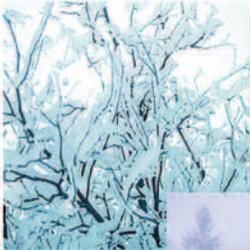


# Wild Times

A Free Publication of the Wyoming Game and Fish Department

Winter 2005

## HABITAT CONNECTION: WILDLIFE IN WINTER



WGFD

Food for wildlife is often covered by snow in the winter, making it harder to find.



Mark Gocke

Some animals stay in Wyoming during the winter.

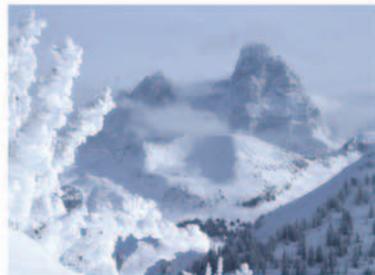
Habitat for wildlife changes in the winter. Insects stop flying, grass stops growing, the temperature drops and snow starts to fall. Humans can put on coats and hats or go inside

our houses to keep warm, but what do the animals do to survive? Depending on what kind of animals they are, they do different things.

Many animals migrate, or leave an area. They go to where it's not as cold and the snow and ice won't cover the ground and

water they need to live. Remember the migratory birds that fly to southern Mexico to avoid the snow? Animals also migrate a shorter distance, like the elk that move from high elevations down to the prairies. Elk use paths that are created in the snow so they use less energy when they migrate.

Other animals hibernate through the hard times of winter. During hibernation, their body temperature drops and they get their energy from the fat they accumulated all summer. They sleep all winter long and wake up in the spring hungry! While some animals hibernate all winter, others sleep for shorter periods of the winter. They just sleep and eat through the winter. It may seem like they are hibernating. When the



Mark Gocke

weather warms up a bit they come out for food, but when it gets cold again they go back to sleep.

Animals that don't migrate or hibernate tough it out. These creatures face deep

snows, freezing temperatures and howling winds to stay in Wyoming. Some of these animals have prepared caches of food to feed from during the winter. And even though snow seems cold to us, it can actually provide insulation, or protective warmth, for some animals. Voles and mice live just under the snow in the winter, which helps keep them warm. These cozy nests under the snow can be as much as 25 degrees warmer than the temperature above the snow! Other animals continually move to find food. Think of what animals you see during the winter...antelope, coyotes, cottontail rabbits?



Mark Gocke

Elk use paths in the snow to migrate so they use less energy.

# FIELD Wildlife Journal

## WILDLIFE BIOLOGIST

**DOUG BRIMEYER,  
JACKSON**

Have you ever seen a mountain lion, grizzly bear, elk or moose? Doug Brimeyer, a wildlife biologist with the Wyoming Game and Fish Department in Jackson, not only gets to see these animals on a regular basis, but he gets to work with them! Brimeyer says, "A wildlife biologist in Jackson gets to work with all of Wyoming's big game animals including bears, mountain lions and moose. There is nothing more exciting than working with such great wildlife."

Biologist Brimeyer says many people don't understand these large animals, and there is a need to study them. For example, right now in Wyoming, numbers of moose in the Jackson area keep going down. So as part of Biologist Brimeyer's job, he studies the animals to find some answers. "Why the number of moose continues to go down is a big mystery we need to solve," said Brimeyer, "and the Wyoming Game and Fish Department is trying to learn as much about this moose population as we can."

To do this, the Wyoming Game and Fish began working with other agencies to put collars on moose! First, they dart the



Mark Gocke



Mark Gocke

Biologist Doug Brimeyer works with moose to figure out why their moose numbers are going down.



Mark Gocke

A biologist waits for the moose to get up after he has given the moose a check-up.



Mark Gocke

Biologists check the teeth of moose to help find out the animal's age.

# WILDLIFE PROFILES



*LuRay Parker*



*Bill Turner*



*LuRay Parker*



*Francis & Janice Bergquist*

# WILDLIFE PROFILES

## WOOD FROG

*Rana sylvatica*

**Size:** up to 2.75 inches

**Eats:** small insects

**Lives in:** areas close to water, like marshes, wet meadows and moist brush

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. 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!

## CANADA LYNX

*Felis lynx*

**Size:** up to 40 inches long and weighs up to 30 pounds

**Eats:** primarily snowshoe hares and small rodents

**Lives in:** very dense coniferous, or pine tree, forests

The Canada lynx is a type of cat, but it has a tail that is only four inches long. Its feet are HUGE and act like snowshoes so it can walk on top of the snow while it hunts its prey. The Canada lynx is listed as threatened under the Endangered Species Act. In Wyoming, the Canada lynx is considered rare. It can be found in the western mountains on the Bridger-Teton, Shoshone, and Targhee national forests and Grand Teton and Yellowstone national parks. Can you find these places on a map? During the day, the lynx rests under a ledge, the roots of a fallen tree, or a low branch. It is nocturnal, meaning it hunts its prey at night.

## MOUNTAIN CHICKADEE

*Poecile gambeli*

**Size:** about 6 inches

**Eats:** insects and seed; from bird feeders they like sunflower seeds and suet

**Lives in:** open pine forests in the mountains with the nest in tree cavities

While many birds fly south for the winter, the mountain chickadee stays in Wyoming. You can often hear it calling "chickadee-deedee, chickadee-deedee." They form flocks, a group of birds, to help protect them from predators during the winter. Mountain chickadees cache, or store food, during the fall so they can make it through the harsh, cold winter. The mountain chickadee has a white eyebrow that other chickadees don't. Have you seen the mountain chickadee this winter? Look for them hanging upside down from twigs or flitting on bush limbs.

## BURBOT

*Lota lota*

**Size:** generally grows to 15 to 22 inches long and weighs 1 to 3 pounds

**Eats:** young burbot feed on insects; adults are piscivorous, or fish eating, and eat other fish like whitefish and sculpins

**Lives in:** larger streams and cold, deep lakes and reservoirs

In Wyoming, the burbot is also known as ling and is a member of the cod family. Most fish spawn, or mate, in either the fall or the spring, but not the burbot. It actually spawns while the ice is still on the water in January and February. One female can lay up to one million eggs! Burbot are nocturnal, hunting other fish for food at night. Fishermen like to catch burbot in the winter while ice fishing.

# OUR Wildlife Heritage

## FISH NEED WATER TOO!

Did you know that Inuit people of Alaska and Northern Canada have more than 100 words to describe ice? That's a lot! With all that ice around in the winter, have you ever thought about what fish do? In Wyoming, even though the lakes and streams may seem like they are frozen, there are still places where there isn't any ice. That is where the fish go.

Because fish are cold-blooded, they are the temperature of the water that surrounds them. As the temperature of both the water and fish get colder, the fish move less and less.

But as with all animals, fish face changes to their habitat all winter long. In November, ice starts to form, but there is still a lot of oxygen for them to breathe, so fish are okay. Fish use their gills to breathe oxygen in the water, called dissolved oxygen. As winter continues in December, January and February, lake tops continue to freeze over, and there is less oxygen for fish, and many can die. Believe it or not, the wind in Wyoming helps keep fish alive. It keeps the ice from forming and actually helps put oxygen

into the water. But if the wind doesn't keep the lake open and the top freezes solid, the fish start to move where there is more oxygen, like inlets, areas where the water flows in, or streams.

Finally April and May comes and warmer waters open up the ice! There are more insects for fish to eat and they are ready to spawn or mate. Do you remember which fish spawn in the winter and which fish spawn in the spring?

## WINTER FISHING

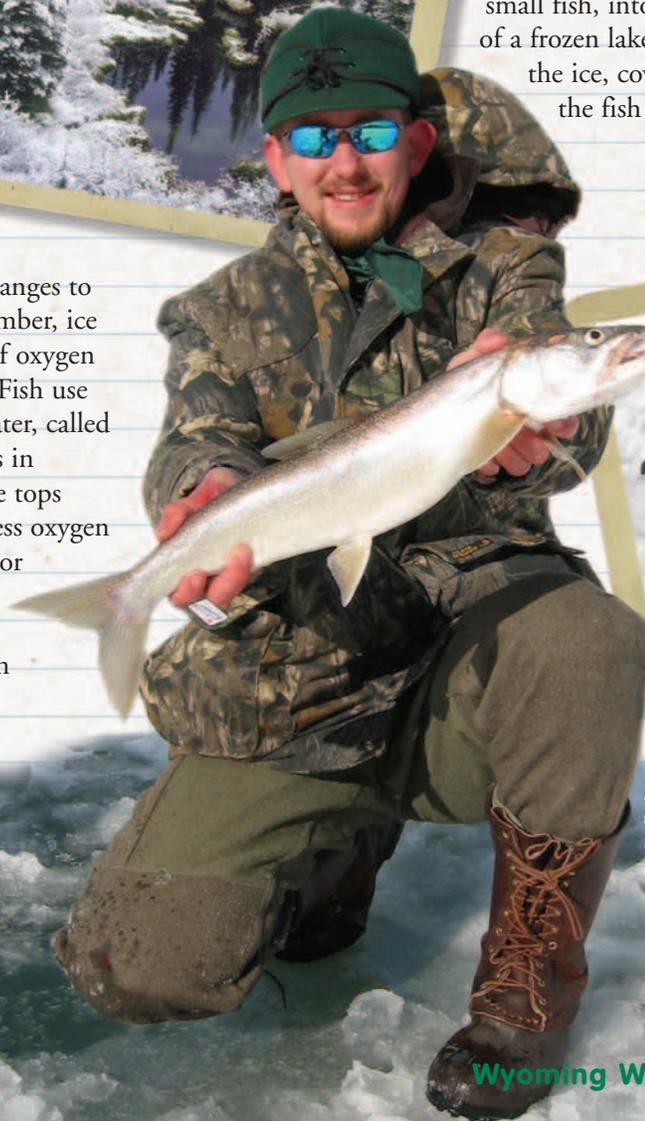
Native Americans and early settlers used both spears and traditional ice fishing techniques. Native Americans would lower fish-shaped decoys, or woodcarvings that looked like small fish, into holes cut through the surface of a frozen lake. They would then lie flat on the ice, covered by a teepee, ready to stab the fish as it swam past.



Mark Gocke



Mark Gocke



Geoff Klein



Ice fishing in the 1800s.

Ice fishing today.

# Around Wyoming

## DRESSING FOR WINTER

Brrrrr, it's cold outside! Did you notice your pet cat, dog or horse grew a thick winter coat? Well, wild animals do the same thing. They grow their winter wear to keep their body temperature the same when it's cold outside. Some animals change color from brown to



Mark Gocke



Mark Gocke

Animals need to grow thick fur to keep them warm and dry during the winter.

Some animals go into a very deep sleep over the winter. During this sleep, the animal's body temperature drops, its breathing slows down and it is very difficult to wake up. Other animals will wake up periodically during the winter. A black bear is an example of an animal that sleeps, but still wakes up. Its heart rate goes down, its body temperature stays high, but it doesn't eat or release body waste.

The little brown myotis is a common bat in Wyoming. During the winter, it sleeps in caves and mines throughout Wyoming, but it is important that humans do not disturb it. If it wakes up, the bat uses most of the energy it stored during the summer, and it might starve to death before insects come out in the spring.



Greg Bergquist

Birds fluff their feathers to trap warm air close to their bodies.

white, like the short-tailed weasel, while others just grow more fur. But no matter what color their fur is, it must keep them warm and dry through the winter months.

Birds' feathers are good insulators, trapping warm air close to their bodies. Birds fluff up their feathers to allow for a larger area of warm air around their bodies.

Did you know sharp-tailed grouse even have feathers on their feet? The feathers help keep their feet warm in the cold and while walking on snow.

## DO YOU SLEEP ALL WINTER?

Grey and black mixing  
Swirls of happy reunion  
Together, the pack.

Thick green of the spring  
Trees and flowers start to bud  
Pups are on the way.

Learning how to walk  
Young eyes meet the outside world  
Puppy fluff, for now.

Colorful blossoms  
Coating the hills and valleys  
Starting hot summer.

Rabbits bountiful  
Playful, learning games commence  
Predicting hunters.

Autumn leaves fall down  
Multi-colored forest floor  
No longer babies.

Now the night arrives  
Tails swish and maws heavenward  
The young ones' first hunt.

Winter snow again  
White insulating blanket  
Falling day and night.

Day flame to night frost  
Life constantly spurs them on  
Wolf years are gleeful.

## LIVE FOR THE SEASONS

BY: AMANDA PAYNE  
*Jackson Hole Middle School, Jackson, WY*

White and black broken  
By snow-crisped November howls  
Cold nose and warm heart.

Paw prints on the crust  
Purple daybreak lightens them  
Left moments ago.



Liz Rey Parker

Sharp-tailed grouse have feathers on their feet to keep them warm!



Doug Mitek

Wolf track in the snow.

# Outdoor Classroom

## TALES IN THE SNOW

Winter is the perfect time of year to read the stories the animals tell. You can tell where animals have been in the winter by studying the tracks they leave in the snow. Go outside after a fresh snow and see what tracks you can find. Look close and you might see where animals as small as mice have been. You can look for other clues that animals have been there, too. Have birds been eating the berries, or have moose been eating the willow twigs? Can you tell the difference between a pronghorn antelope and a mule deer track?

## FEEDING OUR FINELY FEATHERED FRIENDS

Many birds, like the mountain chickadee, stay in Wyoming for the winter. What can we do to help them through these hard times? One thing birds need in the winter is water to drink. Some water is frozen, so they can't use it, because it is ice! Keep warm water outside in your schoolyard so the birds may have water to drink. Most birds eat seed during the winter. You could make a bird feeder to provide food for these birds. Research different kinds of bird feeders and make one with your class. Make sure you keep food and water out for the birds all winter, because they will depend on it once they have found it. Also, keep the area clean, because watering holes and bird feeders that are dirty can spread disease, and we are trying to help the birds, not hurt them.



Gray Jay on a pinecone bird feeder.

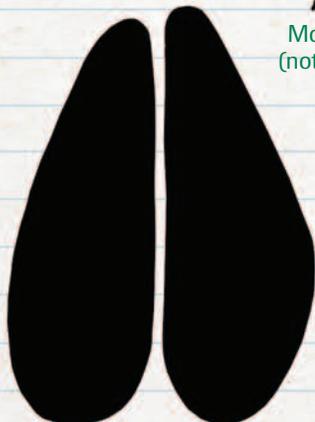
Francis & Janice Bergquist



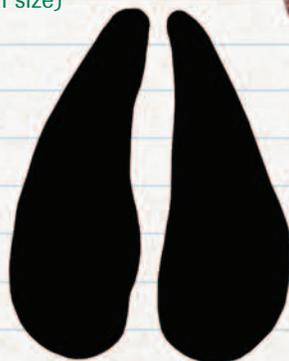
Pine Grosbeaks eat berries still on trees during the winter.

Francis & Janice Bergquist

Mouse tracks.  
(not actual size)



Mule deer tracks.



Pronghorn antelope tracks.

# ▶ TEST YOUR KNOWLEDGE ◀

## CROSSWORD PUZZLE

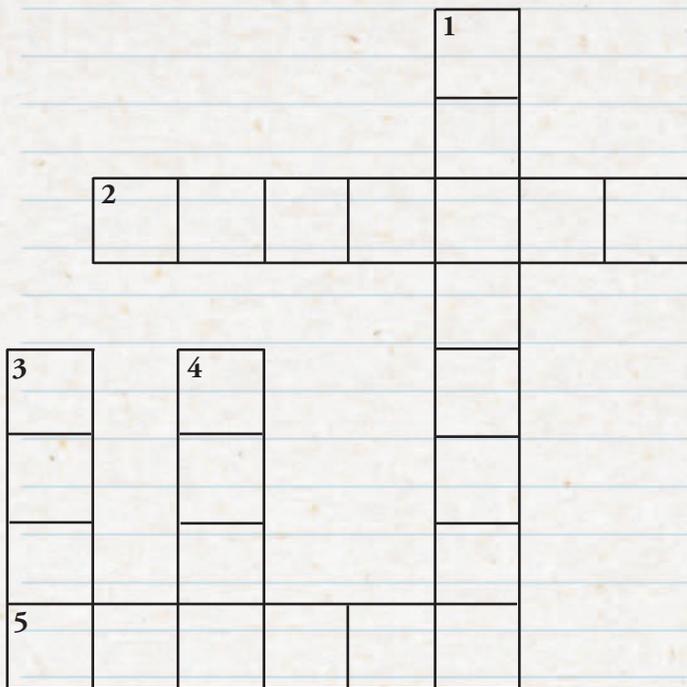
### ACROSS

- When animals leave an area for the winter, they -----.
- What can you look for in snow to see where animals have been?

### DOWN

- What does the sharp-tailed grouse have on its feet that help keep it warm?
- What part of the Canada lynx helps it on snow?
- What did Native Americans use for fishing?

DOWN 1. Feathers 2. Tracks 3. Feet 4. Spears 5. Migrate



## VOCABULARY

Do you know what each of these words mean?

- Habitat
- Migrate
- Spawning
- Hibernate



Lu Key Parker



Mark Gocke

# ▶ LEARNING LINKS ◀

### WEB SITES:

Learn how to make bird feeders at:

<http://www.enchantedlearning.com/crafts/birdfeeders/pinecone-feeder-print.shtml>

### EXPLORE THE LIBRARY:

Do some exploring in the nature section of your school or public library. A whole world is at your fingertips, waiting to be discovered in the pages of books.

### BOOK SUGGESTION:

*What Do Animals Do in the Winter? How Animals Survive the Cold* by Melvin Berger, Gilda Berger and Susan Harrison



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