

Owl Pellets

Materials: Owl pellets (purchased online, tweezers, wooden stick, **skeleton diagram***, sandwich bag

Procedure: (Direct Experience) This activity is a wonderful way for children to better understand the digestive system of birds. A lesson on owl pellets can happen beforehand, to help the students contextualize what is in front of them. All raptors and predatory birds will produce pellets, as a way to discard unwanted parts of their prey. Birds have two stomachs; one muscular and one glandular. In the case of owls, the muscular crop separates the juicy parts from the indigestible bits which are then regurgitated after a meal. Because owls tend to eat their prey whole their pellets will contain the complete skeletons of their prey, providing a wonderful insight into what the owl has been eating, and a look at the anatomy of small mammals.

1) Owl pellets can be purchased online (**owlpellets.com**) and are sterile and safe to handle. Pellets found in nature should always be handled with gloves because the pellets contain hair and bones, and this activity can be quite messy. The small pieces of bone are easy to lose and the hair can blow around. Students may want to wear personal protective equipment (PPE) such as safety glasses, gloves, and a mask, but it is safe to do this activity without them.

2) When dissecting owl pellets the easiest way to start is by gently teasing the pellet apart into more manageable sections, using hands. Once the pellet has been broken apart students can start to pick through the hair to look for bones using tweezers and wooden sticks.

3) They can try to match up the bones that they've found with the ones on paper skeleton diagrams. Students may find other things in their owl pellets such as feathers, or parts of insects.

Hints, tips and tricks: This activity is delightfully sciency. It teaches students about food chains, mammalian bone structure, and the habits of predatory birds. After dissecting, the class can discuss the different kinds of prey they found, how many rodents an owl would need to eat every day and how much land might be needed to support their needs.

***PDF sources for owl pellet sorting guide can be found at**

<https://www.owlrehab.org/wp-content/uploads/2021/01/Pellet-dissection-NEW-2020.pdf>

<https://animalia-life.club/qa/pictures/owl-pellets-bones>

Example of pellet bone sorting guide below:



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Owl Pellet Bone Sorting Chart

Use this chart to identify the different types of bones that you discover in your owl pellets.

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| | RODENT | MOLE | SHREW | BIRD |
|----------------|--|------|-----------------------|------|
| Skull | | | | |
| Jaw | | | | |
| Shoulder Blade | | | | |
| Front Leg | | | | |
| Hip | | | | |
| Back Leg | | | | |
| Rib | | | | |
| Vertebrae | | | | |
| Misc. Items | Caterpillar larvae & caterpillar cocoons | | Caterpillar droppings | |

