

Photo by Brad Barnwell

he Redbud Audubon Society chapter in Lake County, California, has had a special affinity for the Western Grebe species since 1974 when this bird was chosen as the logo for the newly-incorporated chapter. Lake County's 19-mile-long Clear Lake, the largest natural freshwater lake in California is one of four lakes in Northern California where Western and Clark's Grebes come each year in large numbers to nest and raise their young. These beautiful and fascinating birds are a familiar and welcome sight around the 100-mile shoreline of Clear lake. Both local residents and tourists enjoy watching the grebes as they conduct elaborate courtship rituals, construct nests that float on the water, incubate their eggs, and then raise their young.

### What kind of bird is a grebe?

Grebes are fish-eating water birds that breed on inland lakes during the summer and live along the coast and on some inland lakes in the winter. They are slightly smaller than most ducks and are elegant black-and-white birds (think tuxedo and white shirt). They are very graceful, with long flexible necks. They dive into the water, rather than fly away, when a boat approaches them.

### How many grebes does Clear Lake have during the summer?

In 2004 and 2005, Clear Lake had a record 30,000 to 50,000 grebes because the fish they eat (threadfin shad and silversides) were so plentiful those years. In more recent years, winter freezes and cold water temperatures often killed off these fish, so fewer grebes nested here.

This summer of 2012 has seen greater numbers of nesting grebes than in 2010 and 2011 when Redbud also monitored the breeding season. On July 24, 2012, biologists counted 7,760 Western and Clark's grebes in a survey. More than 1,800 nests were counted, in 13 colonies, on this. These numbers compare to 1,249 nests in 2011 and 1,322 in 2010. Redbud Audubon's new webcam focuses on a small area of one colony.

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### Are there different kinds of grebes?

There are five species of grebes that visit Clear Lake: Western Grebes and Clark's Grebes are the most numerous and visible, and are the focus of this Audubon conservation project. The other three species, Pied-billed Grebe, Eared Grebes and Horned Grebes, are smaller, few in number, shy, and more likely to be seen in the creeks and channels, rather than open water.

## How can you tell the different kinds of grebes apart?

Western and Clark's grebes look similar, but with different bill colors and patterns around their eyes. If you want to learn how to tell them apart, see the comparison of key characteristics in the last section of this article.

## What is so unusual about grebe behavior?

**COURTSHIP**: During courtship displays, a pair of grebes will neck-bob in rhythm, then begin hydroplaning ~ "skating" or "dancing" ~ across the surface of the water in perfect synchronization, diving underwater together at the end of each furiously-fast run.



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**NESTING**: Grebes build floating nests on the water, using tule reeds which they break off, carry to the nest site, and weave together to construct their nests. The nests are clustered in colonies, usually in a protected area among the tules or other water plants,

**PARENTING**: Both parents take turns sitting on the nest to incubate the two to six eggs that hatch in about 23 days. Then comes the coolest behavior: The babies ride on a parent's back -- sometimes as many as four chicks at a time -- while the other parent dives for fish and brings food to them. After all the chicks hatch, the deserted nests gradually dissolve back into the lake (a perfect model of "green" recycling)!



Photo by Sharon Gerecke



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# How is Redbud Audubon helping to protect breeding grebes?

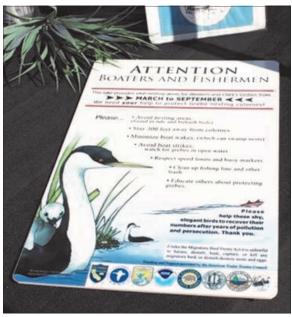
In California many grebes died from two oil spills some years ago, one off Humboldt Bay and one off the Farallon Islands near San Francisco. Penalties paid by the oil companies are sometimes used for grants for conservation activities to increase breeding success for species that died from the oil spills. Redbud is one of three Northern California Audubon chapters working under a four-year grant obtained by Audubon California to protect grebes on local lakes. The Luchenbach Trustee Council funds this conservation grant.

# What are the grant activities on Clear Lake to protect grebes?

**COLONY PROTECTION:** Redbud Audubon is partnering with the County's Department of Water Resources (DWR), so that when Audubon informs DWR about a new grebe colony in an unprotected area, speed limit buoys are set out to keep recreational users a safe distance away. A warning sign has also been installed on the bridge pier at Rodman Slough to alert boaters to slow down to 5mph near the colonies.

**EDUCATION OUTREACH**: Redbud members are conducting an active campaign to inform the general public and lake users about these amazing birds and how to protect them from human disturbance. Outreach activities have included articles in local print and online news media, radio show interviews, presentations at Audubon chapter meetings and community groups, and updates in the chapter newsletter. In addition, Audubon created an educational exhibit booth with grebe models, photos, and handouts. Booth staff have engaged the public with this grebe protection message at major countywide events, such as Redbud's annual Heron Festival and the Pear Festival, Olive Festival, Middletown Days, and Upper Lake's Wild West Days.







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MONITORING: Redbud birders and ornithologist Dr. Floyd Hayes and his biology students from Pacific Union College in Angwin monitor Clear Lake by canoe and kayak to watch for colony formation. Using formal survey methods, Dr. Hayes monitors the colonies throughout the breeding season. His scientific data collection and analysis, along with similar studies conducted by the other two Audubon chapters in this project, become part of ongoing grebe research on Northern California lakes.

### What can people do to protect these nesting birds?

- Stay at least 300 feet away from a colony.
- Avoid colony areas when using a speedboat, jet-ski, or water-skis.
- Avoid boat wakes that create waves that can tip eggs out of a nest or drown small chicks.
- Pick up any leftover fishing line that can entrap and kill birds.
- Educate other lake-users about how they can help protect the grebe colonies.



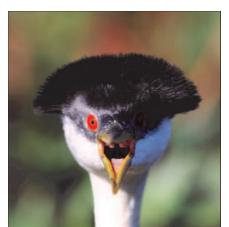


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### What can you do to help?

You can help Redbud Audubon spread the message about protecting grebe families during the breeding season. Tell others how important it is to protect these nesting birds!

### Want to learn more about grebes?

Visit these informative websites:

<u>http://bna.birds.cornell.edu/bna</u> - home page for the Cornell University Laboratory of Ornithology

http://bna.birds.cornell.edu/bna/search?

SearchableText=western+grebe -- Western Grebe page at Cornell

http://bna.birds.cornell.edu/bna/search?SearchableText=clark% 27s+grebe --- Clark's Grebe page at Cornell

### How can you tell the difference?

**Western Grebe** 



- Black on head descends BELOW eye.
- Bill is yellow-green.
- Downy young are grey.





- Black on head rises ABOVE eye.
- Bill is yellow-orange.
- Downy young are white.