

# What Do Owls Eat?



**TOPIC:** Owls & the Food Chain

**AGE GROUP:** K-12

## OBJECTIVES

At the end of the lesson, students will be able to:

1. List 5 items that owls eat.
2. Determine whether owls are carnivores or herbivores.
3. Determine whether owls are predators or prey.
4. Identify five characteristics of owls that make them good hunters/predators (excellent eyesight, head rotation, quiet wings, hooked beak, sharp talons).
5. Explain how an owl pellet is formed.
6. Dissect an owl pellet and identify the bone parts that are found.
7. Describe a 3-part food chain for owls in the meadow or forest.
8. Explain what are possible threats to owls (*toxins in environment, be shot at*)

## MATERIALS

**Dissection Kit** (if possible, put all items on desks ahead of time or put into plastic containers for efficient distribution to students):

1 owl pellet per group of 2 students

Styrofoam trays- 1 per pellet

Tweezers-1 per student

Hand lenses- 1 per student

Toothpicks- 1 per student

Small Ziplock bags- 1 per student

Bone ID sheets-1 per student

Dissecting scopes- 3

Stuffed owls (or pictures) – 3, if possible

First Guide to Birds – resource book for more info on owls

Owl pellet take-home sheet of bone types and pellet ordering information- 1 per student

## ROOM SET-UP

- Arrange desks into groups of 2 so two students can work together.

## INTRODUCTION (5 min):

- Ask if anyone has ever seen or heard owls.
- Ask students where owls live (habitat – forests, meadows).
- Ask students if they know what owls eat, how they eat it, and what happens after they eat.
- Using one of the stuffed owls (or a picture), ask students what characteristics of owls help them to get their food.

### **OWLS AS PREDATORS GAME (10-15 min)**

See Owls as Predators activity handout (attached). Be sure to include parents in the game!

### **DEMONSTRATION & SAFETY (5-8 min)**

- Discuss equipment safety.
- Explain where owl pellets come from, how sanitized (325°F for 40 min. or microwave 20 seconds on high), and how they can do this at home with an adult if they find a pellet.
- Cleanliness: tell students not to put their hands in their mouths or eat food during the wash their hands afterwards.
- Demonstrate to the students that they need to be careful and gently un-wrap the pellet and tear it apart with their fingers. Once the pellet has been “opened up”, then they can use the tools to tease it apart and make further observations about what they find. They may want to use the scopes to see their findings close up.
- Questions?

### **PELLET DISSECTION ACTIVITY (15 min)**

- Pass out the pellets and dissection kit materials to each group of 2 students
- Remind them to do the dissection slowly and carefully.
- After some progress has been made by all the students, discuss their findings and show them some examples from posters, books.
- Invite the groups that are ready, to come up to the dissecting scopes to get a closer look at the bone structure.
- Encourage them to discuss among themselves what they are finding in different groups and try to determine what animal the bone is from and what part of the body it might be.

### **CONCLUSION (5 min)**

- Ask questions related to the lesson objectives.
- Ask students what scientists learn by observing owl pellets.

### **CLEAN UP (3 min)**

- Ask students to clean up their tables by putting the tools on the tray, and putting the remains (bones and fur) into a ziploc bag to take home or into the garbage can.
- Note: do not throw away the tray. We reuse them to reduce waste.
- Hand out the owl pellet take-home sheet of bone types and pellet ordering information.
- Prepare for next group. If last session, hand out parent evaluation forms. Wait till everyone is out of the room to do final clean-up.

### **SOURCES CONSULTED**

- Chiras, Daniel D. “Biology: The Web of Life” West Publishing Company, 1993.
- Cooper, Ann C. “Owls: On Silent Wings” Denver Museum of Natural History, 1994.
- Project WILD Curriculum & Activity Guide, p.144-145.
- Acorn Naturalists – source of owl pellets (catalogue #: T-2608). Tel: 800-422-8886