Birds of Prey Lesson Plan

2nd-6th grade

Watkins Nature Center

This one’s for the birds! Let us introduce you to one of the most majestic group of birds, the raptors. Learn how they are grouped as birds of prey and the differences between the different types of these fearsome predators. Meet several raptors and see firsthand the impressive adaptations they have to survive all over the world.

**Learning Objectives**

By the end of this lesson, students will be able to:

* Discuss predator/prey relationships
* List some unique physical and behavioral adaptations of raptors
* Discuss similarities and differences amongst the different raptor groups
* Classify animals according to their diet and habitat

**Length**

* 45 minutes

**Key Words**

* Raptor
* Predator
* Prey
* Beaks & Talons
* Adaptations
* Habitat
* Carrion
* Falcons, Hawks, Owls, Eagles, and Vultures

**Introduction (5 minutes)**

* What is a naturalist and what do we do
* Why do so many birds and animals live at the nature center

**Lesson (30 minutes)**

* Raptors, also called birds of prey, are birds that are predators. This means they hunt and kill other animals for food. There are many different types of these birds. Falcons, eagles, hawks, owls, and vultures are all raptors. They usually kill by using the talons, or claws, on their feet.
* The types of birds grouped as “raptors” are very different from each other. Most owls hunt at night, while hawks and eagles hunt in the daytime. Owls are built differently from hawks and eagles. Most owls are called nocturnal animals. They are active at night and usually sleep during the daytime. Their eyes can see well in dim light. When it is too dark for owls to see, they can still find prey by listening for it because they also have very good hearing. The flight feathers of owls are soft on the edges. This helps them to fly silently, and it keeps their prey from hearing them approach.
* Eagles have big, broad wings that give them greater lift. They can glide on wind currents called thermals high in the sky for long periods of time without moving their wings. An eagle can fly carrying prey that weighs as much as it does!
* Hawks and some owls have short and stubby wings that give them a lot of lift with some speed. These smaller wings are better for maneuvering among trees in a forest. The thinner wings of falcons and other smaller raptors are built for speed. They can plummet through the air at eighty miles per hour!
* Raptors come in all sizes. They are found on every continent except Antarctica. Depending on their type, they can live in tropical jungles or a scorching desert. They can live on rocky seacoasts or grassy plains. They even live high in the mountains. Some of them, like the Andean condor, live to be very old. Condors can live for more than seventy years.
* All birds have many hollow bones that help make their bodies lighter. This reduces their weight, making it easier for them to fly. Even though a bird’s skeleton is lightweight, it is very strong. For the most part, all raptors, except for vultures, catch their food live. The bird swoops down and grabs its prey with sharp talons. When the prey is caught, the force of impact and the piercing talons usually kill the prey instantly. However, the bird is successful at hunting only about ten percent of the time. As a general rule, when hunting the majority of the time, the prey gets away. Vultures mostly eat animals that are already dead, called carrion.
* The size and shape of a bird’s beak can be a hint as to what kind of food it eats. Small birds like the American kestrel have short beaks for eating insects and small animals. The bald eagle has a heavy, large beak for tearing large pieces of meat from large prey.
* The size of the talons also shows the size of prey the bird goes after. Harpy eagles have huge talons, as large as the claws of a grizzly bear. They have been known to catch and eat small sheep! Barn owls have smaller, thinner talons. They catch and eat rats, mice, and other small animals. A raptor must be quick and sure when it attacks, since some of its prey, like snakes, can even be dangerous. If the bird makes a wrong move, it could become the victim.
* Predators have an important job in the environment and with the balance of nature. They help protect the world we live in by hunting and eating populations of pesty animals that can destroy farmer’s crops. They even clean up the countryside by eating dead or dying animals that might spread disease.
* There are exceptions to all rules listed, naturalists will touch on individual exceptions dependent on age/grade of students

**Review and Closing (10 minutes)**

* Students are asked to discuss how people affect the environment and habitats of other living creatures, both negatively and positively
* Students are asked to explain the importance of raptors to the environment and to humans
* Students are encouraged to ask questions and are able to meet the birds up close

**Curriculum**

* Grade 2: 3.F.1a-c; 6.C.1b
* Grade 4: 3.A.1a, b, d; 3.D.1c; 3.F.1a-b
* Grade 5: 3.A.1a, b, e
* Grade 6: 3.D.1b, e; 3.F.1a-d