

RECENT RECORDS OF THE LEAST GREBE *TACHYBAPTUS DOMINICUS* IN BAJA CALIFORNIA SUR, MEXICO

The Least Grebe *Tachybaptus dominicus* was common and abundant in ponds at the Cape Region of Baja California Sur, Mexico, until the beginning of this century (Bryan, W. E. 1889. *Proc. Calif. Acad. Sci.*, ser. 2, 2:237-320; Brewster, W. 1902. *Bull. Mus. Comp. Zool.* 41 :1-241; Grinnell, J. 1928. *Univ. Calif. Publ. Zool.* 32:1-300). At present, only isolated records of populations exist (Wilbur, S.R. 1987. Univ. of Calif. Press, Berkeley. 253 p.; Storer, R. W. 1992. The Least Grebe. *In: The Birds of North America.* A. Poole, P. Stettenheim & F. Gill, Eds. The Acad. of Nat. Sci., and The Amer. Ornithologists' Union, v.12, pp.1-12; Howell, S.N.G. & S. Webb. 1992. *W. Birds* 23:153-162; Atwood, J.L. & C.T. Collins, 1993. *The Euphonia* 2(2):38-41).

Since the Least Grebe has not been readily reported in the last 70 years and because several problems have been detected on the feasibility of current records (Massey, B.W. & E. Palacios 1994. *Studies in Avian Biol.* 15:45-57; Howell, S.N.G & S. Webb. 1995. Oxford Univ. Press. 851 p.), we present our recent findings and discuss the present status and the rediscovery of the species in Baja California Sur.

The Least Grebe *Tachybaptus dominicus* maintains isolated populations in southern of the peninsula of Baja California (Storer, R.W. 1992. The Least Grebe. *In: The Birds of North America.* A. Poole, P. Stettenheim & F. Gill, Eds. The Acad. of Nat. Sci., and The Amer. Ornithologists' Union, v.12, pp.1-12), and southern Sonora (Storer, pers.com.). Nevertheless our findings are important because in the Cape Region, where Belding (1883. *Proc. U.S. Natl. Mus.* 6:344-352) reported it for the first time from the peninsula, the Least Grebe was common and abundant till the beginning of this century (Bryant, W.E. 1889. *Proc. Calif. Acad. Sci.*, ser., 2, 2:237-320; Brewster, W. 1902. *Bull. Mus. Comp. Zool.* 41:1-241; Grinnell, J. 1928. *Univ. Calif. Publ. Zool.* 32:1-300) but now they are not found there anymore (Guzman *et al.*, 1994. *Ciencias Marinas* 20:93-103; Massey, B.W. & E. Palacios, 1994. *Studies in Avian Biol.* 15:45-57; Llinas, pers.obs.) and for almost 70 years (until 1995) there was not any record of this species (Wilbur, S.R. 1987. Univ. of Calif. Press, Berkeley. 253 p.) except only two isolated records about 10 Least Grebes from the Mulege River (Howell, S.N.G. & S. Webb, 1992. *W. Birds* 23:153-162) and one individual from Agua Caliente, Cape Region (Atwood, J.L. & C.T. Collins. 1993. *The Euphonia* 2(2):38-41).

In late of May and November 1991 we performed fauna surveys studies on Las Pocitas Region (24° 23' - 24° 53'N; 110° 47' - 111° 14'W), 90 km north of La Paz,

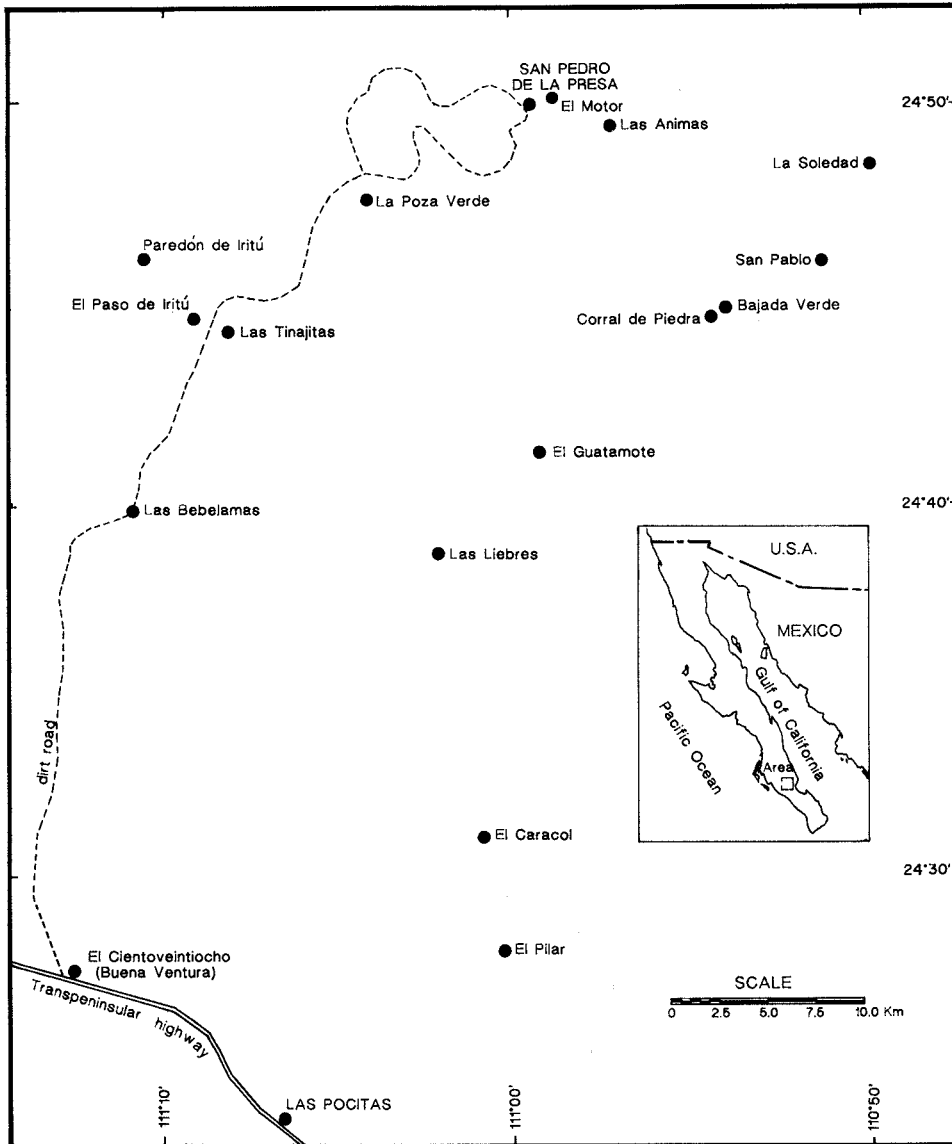


Fig. 1. Las Pocitas Region, La Paz, Baja California Sur.

Baja California Sur (Fig 1.), where we discovered Least Grebes in several fresh-water ponds.

On May 23th we found seven Least Grebes at the San Pedro de La Presa pond, one of them was observed on its nest. The pond dimensions are 60 m x 15 m and 1.5 m to 7 m in deep. This same day we observed another Least Grebe with nuptial plumage at the largest pond (of oval form and 40 m of major diameter, 21 m of minor diameter and 1.2 m of deep) of the three located in Bajada Verde ranch 15 km SE of San Pedro de La Presa. On November 22th, we found seven Least Grebes at Paso de Iritú ranch, and the next day nine more at El Motor pond, both places approximately located at 21 km and 2 km to the south and north of San Pedro de la Presa. Finally, five Least Grebes were recorded at San Pedro de la Presa pond the same day.

Paso de Iritú pond is an artesian oases approximately 200 m x 45 m and 1.5 m in deep. El Motor pond is not associated with any ranch and is about 110 x 20 m and 0.6 m of deep divided at the middle by a promontory of rocks. The ponds dominant vegetation where grebes were recorded consisted of cattail *Typha latifolia* and *T. dominguensis*, willows *Salix lasiolepis*, "yerba del manso" *Anemopsis californica*, watercress *Nasturtium aquaticum* and "manto" *Cryptostegia grandiflora*; also there are green algae *Chara* sp. and *Potamogeton* sp. Associated to the bank vegetation, but separated from the direct influence of the water, there are "tabaco de árbol" *Nicotiana glauca*, "guatamote" *Baccharis glutinosa* and "romerillo" *Hymenoclea monogyra*.

Las Pocitas Region, also known as La Presa Region (Grismer, L.L. & J.A. McGuire, 1993. *Bull. Southern Calif. Acad. Sci.* 92:2-24), is located in the arid-tropical region (Wiggins, I.L. 1980. Stanford Univ. Press. 1025 p.), south of Sierra de la Giganta. According to Grismer, L.L. & J. A. McGuire (1993. *Bull. Southern Calif. Acad. Sci.* 92:2-24), these localities are relict areas that in addition to the fauna from the xeric zone have species from the mesic environment: treefrog *Hyla regilla*, alligator lizard *Elgaria paucicarinata*, two-striped garter snake *Thamnophis hammondi* and slider turtle *Trachemys scripta*. The region is also a refugium for some vertebrates that have been extirpated from other mesic environments of the peninsula by degradation of the habitat, as the Least Grebe (Grinnell, J. 1928. *Univ. Calif. Publ. Zool.* 32:1-300), sora *Porzana carolina* (Guzmán *et al.*, 1994. *Ciencias Marinas* 20:93-103), and the endemic fish *Fundulus lima* (Follett, W.I. 1961. *Systematic Zool.* 9(3+4):212-232; Myers G.S. 1930. *Proc. Calif. Acad. Sci.*, ser. 4, 19:95-104; Llinas, pers. obs.).

In reviewing the literature we found that Howell, S.N.G. & S. Webb (1995. Oxford Univ. Press. 851 p.) report the distribution and also the actual breeding range of the Least Grebe in a fictitious manner because they locate it from the Cape Region to Mulegé. The Least Grebe has not been observed in the last 10 years at the Cape Region (Guzmán *et al.*, 1994. *Ciencias Marinas* 20:93-103; Llinas, pers. obs.). We do not consider creditable this breeding range because this southern record is based from the single individual isolated and without nuptial plumage, recorded by Atwood, J.L. & C.T. Collins (1993. *The Euphonia* 2(2):38-41) in Agua Caliente,

Cape Region. This individual well could be a vagrant because Storer, R.W. (1992. The Least Grebe *In: The Birds of North America*. A Poole, P. Stettenheim & F. Gill, Eds. The Acad. of Nat. Sci., and The Amer. Ornithologists' Union, v.12, pp.1-12) mentions that although Least Grebes are non-migratory, they may move long distances.

The Least Grebe was certainly distributed from San Ignacio (Bancroft, G. 1930. *Condor* 32:20-49) to San José del Cabo (Belding, I. 1883. *Proc. U.S. Natl. Mus.* 6:344-352; Brewster, W. 1902. *Bull. Mus. Comp. Zool.* 41:24; Lamb, C. 1927. *Condor* 29:155-157), but because "the type of habitat required by this species has greatly disappeared" (Grinnell, J. 1928. *Univ. Calif. Publ. Zool.* 32:1-300), it may be now confined to isolated suitable sites, like the Mulege River (Howell, S.N.G. & S. Webb. 1992. *W. Birds* 23:153-162), Las Pocitas, and maybe other places where "it can persist in small numbers" (Wilbur, S.R. 1987. Univ. of Calif. Press, Berkeley. 253 p.). There is other recent information on the Least Grebe distribution in Baja California Sur, but it is inexact and not to be credited. As an example, Massey, B.W. & E. Palacios (1994. *Studies in Avian Biol.* 15:45-57) report Least Grebe breeding in "a series of ponds several kilometers from Puerto López Mateos". However there are not any fresh-water ponds in the vicinity of this port. In other words, they did not state in a precise way where the ponds were located, nor mention the number of individuals or pairs that they sighted.

It is clear that the only reliable recent records are those of Howell, S.N.G. & S. Webb (1992. *W. Birds* 23:153-162) from Mulegé River, and our new record from Las Pocitas. It is probable that the species is more abundant in the latter region, as the 24 individuals sighted correspond to only four oases, and there are at least 30 suitable ponds in this area.

Although the Least Grebe is widespread in mesic environments of the continent (Amer. Ornithologists' Union, 1983), in Baja California Sur appears to be a relict form like others confined to these oases. It is important to emphasize that from all the oases of the peninsula those from Las Pocitas Region are the least altered (Grismer, L.L. & J.A. McGuire. 1993. *Bull. Southern Calif. Acad. Sci.* 92:2-24; Llinas pers. obs.). Thus, Las Pocitas may be the best site where relict fauna has found a refuge or been developed there. This region is also one of the least studied of the peninsula, and has only been included in few herpetological publications (Grismer, L.L. & J.L. McGuire. 1993. *Bull. Southern Calif. Acad. Sci.* 92:2-24). Nevertheless, Las Pocitas's environment is currently threatened mainly by overgrazing of cattle, donkeys and goats, and by the introduction of exotic and aggressive species such as the "manto", domestic cats and pigs.

Current status of the Least Grebe in the peninsula is uncertain (Storer, R.W. 1992. *op. cit.*), therefore we consider that its habitat must be preserved because it is highly possible that the oases content the last populations of the subspecies *T. d. bangsi* van Rossem & Hachisuk, 1937. If these environments are preserved so will the Least Grebe. Additionally, oasis lodge of the endemic fish *Fundulus lima* (Follett, W.I. 1961. *Systematic Zool.* 9(3+4):212-232; Myers G.S. 1930. *Proc. Calif. Acad.*

Sci., ser. 4, 19:95-104) and relict species like the treefrog, slider turtle, two-striped garter snake and alligator lizard. Likewise one of the most important reasons why these ponds should be protected is "that these areas are truly living windows through which one can look into the past" (Grismer, L.L. & J.L. McGuire, 1993. *Bull. Southern Calif. Acad. Sci.* 92:2-24).

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