

Owl Pellets Lab

Owls often swallow their prey whole, but there are parts that cannot be safely digested. Depending on the prey, this can include beaks, claws, scales, fur, bones, or insect exoskeletons. As soon as the prey is swallowed, a pellet begins forming within its digestive tract. Enzymatic juices break down the body tissues in the prey but leave the material that has little nutritional value. About 12 hours after eating their prey, owls regurgitate a pellet that is odorless and clean of all flesh. The owl can then begin feeding again.



These pellets are often found under owl nests and roosting areas. Scientists take advantage of this adaptation by collecting these pellets and examining their contents. From this, scientists can estimate the diversity of available prey since owls are not very selective feeders.



BEFORE dissecting your pellet:









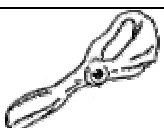
1. Collect the following data (**include units**): Length _____ Width _____
2. Make a hypothesis regarding what you expect to find in your pellet (type of animal(s), abundance of bones, types of body parts, etc.). _____

DISSECTING your pellet: Place your pellet on a paper towel and gently pull it apart using a pair of tweezers, separating hair/feathers from bone.

3. You found evidence of (**circle** all that apply): hair feathers scales exoskeleton
4. **Sketch** each of the skulls you found. **Identify** the animal it belongs to using the skull guide and write the name in the box provided. **Draw** arrows to the characteristics you used to ID the skull.

Identification:	Identification:
Identification:	Identification:

6. **Count** the number of each type of bone you found. Then, **paste** one sample in the box provided.

Bone Type	# Found	Sample	Bone Type	# Found	Sample
 Humerus			 Scapula		
 Femur			 Ulna/radius		
 Lower jaw			 Tibia/fibula		
 Vertebrae			 Rib		
 Pelvic bone					

7. Did you find a (relatively) complete prey skeleton? _____



AFTER dissecting your pellet:

8. Looking back at your hypothesis, how did your expectations differ from your actual findings? _____

9. Compare what you found to what others in your class found. Did they find any other animals? If so, what? _____

11. What habitat do you think your owl would be hunting in and why? _____

12. How do you think an owl locates its prey (sight, sound, echolocation, combination, etc.)? _____

13. What adaptations does an owl need to **both** secure and kill its prey? _____

