

Snowy Plover (*Charadrius alexandrinus*) records from Panama

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DURING OUR STUDIES ON SHORE-bird ecology in Panama, we visited Punta Chame between November 25, 1986 and January 4, 1987. Punta Chame (79°42'W; 8°44'S) is a narrow (about one kilometer wide) peninsula on the Pacific coast located approximately 80 kilometers south of Panama City. Its southern coast, facing the Gulf of Panama, is a sandy beach, while its northern coast, adjacent to the Bay of Chame, is a tidal mudflat.

On November 28 we found a flock of about 18 Snowy Plovers (*Charadrius alexandrinus*) on the mudflat side. They were part of a larger flock consisting of Sanderlings (*Calidris alba*), Wilson's Plovers (*Charadrius wilsonia*), Western Sandpipers (*Calidris mauri*), and Semipalmated Sandpipers (*Charadrius semipalmatus*). The Snowy Plovers were repeatedly seen in the study area for the whole period of our visit, although we never saw more than 20 together.

Heretofore, only one Snowy Plover has been recorded in Panama. It was collected on October 30, 1927 at Copoplum, Bocas del Toro, and the specimen is now in the American Museum of Natural History (Ridgely 1976).

Two races are known from the Western Hemisphere. These are *C. a. nivosus* which breeds in western United States, Baja California, the coastal Gulf of Mexico, the southern Bahama Islands and the Greater Antilles, and winters through Mexico and the West Indies, with records from Guatemala, Hon-

duras, Costa Rica (sight) and Panama (above) and *C. a. occidentalis*, a resident of the coasts of Chile, Peru and southwest Ecuador (Blake 1977; Johnsgard 1981; Hayman *et al.* 1986; Ridgely *pers. comm.*)

To determine which of these two races our birds represented, on December 30 we collected one individual (Academy of Natural Sciences, Philadelphia, no. 178216; mass = 37.4 g; female ovary 6 × 3 mm, ova less than one millimeter) from a flock of 12.

A close examination of this specimen revealed characteristics of *nivosus*. Measurements are well within the range of *nivosus*: wing flat, 104 millimeter; exposed culmen, 14.4 millimeter; tail, 44.2 millimeter, and tarsus, 23.3 millimeter. The coloration is also typical of this subspecies. It lacks the black coloration on the face and breast, the white collar is incomplete, and the grayish coloration around the eye is connected with the bill (Hayman *et al.* 1986). The presence of this relatively large number of Snowy Plovers in Panama could mean an expansion of the wintering range of this race of the species, although further observations are required to confirm this possibility.

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LITERATURE CITED

- BLAKE, E. R. 1976. Manual of neotropical birds. Vol. 1. Univ. Chicago Press, Chicago.
- HAYMAN, P., J. MARCHANT and T. PRATER. 1986. Shorebirds; an identification guide to the waders of the world. Croom Helm, London.
- JOHNSGARD, P. A. 1981. The plovers, sandpipers and snipes of the world. Univ. Nebraska Press, Lincoln.
- RIDGELY, R. S. 1976. A guide to the birds of Panama. Princeton Univ. Press, Princeton.

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