

Materials	Quantity per 2 students
Sterilized owl pellet	1 pellet
Bamboo skewer	2 skewers
Plastic forceps	2 forceps
Nitrile gloves	4 gloves
Plates	1 plate
Bone charts	1

Discussion & Big ideas: (~5 minutes)

This discussion is meant to be brief to make time for the dissection. Draw out a food chain and refer to it as you discuss the following questions:

What do owls prey on?

If owls are predators, then voles, shrews, birds, and rats are the owls' preys.

What eats owls? What will happen if all owls die?

Owls are at the top of the food chain. If owls die, there will be too many voles, shrews, birds, and rats. Owls keep these populations in check!

How do owls eat?

Owls eat their prey whole, but their bodies cannot digest bones and fur. It takes owls 6-10 hours to digest a prey. In that time, a pellet of fur and bones is formed, and is regurgitated 10-16 hours after the meal.

How do scientists know what owls eat?

Scientists dissect these pellets to recover the bones of owls' preys.

Procedure (~25 to 30 minutes)

Assign 1 Scout to each group of tables to keep students on track. Explore which dissection techniques work best, or help them identify which animal the bones belong to. Try to construct a skeleton from the bones if time permits.

Students in pairs

1. Students will first put on rubber gloves, and *then* unwrap the pellet from tin foil.
2. Students record their observations: how long is the pellet? What color is it?

3. Each pair of students will gently pull off small pieces of fur using the tweezers and setting it aside in one pile. They will gently remove the bones from the pellet and set them aside in another pile.
4. After they have removed the bones from the pellet, the students will compare the bones they discovered in the owl pellet to the bones on a bone chart to try to determine what types of bones they found.
5. Students may try to organize their bones into a full skeleton, guided by Bone Charts. They will make conclusions about the bones they have recovered from the pellet: what kind of animal was the prey?
6. Students are allowed to keep the bones in bags if they want.

Cleanup: (~10 minutes)

Leave enough time for cleanup:

1. Leftover wastes, including fur and tin foil, should be placed in trashbags
2. Sanitize students' desks
3. Students should remove gloves last and sanitize their hands

