Manx Shearwater *Puffinus puffinus*

The Manx Shearwater, a close relative of the Black-vented Shearwater, nests on islands in the North Atlantic and winters along the coast of southern South America. Apparently some birds have rounded Cape Horn and migrated to the North Pacific, accounting for over 75 well-supported sightings off California through 2002. These records are all since 1993, suggesting a shift in the species’ distribution—possibly a still-undiscovered colonization of the Pacific Ocean—as well as birders’ becoming aware of the species and its identification criteria.

**Migration:** The first Manx Shearwater conclusively identified near San Diego County was 16 miles off Oceanside 28 April 2004 (T. McGrath).

Black-vented Shearwater *Puffinus opisthomelas*

The ocean along San Diego County’s coast is central to the nonbreeding range of the Black-vented Shearwater. At times, much of the population concentrates there, feeding on squid and fish. The Black-vented Shearwater nests in spring on islands around Baja California, principally Natividad, then migrates north, occurring off southern California primarily in fall and winter.

**Winter:** The Black-vented is less pelagic than most other shearwaters, concentrating within 15 miles of the coast. Briggs et al. (1987), however, recorded it out to the Santa Rosa–Cortés Ridge, 100 miles offshore. In the mid to late 1970s, they found the species most consistently in a strip from San Diego north about 75 km—essentially, the San Diego County coastline—and their highest densities, up to 80 birds per square kilometer, off Oceanside. When sardines or squid are concentrated, however, the numbers of Black-vented Shearwaters can be far higher, for example, 10,000 off San Diego 19 October 1983 (D. W. Povey, AB 38:246, 1984). Often the birds can be seen (with aid of a scope) in large numbers from shore. Our largest such count during the atlas period was of 3850 off Torrey Pines State Reserve (N7) 23 December 2001 (S. Walens). All these counts, however, were eclipsed on 23 and 24 January 2004. On the morning of the 24th, about 85,000 were off La Jolla (N7; S. Walens) while 30,000–50,000, possibly part of the same flock, were off Cardiff (L7; P. A. Ginsburg). The spectacle was broadcast on television news. These flocks must have constituted a substantial fraction of the world’s Black-vented Shearwaters, given that the population breeding in 1997 on Natividad Island was about 77,000 pairs, and that island supports 95% of the species’ entire population (Keitt et al. 2003). An abundance of juvenile sardines, observed by local bait seiners, probably attracted the shearwaters that day (S. E. Smith, National Marine Fisheries Service).

**Migration:** In general, the Black-vented Shearwater is most abundant off southern California from September through December (Briggs et al. 1987). Its movements