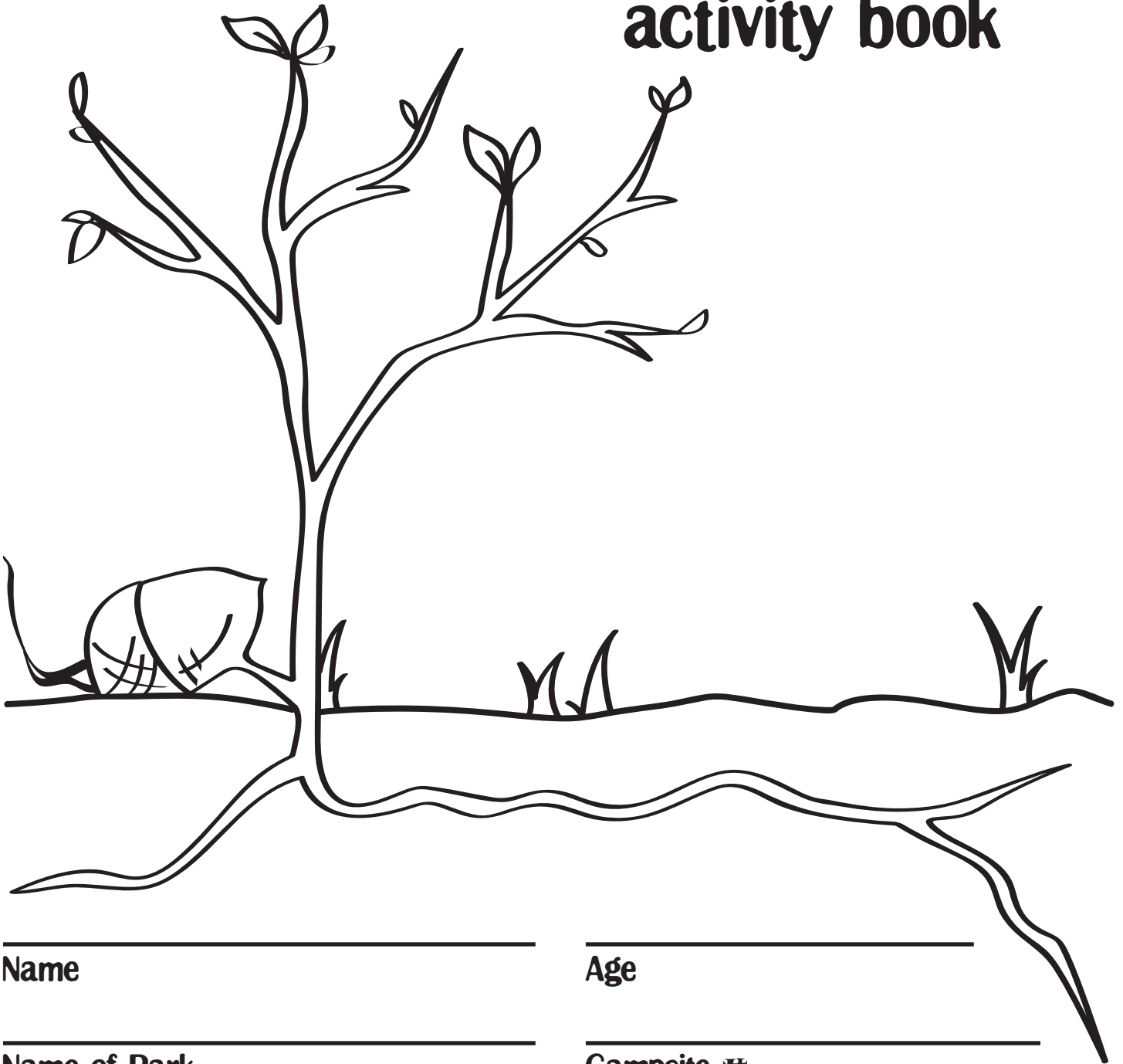


Roscoe's Rangers

activity book



Name

Age

Name of Park

Campsite #



DAKOTA EXPLORERS
"Come play in our backyard"

**For Ages 13
& Over**

A Dakota Explorers Activity Book
2011 North Dakota
Parks & Recreation Department



North Dakota State Symbols

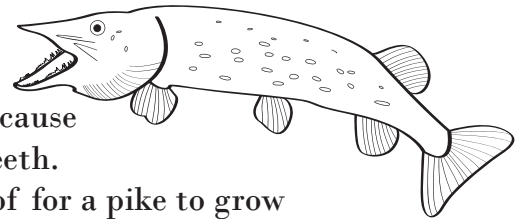


State Bird: Western Meadowlark

The western meadowlark became North Dakota's state bird in 1947 as it is a familiar songbird of open country across the western 2/3 of the United States. The western meadowlark is in the same family as orioles and blackbirds. They average about 8 ½ inches long and have a distinctive call that is often described as watery and flute-like. Their call distinguishes it from the closely related eastern meadowlark species. Look for western meadowlarks perched on fence posts or on the ground where they nest and forage beneath the soil for insects, grain and weed seeds.

State Fish: Northern Pike

The northern pike was chosen as North Dakota's state fish by the 1969 Legislative Assembly. Northerns are easy to identify because of their long, horizontal body with long snout and large, sharp teeth.



The dorsal fin is located far back on the body. It is not unheard of for a pike to grow to lengths of 59 inches and weights of 55 pounds. Northern pikes usually live in habitats that have cold, clear water with plenty of weeds. Many people like to catch northerns as their size creates a challenge, but many release them as they are a bony fish to fillet and eat.

State Tree: American Elm

The American elm was designated as the official state tree in 1947.

The American elm can easily grow over 100 feet tall, forming a high, spreading canopy that creates great shade. Unfortunately, during the 1960s, Dutch elm disease started to spread and has killed thousands of American elm trees in North Dakota. Dutch elm disease is a fungal disease spread by the elm bark beetle.

Trees unaffected by such a disease can live for several hundred years. American elms grow in moist soils and can easily be identified by their leaves as they are long, pointed and doubly saw-toothed with unequal sides. Their leaves are also vary in color; one side being dark green, the other side paler in color.



There are so many wonderful things to see and do in North Dakota's state parks. I encourage you to make memories and take as many pictures as you like. Please leave all that you see and find in the park for all visitors to enjoy. Hope to see you on the trail!

Tracking and Traces

Animal Signs to Look For

Even though you may not see wildlife when you explore the park, you can see the signs or traces they leave behind. Explore the park to see if you can find 8 of the 10 signs listed below. Place an "X" in the box next to the traces you found. Happy Hunting!

Animal Dropping (also called scat)

☐

A Burrow

☐

Animal Trails

☐

Nest (birds are not the only animals to make a nest)

☐

Spider Web

☐

Bones (chicken bones do not count)

☐

Tracks

☐

Insect Galls (bulges on plant stems)

☐

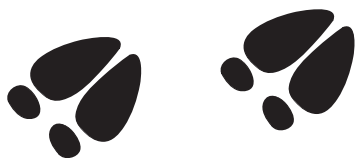
Nibbled Leaves and Branches

☐

Feeding Holes in a Snag (dead tree)

☐

Don't forget to look everywhere! Including the ground, tree branches, under rocks, plants and/or around logs.








Plant and Animal Observation

We depend on each other to be stewards of all the plants and animals that call this park home. By following a few guidelines, you, the plants and animals will be safe.






Do's

-  Do be a careful observer.
-  Do replace logs and rocks to the position you found them.
-  Do stay on designated trails.
-  Do pick up any litter you may see.
-  Do take detailed notes about your observations, including information about location and characteristics of any plants or animals that you see.

Can you think of a few guidelines visitors should follow while visiting our parks? Write your ideas on the lines below.

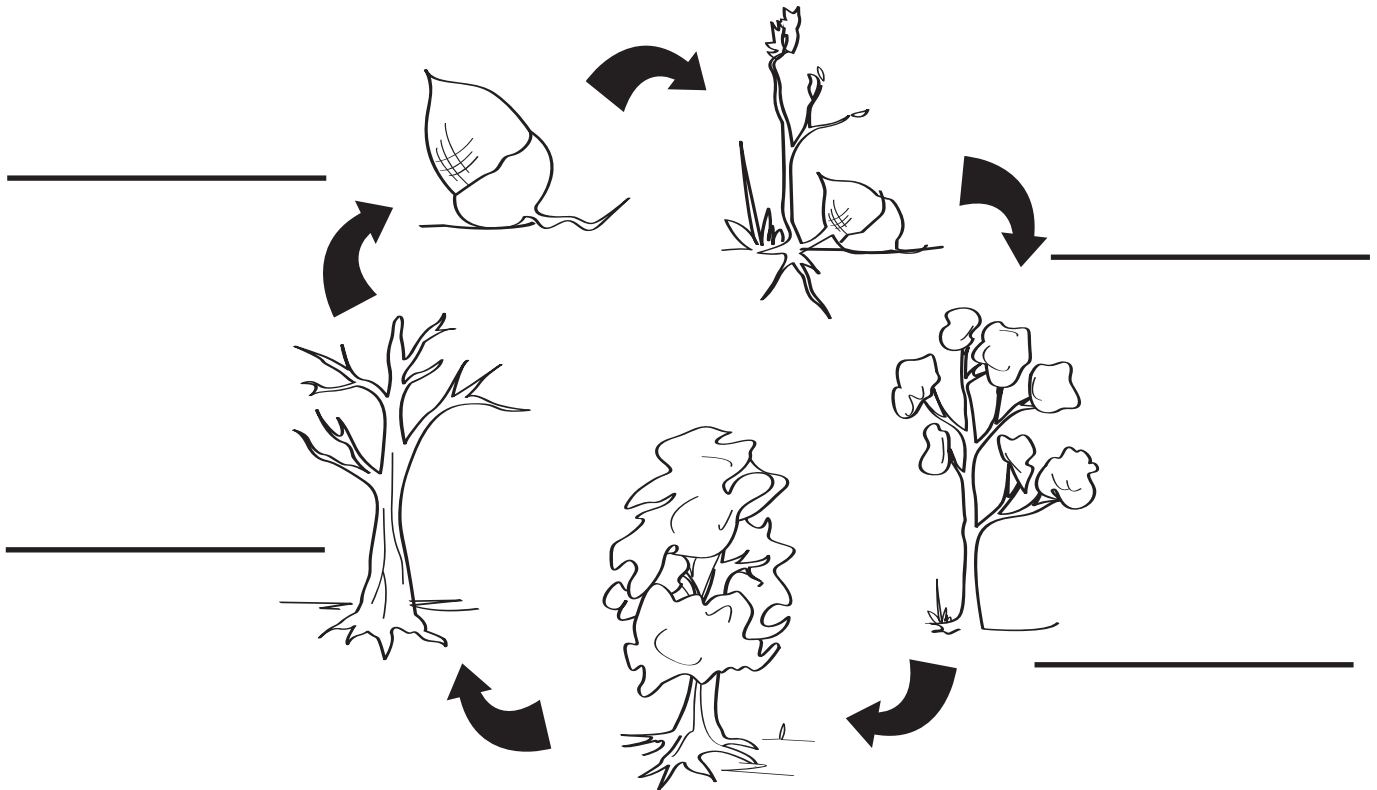
Don'ts

-  Don't put anything you find in your mouth because it could be poisonous.
-  Don't chase after, yell at or throw things at animals you see.
-  Don't reach under logs, rocks, crevices or other spaces if you can't see into them.

Tree Life Cycle

Trees have cycles galore. All living things go through a life cycle, including you. You started out as an infant, then you became a toddler, now you are a youth that will someday become a mature adult. Throughout time, you will be faced with growth, injury, illnesses and yes, eventually death. Find a tree and think about how similar you are. Are you about the same age or is the tree older than you?

Match up the stages of a tree's life cycle in the picture from the descriptions given below and write the stage on the line provided.



Adult

A mature tree that bares leaves and produces seeds.

Seed

The beginning of a tree's life cycle.

Sapling

An immature tree that is still growing.

Seedling

A very young tree that emerges from the seed.

Snag

A dead or dying tree that is losing its bark and has dead branches.

Crack the Code

Using the key below, crack the codes to find out more about plants.

14 21 3 11 3 23 12 2 11 21 24 23 5 23

It's a set of steps that must happen with the right ingredients for a plant to grow and thrive.

Think of the process as a recipe.
Can you figure out
what the right
ingredients are for a
healthy plant?

Now that you have figured
out the key ingredients,
can you figure out what
they produce in a plant cell?

RECIPE

Ingredients:

23 19 2 25 5 22 21 11

18 17 11 24 8

23 3 5 25

17 5 8



13 21 25 3 8 3 14 21 12 25 25

Without this the plant would not be able to
produce the food it needs. This is the
pigment that makes leaves and
needles look green.

13 21 25 3 8 3 14 25 17 23 11 23

This is the cell that stores the green pigment
and where photosynthesis takes place.

KEY

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
17	16	13	6	24	26	22	21	5	1	20	25	7	2	3	14	15	8	23	11	19	9	18	4	12	10

Crossword

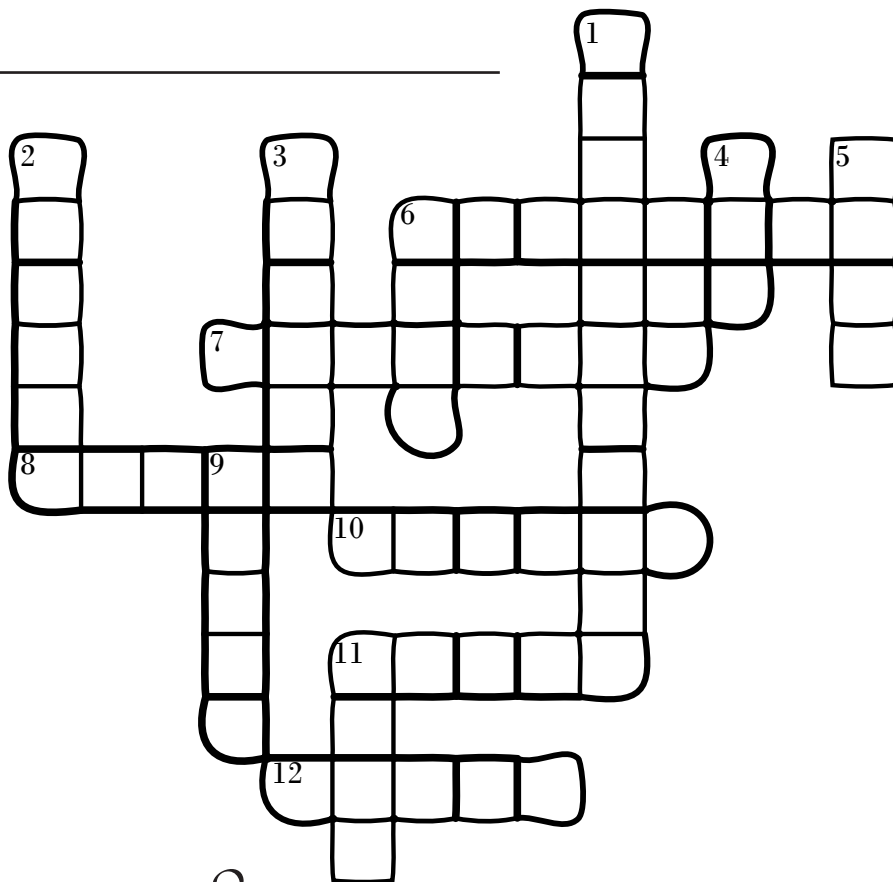
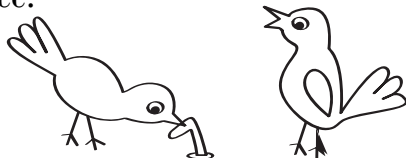
Read the clues and fill in the blanks to complete the puzzle.

Across

6. Uses trees for habitat.
7. Gives shape to a tree.
8. Holds the tree to the ground.
10. Makes food for the tree.
11. Builds nest in tree branches.
12. What the top of the tree is called.

Down

1. Drills holes in tree with beak.
2. Uses trees to build lodges.
3. Squirrels like these nuts.
4. Trees provide clean ____ for everyone.
5. Produces a new tree.
6. Causes a tree to sway.
9. Main stem of the tree.
11. The skin of the tree.



Word Bank

Wind Seed Leaves Beaver Woodpeckers
Roots Branches Wildlife Birds Crown
Air Trunk Bark Acorns

Jumble Puzzle

Unscramble the words on the left. Then, unscramble the circled letters to reveal the phrase below.

KIHE



IERF



DOOURTOS



EIBK



GIMCAPN



Clue: It's "hard" not to figure this out.

North Dakota State _ _ _ _ _ !



Food Web

A food chain shows how energy flows through an ecosystem as one animal eats another animal or plant. Each part of the food chain has a name and role, yet animals can fill a variety of roles depending upon the food chain. Also, not all food chains include all roles.

Producer - Plants that produce their own food using sunlight.

Primary Consumer - Animals that eat plants.

Secondary Consumer - Predators that eat primary consumers.

Tertiary Consumer - Predators that eat secondary consumers.

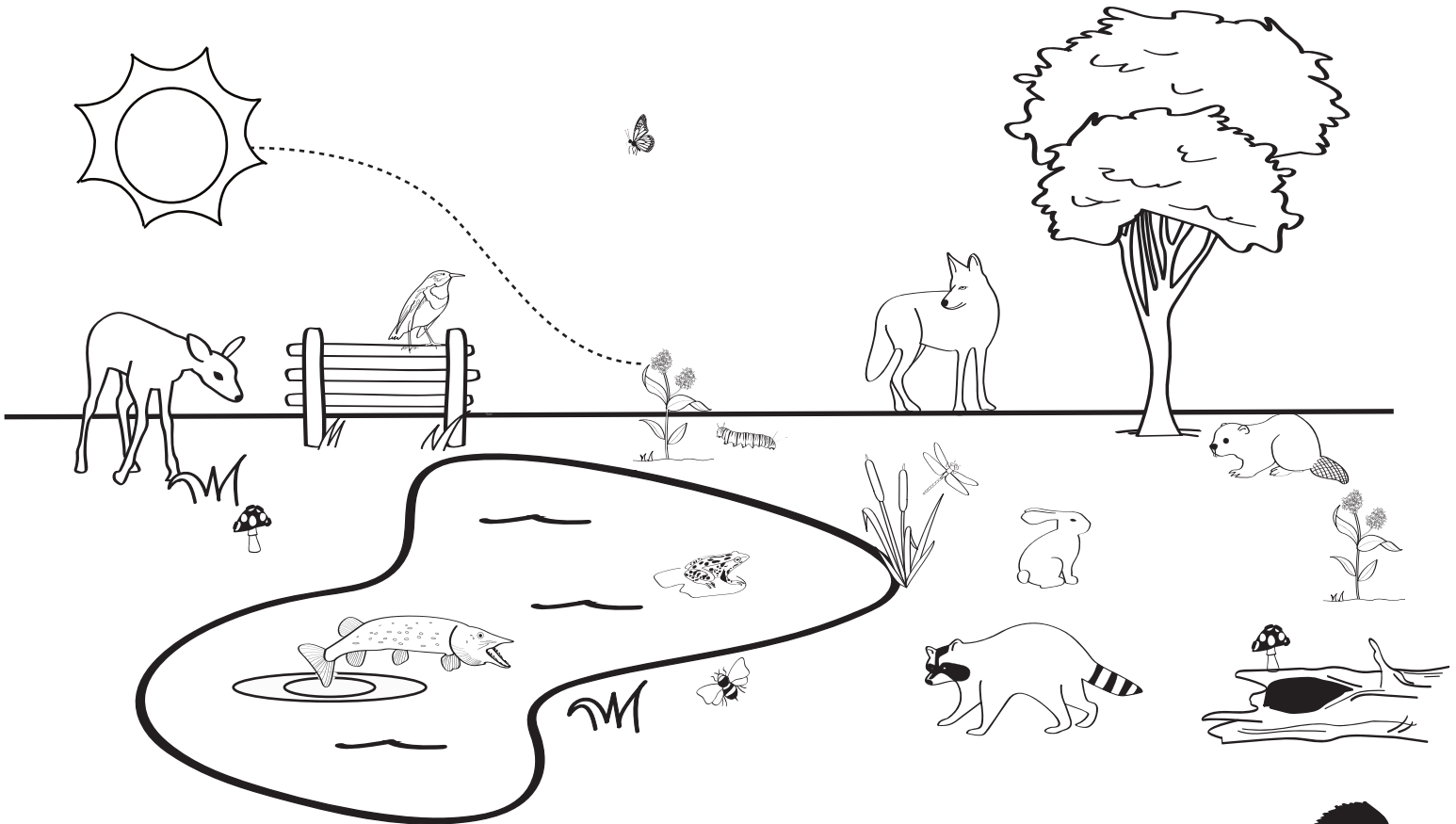
Quaternary Consumer - Predators that eat tertiary consumers. Energy can continue to go on to additional predators until it reaches the top of the food chain.

Decomposer - Bacteria or fungus that breaks down dead plants and animal matter, returning nutrients back to the soil.

Here is what a food chain may look like.

Sun → Grass → Butterfly → Frog → Fish → Wolf → Mushroom

Since animals eat so many different things, the food chain has overlapping parts which creates a web effect. That is why it is known as a food web. In the picture below, create a food web by drawing lines to show several different food chains, connecting producers to primary consumers, secondary consumers and so on.



Dakota Explorer Certificate

This is to certify that

has completed the required Dakota Explorer's activities and has proven that he/she has learned more about the North Dakota state parks and the responsibility we all share in conserving our natural resources.

Park Official



Date