



## Owl Pellet Study Kit

Owls are predators. Most of the the larger owls feed on small mammals, birds, and reptiles. Owls usually swallow their food whole. If an animal is too large to swallow whole, the owl may tear it into large chunks. The owl does not digest the hair, bones, teeth, or feathers of its prey. Instead, a part of the owl's digestive system presses these parts together to form a pellet. The owl eventually spits out the pellet. By taking apart the pellet, you can tell what and how much the owl has eaten. Scientists learn many things about the owls and where they live by examining their pellets.

### Procedure

1. Read the introduction on your Student Activity Sheet.
2. Check that you have an owl pellet, two wooden probes, an owl pellet bone chart, a Rat Skeleton chart, and a sheet of white paper.
3. Place the owl pellet on the white paper. Using your fingers or the skewers, break off a small chunk of the pellet. Be gentle and do not push the skewers any further into the pellet than necessary. Remember, the bones you are looking for are small and easily broken.
4. Carefully tear the pellet apart with the skewers and set aside any bones that you find in it.
5. Compare the bones with the ones pictured on your Owl Pellet Bone Chart. Rats, mice, voles, and pocket gophers are some of the rodents that barn owls eat.
6. Identify as many bones as possible. Make a different pile for each kind of bone that you find.
7. Try to keep track of the bones by placing the ones you find over the matching bones on the rat skeleton chart. The animals eaten by the owl that produced your pellet may not have included a rat, but the bones of other rodents will be similar.
8. Repeat this process until you have completely taken apart the pellet and removed all the bones.
9. Record your findings by completing the other side of your Student Activity Sheet.
10. Compare your findings with those of classmates.



Name \_\_\_\_\_

Date \_\_\_\_\_

## Questions, Observations, and Conclusions

1. How many skulls and how many different kinds of skulls did you find?  
Skulls \_\_\_\_\_ Different kinds \_\_\_\_\_
2. Record the number of each of the animals that your owl ate in forming your pellet.  
Rodent \_\_\_\_\_ Shrew \_\_\_\_\_ Mole \_\_\_\_\_ Bird \_\_\_\_\_ Other \_\_\_\_\_
3. Assume that an owl forms one pellet each day and that your pellet is average. How many animals would an owl eat  
in a week? \_\_\_\_\_ in a month? \_\_\_\_\_ in a year? \_\_\_\_\_
4. Why do you think farmers like having barn owls on their farms?

5. How many other bones did you find?  
Ribs \_\_\_\_\_ Jaws \_\_\_\_\_ Pelvis \_\_\_\_\_ Scapula \_\_\_\_\_ Humerus \_\_\_\_\_ Vertebrae \_\_\_\_\_ Other \_\_\_\_\_
6. How close did you come to finding a complete skeleton?

Why do you think it may be difficult to put together a whole skeleton?

7. What can you say about the mammal population in the area where your pellet was found? Is your answer a good guess, or would you need more pellets to be sure? Why?