

Songbirds of Missouri

Blue Jay



Vocabulary

Match the word with the definition, then write a sentence using each word. Share your sentences with the class.

- ___ Intimidating A. The wearing away of soil by external forces such as wind, water
- ___ Mammals B. People who first enter and settle a region
- ___ Reptiles C. Not agreeable to taste
- ___ Glaciers D. Warm-blooded vertebrates that have hair on their bodies and milk-producing glands for feeding their young
- ___ Erosion E. Hiding a store of provisions
- ___ Pioneers F. A large accumulation of ice that descends from mountains and moves over land
- ___ Incubate G. To acquire the feathers necessary to fly
- ___ Molting H. To pursue something with determination and energy
- ___ Aggressive I. To make timid or to fill with fear
- ___ Caching J. To provide the heat necessary for hatching
- ___ Unpalatable K. Air-breathing cold-blooded vertebrates such as snakes and lizards
- ___ Fledge L. Shedding feathers so new feathers can grow

(Missouri Show-Me Standards: CA.1, CA.6, Goal 2.1)

Classroom Activity

Objectives: After completing this activity, students will be able to:

- Explain why blue jays bury acorns in the winter
- Explain how blue jays use landmarks and memory to find their buried acorns
- Explain how blue jays help sustain the oak tree populations

Grade levels: 2-4

Materials:

- Screwdriver, old butter knife or other tool that can be used for digging
- Four acorns per student
- Pen or pencil
- Notebook

Background:

In fall and early winter, blue jays bury a large number of acorns in the ground and unearth them when food becomes scarce in winter. This exercise will demonstrate the skills needed to relocate the food once it's buried.

Procedure:

- Find a large outdoors site, such as a playground or vacant lot, where students can bury their acorns and then relocate them in a few weeks. If the site is off-campus, make sure no other type of construction or digging activity will take place on the grounds between the time the acorns are buried and relocated. Also, even though your digging activity will be minor, make sure you have permission to dig.
- Use one class period to prepare students for the activity. Discuss the acorn-burying practice of blue jays.

Look up the word "cache" and talk about its meaning as it applies to a blue jay's practice of acorn burying. Explain that since blue jays have a very poorly developed sense of smell, they rely mainly on landmarks and memory to re-locate their acorns.

• On the day of the activity, give students ample time to bury their four acorns. To bury them, they should poke a small hole in the surface of the earth with their digging tool – a half-inch to an inch deep at most – place the acorns in the hole and cover them up so other animals won't find them. Be sure students have left no visible signs such as a raised mound of earth. In their notebooks, students should note landmarks or special measurements that might help them relocate the acorns. (For example, they may jot down that one acorn is buried four paces from an oak tree, right next a clump of large weeds.)

• Wait four weeks, then return to the site and have students try to find their acorns using only the notes they made. If all acorns are found, congratulate your "blue jays" on having good memories. Chances are, some won't be found. In those cases, discuss with students how this lost food plays a beneficial role in keeping oak trees abundant in an area. Also, point out that, while students could consult their notes, blue jays must rely only on their memories. Talk about other animals that bury nuts and seeds.

(Missouri Show-Me Standards: S.3, S.4, Goal 1.3)

Short Answer Q&A

1. Which tree does the blue jay help grow by burying acorns?
2. What is the process of burying acorns called?
3. How many acorns per day can a blue jay bury?
4. When is the best time to see blue jays in Missouri?
5. What are some characteristics of blue jays that many people find annoying?

(Missouri Show-Me Standards: Goal 1.5)

Writing Corner:

Write a paragraph summarizing what happened to the central United States after the last Ice Age and how blue jays improved the problem. Explain what the landscape might have looked like without help from the blue jays. Share your writing with the class.

(Missouri Show-Me Standards: CA.4, Goal 2.1)