

First Record of Parkinson's Petrel (*Procellaria parkinsoni*) for the Continental United States

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Abstract

This paper details a record of Parkinson's Petrel (*Procellaria parkinsoni*), also known as Black Petrel, on 1 October 2005 at 38° 05.788' N, 123° 22.281' W, or 32.4 km (17.6 nmi) northwest of the Point Reyes headlands, Marin County, California in the Cordell Bank National Marine Sanctuary. Although there have been prior potential reports of this species in continental United States waters, all in California, this is the first to be conclusively documented for California and the U.S. waters of the North Pacific Ocean.

Field Encounter

On 1 October 2005, a group of 20 birders led by Rich Stallcup and co-organized by Ann Dewart departed Bodega Bay aboard the *New Sea Angler*, a 20-m charter boat captained by Rick

Powers, who has collaborated with Stallcup since 1988 on pelagic birding trips. This was the thirtieth such trip of this group since 1990. The course ran from Bodega Harbor to the 106-m (59-fathom) "spike" at the north end of Cordell Bank and beyond, off the edge of the Continental Shelf to waters 1800 m or more (1000+ fathoms) deep, then returning on an east-northeasterly course back toward Bodega Bay (Figure 1). The conditions were favorable for viewing birds and other marine life, with light west-northwesterly breezes and swells of 1 m at intervals of ca. 14 sec.

Encounters with birds and mammals over the course of the morning and early afternoon were relatively few compared to past trips. In the afternoon, however, the course set to return to the harbor would pass through waters that had in recent years produced several

species of interest, notably Light-mantled Albatross (*Phoebastria palpebrata*), Shy Albatross (*Thalassarche cauta*), Galapagos/Hawaiian Petrel (*P. phaeopygia/sandwichensis*), and Sooty Tern (*Sterna fuscata*).

At 1418 PDST, from the upper level bow, Stallcup spotted three birds on the water at the edge of a raft of detached Bull Kelp (*Nereocystis luetkeana*) about 0.5 km from the boat; he asked the captain to steer 90° to port, to bring the boat closer to the birds. From that distance, it appeared most likely the birds were a Pink-footed Shearwater (*Puffinus creatopus*), a Flesh-footed Shearwater (*P. carneipes*), and a Sooty Shearwater (*P. griseus*). As we neared about 150 m from the birds, Stallcup asked the captain to turn off the engines and to drift silently toward the birds, a technique that

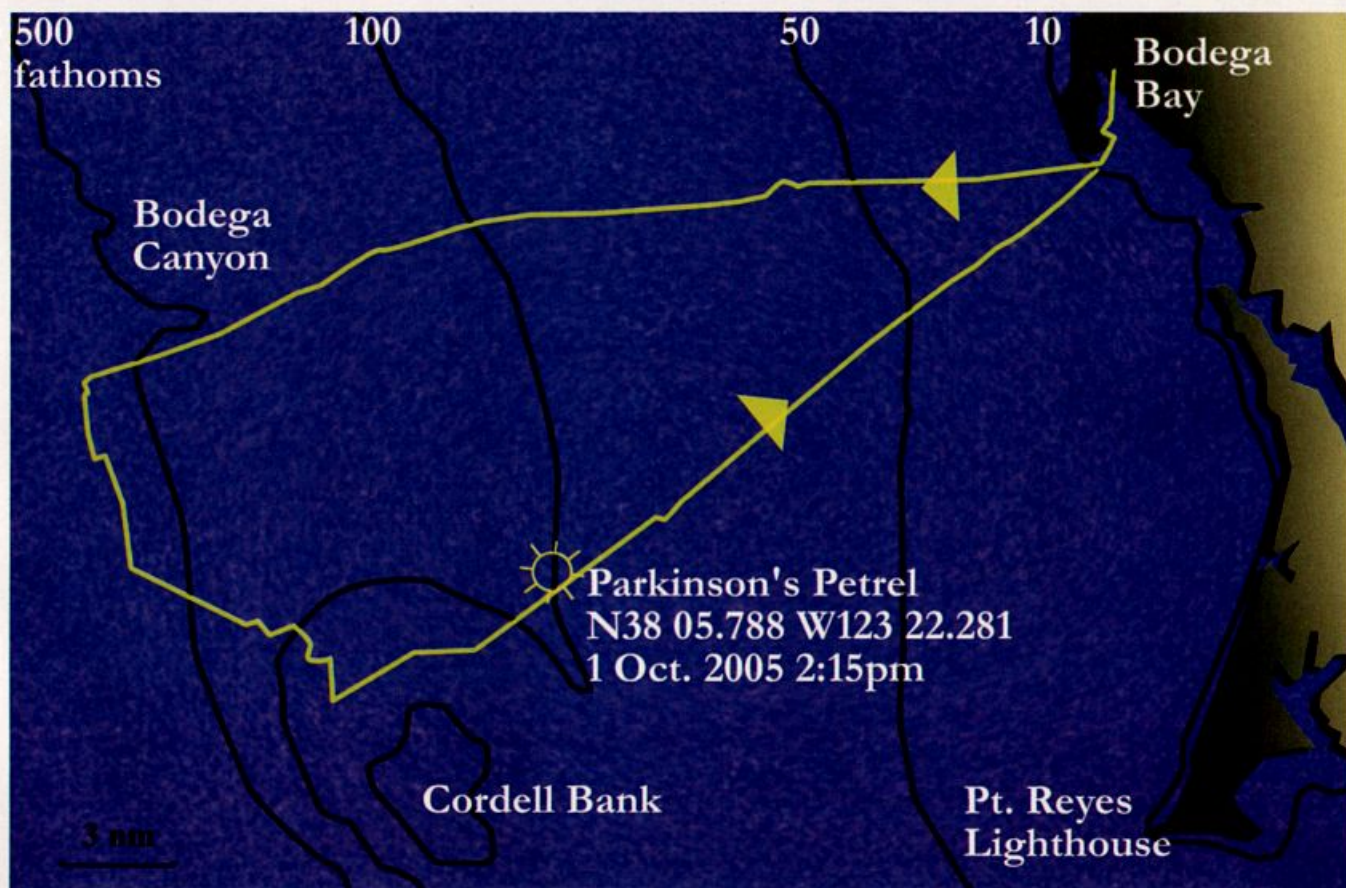


Figure 1. Course of pelagic trip from Bodega Bay, California, 1 October 2005, with location of Parkinson's Petrel. Graphic by Rich Stallcup.



Figure 2. Parkinson's Petrel, Cordell Bank National Marine Sanctuary, Marin County, California, 1 October 2005. This image shows the color, structure, and pattern of the bill, silvery appearance of the remiges when seen from below, and the dark legs and feet. Photograph by © Eric Preston.

(along with maintaining silence on the public address system) had permitted very close approach to seabirds on past trips. The location here was at 38° 05.788' N, 123° 22.281' W.

To Stallcup, the larger dark bird looked "wrong" for Flesh-footed Shearwater; he noted aloud its "big-headed, thick-chested" appearance and its whitish (not pinkish) bill tones. He suggested that those with cameras get into position on the starboard bow, in order to document what appeared to be a *Procellaria* petrel. Over the next two minutes, as the boat drifted alongside and past the birds, Stallcup narrated field characters that would support this tentative identification, including the bill's dark tip and dusky culmen extending to the naricorns. As the birds flushed, the black legs and feet of the suspected *Procellaria* were clearly visible, and Stallcup identified it at that time aloud as a Parkinson's Petrel (*Procellaria parkinsoni*), or Black Petrel, as it is called in Australia and New Zealand (Heather and Robertson 1997).

The bird flew about 0.5 km and landed near another kelp raft and a Rhinoceros Auklet (*Cerorhinca monocerata*). The group studied the bird again, in the same manner, and once more a few minutes later. The encounter lasted about 16 minutes, until 1434 PDST. All twenty participants on board had prolonged, excellent studies of the bird, and extensive photographic documentation was obtained (Figures 2, 4, 5, 8-10).

Field identification

In the North Pacific Ocean, there are several large, all-brown or mostly brown procellariids that might be confused with each other and potentially with Parkinson's Petrel (see McKee and Terrell 2004, Spear et al. 1992). However, most of these birds are noticeably smaller and/or have a very different bill shape than all the *Procellaria* petrels, including Sooty Shearwater, Short-tailed Shearwater (*Puffinus tenuirostris*), dark-morph Northern Fulmar (*Fulmarus glacialis*)—as well as the rare and vagrant gadfly petrels to the eastern North Pacific, such as Great-winged Petrel (*Pterodroma macroptera gouldi*), dark-morph Herald Petrel (*P. heraldica*), Solander's Petrel (*P. solandri*), and Kermadec Petrel (*P. neglecta*), most of which are known only from waters outside the Exclusive Economic Zone (E.E.Z.) of the continental United States. Less likely candidates for confusion would be smaller species such as Bulwer's Petrel (*Bulweria bulwerii*), dark-morph Wedge-tailed Shearwater (*Puffinus pacificus cuneatus*), or Christmas Shearwater

(*P. nativitatus*), all also primarily birds of tropical waters beyond the E.E.Z. waters of the continental United States.

Off California, then, observers should concentrate on distinguishing Flesh-footed Shearwater, as well as the relatively rare dark morph of Pink-footed Shearwater, from any potential *Procellaria* petrel, of which there are an additional two mostly brown species to consider: Westland Petrel (*P. westlandica*) and White-chinned Petrel (*P. aequinoctialis*). Though all five species are mostly brown in plumage, the details of overall size and structure, the distribution of dark and light on the bill, and the size and structure of the bill should be sufficient to distinguish the species, given sufficient views.

Parkinson's Petrel is a somewhat fulmar-like petrel, about the size of a Pink-footed Shearwater, with a thick, pale, horn-colored bill that has a dark tip and dusky culmen, and dark legs and feet (Harper and Kinsky 1974, Harrison 1983, Harri-

son 1987, Marchant and Higgins 1990, Heather and Robinson 1997). The underside of the primaries may appear silvery gray in direct light (Marchant and Higgins 1990, Howell and Webb 1995; Figure 2). Flesh-footed Shearwater and dark-morph Pink-footed Shearwater by comparison are less bulky, have a longer, thinner, pink-based bill, a longer, less wedge-shaped tail, and pale, pinkish legs and feet (Figures 3, 4). Westland Petrel is a much larger bird than Parkinson's, often as much as 20% larger (Figure 6), and tends to look less slender in neck, body, and wings (Marchant and Higgins 1990). Although Parkinson's is comparable in morphometrics to Pink-footed Shearwater, it is an obviously bulkier bird to an experienced observer (Figure 4). In flight, Parkinson's often shows toes projecting beyond the tail; Westland shows little or no projection of the toes past the tail tip (Figures 2, 5). Compared to Parkinson's, Westland has a blockier (rather than rounded) head and a larger, thicker bill, features that can be hard to judge on a single bird at sea (Figure 6); the two species share a similar bill pattern, with most horn-yellowish (sometimes with bluish or



Figure 3. Flesh-footed Shearwater. Compared to Parkinson's Petrel, Flesh-footed Shearwater (as well as dark-morph Pink-footed Shearwater) has a thinner, longer, pink-based bill and pale pinkish feet. Hauraki Gulf, New Zealand; 6 December 2004. Photograph by © Eric Preston.



Figure 4. Parkinson's Petrel (left) and Pink-footed Shearwater in flight, showing their similar sizes. Cordell Bank National Marine Sanctuary, Marin County, California; 1 October 2005. Photograph by © Eric Preston.



Figure 5. Parkinson's Petrel, showing feet projecting beyond the tail tip. Cordell Bank National Marine Sanctuary, Marin County, California; 1 October 2005. Photograph by © Eric Preston.

even greenish tones) bill that show contrasting grayish black unguis (both the maxillary unguis and the mandibular unguis), culmen saddle, and sulcus (Marchant and Higgins 1990). White-chinned Petrel, about the same size as Westland (and therefore appreciably larger than Parkinson's), almost always has a pale unguis and almost always shows—at close range—white feathering at the base of the mandible (sometimes only in the interramal space), i.e., the "chin" (compare Figure



Figure 6. Westland Petrel, showing blockier head and larger, thicker bill than Parkinson's Petrel. Kaikoura, New Zealand; 10 December 2004. Photograph by © Eric Preston.



Figure 7. White-chinned Petrel, showing ivory-tipped bill and white chin. Kaikoura, New Zealand; 10 December 2004. Photograph by © Eric Preston.

7). Some White-chinned Petrels do not show this feature (Falla 1937, Warham and Bell 1979, Warham 1996, Marchant and Higgins 1990), and so its absence clearly does not rule out White-chinned Petrel. Because size and proportions can be difficult to judge at sea, reports of any *Procellaria* in North America should be accompanied by notes on the bird's proportions in direct comparison to procellariids near it.

Discussion

Parkinson's Petrels breed on Little Barrier and Great Barrier Islands, both of which are in the Hauraki Gulf of the North Island of New Zealand. They formerly bred on both the main north and south islands of New Zealand (Heather and Robertson 1997). The world population is estimated at 10,000 birds (Taylor 2000). As is true of many procellariids, Parkinson's Petrel's breeding success has been negatively affected by introduced mammals, including cats. Also, as has been the case with many petrels, shearwaters, and albatrosses, many have been caught and drowned by the long-line fishery (Birdlife International 2005). After the breeding season, Parkinson's Petrels migrate to the eastern Pacific Ocean; their distribution at this time stretches from northern

Peru to southern Mexico (to about 20° N). There is some evidence that the species has a foraging relationship with dolphins, especially Melon-headed Whales (*Peponocephala electra*) and False Killer Whales (*Pseudorca crassidens*) (Pitman and Balance 1992).

In North American waters north of Mexico, there is at least one sighting of a probable Parkinson's Petrel, about 43.2 km (23.5 nmi) south-southwest of Southeast

Farallon Island, San Francisco County, California on 7 June 1996, but this record was not accepted by the California Bird Records Committee, which, however, did agree unanimously that the bird was a *Procellaria* petrel, either Westland or Parkinson's (Rottenborn and Morlan 2000). More recently, a possible juvenile Parkinson's Petrel was photographed off Bodega Bay, Sonoma County, California 11 October 2004 (color photo-

graphs in *North American Birds* 59: 191; Glover et al. 2005).

During the past 35 years, pelagic birding trips in the United States have helped to refine, even to redefine our understanding of nearshore avifaunas; species once thought to be rare are now known to be regular visitors. The Cordell Bank National Marine Sanctuary has begun to receive attention from pelagic birders because of its high productivity. It is essentially an underwater craggy granite ridge located 92 km (50 nmi) north-northwest of San Francisco and about 46 km (25 nmi) west of the Point Reyes Lighthouse in Marin County, California. Roughly elliptical in shape, its dimensions measure about 16 × 7 km (9 × 4 nmi) at the 90-m (50-fathom) contour. Its highest point lies only 36 m (20 fathoms) below the surface of the sea. Some 36.8 km (20 nmi) to the west of the ridge, the depth falls to 3600 m (2000 fathoms) and still deeper farther offshore. The Bank is persistently under the influence of an upwelling plume that originates off Point Arena to the north. In addition, the strong, southbound California Current, driven by prevailing northwesterly winds, encounters this three-km-high submarine wall, whirling additional nutrients and prey items (e.g., euphausiid shrimp; cephalopods; and juveniles, eggs, and dead of several species of rockfish [*Sebastes* spp.]) to the surface. This banquet of food makes Cordell Bank attractive to thousands of seabirds during the summer months and a haven for large numbers of cetaceans, particularly of Blue Whale (*Balaenoptera musculus*) and Humpback Whale (*Megaptera novaeangliae*) over the fall and winter months. Because the Cordell Bank concentrates such prey resources, it is not surprising that it has proven an excellent place to find stray seabirds such as the Parkinson's Petrel.

Acknowledgments

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Figure 8. Parkinson's Petrel dorsal surface in flight. Cordell Bank National Marine Sanctuary, Marin County, California; 1 October 2005. Photograph by © Martin Meyers.



Figure 9. Parkinson's Petrel dorsal surface in flight. Cordell Bank National Marine Sanctuary, Marin County, California; 1 October 2005. Photograph by © Eric Preston.



Figure 10. Parkinson's Petrel sitting on the water near Bull Kelp. Cordell Bank National Marine Sanctuary, Marin County, California; 1 October 2005. Photograph by © Eric Preston.

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