

A *FREGETTA* STORM-PETREL OFF WESTERN MEXICO

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On 29 November 2006, Pagen observed and photographed a storm-petrel of the genus *Fregetta*, most likely a White-bellied Storm-Petrel (*F. grallaria*), at 14° 50.52' N, 112° 35.46' W, 952 km (514 nautical miles) southwest of Cabo Corrientes, Mexico, and 456 km (246 nautical miles) southeast of Isla Clarion, Mexico. This location is over 1600 km from any previous record for this genus in the eastern Pacific Ocean.

The observation was made from the NOAA ship *David Starr Jordan*, which was surveying dolphins of the genus *Stenella* and assessing the ecosystem of the eastern tropical Pacific Ocean for the Southwest Fisheries Science Center (SWFSC). At 16:37, the ship was maneuvering to document a Minke Whale (*Balaenoptera acutorostrata*). Pagen was looking off the ship's stern with a Nikon D70 digital SLR camera and Tokina 80–400 lens, but without binoculars, when he noticed a small flash of white at about 300 m distance. At first he thought the bird was a phalarope, but after a couple seconds of observation its banking flight indicating a storm-petrel became apparent. Realizing that a storm-petrel with a white belly was unusual at this location, he shot 12 frames with the camera at about 300 m distance (Figures 1 and 2). The bird flew along with the ship for another 10 seconds or so, remaining beyond 300 m, before disappearing from sight.

The bird was a small storm-petrel, appearing slightly larger in size than a Wilson's Storm-Petrel (*Oceanites oceanicus*), although no other birds were nearby at the time for comparison. It propelled itself with its feet, leaving small "rooster-tailed" splashes on the water (Figure 2), a characteristic of *Fregetta* and closely related genera of storm-petrels. The storm-petrel appeared to have a dark throat, a square or rounded tail, clear white underparts, white underwing coverts, and white uppertail coverts.



Figure 1. *Fregetta* storm-petrel, presumed White-bellied Storm-Petrel (*F. grallaria*), 456 km SE of Isla Clarion, Mexico (14° 50.52' N, 112° 35.46' W), 29 November 2006. Note the apparently entirely white belly and white underwing coverts contrasting with the blackish breast and head.

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Figure 2. *Fregetta* storm-petrel, presumed White-bellied Storm-Petrel (*F. grallaria*), 456 km SE of Isla Clarion, Mexico (14° 50.52' N, 112° 35.46' W), 29 November 2006. Note the distinct white uppertail coverts and “rooster-tail” splash characteristic of *Fregetta* and related genera of storm-petrels.

Among storm-petrels found in the Pacific Ocean, all features are consistent with those of the White-bellied Storm-Petrel (Harrison 1983, 1987, Marchant and Higgins 1990, Shirihai and Jarrett 2002, Onley and Scofield 2007). The White-throated Storm-Petrel (*Nesofregetta fuliginosa*) has a white throat (creating the appearance of having a dark breast band), a notched tail, is larger, and has a different manner of flight (Harrison 1983, 1987, Onley and Scofield 2007). The only other possibility is the Black-bellied Storm-Petrel (*F. tropica*), which usually has a variable black stripe through the belly, darker and browner upperparts, and longer legs with feet projecting noticeably beyond the tail (Marchant and Higgins 1990). Except for the entirely white belly, however, these differences cannot be adequately assessed in the photographs. According to Marchant and Higgins (1990) and Onley and Scofield (2007), a small proportion of the Black-bellied Storm-Petrels breeding at Tristan de Cunha and Gough islands in the southern Atlantic Ocean may have entirely white bellies; however, the taxonomic status of these populations appears to be unresolved. It is unlikely that birds of these populations reach the Pacific Ocean, and Pitman (1986) and Spear and Ainley (2007) inferred that white-bellied *Fregetta* storm-petrels they observed in the Pacific were *F. grallaria*. We follow these authors in assuming the storm-petrel we observed was a White-bellied, although we acknowledge that a Black-bellied Storm-Petrel with a white belly cannot be ruled out from our observation.

The White-bellied Storm-Petrel breeds in south-temperate waters of the Southern Hemisphere, with Pacific breeding colonies located around Lord Howe, on Kermadec, and on other smaller islands in the southwestern Pacific (*F. g. grallaria*), on Rapa Island in the Iles Australes in the south-central Pacific (*F. g. titan*), and in the Juan Fernandez Islands in the southeastern Pacific (*F. g. segethi*) (Marchant and Higgins 1990, Brooke 2004).

The distribution of the White-bellied Storm-Petrel at sea in the Pacific has been summarized by Murphy (1936), Pitman (1986), and Spear and Ainley (2007). Pitman (1986) observed at least 20 White-bellied Storm-Petrels during 4333 hours of observation in the eastern tropical Pacific from 1974 to 1984. These ranged from the equator to 12° S and from 86° to 109° W, with the closest observation (0° 00' N, 109° 51' W on 8 August 1980) 1678 km south-southeast of the location of the bird seen off of Mexico. Spear and Ainley (2007) recorded and collected seabirds in the eastern and central Pacific west to 175° W during 9308 hours of observation from 1980 to 1995. In the central Pacific they collected 15 and observed an additional

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16 White-bellied Storm-Petrels from 4° N to 20° S and from 110° to 175° W that they concluded from plumage, measurements, molt patterns, and other factors were of the nominate subspecies. They collected 7 and observed 406 within 1700 km of the South American coast (east of 100° W), from 1° N to 36° S, separated by 3500 km from the other group, which they identified as *segethi*. On 16 July 1987 in the Gulf of Panama, at 0° 35.4' N, 80° 33.0' W, Spear and Ainley (1999) also observed a White-bellied Storm-Petrel that they assumed was *segethi*. The location of this observation is 3860 km southeast of that of our observation off Mexico.

Spear and Ainley (2007) found *segethi* most frequently over sea-surface temperatures of 8–15° C. The apparent White-bellied Storm-Petrel we report was over a surface temperature of 28° C, well above the temperature range observed by Spear and Ainley (2007), suggesting that it was crossing unfavorable habitat. Because the ship was making frequent turns to approach a Minke Whale at the time of this observation, it is not clear what direction the bird was traveling when it encountered the ship, that is, whether it may have been migrating north or south.

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LITERATURE CITED

- Brooke, M. 2004. Albatrosses and Petrels across the World. Oxford Univ. Press, Oxford, England.
- Brooke, M. de L. 1987. The birds of the Juan Fernandez Islands, Chile., Int. Council Bird Preserv. Study Rep. 16.
- Harrison, P. 1983. Seabirds: An Identification Guide. Houghton Mifflin, Boston.
- Harrison, P. 1987. Seabirds of the World: A Photographic Guide. Christopher Helm, London.
- Marchant, S., and Higgins, P. J., eds. 1990. Handbook of Australian, New Zealand, and Antarctic Birds, vol. 1. Oxford Univ. Press, Melbourne, Australia.
- Murphy, R. C. 1936. Oceanic Birds of South America, vol. 2. Am. Mus. Nat. Hist., New York.
- Onley, D., and Scofield, P. 2007. Albatrosses, Petrels, and Shearwaters of the World. Princeton Univ. Press, Princeton, NJ.
- Pitman, R. L. 1986. Atlas of seabird distribution and relative abundance in the eastern tropical Pacific. Southwest Fisheries Center Admin. Rep. LJ-86-02C, Southwest Fisheries Center, 8604 La Jolla Shores Drive, La Jolla, CA 92037.
- Shirihai, H., and Jarrett, B. 2002. The Complete Guide to Antarctic Wildlife: Birds and Marine Mammals of the Antarctic Continent and the Southern Ocean. Princeton Univ. Press, Princeton, NJ.
- Spear, L. B., and Ainley, D. G. 1999. Seabirds of the Panama Bight. *Waterbirds* 22:175–198.
- Spear, L. B., and Ainley, D. G. 2007. Storm-petrels of the eastern Pacific Ocean: Species assembly and diversity along marine habitat gradients. *Ornithol. Monogr.* 62.

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