## Some observations of South Polar Skuas (Catharacta maccormicki) on Georges Bank

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**I**N RECENT YEARS, the consensus among several authorities is to recognize three distinct species of skuas (Catharacta spp.). The Great Skua (C. skua) encompasses four distinct subspecies, one of which (C. s.skua) is unique as a breeding form in the northern hemisphere. The other three forms of C. skua, (C. s. lonnbergi, C. s. antarctica and C. s. hamiltoni) form distinct breeding populations on various islands in the southern hemisphere. The Chilean Skua (C, C)chilensis) is a monotypic species confined to the southern portion of South America, and is characterized by brightly rufescent or cinnamon underparts and underwing linings. The South Polar Skua (C. maccormicki), the breeding species of the Antarctic continent, is also monotypic. Recent evidence, photographic as well as specimen, indicates that C. maccormicki regularly undertakes a postbreeding migration which carries it to the high latitudes of the northern Atlantic and Pacific Oceans. For a more complete description of the taxonomy, breeding distributions and plumage characters of all the forms of skuas, refer to Devillers (Auk 94: 417-29 July, 1977).

Until recently, the skuas observed, or in some cases collected, off the North American coast in the Atlantic were either assigned to one of the forms of C. skua on a presumptive basis, or were simply reported as "Skuas". Griscom (1955) and others speculated that sightings of skuas in the North Atlantic during the summer months may have involved birds from southern hemisphere populations. It is this observer's opinion, from personal experience as well as from recent experience of others, that the majority of the skuas encountered on the coastal fishing banks of New England, during the summer months at least, are in actuality South Polar Skuas.

The South Polar Skua is a polymorphic species, exhibiting variations of light and

dark color phases, in a fashion similar to the Holarctic jaegers, but not as yet thoroughly understood. Polymorphism in skuas is apparently unique to this species. Light and intermediate phase adults range from individuals having the head and nape entirely creamcolored, gradually darkening to the light gray underparts, all in striking contrast to the sombre blackish upperparts, to those that are essentially gray-bodied and blackish-mantled with a pronounced gray nuchal collar. This collar is formed by the light gray feathering of the entire nape region, and should not be confused with the golden hackling visible in the nuchal region on most forms of C. skua. Frequently, the tips and shafts of the feathers in the nape region are whitish or yellowish in maccormicki, giving the impression of hackling superimposed upon the gray background of the nape. Some of the juvenals, perhaps most of them, presumably of only the light and intermediate phases, also possess this striking nuchal collar, and are generally gravbodied and black-mantled. The presence of the nuchal collar and the contrast between the light underparts and blackish upperparts are unique to C. maccormicki. In the field dark-phase *maccormicki* are uniformly blackish-brown and lack the nuchal collar (although adults usually have pale tips and shafts to the nuchal feathers) and closely resemble some immature C. skua, and are thus objectively difficult to identify.



Figure 1. Juvenal South Polar Skua. Note the pale nuchal collar.

Harvard, in conjunction with reading Devillers' paper, it seems that all forms of C. skua, which can approach one another closely in plumage and mensural characteristics, can be generally described as follows: Head, nape, body plumage and scapulars profusely marked with whitish, yellow and rufous streaks, spots and blotches, with a concentration over the nape forming the familiar golden "hackling" (most apparent in C. s. skua). Bill larger and deeper than C. maccormicki, and head somewhat larger, although those last characters may



Figure 2. Juvenal South Polar Skua.

only be of value at very close range. In C. s. skua, the entire body plumage is frequently strongly washed with rufous or cinnamon.

From June 1-14, and again from July 6-20. 1977, this observer was aboard the USCGC "Active", a 210-foot cutter, on a non-interference basis to observe abundance, diversity and oiling of seabirds on Georges Bank as part of a census project conducted by the Manomet Bird Observatory. During the June patrol, the cutter was stationed in the midst of the Soviet Silver Hake fishery, located on the continental slope of Georges Bank at 40° 40'N, 67° 05'W. The 25 trawlers that were present provided food for multitudes of fulmars, shearwaters and storm-petrels. It was in the close proximity of these ships that I was able to closely study the population of seabirds for 12 days. I carefully estimated that 25 skuas were present, of which 8-10 were positively identified as C. maccormicki. By the time of the July patrol, the Soviet



Figure 3. South Polar Skua of undetermined age, although clearly a light phase individual.

vessels had departed the area, owing to the termination of the season on Silver Hake, rendering it difficult or impossible to formulate any comparative data on abundance between that and the June patrol. In addition, the skuas were all but absent in July; those observed (total of 5) could not be viewed well enough to attempt specific identification. Whether skuas are decidedly scarcer in July than in June, or whether they simply followed the abundant food supply, remains unknown.

The accompanying photographs of South Polar Skuas are provided as an aid to identification. Figure 5 is an adult light-phase South Polar Skua. Unfortunately, this was as close as I could get to this striking bird. Although distant, the striking cream-colored head should be discernable. Note also the great extent of the white wing patches. Figures 1 and 2 are juvenal South Polar Skuas. The gravish nuchal collar is diagnostic in itself of this species, but also note the battleship-gray underparts in contrast to the blackish back, mantle, wings and tail so characteristic of C. maccormicki. These individuals are identifiable as juvenals by their bicolored bills (bluish-based, black-tipped), visible on the color transparency but only discernable at extremely close range in the field. The bill of the adult is black. Note that the birds are experiencing heavy molt of the remiges and coverts (not visible), a relevant point. Most species that undergo particularly lengthy migrations, such as the southern hemisphere tubenoses, postpone the post-breeding molt of the remiges until the completion of the



Figure 4. Two skuas, sp.?, typical in plumage of many of the skuas present on Georges Bank in June and July, 1977.

migration. Roughly 30% of the Greater Shearwaters (Puffinus gravis) and 60% of the Wilson's Storm-Petrels (Oceanites oceanicus) observed in June were in various stages of heavy molt, with individuals showing various patterns of heavily worn remiges, newly molted ones and missing greater, lesser and primary coverts. It is interesting to note that these South Polar Skuas, having undergone similar migrational patterns, exhibit molt patterns similar to the shearwaters and stormpetrels. Figure 3 is a particularly light bodied South Polar Skua of undetermined age. Note the striking contrast between the body plumage and the upperparts, and the comparatively short, slender bill. The two birds in Figure 4 are representative of 12-15 of the birds present in June and all of the birds observed in July. Identification of these uniformly blackish individuals is tentative at best. The entire body plumage, head, wings, mantle and tail are uniformly blackish-brown. A pale wash is barely visible on the nape. It may well be that these birds are dark-phase South Polar Skuas on the basis of the uniformity of the body coloration, the relatively small size of the bill, and the presence of the pale wash on the nape. (Devillers describes dark phase adult maccormicki as possessing this feature.) The possibility that these individuals actually represent some form of C. skua cannot be overlooked, however. My guess is that they are, in fact, South Polar Skuas.

**T**<sup>T</sup> SHOULD BE ADDED that observers on recent "Bluenose" ferry crossings are of the opinion that the skuas observed in those waters (the northern Gulf of Maine) are Great Skuas (C.s. skua). They base their tentative identification upon their impression of the particularly large-headed, powerful-billed appearance that those birds show (Peter Vickery, pers. comm.).



Figure 5. Light phase South Polar Skua. Note the striking contrast between the head and mantle, as well as the very large wing patches. Photos/ Richard Veit.

The collection of a representative series of specimens is of paramount importance in determining the true status of the skuas in the North Atlantic Ocean at all seasons. In this age, when the collection of organisms for scientific purposes is frequently frowned upon, one must carefully weigh the pros and cons of collecting a particular individual. In the case of the abundant South Polar Skua. one must realize that the effect of collecting a limited number of specimens upon the population as a whole would be negligible, especially compared to the wealth of information and understanding potentially obtainable from a representative series of specimens preserved permanently within a museum.

## **References cited:**

- Devillers, Pierre, The Skuas of the North American Pacific Coast; Auk 94: 417-429
- Griscom, L. and Snyder, D., The Birds of Massachusetts; Peabody Museum, Salem, Massachusetts; 1955
  - -611 Massachusetts Ave., Lexington, MA 02173.