

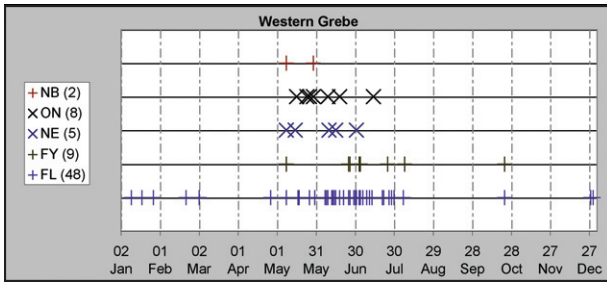
Western Grebe *Aechmophorus occidentalis*

In the middle of the 20th century, the Western Grebe was just a winter visitor to San Diego County, common on salt water along the coast. It continues as one of the most abundant winter visitors on San Diego Bay and the ocean near shore. Since the 1950s it has taken on an additional role as a locally common breeding species, colonizing an increasing number of lakes and lagoons with fringing marshes. The Western Grebe is an outstanding example of a bird that has taken advantage of the need for San Diego County's human population to import and manage vast quantities of fresh water.

Breeding distribution: As of 2001, the Western Grebe was up to six nesting sites in San Diego County. At O'Neill Lake, Camp Pendleton (E6), the birds were summering by 1997 and first confirmed breeding in 1999. The numbers there are still small, maximum 12, includ-

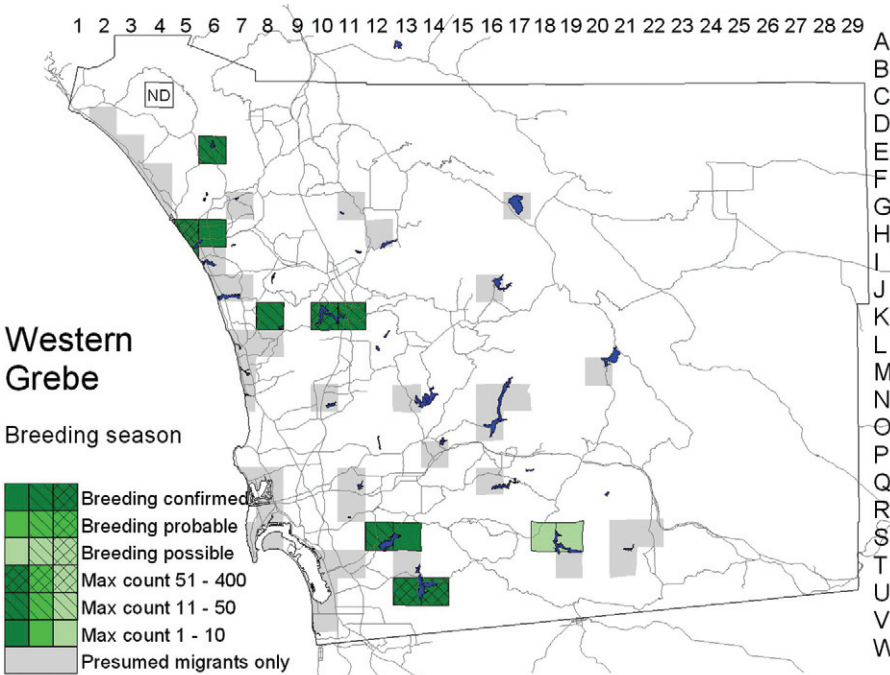
ing a fledgling, 30 July 2001 (P. A. Ginsburg). At Buena Vista Lagoon (H5/H6) the grebes have nested since at least 1997 (K. Messer), both east and west of Interstate 5. Numbers in spring and summer are sometimes large,

Photo by Anthony Mercieca



up to 132 on 11 May 1999 (M. Freda). San Dieguito Reservoir (K8) was a new breeding site discovered as a result of the atlas effort in 1997. The maximum count there in summer was at least 40 on 21 June 1997, including five adults with chicks. The birds nested there in winter as well, with up to 50, including three chicks, on 28 December 1997 and 18 January 1998 (J. Determan). Lake Hodges (K10) has become a major population center for the Western Grebe, with up to 400, including chicks, 14 June 1999 (R. L. Barber). Sweetwater Reservoir (S12/S13), site of San Diego County's first Western Grebe colony in 1956, continues to be important, with up to 40 on 4 May 1998 (P. Famolaro). Finally, a new but large colony is at Lower Otay Lake (U13/U14), with up to 60, including young, in square U13 on 25 June 1999 (V. Marquez) and 150 in U14 on 2 April 2000 (S. Buchanan).

From 1997 to 2001, we found Western Grebes summering at least irregularly on most of San Diego County's other reservoirs. On Lake Henshaw (G17) the numbers were large, up to 150 on 17 and 18 June 2000 (P. Unitt). On other lakes where the species was not confirmed breeding the numbers were much smaller, with no more than ten from May through August. Because of the Western Grebe's history, however, further increases and colonizations may be expected.



Nesting: For its nest, the Western Grebe makes a pile of cattail leaves and other aquatic vegetation, normally in the water if not actually floating. Some nests are visible from lakeshores, but most of our confirmations of Western Grebe breeding were of chicks, often riding on their parents' backs. Shortly after hatching, Western Grebe chicks leave the nest and climb onto the adults' backs.

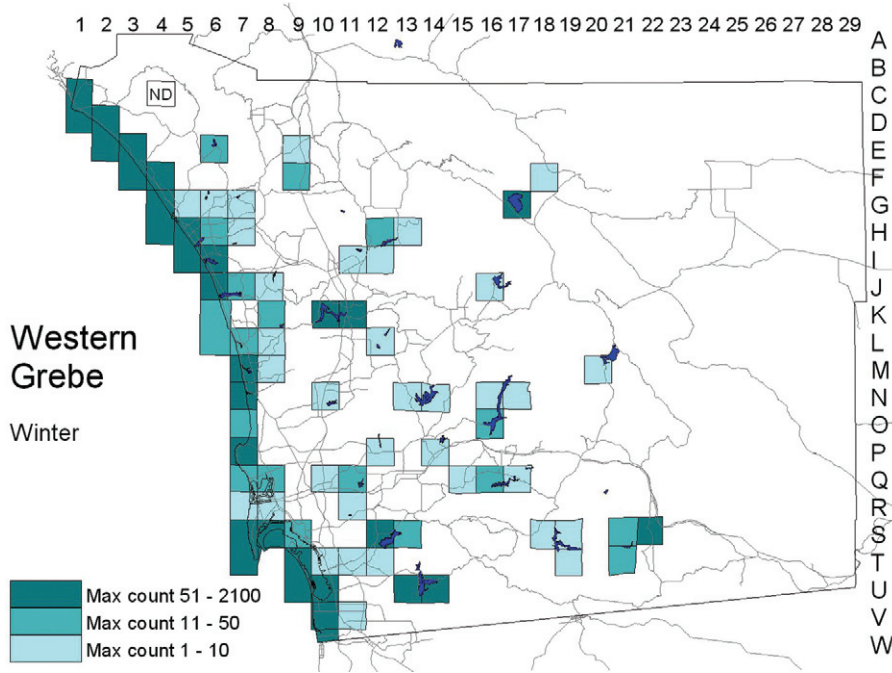
The peak of the Western Grebe's nesting in San Diego County lasts from May through early July, but observations of chicks show that this species perhaps more than any other breeds year round. Small chicks have been noted at Lake Hodges 23 October and 30 December 1998, 27 January and 2 March 1999, and at San Dieguito Reservoir 28 December 1997, 10 and 18 January 1998, and 21 February 1998. Winter breeding of the Western Grebe at Sweetwater Reservoir was noted as long ago as 1966 (Lee 1967).

Migration: Winter visitors from the north and northeast arrive in October and November and depart mainly in April. In the spring of 2000, however, unusually large numbers remained late into the spring, with 675 on the ocean off North Island Naval Air Station (S8) 26 May (R. T. Patton) and 160 off Torrey Pines State Reserve (N7) 4 June (S. E. Smith). In the other four years of the atlas period, records of late stragglers after 2 May were of eight or fewer individuals. In weekly surveys of north San Diego Bay 1993-94, Mock et al. (1994) found the Western Grebe year round but fewest in August (no more than 12 per day).

In the Borrego Valley, there are five records of single fall migrants, 15 October-29 November, and one record of a spring migrant at Lower Willows (D23) 15 April 1974 (ABSDP database).

Winter: As a winter visitor, the Western Grebe is most numerous on the ocean within a mile or two of the shore, especially in the bight extending from Point Loma to Imperial Beach. The birds are here each winter by the hundreds, and in some years by the thousands. On 18 December 1999, the total estimated here on the San Diego Christmas bird count was 5440 (D. W. Povey, R. B. Riggan, S. Walens). Large flocks are regular elsewhere along the coast as well, with up to 1100 off San Onofre (D2) 27 December 2001 (P. D. Jorgensen) and 1840 off Oceanside (H5) 26 December 1998 (S. Walens).

The Western Grebe is common on San Diego Bay, too, with up to 536 in the central and south bay 26 January 1994 (Manning 1995). Mock et al. (1994) found it to be the sixth most numerous bird in north



San Diego Bay even when counts throughout the year were pooled. Their weekly counts peaked at 399 on 19 January 1993.

In winter, the grebe is found on inland lakes even more widely than in summer. Even where it breeds in large numbers, its numbers are even larger in winter, up to 918 on Lake Hodges 27 December 1998 (R. L. Barber) and 900 on Sweetwater Reservoir 16 December 2000 (P. Famolaro). On lakes that the grebe has not yet colonized winter counts run up to 115 at Lake Henshaw 12 December 2000 (J. R. Barth) and 62 at Lake Morena (S22) 20 December 1997 (R. and S. L. Breisch). Above 3000 feet, the elevation of Lake Morena, the only winter record is of two at Lake Cuyamaca (M20) 4 December 1998 (A. P. and T. E. Keenan).

Conservation: The Western Grebe has long been common as a winter visitor along San Diego County's coast;

there has been no clear change through history in its status in that role. As a breeding species, however, the Western Grebe is a newcomer. It was found nesting first at Sweetwater Reservoir, long the only breeding site in the county, in May 1956 (AFN 10:409–410, 1956). All other colonies have established themselves since the mid 1980s. The numbers of nonbreeding birds on inland lakes have increased greatly since that time.

Clearly the building of dams, the filling of reservoirs, and the reservoirs being stocked with fish were prerequisites for the Western Grebe's colonization and spread. Most of these were established, however, decades before the grebe began nesting. Sweetwater Reservoir, closed to

the public, provided an undisturbed refuge and nucleus for the colonization. Lakes Hodges and Lower Otay, however, are open to small boats, so the grebes can adapt to some level of disturbance. Some factors not yet identified must be facilitating a population increase. The Western Grebe still faces threats, however, most notably coastal pollution. Because San Diego County's coast is in the core of the Western Grebe's winter range, a large oil spill here could kill many thousands. The effects of pollution on a small scale can be seen in the dead grebes contaminated with spots of oil that wash up regularly on the county's beaches.

Taxonomy: Both the Western and Clark's Grebes consist of two subspecies, a small one on the Mexican Plateau and a larger one farther north. The northern subspecies of the Western Grebe is nominate *A. o. occidentalis* (Lawrence, 1858).