

- Field guide to the birds of North America. 2d ed. 1987. National Geographic Society. Washington, DC.
- Nehls, H. 25 Jul 1998 *Pers. comm.* (Oregon Bird Records Committee).
- Peterson, Roger Tory. 1993. *Birds of Britain and Europe*. Houghton Mifflin Company. New York.
- Peterson, Roger Tory. 1990. *Western birds*. Houghton Mifflin Company. New York.
- Post, W and SA Gauthreaux, Jr. 1989. *Status and Distribution of South Carolina Birds*. Contributions from the Charleston Museum XVIII. Charleston, South Carolina.
- Schmidt, O, ed. 1989. *Rare birds of Oregon*. Oregon Field Ornithologists. Spec. pub. no. 5.
- Washington Birds. 5:16. 1996.

Northern Fulmar Collected in South Carolina: Southernmost Verified Occurrence for Atlantic Coast

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A juvenile light-phase Northern Fulmar (*Fulmarus glacialis*) of undetermined sex was found on the beach at Kiawah Island, Charleston County, South Carolina, on 27 February 1998 by Higgins. It had been dead for several days. The specimen (ChM 1998.13.010) was prepared as a standard study skin, with the left wing detached and extended. A partial skeleton was preserved. The bird was determined to be a juvenile by the presence of the bursa of Fabricius. As the internal organs had deteriorated, it could not be sexed with certainty, although it was probably a female. No broken bones were found, and the cause of death could not be ascertained. The bird was emaciated (concave pectoral

muscles; little subcutaneous fat). The stomach contained a 2-cm long piece of *Sargassum*. The supraorbital salt gland was only slightly vascularized and measured 21.6 x 11.2 mm. Measurements are: total length, 45.0 cm; tail, 10.9 cm; tarsus, 44.4 mm; flattened wing, 30.5 cm; wing span, 105.5 cm; length of culmen from base, 34.9 mm; width of culmen at base, 16.5 mm.

This specimen provides the first documentation for South Carolina, and the southernmost documented occurrence (verified by material evidence) for the Atlantic coast of North America. A sighting of the fulmar from Mt. Pleasant, South Carolina, in March 1978 has not been verified (Post and Gauthreaux 1989) nor accepted by the SC records committee, although it has been cited in several publications (Lee and Booth 1979; Clapp *et al.* 1982, Haney 1983, Harrison 1983).

This cold water pelagic species was unknown in the southeastern United States before the 1970s. It has undergone a population growth and range expansion in this century (Fisher 1952, Palmer 1963, Lockley 1974), which has been accompanied by an increase in number of reports from waters south of Cape Hatteras. The extension of its range southward may be related to the growth of commercial fisheries, as the fulmar's diet includes fish offal (Palmer 1962). It was first reported in North Carolina in 1973, when an injured bird (which died in captivity and was discarded), was found at Pea Island, Dare County (Lee and Booth 1979). The first North Carolina specimens were collected in 1978, one in May and two in October. Lee and Booth (1979) reported five other sightings during 1976-1978. An additional bird was collected in April 1979, and at least 15 were seen off North Carolina during the same month that year (Lee and Rowlett 1979). Platania *et al.* (1986) reported that 20 North Carolina specimens had been collected for physiological studies during 1978-1982.

The fulmar was first seen off Georgia on 21 February 1983, about 137 km east of St. Catherine's Island, on the middle continental shelf (160 m depth; Haney 1983). Another was seen on 8 February 1984 on the outer continental shelf (Haney *et al.* 1986). In addition, Haney (1986) lists a total of five sightings from the middle continental shelf of Georgia. As of 1993, the species had not been reported from Florida (Stevenson and Anderson 1994).

Considering the data from adjacent states, it is likely that Northern Fulmars are more common off South Carolina than the one verified record indicates. In comparison to North Carolina and Georgia, relatively little information has been published concerning the occurrence of pelagic birds off South Carolina.

Literature cited

- Fisher, J. 1952. *The fulmar*. Collins, St. James Place, London.
- Haney, JC. 1983. Previously unrecorded and hypothetical species of seabirds on the continental shelf of Georgia. *Oriole* 48:21-32.
- Haney, JC. 1986. Pelagic seabird ecology and its relationship to environmental heterogeneity in the South Atlantic Bight. Ph.D. diss., Univ. Georgia, Athens.
- Haney, JC, P Brisse, DR Jacobson, MW Oberle, and JM Paget. 1986. Annotated checklist of Georgia birds. *Occ. Publ. No. 10*, Georgia Ornithol. Soc.
- Harrison, P. 1983. *Seabirds: an identification guide*. Houghton Mifflin Co., Boston.
- Lee, DS, and J Booth, Jr. 1979. Seasonal distribution of offshore and pelagic birds in North Carolina waters. *Am. Birds* 33:715-721.
- Lee, DS, and RA Rowlett. 1979. Additions to the seabird fauna of North Carolina. *Chat* 43:1-9.
- Lockley, RM. 1974. *Ocean wanderers: the migratory seabirds of the world*. Stackpole Books, Harrisburg, Pennsylvania.
- Palmer, RS. 1962. *Handbook of North American birds*. Yale Univ. Press, New Haven, Connecticut.
- Platania, SP, GS Grant, and DS Lee. 1986. Core temperatures of non-nesting western Atlantic seabirds. *Brimleyana* 12:13-18.
- Post, W and SA Gauthreaux, Jr. 1989. Status and distribution of South Carolina birds. *Contributions from the Charleston Museum*, No. XVIII.
- Stevenson, HM, and BH Anderson. 1994. *The Birdlife of Florida*. Univ. Press of Florida, Gainesville.

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