# New and noteworthy shorebird records from south Baja California Peninsula, México

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We present records of nine uncommon shorebird species in the south of the Baja California Peninsula, México. These are American Golden-Plover *Pluvialis dominica*, new record for La Paz Bay; Solitary Sandpiper *Tringa solitaria*, new record for La Paz Bay; Terek Sandpiper *Xenus cinereus*, first records for México; Red Knot *Calidris canutus*, second record for La Paz Bay; Semipalmated Sandpiper *Calidris pusilla*, first records for Baja California Sur; Pectoral Sandpiper *Calidris melanotos*, first records for La Paz Bay; Curlew Sandpiper *Calidris ferruginea*, first record for the Mexican Pacific and second for México; Stilt Sandpiper *Calidris himantopus*, second record for Baja California Sur; and Common Snipe *Gallinago gallinago*, second record for La Paz Bay.

# INTRODUCTION

The avifauna of the Baja California Peninsula, México, has been documented in extensive compilations (Grinnell 1928, Wilbur 1987). Moreover, records of new species and geographical range extensions are constantly being published (Atwood & Collins 1993, Howell & Pyle 1993, Unitt et al. 1995). The latter relate particularly to migratory species (Atwood & Collins 1993, Howell & Pyle 1993), including shorebirds. The Peninsula is part of the East Pacific Flyway, which is used by large numbers of migrating shorebirds (Page et al. 1997, Danemann et al. 2002). Although shorebird research in the area has recently increased (e.g. Fernández et al. 1998, Brabata 2001), there is still a lack of information, including such basic aspects as the species composition at different localities. In this context, records of nine shorebird species rarely or never reported in the south of the Baja California Peninsula are of interest.

## STUDY AREA AND METHODS

The study area is in La Paz Bay at the southern end of the Baja California Peninsula, México. This region is characterized by its aridity, with an average annual precipitation of only 200 mm, and very high evaporation rates (García 1964). The bay features mainly rocky and sandy substrates. Only at Ensenada of La Paz (hereafter referred to simply as "Ensenada"), in the south of the bay (Fig. 1), do muddy substrates occur (Carmona & Ramírez 1997). In this area, tides occur twice daily (Grivel & Grivel 1991). From October to March, the dominant winds come from the northwest, while from April to September, southeast winds prevail (García & Mosiño 1968).

The wetland of Chametla is located in the south part of

Ensenada (Fig. 1). It is about 4 km long (Fernández *et al.* 1998). The beach there comprises a fine grain substrate mixed with clay and mud, and contains saline horizons. Adjacent to Chametla is El Centenario beach, which is characterized by higher proportions of muddy substrate, caused by a lesser slope, which creates a large intertidal zone. There is also one natural and three artificial channels, the latter created by a now abandoned shrimp farm; these channels result in a higher humidification of the land (Brabata 2001; Fig. 1). Due to the shallow slope, tide levels largely govern the available feeding area for shorebirds, exposing 500–1000 m of mud during low tides (Fernández *et al.* 1998).

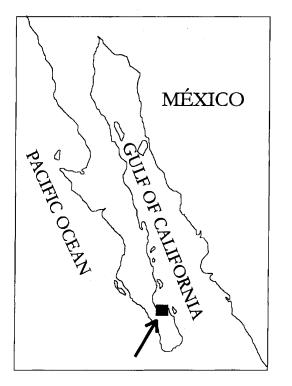
In the southeast part of the city of La Paz are five, 5-hectare oxidation ponds (Fig. 1). Until recently, these were used for the city wastewater treatment (Castillo-Guerrero *et al.* 2002). Along with a treated water collector tank, located 15 km from the city, these ponds are the only freshwater wetlands of the Ensenada; otherwise, the closest are more than 100 km to the northwest (Castillo-Guerrero *et al.* 2002).

As a part of a research program concerning the use of the Ensenada by shorebirds, we surveyed the coast and freshwater wetlands on a two-weekly basis from August 2001 to April 2002 and from August 2002 to April 2003. During these censuses, we identified and counted the birds in the area, using binoculars (10×) and telescopes (20–60×). We also caught birds with mist nets at the coastal wetlands (Chametla and El Centenario) as well as at the oxidation ponds (at least three times per month in each habitat). During these activities, we recorded nine species of which there were few previous records for Baja California Sur. These comprised observations of two species, the capture and release of one species, and the capture and collection of specimens of six species, now held by the Natural History Museum of the Universidad Autónoma de Baja California Sur.



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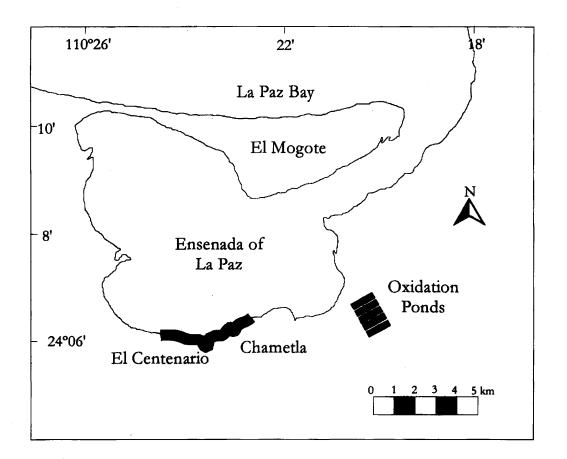


Fig 1. The study area at the southeast end of La Paz Bay, Baja California Sur, México. The coastal (Chametla and El Centenario), and freshwater (Oxidation Ponds) sites described in this paper are shown.



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# **RESULTS AND DISCUSSION**

#### American Golden-Plover Pluvialis dominica

The American Golden-Plover breeds in the American Arctic and winters in S America (Howell & Webb 1995, A.O.U. 1998). The first record for the Baja California Peninsula was of a bird collected in San José del Cabo (in the southern part of the Peninsula) in 1887 (Brewster 1902). Six more records exist, five of them from the northern part of the Peninsula and one more from San José del Cabo (Wilbur 1987). Four additional sightings in San José were recently published (Unitt 2001). This species has been classified as a rare transient and winter visitor (Wilbur 1987). However, Unitt (2001) suggests that it is a regular spring migrant, though in low numbers.

We observed one individual in Chametla in March 2002. We recorded the bird roosting in the intertidal zone along with Black-bellied Plovers *P. squatarola*, Willets *Catoptrophorus semipalmatus*, and Marbled Godwits *Limosa fedoa*. The morphological differences between this individual and the Black-bellied Plover, the most common species in the area, were the golden dorsal feathers and the black chest and belly that extended to the under-tail coverts. Due to the intense observer effort at Ensenada, and because this species has been observed only once, we think that it should be classified as a rare transient in the area (see Grinnell 1928, Wilbur 1987, Howell *et al.* 2001). This is the first record of the species in La Paz Bay.

# Solitary Sandpiper Tringa solitaria

The Solitary Sandpiper breeds in northern N America and winters from the SE United States and N México to Perú and Argentina (Howell & Webb 1995, A.O.U. 1998). It is considered rare along the Mexican Pacific coasts (Baja California Peninsula and Sonora; Howell & Webb 1995, A.O.U. 1998). One specimen was collected in 1887 (Brewster 1902, Grinnell 1928), though recently the reliability of this record has been doubted. The first reliable record for Baja California Sur occurred in February 1999 in the southern region of Migriño (Erickson *et al.* 2001). It seems that this winter record was particularly unusual because all other recent sightings in Baja California and Baja California Sur (20 and 6 respectively) have always been during August–October (Wurster *et al.* 2001), none of them in La Paz Bay.

We captured and collected a juvenile male at the oxidation ponds in February 2002. The bird was caught along with Spotted Sandpipers Actitis macularia, Western Sandpipers Calidris mauri, and Least Sandpipers C. minutilla. All previous sightings for Baja California Sur were made at the Los Cabos region, mostly at freshwater sites, which is consistent with the data reported here. Therefore, the Solitary Sandpiper can be considered as an autumn transient species (see also Grinnell 1928), with occasional individuals wintering in the area.

## Terek Sandpiper Xenus cinereus

Terek Sandpipers breed across the N Palearctic and winter in the Persian Gulf, the Red Sea, SE Asia, E Africa, New Guinea, and Australia (A.O.U. 1998). In N America, there are some isolated records for NE Manitoba and Massachusetts and for the Pacific coast of British Columbia and California (A.O.U. 1998).



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We recorded a Terek Sandpiper on seven occasions between April and September 2002 in Chametla. On each occasion, only one bird was seen. Most times it fed in the intertidal zone, in mixed flocks of Semipalmated Plovers *Charadrius semipalmatus* and Western Sandpipers. At one time, it was observed roosting in the supra-littoral zone, among a flock of Semipalmated Plovers. The possibility of a misidentification is low, given its short, strikingly orange-yellow legs, its upturned bill and its size. The frequent observation of just one bird suggests that only a single individual was involved. This is the first record of the species in México. It therefore should be considered as of accidental occurrence.

## Red Knot Calidris canutus

The Red Knot, with a circumpolar Arctic breeding range and almost worldwide non-breeding distribution, has been classified as a rare transient in Baja California Sur in spring and summer (Grinnell 1928), as an uncommon migrant and winter visitor (Wilbur 1987, Howell & Webb 1995) with some oversummering individuals (Howell & Webb 1995), and as a winter visitor, common during the migratory season (Howell *et al.* 2001). Three records exist for Ensenada (Grinnell 1928, Wilbur 1987, Carmona 1995).

We captured and released an adult Red Knot in March 2002 at El Centenario. It was caught along Wilson Plovers *Ch. wilsonia* and Western Sandpipers. We think that this is a rare transient migrant in Ensenada.

#### Semipalmated Sandpiper Calidris pusilla

The Semipalmated Sandpiper breeds across Arctic America and winters in S America and around the Caribbean. It migrates primarily along the Atlantic coast, and rarely, but regularly along the Pacific coast from British Columbia to N Baja California. The first five records for the northern part of Baja California Peninsula were published in 1992, all during August or September (Wurster & Radamaker 1992). On the basis of these records, the species was later classified as a rare transient in low numbers (Howell *et al.* 2001, Wurster *et al.* 2001). There were no records of Semipalmated Sandpipers for Baja California Sur before our studies.

A total of ten Semipalmated Sandpipers was caught (of which two were collected); eight of these were juveniles, two were adults. Eight were caught in autumn (August–October 2001 and August–September 2002), one in winter (December 2001) and one in spring (March 2002). Seven were captured at the oxidation ponds, one at Chametla, and two at El Centenario. On the basis of these records, we consider the Semipalmated Sandpiper to be an uncommon autumn migrant in Ensenada, with a preference for freshwater wetlands. Most of the birds we recorded were juveniles. This is consistent with other observations from Baja California Peninsula (Wurster & Radamaker 1992, Wurster *et al.* 2001).

#### Pectoral Sandpiper Calidris melanotos

The Pectoral Sandpiper breeds across arctic N America and E Siberia and winters in S America and Australasia. It has been considered as an autumn transient in the Baja California Peninsula since the early 20th century (Brewster 1902, Grinnell 1928). Wilbur (1987) classified it as rare. More recently, however, several observations indicate that it is a regular though uncommon passage migrant (Atwood & Collins 1993, Howell & Pyle 1993), similar to the status proposed for California (Garret & Dunn 1981). There are five recent records (1991–1997) for Baja California Sur, all during September–October. In the four cases where age was determined, the birds were identified as juveniles (Howell & Pyle 1993, Wurster 2001). None of them were recorded in La Paz Bay.

We captured Pectoral Sandpipers at four occasions; singles were caught the first three times (in October 2001 and September 2002) and two on the last occasion (in November 2001). Of the five birds captured, three were juveniles and two were adults (one was collected). In all cases captures were made at the oxidation ponds, along with some Semipalmated Plovers, Western and Least Sandpipers. Dates of capture show that these are autumn transients. The low frequency of capture suggests that, at least in Ensenada, this species is a rare transient, as proposed by Wilbur (1987). This is the first record of the Pectoral Sandpiper in La Paz Bay.

## Curlew Sandpiper Calidris ferruginea

The Curlew Sandpiper breeds in N Eurasia and (rarely) in Alaska. It winters mainly in Africa, India and Australia (A.O.U. 1998). Observations have been reported for the Caribbean, i.e., Barbados, Puerto Rico and Virgin Islands (Canevari *et al.* 2001). It has been classified as a rare but regular vagrant of North America, with possible occurrence in E México (Howell & Webb 1995). However, there is only one record for México, made in the Yucatán Peninsula (Wilson *et al.* 1997).

In November 2001, a juvenile male Curlew Sandpiper was captured and collected at the oxidation ponds, along with Semipalmated Plovers, Western and Least Sandpipers. Presumably this was the same individual that was observed nearby a few days before its capture (Erickson *et al.* 2002). The Curlew Sandpiper should be considered, at least in the Baja California Peninsula, as an extremely rare species. This is the first record for the Pacific coast of México.

## Stilt Sandpiper Calidris himantopus

The Stilt Sandpiper breeds in the American Arctic and winters mainly in S America, but casually north to central California (A.O.U. 1998). It has been recorded six times at Figueroa lagoon, Baja California, always in January or February (Erickson *et al.* 2001) and is thus considered a casual wintering species in the north of the Peninsula, similar to its status in California (Erickson *et al.* 2001). More recently, however, it has been classified as a regular though uncommon transient, in both spring and autumn (Patten *et al.* 2001). There is only one previous report in Baja California Sur: four individuals observed in early January 1993 in the Ensenada of La Paz (Carmona 1995). However, according to Howell *et al.* (2001), this observation is not reliable.

We captured and collected an adult male Stilt Sandpiper in November 2001 at the oxidation ponds, together with other birds typical of this wetland (see above). The low number of records in the Ensenada (two in nine years) suggests that this species should be considered as rare.

# Common Snipe Gallinago gallinago

There are records from the early 20th century that indicate its presence in considerable numbers in the El Cabo region (Brewster 1902, Grinnell 1928). Recently it has been considered an uncommon migrant along the Peninsula (Wilbur 1987, Howell *et al.* 2001), and even a fairly common but somewhat secretive transient and winter visitor (Patten *et al.* 2001). For Ensenada, the only previous record was one in October 1998 in the treated water collector tank (Castillo-Guerrero & Carmona 2001).

We captured and collected an adult female Common Snipe in December 2001 at the oxidation ponds along with birds typical of this wetland (see above). At least for Ensenada, the Common Snipe should be considered as a rare transient (Wilbur 1987).

## CONCLUSIONS

The records presented increase the number of shorebirds species recorded in La Paz Bay to 35 (Carmona & Ramírez 1997). This increment is probably a direct result of increased observation effort, especially at the oxidation ponds, since we obtained most of our data from this site. We consider that it is possible that the strong winds and heavy rainfall associated with hurricane Juliette (26-28 September 2001) influenced the number of records presented here. Our records for American Golden-Plover, Solitary Sandpiper, Terek Sandpiper, Curlew Sandpiper and Stilt Sandpiper may have related to wind-blown vagrants, especially considering the absence of other observations of these species. In contrast, it seems likely that small numbers of Red Knots, Semipalmated Sandpipers, Pectoral Sandpipers and Common Snipes make regular use of the Ensenada. However, these species may occur in such small numbers that they are frequently overlooked. In view of the absence of catching effort and lack of observations prior to 2000, it would be far too speculative to interpret our observations of these species as range extensions.

These observations highlight the importance of the La Paz oxidation ponds, which represent an unusual habitat for the region, as they afford a wetland habitat that is quite different to that of the nearby coast (Castillo Guerrero *et al.* 2002). For this reason, the ponds help to increase local biodiversity, which makes it necessary to incorporate them into conservation strategies for the area.

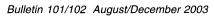
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#### REFERENCES

American Ornithologists' Union (A.O.U.). 1998. Check list of North American birds. Allen Press, Lawrence, Kansas.

- Atwood, J.L. & C.T. Collins. 1993. Additional bird records for Baja California México. *Euphonia* 2: 38–41.
- Brabata, G. 2001. La Ensenada de La Paz, como parte de la ruta migratoria de Calidris mauri: (Scolopacidae); su estancia a lo largo



de un año. MSc. thesis. CICIMAR-IPN. La Paz, B.C.S., México. 64 p.

- Brabata, G. & R. Carmona. 1998. Conducta alimenticia de cuatro especies de playeros (Charadriiformes: Scolopacidae) en Chametla, B.C.S., México. *Biología Tropical* 47:239–243.
- Brewster, W. 1902. Birds of the Cape region of Lower California. Bull. Mus. Comp. Zool., 41, September 1902, 1–241.
- Canevari, P., G. Castro, M. Sallaberry & L.G. Naranjo. 2001. Guía de los chorlos y playeros de la región neotropical. American Bird Conservancy, WWF–US, Humedales para las Américas y Manomet Conservation Science, Asociación Calidris. Santiago de Cali, Colombia.
- **Carmona, R.** 1995. Distribución temporal de aves acuáticas en la playa El Conchalito, Ensenada de La Paz, B.C.S. *Inv. Mar. CICIMAR* 10: 1– 21.
- Carmona, R. & S. Ramírez. 1997. Lista sistemática de aves acuáticas en la Bahía de La Paz, B.C.S. Pp. 237–247. In: La Bahía de La Paz. Investigación y conservación. J. Urbán-Ramírez y M. Ramírez-Rodríguez (eds). UABCS-CICIMAR-SCRIPPS. México.
- Carmona, R., J.A. Castillo-Guerrero & E.M. Zamora-Orozco. 1999. Registros nuevos del zambullidor menor (*Tachybaptus dominicus*) y diez especies de anátidos en las adyacencias de la Bahía de La Paz, Baja California Sur, México. Anales del Instituto de Biología Universidad Autónoma de México, Serie Zoología 70: 191–203.
- Castillo-Guerrero, J.A. & R. Carmona. 2001. Distribución espacio-temporal de aves acuáticas y rapaces en un embalse dulceacuícola artificial, en las adyacencias de la Bahía de La Paz, Baja California Sur, México. *Biología Tropical*. 49: 1131–1142.
- Castillo-Guerrero, J.A., E.M. Zamora-Orozco & R. Carmona. 2002. Aves anidantes en dos cuerpos dualceacuícolas artificiales adyacentes a la ciudad de La Paz, B.C.S., México. *Hidrobiológica*. 12: 85–87.
- Danemann, G.D., R. Carmona & G. Fernández. 2002. Migratory shorebirds in the Guerrero Negro saltworks, Baja California Sur, México. Wader Study Group Bull. 97: 36–41.
- Erickson, R.A., R.A. Hamilton & S.N.G. Howell. 2001. New information on migrant birds in northern and central portions of the Baja California Peninsula, including species new to Mexico. Pp. 112–170. In: *Birds of the Baja California Peninsula; status, distribution, and taxonomy*. R.A. Erickson & S.N.G. Howell (eds.). Monographs in Field Ornithology 3. American Birding Association Colorado USA.
- Erickson, R.A., R.A. Hamilton, E. Palacios & R. Carmona. 2002. Baja California Peninsula. North American Birds 56: 109–111.
- Fernández, G., R. Carmona & H. de la Cueva. 1998. Abundance and seasonal variation of Western sandpipers (*Calidris mauri*) in Baja California Sur, Mexico. *South Western Naturalist* 43: 57–61.
- García, E. 1964. Modificaciones al sistema de clasificación climática de Koeppen (para adaptarla a las condiciones de la República Mexicana). Instituto de Geografía, UNAM, México.
- García, E. & P. Mociño. 1968. Los climas de Baja California. Decenio Hidrológico Internacional. Memoria 1966–1967. Instituto de Geo-

física, UNAM, México. 29-55.

- Garret, K. & J. Dunn. 1981. Birds of southern California: status and distribution. Los Angeles Audubon Soc., Los Angeles.
- Grinnell, J. 1928. A distributional summation of the ornithology of Lower California. *Univ. Cal., Publ. Zool.* 32: 11–300.
- Grivel, F.P. & F.V. Grivel (eds.). 1991. Tablas de predicción de mareas 1992, puertos del Océano Pacífico. Instituto de Geofísica, UNAM, México.
- Howell, S.N.G. & P. Pyle. 1993. New and noteworthy birds records from Baja California, México, October 1991. Western Birds 24: 57–62.
- Howell, S.N.G. & S. Webb. 1995. A Guide to Birds of México and Northern Central America. Oxford University Press, Oxford.
- Howell, S.N.G., R.A. Erickson, R.A. Hamilton & M.A. Patten. 2001 An annotated checklist of the birds of Baja California and Baja California Sur. Pp. 171–203. In: *Birds of the Baja California Peninsula, status, distribution, and taxonomy*. R.A. Erickson & S.N.G. Howell (eds.). Monographs in Field Ornithology 3. American Birding Association, Colorado, USA.
- Page, G.W., E. Palacios., L. Alfaro., S. González., L.E. Stenzel & M. Jungers. 1997. Numbers of wintering shorebirds in coastal wetlands of Baja California, Mexico. J. Field Ornithol. 68: 562–574.
- Patten, M.A., E. Mellink, H. Gómez de Silva & T.E. Wurster. 2001. Status and taxonomy of the Colorado Desert avifauna of Baja California. Pp. 29–96. In: Birds of the Baja California Peninsula; status, distribution, and taxonomy. R.A. Erickson & S.N.G. Howell (eds.). Monographs in Field Ornithology 3. American Birding Association, Colorado, USA.
- Unitt, P. 2001. Some bird observations from Baja California Sur. Pp. 107– 111. In: Birds of the Baja California Peninsula; status, distribution, and taxonomy. R.A. Erickson & S.N.G. Howell (eds.). Monographs in Field Ornithology 3. American Birding Association, Colorado, USA
- Unitt, P., A.M. Rea, E. Palacios, E. Mellink, L. Alfaro & S. González. 1995. Noteworthy records of birds in northwestern Baja California, México. Western Birds 26: 144–154.
- Wilbur, S.R. 1987. Birds of Baja California. University of California, Berkeley. 253 p.
- Wilson, R.J., J. Keenan., B. Lavercombe & M. Della Seta. 1997. Curlew Sandpiper Calidris ferruginea in Yucatán, México. Cotinga 8: 51.
- Wurster, T.E. & K. Radamaker. 1992. Semipalmated Sandpiper records for Baja California. *Euphonia* 1: 27–38.
- Wurster, T.E., R.A. Erickson, R.A. Hamilton & S.N.G. Howell. 2001. Database of selected observations: an augment to New information on migrant birds in northern and central portions of the Baja California Peninsula. Pp. 204–237. In: Birds of the Baja California Peninsula; status, distribution, and taxonomy. R.A. Erickson & S.N.G. Howell (eds.). Monographs in Field Ornithology 3. American Birding Association, Colorado, USA.

