

GREBES — FAMILY PODICIPEDIDAE

Pied-billed Grebe *Podilymbus podiceps*

Strange loud noises like choking, emanating from a marsh, are most likely coming from a Pied-billed Grebe. Large lakes, small ponds, and brackish lagoons offer habitat to this species year round as long as they support patches of marshes. Some birds disperse for the fall and winter onto protected salt water. The Pied-billed Grebe is adopting some of the habits of the megapodes of the Australasian region, using the heat and insulation from rotting wet nest material as an aid to incubation.

Breeding distribution: The Pied-billed Grebe occurs throughout San Diego County's coastal slope wherever it can find suitable habitat. The largest numbers are in the coastal lagoons, especially Buena Vista Lagoon, site of up to 46 in the lagoon's west basin (H5) 13 June 1999 (J. Ginger) and 30 in the east basin (H6) 18 June 1999 (L. E. Taylor). The birds are also numerous on lakes well equipped with fringing marshes; for example, daily counts at O'Neill Lake (E6) ranged up to 25 (21 August 1997, P. A. Ginsburg), those at Lake Murray (Q11) to 18 (N. Osborn).

In the foothills and mountains there are fewer suitable ponds and lakes, but the grebe nevertheless occurs



Photo by Anthony Mercieca

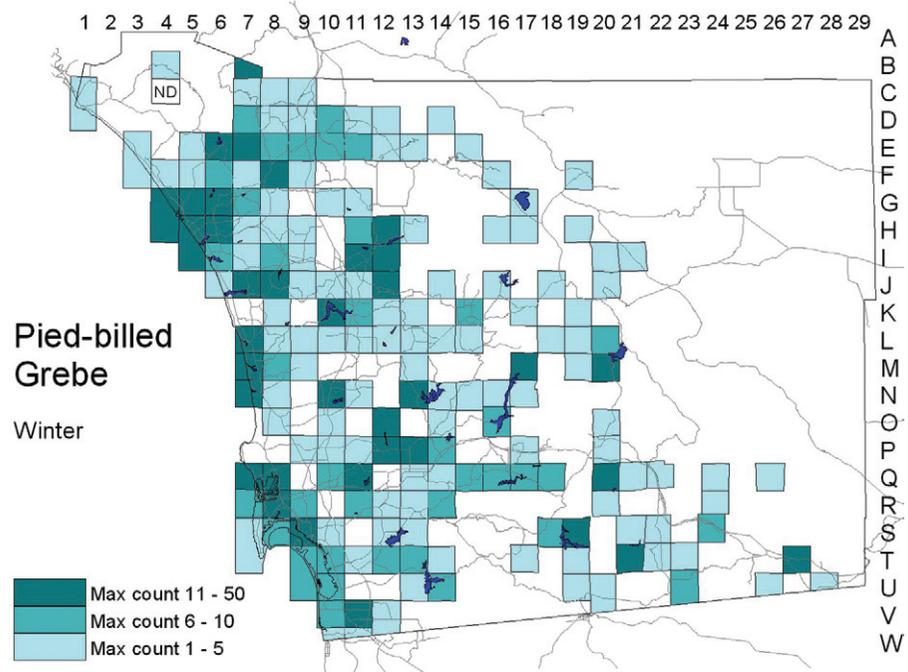
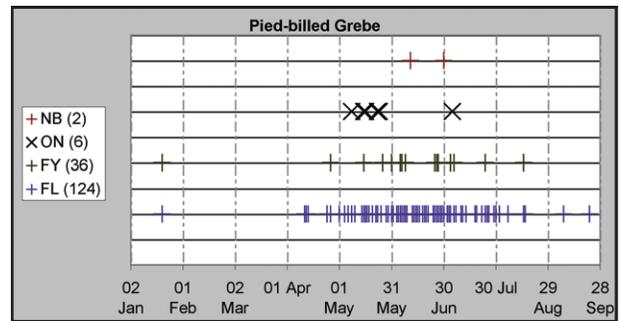
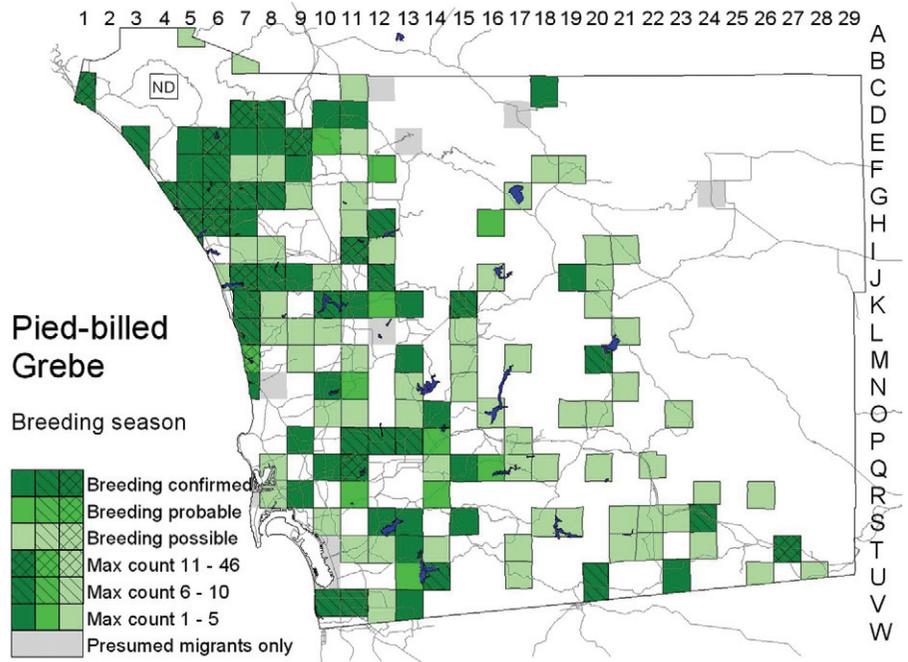
at many of these, some quite isolated, such as Twin Lakes in Cooper Canyon (C18; three, including one chick, 15 June 2000, M. and B. McIntosh). It is confirmed breeding as high as 4600 feet elevation at Lake Cuyamaca (M20; up to ten, including fledglings, 26 June 1999, A. P. and T. E. Keenan) and recorded as high as 5400 feet at Big Laguna Lake (O23; up to two on 24 July 1998, E. C. Hall). The Pied-billed Grebe is also found at a few spots a short distance over the divide on the east slope of the moun-

tains. Among these places, only at Tule Lake (T27) did we find more than two individuals and confirm breeding (up to 20 on 6 and 21 June 2000, adults feeding young 6 June 2001, J. K. Wilson).

Nesting: The Pied-billed Grebe builds a floating platform of marsh vegetation, tying it to emergent plants. Research in San Diego County, among other places, demonstrated that the grebes regulate the temperature and humidity of the incubating eggs by covering them with damp nest material, partially substituting it for the body of the adult (Davis et al. 1984). Sometimes the nest is at the edge of a marsh where it can be seen by a human observer, but often it is hidden within dense vegetation. As a result, the great majority of our confirmations of Pied-billed Grebe breeding were of observations of chicks. The young leave the nest and climb aboard the adult's back shortly after hatching.

Almost all of our records of Pied-billed Grebe chicks fell between 11 April and 22 September. An abandoned newly hatched chick was picked up in Rancho Santa Fe (R8) 15 September 2001 (SDNHM 50574). These data show that in San Diego County the Pied-billed Grebe lays mainly from the third week of March to the third week of August. The species also nests occasionally in winter, as we noted once during the atlas period, with two young several weeks old but still begging from an adult at Wilderness Gardens (D11) 20 January 2001 (K. L. Weaver).

Migration: The degree to which movement of Pied-billed Grebes reflects arrival of migrants from the north versus shifting of the local population is unclear. On salt water, the species occurs mainly from September to March, only rarely in late spring and summer (no more than one per monthly survey of central San Diego Bay 3 May–13 October 1993–94, Mock et al. 1994; no more than one per weekly survey of the San Diego Bay salt works April–July 1993, Stadtlander and Konecny 1994). The latter authors found a max-



imum of 20 on 13 October 1993 and a monthly average peaking in December and January.

Juveniles may disperse soon after fledging while still retaining some of the chicks' striped head pattern. Such a juvenile on a small pond in Greenwood Cemetery (S10) 31 May 1997 was not raised there (P. Unitt).

In the Anza–Borrego Desert the Pied-billed Grebe is a rare visitor. There are five records in the Borrego Valley in fall from 5 September (1998, one near Borrego Springs Country Club, F24, P. D. Jorgensen) to 15 November (1984, one at the Roadrunner Club, F24, A. G. Morley). In late spring there are two records, of two in Borrego Springs (G24) 22 May 2001 (P. D. Ache) and one at a pond in an orchard near the mouth of Coyote Creek Canyon 15 June 1973 (ABDSP database).

Winter: In winter the Pied-billed Grebe ranges more widely than it does in spring and summer. Salt-water sites where it winters but does not breed are Agua Hedionda Lagoon (I6; up to six on 27 December 1997 and 26 December 1998, C. Sankpill), Mission Bay (up to 20 in the northwest quadrant of the bay, Q7, 21 January 2001, L. Polinsky), the San Diego River flood-control channel and Famosa Slough (R8; up to 20 on 6 January 2000, J.

A. Peugh), and San Diego Bay (up to 20 between downtown San Diego and Coronado, S9, 15 December 2001, Y. Ikegaya). Numbers on the lagoons of northern San Diego County are little changed from those in the breeding season, but on some inland lakes they can be considerably higher, e.g., up to 49 at Dixon Lake (I11) 2 January 2000 (C. Rideout) and 50 at Lake Cuyamaca 15 January 1998 (A. and T. Keenan). In the Anza–Borrego Desert the only winter record is of one on the small pool at Butterfield Ranch (M23) 20 January 1973 (ABDSP database).

Conservation: There is no clear evidence for any trend in Pied-billed Grebe numbers in San Diego County, and data from other parts of the range are contradictory (Muller and Storer 1999). As an aquatic bird the grebe is exposed to water pollution, though it nests successfully in sewage ponds. In San Diego County, the grebe benefits greatly from the mass importation of water and the creation of the many reservoirs and ponds used to manage this water. The stocking of these ponds with fish and the introduction of the crayfish, not native to southern California, have supplied the grebe with its staple foods.

Taxonomy: All Pied-billed Grebes in North America are nominate *P. p. podiceps* (Linnaeus, 1758).