

Extension: Owl Pellet Dissection

Background: Owl pellets are masses of bone, teeth, hair, feathers and exoskeletons of various animals preyed upon by raptors (birds of prey). Pellets are produced and regurgitated not only by owls, but by hawks, eagles, and other raptors that swallow their prey whole or in small pieces. Owls feed early in the evening and regurgitate a single pellet approximately 20 hours after eating. Unlike snakes, the protein enzymes and strong acids which occur in the digestive tract of raptors do not digest the entire meal. The relatively weak stomach muscles of the bird form the indigested fur, bones, feather etc. into wet slimy pellets. In this process even the most fragile bones are usually preserved unbroken. The birds then regurgitate the pellets through their mouths.

Owl pellets themselves are ecosystems providing food and shelter for communities which may include clothes moths, carpet beetles, and fungi.

1. Click the virtual dissection link on the class website.
<http://kidwings.com/nests-of-knowledge/virtual-pellet/>

How many of the following bones did you find?

Humerus:

Femur:

Lower Jaw:

Skull:

Scapula:

Ulna/Radius:

Ribs:

Pelvic Bones:

Tibia/Fibia:

Draw the bones you find.

2. Are owls producers or consumers? Why
3. Are owls carnivores or herbivores? Why?
4. What do we know about the digestive system of an owl based upon the pellets? (Is it strong or weak? What is it able to digest?)
5. Owl pellets not only can give us information about the diet of the owl but can also provide a habitat for other animals. What kinds of organisms are found in the owl pellet ecosystem?
6. Other types of birds form pellets, what would you expect to find in the pellet of a seagull? Why?

Examine the owl pellet with your group.

Lay out the bones you find to make as many complete organisms as possible. Draw complete and incomplete organisms here.

Using the bone charts provided, identify the organisms you found. What are they?