Yellow-nosed Albatross at Tuckernuck Island, Massachusetts

Richard R. Veit

Editor's Note. *The stunning photograph of the Yellow-nosed Albatross being harassed by the Great Black-backed Gull that graces our cover was captured by our author. The account that follows describes his sighting in detail and continues on to discuss the phenomenon of avian vagrancy, along with his theory that it represents a population-level process of irruption rather than an isolated event. This replaces our regular feature, "About the Cover", which will reappear in our next issue.*

Description of Sighting

At about 4:45 pm on Sunday, May 29, 2005, I saw and photographed an Atlantic Yellow-nosed Albatross (*Thalassarche chlororynchos*) at Tuckernuck Island. I was searching the brush surrounding my house for stakes for my mist-net poles and gradually became aware of a number of Great Black-backed Gulls dynamically soaring along the bluff on the south side of the island. My thought processes progressed in roughly this fashion: "It is truly amazing how much Great Black-backed Gulls can look like albatrosses." "THAT one REALLY looks like an albatross." "Gametic transfer! That IS a Yellow-nosed Albatross."

I somehow had the notion that I had enough time to run inside my house, get my camera, and call Simon Perkins at Massachusetts Audubon, which I did. I then spent

Figure 1: Yellow-nosed Albatross at Tuckernuck Island on May 29, 2005. Photograph by the author.

about forty-five minutes with my camera at the south-facing bluff just south of my house at the western end of Tuckernuck. The albatross spent about half of that time flying right along the line of the bluff, first heading east past the "Humane House," about the east-west midpoint of the island, and going out of view for me. It would then return, and fly to the west end of the island. It must have completed about five round trips as I watched. There are a couple of hundred pairs of Great Black-backed and Herring gulls nesting in this area; they did not mob the albatross. But occasionally a single gull of either species would seemingly become enraged and pursue the albatross (see cover photo and Fig. 2). The albatross vocalized at least four to five times in response: the call was a nasal, sheep-like bleating sound. After completing these round-trip perusals of the south shore of Tuckernuck, the albatross wandered a bit more. It twice flew inland over the island and made circumnavigations of the North Pond (~1/2 mile diameter). It also flew in a very low, scaling flight over the sand-plain grasslands where the gulls were nesting. At about 5:30 p.m., I left via ATV

Figure 2: Yellow-nosed Albatross over the beach on Tuckernuck Island. Photograph by the author.

to get Chris van der Wolk and Peter Watrous who I knew were on the island. I returned with Chris in about ten minutes, but we never saw the albatross again. An all-day search the next day with Simon Perkins and Daniel Sutherland failed to produce any further sightings of the bird.

Overview of Vagrancy Pattern

The opinion that recent records of Yellow-nosed Albatrosses in North America involve a single individual has been informally put forward by a number of people. For example, it has been suggested that all the sightings in the year 2000 are of a single bird. A discussion of both sides of this issue is in Buckley and Schairer (2000).

I think this conclusion is unlikely, for the following reasons. To begin with, most birders would assume that two sightings of the same species at different places refer to different individuals unless evidence (e.g., a band or other individually distinctive mark) suggested otherwise. Nobody would suggest that a Lark Sparrow at Nantucket and a Lark Sparrow at Plum Island were the same bird, and Operation Recovery in the 1960s helped to demonstrate the unlikelihood of such coincidence. So why suggest that the several sightings of Yellow-nosed Albatrosses are of a single bird? I think the only reasonable answer has to do with the perceived rarity of Yellow-nosed Albatrosses in North America. If a birder has a one-in-a-thousand chance of seeing a Yellow-nosed Albatross in New England, then that observer has a one-in-a-million chance of seeing two of them. But this reasoning contains an important assumption: that the two sightings are statistically independent of one another. Everything we have learned about vagrancy in birds in recent years indicates they are not: vagrancy is a *population-level* process, and vagrants are *clustered* in time. That is, incidents of vagrancy are actually irruptions; if one individual occurs out of range in a given year, then almost always others do as well.

The evidence from albatrosses supports this point of view fairly strongly. First, records of Yellow-nosed Albatross in North America are clustered in time (Figure 3; data from Bourne 1967 and Finnegan 2001). I note that at least six of the thirty-five records are of birds that died, so my sighting on May 29 means that an absolute minimum of seven birds have appeared in North America. Related albatrosses have annual mortalities of seven percent (del Hoyo et al. 1992) suggesting that fewer than one percent of birds reach sixty years of age. The oldest ones recorded have been thirty to forty years old, so records spanning 1885-2005 in North America probably involve three generations, and that would push the absolute minimum total to eight birds. Second, there are obvious clusters of sightings in 1976 and 2000, and perhaps another in 2005. To me, it is almost ludicrously improbable that records spanning 5000 miles of coastline (Nova Scotia to Texas) and six months (as they did in 1976) might pertain to the same individual bird, even a large and conspicuous one like an albatross. Instead, the data rather clearly indicate an irruption of Yellow-nosed Albatrosses to the North Atlantic.

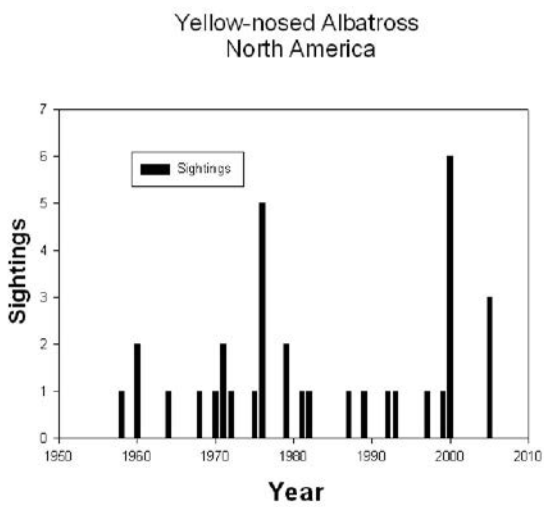

Figure 3: Yellow-nosed Albatross Sightings in North America.

Finally, records of Black-browed Albatrosses (*Thalassarche melanophris*) in the North Atlantic also clearly suggest irruptive movements from the southern hemisphere. I have

extracted records of Black-browed Albatrosses from Great Britain from Dymond and Fraser (1989) and for North America from Patteson et al. (1999). These records, for the years 1958-1985, are graphed in Figure 4. There is a statistically significant correlation between these two time series ($r_S = 0.50$, $p = 0.007$); what this analysis says is that Black-browed Albatrosses tend to occur off Britain during the same years that they occur in North America. In other words, in certain years irruptions of these birds to the North Atlantic occur.

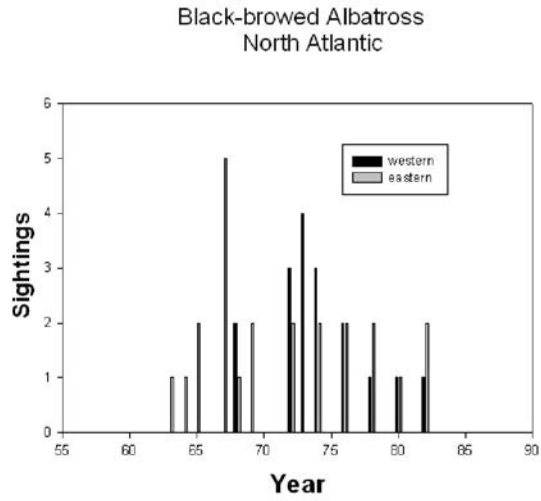

Figure 4: Black-browed Albatross Sightings in the North Atlantic.

Prospecting Behavior

The actions of the Tuckernuck Yellow-nosed Albatross strongly suggested that it was prospecting for nest sites, a frequently observed behavior of tubenoses and other birds (Danchin et al. 1991; Warham 1990, pp. 228-30, 1996, pp. 184-85). Several other Yellow-nosed Albatrosses in the northwest Atlantic also displayed such behavior, or at least were viewed flying over land (Buckley and Schairer 2000). It is puzzling why a pelagic bird like an albatross should be seen over land, until one considers that what they are doing is prospecting. Indeed, Black-browed Albatrosses in the northeast Atlantic have gone so far as to join nesting colonies of Northern Gannets (Bourne 1967), one having done so for thirty years.

There are many anecdotal accounts of prospecting by albatrosses and other petrels. For example, numerous carcasses of Leach's Storm-Petrels, victims of Short-eared Owls, have been found on Monomoy in the summer (Veit and Petersen 1993), and others have been mist-netted at night on Great Gull Island in Long Island Sound (Bull 1974). Vagrants of this northern hemisphere breeder have been seen with increasing frequency in the southern hemisphere (e.g., Veit et al. 1995), individuals have been recorded prospecting in New Zealand and South Africa, and breeding was first recorded in South Africa in 1998 (Brooke 2004). Even more extraordinary is the repeated discovery of prospecting Swinhoe's Storm-Petrels, a species known to breed only on islands near Japan, in the Mediterranean, and western Europe (Brooke 2004). Albatrosses are prone to this sort of behavior as well. An adult Salvin's Albatross, ninety-nine percent of which nest on the Snares and Bounty Islands off New Zealand, was found and banded halfway around the world in a South Georgia Black-browed and Gray-headed Albatross colony in February 1982 by Peter Prince. The bird was subsequently found nesting in the tiny (~5 pairs) Crozet Island colony in the Indian Ocean (Marchant and Higgins 1990)! Numbers of Laysan Albatrosses were observed

over the California Channel Islands and oceanic islands off Baja California during the 1970s and 1980s before being found breeding on Guadeloupe, Clarion, and San Benedicto Islands (Howell and Webb 1992).

In sum, as rare as sightings of any albatross in the North Atlantic are, and as thrilling as it certainly is to see one at close range over land, this phenomenon is actually consistent with what we know about the behavior of these birds. Albatrosses regularly disperse enormous distances away from their natal colonies and usually devote efforts to prospecting potential new nesting sites when they do so. The sighting from Tuckernuck fits a pattern of intermittent irruption to the northern hemisphere, the last two of which occurred in 1976 and 2000. Consistent with other instances of long-distance dispersal, many of the albatrosses involved spent their time visiting and inspecting potential nesting sites. Two other sightings of albatrosses occurred within two weeks following the Tuckernuck bird, one off Monomoy and the other in Buzzards Bay, so 2005 may prove to be yet another irruption year.

References

Bourne, W.R.P. 1967. Long-distance vagrancy in the petrels. *Ibis* 109: 141-67.

Brooke, M. 2004. *Albatrosses and Petrels across the World*. Oxford: Oxford University Press.

Buckley, P.A. and G. Schairer. 2000. Yellow-nosed Albatross on Fire Island, LI, NY. *Kingbird*: 50: 223-31.

Bull, J. 1974. *Birds of New York State*. Garden City, NY: Doubleday, Natural History Press.

Danchin, E., B. Cadiou, J.Y. Monnat, and R. Rodriguez-Estrella. 1991. Recruitment in long-lived birds: conceptual framework and behavioral mechanisms. Pages 1641-56 in B.D. Bell et al, editors, *Acta XX Congressus Internationalis Ornithologici*. Wellington, New Zealand: Hutcheson, Bowman, and Stewart Limited.

del Hoyo, J., A. Elliott and J. Sargatal. 1992. *Handbook of the Birds of the World*. Vol. 1. Barcelona: Lynx Edicions.

Dymond, J.N. and P.A. Fraser. 1989. *Rare Birds in Britain and Ireland*. Staffordshire, England: T. & A.D. Poyser, Calton.

Finnegan, S. 2001. First Yellow-nosed Albatross (*Thalassarche chlororhynchos*) for New Jersey. *Records of New Jersey Birds* 37: 58-62.

Howell, S.N.G., and S.W. Webb. 1992. Changing status of the Laysan Albatross in Mexico. *American Birds* 46: 220-23.

Marchant, S, and P.J. Higgins. 1990. *Handbook of Australian, New Zealand and Antarctic Birds*. Volume 1, Ratites to Ducks. Oxford: Oxford University Press.

Patteson, J.B., M.A. Patten, and E.S. Brinkley. 1999. The Black-browed Albatross in North America: First photographically documented record. *North American Birds* 53: 228- 31.

Veit, R.R. and W.R. Petersen. 1993. *Birds of Massachusetts*. Lincoln, MA: Massachusetts Audubon Society.

Veit, R.R., M.J. Whitehouse, and P.A. Prince. 1995. Sighting of a Leach's Storm-Petrel near the Antarctic Polar Front. *Marine Ornithology* 24: 41-2.

Warham, J. 1990. *The Petrels: Their Ecology and Breeding Systems*. London: Academic Press.

Warham, J. 1996. *The Behaviour, Population Biology and Physiology of the Petrels*. London: Academic Press.

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