Owls and Owl Pellets

*Location of activity provided by staff*

**Grades:** (suggested) 4-8

**Subject:** Ornithology & Exploration

**Activity Objective:**
To have students learn more about owls by dissecting owl pellets, recording their findings on worksheets and discussing the natural history of owls.

**Materials & Preparation:**

**PROVIDED:**
- Tweezers
- Water container
- Magnifying glasses
- Charts of rodent bones
- Clipboards

**NOT PROVIDED:**
- Owl pellets (1 pellet per 2-3 students)
- Copies of worksheets
- Paper plates (one per student) & plastic bags for dissected pellets
- Pencils & a permanent marker

PREP: Look over the contents of the “owl” activity kit, fill the little container with water (optional), leader may wish to do additional research about owls.

**NOTE:** **YOU** must supply the owl pellets - attached is a list of sources and prices***

**Key Vocabulary Terms:** owls, pellets, habitat, identification
*There may not be enough time to do all the activities in the time allotted. Select the activities to be used for the center and work out a plan for keeping the time and sequencing in mind*

**Activities: (25 mins)**

(Choose from the following ideas.)

1. Read "Owls" (included in this packet)

2. OPTIONAL: (If you have a phone and want to look up the owl call of the great horned owl, western screech owls, and elf owl you can). Ask the children if they can identify the calls. You may wish to show the pictures of the three owls and ask them to match the calls with the owls.

3. Display and discuss the charts.

4. Divide the students into teams of 2 or 3 (depending on the number of pellets available). Each team receives one owl pellet.

5. The owl pellet is placed on the paper plate. You may wish to soften the pellets with a few drops of water from the little containers. Students use tweezers to remove the bones from the pellet. They examine the bones, using the magnifying glasses, and try to identify them by matching the bones to the diagrams on the chart. Count the skulls to determine the numbers of animals the owl ate in a 24-hour period.

6. Place the bones in a plastic bag to save for reconstruction back at school. Write the students' names on the bags with permanent marker for identification. The adult leader collects the bags after each center and gives the entire collection to the teacher.

   **NOTE:** The activity below may be done during the center, or if time does not allow, it can be done back in the classroom.

7. Position the bones on a piece of colored cardboard and reassemble the skeleton of the prey animal. The bones are glued to the cardboard. A wooden toothpick, with the end chewed, makes a tiny glue brush.

**Clean Up:**

After the last group, place all materials in the box and place it on the table in the "Biznaga" building. Be sure all foil scraps, baggies, paper plates, and other debris are removed from the activity site.
Where can you buy owl pellets?

Cooper Environmental Science Campus **DOES NOT** provide owl pellets for the Owls and Owl Pellets Activity Center. You must purchase your own pellets before your scheduled trip. Plan to order the pellets at least **six weeks before your trip** or you may be forced to pay extra for shipping. Here are some options for purchasing pellets:

  701 Groveside Road
  Buskirk, NY 12028
  1-518-686-4080
  Extra Large Barn Owl Pellets $2.15 each or Medium Pellets for $2.00

  PO Box 2242
  Mount Vernon, WA 98273
  1-800-4PELLET (Ordering Only) 1-360-422-6764 (Info)
  Small to Jumbo size for $1.95 to $2.35 each

- **Acorn Naturalists** [http://www.acornnaturalists.com](http://www.acornnaturalists.com)
  155 El Camino Real
  Tustin, CA 92780
  1-800-422-8886
  Economy Pellets for $1.55 each and Premium Pellets for $2.95 each
**Record your findings**

<table>
<thead>
<tr>
<th>Sketch of Bone</th>
<th>Number Found</th>
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Based on the number of skulls found, how many animals were consumed?

What is the class average of number of skulls found?

A bird often produces two pellets a day. Using your average consumption number, determine how many animals are consumed:

- per day: 
- per week: 
- per month: 
- per year: 

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**NOCTURNAL HUNTER**

<table>
<thead>
<tr>
<th>EXAMINE &amp; RECORD</th>
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<tbody>
<tr>
<td>LENGTH OF PELLET</td>
</tr>
<tr>
<td>WIDTH (at widest point)</td>
</tr>
<tr>
<td>COLORATION</td>
</tr>
<tr>
<td>VISIBLE CONTENTS</td>
</tr>
</tbody>
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Make a scale drawing of pellet

Now carefully tease away all fur and discover the contents of the pellet. Separate and clean all bones, even the tiniest ones. Sort them by type: skulls, femurs, vertebrae, etc.
<table>
<thead>
<tr>
<th>Sample of Bones Found in Barn Owl Pellets</th>
<th>Description or Number</th>
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<tbody>
<tr>
<td><img src="image" alt="Rodent Skull" /></td>
<td>Rodent Skull</td>
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<tr>
<td><img src="image" alt="Incisor or Front Tooth" /></td>
<td>Incisor or Front Tooth</td>
</tr>
<tr>
<td><img src="image" alt="Mandible or Lower Jaw" /></td>
<td>Mandible or Lower Jaw</td>
</tr>
<tr>
<td><img src="image" alt="Pelvic Girdle or Hip" /></td>
<td>Pelvic Girdle or Hip</td>
</tr>
<tr>
<td><img src="image" alt="Femur or Thigh" /></td>
<td>Femur or Thigh</td>
</tr>
<tr>
<td><img src="image" alt="Tibia and Fibulla or Lower Leg" /></td>
<td>Tibia and Fibulla or Lower Leg</td>
</tr>
<tr>
<td><img src="image" alt="Vertebrae or Backbone" /></td>
<td>Vertebrae or Backbone</td>
</tr>
<tr>
<td><img src="image" alt="Humerus or Upper Arm" /></td>
<td>Humerus or Upper Arm</td>
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</tbody>
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| ![The lower jaw of a mouse, showing the long, curving front teeth and the rather knobbly cheek teeth.](image) | The lower jaw of a mouse, showing the long, curving front teeth and the rather knobbly cheek teeth. |
| ![The lower jaw of a shrew, showing the small pointed teeth which it uses to cut up insects and other small animals.](image) | The lower jaw of a shrew, showing the small pointed teeth which it uses to cut up insects and other small animals. |
| ![The lower jaw of a vole showing the rather long, columnar cheek teeth which distinguish this animal from a mouse.](image) | The lower jaw of a vole showing the rather long, columnar cheek teeth which distinguish this animal from a mouse. |