## NOTES

## THE NORTHERNMOST COLONY OF HEERMANN'S GULL

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The major breeding grounds for Heermann's Gulls (Larus beermanni) are islands in the Gulf of California, especially Isla Raza, where an estimated 80,000 pairs nest (Lindsay, Proc. Calif. Acad. Sci., ser. 4, 30:309-355, 1966). On the western side of the Baja California peninsula only one colony has been reported, at Isla San Roque (27°09' N) (Grinnell, Univ. Calif. Publ. Zool. 32:1-300, 1928). In August 1922 A. W. Anthony (Proc. Calif. Acad. Sci., ser. 4, 14:277-330, 1925) visited San Roque and reported that the colony seemed to have been destroyed by fishermen. On 20 April 1927 L. M. Huey (Condor 29:205-206, 1927) noted that it had rebuilt to 35 pairs and laying had just begun. There are no historical data on the former size of this colony, and its current status is also unknown.

In late May 1971 I discovered a second west coast colony of Heermann's Gulls on Isla Benito del Centro, of the San Benito Islands (28°20′ N), some 150 km northwest of San Roque. The colony was approximately 3 m above sea level on a small rocky point near the middle of the island's south shore (Figure 1). On 25 May, 25 adults (but no subadults or immatures) were present. Nine nests were crowded into a small, flat area; their contents were: c/1-2, c/2-1, c/3-2, c/4-1, c/5-3. The usual clutch in this species is two or three, and it appeared likely from the wide color variation that eggs in the larger clutches had been laid by

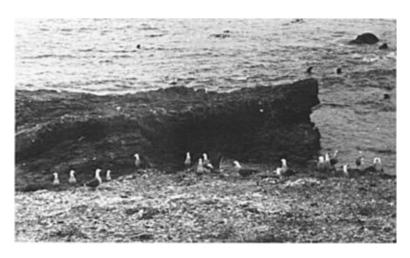


Figure 1. The San Benito Islands colony of Heermann's Gull, photographed on 25 May 1971. Twenty-two gulls are visible.



Figure 2. A Heermann's Gull clutch containing five eggs. San Benito Islands, 25 May 1971.

more than one female. Competition for the seemingly limited nest sites probably accounts for the clutches of multiple authorship. On 21 June 1974 15 adults were in the colony. I found several empty scrapes but only two nests, each with a single chick, an estimated two and four days old.

The age of the colony is unknown. Researchers studying California Sea Lions (Zalophus californianus) on the San Benitos in the mid-1950's failed to report the existence of this colony, but it is easily overlooked. Because of its small size, apparent marginal reproductive success, and lack of growth (or perhaps decline) between 1971 and 1974, I suspect that it may have formed within the past decade.

Two other species that nest primarily in the Gulf of California, Least Storm-Petrel (Halocyptena microsoma) and Craveri's Murrelet (Endomychura craveri) also reach their northern breeding limits at the San Benitos, and they, like Heermann's Gull, begin nesting a month or two later than populations at similar latitudes in the Gulf, only 250 km to the east (for recent data on the breeding range of E. craveri see Jehl and Bond, San Diego Soc. Nat. Hist., Trans. 18(2):9-24, 1975). This suggests that the environmental conditions required for successful breeding by these three dissimilar species are not achieved along the outer coast until late spring and early summer. The recognition of this fact may aid in determining exactly what those conditions might be.