



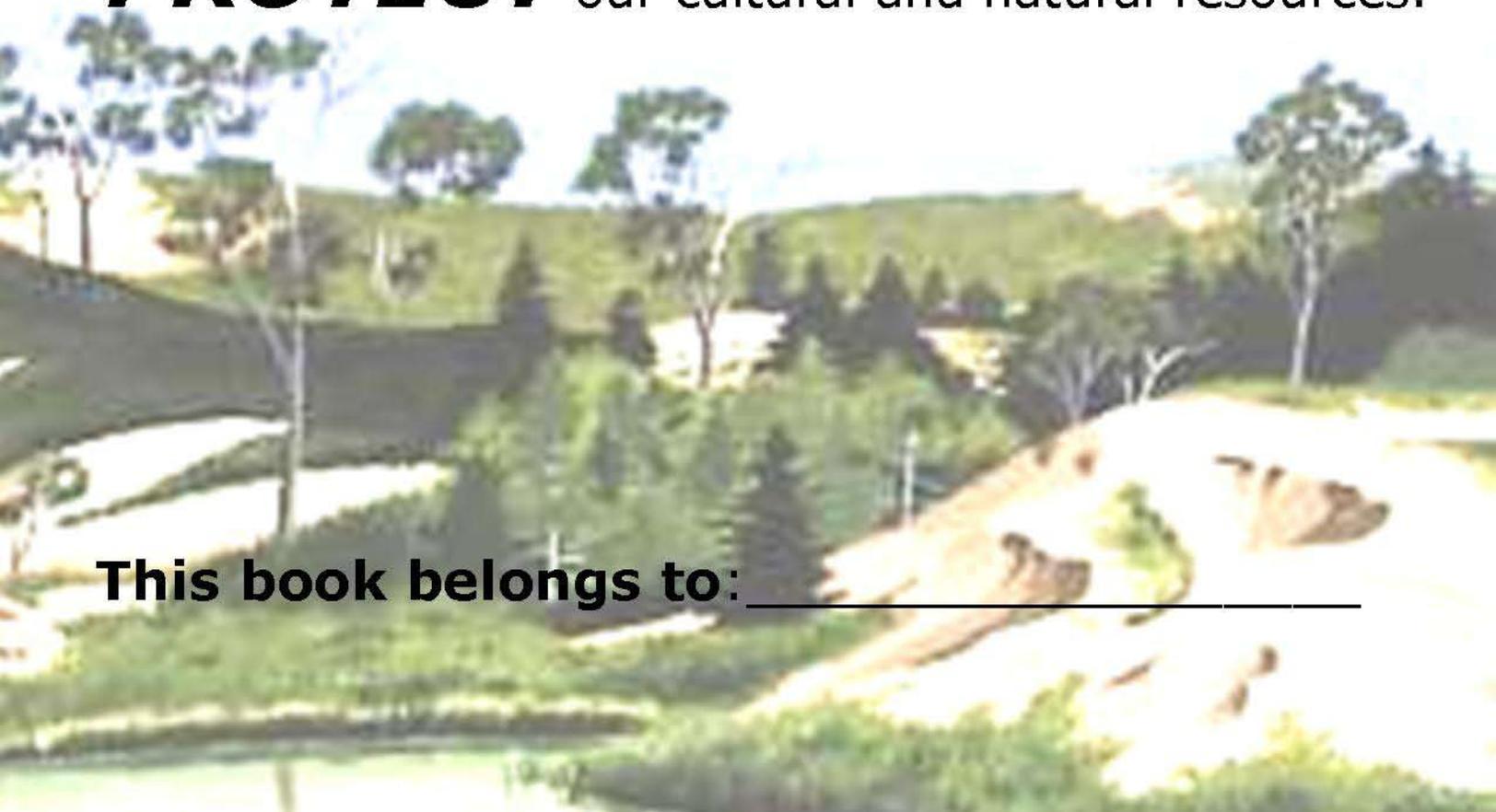
Indiana Dunes National Lakeshore

EXPLORE the Indiana dunes.

LEARN cool facts about national parks.

PROTECT our cultural and natural resources.

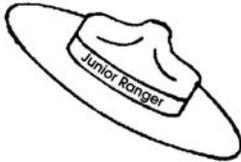
This book belongs to: _____



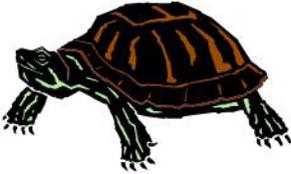
Become a Junior Ranger!

Welcome to the Indiana Dunes National Lakeshore. As you explore, be sure to visit different areas of the park and enjoy your Junior Ranger adventure. From the beach to the farm, and back to the trails, there is much to discover in YOUR national park.

Junior Ranger Requirements:



All Junior Rangers must complete the activities with the Junior Ranger hat next to the title. They are on pages 3, 14, and 15.



If you are younger than 9 years old, complete three of the activities with the Eastern Box Turtle next to the title. Also do the activities on pages 3, 14, and 15.



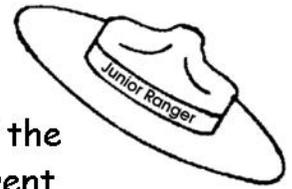
If you are 9 or older, you must complete five activities with the Red Fox next to the title. Also do the activities on pages 3, 14, and 15.

During your Junior Ranger adventure, go on ranger-led tours, read the wayside exhibits, hike trails, and use your observation skills. When you are finished, return this booklet to the Dorothy Buell Memorial Visitor Center to receive your official Junior Ranger Badge! Back at home, continue learning about the park through our website: www.nps.gov/indu/forkids.htm

Many thanks to:

Many thanks to Tom Mulcrone, a former Student Conservation Association intern, for helping to design this Junior Ranger booklet. Also our thanks to the Alliance for the Great Lakes for use of some of the plant and animal graphics used in the booklet.

Explore your Parks



National parks are special places for all people to enjoy. Each of the almost 400 national park units in the United States tells a different story. Think of a place near your home that you would like to preserve. What is special about it? Draw a picture of your favorite spot, and write a description about why it should stay just the way it is.

My favorite place is: _____

It should stay how it is because: _____

Drawing of My Special Place



What is the mission of the National Park Service?

(You can find a brief version of the NPS mission statement in the park's newspaper, *The Singing Sands*.)





Living Lakes

Where to visit: Lakeview Pavilion

People have used the *Great Lakes* for many different things throughout time. The lakes provide food, water, transportation, and a place to have fun. That is why it is important to preserve the *Great Lakes*.

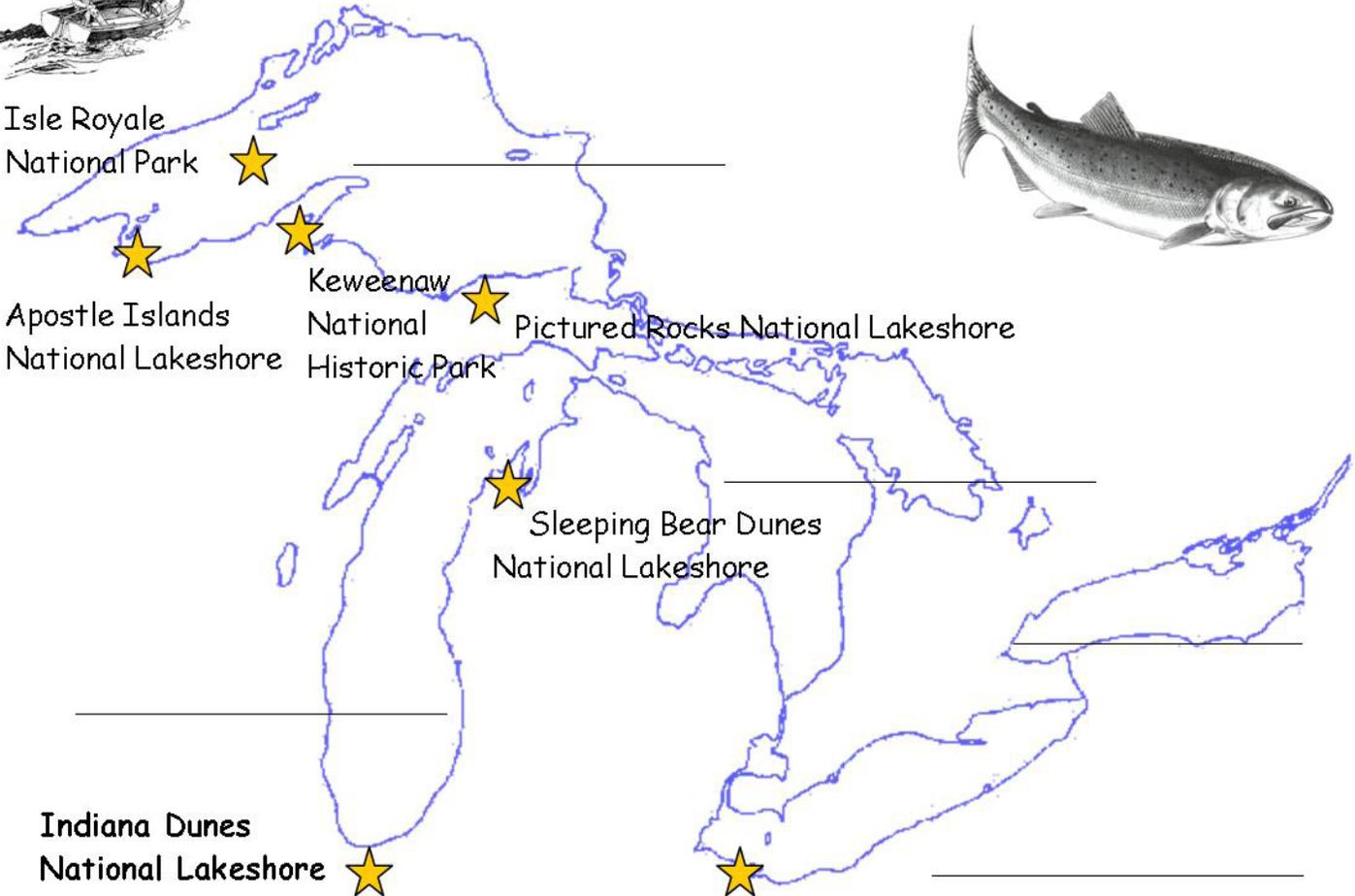
To gain an appreciation of Lake Michigan, visit Lakeview Pavilion on Lakefront Drive. Color in each of the *Great Lakes* on the map, record the name of each lake on the line, and circle the national parks that you have visited or would like to visit.

Our Great Lakes

Huron	Ontario	Erie
Michigan		Superior







I visited Lakeview Pavilion on _____.

Parent's initials _____

Perry's Victory and International
Peace Memorial



Glacier Games

Where to visit: Dorothy Buell Memorial Visitor Center

Although there are no glaciers in the Great Lakes today, these giant sheets of moving ice played a large part in the formation of the area.

Watch the video at the Dorothy Buell Memorial Visitor Center. Fill in the missing words to tell how these lakes were made, using each word only once. Ask a ranger for help if you get stumped.

Basin	Wisconsin	Mile
Ice	15,000	Moraine
Rocks	Glacier	Great Lakes

Imagine that you are standing on the _____ Glacier nearly _____ years ago as it moved across northern Indiana. You walk to the edge of the glacier and notice that you are more than one _____ above the ground. As the giant sheet of _____ moves across the land, you see that it is picking up large _____ and other debris. Suddenly, the _____ starts to melt! Large chunks of ice and rocks that were caught in the glacier fall off and form huge piles around the edges of the glacier. The rocks and soil pile higher and higher as the glacier melts, and soon form a large _____. The water begins to fill the large _____ that was carved out by the moving sheet of ice. You take a moment to look at this amazing sight before you, and then realize that you are standing on the glacier that helped to carve out the _____.

I watched the video at the visitor center on _____.
Ranger signature: _____



Footprints in the Sand

Where to visit: Bailly Homestead

The first people to live in and around the Indiana Dunes were American Indians. Potawatomi and Miami Indians relied on the land for food, water, and shelter.

Part of the Little Calumet River Trail in the Bailly/Chellberg area was once used as a trade route by American Indians and early traders. Take a walk along the trail, and follow in their footsteps by using a special method of hunting called *stalking*. When an Indian hunting party walked through the woods, they would make a straight line and walk in the footsteps of the person in front. Follow these instructions, and then see if you can sneak up on one of your friends!

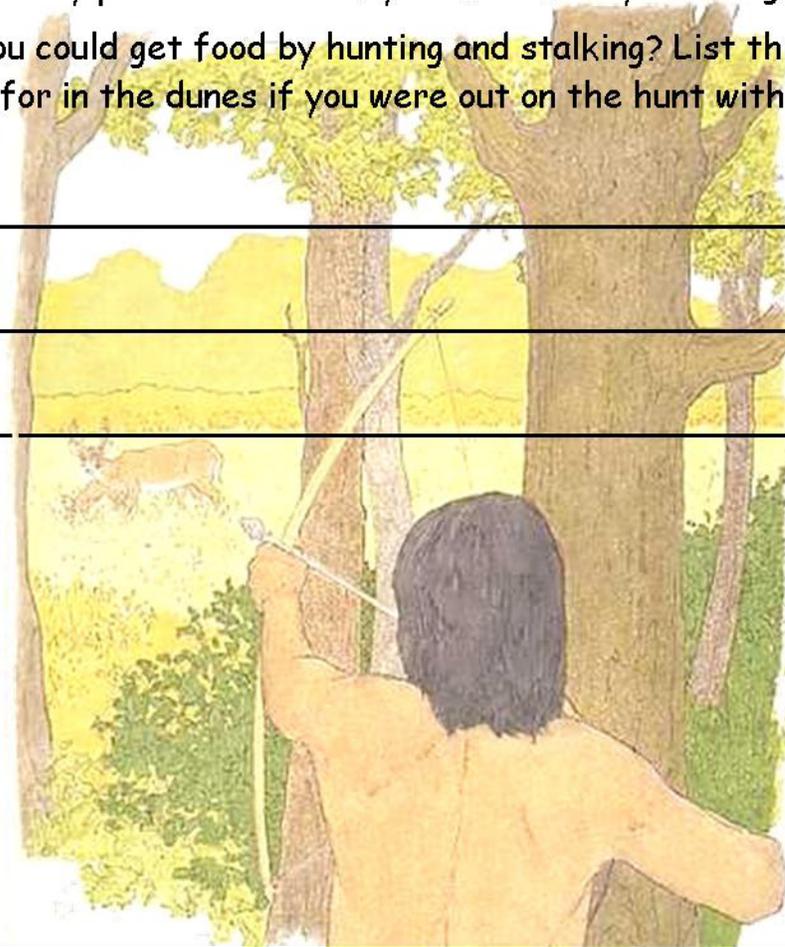
First, place the back of your heel on the ground.

Next, roll the side of your foot down from your heel to your pinky toe.

Lastly, slowly place the rest of your foot firmly on the ground.

Do you think you could get food by hunting and stalking? List three animals that you would look for in the dunes if you were out on the hunt with the Potawatomi.

1. _____
2. _____
3. _____



I visited the Bailly Homestead on _____ . Parent's initials _____

Meet me at the Bailly's



Where to visit: Bailly Homestead

When Europeans came into the Great Lakes region, they set up trading posts along rivers and trails. These trading posts were areas for people of all backgrounds to come together and exchange goods.

Visit the Bailly Homestead. Use the self-guided trail brochure and the signs on the grounds to help the Potawatomi exchange their traditional tools for modern European tools. Draw connecting lines.

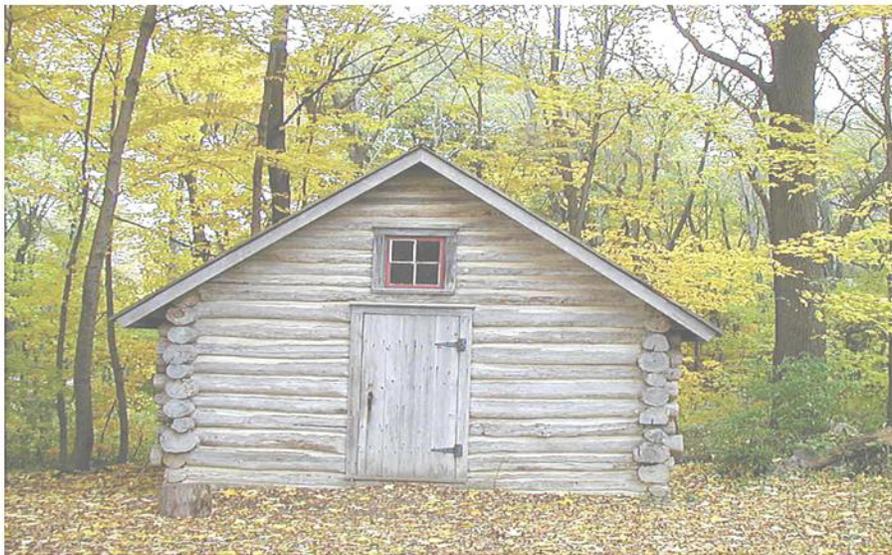
Potawatomi

Bow and Drill (Fire)
 Antler (Making Holes)
 Stone Axe (Chopping Wood)
 Clay pots (Cooking)
 Gourd Containers (Storage)

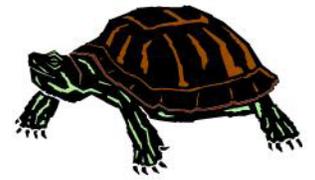
European

Metal Pin
 Glass Jar
 Flint and Steel
 Hatchet
 Iron Kettles

Fur trading cabin at Bailly Homestead.



I visited the Bailly Homestead on _____. I saw _____ buildings.



Stroll in the Sand

Where to visit: One of the park's eight beaches

As you stroll along the beach, observe the animals and plants that make their home on the sand. Check off each living thing you see in the sand, and answer the questions.



Dragonfly _____

How many legs?



Fowler's Toad _____

Where does it live?



Six-lined Racerunner _____

What color stripes?



Ladybug _____

How many spots?



Spotted Sandpiper _____

What does it eat?



Marram Grass _____

Where does this grow?



Cottonwood _____

How wide is the leaf?



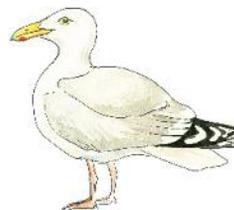
Wild Grape _____

How long is the leaf?



Antlion _____

Find its funnel-shaped trap in the sand.



Herring Gull _____

Look for tracks on the beach.

I visited _____ beach on _____.



Current Conditions

Where to visit: One of the park's eight beaches

Lake Michigan is a very large and powerful body of water. Conditions change often and can sometimes be very dangerous. Answer these questions to help determine if there are rip currents today.

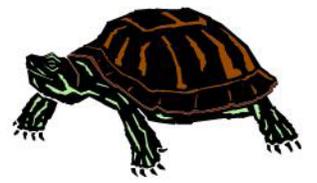
1. How high are the waves today? Rate them from 1-5 with 1 being short and 5 being very tall. _____
2. Where are the waves breaking? Guess how far out the waves are before they start to curl over. _____
3. How hard is the wind blowing today? Rate it from 1 to 5 with 1 being a light breeze and 5 being a strong wind. _____
4. Which direction is the wind blowing from? _____
5. Do you see any change of color in the water? If you do, what color is it and where do you see it? _____

Check Your Stats

Rip currents are formed when there is a strong wind blowing from the north or northeast. High waves that break over the sandbar and a change in water color where the water is getting pushed back out to the lake indicate rip currents.

Find a Rip Current sign on the beach, and read it with your family. Explain to a parent or friend how to safely get out of a rip current, and have them initial here. _____





Pond Patrol

Where to visit: Miller Woods or West Beach Wetlands

The animals that live in the Indiana dunes are very good at hiding. Even though they can be difficult to find, they leave clues about where they eat, live, and sleep. Look at the footprints, and do a three-way match, connecting the name of each animal with its picture and tracks. When you are finished, visit the wetlands and look for tracks.

Canada Goose



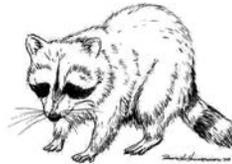
Beaver



Great Blue Heron



White-tailed Deer



Raccoon



Bull Frog



I visited _____ on _____.



Secrets of Succession

Where to visit: West Beach Succession Trail

Indiana Dunes National Lakeshore is part of one of the largest expanses of freshwater dunes in the world. But how were they made?

Walk along the West Beach Succession Trail using the self-guided trail brochure. Watch the transformation from the lake to the forest. As you explore, order each stage of the dunes by putting the numbers 1-4 on the line next to each description.

Stage # _____

Jack pines and junipers take root in the sand behind the foredunes and help to create a more stable dune

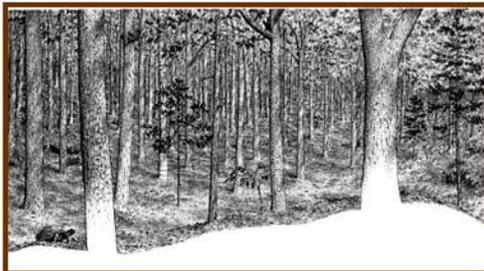
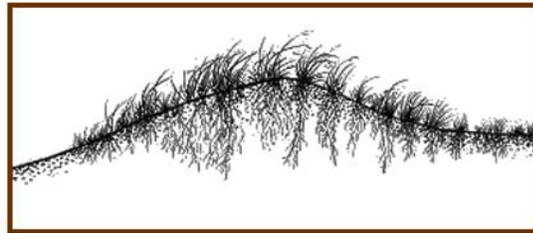


Stage # _____

Cottonwood trees and more diverse plants begin to grow on the back, or lee side of the dune. When their leaves fall off, they decay and make soil that is better for trees and shrubs to grow in.

Stage # _____

Pioneer plants, such as marram grass, spread their roots out under the sand and catch the sand blowing off the beach.



Stage # _____

Black oak and hickory trees begin to grow in the richer soil, and create a wooded dune.

If you have a thermometer, record the following information:

Air temperature _____ Water temperature _____ Soil Temperature _____

I walked the West Beach Succession Trail on _____.

Parent's Initials _____

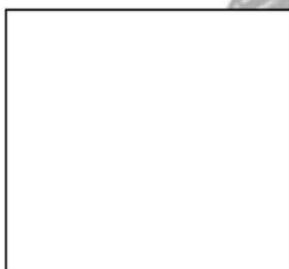


Discover With Your Senses

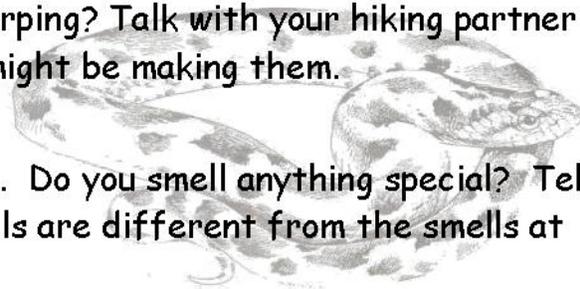
Where to visit: One of the park's hiking trails

The Indiana Dunes National Lakeshore is full of sights, sounds, and smells. Look at a map, or go to the Visitor Center to find a trail that you would like to hike. While you are walking, tune into your senses and answer the questions. And remember to always hike with a friend or someone you know.

1. Describe the weather to your friend or parent. Is it cloudy or sunny? Do you feel warm or cold?
2. Find three different trees on the trail. Compare the leaves and then draw a picture of each of them in the boxes.



3. Look for evidence of animal activity. How many tracks do you see on the ground? _____ Do you see any movement in the trees or in the sky?
4. Stop for a moment and listen carefully for sounds. Do you hear the rustling of leaves? What about birds chirping? Talk with your hiking partner about the sounds you hear and what might be making them.
5. Take a deep breath through your nose. Do you smell anything special? Tell someone how the smells along the trails are different from the smells at home. _____



I hiked _____ trail on _____.



Barnyard Bingo

Where to visit: Chellberg Farm

Welcome to the farm! More than 100 years ago, the Chellberg Farm was owned by Swedish immigrants named Anders and Johanna Chellberg.

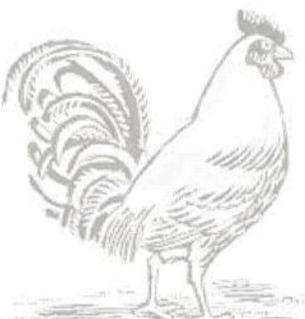
Take a tour of the farm with a ranger or use the self-guided brochure to tour the area with your family or friends. Look for the different tools people used to work the land. While you are discovering the farm, check off the things you see.

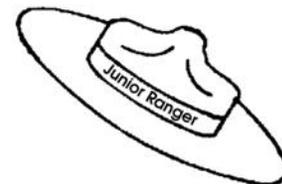
Field Plow	Fence	Goat	Yoke
Clothes Line	Windmill	Wood Stove	Scarecrow
Horse	Sorghum Press	Harness	Barn
Sugar Shack	Chicken Coop	Wagon	Corn Cobs

Help feed the farm animals!

Check with a ranger at the farm or at the Dorothy Buell Memorial Visitor Center to see when there will be a feeding time at the farm. If time permits, go to the Chellberg Farm, and record the date and what animal you helped the farmer feed.

Date: _____ Animal: _____





Walk with a Ranger

One of the best ways to learn and have fun here at the Indiana Dunes is to go on a Ranger-led program. Go to the Dorothy Buell Memorial Visitor Center or look on-line at www.nps.gov/indu to find out what activities are taking place during your visit. Attend one or more with your family. Listen to the ranger, and fill in the blanks.

Name of program: _____

Date and time of program: _____

One thing you learned: _____

Ranger Signature: _____

OR

Talk with a Ranger

Have you ever wondered what it would be like to be a ranger? Now is your chance to find out! Look for a person wearing a grey and green uniform with a badge and an arrowhead logo on their arm. Introduce yourself, and let her or him know you are becoming a Junior Ranger. Ask these questions and record their response:

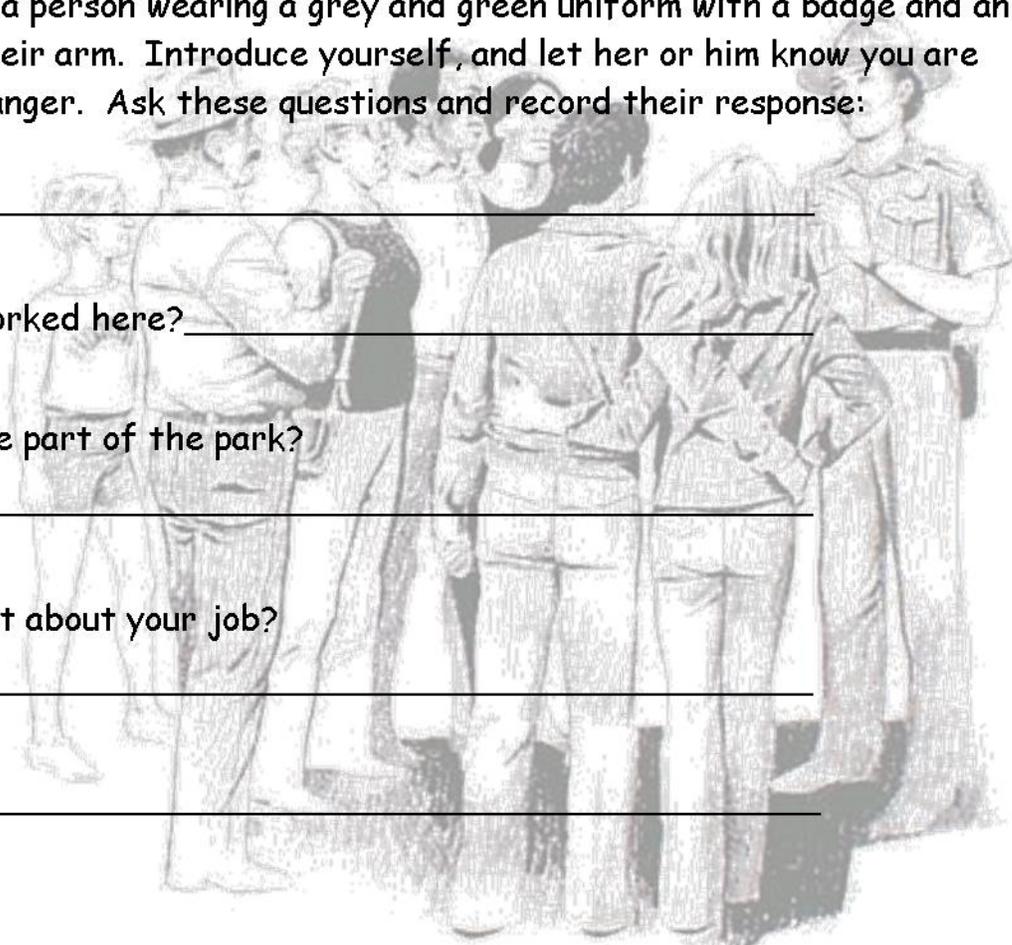
What is your name? _____

How long have you worked here? _____

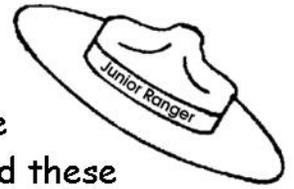
What is your favorite part of the park?

What do you like best about your job?

Ranger Signature: _____



Junior Ranger Training Camp



Now that you have been all around the park and have completed the activities, think about some of your duties as a Junior Ranger. Read these scenarios, and select the best answer.

While you are on the beach, you see a small group of seagulls walking in the sand. What should you do?

- A. feed them some of the leftovers from your lunch
- B. leave them alone
- C. throw rocks at them and chase them away

Your family is on a camping trip in the Indiana Dunes. While you are setting up your tent, you find a set of matches. What should you do?

- A. see if they work and try to light a fire
- B. leave them on the ground
- C. pick them up and give them to an adult

You are walking in the woods and see a beautiful wildflower. What should you do?

- A. pick it and bring it back to show your friends
- B. look at it from a distance and take a photograph
- C. walk off the trail so that you can get a better look

There are strong winds and a warning for rip currents at the beach. What should you do?

- A. stay out of the water to avoid dangerous conditions
- B. go in the water, but take a floatation device with you
- C. pack up and go to a different beach to swim

Junior Ranger Oath

As a Junior Ranger, I _____,
promise to protect the plants, animals, and history of the
Indiana Dunes National Lakeshore. I will share what I have
learned about national parks, and will continue to explore our
national treasures.



Your Signature

Date

Ranger Signature

Date

This Junior Ranger booklet was created through the partnership of the National Park Service (NPS), the National Park Foundation (NPF), and the Student Conservation Association (SCA) and was made possible through the generous support of Ocean Spray Cranberries, Inc., a National Corporate Partner of the National Park Foundation. To learn more about the online Junior Ranger program, visit www.nps.gov/webrangers.

