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RECORD KEEPER

Junior Girl Scouts

The U.S. Fish and Wildlife Service has created this booklet just for you! It has many fun activities related to four different wildlife and habitat topics.

1. National Wildlife Refuges
2. Endangered Species
3. Prairie Potholes
4. Prairie

Each activity will teach you about North Dakota wildlife and habitat. To earn a badge, just complete four of the activities listed after each section. You don't have to do the same activities as your friends or your Girl Scout troop – unless you want to. Just have fun doing them!



National Wildlife Refuges



Activity # _____ Completed on: _____

Endangered Species



Activity # _____ Completed on: _____

Prairie Potholes



Activity # _____ Completed on: _____

Prairie



Activity # _____ Completed on: _____

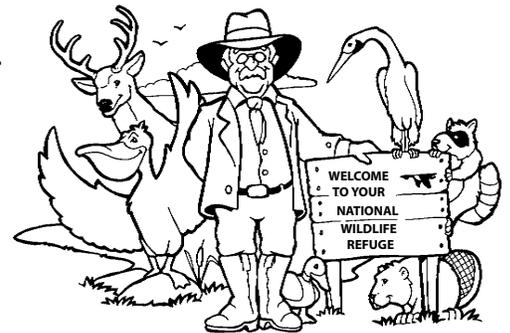
NATIONAL WILDLIFE REFUGES



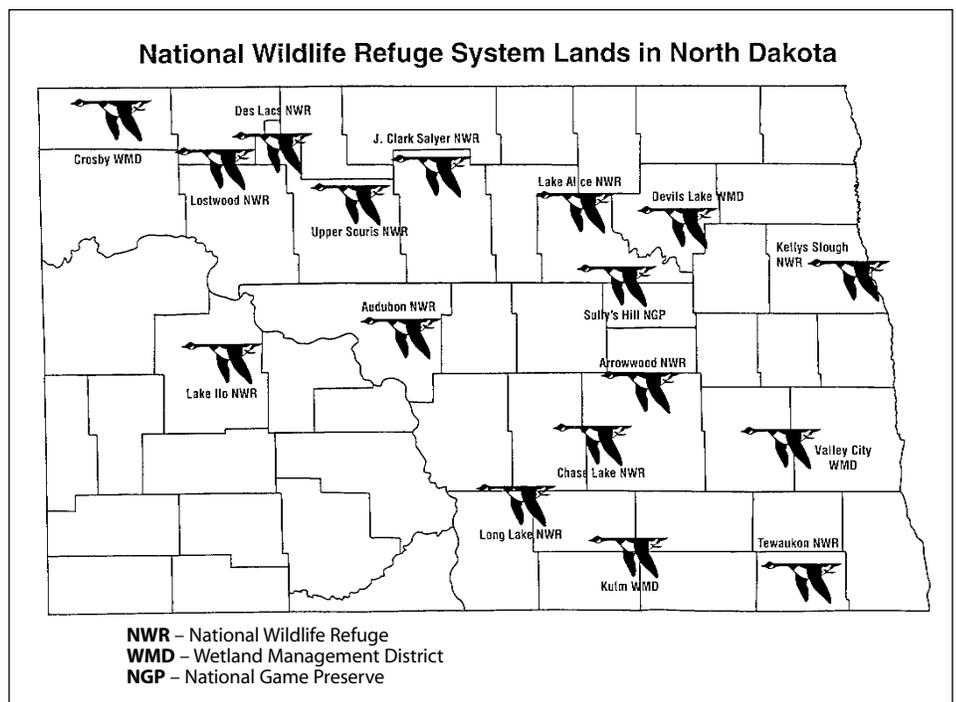
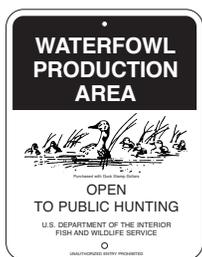
Wildlife habitat is found in very special places called national wildlife refuges, which are managed by the U.S. Fish & Wildlife Service. There are over 545 refuges across the United States, with at least one refuge in every state. On national wildlife refuges, wildlife comes first. Refuges protect important habitat for migratory birds, endangered species, sea animals, fish, butterflies, bison and many more wildlife species.



Over 100 years ago, President Theodore Roosevelt, along with many other people, became concerned about the over-hunting of many of our country's beautiful birds – pelicans, egrets, and herons were being killed every day. President Roosevelt created the first national wildlife refuge in Florida, in 1903. It was named Pelican Island National Wildlife Refuge, and it protected thousands of birds and their habitat. President Roosevelt went on to create 50 more refuges, and he also helped establish laws to protect birds and animals from over-hunting.



North Dakota has 62 national wildlife refuges, which is more than any other state. People who work at these refuges also take care of waterfowl production areas, which are lands for ducks and geese to raise their young on. These lands are found throughout North Dakota, east of the Missouri River, and they are open to the public for birdwatching, hiking, other wildlife observation, hunting, fishing, and more.



Habitat on North Dakota refuges is mostly prairie potholes (wetlands) and prairie (grasslands). A few refuges are along rivers and have wooded areas. J. Clark Salyer is the largest North Dakota Refuge with over 59,000 acres of wildlife habitat.

NATIONAL WILDLIFE REFUGES



1. Habitat = Food + Water + Shelter + Space

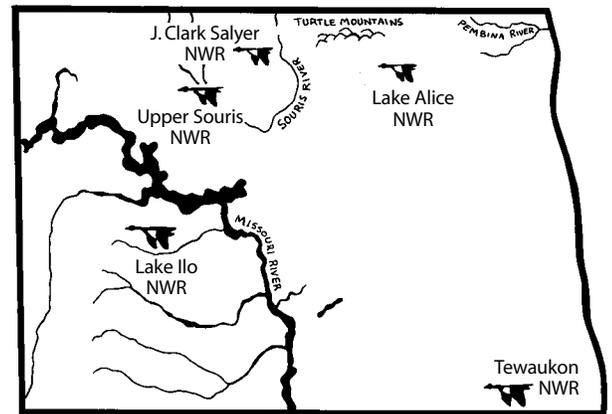
The most important thing that a national wildlife refuge does is to provide homes or habitat for many kinds of wildlife. An animal needs food, water, shelter, and space. If one of these four things is missing from their habitat, the animal may have to move to a new area or may even die.

There are many different habitats found on North Dakota refuges:

- **Prairie** is grassland with very few trees, and is found throughout North Dakota. As you move from east to west across the state, the prairie grasses and wildflowers become shorter because of less precipitation (rain and snow). Tewaukon National Wildlife Refuge is located in southeastern North Dakota where there is more precipitation – the grasses can be 5-6 feet tall. Lake Ilo National Wildlife Refuge is located in western North Dakota where grasses are often less than 2 feet tall. Grasses and wildflowers provide food and cover for bison, prairie dogs, sharp-tailed grouse, monarch butterflies, jackrabbits, and many more animals.

- **Wetlands** that come in many sizes, shapes, and depths can be found across the state, but mainly east of the Missouri River. Shallow wetlands provide food and cover for wading birds, ducks, frogs, salamanders, and other animals. Deep, large wetlands like those found on Lake Alice National Wildlife Refuge in northeastern North Dakota, provide food and cover for muskrats, pelicans, diving ducks, and snapping turtles. Animals need both kinds of wetlands to survive – mallard ducks use the shallow wetlands in the spring for food during migration and the larger, deeper wetlands during the summer to hide their ducklings.

- There are many **rivers, streams, and creeks** in North Dakota. They range from small creeks you can jump across to the large Souris River that runs through Upper Souris National Wildlife Refuge. A whole host of fish, mussels (clams), bald eagles, yellow warblers, and other animals use rivers for water, food, and cover. Trees usually line the larger rivers and grass grows along the smaller creeks. The water and the plants along the rivers and creeks is called a riparian area. These riparian areas provide habitat for a variety of wildlife.



North Dakota

NATIONAL WILDLIFE REFUGES



• **Native forests** are not widely found in North Dakota. The largest forested habitat is found in the Turtle Mountains along the northern edge of the state. J. Clark Salyer National Wildlife Refuge has many aspen, cottonwood, and birch woodlands. Moose, porcupine, ruffed grouse, and beaver use the trees for food and cover. Small pockets of oak tree woodlands are found in the southeastern part of the state and up in the northeast near the Pembina River. Wild turkeys, white-tailed deer, gray tree frogs, fox squirrels and raccoons live in this habitat.

● **Activity:** Choose one of the habitats found on North Dakota National Wildlife Refuges. Use books and the Internet to discover which animals and plants are found in the habitat. Create a drawing of this habitat, along with the plants and animals that live there.

2. The Blue Goose Flies High

Many countries, states, and groups have symbols that represent them. For example, the bald eagle is America's national symbol and is used to represent freedom and strength. When national wildlife refuges were being created, a cartoonist named Jay "Ding" Darling drew a picture of a blue goose, which later became the symbol of the National Wildlife Refuge System. When you see the blue goose on a sign you know you are on a national wildlife refuge.



The Blue Goose

● **Activity:** Choose an animal that you think is most like you. Decide what characteristics you have that you share with a wildlife species. Maybe you can see really well like an owl, or run fast like a pronghorn.

Use scraps of fabric and fabric paint to design your animal on a banner that can be hung in your bedroom.



NATIONAL WILDLIFE REFUGES

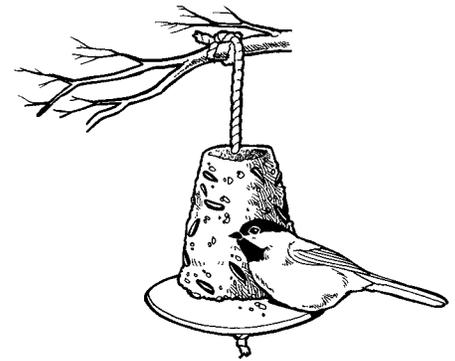


3. Sharing Your Backyard

Did you know that you can make a miniature wildlife refuge in your own backyard? By providing the four things all animals need in their habitat – food, water, shelter, and space – you can create homes for many different birds, butterflies, and other animals.

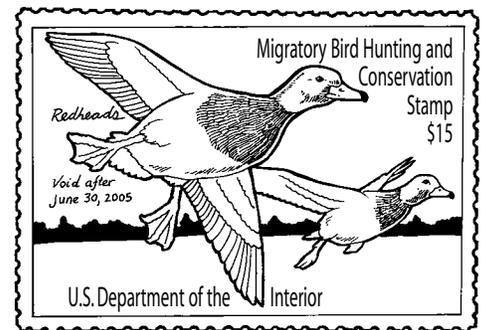
● **Activity:**

- *Select a common bird that you would like to attract to your backyard.*
- *Use field guides or the Internet to determine what this bird needs for food, water, shelter, and space.*
- *Draw an outline of your backyard. Include trees, bushes, flowers, tall grasses, water, or anything else that you think may attract your bird.*
- *Work with an adult to plant trees, bushes, tall grasses, and flowers that provide food. Construct bird feeders or nest boxes and hang them in your backyard. Put out fresh water for the birds to drink - make sure it is not too deep.*



4. Save Habitat – Draw a Duck Stamp

A hunter must purchase a “Duck Stamp” each year to hunt ducks, geese, and swans. The money raised from the sale of these stamps is used to purchase wetlands and grasslands for birds that live there. Hundreds of special places including national wildlife refuges and waterfowl production areas were purchased in North Dakota with Duck Stamp money. Ducks and other wildlife need these areas to nest, raise their families, and to feed and rest during their long migration.



- **Activity:** *Find information about the Junior Duck Stamp Contest on the web-site <http://duckstamps.fws.gov> or by contacting the Tewaukon National Wildlife Refuge office at 701-724-3598. Follow the guidelines and paint, draw, sketch, or color a picture of a duck, goose, or swan. Send your artwork to the Contest Coordinator before March 15th.*

5. Bird Talk

There are many kinds of birds that live on refuges. Many times you may hear the bird, but will not see it. Each bird has its own unique song and call. The difference between a song and call is the length of time of the melody. If the melody is long and has many notes it is a song, if it is short and usually only one or two notes it is a call. Mourning doves have a soft coo song while the blue jay has a loud and boisterous song. Male birds sing to attract females and to communicate to other males that this is their territory. Females may call using clicks, clucks, and chirps to locate and communicate with their young. All birds have warning calls to alert others of danger.



- **Activity:** *Travel to a national wildlife refuge, park, or stay in your own backyard. Close your eyes and sit quietly and listen to the birds singing. Record how many different bird songs and calls you hear.*



6. Characteristics of Bird Eggs

Bird eggs come in many different sizes, shapes, and colors. The size of the bird usually determines the size of the egg.

- A hummingbird egg is only 1/3 inch long and weighs less than 1/100th of an ounce.
- An ostrich egg is about 5 inches long and weighs up to 3 1/2 pounds.

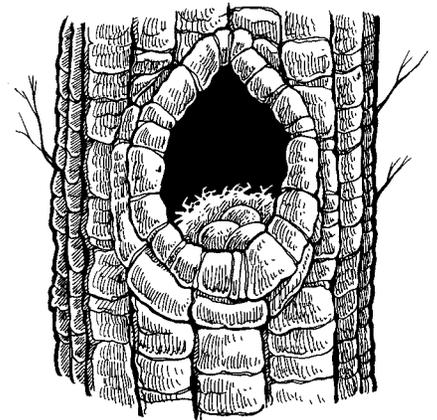
The shape of an egg helps to keep it safe in the nest.

- Puffins are birds who build their nests high up on ledges. Their eggs are round on one end and pointed on the other. If the egg is accidentally bumped by the mother, the egg will not roll out of the nest but will move around in a circle.
- Wood ducks nest in a cavity (hole) of a hollow tree. Their eggs are round, but have little chance of falling out of the cavity.

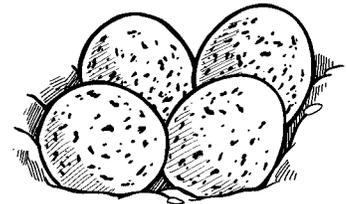
The color of an egg helps protect it from being seen and eaten by predators. The color pattern is called camouflage, and helps it blend into the surroundings.

- Birds that nest on the ground lay eggs that are colored the same as the ground. Piping plovers nest on sandy beaches. Their eggs match the color of the sand and have spots to help keep them hidden from predators.
- Tree swallows nest inside hollow trees where it is dark. Their eggs are white to help the mother see them so she won't accidentally step on one of them.

● **Activity:** Choose your favorite North Dakota bird. Use a field guide or the Internet to discover what size, shape, and color the bird eggs are. Use modeling clay or play dough to create a nest with eggs. Roll balls of clay to form eggs. After the nest and eggs harden, use acrylic paints to make the eggs and nest match the color picture you located in the field guide.



Wood duck nest



Plover nest

Modeling Clay

- 1 cup flour
- 1 tablespoon salad oil
- 1 cup water
- 1/2 cup salt
- 2 teaspoons cream of tartar
- Food coloring (yellow/brown for nest)
(light color for eggs)



Mix ingredients in a saucepan. Have an adult help you turn a stove burner to medium heat. Stir the mixture constantly so it won't stick to the pan. Keep stirring for several minutes until mixture forms a ball. Remove from burner and dump the hot ball onto a flat surface that has been floured. Knead the dough as it cools. Add food coloring to the remaining dough until it takes on the color of the nest you chose. Then put the modeling clay through a garlic-looking strings. Shape them into a circle to create a nest. Add food coloring to more dough until it represents the color of the eggs you chose. Shape the clay into eggs and let clay harden.

NORTH DAKOTA'S ENDANGERED SPECIES



When an animal or a plant becomes an endangered species, it means that there are not many of that kind of animal or plant left. Animals and plants that become extinct are gone forever. Some examples of extinct animals are: the passenger pigeon and the dusky seaside sparrow. World-wide, over 1,000 animals and plants are endangered, and as many as 10 species disappear from our planet every day.



There are more than 200 animals and plants in the United States that are endangered. The main reason that animals and plants become endangered is because habitat is lost. Other reasons may include pollution, and illegal killing of animals. Without good habitat, animals and plants do not have everything they need to live. Plants cannot walk on legs or fly to another place. Sometimes all the habitat is gone or the remaining area is too small to provide a good home for an animal. Sometimes habitats are separated from each other and animals cannot reach them. For example, a black-footed ferret in Wyoming cannot travel to a prairie in North Dakota – it is too far.



Black-footed ferret

In 1973, the United States government passed a law called the Endangered Species Act. This law protects plants and animals that have become very rare. It is now illegal to kill, bother, keep, or remove these protected animals and plants from the wild.

Animals can recover from being endangered. For example, the peregrine falcon was protected by the Endangered Species Act for many years. Wildlife biologists, land managers, landowners and other groups of people have worked hard to protect these birds and their habitats. Now, peregrine falcon numbers have increased, and are not considered to be an endangered species anymore.

NORTH DAKOTA'S ENDANGERED SPECIES



North Dakota's Endangered Species

Eight rare animals and plants either make their home in North Dakota, or use the habitat as a resting and feeding area during their long migration. These species are:

Whooping Crane (bird)

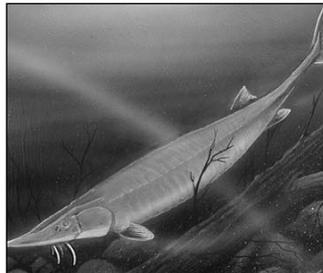
- Is the tallest bird in North America
- Needs wetlands to nest and find food
- Migrates through North Dakota in April and September



Whooping crane

Pallid Sturgeon (fish)

- Has lived since the time of dinosaurs
- Live in large rivers with strong currents
- Live in the Missouri River in North Dakota



Pallid sturgeon

Least Tern (bird)

- Is the smallest member of the gull family
- Nests on sandy beaches
- Lives along the Missouri and Yellowstone Rivers



Least tern

Black-footed Ferret (mammal)

- Has a long, slender body
- Is the rarest mammal in North America
- Used to live in prairie dog towns in western North Dakota



Black-footed ferret

Western Prairie-fringed Orchid (plant)

- A white flowering plant
- Blooms in early July in the tallgrass prairies of eastern North Dakota
- The largest population in the world is found in eastern North Dakota



Western prairie-fringed orchid

Bald Eagle (bird)

- The adult has a white head and tail
- Nests in large trees and eats fish and dead animals



Bald eagle

Gray Wolf (mammal)

- Can range in color from white to black to gray
- Pups are born in a den in the ground, rockpile or hollow log
- Most likely to be found in forested areas of North Dakota



Gray wolf

Piping Plover (bird)

- Small bird that runs quickly across the ground
- Nests on bare, sandy shores of lakes and large rivers
- North Dakota's wetlands are very important nesting areas for piping plovers



Piping plover

NORTH DAKOTA'S ENDANGERED SPECIES



1. Don't Forget Us!

When all of one kind of animal or plant is gone, it is said to be extinct. There will never be more of that kind. Dinosaurs are a good example – once there were lots of dinosaurs, now there are no living dinosaurs. Another example is the passenger pigeon. Once there were millions of passenger pigeons, now they are all gone. We will never see a passenger pigeon again.



In North Dakota, there are animals that are no longer found here: great plains wolf, Audubon sheep, black-footed ferret, and grizzly bear.

People are working hard to make sure that the animals and plants we have today will not become extinct. We can help by learning about extinct species and why they went extinct.

● **Activity:**

Use library books or the Internet to research 3 of the 8 extinct animals listed below.

- Passenger pigeon
- Dusky sparrow
- Heath hen
- Great auk
- Labrador duck
- Audubon sheep
- Great Plains wolf
- Carolina parakeet

Answer the following questions.

1. Where was this animal once found?

2. In what habitat did this animal live (ex. forest, wetland, grassland)?

3. When did this animal become extinct?

4. Why did the animal become extinct?

5. What lessons can we learn from this animal to help keep other species from vanishing from the earth?

NORTH DAKOTA'S ENDANGERED SPECIES



2. Habitat "Pic"

Habitat is an animal or plant's home. Animals and plants need four things in their habitat; food, water, shelter, and space. Some animals live in the grasslands, in a wetland, along a river, or in a forest. If an animal or plant's habitat is destroyed, they will have no place to live.

Least terns and piping plovers are two birds that like to nest on sand bars or beaches of the Missouri River. The color of their eggs matches the sand to hide them from predators.

● **Activity:** Create a piping plover and least tern habitat picture using food items and tempera paint.

Potatoes or apples:

Take a potato or apple and cut it in half. Use a toothpick to etch a design in the freshly cut area. Use a small paring knife to cut away potato or apple that you don't want in the design. Dip the cut edge of the potato or apple into tempera paint and press onto paper.

Carrot or celery tops:

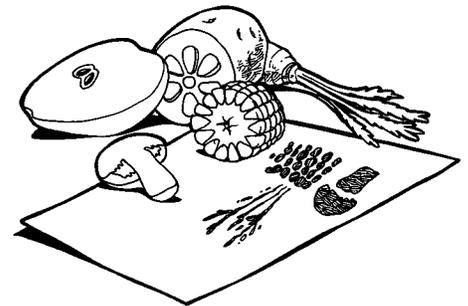
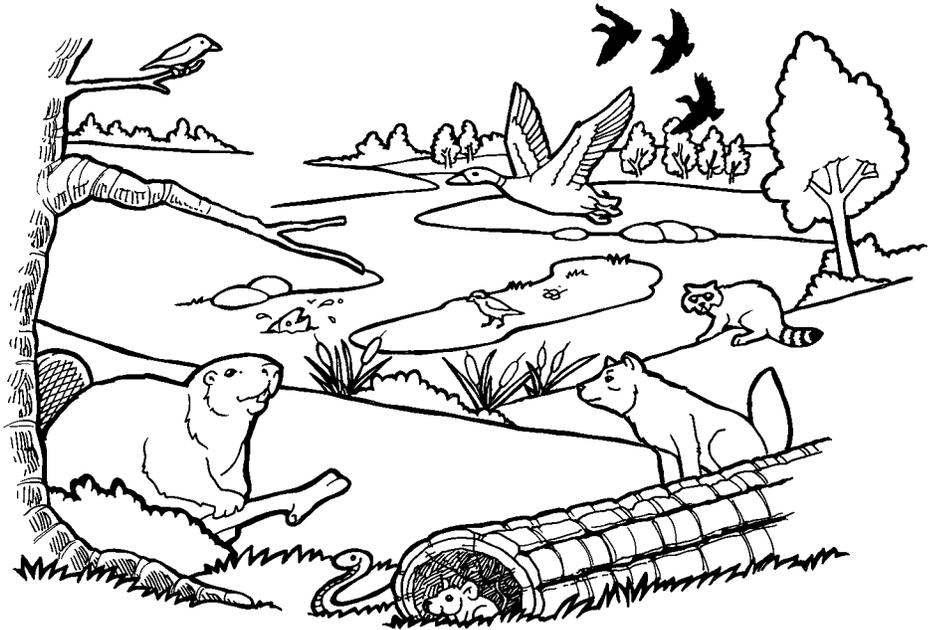
Use carrot or celery tops dipped in green paint to create plant shapes.

Corn-on-the-cob:

Roll in paint, and then across paper to make gravel beach.

Mushrooms:

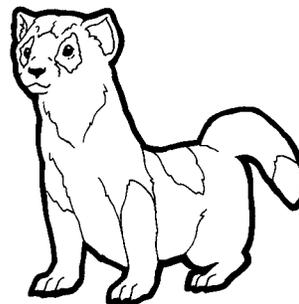
Cut crosswise and dip in paint.





3. Jewels of the Night

The black-footed ferret is a nocturnal animal – that means they come out during the night to hunt. Nocturnal animals have a mirror-like surface on their eyes that reflects light outward. This greatly improves their night vision. The reflection that results when light (like headlights of a car) shines on them is called eyeshine. Eyeshine colors can vary between animals. A black-footed ferret's eyes are green, a fox's eyes are yellow, and a jackrabbit's eyes are red.



● Activity:

A. Watch for nocturnally active animals when driving with your parents at night. Look for eyeshine. This is one of the best animal clues to observe after dark. Record the names and eyeshine colors of the animals you see at night.

B. Draw a picture of an imaginary nocturnal animal. Write a story that includes information about the animal. What kind of tools would the animal need to survive at night? What would it eat? How would the animal find its food? How would it find its way around in the darkness?

Animal	Eyeshine Color
Badger	Green
Cat	Yellow

4. Was That A Dinosaur?

The pallid sturgeon is a fish that lives in the Missouri River. This fish lived when the dinosaurs roamed the earth. Pallid sturgeons are endangered because of changes that people have made to the Missouri and Mississippi Rivers. Large dams have changed the once warm, shallow rivers to deeper, colder rivers.

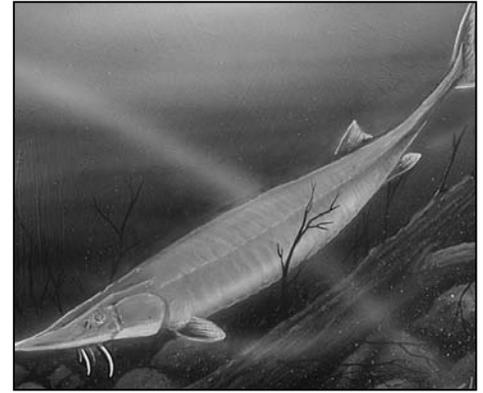
The Missouri River used to be many miles wide with little streams running parallel to the river. People have straightened the river and made it more narrow so the water is deeper and runs faster – this has limited the amount of gravel beds available for the pallid sturgeon to lay eggs on. People have also built large dams to create deep reservoirs, and we take water from the Missouri River with big



irrigation tubes, which can trap young pallid sturgeon. The result of these changes is that there are very few young pallid sturgeon being born and survival is very difficult.

● **Activity:** *Research more about this extraordinary fish in the library or on the Internet and use the information to finish the story below about a young pallid sturgeon's journey. After you have completed your story, share it with younger children to help them learn about pallid sturgeon and their struggle to survive in the Missouri River.*

Does the young pallid sturgeon avoid the irrigation tube? What happens when he swims into the reservoir created by a large dam? Do concerned people come to the aid of the pallid sturgeon and the River to make it a better place for fish and people?



Pallid sturgeon

A Sturgeon's Journey

The water is cool. A young pallid sturgeon breaks free of the yolk sac and swims for the first time in the Lower Missouri River in northwestern North Dakota. Looking around, the young pallid sturgeon sees that he is all alone. All the other eggs lay on the bottom of the river bed in the cold gravel... it is too cold for the eggs to hatch. Driven by hunger, the young sturgeon begins to look along the bottom of the river for small insects. He uses barbels (look like whiskers) located close to his mouth to help locate food. The cold water makes it difficult for insects to survive so the young pallid spends his first night hungry. In the morning, as he drifts downstream he happens to come upon a shallow area of the river with soft mud. There are lots of insects there and the young pallid eats his fill. The young pallid stays in this area for one year. The days go by quickly and the young pallid sturgeon is growing quickly off the rich diet of insects. The water is muddy here. This helps him hide from other fish predators like sauger, burbot and catfish. By fall he has grown to 4 inches long. If he survives into adulthood, he will be 5 to 6 feet long. The young pallid has yet to see any other pallid sturgeons in his travels.

The next year he moves downstream in search of more food. He looks for sandbars and islands where insects like to hang out, but the water is deeper and has covered the sandbars and islands. He notices a nice sandy area along the shore where there might be more food and swims toward it. Suddenly, the water begins to pull him toward the shore, he fights against the strong current but it is sucking him into an irrigation tube

NORTH DAKOTA'S ENDANGERED SPECIES



5. Welcome Back!

Bringing animals back from the brink of extinction takes lots of hard work by many concerned people and groups. These people have had great success with some species.

The peregrine falcon used to be endangered, but now soars along the coasts, mountains and forests throughout the country.

The bald eagle is also doing well across the United States and may be off the endangered species list soon. In North Dakota, bald eagles can now be seen migrating through the state every year and there are records of bald eagles nesting along the Missouri, Sheyenne, and Red Rivers.



Peregrine falcon



Bald eagle

● Activity:

A. Make a banner or poster celebrating the return of these species. Hang your poster in your community or school.

B. Throw a "Welcome Back" party to celebrate the return of the peregrine falcon, bald eagle, and gray wolf. Invite friends or younger Girl Scouts. Create special invitations with the animals on it. Make masks in the shape of a bald eagle for people to wear (see full-size pattern on page 24). Serve cookies or jello jiggers that are shaped like an endangered species, or make a bird nest from chocolate-covered coconut and jelly bean eggs. Make up a quiz show game with facts about North Dakota's endangered species.





6. We're In This Together

There is only so much room on the Earth. Both wildlife and people use the same food, water, shelter, and space. When something happens to wild animals we need to remember that the same thing could happen to people. When we poison our rivers and streams, the fish that live there can become sick or die. If people eat too many of these fish, they can also get very sick.

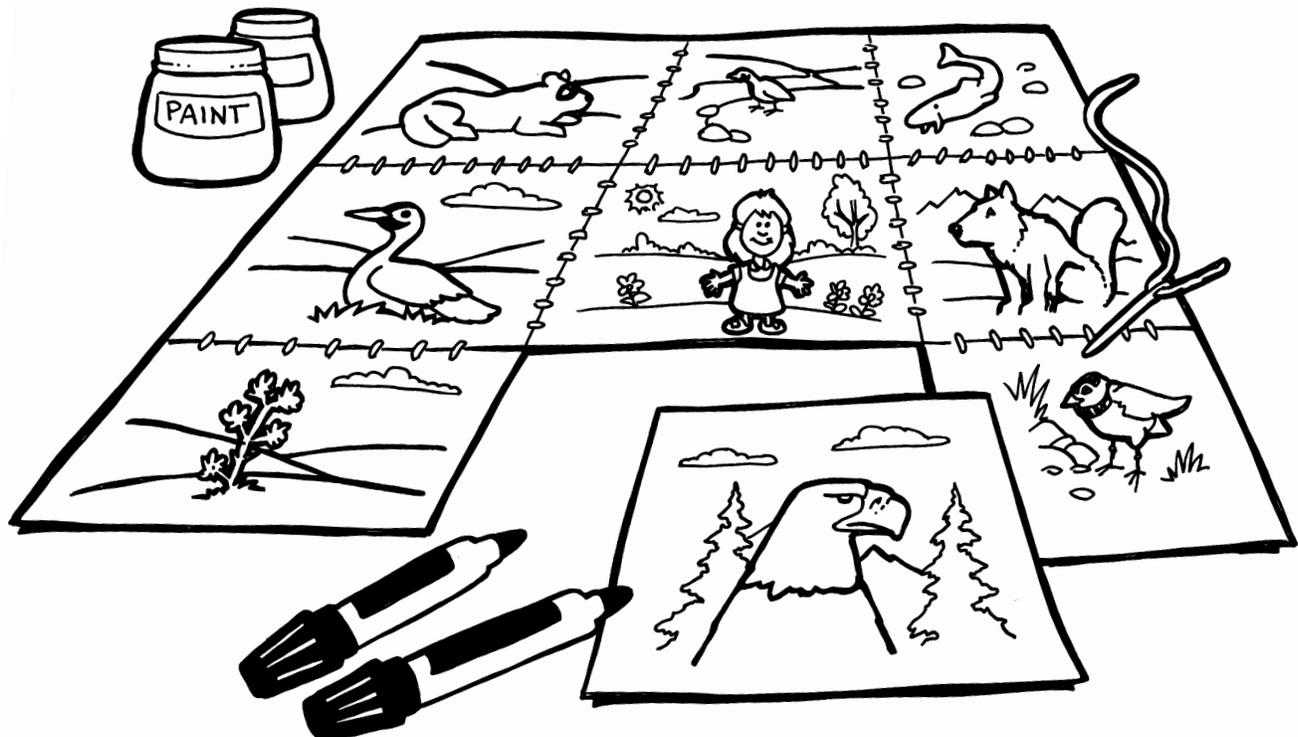
Imagine that the world is a giant quilt. Each quilt square represents an animal, plant, or person. We are all tied together by threads which connect us to each other. If one square is removed, the rest of the quilt is affected – it is no longer complete, as beautiful, or as warm as it once was. The same can happen with endangered species. If we start to lose animals and plants from our earth we are no longer complete.

● **Activity: Create an Endangered Species Quilt:**

Cut 9 square blocks of plain colored cloth - all the same size.

Use fabric paints, iron-on transfers, or appliqués and put one of the eight North Dakota endangered species onto each square.

On the middle square, write your name or draw a picture of yourself. Sew the quilt together.



NORTH DAKOTA'S PRAIRIE POTHOLES



Prairie potholes are amazing places where water and land come together. Just like you may have one or more nick-names, people call prairie potholes a variety of nick-names including wetlands, sloughs, ponds, lakes, and swamps. The water found in the potholes may come from falling rain, melting snow, or natural underground springs. Just because they are called wetlands, it does not mean that they always hold water. The water level can change from season to season, and year to year. Some potholes hold water for only a couple of weeks in the spring, and others hold water all year long. There are times when wetlands can be completely dry.



Prairie Potholes

Over 10,000 years ago, part of North Dakota was covered by a huge glacier. As this huge chunk of ice melted and retreated, it left depressions, and piles of soil and rocks. The depressions filled with water and are called potholes. The piles of soil and rock became the gently rolling hills. This landscape was later called the "Prairie Pothole Region," which spreads through parts of North and South Dakota, Minnesota, Montana, Iowa, and Canada. The many potholes in this area are very important to the millions of ducks, geese, shorebirds, and other kinds of wildlife that breed and raise their young here. They also provide important areas for birds to rest, eat, and refuel before they continue on their long migration journeys. Many scientists consider the prairie pothole region to be one of the most important wetland areas in the world.



NORTH DAKOTA'S PRAIRIE POTHOLES

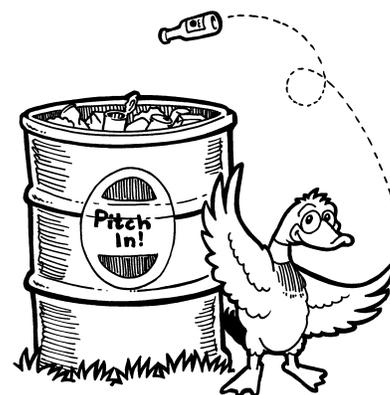


1. No More Trash for Wildlife

Trash can hurt and even kill wildlife. Wildlife can get their feet, wings and heads tangled in fishing line and plastic can rings. Small mice and shrews often enter bottles and cannot get back out.

● **Activity:** Have an adult join you in this activity as you carry a litter bag and spend a portion of your day walking around a lake that people like to swim and fish in. Pick up the aluminum cans, glass bottles, fishing line, and other paper and plastic that people have left behind.

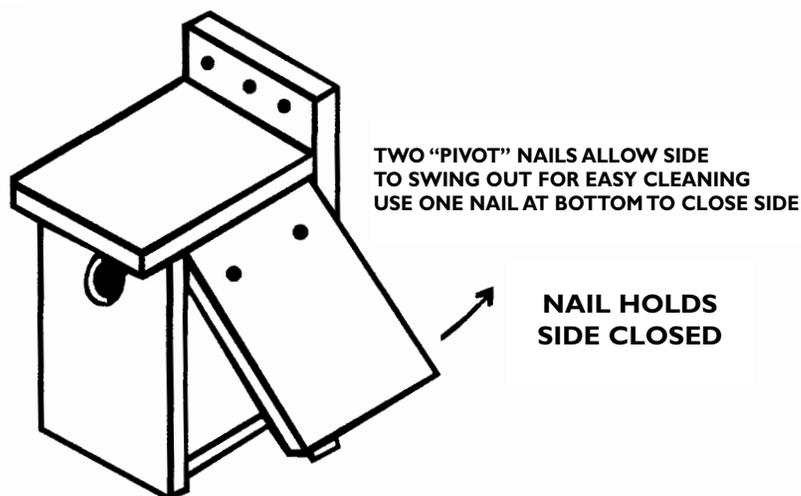
When finished, discard your trash bag in a dumpster so it can be properly disposed of. Recycle aluminum cans and glass bottles that you have picked up.



2. Build a Tree Swallow Nest Box

Tree Swallows are beautiful, fast-flying birds found near wetlands. They like to live near wetlands because they feed on the many insects – especially mosquitoes that are found here. Read more about tree swallows in a field guide, on the Internet, or a bird magazine.

● **Activity:** Ask an adult to help you cut the wood, nail the box together, and place it on a post near a wetland. Watch as tree swallows enter the box, place grass and feathers inside for a nest, lay their eggs, and raise their young. Make sure to clean the nesting box out in the early fall so it is ready for another pair of tree swallows in the spring.



OPENING IS 1 3/8" CIRCLE

LUMBER
ONE 1" X 6" X 6'



NORTH DAKOTA'S PRAIRIE POTHOLES



3. Create a Scavenger Hunt

Visit a wetland and discover what makes it so full of life!

● **Activity:** Make a list of every living and non-living thing that you see close to the wetland. Look for birds and animals, plants, animal tracks, nests, bones, feathers, and any other signs of wildlife.

Use your list to create a picture scavenger hunt and then have your friends visit the wetland and try to find each of the items that you have drawn.

4. Mapping a Pothole

● **Activity:** Sit on a hilltop that overlooks a prairie pothole. Sketch a map of the pothole, including plants and trees that grow in and around it. Add in the surrounding grasslands, croplands, buildings, and whatever else you see.

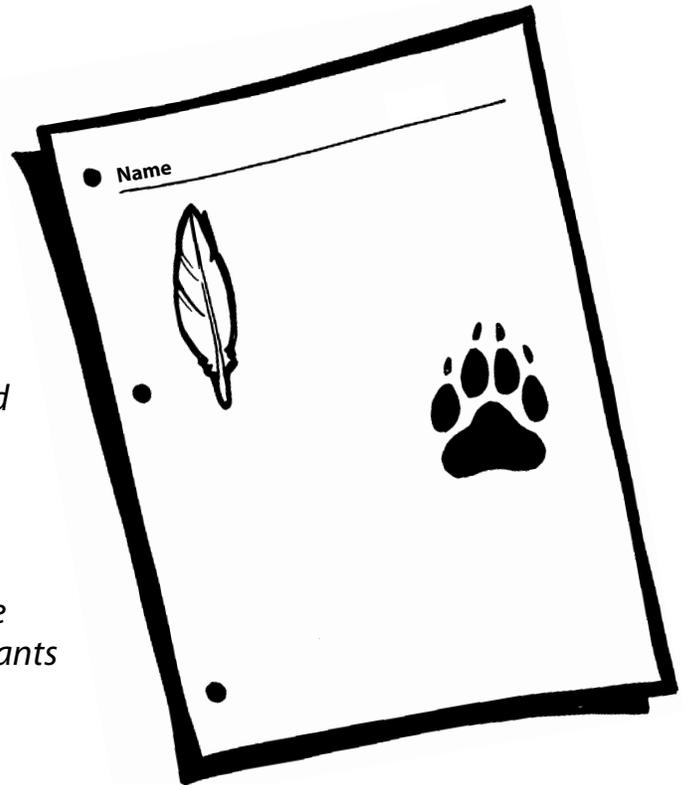
After you complete your drawing, take a walk and count how many footsteps it is between the pothole and the nearest building. How many footsteps does it take to get around the pothole? What kind of crop is growing around the pothole? Label the answers to these questions on your map.

Think About It.....

1. Why do you think this pothole is used by wildlife? What kinds of animals or animal sign do you see?

2. What do you see in this pothole that gives animals their food, water, or shelter?

3. How could this area be improved to attract more wildlife?



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5. Plants + Mud = Muskrat Hut

Look for a muskrat hut in a pothole near you. It looks like a pile of muddy plants. Actually it is a year-round home for muskrats. It is made from grasses, cattails, and other plants that are held together with mud... and it is a very busy place!! This hut is a home for a family of muskrats. The muskrats get inside by going through underwater openings. There are even little "rooms" inside the lodge, and each room has a soft, grassy floor. Baby muskrats are called kits, and can be found inside one of the rooms.

● **Activity:** *Many other wetland animals use muskrat huts. Match the picture of each animal with the description of what they do.*

• *Crawling up on a hut gives me a place to rest and sun myself. I slip quietly into the water when I'm disturbed.*

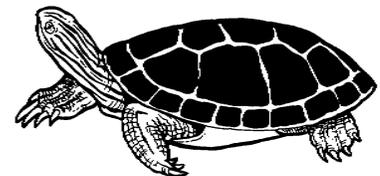
• *I like to perch atop a muskrat hut and sing my cheery song.*

• *I like to "loaf" or rest on top of a muskrat hut. The hut is surrounded by water, so I am protected from other animals who might like to have me for lunch.*

• *The muskrat hut provides a great lookout point for me to get my food from. If I stand quietly and watch the water below, I can snap up a tasty fish for my lunch.*



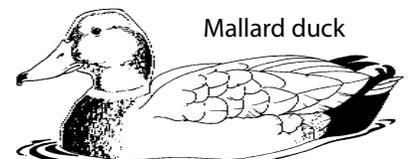
Great blue heron



Painted turtle



Red-winged blackbird



Mallard duck

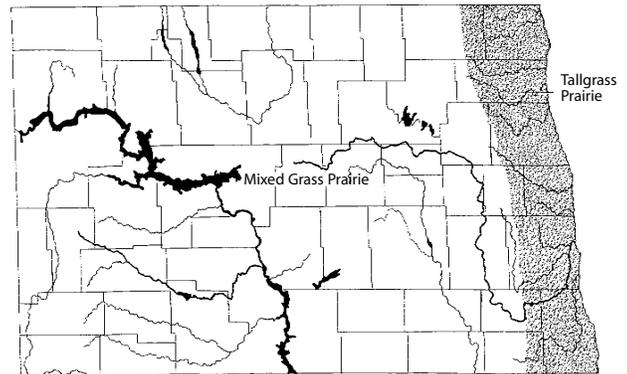
NORTH DAKOTA'S PRAIRIES



Prairie is the main habitat found in North Dakota. Prairie is made up of grasses, colorful wildflowers, and scattered shrubs (bushes). As early European settlers traveled across the vast expanse of prairie, they commented that it was like crossing “a sea of grass,” because the wind moved across the grass causing it to ripple like waves on an ocean. The settlers named this huge open country “prerie,” which means meadow or grassland. The spelling was later changed to “prairie.”



North Dakota has two kinds of prairie grasslands – the tallgrass prairie and the mixed grass prairie. Tallgrass prairie is found on the eastern edge of the state, and receives more precipitation than the mixed grass prairie in central and western North Dakota.



North Dakota Prairies

1. Grassland Trek

● **Activity:** Take a walk through prairie grasslands near your home. The prairie might be in your backyard, or land that a friend or relative owns. You can also find prairie on a national wildlife refuge, wildlife management area, national grassland, or national park. Use all your senses to search for the items below. **(Remember to NEVER taste a wild plant, berry, or mushroom, as some are poisonous).**

• Find 3 signs that animals live here (holes, tracks, chewed leaves, animal droppings)

1. _____
2. _____
3. _____

• Find something that looks:

- fragile _____
- beautiful _____
- ugly _____
- young _____
- old _____
- funny-looking _____



NORTH DAKOTA'S PRAIRIES



- Find something that is decomposing:

- Find evidence that humans have been here before:

- Find 3 different types of plants :



2. Flower Power T-shirts

● **Activity:** Collect several different colored flowers (make sure you have permission from the landowner, first.)

Materials Needed:

flowers	brown paper bag
rock (or hammer)	newspaper
pre-washed cotton t-shirt	waxed paper
dye setting solution (3 Tbsp. baking soda in 1 gallon water)	

Directions:

1. Put several layers of newspapers (1-2 inches thick) inside the brown paper bag.
2. Place the brown paper bag inside the shirt so it lays flat.
3. Arrange flowers and leaves on the t-shirt.
4. Place a piece of waxed paper on top of the flowers and leaves. The order of your layers should be: waxed paper, flowers & leaves, front of t-shirt, brown paper bag with multiple layers of newspaper inside, back of t-shirt.
5. Using a rock or hammer, pound the front of your t-shirt until the colors from the flowers and leaves soak into the t-shirt. Pound carefully so you do not tear the fabric.
6. After you are done pounding, soak your t-shirt in a dye setting solution of 3 tablespoons baking soda in one gallon of water for 15 minutes.
7. Dry your t-shirt, and then enjoy wearing your "Flower Power T-shirt".



NORTH DAKOTA'S PRAIRIES



3. Prairie Playtime

Pioneer children did not have an abundance of toys to play with. They kept themselves amused with items they found on the prairie, or items they made from prairie resources. Children may have played hide and seek, or catch with a ball made of animal hide or grass. They skipped stones for fun, and made marbles by rolling clay.

● **Activity:** *Create a game or develop a toy using only natural materials found on the prairie. Share your game or toy with your friends – describe what materials were used, and how to play with the new game or toy.*

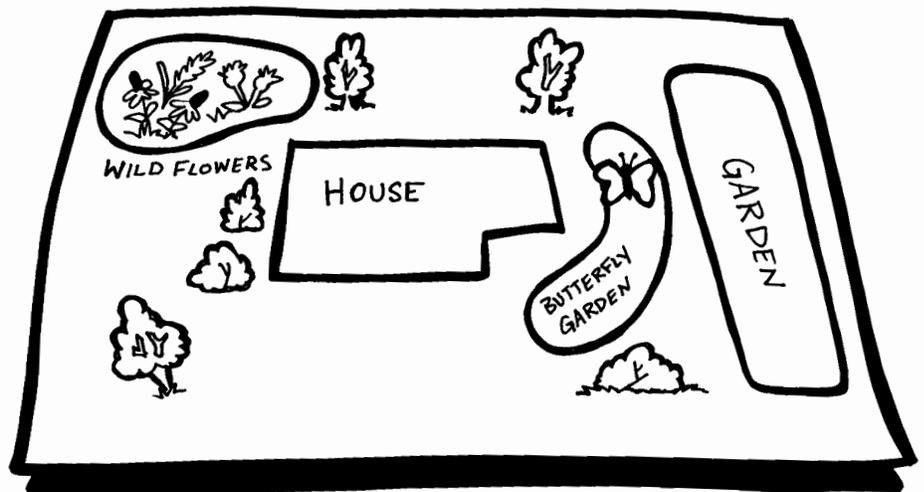
Materials Needed:

sticks bones
stones hide
grasses other natural resources

4. Plant a Prairie

● **Activity:**

1. Research the types of grasses and wildflowers found on North Dakota native prairie.
2. Find an area in your yard, garden, or even at your school that you can convert to a natural prairie habitat.
3. Sketch a plan of what you want to plant and the arrangement of how you want to plant it.
4. With permission, collect seeds from native plants (late summer or fall). Research planting techniques and then plant your seeds.



NORTH DAKOTA'S PRAIRIES



5. Song Map

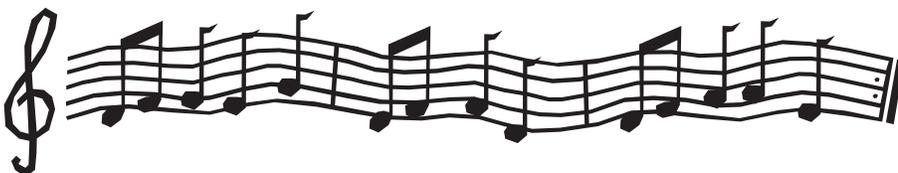
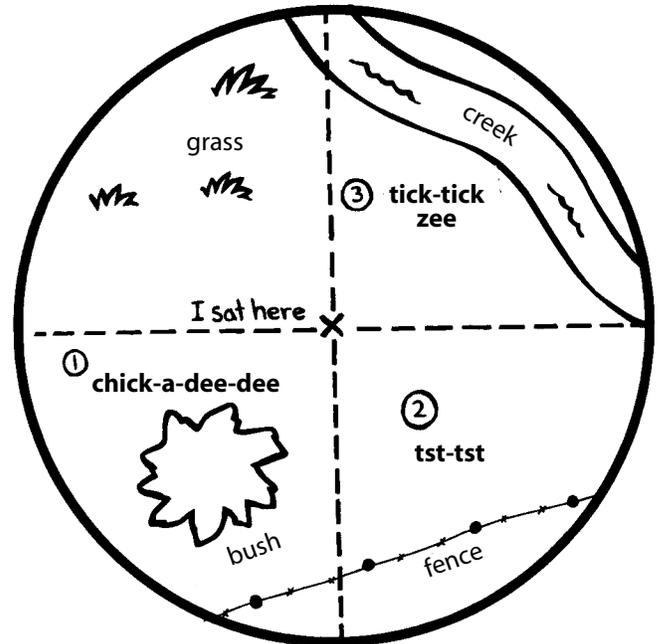
Some people may think that prairie grasslands are not important to birds, because they do not have a lot of trees or bushes. The fact is that there are many species of birds that breed, nest, and thrive in this grassland habitat.

● **Activity:** Discover the variety of birds that live on the prairie by making a song map.

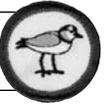
Materials Needed:
sheet of paper
clipboard
pencil

Directions:

1. Take a walk through the prairie, and find a quiet, comfortable place to sit.
2. On your paper, draw a large circle and incorporate your surrounding landmarks. There may be a wetland, bushes, or a large rock. Mark an X or a stick figure of yourself where you are sitting in relation to these objects.
3. Sit and listen very carefully for the songs of different birds. As you hear the different songs, draw a dot on your map that represents the area that you hear the song coming from.
4. Next to the dot, describe what the song sounds like. (For example, a robin sounds like: "cheer-up cheerio"). If you see the bird, you can also sketch an image of the bird on your map.
5. After you have listened for 20 minutes, count how many different songs you have heard. You will be amazed.
6. Take your song map home and use a bird field guide to help you identify the birds on your map.



NORTH DAKOTA'S ENDANGERED SPECIES (CONTINUED)



Bald eagle mask pattern for "Welcome Back!" activity found on page 14.

