

# Wild Times

A Free Publication of the Wyoming Game & Fish Department

Winter 2009

## THE HABITAT CONNECTION



In the last issue of Wild Times, we learned that all animals need good habitat to survive. Habitat is the food, water, shelter and space arranged just right for wildlife to live. But have you ever thought about what happens to habitat when winter comes? Snow and ice cover up food like grasses and places where the animals get water, such as ponds, streams and springs. In Wyoming, we have bitter cold winds and freezing temperatures with lots of snow, which can all cause problems for wildlife.

But, most animals are very good at coping with the changing weather. They find shelter to protect themselves from the wind. Some animals even change what they eat. For example deer and elk will nibble on twigs and bark that may be exposed above the snow.

Do you remember the different animals like birds and squirrels that made caches in the summer and fall so they have food to eat all winter long? Can you think of other things wildlife does to survive the winter?



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# FIELD Wildlife Journal

## Mark Gocke

### INFORMATION & EDUCATION SPECIALIST



Like all jobs in the Wyoming Game and Fish Department, Mark Gocke's work is fun and fascinating. He is an Information and Education Specialist in Jackson. I&E Specialist Gocke gets to work with people around Wyoming and teach them about all the things the Wyoming Game and Fish does. This can be anything from taking pictures of a bighorn sheep — transplant from a helicopter, to teaching kids about wildlife tracks. "There are many different ways to tell the story of the Wyoming Game and Fish Department. Sometimes I write for the newspapers, hold workshops, do radio shows or just talk to people on the street about Wyoming's fish and wildlife resource," Gocke says. "However, the one I enjoy the most is photography. I've come to realize that a great photograph can really have an impact on people, sometimes more than words."

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I&E Specialist Gocke has an interesting story in how he became interested in wildlife and eventually decided to make it his career. He grew up in Nebraska and didn't really think that working with wildlife could be a career.

"I didn't come from a family that spent a lot of time hunting and fishing," Gocke said. "My folks would sometimes take us camping as kids, which was fun, but it was mostly family friends who introduced me to hunting, fishing and even trapping."



It was trapping that really captured Mark's interest and love for wildlife at a young age. "My mom would drive me down to the creek every morning before school so I could check my traps. I don't think I caught anything for the first two years! I learned I needed to know a lot about the animals and their daily habits to be successful. I kept studying their tracks and was more careful about my own scent around the traps and eventually I caught some animals. It was exciting!"

I&E Specialist Gocke says it was a similar experience when he started hunting with a bow and arrow. "You have to get really close to an animal to kill it with an arrow," he says.



Like trapping, to be successful with archery equipment, he needed to know all about the wildlife's daily activities. "There is nothing like studying the signs of wildlife and learning about what they do when you can't see them. It is truly fascinating," Gocke says.

He went to college and majored in psychology before learning that he could study to have a career in wildlife. "I changed my major and am really glad I did! I feel really lucky to have a job working for something I'm really passionate about: wildlife!"

Watch for photos taken by I&E Specialist Mark Gocke in issues of Wild Times, as well as in newspapers, magazines and even on television. If you love wildlife, but also like to take pictures and write stories, you could have great job with the Wyoming Game and Fish Department.



# WILDLIFE PROFILES



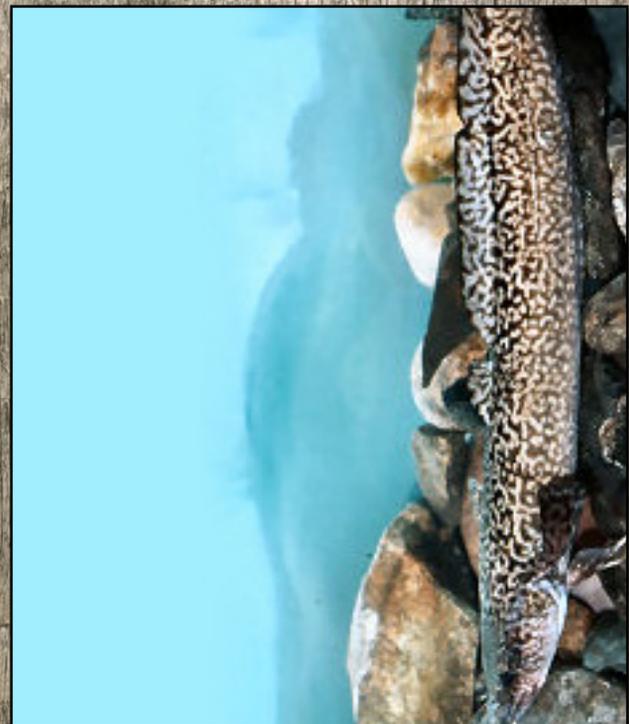
Photograph by Mark Gocke



© Merlin D. Tuttle, Bat Conservation International



Photograph by Mark Gocke



# WILDLIFE PROFILES

## Little brown myotis

**Size:** 3 to 1 inches

**Eats:** Insects

**Lives In:** Forests, areas around water in the mountains and lower valleys, caves and mines

Bats are common in Wyoming, especially the little brown myotis. It lives in Wyoming year-round. It is rarely found far from open water because it eats mainly insects that live near the water. This bat is nocturnal, meaning it hunts for insects at night, but don't expect to see the bat when the snow starts to fall! During the winter it sleeps, or hibernates, in caves and mines throughout the state. It is important that it is not disturbed, because if it wakes up, it will use most of its energy that it has stored during the summer to survive the winter. It might starve to death before the insects come out in the spring.

## Mountain bluebird

**Size:** About 7 inches tall

**Eats:** Mainly insects and small fruits

**Lives In:** Open areas with scattered trees and often in flocks in the winter

Like many kinds of birds, mountain bluebirds migrate to warmer areas during the winter, although they don't have to go too far. Some birds go all the way to Mexico or even Central America, but the mountain bluebird might winter in areas as close as Colorado, Arizona or even Nebraska! Like most birds, when it gets cold, the mountain bluebird ruffles up its feathers to trap air to keep it warm. This makes the bird look fluffy. In the spring, only the female mountain bluebird builds the nest. The male sometimes acts as if he is helping, but he either brings no nesting materials to the nest cavity or he drops it on the way. Mountain bluebirds build nests in cavities in trees and snags, and frequently in nest boxes. Nests can be made of different materials like woven grasses and lined with fine grass, soft bark, hair or feathers.

## Burbot

**Size:** Can weigh up to 24 pounds or more

**Eats:** Aquatic insects and other fish

**Lives In:** Deep cold water of rivers and lakes

Fish are cold-blooded, just like reptiles and amphibians. This means that their body temperatures change with the temperature of their surroundings. During the winter, fish live under the ice of frozen streams, lakes and rivers. Oxygen is still important for fish to survive, even though they live in the water. They use their gills to breathe the oxygen in the water. In the winter when the water surface is frozen, it can be difficult for fish to get oxygen and sometimes lakes will "winterkill," which means the fish die. Wyoming's winds are important to help prevent winterkill. The wind blows the ice free from the lakes every now and then and helps keep the oxygen in the water. Burbot are a great fish for ice fishing!

## Grizzly bear

**Size:** About 4 feet 3 inches tall when standing on all four legs and as long as 7 feet; usually weigh between 300 and 700 pounds

**Eats:** Grizzly bears are omnivores, so they eat both plants and animals

**Lives In:** Forested areas with meadows and valley bottoms. Look for grizzly bears in the Greater Yellowstone Ecosystem in Wyoming

Did you know a grizzly bear can put on as much as 400 pounds to prepare for its winter sleep? This omnivore will eat just about anything to fatten up for the cold weather when food may not be available. Not only do grizzlies eat large mammals like elk, deer and moose, but you might also find them snacking on fish, roots, plant sprouts, berries, mushrooms and any smaller animals. Grizzlies can dig through logs and rocks for insects that taste good to them! One of the most important foods for grizzlies in Wyoming are nuts from the white pine tree.

# Our Wildlife Heritage

Winter has caused many challenges to wildlife through the years, and although wildlife may have developed many techniques to deal with the harsh conditions, sometimes there are still problems. Feedgrounds are examples of humans having to step in to help prevent starvation and large scale die-offs of elk in areas of northwest Wyoming. Feedgrounds are areas where wild animals are fed during the winter.



Feedgrounds were started following problems brought on by the severe winter of 1908. Hundreds of elk were trapped in Jackson Hole and they died of starvation. In order to prevent this from happening again, the 1912 Legislature gave \$5,000 to feed elk on the National Elk Refuge. It wasn't until 1929 that the Wyoming Game and Fish Department officially started three feedgrounds to prevent any more large scale die-offs.



Over the next 35 years, elk were fed in many different locations in the Jackson and Pinedale areas. Some feedgrounds were started in the late 1940s and 1950s

to prevent damage to stored hay. Feeding has continued and is a part of present day wildlife management. Many people have several different opinions on how feedgrounds should be run. Some people want to close down feedgrounds, while others want to keep them open. There are advantages and disadvantages to both sides of this problem. Do some research online with your class to see if you can learn more about this issue facing Wyoming's wildlife.



# AROUND WYOMING

## **F**reezing Frogs!

Wood frogs are medium-sized frogs that rarely grow longer than 2.75 inches. In Wyoming, they can be found in the Medicine Bow and Big Horn Mountains. Can you find those mountain ranges on a map? Do the frogs live near you? All frogs are cold-blooded, which means the animal's temperature is affected by its surroundings, but wood frogs have blood that can freeze. In fact, a third of their body fluids can freeze solid without harming them. Some scientists think they survive being frozen by increasing the amount of glucose, or sugar, in their blood. Because they are able to survive freezing, wood frogs live as far north as Alaska. Now that's cold-blooded!



## **P**repared for winter?

Wildlife all around Wyoming survive the winter using different techniques. Sharp-tailed grouse not only have feathers all over their body, but also on their feet. The feathers help keep their feet warm in the cold and while walking on snow. Birds often fluff their feathers, trapping warm air close to their bodies. Other birds, called migratory birds, fly south for the winter.

During the winter, fish can live under the ice of lakes and streams. They are also cold-blooded, like frogs. Fish also move less and less as the water becomes colder. How does this help them?

Some animals go into a very deep sleep, or hibernate, during winter. Animals, like black bears, still wake up, but their heart rate goes down and their body temperature stays high. Black bears don't eat or release body waste in the winter.

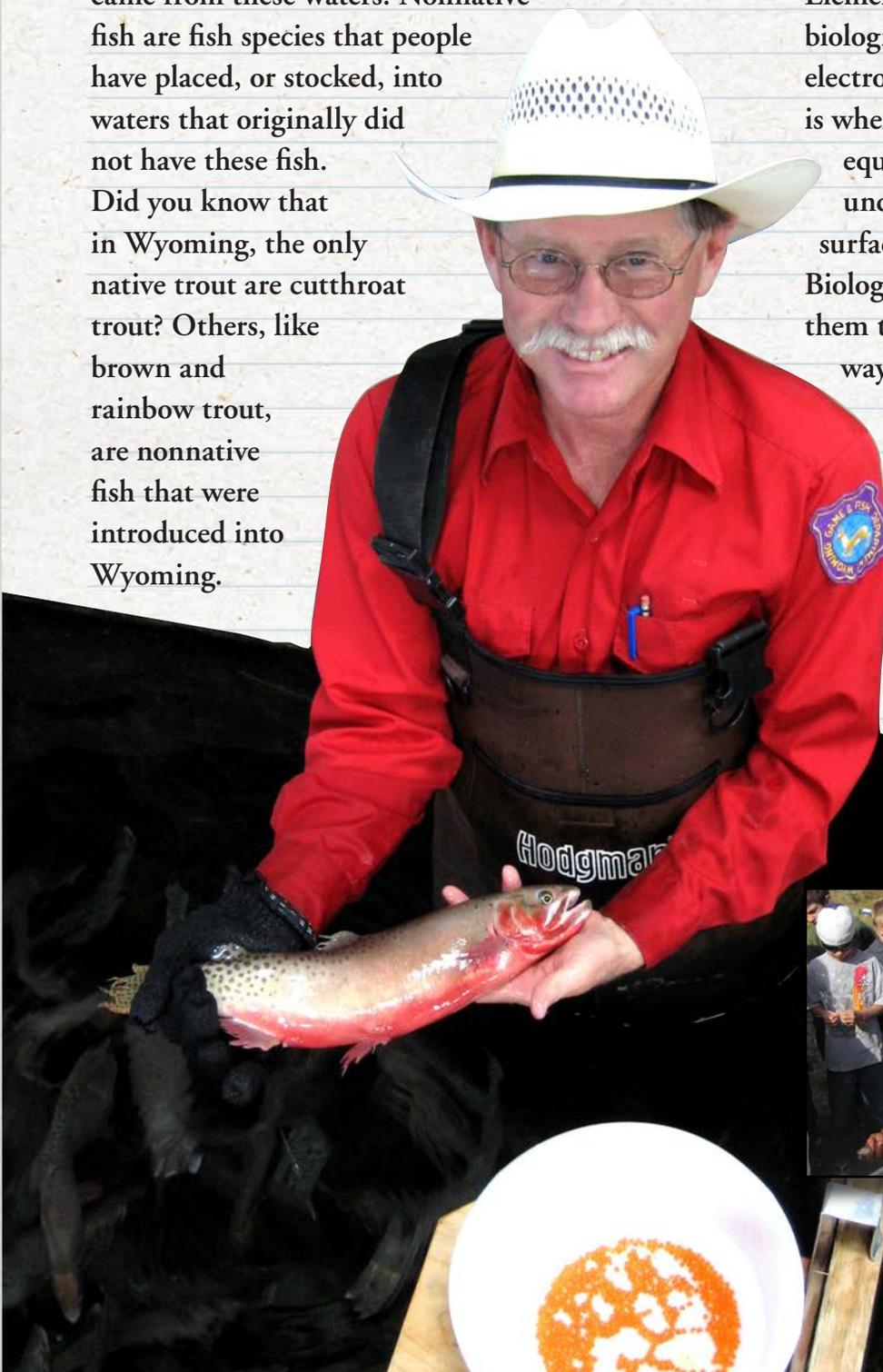


# OUTDOOR Classroom

## Have you ever wondered how Wyoming Game and Fish biologists study fish?

**T**here are many ways biologists look at what lives under the water, and they study many different kinds of fish. Some of these fish are called natives. Native means the fish originally came from these waters. Nonnative fish are fish species that people have placed, or stocked, into waters that originally did not have these fish. Did you know that in Wyoming, the only native trout are cutthroat trout? Others, like brown and rainbow trout, are nonnative fish that were introduced into Wyoming.

**S**ome students from Rawlins got to learn all about native and nonnative fish in Wyoming at a place called Muddy Creek. Students from Mountain View and Pershing Elementary schools each spent a day with fish biologists. They learned how biologists use electrofishing to study fish. Electrofishing is when specially trained biologists use equipment to shock fish while they are underwater. The fish then float to the surface of the water where they are netted. Biologists study the fish and then return them to the water unharmed. This is a great way to learn what is going on in our waters without harming the fish!



# ▶ TEST YOUR KNOWLEDGE ◀

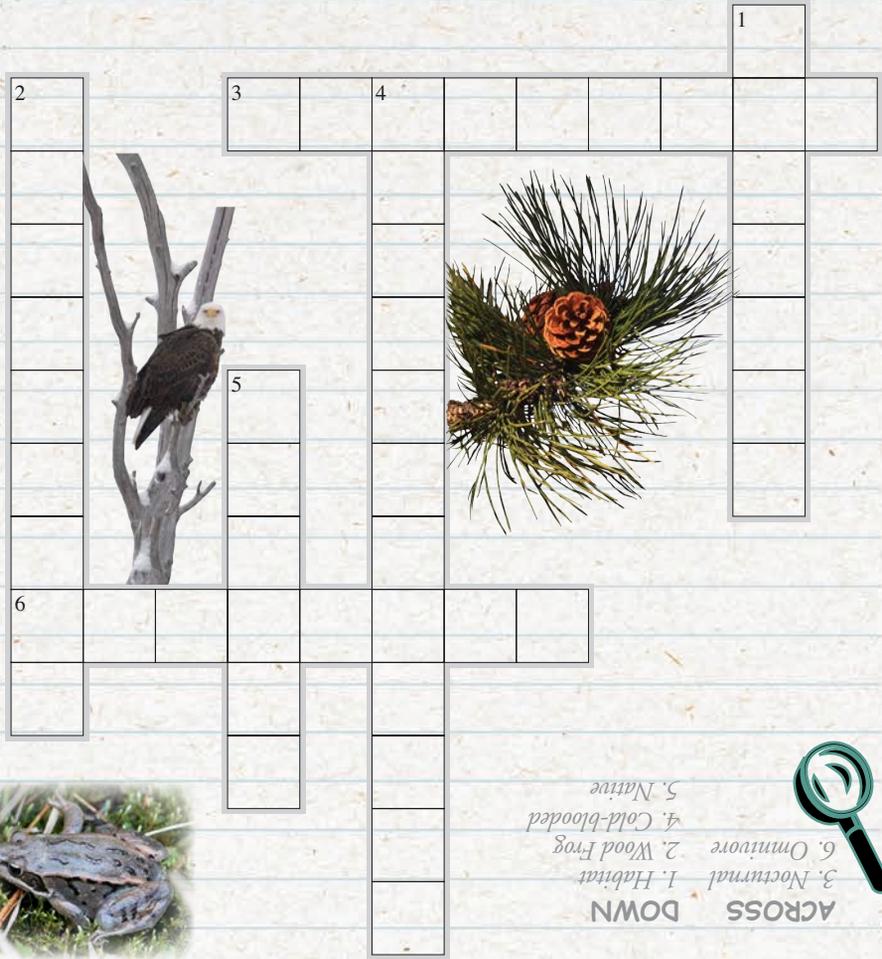
## Crossword Puzzle

### ACROSS

3. Since bats are active at night they are called \_\_\_\_\_.
6. Animals that eat both plants and animals are called \_\_\_\_\_.

### DOWN

1. \_\_\_\_\_ is the food, water, shelter and space needed for wildlife to live.
2. \_\_\_\_\_ are cold-blooded, but they are also unique because they are able to avoid freezing.
4. An animal is considered \_\_\_\_\_ when its body temperature changes with the temperature of its surroundings.
5. Wildlife is considered \_\_\_\_\_ when it is in the area it originally came from.

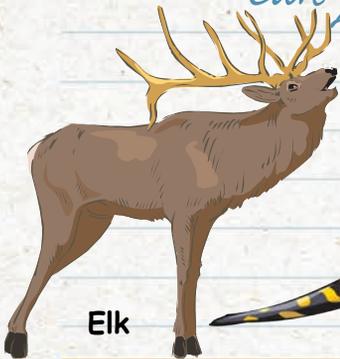


- ACROSS  
1. Nocturnal  
2. Wood Frog  
3. Omnivore  
4. Cold-blooded  
5. Native
- DOWN  
1. Habitat  
2. Wood Frog  
3. Omnivore  
4. Cold-blooded  
5. Native



## ▶ Research the Internet ◀

*Can you use the Internet to find what these animals do during the winter months?*



Elk



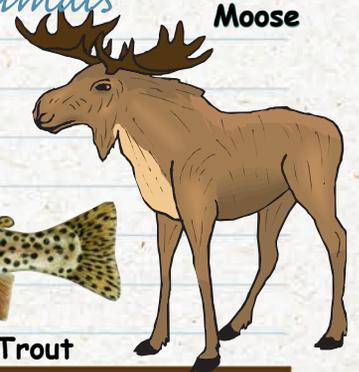
Tiger Salamander



Robin



Colorado Cutthroat Trout



Moose



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