

NESTING OF BRANDT'S CORMORANTS IN THE NORTHERN GULF OF CALIFORNIA

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In Mexico, Brandt's Cormorant (*Phalacrocorax penicillatus*) breeds mostly on islands and offshore rocks along the Pacific coast of the peninsula of Baja California (Everett and Anderson 1991, Grinnell 1928, Wilbur 1987). The southernmost known colony on the Pacific coast is at the north end of Isla Margarita (approximately 24° 30' N, 112° W; Guzman in Everett and Anderson 1991). Colonies in the Pacific can contain thousands of individuals.

In the Gulf of California documented Brandt's Cormorant breeding has been restricted to the Midriff Islands. In this region it nests or has nested on Roca Vela, on islands in Bahía de los Angeles, including Calavera, Smith, and Flecha, on Roca Partida (near Isla Partida Norte), Isla Partida (or Cardonosa), Isla Salsipuedes, Isla San Esteban, and Isla San Pedro Mártir (Ainley et al. 1981, Banks 1963, Everett and Anderson 1991, Osorio-Tafall and del Toro-Avilés 1945, Tershy and Breese 1997, van Rossem and Hachisuka 1937, E. Palacios pers. comm.). In addition, van Rossem (1945) suspected some offshore rocks near Guaymas as a breeding locality for this species. Brandt's Cormorant breeding colonies in the Gulf of California are small, rarely exceeding 250 pairs, and the total population in this area has been estimated at 500 to 1000 pairs (Everett and Anderson 1991). It is possible, however, that some colonies have been overlooked, through confusion of this species with the Double-crested Cormorant (*P. auritus*) (Russell and Monson 1998, Wilbur 1987).

Here we report a breeding colony of Brandt's Cormorant on Isla San Jorge in the northern Gulf of California. Mailliard (1923) and Mellink and Palacios (1993) previously reported on the breeding birds of this island, and neither recorded nesting Brandt's Cormorants. Isla San Jorge (31° 01' N, 113° 15' W) comprises a series of small bare rocky islets located in the northeastern Gulf of California.

On 9 November 1999 we found a small breeding colony of Brandt's Cormorant on the northeastern side of the southernmost islet (Figure 1). The colony, located on a 30° slope, about 10 meters above mean sea level, was surrounded by a small congregation of California Sea Lions (*Zalophus californianus*) and some nesting Brown Boobies (*Sula leucogaster*). Double-crested Cormorants were nesting on the upper ridges of the islet. We counted about 40 Brandt's Cormorants, including breeding adults and first-year birds, and 24 nests, 19 of which contained one to four eggs. On 31 January 2000 we recorded 31 adults and 13 juveniles. Five adults were still attending nests. A small chick, yet to fledge, was visible in one of these. On 9 January 2001 there were 39 adults and 26 young in the colony. Eight of the adults were attending nests.

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NOTES



Figure 1. Brandt's Cormorant colony at Isla San Jorge, showing chicks three quarters grown and one incubating adult. Also visible are Blue-footed and Brown Boobies and California Sea Lions.

Photo by Eric Mellink

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