

OCCURRENCE OF SNOWY AND COLLARED PLOVERS IN THE INTERIOR OF MEXICO

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The A.O.U. (1983) noted breeding by Snowy Plovers (*Charadrius alexandrinus*) in the interior of North America south to southern Arizona and southern New Mexico; all records for Mexico (breeding and winter) were coastal. The Collared Plover (*Charadrius collaris*) is described as resident from Sinaloa and Veracruz south through Middle America, primarily in coastal areas (A.O.U. 1983, Friedmann et al. 1950). We detail here several recent records (since 1982) of both of these plovers from the interior of northern and central Mexico. Our hope is to make observers aware of the potential occurrence of Snowy and Collared plovers at sites in the interior of Mexico. Figure 1 shows sites mentioned for Snowy Plovers in the following accounts.

SNOWY PLOVER

Coahuila

At Presa El Tullillo (25°40' N, 101°24' W; elevation 1100 m), a reservoir 50 km west-northwest of Saltillo, we noted four to five basic-plumaged Snowy Plovers along the south shore on 27 November 1986. Aldegundo Garza de Leon (pers. comm.), an ornithologist resident in Saltillo, collected two Snowy Plovers (numbers 778 and 779 in his collection) at El Tullillo on 21 March 1982, but has found no evidence that the species nests at this site.

Zacatecas

At Presa Acecatecana (22°44' N, 102°33' W; 2150 m), a large reservoir south of the bypass on the south side of the city of Zacatecas, we found 11 or 12 alternate-plumaged Snowy Plovers on 27 June 1991 in an extensive dry muddy area along the reservoir's northeast corner, near the dam. The birds included three or four apparent pairs, which gave the upslurred *chuweep* and low *perrrt* calls typical of nesting birds. We saw one bird apparently trying to lead another into a small area where the first bird would sit down as if in a nest scrape; however, we found no eggs. Howell visited this reservoir on 4 January 1984 and 12 April 1987 but saw no Snowy Plovers on those dates.

To our knowledge, the only previous report from Zacatecas is of three seen, and an adult female collected, at a shallow lake 8 km east of Noria de los Angeles in the southeast of the state, 3 August 1959 (Webster 1968); this site is 25 km due south of Salinas de Hidalgo, San Luis Potosí (see following).

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San Luis Potosí

On 28 June 1991, immediately west of the town of Salinas de Hidalgo, in western San Luis Potosí ($22^{\circ}38' \text{ N}$, $101^{\circ}45' \text{ W}$; 2100 m), we saw six to eight pairs of Snowy Plovers, including an adult with two small chicks, at the largest lagoon south of Highway 49. We have found no previous records from San Luis Potosí.

Guanajuato

At the small reservoir southwest of Highway 111, 5 km east of Dolores Hidalgo ($21^{\circ}08' \text{ N}$, $100^{\circ}53' \text{ W}$; 1900 m), P. Pyle and Howell saw a single basic-plumaged Snowy Plover on 6 January 1984. We have found no other records of the species from Guanajuato.

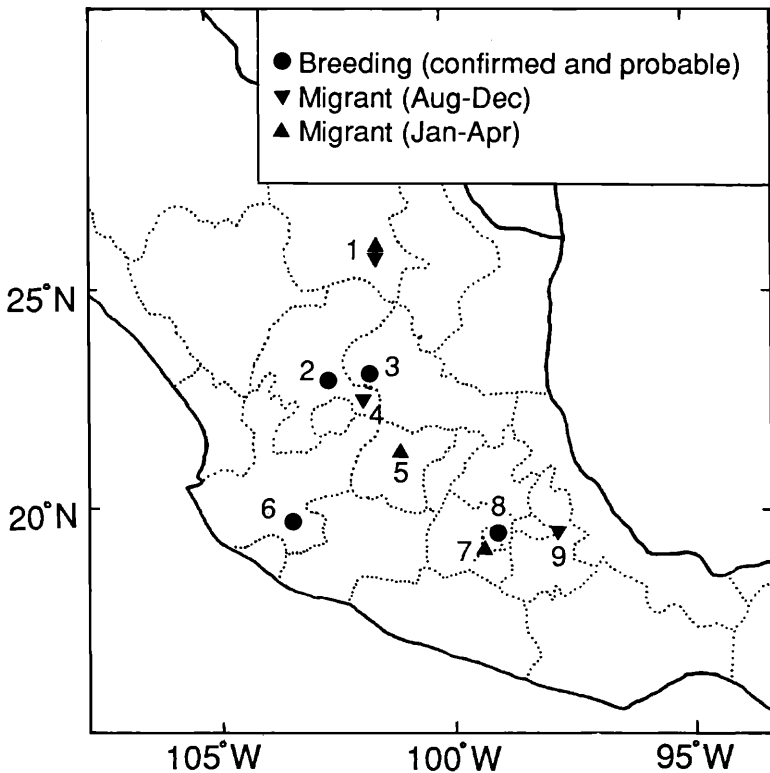


Figure 1. Central Mexico, showing sites in the interior where Snowy Plovers have been recorded. 1, Presa El Tulillo, Coahuila; 2, Presa Acecatecana, Zacatecas; 3, Salinas de Hidalgo, San Luis Potosí; 4, Noria de los Angeles, Zacatecas; 5, Dolores Hidalgo, Guanajuato; 6, Atoyac, Jalisco; 7, San Gregorio/Tlahuac, Distrito Federal; 8, Lago Texcoco, México; 9, Laguna Totolcingo, Puebla.

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Jalisco

On 9 March 1992, Howell found six alternate-plumaged birds at the permanent lake immediately northeast of Highway 54D at kilometer post 33 (20°08' N, 103°33' W; 1500 m), near Atoyac. The birds included one apparent pair, and Howell heard a few *chuweep* calls being given. At the much larger shallow seasonal lake east of highway 54D between kilometer posts 35 and 40, Howell noted at least 100 Snowy Plovers on 27 February 1993; none showed any indications of nesting. We know of no previous records from Jalisco.

Puebla

Laguna Totolcingo, a vast shallow lake, straddles the eastern border of Tlaxcala with the state of Puebla (19°20' N, 97°62' W; 2200 m). On 12 December 1986 we saw 100+ Snowy Plovers on the extensive salt flats bordering the lake north of Highway 136, all apparently in the state of Puebla. At least 40% of the birds were in full alternate plumage, 20% or more were in basic plumage, and 30% of the birds were juveniles, some in very fresh plumage; the remainder were too distant for their plumage to be assessed accurately. We have found no other records from Puebla. Howell visited this lake on 21 January 1984 but saw no Snowy Plovers. The large expanse of the lake and salt flats, however, combined with fluctuating water levels, means that at any given time much of the area may be generally inaccessible to observers and/or unsuitable for plovers.

México/Distrito Federal

The only records of the Snowy Plover from the Distrito Federal are of single alternate-plumaged birds seen at the relatively heavily birded marshes on the south side of Mexico City (19°16' N, 99°08' W; 2200 m), at San Gregorio Atlapulco on 22 April 1985 (Wilson and Ceballos-L. 1986), and at Tlahuac on 22 April 1992 (Howell and R. G. Wilson). Snowy Plovers occur in summer and may nest at Lago Texcoco (19°30' N, 99°02' W) on the Mexico/D.F. border (Wilson and Ceballos-L. 1986, R. G. Wilson pers. comm.).

COLLARED PLOVER

Collared Plovers are resident locally along rivers in the lowlands on both coastal slopes of Mexico, and we have seen them up to 250 km from the coast (e.g., at Yaxchilan, Chiapas). Such records, however, are all in the tropical lowlands (below 500 m elevation). Records that fall outside this pattern are listed below.

Jalisco

At the extensive marshes and lakes beside Highway 54D north of Sayula (20°02' N, 103°34' W; 1500 m), we saw five Collared Plovers, including two apparent pairs, on 31 March 1988, and Howell noted four birds on 10 March 1989 and four on 27 February 1993.

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TLAXCALA

On 21 January 1984, P. Pyle and Howell found a Collared Plover at a small pool in the short-grass plains bordering Laguna Totolcingo, in Tlaxcala. They realized the rarity of such an occurrence and carefully noted the bird's elegant, slender build and slender, all-black bill. Other features noted were the bold, clean-cut white forehead patch, the complete, narrow black chest band, a rufous wash to the sides of the head, lack of a white hindcollar, and the slender, pale flesh-colored legs. This is the only record of Collared Plover we are aware of from the Mexican plateau.

MORELOS

At Laguna El Rodeo (18°46' N, 99°20' W; 1000 m), a small natural lake 15 km south-southwest of Cuernavaca, R. G. Wilson (pers. comm.) recorded up to four Collared Plovers in the winters of 1983/1984 (also seen by Howell and P. Pyle), 1986/1987, and 1989/1990, with extreme dates of 8 October and 15 March. We saw none at El Rodeo on 20 May 1990, and R. G. Wilson (pers. comm.) has seen none there during several visits from April to September.

GUERRERO

At Laguna de Tuxpan (18°22' N, 99°30' W; 750 m), a large lake 2 km east of Iguala, we and R. G. Wilson saw three to five Collared Plovers along the south shore on 16 December 1986. We saw none there on 20 May 1990 or 2 June 1986.

DISCUSSION

These observations indicate that Snowy Plovers breed locally in summer at lakes and reservoirs on the Mexican plateau. While our only certain proof of nesting was the chicks in San Luis Potosí, the calls and behavior of the birds in Jalisco and Zacatecas strongly suggest that they also were nesting. The species also may nest at Lago Texcoco, state of México. By December, many wintering Snowy Plovers have attained alternate plumage (G. W. Page pers. comm.), which may explain our observation at Laguna Totolcingo. The number of fresh-plumaged juveniles there, however, may also suggest late summer nesting by Snowy Plovers at or near the site.

Nonbreeding Snowy Plovers, possibly from the interior of North America, occur as winter migrants to the Mexican plateau, with specific records between November and March. The two April records, both from the Distrito Federal, may represent migrants headed for nesting sites in Mexico, since most Snowy Plovers nesting in the interior and on the Pacific coast of the U.S. have by then arrived at breeding areas (G. W. Page pers. comm.).

Clearly, more field work is needed to determine the nesting season, distribution, and breeding and winter abundance of Snowy Plovers in the interior of Mexico; for example, numerous large shallow lakes on the Mexican plateau in the states of Chihuahua and Durango have never been surveyed for Snowy Plovers. The dearth of records for both Snowy and Collared plovers from the interior of Mexico prior to the 1980s probably

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reflects a lack of observer coverage rather than range expansion by either species.

The Collared Plover appears to be a winter visitor (October to March) to lakes in the Rio Balsas drainage of interior southwest Mexico and a winter vagrant to the central highlands (the January record from Tlaxcala). There is no evidence of breeding by Collared Plovers at the lakes in Guerrero and Morelos. Although Widrig (1983) reported Collared Plovers nesting in December in coastal Nayarit, other known nesting dates from southwest coastal and interior Mexico are in spring: on 11 April 1988 at Puente Mexcalhuacan, Michoacan, we found an agitated pair of Collared Plovers behaving as if they had chicks nearby; on 20 May 1990 (when we saw no Collared Plovers at either El Rodeo or Tuxpan) we found a nest with four eggs on the beach at the eastern end of Laguna Mitla, Guerrero; Binford (1989) saw an adult with three chicks in coastal Oaxaca, 19 April 1964; Amadon and Eckelberry (1955) saw adults with chicks at two sites in interior southeastern Veracruz and western Chiapas in mid May 1952. Further work is needed to determine this species' status in southeastern Jalisco.

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