

## General Field Notes

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*General Field Notes* briefly report such items as rare sightings, unusual behaviors, significant nesting records, or summaries of such items.

*First, second, or third sightings of species in either state must be submitted to the appropriate Bird Records Committee prior to publication in The Chat.*

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## Status, Distribution and Phenology of Band-rumped Storm-Petrel in Waters off South Carolina

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First discovered in South Carolina by Jay Shuler in 1972 (Shuler 1973), the Band-rumped Storm-Petrel (*Oceanodroma castro*) has been classified as casual in South Carolina waters (Post and Gauthreaux 1989). However, recent pelagic trips off South Carolina indicate that this species is a localized late spring and summer resident in areas outside the continental shelf.

### Background

During the 1980s and early 1990s, I was a crewman and frequent guest aboard more than one offshore sport fishing charter vessel. We spent many spring and summer days over 100 km offshore, trolling just beyond the continental shelf edge and along the western portion of the Gulf Stream. These charters focus their efforts on deep-water upwellings, floating sargassum reefs and other bird-attracting features. When birds are spotted, every effort is made to draw near fish-indicating bird activity.

Over the course of more than 90 such trips between mid-May and August, I sighted Band-rumped Storm-Petrels at least 30 times. Roughly half of the encounters were over a feature known as the “380 Hole”, which lies 104 km SE of the Charleston harbor jetties.

### Recent Results

In spring 2004 I began organizing birding-only pelagic trips out of Charleston, SC. Band-rumped Storm-Petrels were observed off SC on seven out of 10 trips beyond the continental shelf in 2004–2006. On these trips, multiple observers, including Lex Glover, Burton Moore, Chris Feeney, Steve Compton, Chuck Hocevar, J. B. Hines, Robert Grenfell, Chris Snook,

me, and others, observed Band-rumped Storm-Petrels. On 30 May 2004, five individuals were seen. Two of these were photographed by Burton Moore at the “380 Hole”. Computer images scanned from the photographs may be viewed on the Internet at <http://www.crbo.net/BRSP.html>.

Following this trip, one to six birds were recorded on six additional dates, as follows: five to six individuals on 18 June 2004, two on 28 May 2005, one on 10 June 2005, one on 15 July 2005, one on 20 August 2005, and two on 5 August 2006. The storm-petrels occurred over 350–762 m depths. The birds were seen in areas with a water surface temperature of 26.8–28.9 °C (80.3–84.0 °F). Similar conditions prevailed on all seven occasions.



Figure 1. Band-rumped Storm-Petrel, 30 May 2004. Photo by Burton Moore.

## **Discussion**

Prior to the 1990s, except for a very few survey cruises by J. C. Haney, workers interested in South Carolina pelagic birds generally stayed within 80 km of shore. This is an insufficient distance for reliably reaching some species of pelagic birds off SC; trips of such length never depart the shallow waters of the continental shelf. In addition, although the long-distance survey cruises were conducted systematically, for statistical reasons data were based on random encounters with birds (Haney 1985). This methodology prevented actions like chasing distant birds, timely dispensation of chum to attract birds, and other strategies that help produce sightings of Band-rumped Storm-Petrels. Despite this limitation, the small number of long-distance survey cruises in season produced Band-rumped Storm-Petrel records such as the individual that J. C. Haney observed in the company of Wilson’s Storm-Petrels (*Oceanites oceanicus*) at N32° 04' W78° 18' on June 3, roughly 160 km southeast of Charleston (Haney 1986).

Since about 1990, many pelagic excursions have been conducted in or beyond the Gulf Stream, as far as 150 km offshore. The largest numbers of seabirds often concentrate at Gulf Stream upwellings where food resources are readily available to surface-feeding birds (Haney 1983). In addition, birders now often scatter bait (chum) over their observation areas, luring

relatively large numbers of seabirds within close range. These and other reasons undoubtedly account for the recent proliferation of records, and make it necessary to reevaluate the status of many pelagic species.

Band-rumped Storm-Petrel numbers off SC peak during spring migration in late May and early June. Numbers begin to decrease in early July, and by the end of September all appear to have left the region. Observers at suitable distances off Georgia have also noted similar patterns of occurrences (Haney 1983, 1985; Dias, unpublished). Off the Outer Banks of North Carolina, during the same period, Band-rumped Storm-Petrels have been recorded on most Gulf Stream trips (B. Patteson, pers. comm.).

Off South Carolina, Band-rumped Storm-Petrels appear to favor certain sites, whose locations are often independent of Gulf Stream orientation. These sites are found in deeper waters slightly beyond the continental shelf, whose edge lies above 200 meter depths. Of these locations, one known as the "380 Hole" is noteworthy.

The "380 Hole" is 8.7 km beyond the edge of the continental shelf at N32° 07.610' W78° 56.700'. Here, a 695 m depression lies within surrounding 268 m depths. Band-rumped Storm-Petrels are often seen at this location when the western edge of the Gulf Stream passes over it. At times, Band-rumped Storm-Petrels may be found here even when the Gulf Stream boundary is east or west of it.

Other similar sites are: (1) A sea valley 0.5–3.5 miles southeast of the "380 Hole"; (2) the Beaufort Valley at N32° 23.419' W78° 13.078'; (3) a sea valley between N32° W79° and N32° 05' W79°; and (4) the "226 Hole" at N32° 00.686' W79° 05.773', which is barely south of the South Carolina border.

Such locations are characterized by fairly consistent upwellings of deeper, colder water that occur when the northward-flowing Gulf Stream passes over depressions adjacent to sharp rises in the Blake Plateau. Cold water upwellings bring nutrients to the surface, which increase phytoplankton biomass, which enhances prey availability (Haney 1985).

Band-rumped Storm-Petrels also favor cold-core areas between Gulf Stream filaments and the Gulf Stream proper (Haney 1985). These features are temporary in nature; they are essentially northward-traveling upwellings caused by friction between the Gulf Stream and the underwater contours of the Blake Plateau.

### **Literature Cited**

- Haney, J. C. 1983. Previously unrecorded and hypothetical species of seabirds on the continental shelf of Georgia. *Oriole* 48:21–32.
- Haney, J. C. 1985. Band-rumped Storm-Petrel occurrences in relation to upwelling off the coast of the southeastern United States. *Wilson Bulletin* 97:543–547.
- Haney, J. C. 1986. Records of seabirds from South Carolina offshore waters. *Chat* 50:44–46.

Post, W., and S. A. Gauthreaux Jr. 1989. Status and distribution of South Carolina birds. Contribution Charleston Museum XVIII.

Shuler, J. 1973. First South Carolina Record of Harcourt's Storm-Petrel. *Chat* 37:78



Sedge Wren, Pea Island NWR, 11 Nov 2006. Photo by Jeff Lewis.