Start with a Book: Bird Buddies Toolkit

Hunting Prey

A bird of prey, or raptor, has excellent eyesight, powerful feet with long sharp talons, sturdy, partially hollow bones, and a strong hooked beak. Most hunt live prey and all are carnivorous. Birds of prey include hawks, eagles, falcons, owls, and vultures — though vultures lack strong, grasping feet and talons and dine on carrion.

Vultures also use their sense of smell to locate their food, but most other birds locate food by seeing or hearing it. A Great Horned Owl, which has no sense of smell, can prey on skunks because of this. Birds' preference for food is guided by being able to locate it and use their beaks to get it into their mouths.

HAVE KIDS TEST THEIR OWN SENSES OF SIGHT AND HEARING AGAINST BIRDS OF PREY WITH THESE DEMONSTRATIONS.

Fine-toothed comb

Blindfold

Supplies

- A quarter coin
- Tape measure
- Empty narrow-necked bottle



Get kids thinking ...

ASK KIDS: What do you notice about the eyes of birds of prey? Why would that be useful to birds of prey? What do they think when they hear: *"Eyes on the front, ready to hunt. Eyes on the side, ready to hide."*

Binocular vision is when both eyes can focus on one thing at the same time. Birds of prey, especially eagles, have amazing long-distance vision and can use both monocular and binocular vision. Eagles can see perfectly clearly about **eight times as far** as people can, allowing them to spot and focus on even small prey animals that are two to three miles away.





Let's get started

FIND OUT HOW EAGLED-EYED KIDS ARE!

- **STEP 1:** Take kids outside to a large space, such as an empty parking lot, playground, or sidewalk where it is safe for everyone to stand.
- **STEP 2:** Have the kids turn their backs to you and place a quarter on the ground don't let them know where you put it.
- **STEP 3:** Have everyone walk about 25 feet or so away from the quarter and then have them turn around and ask if they see anything on the ground back where they were first standing.
- STEP 4: In twos or threes, have kids walk toward the quarter and when they see the quarter, have them stand in that spot. Measure the distance and multiply it by 8. That's about how far away an eagle would be able to see the quarter!







NOBODY SAYS "EAGLE-EARED," BUT THIS DOESN'T MEAN EAGLES HAVE POOR HEARING.

Birds of prey like eagles and hawks that are diurnal (active during the day) do use their hearing to locate prey or other birds, but it's not as essential as it is for owls, which locate their prey in the dark only by sound.



Show kids a picture of a Great Horned Owl

ASK: What are those tufts sticking up on its head? Where are the bird's ears?

Birds' ears are funnel-shaped openings located below and somewhat behind their eyes. They do not have outer ears and their ear openings are covered by soft feathers called auriculars, which help protect the ears and help keep the sound of rushing wind out.

GIVE KIDS AN IDEA OF HOW THIS WORKS:

STEP 1: Get a narrow-mouthed bottle and blow over the opening. What happens?

STEP 2: Next, hold a fine-tooth comb over the mouth of the bottle and blow through the comb. What happens? The teeth of the comb act like the soft feathers covering the ear openings and cut down on the noise.

Some owls, especially those who hunt at night, have one ear opening higher than the other and rely on their hearing to locate prey. Depending upon where the sound is coming from, the sound will be louder in one ear than the other. This difference helps the owl pinpoint where the sound originates.

That's not all that helps owls' hearing. Point out pictures of owls from your field guide and have them note their concave faces (like the Barn Owl at right). This face shape helps them funnel sound into their ears.







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HELP KIDS UNDERSTAND HOW THIS WORKS:

- **STEP 1:** Pair them up and have them stand about 6 feet apart.
- **STEP 2:** One at a time, have them whisper to each other.
- **STEP 3:** Now have them cup their hands behind their ears and use the same whisper voice again.

ASK: Which way sounds louder? Why? Their cupped hands act like the curve of the owl's face and direct the sound to their ears.



DEMONSTRATE HOW IMPORTANT HEARING WHERE PREY IS LOCATED IS TO AN OWL:

STEP 1: Blindfold one child and have the others stand in a circle about 10 feet back around them.

STEP 2: Choose one child to go up quietly as possible and tap the blindfolded "owl" on the shoulder.

If the blindfolded child is able to detect the "prey" before he is tapped, the "prey" has to take the place of the "owl" and is blindfolded.

More hunting activities

PREDATOR VS. PREY GAMES TO PLAY WITH KIDS (SCIENCING) sciencing.com/predator-vs-prey-games-to-play-with-kids-12748126.html

RAPTOR STUDY (NEW JERSEY DIVISION OF FISH AND WILDLIFE) nj.gov/dep/fgw/pdf/raptrpln.pdf

RAPTORS! THE BIRDS OF PREY AUDUBON ADVENTURES ACTIVITY GUIDE audubonadventures.org/docs/AA_Raptors_final.pdf





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Great Horned Owl



