

# First records of Black Tern *Childonias niger*, Willet *Tringa semipalmata*, and Snowy Plover *Charadrius nivosus* for the state of Queretaro, central Mexico.

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#### **Abstract**

I present the first records of Black Tern, Willet and Snowy Plover for the state of Queretaro. Each of these species was found at the 'El Centenario' reservoir in Tequisquiapan during 2010-2011. These records highlight the potential importance of reservoirs on Mexico's central plateau for a wide variety of birds.

Keywords: avifauna, distribution.

Primeros registros de Childonias niger, Tringa semipalmata y Charadrius nivosus para el estado de Querétaro, México.

#### Resumen

Reporto los primeros registros documentados de *Childonias niger, Tringa semipalmata* y *Charadrius nivosus* para el estado de Querétaro. Cada una de estas especies se encontró en el embalse 'El Centenario', Tequisquiapan, durante 2010-2011. Estas observaciones sugieran la importancia potencial de los embalses de México central para las aves.

Palabras clave: avifauna, distribución.

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Queretaro is a small state in the southern part of Mexico's central plateau (Figure 1). The most recent published avifauna of Queretaro (Pineda-López 2010) indicated that 375 species of birds have been seen in the state. Although it hosts a wide variety of vegetation cover (Zamudio *et al.* 1992), much of Queretaro is in an 'arid zone' (León-Paniagua *et al.* 1990) consisting of farmland and semi-desert. Many urban areas in the southern half of Queretaro, however, support semi-permanent reservoirs. These reservoirs host a variety of aquatic bird species (Pineda-López and Arellano-Sanaphre 2010).

El Centenario (20°30'44"N, 99°53'41"W) is a reservoir in the town of Tequisquiapan, Queretaro. It has an area of 192.1 ha and vegetation cover of 46.7 ha (Pineda-López and Arellano-Sanaphre 2010). Fluctuations in the water-level of El Centenario have significant effects on the number of aquatic birds that it supports, but in winter, the reservoir can hold over 10,000 individuals (JH pers. obs.) of a variety of species.

El Centenario was monitored weekly between August 2010 and July 2011. Records of birds seen during these visits were recorded in a notebook. All observations were made with Leica 8 x 32 binoculars and a Nikon ED82 spotting scope. Photographs were taken with a Sony DMC-FZ38 digital camera. The following new species for the state of Queretaro were documented.



**Figure 1.** State of Queretaro with the locations of Tequisquiapan and El Centenario.

#### Black Tern

Black Terns are migratory marsh terns which breed primarily in northern USA and Canada (Heath *et al.* 2009) and winter off the coasts of Central and South America. An increased understanding of the wintering and migratory ecology of this species is important given recent declining trends in its population (Heath *et al.* 2009). Black Terns are considered rare transients in inland Mexico (Forcey 2002). Past observations include a handful of fall records in central Oaxaca, Chihuahua, Durango, Zacatecas, San Luis Potosi, and Jalisco (Williams 1983, Forcey 2002).

On the evening of 5<sup>th</sup> September 2010, I recorded a group of six Black Terns at El Centenario. Immediately after the observation, the following notes were taken: 'Six small terns hawking for insects on the reservoir in typical marsh tern flight. All apparently Black Terns in non-breeding plumage. Notable dark caps, black smudges behind eye, upper-wings grey, undersides white'. Lots of other migratory birds were present at the reservoir at the time following a series of heavy thunderstorms, including over 2,500 Wilson's Phalaropes *Phalaropus tricolor* and several hundred Baird's Sandpipers *Calidris bairdii* and Least Sandpipers *Calidris minutilla*.

# Willet

Willets breed locally in western North America and in wetlands along the Atlantic coast (Lowther *et al.* 2001). They winter primarily on the Pacific and Atlantic coasts of Central America. Inland records from Mexico are extremely rare (Howell and Webb 1995).

On 11<sup>th</sup> September 2010, a single Willet was recorded at El Centenario. During routine monitoring work, a flock of waders flew past me at the northern end of the reservoir. The flock consisted of a number of Greater Yellowlegs *Tringa melanoleuca*, Lesser Yellowlegs *Tringa flavipes*, Baird's Sandpipers and the Willet. The bird landed, and photographs (Figure 2) were taken to document this record. Notes taken during and immediately following observations were as follows: 'A large wader in flight with a striking black-and-white wing pattern and grey scapulars and mantle. On the ground appeared larger than associating Greater Yellowlegs. Later analysis of photos confirmed the identification.

### Snowy Plover

Snowy Plovers are found on sandy coasts or inland brackish lakes in North and Central America (Page *et al.* 2009). In Mexico, they have recently been documented breeding in the highlands of San Luis Potosi, Zacatecas, and Estado de México (Luévano *et al.* 2010, DeSucre Medrano *et al.* 2011). Historical records exist of small

numbers of birds in Guanajuato, Jalisco, Puebla, and Distrito Federal (Howell and Webb 1994).

On 13<sup>th</sup> March 2011, I recorded a single Snowy Plover at El Centenario. Much of the reservoir had been drained, but a few remaining puddles held approximately 100 Least Sandpipers and the Snowy Plover. A series of photos (Figure 3) and notes were taken during observations. Structure, bill shape, and face pattern confirmed the identification. The apparently yellow legs shown by this individual were caused by it wading in mud of this colour.



**Figure 2.** Willet and Lesser Yellowlegs at El Centenario, 11<sup>th</sup> September 2010 (photo by author).



**Figure 3.** Snowy Plover at El Centenario, 13<sup>th</sup> March 2011 (photo by author).

## Discussion

Recent studies have started to highlight the importance of reservoirs in Queretaro for aquatic birds (Pineda-López and Arellano-Sanaphre 2010). The extent of previous under-recording in this region was demonstrated by the

fact that the study by Pineda-López and Arellano-Sanaphre (2010) added 29 species to the state bird-list. It is perhaps not surprising, therefore, that regular monitoring of El Centenraio has now resulted in three more new species being added, taking the overall list up to 378.

Given that Black Terns and Snowy Plovers have been found at similar times of the year in other states on the central Mexican plateau, it is unlikely that the occurrences reported here are accidental. Indeed, the predicted distribution of both birds (Howell and Webb1995) suggests that both should occur in Queretaro. Continued monitoring of the reservoirs in Queretaro will probably result in more sightings of these species.

The Willet was probably a genuine vagrant, as its current predicted distribution in Mexico is strictly coastal at all times of the year (Howell and Webb 1995).

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More sightings of this species in this region, however, might confirm that Willets regularly migrate over inland Mexico.

These sightings, together with those of the Pineda-López and Arellano-Sanaphre study (2010) confirm that Queretaro's reservoirs have been historically under-recorded. These bodies of water host more species of aquatic birds, and in greater numbers (JH pers. obs.) than has been previously recognised. Reservoirs such as El Centenario could therefore be very important for both resident and migratory birds. Further monitoring would confirm this. Management plans for reservoirs on Mexico's central plateau should consider this.

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