What would you need to survive a night in the wild? How about a month? Would you want a sleeping bag, something to light a fire, a cell phone to call for help, warm clothes, a raincoat, a knife, a jar to collect water, or a fishing pole to catch dinner? Turns out, your needs really aren’t that different from Wyoming’s wildlife. They need food, water, shelter, and space to survive their time in Wyoming’s wild places. Those four components are the building blocks of habitat, and quality habitat is the foundation for healthy wildlife populations in Wyoming.

Habitat is so important to our wildlife, the Wyoming Game and Fish Department has dozens of employees dedicated to conserving and improving habitat in our state. Some Game and Fish employees focus on the science behind quality habitat, like trying to figure out how to make more food available for wildlife, or improving the areas in a creek where fish go to spawn. Other employees are dedicated to construction projects. They work to make physical improvements to wildlife habitat, like installing wildlife friendly water tanks, fences, or gates.

In this issue of Wild Times, you’ll learn more about the work the Game and Fish is doing to improve habitat and provide the right food, water, shelter, and space for Wyoming’s wildlife. Game and Fish, together with conservation organizations and private landowners, understand how important quality habitat is to our wildlife and are working together to keep our habitat and our wildlife healthy for generations to come.

Inside:  
Field Wildlife Journal ...2  Our Wildlife Heritage ...5  Outdoor Classroom ...7  
Our Wildlife Heritage ...3  Around Wyoming ...6  Learning Links ...8  
Wildlife Profiles ...3  Test Your Knowledge ...8  

Wyoming Game and Fish Department
You don't need to be a biologist, veterinarian, or technician to help Wyoming wildlife and wildlife habitat. There are a lot of different careers available to those interested in conservation and natural resources; these jobs require many different skills, from understanding science to balancing financial records.

Meredith Wood has a job you might not associate with a career in wildlife. Wood is the grants manager in the Fiscal Division of the Wyoming Game and Fish Department. Her job is to oversee all the money that comes to the Game and Fish from other organizations and agencies that is put to use for the benefit of wildlife. Groups like the Rocky Mountain Elk Foundation, and the U.S. Government give money to the Game and Fish for many different projects including habitat improvement, disease investigation, and wildlife trapping.

Wood helps keep track of these funds, which can total more than $13 million each year. Each grant has specific rules on how and when the money should be spent, rules that Wood and her coworkers must follow. She and other members of the fiscal division help compile annual reports of how Game and Fish is spending the money so that hunters, anglers, and the public can see that the funds are being used to benefit fish, and wildlife.

"With these funds come very specific administering requirements that are rather complex," Wood explains. "At the end of the day, to see the benefits our wildlife receives as a result of this work makes my position extremely rewarding."

If you're good with numbers, enjoy math, and have strong organization skills, you might consider a career in the financial area of wildlife management. Like Wood, you can put your skills and talents to use to benefit the amazing wildlife and habitat Wyoming has to offer.
WILDLIFE PROFILES
**Gray Jay**

**Size:** Around 11 inches in length with a 17 inch wingspan  
**Eats:** Seeds, berries, insects, small rodents, and eggs  
**Lives In:** Sub-alpine spruce forests

The gray jay is a member of the crow and jay family, and lives in forests throughout Wyoming, New Mexico, and Arizona. They like forests where there are black spruce, white spruce, Englemann spruce, and jack pine trees. One of their important habitat requirements seems to be temperatures cold enough to safely store food, and tree bark the gray jay can arrange to wedge food into dry, concealed storage spaces.

Gray jays love food, even human food. They’ve been known to arrive at a cabin, cookout, or picnic uninvited and try to steal a snack or two. It’s this behavior that’s earned them the nickname “camp robber.”

**Thirteen lined ground squirrel**

**Size:** 6-11 inches in length; weighs 3-9 ounces  
**Eats:** Grass and weed seeds, caterpillars, grasshoppers, crickets, mice, and shrews  
**Lives In:** Prairies, fields, brushy areas, and small stands of trees across Wyoming

The striped and spotted pattern on the back of the thirteen lined ground squirrel might look like the stars and stripes of the American flag. That’s why some people call these rascally critters, “Federation squirrels.” This color pattern helps camouflage the squirrel in tall grasses from predators like hawks and harriers.

Watch for the thirteen lined ground squirrel on paths between holes during nice sunny days. When they aren’t out eating or being social, the squirrels hang out in an underground burrow. Just inside the burrow is an entryway, then the tunnel turns in a sharp “L” shape. This shape helps trick burrowing predators, like the badger, into thinking the tunnel is nothing but a dead-end!

**Bobcat**

**Size:** 18-49 inches in length weighs roughly 14 to 40 pounds  
**Eats:** Rabbits, hares, small rodents, insects, and even small deer  
**Lives In:** Wooded areas, semi-desert, forest edges, and swamplands from Southern Canada to Mexico

The bobcat gets its name from its stubby, bobbed tail. Its color is generally tan to grayish brown, with black streaks on the body and dark bars on the forelegs and tail. The bobcat’s spotted patterning acts as camouflage.

Bobcats are crepuscular, which means they are active in the hours of dusk and dawn. A bobcat may travel up to seven miles in a night in search of food and water. They can go for long periods of time without food, but will eat heavily when lots of food is available. The bobcat hunts by stalking its prey, then ambushing it with a short chase or pounce.

**Channel catfish**

**Size:** 2-20 pounds in weight  
**Eats:** Insects and other fish  
**Lives In:** Large reservoirs and rivers where summer temperatures exceed 70 degrees

The channel catfish is the most abundant catfish in North America. They are native to the rivers of the Missouri River drainage in Wyoming.

Channel catfish have a very sensitive sense of smell and taste. At the pits of their nostrils are very sensitive odor sensing organs. They also have taste buds over the surface of their entire body. Their whiskers, called barbels, are also covered with thousands of taste buds. This combination of sense and taste allows channel catfish to find food in dark, stained, or muddy water with ease.

Channel cats, as anglers call them, grow slow but are long-lived. It may take a catfish five years to grow 15 inches in Wyoming, but some individual catfish have been known to live more than 20 years.
WILDLIFE-FRIENDLY FENCING

Fences have been an important tool in the settling of the American West. Thousands of types of fences have been invented, and millions of miles of fence crisscross the country. Fences helped mark property boundaries and kept cattle, sheep, and horses from wandering the plains. Today, fences keep children playing happily in backyards and prevent dogs from getting struck by cars on the road. It’s hard to imagine our neighborhoods, farms, and ranches without fences.

But some fences can harm Wyoming’s wildlife. Antelope trying to go through the fence or deer, moose, and elk trying to jump over the fence can get tangled in the wire and become injured or even die. Fawns and calves have a difficult time getting past them. Fences can alter the route that migrating wildlife take as they move from summer to winter feeding areas, forcing the animals to add many miles to an already difficult and dangerous journey. And fencing can affect where wildlife crosses the road, possibly increasing the number of wildlife and vehicle collisions.

To help improve wildlife habitat, the Game and Fish, along with other conservation organizations, have worked together to identify areas with fencing that could be dangerous to wildlife. These groups have also worked with private landowners to make modifications to their fences to make them passable for wildlife while still meeting the needs of the landowners. Wildlife and livestock-friendly fences are usually built no more than 42 inches tall. They have a smooth bottom wire at least 16 inches off the ground so antelope can scoot under the fence. The wildlife-friendly fence also has 10-12 inches between the top two wires so deer and other animals can jump the fence without catching their hind legs.

In many cases, the fences are modified or replaced at little or no cost to the landowners. Once the fences are fixed, they are monitored with cameras to make sure deer, antelope, or elk can get through or across them. When we all work together, we keep Wyoming a safe and happy place to live for people, livestock, and wildlife!
While fire can be a threat to the habitat of humans, it can also be a tool to improve habitat for wildlife. Prescribed burning, or using fire to burn a targeted piece of land, is used across the state. The fire can be used to burn undesirable plants or trees. Smaller fires can also be set to prevent larger, more dangerous fires because the smaller fire burns up all the fuel in a controlled manner. Fire can also help some plant species. Burned areas re-green very quickly. Heat from the sun absorbed by the burned area warms the soil and plants respond by sprouting and sending up new shoots.

Sometimes the wildlife themselves can help improve habitat! In the Sheridan region, for example, 15 beaver were transplanted to watersheds on the Black Hills National Forest. The new beavers built new dams and created new ponds that will slowly release runoff water. This water will add to the water already flowing later in the year, providing additional habitat for fish and wildlife.

Near Baggs, ten miles of deer proof fence and a tunnel underpass were built to help prevent wildlife and vehicle collisions. The special fences “guide” the deer to the tunnel that goes under the highway to the other side of the road. These improvements reduced deer and vehicle collisions to less than 50 accidents the year after they were built, when before there were hundreds of accidents. These kinds of projects, completed by the Game and Fish, Wyoming Department of Transportation and local conservation districts, help save the lives of wildlife and people!

Fish habitat is also a concern for Game and Fish. In the Jackson region, personnel worked with a private landowner on a fish passage project. An irrigation headgate was acting as a barrier to fish movement, keeping fish from a spawning, or breeding, habitat. A new headgate which included a fish ladder, was designed by the landowner. The ladder isn’t really a ladder at all. Instead, it was a huge concrete structure delivered in four pieces. It had to be put in place by a large trackhoe. With the new structure in place, fish can swim up and downstream to their preferred habitat without being blocked.
Most of the time, trees are considered excellent habitat for wildlife. Trees can provide food and shelter for a host of wildlife species, from birds to moose. But some species of trees can actually ruin wildlife habitat. Trees like the Russian olive and salt cedar out-compete the other trees, plants, and shrubs around them. These invasive trees take over an area, sucking up water and nutrients. They can clog irrigation canals and even negatively impact wildlife like cavity and insect-eating birds.

Game and Fish habitat biologists, conservation groups, and private landowners are working together to remove aggressive trees and replace them with more wildlife friendly options. Removing Russian olive and salt cedar can help restore native woody plants and creates growing room for grasses and other plants that provide food for wildlife and livestock. Wildlife will benefit as other plants and shrubs begin to grow where once, only invasive trees stood.

Waging war on these tree weeds takes lots of different tools. Personnel use a big piece of machinery called an excavator to grind up the larger Russian olive trees to mulch. The next fall, crews spray with a chemical, called an herbicide, to kill the resprouting Russian olives and smaller salt cedars not cut by the mulching machine. Once the salt cedar and Russian olives are removed, new and more wildlife friendly plants like willows and cottonwoods are planted in their place.

Though Wyoming’s rivers and streams will probably never be completely free of these invasive trees and other weeds, members of the wildlife and agriculture community will continue to work together to return habitat that supports a healthy mix of wildlife, friendly plants, shrubs, and grasses.
True or False Habitat Quiz

1. A wildlife friendly fence should be more than 42 inches tall.
   True  False

2. Fire is always harmful to wildlife habitat.
   True  False

3. All trees make ideal wildlife habitat.
   True  False

4. The components of habitat are food, water, shelter, and sunshine.
   True  False

5. The “camp robber” is also known as the blue jay.
   True  False

6. Catfish have whiskers, called barbels, that help them taste.
   True  False

7. Bobcats have a stubby tail and a spotted coat
   True  False

8. Structure to help fish move up and downstream freely is called a fish elevator.
   True  False

Book: Kids’ Easy to Create Wildlife Habitats: For Small Spaces in City-Suburbs-Countryside
by Emily Stetson
Learn more about how to observe and support wildlife around your home, school, or community? Pick up this book and learn about the characteristics of different animals and what makes their habitats special to them. You can also complete activities like making a feast for butterflies, exploring a rotting log, or making a compost pile. Learn more about wildlife habitat and how to support the wildlife close to your home in small, easy ways.

Book: Camp Out!: The Kids’ Ultimate Guide
By Lynn Brunelle
School is winding down and summer is just around the corner. Are you ready for a few months of enjoying Wyoming’s wildlife and wild places? Consider a campout this summer. Use this great book to help you started learning about bear safety, bathing in the outdoors, and even building a tent. You’ll learn more about basic camping “How To’s” or more advanced skills like keeping a field journal. You can also read creepy campfire stories or try tasty outdoor recipes like solar oven pizza and s’mores. Yum!