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Raptors! The Birds of Prey

Raptors are the hunters of the bird world.

In the dark of night, a Great Horned Owl perches on the limb of a tree. Suddenly, a faint rustling sound below gets its attention and the owl takes off. Flying silently on wings that measure more than four feet across, it swoops to the ground and grasps a field mouse in its powerful talons. Then it heads back to its nest where hungry chicks wait for a meal.

An owl is a raptor, or bird of prey. "Prey" is another word for an animal that is hunted for food. Ospreys, eagles, hawks, harriers, falcons, and kites are also birds of prey. Why are these birds called "raptors," and what do they have in common? Just turn the page to find out!

BALD EAGLES: A SUCCESS STORY

In 1782 the Bald Eagle was chosen as America's national symbol. That year about 100,000 nesting pairs may have lived in the lower 48 states. Yet by the 1960s the Bald Eagle was nearly extinct there. The number of nesting pairs had dropped to just 400. Why? The poisonous pesticide DDT, water pollution, habitat loss, and illegal hunting did great damage to the Bald Eagle population. Then the Endangered Species Act was passed, and in 1978 the Bald Eagle was protected under that law. It worked! Today, thanks to laws and the actions of caring people, eagles are thriving in the United States again!

What Is a Raptor?

Raptors share characteristics that other birds don't have.

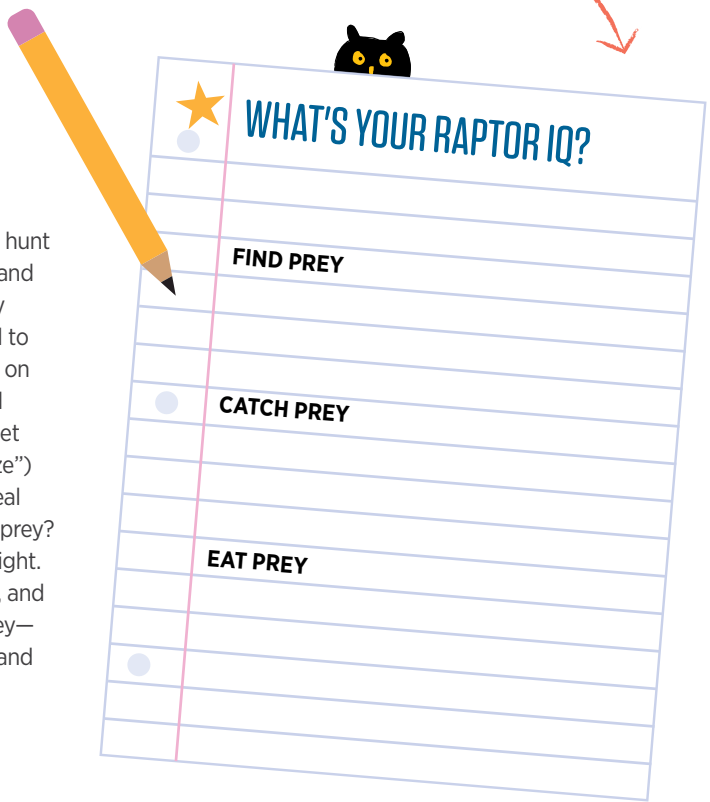
Plenty of other birds hunt live animals for food. Robins hunt worms, pelicans hunt fish, woodpeckers hunt insects...and those are just a few examples. So how are birds of prey different? Part of the answer is in that other word used to describe this group: raptor. The word "raptor" is based on an old word that means "to seize and carry away." And that's exactly what raptors do! They use their strong feet with curved, pointed claws called talons to catch ("seize") their prey and carry it away. Then they tear into the meal with their sharp, hooked beak. How do they spot their prey? Another characteristic of raptors is their excellent eyesight. Powerful grasping feet with talons, a razor-sharp beak, and extra-good eyesight are adaptations of the birds of prey—special physical characteristics that help them survive and that set them apart from other birds.

What's on the Raptor Menu?

Bald Eagles and Ospreys feed mainly on fish. Peregrine Falcons mainly catch birds. American Kestrels are small and so is their prey. They nab small birds, small mammals such as mice, snakes and other reptiles, amphibians, and insects. The diet of hawks is similar to that of kestrels, but they are bigger and so are capable of catching bigger prey. Big Golden Eagles carry off jackrabbits, prairie dogs, and other medium-sized mammals. These are raptors that hunt by day.

At night, owls take over. They have adaptations for hunting in the dark. Their huge eyes gather every speck of light. Round, feathered areas on their faces work like radar dishes to channel sounds to their ears. Soft, comb-like feathers on their wings' edges muffle the sound as they fly. Owl prey ranges from insects to lizards, snakes, frogs, mice, rats, rabbits, and for some species, other raptors. Great Horned Owls like the one on the cover even eat skunks!

What adaptation helps raptors do the following things? Write your answers using adjectives and nouns.

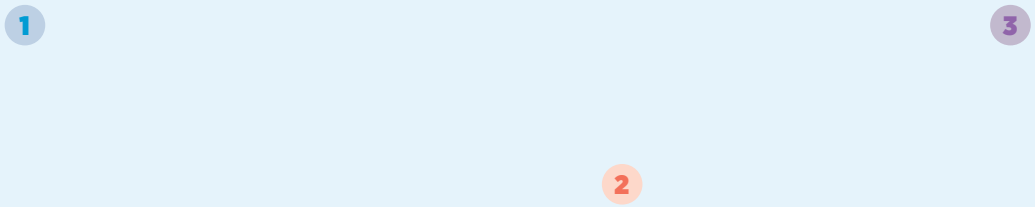


Ride the Wind

Flying is hard work and it burns a lot of energy.

Many raptors get help in flight by hitching a ride on rising currents of air called thermals. A thermal forms when the sun heats up the ground in the morning. Air near the ground heats up too, and rises. A raptor can spread its wings and float upwards on this air, soaring effortlessly in circles. It can travel for miles by riding one thermal after another, hardly ever flapping a wing. Here's how.

1. **The raptor rises on the outside edge of the thermal.**
2. **The raptor leaves the thermal at its top. It glides down at an angle, faster and faster.**
3. **The raptor swoops into another thermal and starts spiraling upward again.**



The bands on the legs of this Peregrine Falcon help scientists track its migration.

Raptor Recovery

Raptors play an important role in an ecosystem. Without raptors, populations of mice and other rodents would increase too rapidly. They would then compete with other animals for food. Raptors also help farmers by eating mice, moles, and other animals that may damage farm crops.

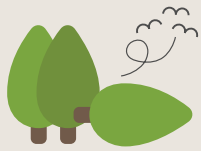
So when scientists observed that populations of raptors were rapidly decreasing, Americans knew it was important to take action. In 1972, a pesticide called DDT was banned. DDT caused many raptors to lay thin-shelled eggs that broke easily. Today, volunteer community scientists count raptors as they migrate between winter and breeding ranges. They help band raptors or attach radio transmitters to track their migration. They also monitor nests to see how many chicks are produced each year.

With help from humans, birds of prey will be here to stay!

RAPTOR TROUBLES

While few animals hunt raptors, they do face other threats.

- Sometimes they fly into power lines and windows, or are hit by cars.



- Raptors lose places to nest and hunt when forests are cut down and fields are built on.
- Climate change can cause droughts that can reduce the amount of raptors' prey.

- Poisons are one of the biggest threats to raptors. Eating an animal that has consumed insects poisoned by pesticides can make a raptor sick or even kill it.

RAPTOR NEWSFEED!

The Peregrine Falcon is the world's fastest animal. It can reach a speed of more than **200 miles per hour** when it dives from high in the sky to catch a bird.

The biggest Bald Eagle nest ever recorded measured **20 feet high** and **9.5 feet across**. It weighed **4,000 pounds**, about as much as a minivan!

An owl's neck is so flexible, it can swivel its head **270 degrees**—that's three-fourths of a complete circle!

The Swainson's Hawk migrates from Canada to Argentina and back again each year. That's a round trip of **about 12,400 miles!**

Most raptors' eyesight is about **three times** as sharp as a human's.

A certified raptor vet tech at the Audubon Center for Birds of Prey takes an x-ray of an injured Bald Eagle.

Raptor Rescue

Many facilities around the country help injured birds and other kinds of animals return to the wild.

The Audubon Center for Birds of Prey located in Maitland, Florida, treats injured and orphaned raptors. Each year between 600 and 800 patients arrive at the center needing help. They range in size from large Bald Eagles to tiny Eastern Screech Owl chicks that have fallen out of nests. Most are brought to the center by concerned people. Injuries include vehicle strikes, electrocution by power lines, collisions with windows, gunshots, and poisons. Many have broken wings, injured eyes, or damaged beaks. The Center for Birds of Prey works to nurse these patients back to health. Their stay can vary from one day (a quick return to a nest) to up to a year (including severe injuries and feather damage).

Nearly half the patients are released back to the wild after recovery. Birds that can't survive in the wild anymore are placed with zoos and other educational facilities.

The center also manages Audubon EagleWatch, a program that keeps an eagle eye on more than 500 Bald Eagle nests in Florida. Volunteers collect important information on eagle nesting, including counting chicks, finding new nests, and stopping nests from being destroyed by illegal activities.

Spot Raptors in Your Neighborhood!

Raptors live almost anywhere. They live in cities, woods, deserts, near bodies of water, in parks, and even in yards. But if you can't find a raptor, practice your bird-watching skills on other species. You can even be a community scientist by keeping an eye on birds!

Go outside with a notepad and a pencil. Look for and listen for birds. Write about what they do. Make some sketches. Here are some ideas to get you started:

What is the date?

Is it morning, afternoon, or evening?

What is your location?

What is the weather like?

What does the bird you see look like?

What is its main color?

BE A BIRDER

Visit **audubonadventures.org/TakeAction.htm** to see some community science projects you might enjoy!

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Project Team: Elaine O'Sullivan, Managing Editor; Christina Wilsdon, writer; Lorin Driggs, principal editor; Carrie Barron, Jacelyn Downey, Dianna Flynt, Geoff LeBaron, Keith Russell, Katie Warner, Miranda Wilson, scientific and educational reviewers
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