

WILD TIMES

KIDS MAGAZINE

FALL 2018



INSIDE:

Animals play
hide and seek

Collecting
kokanee eggs

Learn about
long-eared owls



ACTIVITIES | LESSONS | INFORMATION | FUN

Hide and seek for wildlife

In the fall, many people wear camouflage clothing to blend into their surroundings so they can be sneaky when they go hunting. Wildlife depend on camouflage year-round to help them blend into their environment. When wildlife have colors or patterns on their fur or skin that help them blend in with their habitat, it is called camouflage. Blending in with the nature around them helps wildlife to survive in many ways. If an animal does not want to be seen by a predator, camouflage helps them hide. On the flip side, camouflage helps predators not be seen while they sneak up on their prey. A predator is an animal that eats other animals, while prey is an animal that gets eaten by a predator.

There are four main types of camouflage wildlife use:

- **Concealing or cryptic coloration** - This is when animals match their background to blend in. For example, weasels shed their brown summer coats to grow in a white coat in the winter. In both seasons, they blend in with the background, whether it is brown grass and dirt in the summer or white snow in the winter.
- **Disruptive coloration** - This is when animals have stripes, spots, or other patterns of color to make their body outline not stand out as much against their background. An example of this is spots on a bobcat or a deer fawn.
- **Disguise** - This is when animals blend into their habitat by looking like another object. Some examples of this are walking stick bugs that look like a twig, a grasshopper looking like a leaf, or an american bittern pointing its beak towards the sky and swaying like grass.
- **Mimicry** - This is when harmless animals look similar to poisonous or dangerous animals in order to fool their predators into leaving them alone. The harmless pale milksnake found in Wyoming looks a lot like the dangerous coral snake, which is not found in Wyoming.

FIELD JOURNAL



Left: Game and Fish staff squeeze eggs out of a kokanee fish. Right: Game and Fish set up traps for kokanee in the river in order to collect eggs to be used to produce the fish at hatcheries for stocking. (Photos by Christopher Martin/WGFD)

Game and Fish collects kokanee eggs

Do you like to fish? You might be surprised to know the Wyoming Game and Fish Department has ten fish hatcheries and rearing stations that raise many species of fish to put in your favorite lakes, rivers and streams. This is called stocking fish. We stock over five million fish each year around the state!

Now that it is fall a few different species of fish are spawning--that is when a female fish lays eggs and a male fish fertilizes them. The eggs grow into baby fish. Spawning in the fall is special because most fish spawn in the spring. The kokanee salmon is one species of fish in Wyoming that spawns in the fall.

Because kokanee salmon like to travel back to the same place they hatched in the wild in order to spawn, it is hard to have them spawn at a fish hatchery. Instead, Game and Fish biologists on the statewide spawning crew set up traps in a few locations each fall to catch the

adult kokanee that are ready to spawn. Here is how they do it:

- As the biologists remove the fish from the trap, they separate the adult Kokanee into groups of males and females. Eggs from the female are collected first in a plastic bowl and then milt from the male is added. Last year, we collected about 570 eggs per female kokanee.
- The egg and milt mixture is swirled around to allow all the eggs to be fertilized before passing the eggs off to another member of the crew.
- Next, the bad eggs are separated from the rest, and salt water is added to the mix to help the eggs get fertilized.
- The fertilized eggs are loaded into coolers for two hours. Then, the eggs are strong enough to be safely transported to a fish hatchery to incubate, hatch, and grow throughout the winter and spring.
- The young fish are then stocked back into lakes in June and July at several locations around Wyoming including

New Fork Lake, Boulder Lake, Green River Lakes, Fontenelle Reservoir, Flaming Gorge Reservoir, Rob Roy Reservoir, Alcova Reservoir, Lake Hattie and more.

When kokanee hatch and grow into small fish in nature, only a small number survive. With the help of the statewide spawning crew and raising the eggs at a fish hatchery, almost all of the little fish survive! Wild spawning lets Game and Fish stock more kokanee each year, and it also means more kokanee return for us to spawn in future years.

If you like fishing for kokanee, now you know that Game and Fish helps you have more fish to catch in Wyoming.

To see a video of game and fish biologists spawning kokanee, visit this link online: [youtube.com/watch?v=px7DIVEkF8U](https://www.youtube.com/watch?v=px7DIVEkF8U).

WILDLIFE PROFILES



Kokanee Salmon (*Oncorhynchus nerka*)

Range: Kokanee salmon are not native to Wyoming. They are very closely related to a type of fish called sockeye salmon. The only difference is that kokanee spend their entire life in fresh water. Sockeye spend most of their lives in the Pacific Ocean and then swim up freshwater streams to lay and fertilize their eggs. Kokanee were introduced to Wyoming in Fremont Lake, New Fork Lake and Flaming Gorge Reservoir. Today they also live in Boulder Lake, Fontenelle Reservoir, and High Savery Reservoir. You can fish for them, too, in the New Fork River and the Green River, both above and below the Fontenelle Dam.

Size: Kokanee can grow to 9-17 inches long and weigh an average of 1 pound. They can sometimes grow to lengths of up to 20 inches long and weigh 3-5 pounds.

Habitat: Kokanee salmon like cold deep lakes and reservoirs. They spawn in loose gravel and sand along lake shores or in river beds.

Young: Adult kokanee spawn their eggs in the fall. The fertilized eggs lay in the gravel of river beds or lake shores all winter

until spring when they hatch. When the eggs first hatch the babies are called an alevin. Alevins have a yolk sack attached to their body and get all their nutrients from the yolk sack. In a few weeks the yolk sack gets absorbed and the alevin develop into a small fish called fry. Fry swim out of the gravel and move downstream into a lake or reservoir.

Predators: Lake trout, brown trout and rainbow trout are all predatory fish that eat kokanee. Hawks, eagles, falcons, and osprey will eat kokanee while they are spawning.

Food: Kokanee mostly eat tiny shrimp like animals called plankton. Sometimes kokanee eat water insects and even small snails.

Did you know? Kokanee only spawn once in their life when they are mature adults of 3-4 years old. Before kokanee are mature they are a silver color with blueish backs. When they are old enough to spawn, kokanee turn bright red and their heads and tails turn green. A week or two after adults spawn, they die.



Long-eared Owl (*Asio otus*)

Range: Long-eared owls are found across North America but are not seen often because of their secretive nature. They can be found at elevations near sea level all the way to above 6,500 feet. They can be found in Wyoming year round.

Size: Long-eared owls are crow-sized owls that look similar to their larger relative the Great-horned Owl. This slender owl weighs from 7- 15 ounces and has a wingspan of 35-40 inches.

Habitat: These secretive birds sleep in thick forests. They hunt in open grasslands or shrublands. They often build nests in forests or brushy vegetation next to open meadows or grasslands

Young: Long-eared owls lay anywhere from 2-10 white eggs in a hollow trees, cliffs or nests in trees. Long-eared owls do not build their own nests, so they use abandoned nests built by crows, magpies or hawks. Baby owls (or owlets) will hatch after about 27 days and are born with their eyes closed, covered in

white down. The owlets are helpless and rely on both parents to bring them food before they are big enough to fly and feed themselves.

Predators: Other large birds of prey, such as red-tailed hawks, golden eagles and great-horned owls, will sometimes eat adult long-eared owls. Raccoons have been known to attack females sitting on their nests. Porcupines, bull snakes, crows and magpies can eat owlets.

Food: Long-eared owls are carnivores, which means they eat only meat. They like to eat small mammals like mice, voles, shrews, pocket gophers, small rabbits and even insects

Did you know? Long-eared owls are nocturnal hunters, which means they hunt at night. They blend into trees by using their camouflage colors, standing up tall, sticking up their long ear tufts and flattening their body feathers to look like a tree branch.



Chronic wasting disease makes the animal lose weight, lose control of their body movements and eventually die.

CWD affects deer, elk and moose

There is a disease in Wyoming and 22 other states that is making mule deer, white-tailed deer, elk and moose sick. It is called chronic wasting disease (or CWD) and once a member of the deer family gets it, they will die. CWD is contagious, which means that it can be spread from one animal to another. It can be spread if an infected animal comes in physical contact with another animal, or it can be spread through the environment (like soil, plants and water) from saliva (spit or drool), feces (scat or poop), urine or an infected dead animal carcass. Sadly

there are no treatments or cures for CWD.

Chronic wasting disease changes the brain, spinal cord and lymph nodes in the animal's body. It causes spongy holes to form and grow in the brain. This makes the animal lose weight, lose control of their body movements and eventually die. Other signs that an animal might have the illness are lots of drooling, drinking a lot of water, urinating a lot, acting nervous and lowering their head.

Sometimes a deer or an elk could be sick, but it doesn't show any signs of the disease yet. It is important

for hunters to know if the animal they harvested has CWD. At a hunter check station, a wildlife biologist or game warden can take lymph nodes out of the neck of a harvested deer, elk or moose and send it to the Wyoming Game and Fish Wildlife Health Lab to be tested for CWD. It takes three weeks to get the results.

Knowing if animals have CWD also helps Game and Fish watch for areas of the state that have more CWD cases than other parts of the state. It also helps to continue research about CWD in Wyoming and across the United States.

Camouflage: The Game

(Adapted from Project WILD “Thicket Game”)

If you want to try out your skill at camouflaging yourself in nature, round up some friends and try out this game!

How to play Camouflage:

- This game works best with at least five people and should be played outdoors in a safe area. Be sure to look out for holes in the ground or things you could trip over while playing. Also, make sure to pick some boundaries so nobody goes too far away.
- One person starts as the “predator” and should close his or her eyes and count to 20 while everyone else (the “prey”) scatters and hides within the boundaries.
- The hidden prey must be able to see the predator at all times from their hiding spot.
- Once the predator is done counting, they may open their eyes and begin to look for the prey without leaving their counting spot. They can squat down, stand on their tippy-toes, and pivot, but cannot walk around.
- When the predator sees a hiding prey, they must call their name out loud and describe where they are hidden. That person is then “out” and has to come sit down by the predator. The predator can hold up a number of fingers during the round if they would like to be sure the prey animals are able to see them. If this happens, the prey that are still hiding must remember the number that the predator holds up each round to win.
- Once the predator has found as many prey as he or she can, they can declare that the round is over. The predator then can count to 20 again while the prey move ten steps closer to hide



again. Keep playing rounds until all only one surviving prey is left. That prey wins and becomes the new predator for the next game!

It can be fun and surprising to see how close you can hide to another person if you are creative with your camouflage!

TEST YOUR KNOWLEDGE

FIND THE HIDDEN ANIMAL

Some animals are so well-camouflaged they can be hard to spot! Here are some photos of very well hidden wildlife. See if you can find the animal camouflaged in each image:



American bittern



Horned lizard



Screech owl



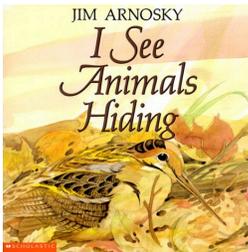
Bobcat



Deer

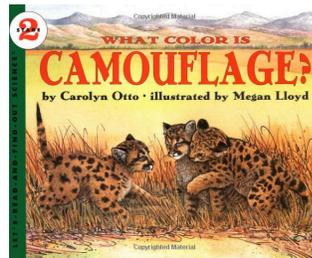
LEARNING LINKS

Books to check out



I See Animals Hiding
By Jim Arnosky

Camouflage is the theme of this book—an adventure through these pages will provide fun opportunities to search for the wildlife who are concealed in simple watercolor sketches.



What Color Is Camouflage?
By Carolyn Otto

The book introduces readers to the world of animal camouflage and animal disguises. Young readers discover how some animals can virtually disappear into their surroundings.



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