

Wildlife Express!

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Behold, the Bald Eagle



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Let's Look At...



Bald Eagles

What animal do you think of when you think of the United States? Most people think “bald eagle.” The bald eagle became our national emblem in 1782. It is on a lot of important things, like money and the Presidential Seal. But a real bald eagle is more impressive than symbols!

Eagles are the largest of the birds of prey. We have two eagles in the United States, the golden eagle and the bald eagle. While golden eagles are found mostly in the west, bald eagles can be found in many places around the country.

Bald eagles are the only North American member of the sea eagle family. As you may have guessed by their name, sea eagles live around water and so do bald eagles. They live along rivers, lakes, and ocean coasts. Here in Idaho, bald eagles have miles of rivers and many large lakes to call home.

So, how do you recognize a bald eagle? Adult bald eagles have a distinctive bright white head and tail. Their body is dark brown and their feet and beak are bright yellow. They are big! Bald eagles are three feet tall with six to seven and one-half foot wingspans. Only the California condor is larger. Young bald eagles are about the same size as an adult, but their feathers are different. The best thing to remember is “splotches.” Young bald eagles have dark brown feathers with a lot of white splotches on the belly and chest. Their heads and tails are brown. They have dark beaks and pale yellow eyes and feet. As an eagle gets older, the splotchy feathers become solid brown. The bird’s head and tail start to turn white. A young eagle will have its adult feathers at about five years of age.

When eagles are five to seven years old, they find a mate and begin to reproduce. Mated pairs return to the same nest every spring, adding new materials each year. The nest is made of large sticks and lined with grasses, moss and downy feathers. These nests can be 20 feet tall and nine feet across, making them the largest nests of any North American bird. Big nests need big trees, so bald eagles need forested habitat near water. Bald eagles usually lay two white eggs that hatch in a month. After hatching, both parents feed the young eaglets. Eaglets spend 10 to 12 weeks in their nest before fledging (FLEJ-ing) or leaving the nest. During the last few weeks, they spend a lot of time flapping their wings to make them strong.

Eagles are strong flyers. Their long broad wings help them soar over water to find their favorite food, fish. Eagles will also steal fish from other eagles and osprey. It was because of this habit Benjamin Franklin wanted the wild turkey to be our national symbol instead. Somehow, having a turkey on our money would not be the same!

Birds of Prey

Birds of prey are a group of birds including hawks, eagles, owls, and vultures. They are also called raptors. Most raptors catch and kill their food. Vultures feed on dead animals, called carrion (KAR-ee-on). Eagles will also eat carrion, especially during the winter months when prey is scarce.

No matter what they eat, raptors are very beneficial, eating things we think are pests. Since raptors come in all sizes, so does their prey. Small raptors, such as pygmy owls and kestrels, eat insects and small rodents, like mice. Large raptors, like red-tailed hawks and great horned owls, prey on rodents, snakes, and larger animals, like jackrabbits and skunks. Bald eagles and osprey catch and eat fish.

Birds of prey range in size from the tiny five-inch elf owl of the desert southwest to the huge California condor. Here in Idaho, our smallest raptor is the seven-inch tall pygmy owl while the bald eagle is our largest.

No matter what their size, raptors share some special characteristics. Excellent vision helps these birds spot their prey. Long, sharp claws, or talons, help to catch and kill food. A sharp hooked beak helps not only to kill prey but also to tear food apart.



Raptors are incredible fliers. They can glide, flap, hover and soar in the air. When gliding, a hawk holds its wings slightly tucked-in with its tail closed. This streamlined shape gives the bird the speed needed to catch its prey. Flapping flight allows the bird to rise in the air and move forward. Some raptors, such as the kestrel, our smallest falcon, and the large rough-legged hawk, hover. While hovering, these birds scan the ground for prey.

When most of us think of a hawk, we picture a bird soaring high in the sky. With wings spread, the bird simply "rides" the waves of warm air rising from the ground. These waves are called thermals, and raptors riding them can soar long distances at great heights. Migrating raptors seek out thermals to help them on their long journey. At other times, they just seem to enjoy the ride. After watching a soaring raptor, it's no wonder why some people wish they could fly!

Bald Eagle Recovery

If you were a student living 30 years ago, your chances of seeing a bald eagle were pretty small. At that time, bald eagles were very rare. In fact, bald eagles were declared an Endangered Species in 1978 in most of the United States. How could our national symbol be in danger of extinction?

In the early 1900s, bald eagles and other raptors were shot by people who misunderstood birds of prey. They saw eagles and hawks as a threat to their farm animals. Some people even thought eagles could catch and carry away a small child! People also began to take away eagle habitat. Forests were cleared of the big trees eagles needed for nests. People built homes around lakes and along rivers where eagles lived. Our eagle population began to drop. In 1940, bald eagles were protected from shooting by the Bald Eagle Protection Act, but people continued to take away habitat. Worse yet, they started to use a pesticide called DDT.

DDT is a chemical used to kill insects. It can also be harmful to other animals, including eagles and people. When DDT was sprayed, it often washed into streams and rivers. It was taken up by plants and then moved up the food chain as one animal ate another. When an eagle ate a fish, it was eating large amounts of DDT. Some eagles got so sick that they died. DDT also made the eagle's eggshells very thin. The eggs cracked easily when the parent birds sat on them. The developing eaglets were killed. All over the United States, young eagles were not hatching. With no young eagles surviving, eagle numbers decreased. The birds became endangered.

Fortunately for eagles and other raptors that had been affected by DDT, we found out what was happening. DDT was banned and could no longer be used. We also realized the importance of good habitat for eagles and began to protect eagle habitat. Bald eagles returned to places where they had disappeared. In Idaho, only 15 pairs of bald eagles nested in 1982. By 2006, over 200 pairs nested in our state. As Idaho's eagles show, the recovery of the bald eagle is truly one of our greatest conservation success stories.





... Or Be Hunted

Animals that are hunted and eaten by other animals are called prey. Mice, insects, deer and rabbits are just some of the examples of prey animals.

Prey species are important links in the food web. They help to pollinate flowers and spread plant seeds in their droppings. A few prey animals are both predators and prey. A dragonfly may eat an insect and then be eaten by a fish. Weasels eat mice and may be eaten by great horned owls.

Prey species have adapted to survive in a world of predators. More than one type of predator may eat a

prey species, so some prey animals need to have a lot of babies. This way they will make sure that some members of their species survives.

Prey may also live together in groups to help them outsmart a predator. It's much easier to see danger with many eyes looking than just one pair. By living in a group, female elk also have an easier time raising their young. Elk will baby-sit for each other.

It might be easy to feel sorry for a prey animal when it is eaten, but they are just playing their role in nature. Without them, who would predators eat?

Nest Sweet Nest

Birds do many amazing things. One of those things is nest-building. Using their feet, beaks and bodies, birds are able to make sturdy nests out of simple things like sticks, grass and mud. Some birds may fly miles as they bring materials to the nest site. Many of these nests are so well made that they last for years. A bald eagle nest in Ohio was used by eagles for 34 years! This nest got so heavy that it finally broke down its tree.

Birds also build their nests in a wide variety of places. Trees and shrubs are places you have probably seen nests. How about the mud nests barn and cliff swallows make under bridges and on cliffs? Or the ground burrows that burrowing owls use? Kingfishers dig burrows into the banks of lakes, rivers and streams. Wrens have been known to nest in mailboxes and clothes hanging outside to dry. Killdeer nest on the gravel rooftops of buildings or in gravel driveways. Some waterbirds, like loons and grebes, build floating nests that keep their eggs safe from land predators.

Other birds use unusual things in their nests. Ospreys seem to like to decorate their nests with manmade things. Items like bailing twine, boots, oars, and even a Barbie doll have been found in osprey nests. Perhaps the most unusual nest was one made by a canyon wren. This little bird decided to build its nest in an office building and it used office supplies like paper clips, rubber bands, pins, wire, and toothpicks. In all, the wren used 1,791 items to make its two pound nest! White-necked ravens have been known to build their nests using barbed wire! Now, that would be a well-protected nest!



Eagle Watch

Observing bald eagles is a lot of fun. In Idaho, December and January are great times to eagle watch. At this time, we not only can see eagles that live in Idaho all year long, but we can also see eagles that migrated here from colder, northern climates.

The birds gather in large trees near open water to fish and roost. If the fishing is good, you may see a lot of eagles in one area. Be sure to check the trees carefully because usually when you see one eagle, others will be nearby. Check out their feathers to identify the bold white head and tail and brown body of the adults. Look for the splotchy feathers of the immature birds. If you watch long enough, you might get to see an eagle catch a fish, or see one eagle steal a fish from another.

To find bald eagles, travel along a river or around a lake. Whenever you find some open water, scan the nearby trees. If eagles are present, they are usually not too hard to spot, especially if you are using binoculars. Remember to dress warmly, because it is usually cold near the water. Use your car as a blind to watch the eagles and stay warm. Also, remember to be a good wildlife watcher and do not get too close. If you meet others looking for eagles, share your observations and help them find the eagles.

Some parts of the state have organized eagle watching events. These educational events are great ways to get to observe and learn about wintering eagles. Contact your regional Fish and Game office to find out about any eagle watching events in your area.



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Hunt ♦♦



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A predator is an animal that kills and eats other animals to survive. People usually think of large animals like wolves and mountain lions as predators, but predators come in all sizes, from big wolves to tiny spiders.

Would you think of a bluebird or bald eagle as a predator? Both are birds that eat other animals to survive. The bald eagle eats fish, and the bluebird eats insects. They are predators even though some people may not see them that way.

The number of predators there are depends upon the number of animals they have to eat. The more rabbits there are, the more bobcats you may see. As soon as rabbit numbers drop, so will the bobcat numbers.

Predators are an important part of the ecosystem. They help maintain the balance of nature. We might be overrun with mice, if it weren't for predators. Predators also often eat sick and unhealthy animals. Removing unhealthy members in a group helps to keep the whole group healthy and strong.

Predators may sometimes be seen as vicious or bloodthirsty, but they really are not. Predators kill for one reason – to survive. Wildlife acts instinctively (in-STINK-tiv-lee) or naturally. They have no choice. Predators have a job to do in nature, and they do it very well.

The Eyes Have It

Good eyesight is important to birds of prey. It helps them spot prey from long distances and keep the prey in focus until it is caught. Good eyesight is also important to avoid predators.

Birds of prey have eyes that face forward, just like yours. Both eyes look at something at the same time. This is called binocular vision. Raptors can also see things off to the side by using their right or left eye by itself. This is called monocular vision. You can have monocular vision by covering one eye.

Because raptors have both binocular and monocular vision, they have two well-focused side views and one well-focused front view all at the same time. Large numbers of special cells, called cones, are grouped together to form foveae (FO-vee-ee). These groups of cones give the bird very sharp vision as well as color vision. Birds of prey have two kinds of foveae. The central foveae provide sharp monocular vision on either side of the bird. Temporal foveae give the bird sharp binocular vision when looking straight ahead. Together, these foveae give birds of prey three areas that provide excellent vision. The bird has three well-focused views at the same time. This is a big advantage when finding and catching prey from a perch or from the air.

Birds of prey are also able to focus their eyes very quickly. The lens of the eye and the shape of the eye can change very rapidly, keeping objects in focus. These changes in the eye are called accommodation. A falcon diving to capture a bird can keep its prey in clear focus from the time it spots the prey until the prey is caught. Wow, it's no wonder that a bald eagle can see a fish from a mile away!



An Eagle Grows Up

Like many birds, baby eagles are pretty helpless when they first hatch. They do not have many feathers and cannot feed themselves. Baby birds like this are called altricial (al-TRISH-al). Birds like ducks, geese, and sandpipers usually have babies that are called precocial (pre-KO-shall). This means that they have quite a few feathers and are able to feed themselves and keep up with their parents a few hours after hatching.

For the first few weeks, eaglets are covered with gray down. Their eyes are open, and they have huge feet. During this time, they are still kept warm by their parents. By three weeks of age, they are starting to get flight feathers on their wings. Body feathers start growing when the youngsters are four weeks old. This is also the time when they begin to gain a lot of weight. Eagle parents are kept very busy hunting to feed their hungry brood.

Eagle eggs hatch in the order that they were laid. This often means that one eaglet will be a lot smaller than its siblings. Unfortunately, the smaller eagles often die, because the older bird gets most of the food. While this may seem sad, the older chick is more likely to grow up strong and healthy because of all the food it will get from its parents.

It takes very good eagle parents to raise all their babies each summer. One such pair lives outside of Salmon. This pair of bald eagles has successfully raised 12 eaglets in the last four years. In fact, during the summer of 2004, they raised four eaglets! Very few eagle parents are able to raise this many eaglets. This pair is probably the most successful bald eagle pair in Idaho.



Bald Eagle Wordsearch

W X I Y G O C Q J V X K B G B
W E P F Z K T U O I S W T T V
Y B T H F G C Y S S V O U S P
B Q Q S O M A T E I E H A H T
X D V L E F M P Z O H N Y R U
G L D X Q N Q V M N S B E Z Y
G E D T Y H C V Y X I S A U P
N F Z Q Z P J B E I F X T M L
N H W Q F I K F B M K X Y N J
A V I X Z J V H J S B I F K J
E A G L E T S G B H X L P J R
E U L L O M E T E M P F E U D
J T Q E O V N N E Z I C X M V
Y E R P I A T Y Y F T J S D N
S X U F D L Y F K G H J P V E

Words

Eaglets

Five

Prey

Emblem

Golden

Soar

Fish

Mate

Vision

Nest

1. Bald eagles have excellent _____.
2. Baby eagles are called _____.
3. Young eagles are about _____ years old before they get their adult feathers.
4. Eagles will return to the same _____ year after year.
5. The bald eagle became our national _____ in 1782.
6. The other eagle that lives in Idaho is the _____ eagle.
7. A bald eagle usually stays with one _____ throughout its life.
8. The long broad wings of eagles help them to _____.
9. Bald eagles love to eat _____.
10. Bald eagles are Idaho's largest bird of _____.

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WE WOULD LIKE TO HEAR FROM YOU !

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