

Project Weblink

learning-center.homesciencetools.com/article/owl-pellet-dissection-project

[Purchase Owl Pellet Dissection Kit Here](#)

Background

An owl pellet dissection lab is a memorable (and fun!) way to learn about the eating habits of **birds of prey**—birds such as owls that eat rodents and small birds.

What are owl pellets? They are the regurgitated remains of an owl's meal, including all the bones of the animals it ate (usually small rodents). Owls usually swallow their food whole, digest the edible parts, and then expel the indigestible parts through their mouth as a pellet. It might sound gross, but dissecting these is a project most kids love!

[Watch our video](#) for a quick introduction.

A **food chain** shows the relationship between producers (plants) and consumers (animals that eat the plants or that eat other animals). Here are some simple relationships between the producers and consumers that are involved in a Barn owl's diet.

Plants, grasses, roots, seeds → mice, rats, gophers, birds

Plants → insects → frogs, birds

Worms → birds, moles

Birds, mice, rats, frogs → weasels

Birds, mice, rats, gophers, frogs, moles, weasels → Barn owls

To help younger kids visualize this relationship, make a chart (using pictures) of what you think the owl's food chain looked like, based on the animals you were able to identify in your owl pellet.

Ready to dissect more? Check out our other dissection kits for all ages!

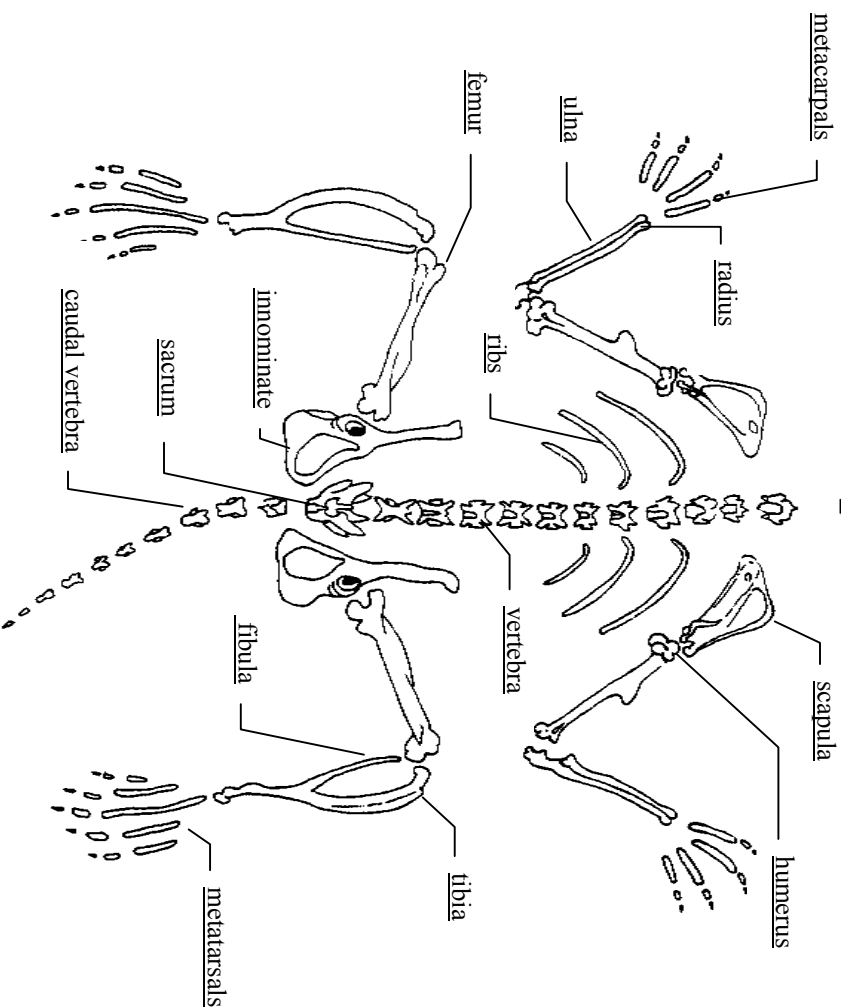
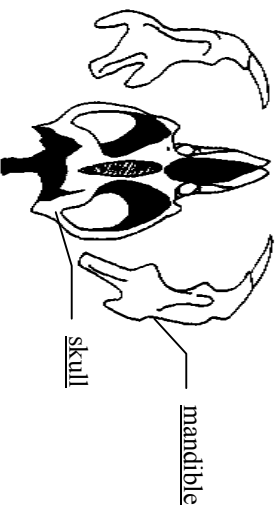
Safety Guidelines

- Work in a place separate from eating and food preparation areas.
- Use disposable [latex gloves](#) or [nitrile gloves](#) during the dissection and cleanup.
- Use a [disposable tray](#) or plate to contain the owl pellet during dissection. Do not dissect directly on desks or table tops.
- Use only dissection tools provided. Do not let children use pencils or other personal items for dissection. Kids like to use our economical [plastic forceps](#) to take apart the owl pellet.
- Use a sanitizer with paper towels or disposable sanitizing wipes to thoroughly wash hands, work areas, and any dissection tools when finished. Household bleach in a 1:10 solution can be used as a sanitizer.
- Make sure everyone thoroughly washes their hands with soap and water after the dissection and cleanup.

Project Instructions

1. To do this lab, you'll need an [owl pellet](#). Carefully inspect the outside of the pellet and note its size (when ordering samples, specify whether you prefer small, [large](#), or jumbo owl pellets), whether there are any feathers visible, and whether there are any clues to where the pellet was found. Guess how many different animal skeletons the pellet contains.
2. Next, gently pull apart the pellet, being careful not to break any of the bones inside it. Use toothpicks or a [teasing needle](#) to separate the bones from the fur or feathers. Take special care when removing the skulls and jawbones, since they are the best way to identify the animals that the owl ate. Group similar bones together. When you've finished sorting the bones, roll the last bits of fur between your fingers to find little bones or teeth that might have been overlooked.
3. Once you've found all the bones, try to reconstruct the skeletons of the animals. Use an identification key to classify the bones. Owls usually eat more than one rodent before regurgitating the remains, so you should be able to find multiple bones that are similar. Can you distinguish between the bones of different kinds of rodents based on their size?
4. How many different kinds of animals did you find evidence of in the pellet? How many animals were there in total? What can you conclude about the eating habits of the owl that made your pellet?

Owl Pellet Examination Instructions



Rodent Skeleton

An owl pellet examination is a good way to learn about the eating habits of *birds of prey*--birds that eat other animals and small birds. Owl pellets are the regurgitated remains of an owl's meal, including all the bones of the animals it ate. Owls usually swallow their food whole, digest the edible parts, and then expel the indigestible parts through their mouth as a pellet.

Carefully inspect the outside of the pellet and note its size, whether there are any feathers observable, and whether there are any clues to where the pellet came from. Have your children guess how many different animal skeletons the pellet contains.

Gently pull apart the pellet, being careful not to break any of the bones inside it. Use toothpicks or a teasing needle to separate the bones from the fur or feathers. Take special care when removing the skulls and jawbones, since they are the best way to identify the animals that the owl has eaten. Group similar bones together.

As you dissect, look for evidence of the wool-eating moth: tiny eggs, pupae casings, cocoons, or larvae.

When you've finished sorting the bones, roll the last bits of fur between your fingers to find little bones or teeth that might have been overlooked. Once you've found all the bones, try to reconstruct the skeletons of the animals. Use an identification key to identify them.

How many different kinds of animals did you find in the pellet? How many animals were there in total? What can you conclude about the eating habits of the owl that made your pellet?

A food chain shows the relationship between producers (plants) and consumers (animals that eat the plants or that eat other animals).

Here are some simple relationships between the producers and consumers that are involved in a Barn owl's diet:

- Plants, grasses, roots, seeds --> mice, rats, gophers, birds
- Plants --> Insects --> frogs, birds
- Worms --> birds, moles
- Birds, mice, rats, frogs --> weasels
- Birds, mice, rats, gophers, frogs, moles, weasels --> Barn owls

Based on what animals you were able to identify in your owl pellet, make a chart of what you think the owl's food chain looked like.