



Teacher Guide

UNIT 1 LESSON 3: COURTSHIP RITUALS AND MATING DISPLAYS

Theme

The courtship rituals and mating displays of birds are not only entertaining, but also teach us how natural selection can produce unique behaviors and physical features.

Missouri Science Standards: LS4.B.1, LS4.B.1, LS2.C.2

Vocabulary



Display Behavior - a fixed set of actions that carries a specific message. Although many display behaviors are used to attract mates (courtship behavior), some display behaviors have other purposes, such as defense.

Competition - A symbiotic relationship between or among living things that compete for limited resources, such as food, space, shelter, mates, ecological status, etc.

Lek - In animal behavior, a lek is communal area in which two or more males of a species perform courtship displays.

Common Misconceptions to Watch Out For:



- **All bird species are monogamous.** Most songbirds in North America will somewhat secretly mate with multiple birds. DNA paternity testing shows that in many species, 40 percent of the young are the result of mating outside their chosen partner.
- **Birds pair for life.** Splitting up is a regular part of life for almost all birds. Most live with one partner for only a few months or years depending on the species. Annual splitting up rates range from 99 percent in the Greater Flamingo to 0 percent in the Wandering Albatross.
- **All bird species mate during the same month of the year.** We typically think of spring as the mating season for birds. However, this period falls over several months with some birds starting as early as January, while others don't start until the late summer months.

Video 1: Bird Courtship Behavior

Video Description: This video lesson covers why birds use courtship rituals and the different types of display behaviors. It also addresses common misconceptions and vocabulary terms. Video is made by Missouri River Bird Observatory (MRBO).

Follow- up Questions:

1. Fill in the blank. A symbiotic relationship between or among living things that compete for limited resources, such as mates, is called _____.
2. What is the purpose of a mating display? Why is it worth the energetic cost?
3. True or False? All bird species pair for life.

Article: 10 Outrageous Ways Birds Dance to Impress Their Mates

Article Summary: Audubon writer, Hannah Waters, presents ten birds with interesting and outrageous courtship dance displays. Article includes videos of the displays as well as fun, short descriptions.

Article Link: <https://www.audubon.org/news/10-outrageous-ways-birds-dance-impress-their-mates>

Teacher Notes:

- Have students become familiar with some of the funkiest mating displays and courtship rituals by reading the article and watching the associated videos.
- The follow-up questions will address what the students should take away from the article.

Follow- up Questions:

1. What was your favorite courtship display? Why?
2. This article was about the different ways birds will dance to impress their mates. What other methods do you know that birds use to impress mates?
3. How would you define a lek?



Activity: The Lekking Grounds

Activity Summary: Students will learn more about a unique species endangered in Missouri, the Greater Prairie- Chicken. They will examine the causes of this decline and design the ideal habitat with all the necessary components.

Teacher Notes:

- Make sure students have all the necessary papers including the activity instructions and the Fact Sheet.
- An extension could be to have the students further research Greater Prairie-Chicken habitat management plans and compare them to their own design.

Concluding Questions/Assessment

*Student worksheet included in packet.

1. What is a display behavior? Give an example.
2. How do courtship rituals and mating displays help a species survive and reproduce?
3. Explain one reason the population of Greater Prairie- Chickens has decline in Missouri.
4. What is once misconception people often have about bird mating season? Explain why it is false.
5. Describe or draw a courtship display you found interesting.

