



WILD, WILD WETLAND WILDLIFE

Summary

Students become familiar with local plants and animals of the wetlands while playing a wildlife bingo game. The students then hunt for evidence of animal presence on the wetland ESHA by searching for scat, owl pellets, burrows, and other clues that point towards animal presence. The lesson concludes with owl pellet dissection and a discussion about wetland food chains including an owl food chain.

Objectives

Students will:

- Recognize a handful of native animals and plants.
- Understand that wildlife is all around us even if they do not see the animals directly.
- Know what to look for when doing basic animal tracking.
- Know what an owl pellet is and that it can be used to determine what the local owls are eating.

California Content Standards Addressed

Outline

There are seven parts to this lesson:

- 1) Introduction to Wildlife (5 minutes)
- 2) Wildlife and Plant Bingo (15 minutes)
- 3) Introduction to Scavenger Hunt (10 minutes)
- 4) Animal Presence Scavenger Hunt (25 minutes)
- 5) Owl Pellet Dissection (20 minutes)
- 6) Owl Food Chain Discussion and Specimen Observation (10 minutes)
- 7) Closing Circle (5 minutes)

Materials

2. Wildlife and Plant Bingo

Bingo card for each student and steward with 9 different plants and animals on each. For the moment, the best bingo cards are in the Summer Program Presentation #2 box.

1 zip-lock bag full of dried beans

The Basics:

Grade Level

4-8

Subject Areas

Life Sciences, Ecology

Duration

90 minutes

Number of Docents Needed

1

1 deck of wildlife and plant cards that includes all the animals and plants that are found on the bingo cards

Prizes for the bingo winners

3. Introduction to Scavenger Hunt

Blown up pictures of the animals included on the scavenger hunt handouts

4. Animal Presence Scavenger Hunt

1 laminated "Animal Presence Scavenger Hunt" Handout for each student

1 wax crayon for each student

1 clipboard for each student

5. Owl Pellet Dissection

4 or 5 foil-wrapped owl pellets

1 wooden skewer for each student

1 Owl Pellet Dissection Handout for each student, found in the wildlife kit

1 pencil for each student

Lots of paper towels and soap

Vocabulary

Wildlife, Burrows, Scat, Tracks, Food Chain, Owl Pellet

Background Material

Wildlife is the term for animals, plants, and other living things that are found in the wild or are not domesticated. Usually animals are implied when talking about wildlife. Even though we may not see wildlife a lot, we can see evidence for their presence very clearly such as **scat** which are animal feces, **burrows** which are the entrances to tunnels made by underground animals, **tracks** which are the footprints of animals, plant damage done by grazing animals, or animal sounds. The word used to describe the act of looking for these animal clues to tell us more about an animal's behavior is **tracking**. We can learn a lot from these clues if we look closely and often. Tracking also has the great benefit of not disturbing the wildlife we are trying to learn more about.

Owl Pellets is another clue that point to the presence of a specific animal: the owl. Owls are predators and will swallow small mammals, birds, even insects mostly whole. However, an owl will regurgitate (bring back up through the mouth) the parts of the animal that are hard to digest like the bones, teeth, fur, and feathers. The owl expels this material in a tight, dry package called a pellet. Many predatory birds regurgitate pellets and pellets are often found under trees, posts, or other bird perches.

An owl pellet can tell us a lot about what the local owl are eating. If we dissect an owl pellet, the bones of the owl's prey are found inside and we can identify the skulls and bones to figure out what they ate. If we were to dissect owl pellets continually for months or years from the same area, we could learn about the yearly behavior and eating habits of certain local owls. Through owl pellets, we learn more about the **food chain** that include owls.

Procedure

1) Introduction to Wildlife (5 minutes)

- Ask students if they have seen wild animals in and around Watsonville. Which animals have they seen? Where specifically? What are some clues that

animals are in the area? Are there any animals that live around Watsonville that they want to see?

- Explain that today we will become familiar with some local animals as well as some clues or signs that tell us certain animals are in the area.

2) Wildlife and Plant Bingo (15 minutes)

- Explain that we are going to play a game where we become familiar with local wetland plants and animals. Have stewards pass out bingo cards to each student and a pile of beans at each table.
- Explain the rules of bingo. Each student has a large card with 9 plants and animals that are different mixture of plants and animals than the cards that they other students have. You have a bag of McQuade wildlife cards; one card of each plant or animal that are on the bingo cards. You shuffle the deck and start drawing cards from the front and replacing them at the back of the deck. Each time you draw a card, read the animal or plant name loudly, show it to the students, and tell them one fact about that animal or plant which can be found on the back of the card. If a student has that plant or animal, they put a bean on the picture on their bingo card. Repeat until a student, or several students, shout bingo. A student has bingo when they have three beans in a row. Play for as long as you like or until a certain number of students get bingo. Give bingo students a prize. Have stewards play along.
- Have stewards collect beans and bingo cards when the game is done.

3) Introduction to Scavenger Hunt (10 minutes)

- Have stewards pass out clipboards, wax crayons, and laminated "Animal Presence Scavenger Hunt" handout to each student.
- While students look over the handout, go over each animal presence clue included on the handout and what animal might have made that clue or sign. (Example: A ground squirrel creates holes in the ground as wide as a baseball.) When possible, show pictures of the animals that left the clues to the students. (Example: Show a large Ground Squirrel picture.)
- Explain that they will go on the ESHA in small groups, look for these animal presence clues, and mark on the laminated sheets with their wax crayon how many of these clues that they find.

4) Animal Presence Scavenger Hunt (25 minutes)

- Have teacher break the students up into small groups. Two or three stewards lead a small group out onto the ESHA and look for animal clues using the above instructions. Stewards keep track of time and bring the students back after 25 minutes.

5) Owl Pellet Dissection (20 minutes)

- Once the students are back from the scavenger hunt, put the laminated sheet to the side and pass the Owl Pellet Dissection handout to each student. Have students sit in their small groups with their high school leaders.
- Explain that now we are going to dissect owl pellets. Describe what owl pellets are and what they are made of. Explain that we are looking for

food chains in action. We are looking for the bones of the owl prey and try to identify the animal based on the skull models on their sheet.

- Pass wood skewers out to each student, a paper towel for each group, and one foil wrapped pellet for each group. Have students dissect and try to identify skulls for 15 minutes.
- When the pellet dissection is done, have students cleanup by dumping bones and fur outside, paper towels and skewers go in the trash, and wipe the tables down. Stewards should collect the owl pellet handouts.

6) Owl Food Chain Discussion and Specimen Observation (10 minutes)

- Once the tables are cleaned, have students sit back down and discuss the food chain that we observed with the owl pellets. Owls to rodent to grass/seeds to sun. What else might be included in this food chain.
- Show students freeze-dried specimen of the great horned owl and make observations or share some fact about the owl. Also show the freeze-dried specimens of the shrews, wood, rat, and mouse as examples of owl prey. Share some observations and facts.

7) Closing Circle (5 minutes)

- Have students and stewards circle up. Go around in a circle and share one thing you learned today.

Extensions

- Clay Animal Models
- 1) Students look through animal field guides and pick out one animal that they like. Then they make small models of their animals using colored Fimo or Sculpey clay. The idea is to make the models as realistic as possible and display the animal's characteristics.