

NORTHERN HARRIER BREEDING IN BAHIA DE SAN QUINTIN, BAJA CALIFORNIA

XAVIER MORENO and GONZALO DE LEÓN-GIRÓN, Colección de Vertebrados, Facultad de Ciencias, Universidad Autónoma de Baja California, Carretera Transpeninsular Ensenada–Tijuana No. 3917, Colonia Playitas, Ensenada, Baja California, México, CP 22860

HIRAM RAFAEL MORENO-HIGAREDA, CICESE, Carretera Ensenada–Tijuana No. 3918, Pedregal Playitas, Ensenada, Baja California, México, CP 22760; Universidad Autónoma de Baja California, Carretera Transpeninsular Ensenada–Tijuana No. 3917, Colonia Playitas, Ensenada, Baja California, México, CP 22860

LORI HARGROVE, San Diego Natural History Museum, 1788 El Prado, San Diego, California 92101

ENRIQUE D. ZAMORA-HERNÁNDEZ, B. Botaris 286, Punta Banda III, Ensenada, Baja California, México, CP 22897

DANIEL OLGUIN, Terra Peninsular, Calle Tercera 1282, Zona Centro, Ensenada, Baja California, México, CP 22800

HORACIO DE LA CUEVA, CICESE, Carretera Ensenada–Tijuana No. 3918, Pedregal Playitas, Ensenada, Baja California, México, CP 22760; Terra Peninsular, Calle Tercera 1282, Zona Centro, Ensenada, Baja California, México, CP 22800; cuevas@cicese.mx

ABSTRACT: The Northern Harrier (*Circus hudsonius*) reaches the southern limit of its current breeding range at San Quintín Bay, Baja California Mexico, where the tidal salt marsh is home to possibly as many as 15 pairs. In 2023 one pair had a nest with three eggs hatching 25–26 April. Two young fledged by 17 June.

The Northern Harrier (*Circus hudsonius*) is a dimorphic raptor widely spread through North America, wintering regularly as far south as Central America, rarely to Colombia and Venezuela (Smith et al. 2020). In Mexico, it breeds only in the state of Baja California (Howell and Webb 1995, Smith et al. 2020), but records of nesting in Baja California have been few. Massey and Palacios (1994) reported it as formerly breeding in Baja California but specified no records. Unitt et al. (1995) listed historic nesting in the 19th century near the border with California, possible breeding at El Rosario in 1925 based on observations in April and May, and likely breeding at the mouth of the Rio San Telmo in 1967 and east of San Telmo de Arriba in 1991. Erickson et al. (2002) reported a nest with three eggs at the mouth of the Rio San Telmo, and Erickson et al. (2016) reported a sighting of a nest with five young on the Maneadero plain. We report here on successful nesting at the Bahía de San Quintín, Baja California, Mexico.

On 4 April 2023, while surveying bird species in San Quintín Bay, we observed three pairs of Northern Harriers flying over 0.5 ha with central coordinates 30.4083° N, 115.9358° W, in the Cielito Lindo area in the southeast corner of the bay, in wetland dominated by *Salicornia* sp. and *Spartina* sp. (Delgadillo et al. 1992). The breeding activities of the Northern Harrier pairs observed in San Quintín were asynchronous. The closest pair to us was defending a territory from other harriers and birdwatchers. We observed a second pair in nuptial flight and also a flight in which the male provided the female with food; the third and farthest pair was not engaging in nuptial behaviors but was patrolling their territory. Smith et al. (2020) mentioned that loose colonies of the Northern Harrier have been reported in Seal Beach, California (Hall 1947), and the province of Manitoba, Canada (Hecht 1951).

Given the overtly aggressive behavior of the first pair, we assumed they might

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have been nesting, and we decided to explore the area where they were defending the territory to find the nest, but we failed to find the nest on this date.

Some 150 km north of San Quintín, we have also observed nuptial flights and fledglings at Estero de Punta Banda between April and June, 2014 to 2023, but have not looked for nests.

On 25 April 2023, we returned to the suspected nest location and found a nest within the Cielito Lindo wetland in a patch of *Salicornia* and *Spartina* at coordinates 30.41044° N, 115.93410° W. The nest was approximately 60 cm in diameter, sitting on a bed of *Salicornia* and dry sea grasses; no anthropogenic material was found in the nest. The height of the *Salicornia* plants surrounding the nest was approximately 50 cm, providing good cover. In the nest, we found a chick and two eggs. We returned the next day, 26 April, to place a camera and photograph the chicks—of which a second had hatched (Figure 1).

A fourth trip on 17 June revealed two fledglings that were being fed by the male after a feeding flight and calling. The fledglings were observed approximately 200 m northeast of the nest (Figure 2).

The Northern Harrier is a species of least concern under the International Union for Conservation of Nature and does not have protected status in Mexico,



FIGURE 1. Northern Harrier chicks on their nest at the Cielito Lindo wetlands in Bahía San Quintín, 26 April 2023.

Photo by Hiram Moreno

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FIGURE 2. Northern Harrier fledgling at the Cielito Lindo wetlands in Bahía San Quintín, 17 June 2023.

Photo by Xavier Moreno

but it is listed as a species of special concern by the California Department of Fish Wildlife and as a species of conservation concern by the U.S. Fish and Wildlife Service (CNDDDB 2024). Its most significant threat is the disappearance of wetlands. Northern Harriers nest on the ground, usually in dense vegetation associated with open wetlands, but rarely in saltmarshes (Smith et al. 2020). Our observations confirm that there is a nesting population at San Quintín Bay with successful nesting in saltmarsh habitat. The population around San Quintín Bay may be as large as 15 pairs, on the basis of our observations at various localities from 2022 through 2024. The area apparently represents the current southernmost extreme of the Northern Harrier's breeding range, as there are no recent reports from El Rosario from April to July, and farther south on the Baja California Peninsula are only a few reports of single individuals straggling as late as May (Ruiz-Campos et al. 2005).

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LITERATURE CITED

California Natural Diversity Database (CNDDDB). July 2024. Special animals list. Calif. Dept. Fish and Wildlife. Sacramento; <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406>.

NOTES

- Delgadillo, J., Peinado, M., Parras, J. M. M., Alcaraz, F., and De La Torre, A. 1992. Análisis fitosociológico de los saladares y manglares de Baja California, México. *Acta Bot. Mex.* 19:1–35; doi.org/10.21829/abm19.1992.645.
- Erickson, R. A., Patten, M. A., Palacios, E., and Carmona, R. 2002. Baja California Peninsula. *N. Am. Birds* 56:489–490.
- Erickson, R. A., Carmona R., and Ruiz-Campos, G. 2016. Baja California Peninsula. *N. Am. Birds* 69:496–498.
- Hall, E. M. 1947 Concentrated nesting of Marsh Hawks. *Condor* 49:211–212.
- Hecht, W. R. 1951. Nesting of the Marsh Hawk at Delta, Manitoba. *Wilson Bull.* 63:167–176.
- Howell, S. N. G., and Webb, S. 1995. *A Guide to the Birds of Mexico and Northern Central America*. Oxford Univ. Press, New York; doi.org/10.1093/oso/9780198540137.001.0001.
- Massey, B. W., and Palacios, E. 1994. Avifauna of the wetlands of Baja California, Mexico: Current status. *Studies Avian Biol.* 15:45–57.
- Ruiz-Campos, G., Palacios, E., Castillo-Guerrero, J. A., González-Guzmán, S., and Bathe-González, E. H. 2005. Composición espacial y temporal de la avifauna de humedales pequeños costeros y hábitat adyacentes en el noroeste de Baja California, México. *Ciencias Marinas* 3:553–576; doi.org/10.7773/cm.v31i3.42.
- Smith, K. G., Wittenberg, S. R., Macwhirter, R. B., and Bildstein, K. L. 2020. Northern Harrier (*Circus hudsonius*), in *Birds of the World* (P. G. Rodewald, ed.). Cornell Lab Ornithol., Ithaca, NY; doi.org/10.2173/bow.norhar2.01.
- Unitt, P., Rea, A. M., Palacios, E., Mellink, E., Alfaro, L., and González, S. 1995. Noteworthy records of birds in northwestern Baja California, Mexico. *W. Birds* 26:144–154.

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