



# Grebe Breeding Behavior- Courtship

## Overview

Students will learn about the breeding behavior of Western and Clark's Grebe.

## California Science Standards

Grade 2: 4.c.-I&E  
Grade 5: 6.c, 6.g.-I&E  
Grade 6: 7.b-I&E  
Grade 7: 7.a.-I&E

## Oregon Science Standards

Grade 3: 01,05-L.S.  
01-04-S.I.  
Grade 5: 01-L.S.  
01-03-S.I.  
Grade 8: 01,02-S.I.

## National Standards

Content Standard A:  
Science Inquiry

## Materials Included

- \* Student Journal
- \* Life of Birds Vol. 4
- \* Binoculars
- \* Clipboards
- \* Pencils

## Materials Needed

- \* Spotting Scope

## Activity Time

Preparation: 15 min.  
Activity Time: 40 min.

## Best Season

Late March-May

## Vocabulary

- \* Water bird
- \* Rushing ceremony
- \* Weed ceremony
- \* Breeding season

**Grade Level:** 2nd-8th (O.S.S.: 3rd-8th) (C.S.S.: 2nd-7th)

## Learner Objectives

Student will:

- Demonstrate an understanding of bird courtship
- Make field observations of grebe behavior
- Formulate questions about Western and Clark's Grebe mating behavior
- Summarize observational data

## Background Information

Grebes are water birds. A water bird is any bird that utilizes an aquatic habitat. Familiar examples of other types of water birds would be ducks, geese, and swans. Both the Western and Clark's Grebe are commonly seen around lakes and freshwater marshes in eastern Oregon. These two species look and behave very similarly. The Western Grebe is larger than the Clark's and the black cap on the head usually extends below the eye, whereas, on the Clark's Grebe the black cap extends to just above the eye. The grebes arrive in eastern Oregon around late March into mid-April to breed and travel from as far south as Mexico .

During the breeding season, many birds have set courtship behaviors that they follow. Breeding behavior between the Western and Clark's Grebe is very similar, in fact, scientists considered them to be different color phases of the same species up until 1985. Both birds have two courtship ceremonies that they conduct. One is the "Rushing Ceremony" and the other is the "Weed Ceremony."

The "Rushing Ceremony" consists of advertising calls made to a potential mate, dip-shaking where heads are dipped into the water and shaken on the way out, rushing wherein pairs run on the surface of the water side by side flapping their wings, and finally diving head first into the water. In the "Weed Ceremony," pairs have already been formed. This ceremony consists of neck-stretching, bob-shaking, weed diving, and bob-preening. During the weed diving, they will gather vegetation from below the water bringing it back up to the surface to display to their mate. They will then shake their heads side to side until all the weeds fall back into the water.

Both of these displays are easy to observe out on the water during the breeding season.

# Lesson Plan

## Getting Ready!

1. Read over background information section.
2. Make copies of the *Student Journal: Grebe Breeding Behavior– Courtship*.
3. Make preparations for going on a field trip.

## Discuss!

1. Ask the students if they know what a water bird is and discuss with them what makes a bird a water bird.
2. Ask them if they know anything about bird courtship.
3. Let them know that they are going to be learning about the beautiful courtship displays of the Western and Clark's Grebe, two types of water birds.

## Investigate!

1. Play the "Life of Birds" DVD on bird courtship behavior (Volume 4). To get to the section on grebe courtship behavior fast forward to -00:12:32 on your DVD player.
2. After watching it discuss the elements of bird courtship, mate selection, mate recognition, resources, nest site, etc.
3. After general discussion focus on the grebes.
4. Have students work in groups of 2-3 to generate questions about grebe courtship behavior that they may see in the field.
5. Generate a class list of questions and write them on the board.

## Go Outside!

1. Schedule a field trip for late March, April, or May to observe courting grebes at a place like Moore Park.
2. Have students take their binoculars, questions, and Student Journal about grebe mating behavior with them in the field.
3. Have the students spread out at the site and observe courting grebes for 20 minutes. This would be a great time to use a spotting scope if you have one available.
4. Encourage students to take detailed notes on grebe behavior using the Student Journal with behaviors listed as a reference.
5. Challenge the students to identify the grebes as either a Western or Clark's Grebe and write this in their Student Journal.

## Follow-up!

1. In the classroom summarize common behaviors that were observed by the group. Note similar and unique observations.
2. Tally observations and discuss questions that were asked and answered from these observations.
3. Ask students 2-3 questions to re-cap the lesson (see right panel).

## Verify Grebes are Courting

Visit the site before the field trip to verify that they will be courting at the time, during late March through May.



## Using Field Guides!

Have students look up both the Western and Clark's Grebe in the field guide to learn how to identify between the two species.

## Suggested Questions

*What is a water bird?*

*Why do grebes have courtship displays?*

*How can you identify a Western Grebe from a Clark's Grebe?*