



Junior Rangers Activity Guide



Become a Junior Ranger!

Welcome to 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 neighborhood 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 painted 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.



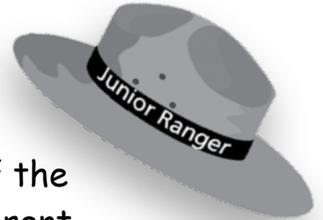
Bonus Sticker - Hike one of the parks many trails or go for a swim at West Beach when a life-guard is present.

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 Indiana Dunes National Lakeshore Visitor Center to receive your official Junior Ranger badge or patch! Back at home, continue learning about the park through our website: www.nps.gov/indu/forkids/index.htm

Thank You!

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 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 protect. What is special about it? Draw a picture of your favorite spot, and explain why it should stay just the way it is.

My favorite place is: _____

It should stay how it is because: _____



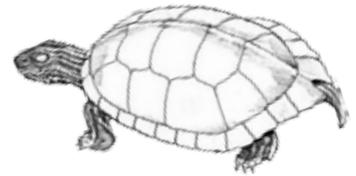
Drawing of My Special Place

[Large empty rectangular box for drawing]

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*, and also on the park website, <http://www.nps.gov/indu/parkmgmt/index.htm> .)





Living Lakes

Where to visit: Lake View 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 Lake View Pavilion on Lake Front 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

Isle Royale National Park ★ _____

Apostle Islands National Lakeshore ★

Keweenaw National Historic Park ★

Pictured Rocks National Lakeshore ★ _____

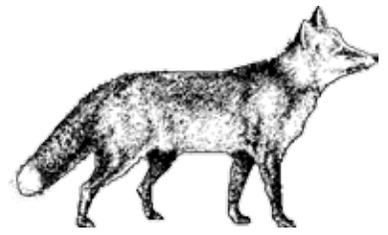
Sleeping Bear Dunes National Lakeshore ★ _____

Indiana Dunes National Lakeshore ★ _____

Perry's Victory and International Peace Memorial ★ _____

I visited Lake View Pavilion on _____.

Parent's initials _____



Glacier Games

Where to visit: Indiana Dunes National Lakeshore Visitor Center

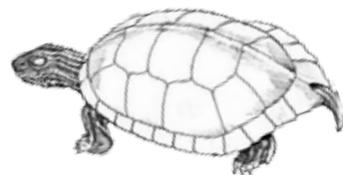
Although there are no glaciers in the Great Lakes today, these giant sheets of moving ice played a large part in the formation of the area.

Watch the video at the Indiana Dunes National Lakeshore 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 five animals that you would look for in the dunes if you were out on the hunt with the Potawatomi.

1. _____

2. _____

3. _____

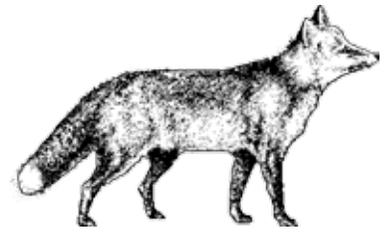
4. _____

5. _____



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 found at the Indiana Dunes National Lakeshore Visitor Center and the signs of the homestead to help the Potawatomi exchange their traditional tools for modern European tools. Draw connecting lines.

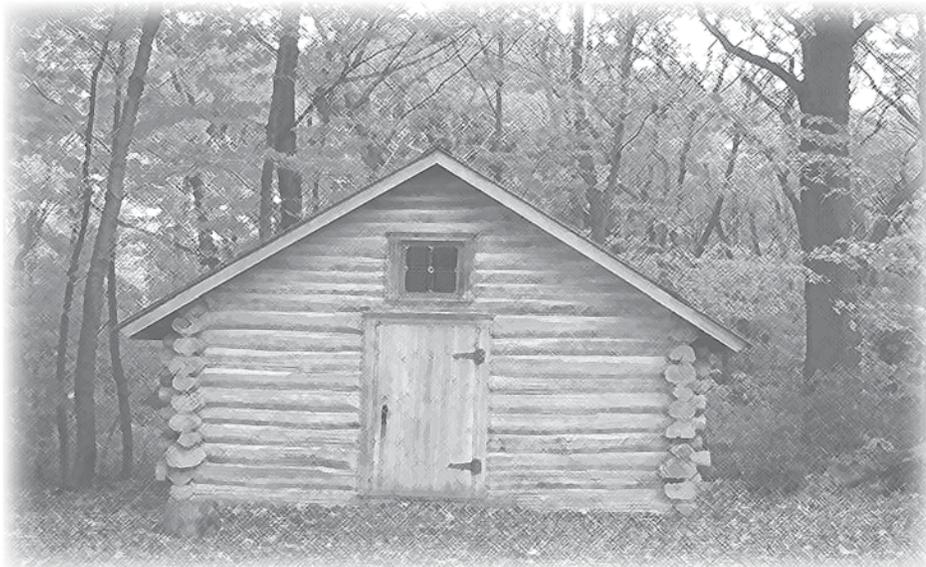
Potawatomi

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

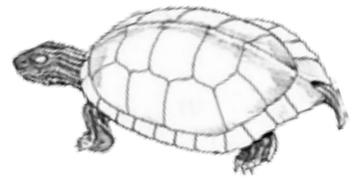
European

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: The Beach

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, and answer the questions.



Dragonfly _____

How many legs?



Fowler's Toad _____

Where does it live?



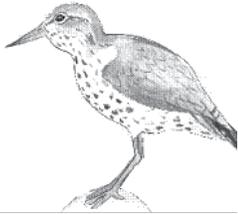
Six-lined Racerunner _____

What color stripes?



Ladybug _____

How many spots?



Spotted Sandpiper _____

What does it eat?



Marram Grass _____

Where does this grow?



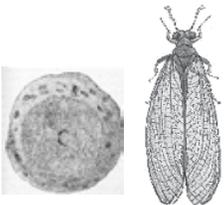
Cottonwood _____

How wide is the leaf?



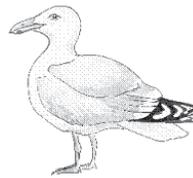
Wild Grape _____

How long is the leaf?



Ant lion _____

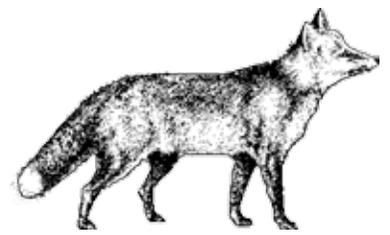
Find its funnel-shaped trap in the sand.



Herring Gull _____

Look for tracks on the beach.

I visited _____ beach on _____.



Water Safety

Where to visit: The Beach

Lake Michigan is a very large and powerful body of water. Conditions change often and can sometimes be very dangerous. Before going swimming at any of the park's beaches, you should consider these facts and check conditions for safety.

1. Look at the waves. How high are they? Rate them from 1-5 with 1 being no waves and 5 being very tall with whitecaps. _____
2. How hard is the wind blowing today? Rate it from 1-5 with 1 being no breeze and 5 being a strong wind. _____
3. Which direction is the wind blowing from? _____
Hint: if you are looking at the lake and the wind is blowing in your face, it is a north wind.
4. Do you see any change of color in the water? If you do, what color is it and where do you see it? _____
5. Do not swim without an adult who is comfortable swimming in the lake.
Circle your swimming partner.
MOM DAD RELATIVE ADULT FRIEND CHAPERONE
6. Did you bring a lifejacket? YES NO

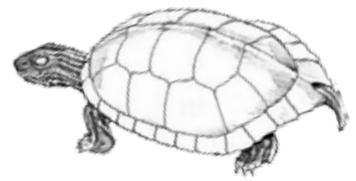
Since Lake Michigan is not a pool and does not have a flat bottom, it is safest to swim with a lifejacket. There are high and low spots throughout the shallow areas, and a lifejacket will help keep you floating if you step off the edge of a drop-off.



Should You Go Swimming Today?

If you gave the waves a rating of three or higher, if the wind is blowing from the north, if white caps are present, and if you see a change of color in the water, there might be rip currents. **DO NOT GO SWIMMING.**

Parent's initials: _____

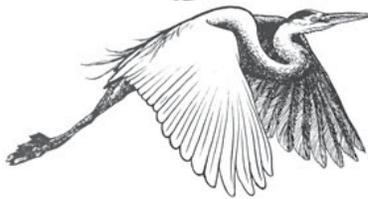


Pond Patrol

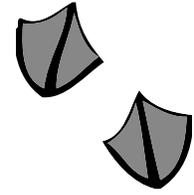
Where to visit: Miller Woods or West Beach Wetlands

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



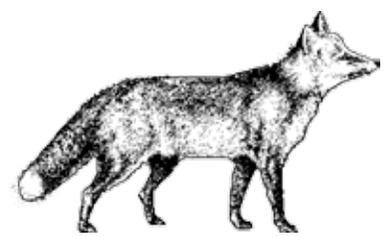
Raccoon



Bull Frog



I visited _____ on _____.



Secrets of Succession

Where to visit: West Beach Succession Trail

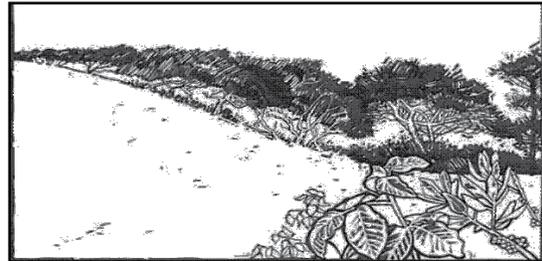
Indiana Dunes National Lakeshore is part of one of the largest expanses of freshwater dunes in the world. How were they made?

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.



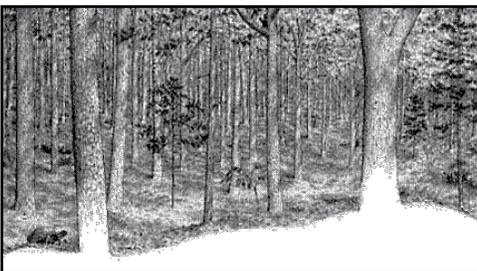
Stage # _____

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



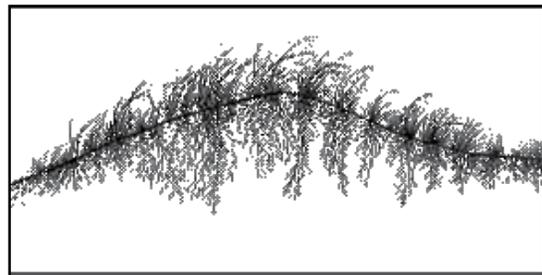
Stage # _____

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 # _____

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



Stage # _____

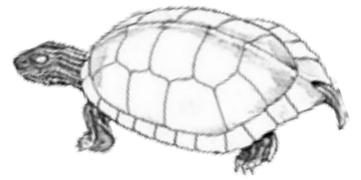
Pioneer plants, such as marram grass, spread their roots out under the sand and catch the sand blowing off the beach.

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 _____

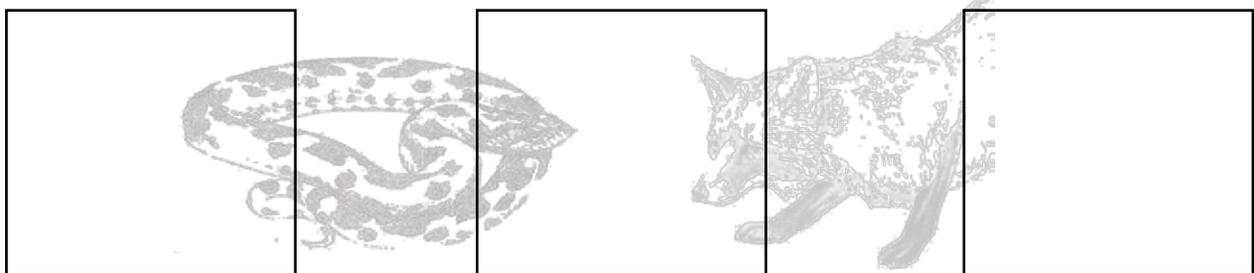


Discover With Your Senses

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

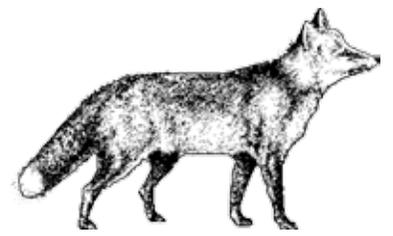
Indiana Dunes National Lakeshore is full of sights, sounds, and smells. Find a trail that you would like to hike. While you are walking, tune into your senses and answer the questions. And remember to always hike with a friend or parent. (Park and trail maps are available at the visitor center.)

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 the _____ 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.

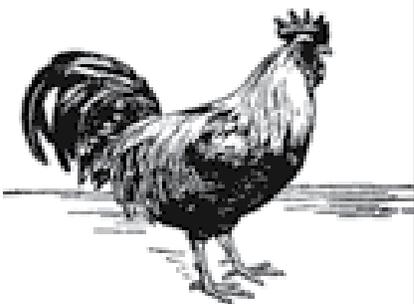
Take a tour of the farm with a ranger, or use the self-guided brochure to tour the area with your family or friends. Look for the different tools people used to work the land. While you are discovering the farm, check off the things you see. (Brochures are available at the visitor center.)

Field Plow	Fence	Garden	Yoke
Clothes Line	Windmill	Wood Stove	Scarecrow
Water Trough	Sorghum Press	Fire Wood	Barn
Sugar Shack	Chicken Coop	Wagon	Corn Crib

Help out on the farm!

Check with a ranger at the farm or at the Indiana Dunes National Lakeshore Visitor Center to see when there will be a program at the farm. If time permits, go to the Chellberg Farm, and participate in the program.

Date: _____





Walk with a Ranger

One of the best ways to learn and have fun here at Indiana Dunes National Lakeshore is to go on a ranger-led program. Go to the Indiana Dunes National Lakeshore 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; 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 at Indiana Dunes National Lakeshore. While you are setting up your tent, you find a set of matches. What should you do?

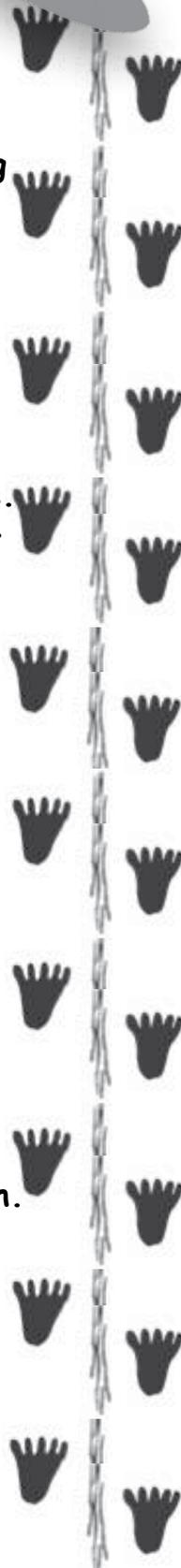
- A. see if they work and try to light a fire
- B. leave them on the ground
- C. pick them up and give them to an adult

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 West Beach. What should you do?

- A. stay out of the water to avoid dangerous conditions
- B. go in the water, but take a flotation 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
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