

## San Diego Audubon Society

### Report on Western Grebe and Clark's Grebe Breeding at Lake Hodges, Summer 2021 September, 2021

On August 28<sup>th</sup>, 2021, a survey conducted by San Diego Audubon Society volunteers found an estimated 70 nests with 40 Western Grebe (*Aechmophorus occidentalis*) and Clark's Grebe (*Aechmophorus clarkii*) pairs with chicks on Lake Hodges. This estimate translates to a 57% success rate for the number of grebe nests that successfully fledged at least one chick during this summer breeding season. As a summer nesting event, with the water level of Lake Hodges contending with hot weather and natural evaporation, this fledging rate should not be interpreted as a catastrophic failure

<https://www.sandiegouniontribune.com/communities/north-county/story/2021-09-04/column-fluctuating-water-levels-detrimental-to-grebes-nesting-cycle>) though there are many opportunities for improvement. The City did not adequately share information with the public during this nesting season, and has not made clear its decision-making process in the recent years of nesting season; creating a vacuum of understanding about the Western Grebe and Clark's Grebe populations and creating worried and sometimes irate members of the public. The public filled in their own information. A transparent decision-making process, clarity on monitoring and how monitoring information is used, and better sharing of information is needed by the City of San Diego Public Utilities Department, and any other agency with control over Lake Hodges water levels.

#### Grebes

Western Grebe and Clark's Grebe nest at several reservoirs in San Diego County, and though these species are more numerous as winter migrants on coastal waterbodies, the populations have been steadily increasing at inland reservoirs. Western Grebe and Clark's Grebe have nested at Lake Hodges since at least the late 1990s (Unitt 2004), and the population is about 75% Western Grebe and 25% Clark's Grebe.

Grebes build floating nests out of plant material, and lay 1-4 eggs. Grebes incubate the eggs for 23-25 days. Once one or two hatch, the adults may stick around for only a day or two to wait for the other eggs to hatch. Safety from predators and the need to feed the young chicks may mean moving on, leaving unhatched eggs behind. The chicks are still very small when they climb on to the backs of their parents to leave the nest, and sometimes only a bump and feather displacement is seen. In photo 5, this behavior is evident. See attached Photo 3 of a Western Grebe—with small chicks' heads hiding in the adult's feathers.

#### Conservation Concern

Both the Western Grebe and the Clark's Grebe have been identified as [Birds of Conservation Concern](#) on the greatly expanded updated list released as of 2021 by the US Fish

and Wildlife Service (USFWS). The 1988 amendment to the Fish and Wildlife Conservation Act mandates the USFWS to identify species of all migratory nongame birds that without additional conservation action are likely to become candidates for listing under the Endangered Species Act of 1973. The Birds of Conservation Concern is the most recent effort to carry out this mandate. The overall goal of this report is to identify those bird taxa (beyond those already designated as federally threatened or endangered) that represent the highest conservation priorities of the USFWS.

Both bird species are also vulnerable at other life history stages. These species spend time in the ocean when not in inland reservoirs, and climate change, oil spills and other forms of pollution represent both acute and long-term existential challenges. Climate change in particular is changing ocean dynamics and the timing of food sources, with complex, unpredictable, and detrimental effects on our native birds.

### **Survey Details**

This survey was done by Krisztina Scheeff and David Hekel. The grebe survey began at 6am and continued until 9am. The two surveyors each started at opposing ends of the lake, one using a boat and one walking the shoreline, and made their way to the middle. The attached map shows the areas and numbers of grebes identified. Krisztina is a wildlife photographer and grebe expert with a Master's degree in Agricultural Engineering with emphasis on Animal Science and Genetics. She was a teaching assistant at Purdue University Biology department. Krisztina teaches about grebes for various organizations including the North American Nature Photography Association, and has run workshops during the San Diego Bird Festival for the Audubon Society for the past 5 years. She is a member of the San Diego Audubon Conservation Committee. David is a ranger with the San Diequito River Park, patrols the lake four times a week and has over 25 years of experience. In his free time he's a photographer and grebe counter. David also co-leads grebe workshops for the San Diego Audubon Society during the Bird Festival.

In June 2021 the Lake was lowered and exposed mudflats on the east end, close to Nesting Site 1 (see attached map). Over the subsequent weeks, vegetation grew in. When water was let back in it created a favorable nesting area for the grebes. On July 29<sup>th</sup>, the surveyors noticed nesting grebes with eggs. As reported by three other birders & photographers, nesting had started a week before that. Given the average incubation period, our surveyors estimated that hatching occurred around August 16<sup>th</sup>, and the first chick I was spotted on August 21<sup>st</sup> (likely hatched a few days before).

Our surveyors recorded 23 pairs of Western and Clark's Grebes with at least one chick, 12 had at least 2, and the remaining 5 have between 3-4 (see photos 3 and 4).

Map of survey locations



Photos (all photos by KS Nature Photography, <https://www.KSNaturePhotography.com>)



Photo 1: Western Grebe rushing activity



Photo 2: Clark's Grebe (left) and Western Grebe (right)



Photo 3: Western Grebe with chicks



Photo 4: Clark's Grebe with chick



Photo 5: Western Grebe with feathers concealing a chick

#### References

Unitt, Phillip. 2004. San Diego County Bird Atlas. San Diego Natural History Museum. p.645