



Volume 31/Issue 7 Northern Harrier March 2018

NORTHERN HARRIER



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MEET THE NORTHERN HARRIER



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If you spend time in open country, you have probably seen a northern harrier. This beautiful hawk loves Idaho's open spaces. Grasslands, marshes, farmlands or other places with few trees are where harriers live. They are sometimes called gray ghosts because of the males' soft gray feathers. The females and young birds are brown. But both males and females have a big white patch on their rump. They also have very long tails with black stripes.

When harriers fly, they hold their wings in a V-shape. This makes them seem to bob on the air like a cork bobbing in water. Their long slender wings allow them to fly close to the ground, looking for food. Because their wings are so long---almost four feet---harriers do a lot of gliding. This helps them sneak up on their prey. Harriers eat small mammals like voles, mice and shrews as well as birds, lizards, snakes and frogs. Sometimes they will eat insects or animals as large as rabbits.

A harrier's face looks a lot like an owl's face. It is rounded and the feathers make half-circles around the bird's eyes. This is called a facial disk. It helps direct sound to the bird's ears. Having facial disks helps harriers find prey using sight

and sound. When you are searching for a mouse deep in the grass, this is a big help.

Because they live in open habitat, harriers nest on the ground. They build a platform of thick-stalked plants like cattails or willow. These platforms are often built in places with thick shrubs. Grasses are used to line the nest where the four to five eggs will be laid. It takes almost two weeks to build the nest.

Female harriers incubate the eggs and keep the nestlings warm. Males bring food to feed the female and her babies. Often, the female flies out of the nest to meet the male and he gives her the prey in mid-air. She then returns to the nest to feed the babies. Mid-air food exchanges helps keep the nest hidden from predators. And any possible predator near a nest better watch out! Harrier parents defend their nest by dive-bombing the intruder to drive it away.

Harriers are found all across North America. They live in Idaho all year long, giving us plenty of chances to see them. Next time you are out in Idaho's beautiful open country look for the slender, long-winged harrier, bobbing over the ground as it searches for food.



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The Hawk Family



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Hawks are a large group of usually solitary birds of prey. Scientists have identified at least 235 different species. They are closely related to falcons. You can see hawks just about anywhere in the world except the high Arctic and in Antarctica. Here in Idaho, you can see 11 different species of hawk.

Hawks share a number of characteristics. They are diurnal (die-UR-nal). This means that they are active during the day. Hawks have hooked beaks used for tearing their food. They have strong legs and feet that they use for grasping and killing prey. Excellent eyesight lets hawks spot their food a mile away! Each eye is shaded by a bony ridge that makes the hawk look mad.

Most hawks mate for life. They build large stick nests in trees, on cliffs or on manmade structures. Some species build their nest on the ground. Nests are often re-used for many years. Sometimes, a nest that has been used for a long time can get so heavy that it breaks the tree it is built in! Eagle nests are known for weighing hundreds of pounds. Many hawks will aggressively defend their nest. Intruders are often chased away by the parent birds.

Young hawks look very different from their parents. They might have feathers with different colors and patterns. Several species have yellowish eyes when they are young, but their eyes turn red when they are adults. Young bald eagles have dark beaks that turn yellow when they are adults. It might take several years for young hawks to get their adult feathers.

Female hawks of all species are larger than the males. No one is quite sure why this is the case. If you see several hawks perched together see if you can tell the difference between the males and females.

Hawks are familiar birds because we often see them soaring high above. Unfortunately, this makes them easy targets for people to shoot. Long ago, people thought hawks were bad. They thought hawks would eat livestock and even small children. We now know a lot more about hawks and what they really eat. This has helped people understand the important role hawks play in the food web. Hawks are now protected, and most people enjoy the sight of a hawk soaring through the sky.

SHOW-OFFS

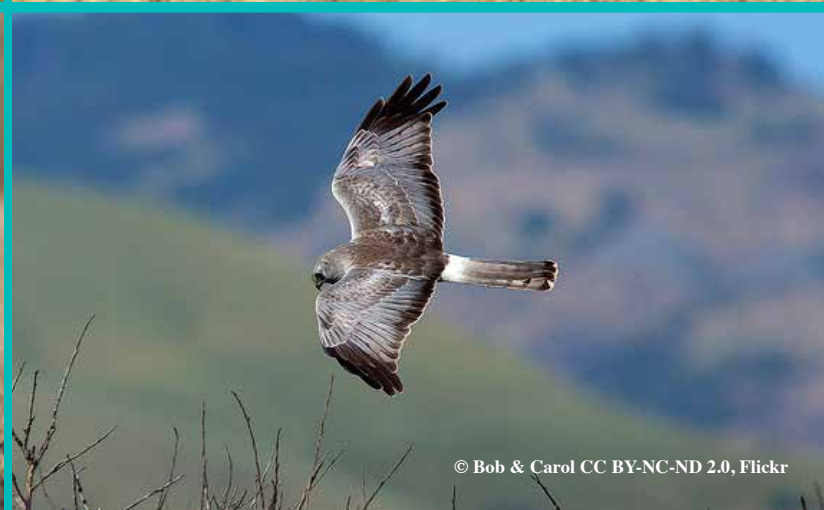
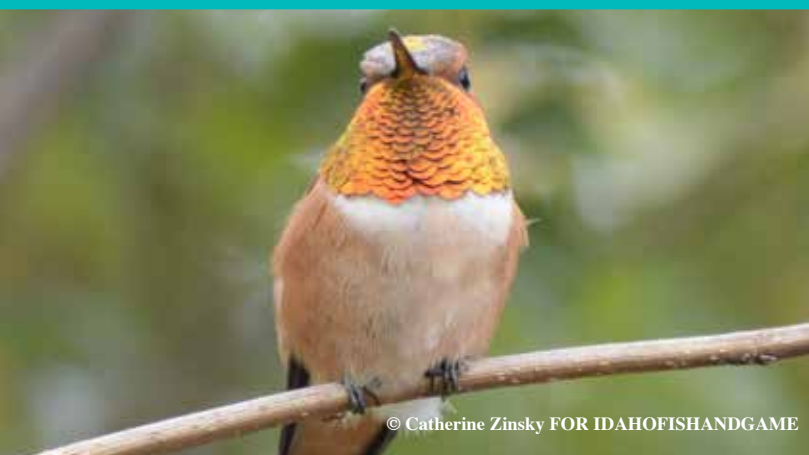
Valentine's Day might be over for us, but the season of romance is just getting started for birds. In the bird world, it is the handsomest guy with the coolest moves and the prettiest song that gets the girls. Male members of the grouse family like sage grouse or sharp-tailed grouse, put on quite a show to attract the hens. First, there are the sounds: hoots, pops, scrapes, rasps, drumming, and stamping. Then there are the moves: wing fluttering, foot stamping, wing beating, leaping, tail fanning, and bows. Finally, the look: tail fans, colorful air sacs, ruffs around necks, decorative feathers, and colorful eyebrow combs. Put this all together and you have an impressive courtship display that is sure to attract attention.

Even tiny male hummingbirds put on quite a show for the females. They flash their colorful, shiny throat feathers from a very obvious perch. Some will hover right in front of a female, trying to get her attention. Male black-chinned hummingbirds do something called a pendulum

flight. They fly in a deep, wide U-shape through the air. Air moving through their tail feathers makes a loud humming noise. All this swooping and humming is quite a show, especially from a four-inch bird.

Birds of prey are also pretty good at showing off. Male northern harriers have a spectacular display called sky dancing. The flight looks like the bird is on a roller-coaster. At the top of each peak, the harrier does a complete barrel roll before diving back toward the ground and swooping upward again. Sometimes these sky dances might cover a half-mile. The male harrier will even fly 1000 feet up into the air.

All this singing, dancing and flying might seem kind of odd, but it is serious business. A male with a good display can defend the best territory. This territory will have good nesting sites and plenty of food. Both are important for raising young. Showing off tells females that the male bird is not just a pretty face.



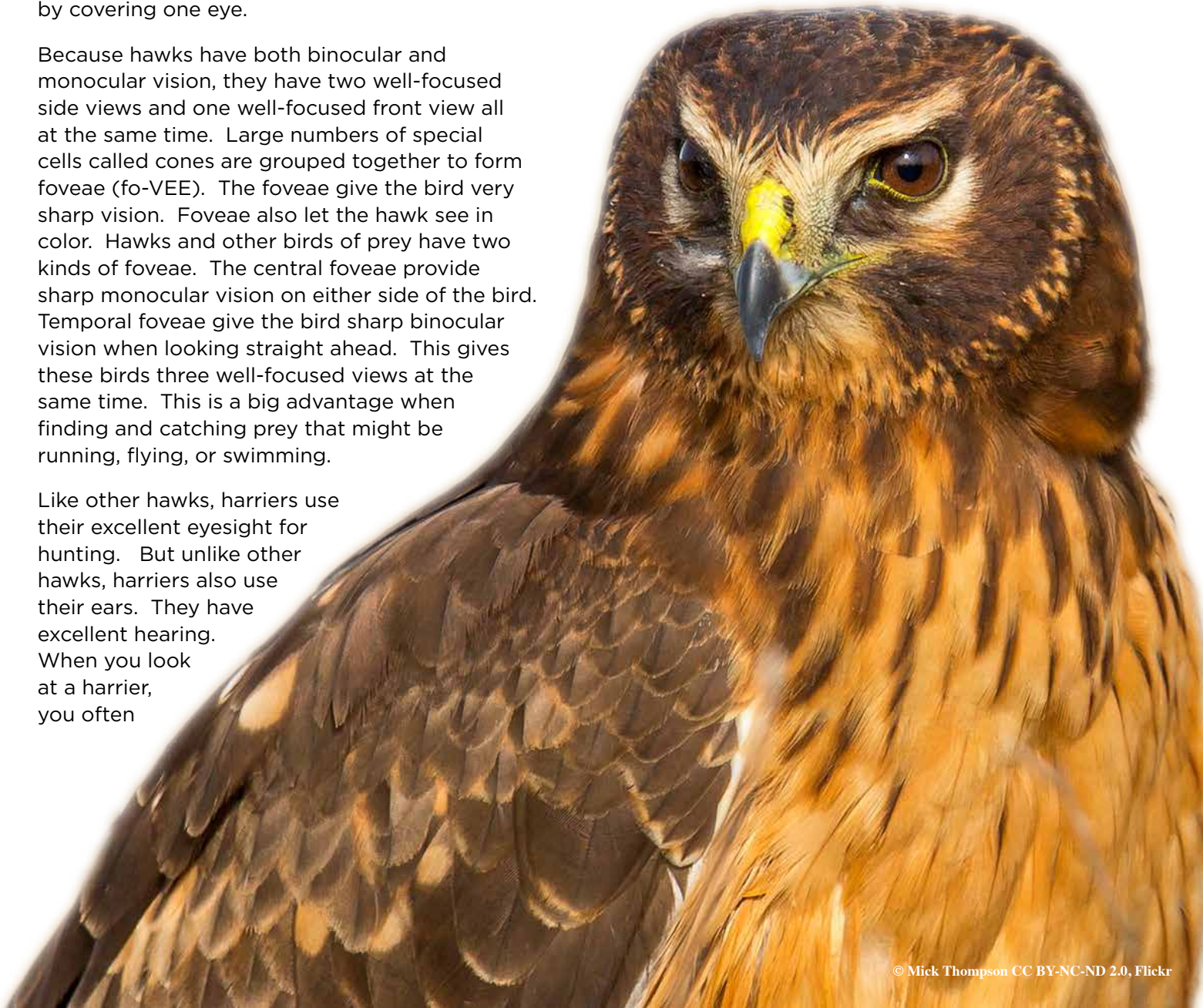
SIGHT AND SOUND

Many birds of prey are known for their excellent eyesight. They can spot prey from long distances. Bald eagles can see a fish up to a mile away! Like most predators, hawks have eyes that face forward, just like yours. Both eyes look at something at the same time. This is called binocular vision. Hawks can also see things off to the side by using their right or left eye by itself. This is called monocular vision. Try out your monocular vision by covering one eye.

Because hawks 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). The foveae give the bird very sharp vision. Foveae also let the hawk see in color. Hawks and other 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. This gives these birds three well-focused views at the same time. This is a big advantage when finding and catching prey that might be running, flying, or swimming.

Like other hawks, harriers use their excellent eyesight for hunting. But unlike other hawks, harriers also use their ears. They have excellent hearing. When you look at a harrier, you often

think of an owl. This is because harriers have facial disks like many owls. The stiff feathers of a facial disk help to direct sound toward the harrier's ears. This can help the bird hear the prey it might not be able to see. Harrier habitat has a lot of thick grasses where prey animals can easily hide. By having excellent eyesight and hearing, harriers can find the food they need to survive.



Telling the Difference

Telling the difference between male and female birds is sometimes easy. And it is sometimes difficult. If the male bird has brightly colored feathers and the female does not, telling the difference is easy. Think about a mallard duck. That bright green head, yellow bill, white neck-ring and light gray body make it easy to tell the male from the brownish female. Other birds like sparrows or flycatchers look alike. This makes it almost impossible to tell the male from the female just by looking at the bird.

In a few species of birds of prey, the male and female look different. The northern harrier is one of these. The ghostly gray male looks quite different from the brown, tan and white female. Male and female American kestrels also look quite different. These little falcons are very colorful, making it easy to tell a male from a female.

Because most male and female birds of prey look alike, it is their size that tells them apart. Female birds of prey are larger than the males. Sometimes they are quite a bit larger. A female bald eagle can be five to six inches taller than the male and weigh several pounds more. Female northern harriers are two to four inches taller than the 16 - 18 inch tall males. They can also weight twice as much as a half-pound male.

Scientists are not sure why female birds of prey are larger. It might have to do with nesting. Larger birds can more easily incubate eggs and keep nestlings warm. Another reason might have to do with food. Larger birds catch larger prey. This allows both parent birds to catch different-sized prey. By hunting different prey, parent raptors can provide their babies with plenty to eat.





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Winging It

When you watch a bird fly, you might think that all bird wings are the same. In fact, they are quite different. A songbird like a robin has different wings than a red-tailed hawk. And the hawk has very different wings than a Canada goose.

Different birds use their wings in different ways. For example, a red-tailed hawk soars high up in the sky. Its long, broad wings allow the hawk to take advantage of rising warm air, called thermals. The hawk can soar on the rising air for a long time as it looks for food.

On the other hand, have you ever seen a robin soaring like a hawk? Of course not! Robins have short, broad wings that are good for

flying through the trees, not soaring. Birds like quail and grouse have short, rounded wings. Their wings help them with their explosively quick get-aways. But you will never see them soaring high in the sky. And you will never see a red-tailed hawk fly away as quickly as a quail.

Hummingbirds have very specialized wings. These tiny birds are the only birds that can fly forward, up, down and backwards. In fact, they are the only kind of bird that can fly backwards. Hummingbird wings also allow the bird to hover in front of a flower. Have you ever seen a robin, red-tailed hawk or grouse hover? Even if they cannot, their special wings allow them to do the flying they need to do to survive. Wings really are amazing!



Be Outside This Spring!

March in Idaho can mean many things. One day it is warm and sunny. The next, it's snowing! Winter cannot let go, but spring seems slow to arrive. Officially, spring begins on March 20 with the vernal equinox. This is a day when the amount of light and dark is just about equal. After that date, we start getting more and more daylight.

You can find many signs of spring by getting outside and looking around. Check out the trees and shrubs in your yard. Do you see buds on the tips of branches? Pull dead leaves away from the soil. Can you find green shoots coming up out of the ground? These are the first spring flowers. You can even listen to the sap rising in the trees on warm afternoons. Thin-barked trees like aspen or a young cottonwood work best for this. Press your ear tightly against the bark and listen very carefully. Do you hear gurgling? That is the sound of sap rising from the roots into the tree's trunk and branches. If you have a stethoscope, you will be able to hear the sap even better. In the winter, sap is stored in tree roots. But as spring arrives, trees come out of their winter dormancy. The sap rises to help nourish the tree.

Bird song is another sure sign of spring. As the days get longer, male birds sing to establish a territory. In some places, like a marsh, the sound of singing birds can be very loud! Here are some songs to listen for in your neighborhood:

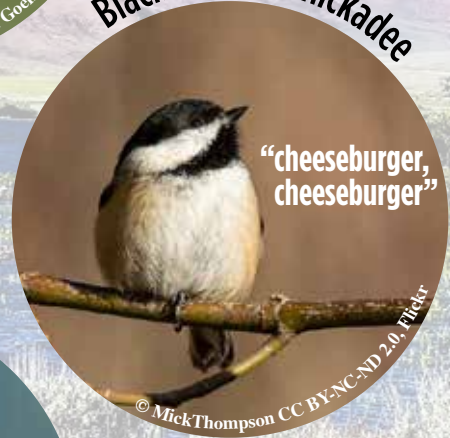
Red-winged Blackbird



“kong-a-ree,
kong-a-ree”

© Jen Goehritz CC BY-NC-ND 2.0, Flickr

Black-capped Chickadee



“cheeseburger,
cheeseburger”

© MickThompson CC BY-NC-ND 2.0, Flickr

American Robin



“cheerily,
cheer, cheer-up,
cheer-up”

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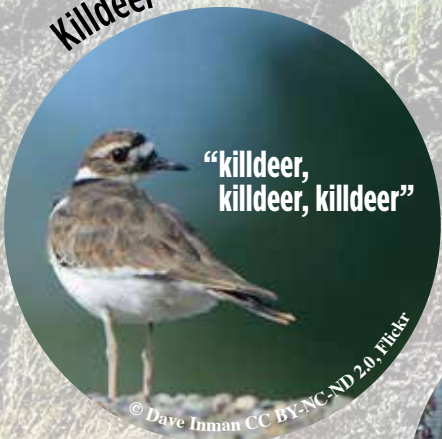
Song Sparrow



“maids, maids, put
on your tea kettle-
lettle-lettle”

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Killdeer



“killdeer,
killdeer, killdeer”

© Dave Inman CC BY-NC-ND 2.0, Flickr

Northern Flicker



“flicka, flicka,
flicka, flicka”

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Northern Harrier Puzzle

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

Words

Bigger
Brown
Dance
Face
Foveae
Grasslands
Gray
Ground
Hawk
Mouse

A harrier's face looks like an owl's _____.

A place harriers like to live. _____

Females are _____ than males.

Harriers nest on the _____.

Harriers may pass this to each other while flying. _____

The color of a female harrier. _____

The color of a male harrier. _____

Harriers are a type of _____.

Male harriers sky _____ for their mates.

These give harriers their sharp vision. _____

WILDLIFE EXPRESS

Volume 31 • Issue 7 • Northern Harrier • March 2018

Wildlife Express is published nine times a year
(September-May)

by the Idaho Department of Fish and Game

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WE WOULD LIKE TO HEAR FROM YOU!
If you have a letter, poem or question for Wildlife Express,
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