NOTEWORTHY BIRD RECORDS FROM SINALOA, MÉXICO

MARCO ANTONIO GONZÁLEZ-BERNAL, Universidad Autónoma de Sinaloa, Ciudad Universitaria, Culiacán, Sinaloa, México

JOSÉ ALFREDO CASTILLO-GUERRERO, Centro de Investigación Científica y de Educación Superior de Ensenada, Apdo. Postal 2732, Ensenada, Baja California, México

CECILIA DEL ROCÍO HERNÁNDEZ-CELIS, Pronatura A. C., Blvd. Culiacán 3773, Culiacán, Sinaloa, México

ERIC MELLINK, Centro de Investigación Científica y de Educación Superior de Ensenada, Apdo. Postal 2732, Ensenada, Baja California, México; emellink@cicese.mx

To date no general account of the birds of Sinaloa has been published. The subtropics, warm desert, and montane habitats converge in Sinaloa, making the state an area of high bird diversity. Of Sinaloa's habitats, the coast has been studied the most. This coast includes a series of wetlands known to be important to birds. For example, Bahía Santa María–La Reforma and Ensenada Pabellones, two of the best studied areas, are key stopover and wintering sites for shorebirds (Engilis et al. 1994) and waterfowl (Kramer and Migoya 1989). They also sustain important populations of breeding and resident birds (Carmona and Danemann 1994, Howell and Webb 1995, González-Bernal et al. 2003). Yet ornithological research in Sinaloa has been limited, and knowledge of the state's birds is far from complete. Here we report some noteworthy records that we have made since 1998, mostly in the two bays mentioned above, but also elsewhere along the coast and at a few inland sites.

Breeding Species

Mexican Duck (Anas platyrhynchos diazi). On 17 April 2003 we found a road-killed female (sex based on its heavily mottled, brown-orange bill) next to an irrigation ditch near Costa Azul (25° 11′ 15″ N, 108° 05′ 48″ W), Bahía Santa María–La Reforma. This subspecies occurs primarily in the Mexican highlands (Leopold 1959, Howell and Webb 1995, AOU 1998). At least five recent observations at low elevations, however, involving several individuals and pairs in the valley of the Río Yaqui, southern Sonora, have been attributed to the Mexican Duck (Palacios and Mellink 1995, Russell and Monson 1998, Mellink unpubl. data). Another wild female Mallard (A. p. platyrhynchos) or Mexican Duck was noted by James Pike in southern Sinaloa (L. R. Hays in litt.).

Although the possibility of these birds' being domestic Mallards has been considered, all the individuals recorded have resembled the female Mallard only, even during the breeding season (14 May 1994, Palacios and Mellink 1995; 29 June 2002, our data). Moreover, Leopold (1959) reported Mexican Ducks from Tepic, Nayarit, and a pre-1859 specimen of a Hawaiian Duck (A. wyvilliana) reportedly from Mazatlán was either misattributed or misidentified (AOU 1998); if the latter, the bird was perhaps a Mexican Duck. It is unlikely that this species has been deliberately introduced in the area. In any case, when ducks are kept domestically they are domestic forms of the Mallard or Muscovy Duck (Cairina moschata). Rather, favored by irrigation for agriculture, Mexican Ducks could have colonized the region.

Anhinga (Anhinga anhinga). This species has been reported from southern Sinaloa southward (Howell and Webb 1995), and there are a number of records from the lower Río Yaqui in southern Sonora (Russell and Monson 1998). We observed it throughout

the year at Ensenada Pabellones, with as many as eight individuals at any one time. On 13 March 2001 we found two nests on the higher branches of black mangrove trees (*Avicennia germinans*), about 12 m above the water.

Boat-billed Heron (*Cochlearius cochlearius*). This species had been reported previously north to southern Sinaloa (Howell and Webb 1995). Our observations at Ensenada Pabellones extend its range north about 250–300 km. On 13 March 2003 we saw one pair nesting in red mangrove (*Rhizophora mangle*) on a small islet (~200 m²; 24° 23′ 03″ N, 107° 34′ 17″ W) in Ensenada Pabellones, possibly coinciding with the beginning of the breeding season. Between 29 February and 14 May 2004 we found 28 pairs nesting at the same place. We have not seen the species after August.

Yellow-breasted Crake (*Porzana flaviventer*; Figure 1). We observed this species 17 times between 21 January 2002 and 14 May 2004 (21 Jan, 12 Feb, 1 Mar, 14 Apr, 14 May 2002; 23 Jan, 21 Feb, 28 Mar, 27 Apr, 19 Jun, 12 Jul 2003; 14 May 2004) in an agricultural ditch adjacent to Laguna de Chiricahueto (24° 26′ 17″ N, 107° 27′ 12″W). The vegetation here was cattail (*Typha domingensis*), water hyacinth (*Eichhornia crassipes*), and giant reed (*Arundo donax*). On 11 April we observed a pair with two completely black chicks. Identification was based on reddish-brown color, with white spots, cream-colored legs, yellowish breast, and black line between the eye and the crown (*sensu* Howell and Webb 1995). We concluded that the species was a breeding resident at this locale. Previously, on the Pacific slope, the Yellow-breasted Crake had been reported conclusively only from the state of Guerrero southward (Howell and Webb 1995, AOU 1998). Our observation suggests that an unclear Michoacán record (AOU 1983, dropped in AOU 1998) might have been valid, and perhaps other populations exist between Guerrero and Sinaloa.

Purple Gallinule (*Porphyrula martinica*). We observed this species on 15 occasions between 11 December 2002 and 14 May 2004 in Ensenada Pabellones, finding it in rivers, agricultural canals, and within the bay, associated with aquatic and emergent vegetation. Our maximum tally was of five individuals. Our record is about 200 km north of the northern range limit for the species mapped by Howell and Webb (1995),



Figure 1. Yellow-breasted Crake at Laguna de Chiricahueto, Sinaloa, Mexico, 15 February 2004.

although there was one previous record for this species from "between Charay and Culiacán" on 20 December 1973, by R. A. Erickson (L. R. Hays pers. comm.), and one from southern Sonora (Russell and Monson 1998).

Collared Plover (Charadrius collaris). At Ensenada Pabellones we located five nests on seven visits from 28 April to 3 June 2004. Nests were widely spaced and were on mud or salt flats, near water and cattails; some had a little gravel. There were cattle and horses walking through the colony site. At Cacaxtla (23° 41′ 37″ N, 106° 47′ 48″ W), near the Río Piaxtla, we observed two pairs on a sandy surface with gravel and some rocks. On 15 May 2005 we found another nest of this species at the same place and three nests at Mezquitillo (24° 31′ 34″ N, 107° 34′ 54″ W). Our records represent only a modest northward extension of the species' previously known breeding range (Howell and Webb 1995), but we include it here as very little information on the locations of Collared Plover colonies along the coast of western Mexico has been published.

Northern Jaçana (*Jacana spinosa*). This species is abundant year round in Ensenada Pabellones. Each year from 2002 to 2005 we found nests and eggs between mid-February and late May in agricultural canals and areas with cattail, in both fresh and brackish water. We found the species also in the Río Sinaloa (25° 39′ 34″ N, 108° 23′ 17″ W) in May 2001 and at the northern end of the Río Fuerte (25° 57′ 20″ N, 109° 14′ 54″ W) in May 2004, although we did not find breeding evidence. The species' previously known range includes only the southern part of the state of Sinaloa (Howell and Webb 1995), but it seems likely that it is a resident locally throughout most of the state's coastal plain.

Nonbreeding Species

Canada Goose (*Branta canadensis*). Two individuals were shot by hunters at Patolandia Hunting Club (24° 37′ 25″ N, 107° 43′ 22″ W), Bahía Santa María–La Reforma, in December 2000. This locality is at the southern fringe of the species' reported main winter range (Leopold 1959, AOU 1998, Howell and Webb 1995), and the record is the first for the state of Sinaloa (cf. Howell and Webb 1995). Canada Geese are not kept domestically in Mexico, and these, mixed with other waterfowl, were not likely to have been transported to the area by humans.

Red-footed Booby ($Sula\ sula$). We recorded one individual at Farallón de San Ignacio ($25^{\circ}\ 26'\ 14''\ N$, $109^{\circ}\ 22'\ 47''\ W$) on 24 October 2004. This species is considered rare inside the Gulf of California, and the only locality in the gulf mapped by Howell and Webb (1995) is off the coast of Baja California.

White-tailed Hawk (*Buteo albicaudatus*). On 12 December 2003 we recorded one adult perched on a cottonwood on the banks of the Río San Lorenzo (24° 19′01″N, 107° 22′ 23″W), near Ensenada Pabellones. Along the Pacific coast of Mexico the species breeds locally in southern Sonora, Nayarit, and other areas (Howell and Webb 1995), but Sinaloan records are rare. L. R. Hays (unpubl. data) has records of one individual collected (11 January 1947) and one observed (24 March 2001) at Copala, and two individuals at nearby El Salto, Durango (1 September 1996).

Black Turnstone (*Arenaria melanocephala*). Between March and April 2003 we saw up to five individuals on five different occasions at Isla El Rancho, Bahía Santa María–La Reforma (25° 04′ 15″ N, 108° 03′ 33″ W). The only other records along the mainland coast south of Sonora consist of a sighting of a single bird at Punta Cerritos (north of Mazatlán), Sinaloa, on 3 April 1994 (L. R. Hays unpubl. data) and two records from Nayarit (Alden 1969, Howell and Webb 1995).

Brown Noddy (Anous stolidus). On 5 February 2001 we saw 22 Brown Noddies feeding 20 km from the coast (25° 31′14″N, 109° 09′33″W) between Topolobampo and Farallón de San Ignacio. In the Pacific this species breeds on islands and islets off southern Mexico and, although it disperses in winter, it had not been reported

previously north of the mouth of the Gulf of California (Howell and Webb 1995, Chardine and Morris 1996).

Say's Phoebe (Sayornis saya). Between 8 and 12 October 2002 we repeatedly observed one individual at Isla Tachichilte (25° 02′ 44″ N, 108° 07′ 56″ W), inside Bahía Santa María–La Reforma. This species had been previously reported in Sinaloa by Gómez de Silva (2003).

Phainopepla (*Phainopepla nitens*). On 25 May 2004 we saw a male and a female, apparently a pair, along the Río El Fuerte near Ahome (25° 57′ 21″ N, 109° 14′53″W) feeding on a cottonwood (*Populus* sp.) that stood adjacent to an agricultural canal. This is the first record for the state of Sinaloa (cf. Howell and Webb 1995).

Palm Warbler (*Dendroica palmarum*). We captured two individuals in mist nets in Bahía Santa María–La Reforma (25° 00′ 14″ N, 107° 59′ 19″ W) on 11 December 2002 and 17 March 2003 and three individuals in Ensenada Pabellones on 9 December 2003, 26 April 2003, and 5 February 2004. This species is a winter vagrant along the Pacific coast of Mexico, although there are no previous records for Sinaloa (cf. Howell and Webb 1995).

Brewer's Sparrow (*Spizella breweri*). This was one of the most common sparrows caught in mist nets in Bahía Santa María–La Reforma (25° 00′ 14″ N, 107° 59′ 19″ W) on 12–13 December 2002, 18–19 March 2003, 11–12 December 2003, and 7–8 February 2004 (27 captured in 8 days). The species had not been recorded previously in Sinaloa but was suspected to winter in the north of the state (Howell and Webb 1995).

Song Sparrow ($Melospiza\ melodia$). We captured two individuals on 26 November 2003 at Santa María–La Reforma (25° 00′ 14″ N, 107° 59′ 19″ W), and two on 9 December 2003 at Ensenada Pabellones. The species had not been reported previously south of southern Sonora along the continental Pacific slope of Mexico (cf. Howell and Webb 1995, Russell and Monson 1998).

Xicotencatl Vega, Pronatura A. C., Pichigüila Club, Patolandia Hunting Club, and Tony Picos provided logistical support. Miguel Ángel Guevara, Juan Ramón Ibarra, Silvia Judith Mellado, Citlalic Cristina Mendoza, Felipe Mercado, and Edén Sánchez assisted in field work. Loren R. Hays kindly provided several unpublished records. Loren R, Hays, Héctor Gómez de Silva, and Michael A. Patten provided editorial assistance. Our appreciation to all of them.

LITERATURE CITED

- Alden, P. 1969. Finding the Birds in Western Mexico: A Guide to the States of Sonora, Sinaloa, and Nayarit. Univ. Ariz. Press. Tucson.
- American Ornithologists' Union. 1983. Checklist of North American Birds, 6th ed. Am. Ornithol. Union. Washington, D.C.
- American Ornithologists' Union. 1998. Checklist of North American Birds, 7th ed. Am. Ornithol. Union. Washington, D.C.
- Carmona, R., and Danemann, G. 1994. Nesting waterbirds of Santa Maria Bay, Sinaloa, Mexico, April 1988. W. Birds 25:158–162.
- Chardine, J. W., and Morris, R. D. 1996. Brown Noddy (*Anous stolidus*) in the Birds of North America (A. Poole and F. Gill, eds.), no. 220. Acad. Nat. Sci., Philadelphia.
- Engilis, A. Jr., Oring, L. W., Carrera, E., Nelson, J. W., and Martinez Lopez, A. 1998. Shorebird surveys in Ensenada Pabellones and Bahia Santa Maria, Sinaloa, México: Critical winter habitats for Pacific flyway shorebirds. Wilson Bull. 110:332–341.

- Gómez de Silva, H. 2003. Mexico region. N. Am. Birds 57:264.
- González-Bernal, M. A., Vega, X., and Mellink, E. 2003. Nesting of Western Gulls in Bahía de Santa María–La Reforma, Sinaloa, México. W. Birds 34:175–177.
- Howell S. N. G., and Webb, S. 1995. A Guide to the Birds of Mexico and Northern Central America. Oxford Univ. Press, Oxford, England.
- Kramer, G. W., and Migoya, R. 1989. The Pacific coast of Mexico, in Habitat Management for Migrating and Wintering Waterfowl in North America (L. M. Smith, R. L. Pederson, and R. M. Kaminsky, eds.), pp. 507–528. Tex. Tech. Univ. Press, Lubbock.
- Leopold, A. S. 1959. Wildlife of Mexico. Univ. Calif. Press, Berkeley.
- Palacios, E., and Mellink, E. 1995. Breeding birds of esteros Tóbari and San José, southern Sonora. W. Birds 26:99–103.
- Russell, S. M., and Monson, G. 1998. The Birds of Sonora. Univ. Ariz. Press, Tucson.

Accepted 8 November 2005



Brewer's Sparrow

Sketch by George C. West