned on about 15-16 January (O. Driggers, pers. comm.), when the Brant probably returned with them. The coots' whereabouts since 29 December is unknown, and except for a few on the Pee Dee River, they were not known to be present in Marlboro County after late December until 15-16 January.

Post and Gauthreaux (1989) correctly eliminated several reputed records of Brant in November 1974 near Clemson, S.C. (*Am. Birds* 29:41, 1975); these records are a misprint (H. E. LeGrand, Jr., pers. comm.). Thus, the Brant at Lake Wallace is the first documented inland record for South Carolina. On the coast, the Brant is very rare from late fall to early spring (Post and Gauthreaux, 1989).

North Carolina has only two inland records of the Brant. I watched a solitary Brant rest for 30 min in corn field stubble near Ross Pond, Anson County, within the Pee Dee NWR on 8 December 1979. The bird was seen independently by L. P. Hartis and several other observers from 7 to 11 December. The bird was in basic plumage, using the same criteria as above; the incomplete white necklaces were indistinct. The Brant appeared to be in good health, but was very tired, and probably arrived the night of 6-7 December, following a strong cold front from the NW.

On 14 November 1983, B. and M. Wagner and M. A. Foster saw an immature (= juvenile) Brant at Jordan Lake, also in the Piedmont, for the only other inland N. C. record (*Chat* 48:53, 1984). The bird was identified as an immature on the basis of the lack of white necklaces. The head and neck were described as black or deep brown, the upperparts as slaty-black or brown. The observers were uncertain of the color on the foreparts and upperparts and did not describe the pattern of the upperparts. If present, the crescent necklaces may be indistinct and not readily seen at 100 m, the distance the bird was from the observers. Consequently, I believe that further documentation of the plumage of this Brant is necessary to conclude that the bird was a juvenile.

The Brant at Marlboro County, S.C., usually fed among a single large flock of coots, ranging in size from 100 to 600 birds. I watched the Brant feed for a total of 240 min at a distance of usually less than 20 m. The Brant frequently kleptoparasitized the coots, i.e., stealing already procured food (Brockmann and Barnard, 1979), robbing many of abundant submerged green algae which the coots brought up to the surface in beakfulls ($N > 600$ observations). The Brant cruised among the coots and swam directly towards coots after they emerged with food, or waited over a briefly submerged coot until it surfaced, to rob it of food. As coots must surface before eating food, kleptoparasitism was an easy task. Usually, the Brant stole only a portion and the coot retained some of the algae. The Brant also used the coots as "beaters", following them to good foraging areas, and then displacing them. All kleptoparasitic strategies were very successful. Much less frequent were non-parasitic foraging methods, dipping the bill underneath the water or up-ending (submergence of head and neck) to feed on the same algae. The Brant spent almost all of its time feeding and preened occasionally.

Many of the coots did not attempt to protect their food from the Brant. Some individuals attempted to reclaim stolen food, but were unsuccessful. The Brant called only three times, a low guttural "cruk", during agonistic encoun-

ters with coots. Once, the Brant called and pecked with a partly open bill at a coot which attempted to reclaim part of its stolen food. The other times, the Brant gave the same call when it used a lowered-head threat when it displaced single coots reluctant to move from a favored foraging area.

On 22-23 and 29 December, when the lake was partly or mostly frozen over, many other waterfowl joined the coots to form a concentrated flock. The Brant then rarely attempted to kleptoparasitize both sexes of the Ring-necked Ducks (*Aythya collaris*) that were feeding on the algae; it was successful only once. The Brant did not attempt to kleptoparasitize any other species of waterfowl. The Brant never associated with the Canada Geese present.

Brockmann and Barnard (1979) did not list the Brant as a known kleptoparasite. Einarsen (1965; pp. 31) forcefully states that Brant may closely attend scaups, scoters, and goldeneyes foraging for shellfish, to feed on fragments of eelgrass and sea lettuce, when inadvertently brought to the surface by the other species. H. Boyd (*in litt.*) has observed unambiguous reciprocal kleptoparasitism between the dark-bellied Brant (*B. b. bernicla*) and the Eurasian Wigeon (*Anas penelope*) in Norfolk, England, where each species pirated algae from the other. Brant may also follow oyster dredges that pull up eelgrass and other plants (Palmer, 1976).

The large concentration of coots at Lake Wallace and a visible and abundant food supply of green algae, the Brant's favorite food, allowed the Brant to have an extended stay at Lake Wallace, S. C., which included a return to the site after an absence of about three weeks. In the two extralimital N. C. localities, where coots were absent or scarce, kleptoparasitism could not be used as a successful foraging strategy.

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