

OBSERVATIONS ON ESTEROS EL COYOTE AND LA BOCANA, BAJA CALIFORNIA SUR, MEXICO, IN SEPTEMBER 1991

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The coast of the southern Vizcaino Desert, Baja California Sur, includes three lagoons: La Bocana, El Coyote, and San Ignacio (Figure 1). The avifauna of La Bocana and San Ignacio lagoons was first described by Huey (1927). Since then, the only ornithological research in the area has been by Reitherman and Storrer (1981), Danemann (1991), and Danemann and Guzmán (1992), who studied various aspects of the avifauna of San Ignacio Lagoon. No ornithological information from La Bocana or El Coyote has been published since Huey's early account.

In September 1991 we surveyed El Coyote and La Bocana lagoons, usually referred as "esteros." Here we summarize observations recorded during those surveys.

El Coyote (also known as La Escondida), located between 26°48' and 26°50' N, and 113°24' and 113°29' W, has two main arms that reach depths from 2 to 4 m and is separated from the ocean by a narrow sand bar. The shoreline of the lagoon consists of sand beaches (along the bar), mud flats, mangroves, and salt marshes. Most of the lagoon is covered by mangrove islands separated by narrow channels. In the open areas of the lagoon, low tides expose large shoals. Human activities in El Coyote include some commercial and sport fishing, mainly in the deeper channels.

Estero La Bocana, known to Huey (1927) as Pond Lagoon, is located between 26°42' and 26°47' N, and 113°34' and 113°42' W. It is a narrow lagoon separated from the ocean by a sand bar extending northwest-southeast. Averaging 600 m, its width ranges from 150 to 1250 m. This estero holds some mangrove islands and salt marshes, and its shoreline includes sand beaches along the bar, and mud flats, marshes, and mangroves along the mainland coast.

Both lagoons are included in the "El Vizcaino" National Reserve of the Biosphere (Gobierno de los Estados Unidos Mexicanos 1988).

We surveyed Estero El Coyote from 8 to 12 September 1991, La Bocana on 13 and 14 September 1991. We used an inflatable 7-foot boat that allowed us to cover most of the lagoons, including the shallow channels among the mangroves. Observations during low tide were made from the shore or mud flats. We used 10× binoculars and a 40× spotting scope.

We recorded 45 species in El Coyote (EC) and 36 in La Bocana (LB), for a total of 47 species over both areas.

Magnificent Frigatebird (*Fregata magnificens*). EC, 3 juveniles. The nearest colony is at Santa Margarita Island, Magdalena Bay.

Brown Pelican (*Pelecanus occidentalis*). EC, 1300 to 1500; LB, several groups of fewer than 30 individuals each. No evidence of nesting.

Double-crested Cormorant (*Phalacrocorax auritus*). EC, 200 to 250; LB, a few groups up to 30 individuals each.

Black-crowned Night Heron (*Nycticorax nycticorax*). EC, 3 ad., 1 juv.; LB, 2 ad.

Yellow-crowned Night Heron (*N. violaceus*). EC, 13 ad., 3 juv.; LB, 1 ad.

Green-backed Heron (*Butorides striatus*). EC, 14; LB, 2.

Tricolored Heron (*Egretta tricolor*). EC, 11; LB, 5.

Little Blue Heron (*E. caerulea*). EC, 11 ad., 1 juv.

Reddish Egret (*E. rufescens*). EC, 14; LB, 6.

Snowy Egret (*E. thula*). EC, 39; LB, 5.

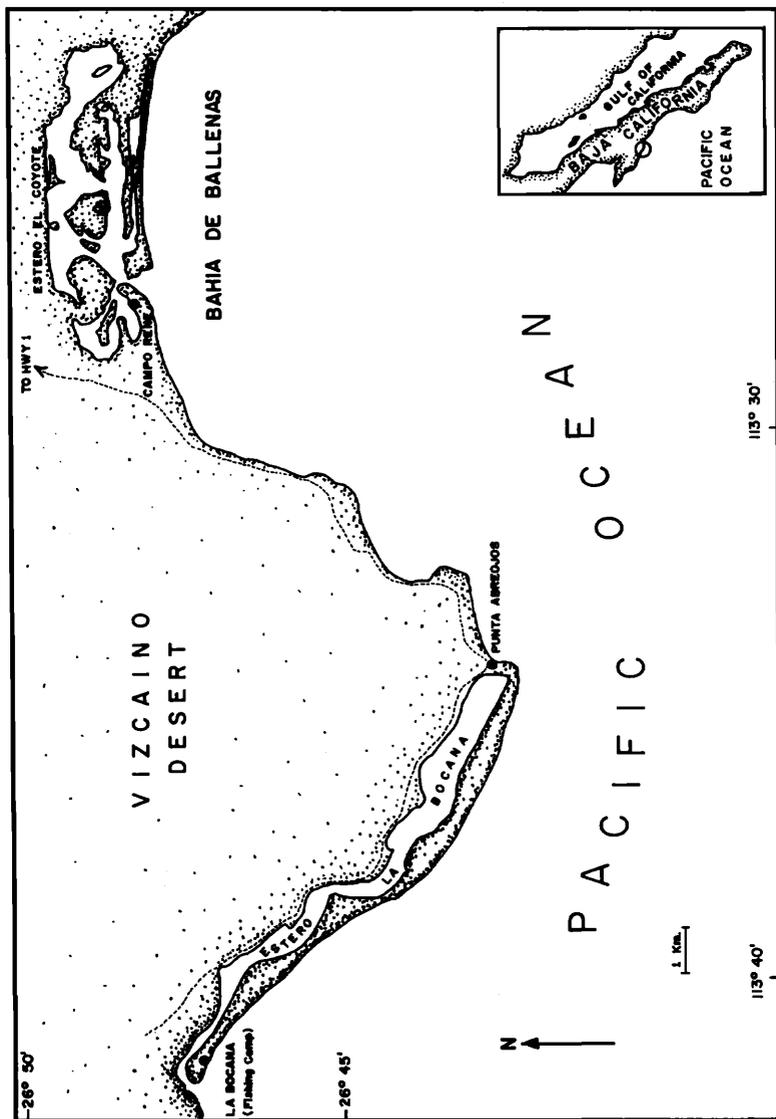


Figure 1. Southern Vizcaino Desert area, showing location of esteros El Coyote and La Bocana.

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- Great Egret (*Casmerodius albus*). EC, 1.
Great Blue Heron (*Ardea herodias*). EC, 17; LB, 10.
White-faced ibis (*Plegadis chihi*). EC, 1.
White Ibis (*Eudocimus albus*). EC, 15 ad., 3 juv.; LB, 4.
Local fishermen reported large concentrations of ducks and geese, especially the Brant (*Branta bernicla*), in both EC and LB during the winter. We saw no waterfowl during our visit.
- Semipalmated Plover (*Charadrius semipalmatus*). LB, 3.
Snowy Plover (*C. alexandrinus*). EC, 11; LB, 2.
Wilson's Plover (*C. wilsonia*). EC, 5; LB, 3.
Black-bellied Plover (*Pluvialis squatarola*). EC, 15; LB, 1.
Marbled Godwit (*Limosa fedoa*). EC, 900 to 1200; LB, 1000.
Willet (*Catoptrophorus semipalmatus*). EC, 150 to 300; LB, 100.
Dowitchers (*Limnodromus* sp.). EC, 500 to 600; LB, 1000.
Whimbrel (*Numenius phaeopus*). EC, 16; LB, 1.
Long-billed Curlew (*N. americanus*). EC, 26; LB, 16.
Greater Yellowlegs (*Tringa melanoleuca*). EC, 23; LB 68.
Spotted Sandpiper (*Actitis macularia*). EC, 1; LB, 1.
Red-necked Phalarope (*Phalaropus lobatus*). EC, 2; LB, 1.
Ruddy Turnstone (*Arenaria interpres*). EC, 1; LB, 4.
Sanderling (*Calidris alba*). EC, 38.
Western Sandpiper (*C. mauri*). EC, 2000; LB, 200.
Least Sandpiper (*C. minutilla*). EC, 200.
Heermann's Gull (*Larus heermanni*). EC, 53; LB, 1.
Ring-billed Gull (*L. delawarensis*). EC, 16; LB, 29.
Western Gull (*L. occidentalis*). EC, 30; LB, 16.
Elegant Tern (*Sterna elegans*). EC, 800 to 850; LB, 400.
Royal Tern (*S. maxima*). EC, 100 to 120, including 2 fledglings; LB, 13.
Forster's Tern (*Sterna forsteri*). EC, 7; LB, 12.
Least Tern (*S. antillarum*). EC, 12 ad., 5 juv.
Caspian Tern (*S. caspia*). EC, 14; LB, 3.
Osprey (*Pandion haliaetus*). EC, 12; LB, 15.
Belted Kingfisher (*Ceryle alcyon*). EC, 3.
Horned Lark (*Eremophila alpestris*). EC, 20; LB, 12.
Northern Rough-winged Swallow (*Stelgidopteryx serripennis*). EC, 12.
Common Raven (*Corvus corax*). EC, 2.
Loggerhead Shrike (*Lanius ludovicianus*). EC, 7; LB, 1.
Northern Mockingbird (*Mimus polyglottos*). LB, 1.
Mangrove Warbler (*Dendroica petechia castaneiceps*). Common in mangroves of both lagoons.

Savannah Sparrow (*Passerculus sandwichensis*). EC, S; LB, 3.

Most of the species reported by Huey (1927) were present during our visit. The most important difference was the absence of waterfowl, of which Huey noted several species during his mid-April visit but had not arrived by our early September visit.

Thirty-seven of the 52 species reported for San Ignacio Lagoon (Danemann and Guzmán 1992) were observed in El Coyote and/or La Bocana. The high similarity of the avifauna of these lagoons reflects their physical similarities: absence of permanent fresh water flow, high rate of tidal flushing, possessing extensive shores and mud flats, and similar vegetation and climate. Differences in bird diversity between El Coyote and La Bocana are presumably a result of the larger size and more extensive habitat of the former.

Given their position along the Pacific flyway, suitability of habitat, and the numbers of migratory shorebirds recorded during our visit, these esteros may be considered

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important areas for these species, and probably for waterfowl. Including Ojo de Liebre (Scammon's) and San Ignacio, this group of coastal lagoons should be included in any research and conservation program regarding migratory birds in Baja California.

This research was supported by the Seabird Program coordinated by Dr Juan R. Guzmán Poo at the Universidad Autónoma de Baja California Sur, through a grant from the Secretaría de Educación Pública de México. Kodak of México donated the film used in the research. Philip Unitt greatly assisted in editing this paper.

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Accepted 21 April 1993