

Owls
for
Students and Home Educators
Educational Resource Packet



Woodlands Nature Station
Land Between The Lakes
Golden Pond KY 42211

Owls



An owl is an amazing animal! Owls are **raptors**, meat eating birds with sharp beaks and strong claws called **talons**. Why do raptors need these sharp beaks and strong talons? To catch and eat their food! Owls are **predators**, which means that they hunt other animals for food. An owl's **prey**, or the animals it eats, includes insects, mice, and other birds!

Help the great horned owl find his favorite prey by coloring in the spaces marked with a *. What do you think it might be?

What sense do we have that owls do not? Hint: think about the great horned owl's prey above!

If you were an Owl. . .

. . . You would stay up all night and sleep all day.

Owls are **nocturnal**, which means that they are awake and active at night. Humans are **diurnal**, which means we are awake and active during the day.

. . . Your eyes would be as big as tennis balls!

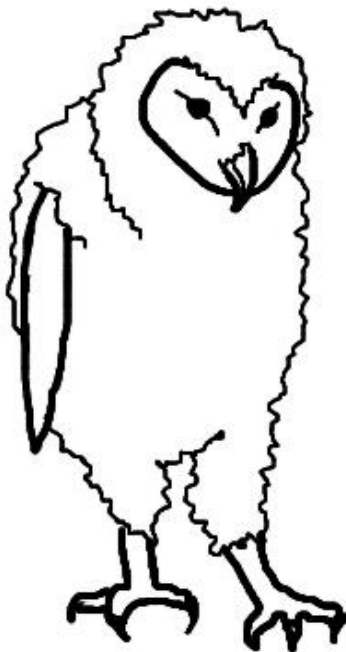
An owl has extremely large eyes which help them to see even when there is very little light. This adaptation helps them when they are hunting at night.

. . . You would be unable to move your eyes.

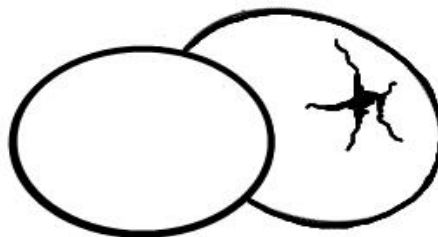
Hold your head still and look from side to side. How about rolling your eyes? Easy, right? It is for a human, but an owl is unable to move its eyes. To make up for not being able to move its eyes, an owl can turn its head *almost* all the way around!

. . . Your most important sense would be hearing.

An owl can hear a mouse's footstep. They use this sense, even more than they use their eyesight, to catch their prey. A ring of feathers around an owl's face, called a **facial disc**, helps to funnel sound to their ears. You can easily see the facial disc on the young barn owl below.



. . . You would hatch from an egg and instead of being called a baby when you were young, you would have been called an owlet.



Owl Math

A human has 7 vertebrae, or bones, in their neck. An owl has twice as many vertebrae. How many vertebrae does an owl have?

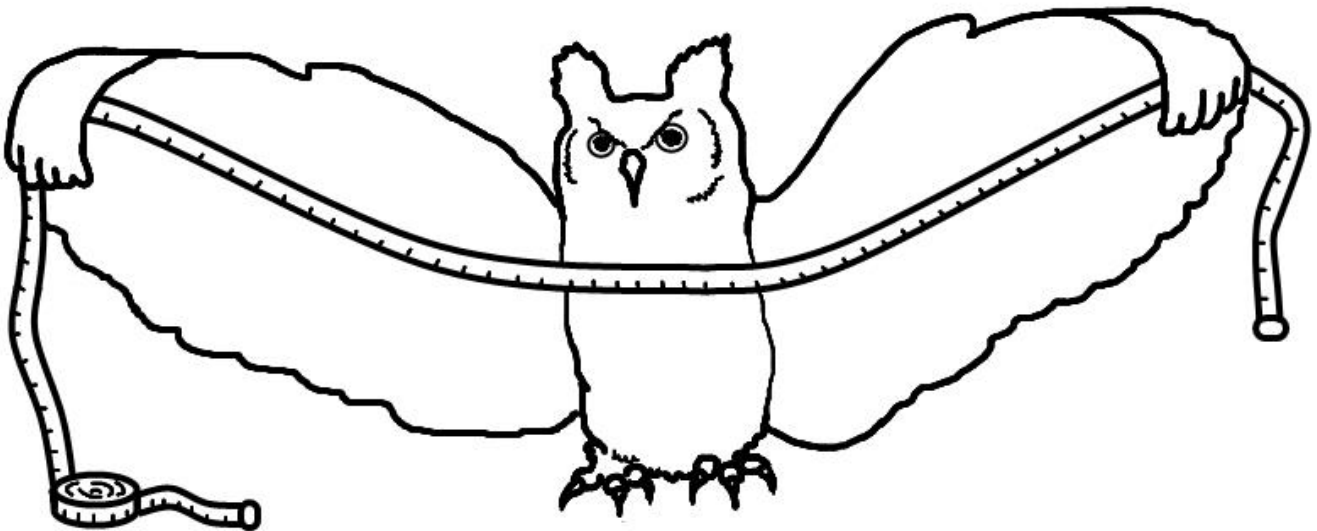
$$7 \times 2 = \underline{\hspace{2cm}} \text{ owl vertebrae}$$

With all those extra neck bones an owl is able to turn its head 270 degrees, or $\frac{3}{4}$ the way around a circle. In comparison, a human can turn its head about 90 degrees in one direction. How many degrees more can an owl turn its head compared to a human?

$$270^\circ - 90^\circ = \underline{\hspace{2cm}} \text{ degrees}$$

The great horned owl is the largest owl in Kentucky. They can have a wingspan of 3 to 5 feet! What is your wingspan? Stretch your arms out and measure from fingertip to fingertip. How do you compare to a great horned owl?

 your “wingspan”



A great horned owl weighs about 3 lbs while a screech owl weighs only $\frac{1}{4}$ lb. That is about the same weight as a hamburger without the bun!

Find a ruler and measure this paper from top to bottom. A screech owl has a wingspan that is 2 times the length of this sheet of paper.

$$\text{Length of paper} = \underline{\hspace{2cm}} \times 2 = \underline{\hspace{2cm}} \text{ screech owl wingspan}$$

Bones!

After an owl eats it will cough up an **owl pellet**. This is not vomit but the indigestible parts of the owl's meal such as fur and bones. By studying these pellets scientists can learn more about what an owl likes to eat.

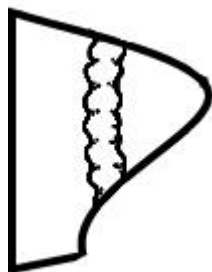
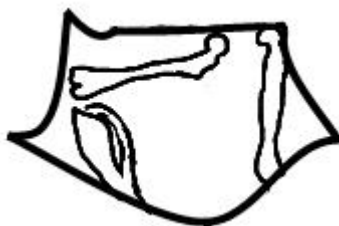
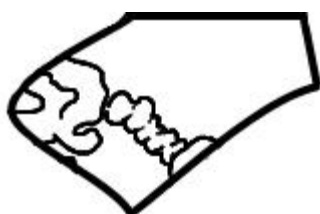
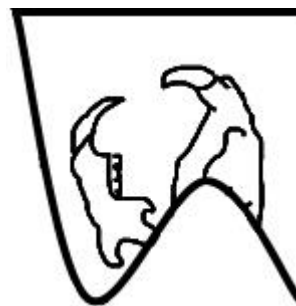
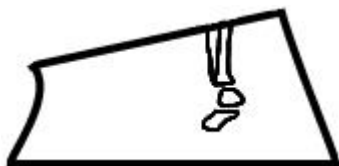


To study an owl pellet you need to pull it apart and find all of the bones in it. On the following page are puzzle pieces representing the contents of this owl pellet. Cut out the puzzle pieces, put the puzzle together and tape or glue it below. What do you think this owl has eaten?

Can you label these bones on the skeleton?

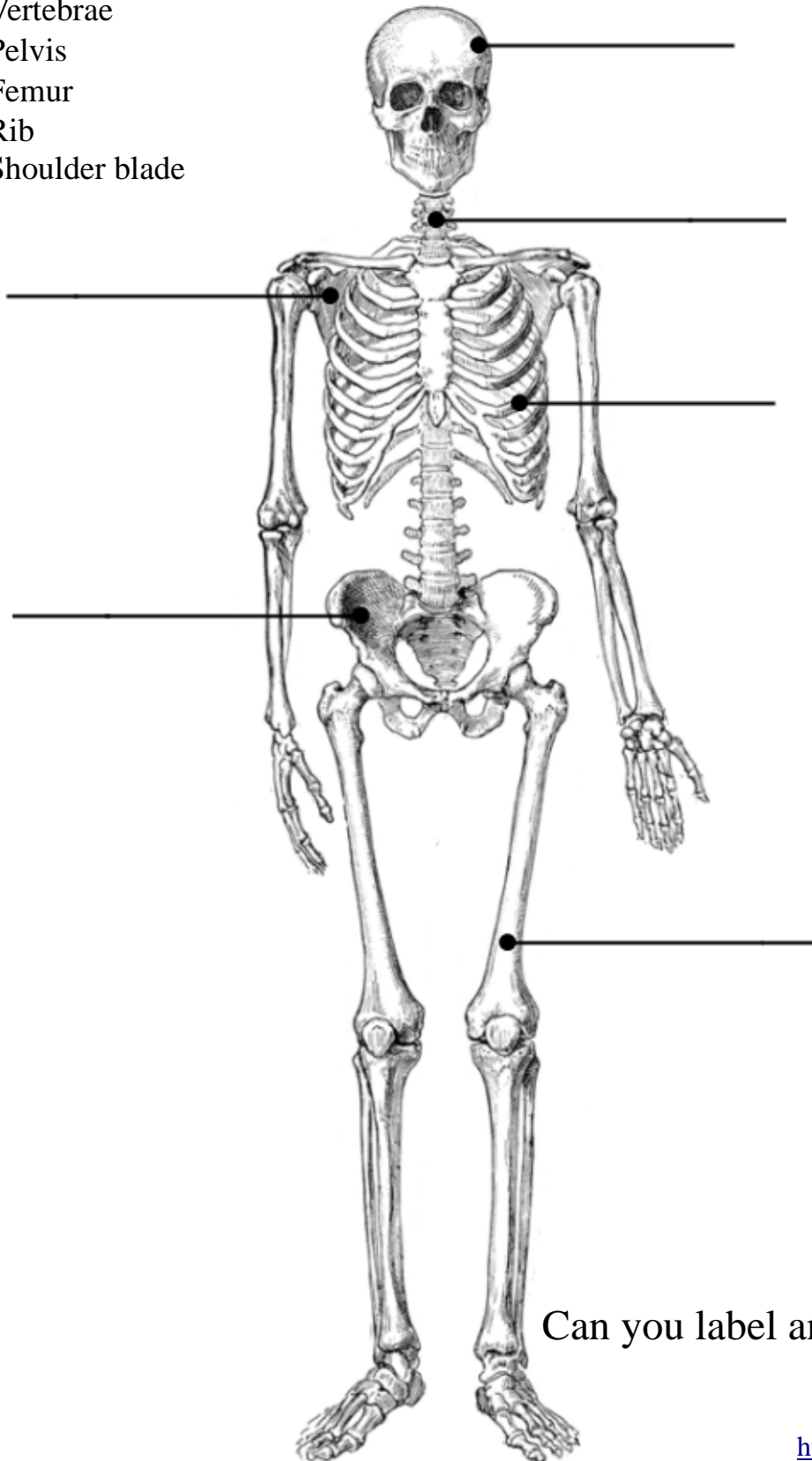
- Skull
- Vertebrae
- Pelvis
- Femur
- Rib
- Shoulder blade

Put together the skeleton of the owl's prey by solving the puzzle!



Can you name the bones on a human skeleton?

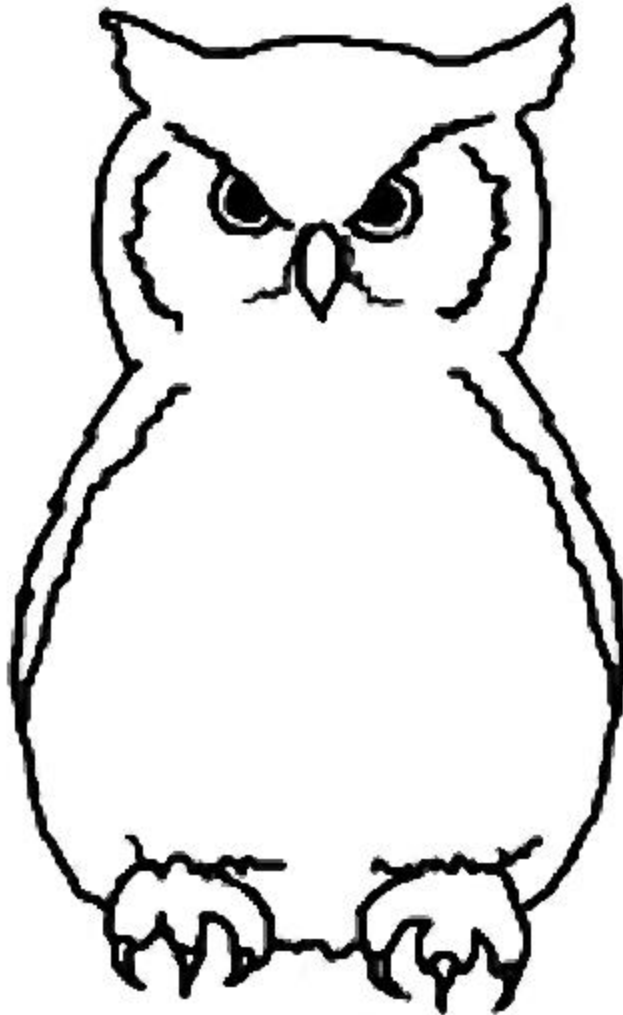
- Skull
- Vertebrae
- Pelvis
- Femur
- Rib
- Shoulder blade



Can you label any other bones?

Camouflage

Owls use **camouflage** to blend in with their surroundings and stay hidden from **predators** and their prey. The color and pattern on their feathers looks a lot like the color and pattern of tree bark. An owl with tufts (special feathers on top of their heads) such as this screech owl can even raise their tufts to help them to look even more like a stick or a branch!



Screech owls are normally reddish brown or gray. Color the owl above any way you want, then cut him out and explore your house. How many places can you find where the owl can stay safe and hidden and camouflage or blend in with his surroundings? You could even cut out more owls and have a game of hide and seek with a friend!

Owl Adaptations

An **adaptation** is a feature or behavior that helps an animal to survive. Unscramble the letters to complete each sentence about an owl adaptation.

1. An owl's _ _ _ contains many specialized cells, called rods, which help an owl to see in the dark. (YEE)
2. The ring of feathers around an owl's face is called a F _ _ _ _ _ D _ (○) _ . This helps to funnel sound to an owl's ear. (SALCIAIC)
3. The feathers on an owl's _ _ _ (○) have soft, fringed edges, allowing them to fly silently. (NIWG)
4. A _ _ _ _ is used to tear apart food. (AEBK)
5. Sharp (○) _ _ (○) _ _ allow an owl to catch their prey. (NALTOS)

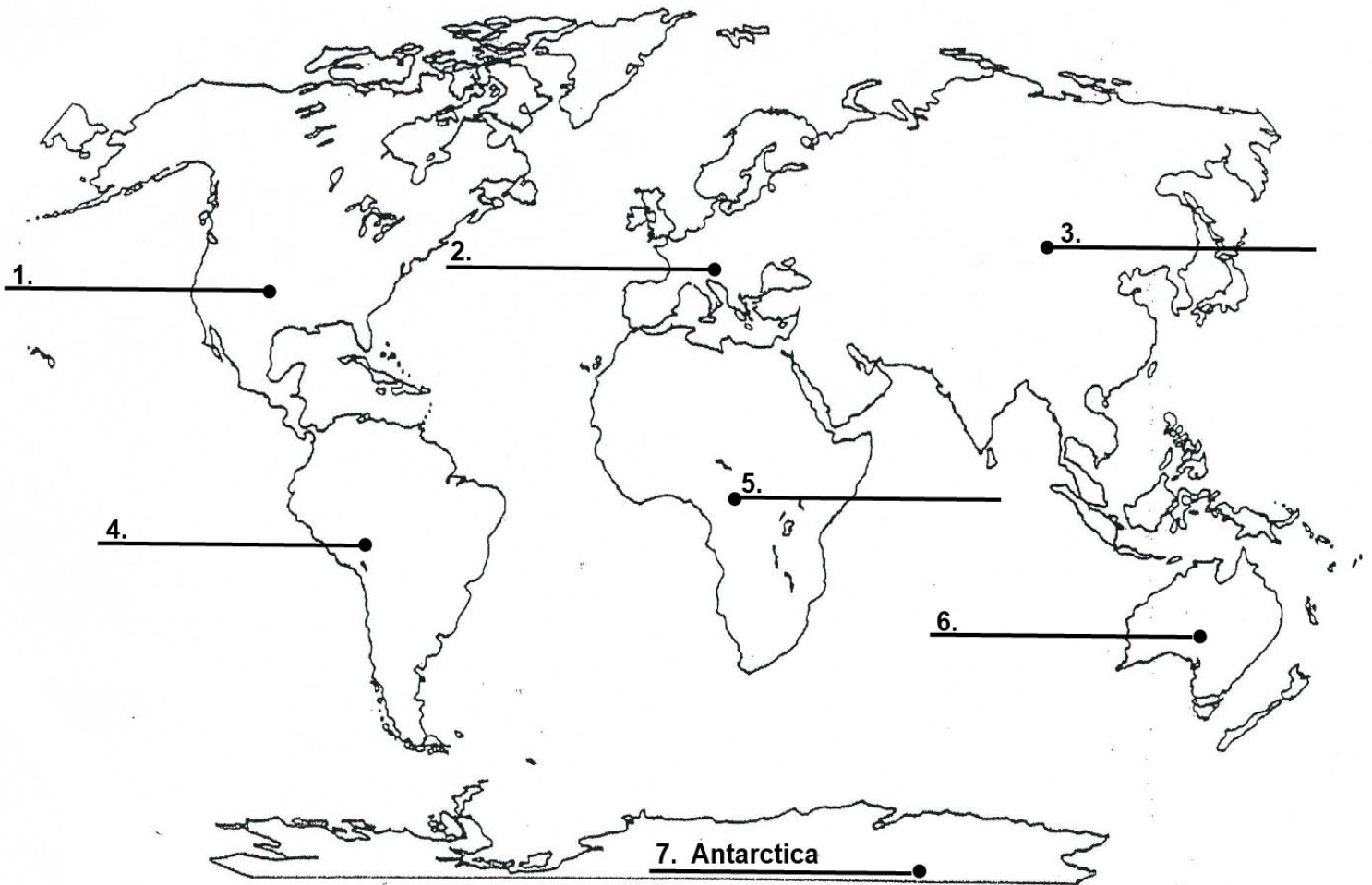
Bonus! The barn owl is also known as a _ H _ _ _ owl because of its pale color and silent flight. Unscramble the letters from the circles above to find out what this owl is sometimes called!



Owl Geography

The barn owl has a very large **range** (the region or area where a plant or animal lives). The barn owl is found on all continents except Antarctica. Fill in the names of the continents where the barn owl can be found.

<http://etc.usf.edu/clipart/>

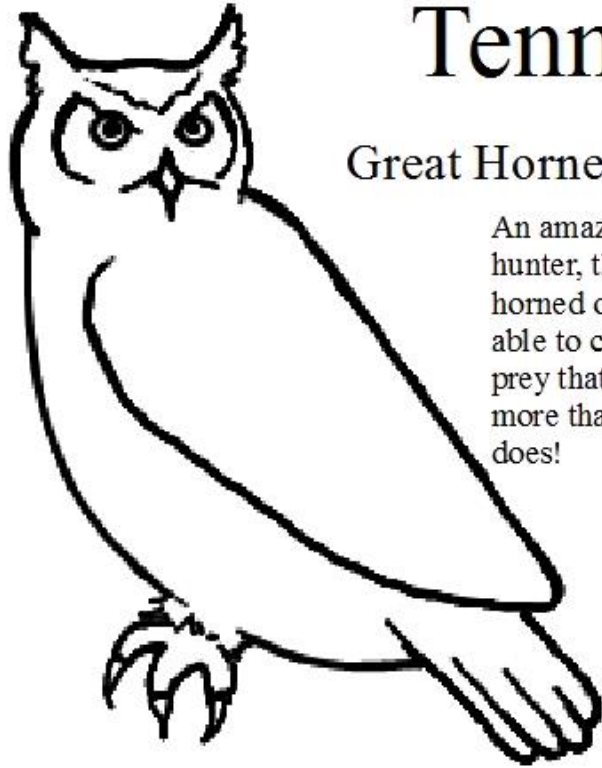


Owl Vocabulary

Draw a line connecting the vocabulary word to its definition.

Adaptation	The region or area where a plant or animal lives.
Camouflage	Active during the night.
Diurnal	An animal that is hunted by another animal.
Facial disc	A pellet of fur, bones and feathers that an owl will cough up after a meal.
Nocturnal	A raptor's sharp claw.
Owl pellet	An animal that hunts other animals for food.
Predator	Active during the day.
Prey	A meat eating bird with a sharp beak and talons.
Range	A feature or behavior that helps an animal survive.
Raptor	The ring of feathers around an owl's face that helps to funnel sound to an owl's ears.
Talon	To blend in with the surrounding environment.

Owls of Kentucky and Tennessee



Great Horned Owl

An amazing hunter, the great horned owl is able to catch prey that weighs more than it does!

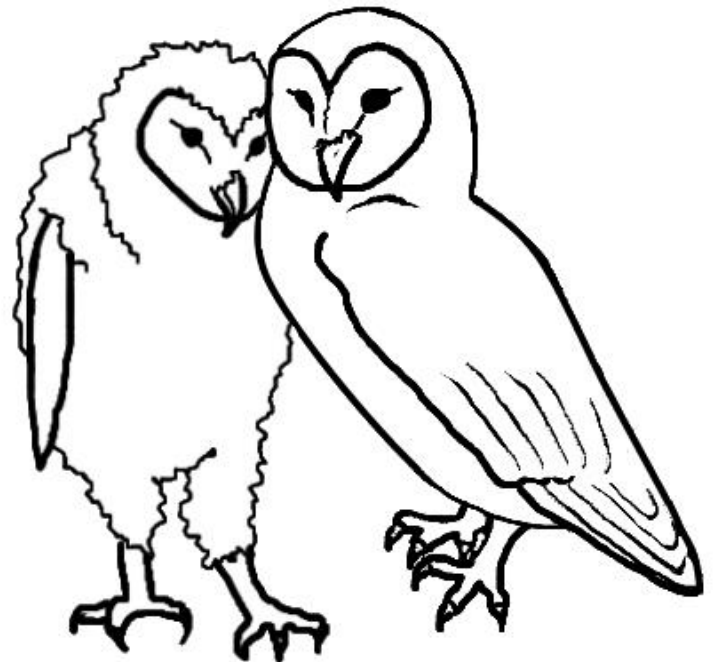
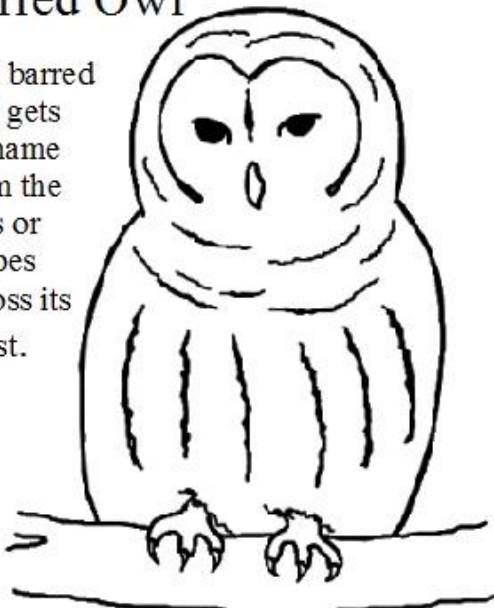
Screech Owl



This small owl does not screech, its call actually sounds like a whinny or a trill.

Barred Owl

The barred owl gets its name from the bars or stripes across its chest.



Barn Owl

Barn owls often nest in barns. Farmers love to have them around because they help to control the rodent population.