

## Owl Pellet Dissection

Owls are awesome birds of prey (raptors), and their role in an ecosystem is fascinating. When owls eat their prey it's swallowed whole. The stomach acid is weak, however, and doesn't break down the bones or fur, so after a couple of meals, the junk in their tummies forms into a packed ball of bones and fur that they then throw up into a ball called a pellet. Companies collect these pellets and disinfect them for sale so they can be dissected!

### What You'll Need:

Owl pellets (<https://pellet.com/collections/barn-owl-pellets>)

Tweezers (optional, can use fingers but tweezers help with tiny bones)

Paper plate/paper towel

Kid-sized Latex-free gloves (if your kiddo is allergic to fur)

Laminated Owl Pellet sheets (12 of them)

### Directions:

1. Introduce owls and how they eat their food:
  - a. Owls are incredible hunters. They have several features that make them superior raptors.
    - i. Silent wings: Owls have frayed edges to their wings. This allows wind to break up over the wings and keep it from making that flapping sound. <https://animals.howstuffworks.com/birds/owl-fly-silently1.htm>
    - ii. Large eyes locked into their skull: Owls have large eyes because they are nocturnal. The larger the eye the more light it can let in. Their eyes are locked into their skull by a ring of bone, meaning they can't move their eyes independently and therefore have to turn their whole head if they want to look around. Their heads are very flexible and are able to almost look behind them to see. <https://bit.ly/2Uo38bg>
    - iii. Ears at two places: The right ear of an owl is higher on the skull than the left - which sounds strange! By having ears in two places on their head it allows them to hear sounds at night and triangulate their prey – like bird GPS. The flat face of the owl funnels sounds to their ears. Some owls, like the Great Horned Owl, have to hunt mice, voles, moles, and other prey through snow up to a foot deep. Their ears triangulate the location of the critter, even through snow, and then with their silent flight, they swoop in and grab it. (from Birdwatchingdaily.com - <https://bit.ly/3bdyXKx>)
  - b. Food: Owls eat their food whole, like many birds of prey. Because they're eating small rodents and other birds, they can eat a whole meal in one gulp.
    - i. Stomach acid in an owl is very light, meaning it can dissolve the meat of the critter it ate, but can't dissolve the fur or bones (or feathers in some cases). This means after a couple of meals, the owl has a build-up of fur and bone in its stomach, which it needs to get rid of to make room for more meals. It does this by throwing up the ball of fur and bone tightly packed together – we call these owl pellets.
  - c. These owl pellets came from a company that owns barn owls and collects their pellets for students all over to dissect. They are STERILIZED, but if you feel grossed out a little, gloves are a great way to enjoy the pellets and keep you hands clean!

Here is a great link to a pellet activity sheet with the identification of the bones you typically find in these pellets! Can you put your critter(s) back together?

<https://www.carolina.com/pdf/activities-articles/owl-pellet-bone-grid.pdf>