



## Raptor Resource Project Lesson Plans

To find more plans, go to [www.raptorresource.org](http://www.raptorresource.org)

### Lesson Plan: What's on the Menu?

<b>Grade/Level</b>	Middle school
<b>Time Allotment</b>	1-2 class periods
<b>Content Area(s)</b>	Life science, Food chains, Energy flow

#### Objectives

Students will use prey items collected from a Bald Eagle nest to describe that energy in an animal's food was once energy from the sun. In the process, they will learn about ecosystem interactions, energy, and dynamics.

#### Curricular Connections

5-PS 3-1: Use models to describe that energy in animal's food was once energy from the sun.

LS1: From Molecules to Organism's Structures and Processes

LS1.C: Food provides animals with materials they need for body repair and grow

LS 2. Ecosystem: Interactions, Energy and Dynamics

#### Instructional Materials

- Prey logs and information from the Decorah North Nest. Teachers may also use information from the Fort St. Vrain nest in Platteville, CO for this lesson.
- Drawing paper and pencils

#### Resources

- Basic Bald Eagle information, including diet:  
[https://www.allaboutbirds.org/guide/Bald\\_Eagle/lifehistory](https://www.allaboutbirds.org/guide/Bald_Eagle/lifehistory)
- Slideshow with basic information about the North Nest:  
<https://bit.ly/2y0l6sL>
- North Nest prey table (included at the end of this lesson plan)

- Prey blog on the North Nest <https://www.raptorresource.org/2018/08/09/whats-on-the-menu-at-the-decorah-north-nest/>
- Live stream: <https://www.raptorresource.org/birdcams/decorah-north-nest/>

### Background Knowledge

Basic information about the North Nest and its inhabitants will help teachers and students understand the local prey base. The live stream provides a look at the North Nest territory.

### Opener

Ask the following questions:

- What is the typical diet of a bald eagle?
- What might be included in the diet of the Decorah North eagles?

### Procedure/Method/Activity

Read through the blog and look at the items listed in the prey table.

### Assessment

The bald eagle is considered a bird of prey and is a majestic symbol for the United States.

1. Write about your understanding of the term “bird of prey”.
  - Describe this “bird of prey” based on its diet using any/all of these terms that apply: carnivore, predator, omnivore, herbivore, scavenger. Include an explanation in your 3-sentence summary.
2. Draw and label 2 possible food chains for this habitat. Begin each food chain with the sun and have 4 steps in each chain.

### Extension

- How are the terms “cycle” and “flow” different? Define matter and energy and identify matter and energy in your food chain.
  - Which one of these statements do you agree with?
    - Only energy cycles through an ecosystem
    - Only matter cycles through an ecosystem.
    - Both matter and energy cycle through an ecosystem.
    - Neither matter nor energy cycles through an ecosystem
  - Explain your thinking.

<p><b>Feathered (19)</b></p> <ul style="list-style-type: none"> <li>● Unknown birds (6)</li> <li>● Chicken and parts (4)</li> <li>● Coot (2)</li> <li>● Duck (1)</li> <li>● Gosling (2)</li> <li>● Grouse or Pheasant (3)</li> <li>● Turkey or Goose (1)</li> </ul>	<p><b>Finned (246)</b></p> <ul style="list-style-type: none"> <li>● Trout (144)</li> <li>● Sucker (44)</li> <li>● Fish pieces (58)</li> </ul>
<p><b>Furred (47)</b></p> <ul style="list-style-type: none"> <li>● Deer – Heads (4)</li> <li>● Legs or sections (12)</li> <li>● Groundhog or Muskrat (2)</li> <li>● Opossum (2)</li> <li>● Rabbit (8)</li> <li>● Raccoon and pieces (11)</li> <li>● Squirrel (6)</li> <li>● Field Mice or Voles (4)</li> </ul>	<p><b>Reptiles (2)</b></p> <ul style="list-style-type: none"> <li>● Turtles (2)</li> </ul> <p><b>Miscellaneous (125)</b></p> <ul style="list-style-type: none"> <li>● Cow Placenta (37)</li> <li>● Mystery Meat or Unidentified Food Objects (48)</li> <li>● Animal legs/feet (4)</li> <li>● Pink/Red Innards (24)</li> <li>● Bony Meat (12)</li> </ul>
<ul style="list-style-type: none"> <li>● Do nests in different habitats have different prey bases? Compare prey information from the North Nest with prey information from the Xcel Energy Fort St. Vrain nest: <a href="https://www.raptorresource.org/2017/09/11/whats-on-the-menu-at-fort-st-vrain/">https://www.raptorresource.org/2017/09/11/whats-on-the-menu-at-fort-st-vrain/</a></li> </ul>	

**What's on the Menu? Observations from Decorah North**