

# Nesting Wilson's Storm-Petrels in Antarctica

*Brooke Stevens*

Just before leaving on a three-week trip to the Falklands, South Georgia, and the Antarctic Peninsula last fall, I was asked by Carolyn Marsh to think about writing a post-trip account for *Bird Observer*. There were other local birders along — Wayne and Betty Petersen, Ted Davis, Warren Harrington, and Molly Cornell. Although we had great fun together, the New England presence hardly qualified as a topic of regional interest, and besides, I had already used that as an excuse to write about the adventures of the Murrelets on Attu (*Bird Observer*, June 2001). Then I thought, what about doing a piece on “our” birds that are really “their” birds, *really* theirs. In other words, birds that are plentiful and seen regularly on New England summer pelagic birding trips out of Cape Cod or Newburyport, but that disappear in fall and winter — not after nesting and reproducing in North America, but rather to nest and reproduce in the Southern Hemisphere.

I had camped along an Alaskan braided river in the Brooks Range last June, and was serenaded by graceful, close-flying Arctic Terns that were nesting in the gravelly bed below my tent. I was thrilled to see them again in the icy bays of the Antarctic Peninsula just six months later, and marveled at their journey. But perhaps the biggest surprise came on November 26 while we were enjoying (wallowing in!) the animal life at Hannah Point, our last stop before crossing the Drake Passage to Cape Horn. The weather was fair and it offered us a mellow opportunity to wander, sit, listen to, and generally enjoy Gentoo, Chinstrap, and Macaroni penguins; Antarctic (Southern) Giant Petrels, Kelp Gulls, and Antarctic Shags; and courting Snowy Sheathbills scooping out debris from a hollow ledge. It was a somewhat confined area compared with some places we had landed, filled with snow, ice, rock, lichens (and tiny invertebrates), but teeming with life! At one point, as Ted Davis turned and walked away from me, past a tall, jagged rock protrusion, laced with crevices, ledges, and cracks, a Wilson's Storm-Petrel shot past his head and headed to sea. The day before, while cruising around the Melchior Islands in zodiacs, Wayne reported with great excitement that he had seen a Wilson's Storm-Petrel *enter* a nest crevice on one of the rocky cliffs, where Kelp Gulls were also nesting among limpet shells that they had regurgitated. It was the first time that he had ever seen this species actually enter a possible nesting site.

Robert Cushman Murphy's classic study, *Oceanic Birds of South America*, and Ralph Palmer's *Handbook of North American Birds* have subsequently become primary references in my investigation of life history events associated with this regular visitor to New England waters. Wilson's Storm-Petrels breed on South Georgia, the South Orkneys, South Shetlands, islands of the Antarctic Archipelago, and on other islands in the circumpolar Antarctic ring (Murphy p. 750). Our trip from the second week in November to the first of December coincided with the spring arrival of the storm-petrels on their austral breeding grounds in west Antarctica. Although we may see hundreds of “Mother Carey's Chickens” dancing and pattering

over North Atlantic waters during local offshore pelagic trips, there are historical accounts of vast concentrations near Antarctica's Deception Island, and "acres and acres, so close they were almost touching" at South Georgia (Palmer p. 250). Throughout much of the species' range while in the middle latitudes, moderate numbers of Wilson's Storm-Petrels scatter over huge areas of the Atlantic Ocean, with "tens or scores of birds remaining visible as one travels great distances along tropical coasts and in the vicinity of tropical convergences" (Palmer, p. 250). Throughout the 4000 nautical miles we traveled on our cruise, we saw Wilson's Storm-petrels almost daily.


The storm-petrels that Wayne and I observed on land were flying into and away from rocky cliffs. The actual nest of the Wilson's Storm-Petrel is a burrow, usually in a cavity under rocks, either naturally occurring or, where there is soil, dug out by the petrels. The nest chamber can be unlined or fitted out with bits of vegetation, "a comfortable collection of penguin feathers," or simply accumulated debris, including carcasses of dead young (Murphy pp. 752-3). The nests that Murphy described on South Georgia were located in rocky scree or else on cliff faces. They were generally inaccessible, and the apparently ventriloquial, low whistling cry of the adult birds made them difficult to locate. Murphy himself, after a lengthy and patient search, was unable to discover a nest, although he reports that many of the birds he shot were "undoubtedly incubating." He quotes another account in which an observer sees the birds fluttering around the headlands and tussock flats along the Bay of Isles, South Georgia, "flying back and forth like martins, but I never spied one in the act of alighting at its nesting site" (p. 753). Now I can better appreciate Wayne's excitement at seeing one enter a nesting crevice!

There are purported to be millions of prions (one of several small southern ocean petrel species) nesting in some of the places we visited, yet we saw not a single one coming or going to a nest site. This was no doubt because skuas were everywhere, doing what they do best, stealing eggs and eating any adults that they could capture. There were carcasses of prions strewn all about the rocky slopes of several nesting islands. Are the storm-petrels we saw in broad daylight immune to the attacks of these predators? An account quoted in Murphy notes that "possibly its body affords too small a morsel to warrant any effort on the skua's part" (p. 755). Our sightings were not far from Petermann Island where in January 1909 members of a French expedition discovered twenty nests under large stones, or in deep crevices among the rocks. "The last birds of the species were observed about this locality on April 20, and the first arrival of the next autumn returned on November 23" (Murphy p. 752). Chicks are born in early to mid-February and fledge after fifty days or longer. It is the beginning of the austral winter then, and a daunting prospect, even for a krill-fed fledgling, to escape if the burrow should become snowed in. Although an adult storm-petrel can't reach its chick through hard-packed snow, it can apparently burrow through up to twenty centimeters (about eight inches) of soft snow (Palmer p. 250).

By April, Wilson's Storm-Petrels are migrating north, rapidly crossing warm equatorial waters. However, there is little evidence that first-year birds undertake such long migrations; "specimens determinable as in juvenal plumage are rare in

collections of North Atlantic birds, although very common in those from the tropics” (Murphy p. 750). The fledglings possibly follow a coastal route on their northward journey, while the adults undertake a more intrepid pelagic voyage that intercepts the Gulf Stream and reaches the latitude of Cape Hatteras about the third week in April. This is precisely the time when the vanguard of the population generally reaches the Atlantic Coast of the United States (Palmer p. 248). Gradually at least a portion of the population moves somewhat inshore during May and June. Murphy notes that “the whereabouts of the first-year birds during the northern winter, or breeding season, is a matter of considerable uncertainty.” He concludes that as the young do not molt until after they have left the North Atlantic, and probably not until their second summer; they do not breed until their second year, spending their entire first year at sea.

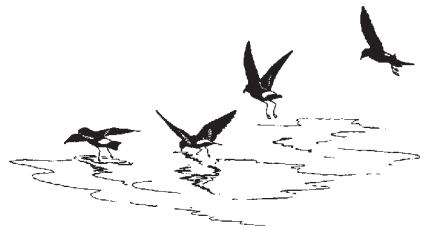
I particularly enjoyed Murphy’s description of this tiny, intrepid seafaring bird, made during a round trip voyage between New York and South Georgia in 1912-1913, when he saw Wilson’s Storm-Petrels as frequently as we did on our journey:

Like all small dark petrels, this species is difficult to see against water ruffled by the wind, and only rarely does it rise above the horizon of a person standing on the deck of a ship. The birds therefore often rush into the field of vision and appear at close range after the observer has been vainly scanning the water in the distance. During calms, when the ocean is silvery, they are silhouetted against it and are visible from afar. When following a vessel, they skip along the surface as they approach, giving a vigorous kick on the lee side with both feet whenever they touch the water. When they ‘stand’ to feed, the wings are held rigidly and they face the wind; the momentum necessary to keep them from being blown away is furnished by the webs, the legs sinking to the heel as they work backward in unison. Why their almost weightless bodies are not whisked off to leeward like fluffs of down is a good deal of a mystery. Regardless of the strength of the gale, however, they contrive to move forward in the apparently effortless, dreamlike manner that seems to defy both wind and gravitation (p.752). 

## References

- Murphy, R.C. 1936. *Oceanic Birds of South America*. Vol. II. New York: The American Museum of Natural History.
- Palmer, R.S., editor. 1962. *Handbook of North American Birds*. Vol. 1. New Haven, CT: Yale University Press.

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WILSON'S STORM-PETREL BY WILLIAM E. DAVIS, JR.