



A Massive Spring Movement,
including Three Species
New to North Carolina,
at Cape Hatteras National Seashore

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Skua, Photo/Eric Hosking from N.A.S.

Much remains to be learned about the distribution and abundance of seabirds off the Atlantic Coast of North America, where — unlike the Pacific Coast — observations have been few (although increasing, especially off the Maritime Provinces, New England and Long Island) or practically lacking (New Jersey south to Florida). The area of the Outer Banks of North Carolina in particular (marine waters of Cape Hatteras and Cape Lookout National Seashores) has almost never been surveyed for pelagics by means of offshore boat trips, particularly surprising in view of the proximity of the Gulf Stream to Cape Hatteras (sometimes as close as 8-10 miles). Recently, in the summer and fall of 1972, trips out of Hatteras Village and Morehead City, N.C. into and beyond the Gulf Stream have given an indication of the wealth and diversity of seabirds there, recording, for example, hundreds of Audubon's Shearwaters (*Puffinus lherminieri*), several Black-capped Petrels (*Pterodroma hasitata*), at least two Black-browed Albatrosses (*Diomedea melanophris*), White-tailed Tropicbird (*Phaethon lepturus*), Bridled Tern (*Sterna anaethetus*), and slightly further north a White-faced Storm Petrel (*Pelagodroma*

marina) — in addition to the pair of the latter species seen at Oregon Inlet, N.C. after a hurricane in 1971. (This species' status may be changing: see Buckley and Wurster, *Bull. Brit Orn. Club*, 90: 35-38 [1970] for a discussion of North Atlantic records). All reports of occurrences mentioned in this paper come from *Audubon Field Notes/American Birds* unless stated otherwise; for further details refer to issues of that journal.

This paper reports a seabird movement seen from shore at Cape Hatteras National Seashore in late May 1970, of a magnitude possibly never before recorded on the Atlantic Coast of North America. Among the commoner species were three others never before recorded from the Carolinas, and in fact almost unknown south of New England waters. Observations were all by the writer and F. G. Buckley, and both observers were previously familiar with all species seen, from much pelagic bird work, especially ocean crossings.

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Our first opportunity to make observations of pelagics in the Hatteras area in May 1970 was in the evening of the 30th, at Hatteras Inlet, Dare Co. (35° 11' N, 75° 46' W), where in about an hour we recorded 10 Sooty Shearwaters, (*P. griseus*), 5 Wilson's Petrels (*Oceanites oceanicus*), and to our surprise, 20 Cory's (*P. diomedea*) and 10 Greater (*P. gravis*) Shearwaters. These latter two species do not normally occur in the first late May batches of Sooties passing the N. Y.-N. E. coast. Data for the Carolinas were non-existent, but these species were still unexpected. Additionally we saw 2 jaegers (see below), and it was clear that a seabird movement of more than passing interest was underway. Unfortunately our work in a nearby Royal Tern (*S. maxima*) colony prevented further seawatching until about 4 p.m. on the 31st, when we set up scopes on the beach about 4 miles above (= NE) Hatteras Inlet. Immediately in sight were hundreds of seabirds, mostly shearwaters. We sat riveted to the scopes for 4 hours, and because the birds were coming by so fast, counts of the commoner species were taken per minute, and repeated through the period to ascertain density constancy. We were forced to suspend observations at dusk, but the birds were still passing in undiminished numbers at that time.

Early the next morning (7 a.m.) there was little activity, and upon returning from the tern colonies we again set up watch, from 4 p.m. to 6 p.m., recording more shearwaters and two more jaegers. By the morning of the 2nd, the flight had subsided to only a few Sooties still going by, or resting on the water near the breaker line: no other species of seabirds were seen on the 2nd. On the afternoon of the 1st, a visit to Cape Hatteras Lighthouse, about 8 miles up the beach (NE) where the Outer Banks turn 90° to the NW, revealed that all seabirds were continuing on a NE heading, passing far out to sea just a short distance above the Cape. Birds seen at the time were not included in the totals, to avoid duplication. Table 1 lists all seabirds recorded on each of the 4 days from May 30 to June 2, 1970, the times of observation, as well as daily and species totals, and average numbers of all seabirds/minute during observation times. Because the periods of most intense passage were noted only during brief observation periods on two late afternoons — probably not the peak hours of movement — these totals are certainly conservative, if not fractional. It is not unlikely that over 25,000 seabirds passed Cape Hatteras from May 30 to June 2, 1970, and perhaps twice to three times that number.

Table 1. Seabird species and numbers for the duration of the passage.

	Hatteras Inlet 6 p.m.—7 p.m.	May 31	Hatteras Village 4 p.m.—6 p.m.	June 2	Totals
Cory's Shearwater	20	3600+	1400+	—	5,020+
Greater Shearwater	10	1800+	700+	—	2,510+
Sooty Shearwater	10	1800+	700+	100±	2,610±
Manx Shearwater	—	2	—	—	2
Wilson's Petrel	5	750+	250+	—	1,005+
Pomarine Jaeger	—	11	—	—	11
Parasitic Jaeger	—	26	—	—	26
Long-tailed Jaeger	2	6	2	—	10
Skua	—	2	—	—	2
Totals:	47	7997+	3052+	(100±)*	11,196
Birds/Minute	.78	33.2	25.4	—	26.4

*resting on water

The following three species — part of the movement described above — have never before been recorded in the Carolinas, so details are warranted. All were seen on May 31, just above Hatteras Village.

MANX SHEARWATER (*P. puffinus*): the two different birds seen *ca.* 75 minutes apart, just beyond the breakers, were flying in small groups of Sooties, and were clearly distinguishable as Manx, through 30x Balmscopes, by mode of flight, size, wing and tail proportions, and cheek patterns (cf. Post, *Kingbird*, 14: 133-140 [1964] for details and illustrations showing all three "black and white" shearwaters). This late May occurrence of Manx with Sooties parallels data from Long Island, the Maritimes and New England, and although this seems to be the first coastal record of Manx between Long Island and Florida (*vide* Post, *Bird-Banding*, 38: 278-305), this probably reflects only a paucity of observers and offshore trips.

LONG-TAILED JAEGER (*Stercorarius longicaudus*): during routine evenings scannings of pelagics at Hatteras Inlet, two jaegers were seen flying low over the water with Sooty Shearwaters on May 30. While still at some distance, their size and flight clearly eliminated Pomarine Jaeger (*S. pomarinus*), so the logical, probable assumption was that they were Parasitics (*S. parasiticus*). As they approached the north side of 3-mile wide Hatteras Inlet, they veered toward the point on which we stood, and as they got closer, left the water surface, gaining altitude. At that point, their small size, shallow wingbeat, light nuchal collar, grey back, unmarked breast, light cheeks and dark underbelly (an unstressed field mark for adult Long-taileds) unequivocally identified them as that species. They then flew directly over our heads, circled several times at about 200 feet altitude, their long tails whipping through the air, and headed inland over Albemarle Sound. It was this observation primarily that suggested more than a routine movement of Sooty Shearwaters in progress. The next day from 4 p.m. — 8 p.m. an additional 6 Long-taileds were seen (1,2,1,1,1) very close to shore under the most optimal conditions. This time they were accompanied by at least 26 Parasitics (all light phase adults), 11 adult Pomarines (8 light, 1 intermediate, 2 dark) and the following species, below. Finally, another pair was seen on June 1, with no other jaegers. Spring records of Long-taileds from the Atlantic Coast of North American are extremely few, and none to my knowledge has ever been seen south of N.J. at that season.

SKUA (*Catharactastua?*). two different adult Skuas, probably of Arctic origin, (although the possibility of Antarctic Skuas, *C. skua* (?) *lönnerbergi*, must be considered, in the light of one's being taken recently in the Caribbean (Hudson, *Bird Study*, 15:33-34 [1968]), passed so close to shore, within 20 minutes of each other, that the white primary flashes identified them with the naked eye, and with only 8x binoculars, the tawny-golden stripes on the neck and back were clearly discernable. The second of the two swerved in mid-air, and dropped onto a light phase Pomarine Jaeger passing underneath, chasing it and forcing it to disgorge some morsel that was caught before hitting the water! Comparison was thus possible simultaneously between all 4 species of stercorariids known from the Northern Hemisphere. At the time, this was one of the very few U.S. occurrences of Skua south of Long Island, but recently it has been seen off New Jersey, Delaware, Maryland, Virginia, and Florida. It may thus be more regular off these areas than previously thought; in particular it should be looked for on winter pelagic trips.

Three other cold water and dispersive or migratory species that were looked for carefully in this flight, but not found, were Fulmar (*Fulmarus glacialis*), Leach's Petrel (*Oceanodroma leucorhoa*), and Sabine's Gull (*Xema sabini*). However, on May 27, 1972 an adult Sabine's was seen by R. L. Ake in a huge flight of Sooty Shearwaters about 80 miles further north, on the Outer Banks, and all three species are expected at this time under these conditions. It is noteworthy that no warm water, truly tropical species (such as Audubon's Shearwater, White-tailed Tropicbird, Sooty (*S. fuscata*), Bridled, or Noddy (*Anous spp.*) terns were seen: it was a flight of cold water, essentially Arctic seabirds, and although Cory's Shearwater is warm water loving and not Arctic, it is also hardly tropical.

The weather during this flight was not stormy, although for almost five days prior to the 30th of May, extremely strong E winds prevailed, and were certainly the proximate cause of this movement so close to land. However, a detailed discussion of movements of seabirds northward in the North Atlantic in spring, including species composition and geographic origin, will be presented elsewhere (Wingate and Buckley, *in prep.*). Observers having any data bearing on coastwise movements of seabirds in the North Atlantic in spring are asked to contribute them for that paper and to look for similar flights at this time of year in the future, particularly on the Outer Banks of North Carolina.