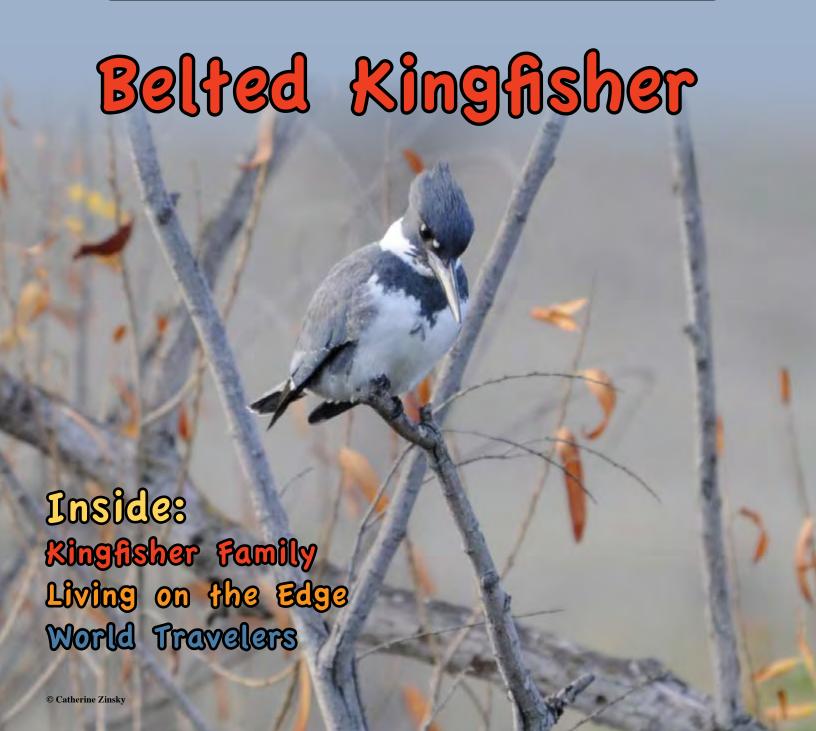


Volume 29/Issue 6

Belted Kingfisher

February 2016



Belted Kingfisher

daho's rivers, streams and lakes are a perfect place to meet the belted kingfisher. This stocky, blue-gray bird loves water. It is about the size of a loaf of bread. The kingfisher's large head has a crest. This makes them look like they are having a really bad hair-day.

You often hear a kingfisher before you see it. Their loud rattling calls are given when the bird is flying or perched. Kingfishers are fast fliers, zipping from perch to perch. When you see a kingfisher, check out the colors on its chest. Males have a blue-gray band across their chest. Females have both a blue-gray band and a rusty-colored band. Belted kingfishers are one of the few birds where the female is more colorful than the male.

As you might guess from its name, the kingfisher eats fish. These birds perch on branches overhanging

the water. They watch for small fish swimming near the surface. Sometimes they even

hover over the water as they hunt. When they spot a fish, they dive down beak-first. Using their stout beak like a pair of pincers, they grab the fish and quickly fly back to their perch. Then they do something a bit strange---the kingfisher hits its prey against the branch. Biologists think this behavior helps stun the prey, making it easier to eat. It could also help break off the fin spines of fishes like sticklebacks or bullheads.

Kingfishers sometimes eat crayfish, mollusks, insects, amphibians and small reptiles.

Kingfishers are solitary birds. They defend a territory along a river, stream or lakeshore all year. During the breeding season, the pair defends a smaller territory and nest site. Kingfishers do not build a nest like other birds. Instead, they dig a burrow into an earthen bank. Both parents work to dig the burrow. It is three to six feet long and ends in a small chamber. This is where the female lays her five to eight white eggs.

Baby kingfishers are fed by both of their parents. The stomachs of baby kingfishers are extremely acidic. The acid helps them digest tough things like fish scales and bones.

Most animals, including humans, have acid in their stomachs to help with digestion. However, our stomach acid is pretty wimpy compared to that of a baby kingfisher. But about the time they are ready to leave their nest burrow, their stomach acid changes. It is no longer strong enough to digest bones and scales. Then, the youngsters start making pellets like their parents. This is the grown-up kingfisher way of getting rid of those tough scales and bones.

Belted kingfishers are found all over North America. They live year-round in Idaho as long as they can find open water in the winter. The next time you are near the water, listen for the loud rattling call of this amazing bird!



By JJ Harrison (jjharrison89@facebook.com) (Own work) [CC BY-SA 3.0 (http://creativecommons.org/licenses/by-sa/3.0)], via Wikimedia Commons

The 95 different species of kingfisher are divided into three separate groups—tree kingfishers, river kingfishers and water kingfishers. These different groups of birds live in different places around the world. They also eat different kinds of prey. For

each foot are partly joined together. This kind of

foot is called syndactyl (sin-DAC-till). Scientists are not sure why kingfishers have syndactyl feet.

example, tree kingfishers are found mainly in Asia and Australia. They often live far from water and eat invertebrates, lizards, rodents and even venomous snakes. The laughing kookaburra is a tree kingfisher that lives in Australia. River kingfishers live in Africa, Europe and Asia. They are the smallest of the kingfishers. The African dwarf kingfisher is only four inches long! Idaho's belted kingfisher belongs to the last group, the water kingfishers. The water kingfishers are found only in North, Central and South America.

Here in the United States, we can see three different species of kingfisher. The belted kingfisher is the most common. The other two species are the ringed kingfisher and the green kingfisher. They live in the far southern parts of Texas, New Mexico and Arizona. The ringed

kingfisher is the largest, almost twice the size of the belted kingfisher. The green kingfisher is a small, robinsized kingfisher. It gets its name from its emerald-green feathers. It has a very long beak. Bird watchers make special trips to look for both of these uncommon kingfishers.



By John Gerrard Keulemans 1842–1912 [Public domain], via Wikimedia Commons

African Dwarf Kingfisher

Pellets

hink about the last time you ate a hamburger. Did you have to pick hair and bones out of your burger? Of course not! Because we cannot digest hair and bones, the butcher removes them from the meat we eat. But what about birds that eat mice, fish, insects or birds? They cannot visit the butcher to get their food cleaned. It turns out that these birds have a pretty neat way of taking care of the indigestible parts of their food-pellets.

Pellets form in birds that eat other animals. This includes birds like owls, hawks, eagles, shorebirds, kingfishers, herons, shrikes, grebes and others. Pellets might look a bit like poop, but they are formed at the top of the digestive tract instead of at the end. Pellets contain the parts of food that birds cannot digest. This includes fur, bones, feathers, teeth, claws, insect exoskeletons, crayfish claws, fish scales and shells. Pellets are often found on the ground beneath nests or roosting sites.

A pellet is formed in the bird's gizzard. This is a muscular part of the stomach that grinds food. The digestible meat gets separated from the indigestible parts. It takes about six to eight hours for a pellet to form. Since the pellet partly blocks the upper part of the stomach, the bird spits up the pellet so it can eat again.

Biologists can learn a lot about a bird by dissecting its pellets. Pellets contain many clues about a bird's diet. They can also tell a biologist how many of each kind of prey animal a bird is eating. Sometimes, odd things like metal bird bands turn up in the pellets of bird-eating hawks.

Pellets are fascinating to dissect. If you find one, gently pull it apart to separate the bones and fur. Put the bones that look alike together. This can help you get an idea of how many animals the bird ate. You might be surprised! Once you are done with your dissection, make sure to thoroughly wash your hands.

Long-eared owl pellets and rodent bones obtained from dissected pellets (1 bar = 1 cm).



What's in a Name?

cience is full of names. Animals and plants have common and scientific names. Common names are in the language of the country where the animal lives. Scientific names are in Latin. This helps scientists all over the world know what animals and plants they are talking about. For example, we say belted kingfisher. A scientist might say *Ceryle alcyon*. This is the belted kingfisher's scientific name.

The diet of the omnivorous raccoon, which is usually nocturnal, consists of about 40% invertebrates, 33% plant foods, and 27% vertebrates.

By Dave Menke

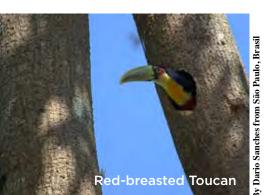
Science also has special names for groups of animals. You already know some of these names. How about carnivore, herbivore or omnivore? See, you are already speaking the language of science. Like scientific names, these words often come from Latin words.

The suffix "—vore" comes from the Latin word "vorare." This means "to devour." The prefix "carni" means meat. Put them together and you have carnivore, a meat-eater. Omni is Latin for all or many. An

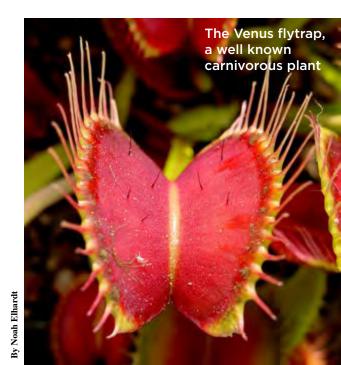
carnivore herbivore omnivore

animal that eats many different things is an omnivore. How about a plant eater? Herb refers to plant, so an herbivore is an animal that eats plants.

Sometimes, these labels can get very specific. An insectivore is a specific kind of carnivore that eats insects. Shrews are insectivores. Frugivores are herbivores that eat fruit. Toucans that live in the tropics are frugivores. Ever hear of a hemovore? In Latin, "hemo" refers to blood. So, a hemovore is an animal that eats blood. Next time you swat a mosquito, you can say "take that you hemovore!" Have fun



using a dictionary to create names for animals based on what they eat. You probably have some pizzavores right in your classroom.



he place where two habitats meet is called an edge. Edges occur in many places. The border between a meadow and a forest is an edge. The border between land and water is an edge. Edges can be very large or quite small. Being able to use both habitats along an edge is a big benefit for many animals. This is why many different kinds of plants and animals often live in edge habitats.

Belted kingfishers live on the edge between land and water. They depend on water for their food. They also need trees near the water for perches and earthen banks for nest sites. Many animals share the kingfisher's edge habitat. Birds such as wood ducks, great blue herons, flycatchers, swallows, eagles, osprey and others live along water edges. Mammals like muskrat, mink, raccoon, otter and beaver can also be found along water edges. These animals use both the water and land habitats.

Sometimes animals might only live in one part of an edge habitat. But they benefit from both parts. Fish living in streams benefit from the land along the water. Trees create shade, helping keep the water cool. Insects living in trees and shrubs fall into the water and are eaten by the fish. Other animals only use the water to drink. They find food and shelter in the habitat along the water. Edge habitats offer the best of both worlds.



By Bureau of Land Management [Public domain], via Wikimedia Commons



World Travelers

or the most part, birds live in the same places all their lives. Many birds migrate long distances between summer and winter ranges. Once they arrive, however, they usually stay put until it is time to migrate back. Other birds travel all over the place. Belted kingfishers are known for being world travelers. They have been found in places as far away as Hawaii, the Galapagos Islands, Great Britain, Greenland and the Netherlands. That's a lot of traveling!

Sometimes we can figure out why birds travel far from their homes. A group of birds called winter finches are what we call irruptive. This means that every few years, they travel far from their normal winter homes. These birds include pine siskin, evening grosbeak, red-breasted nuthatch and common redpoll. You might see them visiting your backyard feeders. In the case of the winter finches, lack of food seems to be why they travel.

Not being able to access food is the reason why snowy owls sometimes travel far from their winter



© Michael Morrison

homes. When these owls have a lot of food in the summer, most of their babies survive. When winter arrives, adult owls defend their territories and the food in them. This means that the young owls have to fly far away to get enough to eat. Several years ago, a few young snowy owls traveled from their Arctic homes to Idaho, looking for food.

Some birds find themselves in faraway lands during migration. Strong storms can blow a bird off-course. Ships far out in the ocean sometimes find exhausted birds sheltering on-board because they were blown offcourse.

In the case of belted kingfishers, no one really knows why they sometimes travel long distances. Like some people, maybe they just get an itch to see someplace new. Whatever the reason, it is another mystery that makes birds such fascinating creatures.





Be Outside The Great Backyard Bird Count (GBBC)

ebruary 12 - 15 is the 19th annual
Great Backyard Bird Count. During
this four-day period, people all
over the world become citizen scientists.
They do that by observing and counting
birds. They count in yards, parks, trails,
just about anywhere birds can be found.
You can join in the fun!

The GBBC is free and open to anyone interested in birds. It is a great family activity. Many families join the count by observing birds in their yard or at a favorite park. In 2015, birdwatchers in the United States recorded 671 different species of birds. The world list tallied 5,090 species!

All this counting by citizen scientists helps to answer important questions. It gives a picture of winter bird populations across the globe. It documents irruptions of species. It shows how weather influences birds. Migration patterns can be seen. This data can help answer future questions that we have yet to ask. You do not need to be a bird expert to join the GBBC. Check out the GBBC website at **www.birdsource.org** for all the information and directions. It is easy and fun. Maybe your teacher would give you extra credit for being a citizen scientist for a weekend!













Kingfisher Word Search

WORDS

P	В	S	Ε	D	Q	Н	G	Ε	R	Y	G	R	K	D
С	P	U	U	U	R	P	R	0	Ε	R	K	G	I	I
F	0	0	Z	V	L	0	I	Р	Т	0	A	V	Т	A
V	L	L	F	R	V	В	Χ	Ε	A	Т	Ε	W	Q	F
A	Н	Y	0	I	Z	0	С	L	W	I	В	D	Т	L
V	U	I	N	R	Ε	P	С	L	W	R	N	V	N	М
P	E	R	С	Н	F	M	Y	Ε	R	R	Т	N	I	F
L	A	U	R	S	K	U	С	Т	Т	Ε	Y	S	В	Н
С	L	0	R	Т	A	P	L	S	R	Т	Χ	U	M	I
F	Ε	Ε	Т	A	K	J	P	Н	L	Ε	R	R	G	F
Н	0	U	M	V	М	0	U	R	0	R	V	Т	Ε	I
S	Н	0	R	Ε	L	I	N	Ε	0	V	S	I	G	S
W	В	D	F	R	Z	V	Н	W	J	Ε	Ε	Н	R	Н
U	S	С	I	Ε	Ε	R	Т	0	R	F	N	R	K	Н
G	В	A	A	R	В	Т	Ε	С	М	E	Z	Y	Z	J

BEAK BLUE BURROW CARNIVORE COLORFUL CREST DIVE **FEET** FISH FLY **HOVER** LOUD **PATROL PELLETS PERCH RIVER**

SHORELINE TERRITORY

> **TREE WATER**

WILDLIFE EXPRESS

Lead Writer: Vicky Runnoe Layout: Kelly Kennedy Yokoyama Contributors: Lori Adams, Adare Evans



adare.evans@idfg.idaho.gov

Wildlife Express, Idaho Fish and Game PO Box 25, Boise, ID 83707