Junior Ranger Handbook

National Park Service Gulf Islands National Seashore

Mississippi and Florida





This booklet belongs to:

My age:

| | to Become a Ju | | - |
|-------|-------------------------------------------------------------------------------------|--------------------|-----------------------|
| I. Ho | w old are you? | | NIOR RANGE |
| Co | mplete this number of activit oklet. | | |
| whe | s booklet is designed for Junior o are 6 to 11 years old, but anybo ticipate! | Rangers ody can | Learn PRO |
| | end a ranger-guided program l write down one thing you lea | 0 | r sign your booklet |
| | ou can't attend a program, watc ead. | h the park movie : | at the visitor center |
| Pro | gram Title: R | anger Signature: | |
| Wh | at did you learn? | | |
| | nplete ONE of the projects lis | tod bolow and go | t an adult? |
| | nature when you are finished. | sted below and ge | at all adult 5 |
| (| ick up at least 10 pieces of trash or recycle them if you can). | | |
| | euse something you have alreadeuse your empty soda bottle as | | ent way (example: |
| | ult's signature: | | |

4. 2 and 3. After your booklet is reviewed you will be awarded your junior ranger badge!

Explore your Park Safely!

Junior Rangers know that safety comes first when they explore. Circle the safety rules that are important to your visit today.



Remember that all plants and animals in the park are protected! Please do not pick any plants and never take animals from their homes. You may take seashells, but make sure there are no hermit crabs or other creatures living inside of them.



Keep wildlife wild! Please do not get too close to wild animals and never feed them. Humans have been scratched and bitten while trying to feed or approach park animals. Human food is not healthy for animals.



Protect yourself from the heat and sun! Drink plenty of water, even if you don't feel thirsty. Wear a hat and sunscreen.



Forts are fun to explore, but they are often dark and it can be easy to trip and fall. Walk carefully instead of running inside the fort.



Be safe when you go swimming! Never swim alone and pay attention to the beach safety flags. A purple flag means there may be jellyfish, stingrays or sharks in the area. A red flag means there may be strong surf and/or undercurrents and you have to stay out of the water. A green flag means it is safe to swim but be smart and swim with a buddy.

Investigate an Arrowhead

The arrowhead is the symbol of the National Park Service.

You will see this arrowhead in every National Park Service site you visit. It is found on park ranger uniforms, on signs, in visitor centers and lots of other places.

Test your investigation skills!

Step 1. Find an arrowhead symbol in the park.

Step 2. Where did you find it?



Step 3. Look carefully at the arrowhead symbol. Every object in the arrowhead represents a feature protected within all National Park sites. Take a close look at the arrowhead and see if you can figure out the answers to the following questions.

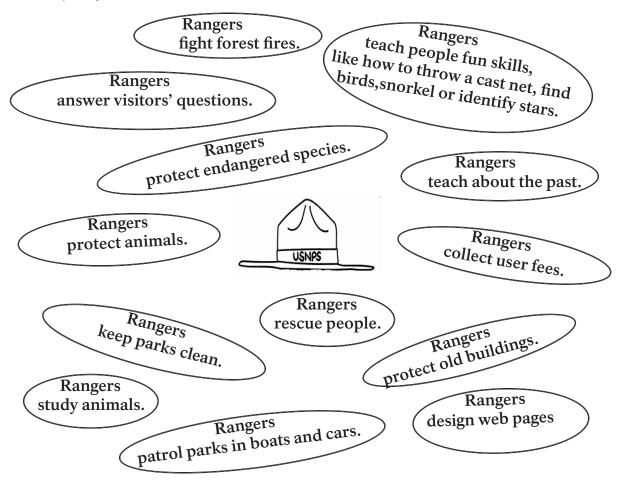
| 1. The | represents all plants. |
|--------|-----------------------------|
| 2. The | represents all animals. |
| 3. The | represents land formations. |
| 4. The | represents history. |

What does a Park Ranger do?

This is a hard question, so think carefully. Park Rangers care for and protect close to 400 National Parks. National Parks are found all over the country and are some of the most beautiful, interesting and historically important places in the nation.

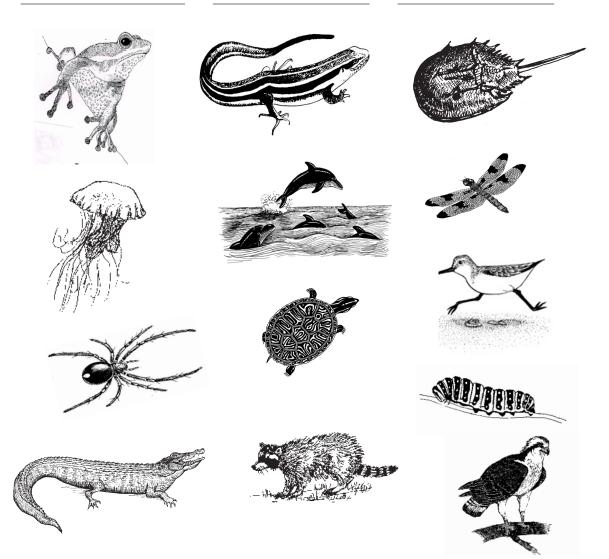
How many have you visited?

Maybe you will become a Park Ranger when you grow up! Draw an "X" by the jobs you would like to do.



Wildlife Search

It's great to watch animals in their natural habitat. What are three things animals find in their habitats that they need to survive?

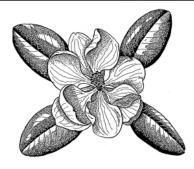


Circle the animals you have seen in the park!

Seashore Tic-Tac-Toe

Gulf Islands National Seashore is a great place to explore! The park is full of interesting things to see, smell, touch and listen to.

Test your exploration skills and try to find at least three items in a row (vertically, horizontally or diagonally) to make tic-tac-toe. Draw what you find.



| A plant taller than you | An animal | Something that smells |
|-------------------------|--------------------------------|-----------------------|
| An animal that flies | Something that feels smooth | A flower |
| Something beautiful | Something that sounds good | An animal track |

Seashore Animal Riddles

Gulf Islands National Seashore has many kinds of animals. A few of our wild creatures are scary to some people.

Junior Rangers know that even animals we may not like are important to nature. All animals are part of the food web. They eat plants or animals and then are often eaten by other animals.

See if you can figure out these mystery creatures by solving these five riddles. Write down your answer to the "Who am I" question. If you get stuck, turn the page upside down to get the answers. You may be surprised by what you discover!

Riddle #2

Riddle #1 I. Most of my brain is used for my sense of smell. 2. I am a good hunter and can swim very fast. I hunt for fish, crabs, and other marine 3. I have rows of sharp teeth that I use to tear apart my prey.

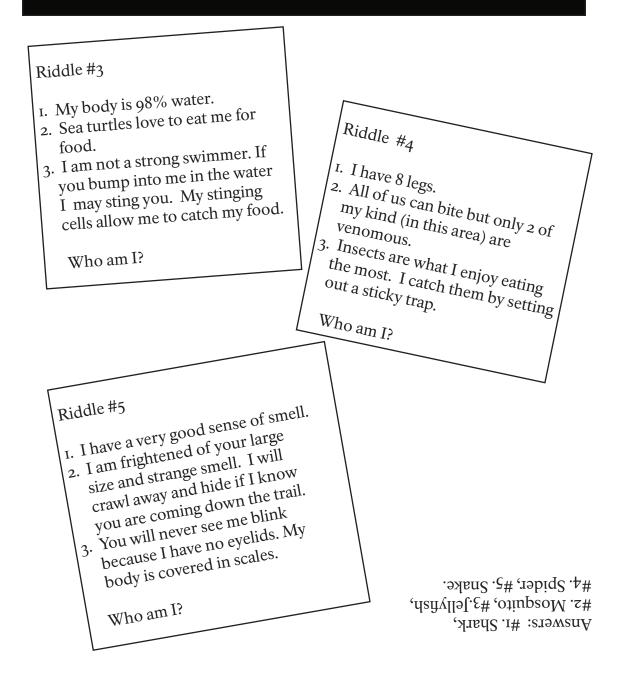
Who am I?

- 1. Only the females of my kind will bite you.
- 2. Some birds love to eat me. 3. My wing beats 300 - 600 times per second.

Who am I?

7

Seashore Animal Riddles



8

Trash! Litter! Marine Debris!

Sometimes people are careless with their trash and leave it on the ground or in the water. The National Park Service tries hard to pick up all the trash, but we could use your help!

Help us keep the park clean and safe by picking up a small bag of trash. You can use an old shopping bag or ask for a trash bag at a visitor center. Be careful not to pick up sharp objects or unidentifiable trash unless an adult is with you.



As you pick up the trash, write down what kind and how many pieces of trash you find.

Trash from beachgoers, hikers, boaters and picnics

| Bags/Food Wrappers | Beverage Cans/Bottles |
|--------------------|-----------------------|
| 6-Pack Holders | Other |
| Trash from fishing | |
| Bait Containers | Buoys/Floats |
| Fishing Line | Fishing Lures |
| Trash from smoking | |
| Cigarette butts | Cigarette packaging |

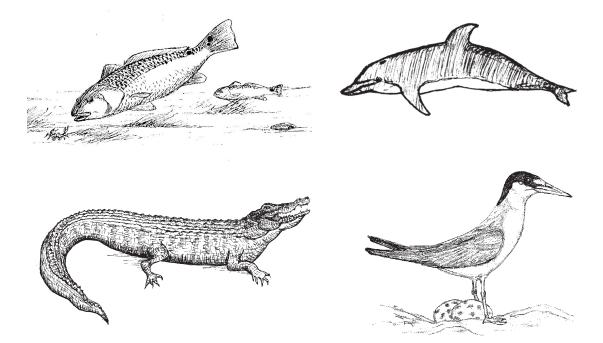
How can the National Park Service stop or reduce the amount of littering?

Show you care by not littering! You CAN make a difference! Thank you for your help!

We All Live Downstream

Most of Gulf Islands National Seashore is underwater. Rivers flowing through much of the central United States eventually flow into the Gulf of Mexico. Trash, chemicals and other pollutants can flow into the park from areas hundreds of miles away. Clean water is not only beautiful, but is also neccessary for people and animals to survive.

Circle your favorite park animal from the four shown below.



How does pollution affect the animal you circled?

What can you do to keep pollution out of park waters?

Beautiful Barrier Islands



Did you realize the beach looks a little different every time you visit? The wind you feel and the water you see move the island one sand grain at a time. The shoreline of a barrier island naturally moves over time. Sand moves along the beach every minute of every day around the clock.

Try this experiment to see how the island moves.

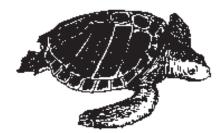
- Stand at the very edge of the beach where the tide can wash gently over your feet and ankles. See if you can stand still for 2 full minutes.
- 2. What happened to your feet during those two minutes? Did they move?
- 3. Why do you think this happened?
- 4. What do you think can happen to roads, forts, houses and hotels that are built on the beach?

Sea Oats

Sea oats are plants that live on barrier island beaches. The roots of this plant can go down 30 feet and help hold the sand on the island together. To protect your island, use boardwalks and don't walk on the dunes and plants.

Sea Turtle Search

HDPLASTICKETS EEIAKOEGMCRET DRGREENARACHH AEGTMILASBTAR EGAHPISHSRRTE HNDR S G A B L E E C A RARSRIHLPHTHT EDATIEFTRTRLE GNXADIIYLAGIN GETPLLAKLESNE OCIXEMFOFLUGD LTDSYEFSGGESG ΕΧΤΙΝΟΤUΕΙΝJΑ



Sea turtles are amazing <u>reptiles</u> that live in the <u>Gulf</u> <u>of Mexico, Leatherback,</u> <u>Kemp's Ridley, Loggerhead</u> and <u>Green</u> sea turtles visit Gulf Islands National Seashore.

Barrier islands are important nesting sites for turtles to lay their eggs in the sand. Baby sea turtles, called <u>hatchlings</u>, are usually about 2 inches long.

All species of sea turtles are <u>threatened</u> or <u>endangered</u>. Endangered means that an animal is in danger of becoming <u>extinct</u>.

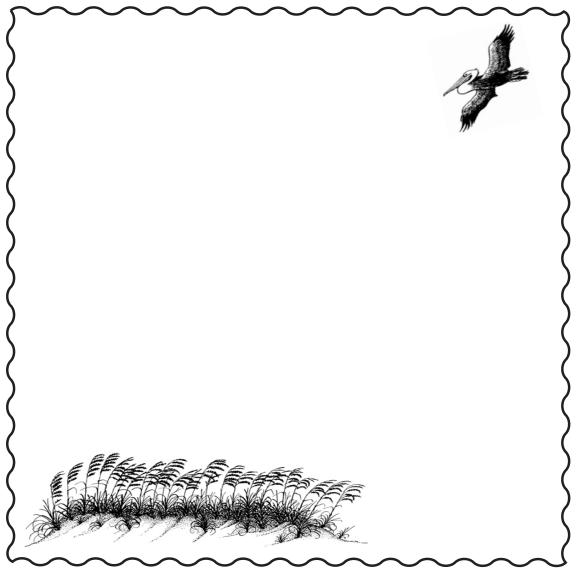
Did you know that plastic bags look like food (jellyfish) to a sea turtle? If a sea turtle eats <u>plastic</u> it will die.

You can help by picking up all your <u>trash</u> after a visit to the park.

Search for the words that are underlined in the story above!

My Favorite Seashore Memory

What is your favorite memory of your visit to the park? Write a story about or draw a picture of a special place, animal or activity. Use all your senses to think about what things looked, smelled or sounded like.



Hermit Crab Field Study



Hermit Crab Facts:

- * Hermit crabs have soft bodies. They find empty shells made by other animals to crawl into for protection.
- * There are hundreds of species of hermit crabs throughout the world. Some live in water and some live on land.
- * Seashore hermit crabs are eaten by fish, other crabs and birds.

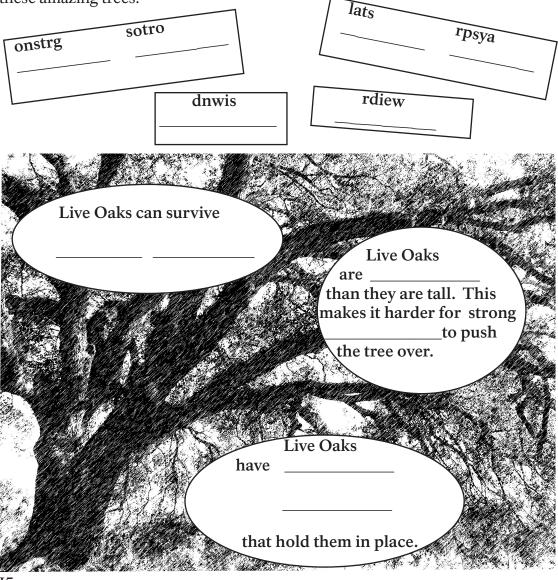
Park scientists do field studies on animals, and so can Junior Rangers. You can learn from hermit crabs by observing them. Remember to be kind by gently putting them back where you found them.

Did you know it is against park rules to take living animals like hermit crabs? Please help the hermits by not taking them away from their homes!

- I. Find a hermit crab. (Search around the shallow water on the beach.) Where did you find it?
- 2. Is it still alive? _____ To see if a crab is still in the shell, place the shell on the beach and draw a circle around the crab in the sand. Be patient and watch to see what happens.
- 3. What kinds of claws does it have? Why do you think it has claws?
- 4. How big is it? Is it bigger or smaller than your hand?

Living with Hurricanes

Hurricanes are tropical storms that bring powerful winds, high water, rain, thunder and lightning. Hurricanes can be scary, but they are part of the natural world. The Live Oak is a kind of tree that has adapted to survive hurricanes. Unscramble the words and complete the sentences below to learn more about these amazing trees.



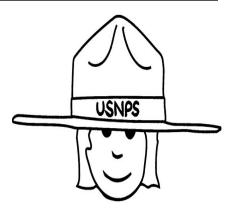
Interview a Park Ranger

Park Rangers have important jobs. At Gulf Islands National Seashore Park Rangers help protect the historic forts and the plants and animals that live in the park. Rangers help make sure you have a safe, fun visit to the park and do research to learn more about the park.

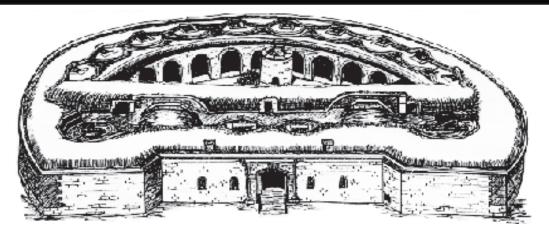
As a Junior Ranger it is important to know what park employees do. Find a Park Ranger or Park Volunteer and ask them these questions.

- I. What is the name of the park employee?
- 2. What is their favorite place in the park?
- 3. What job do they perform at Gulf Islands National Seashore?
- 4. What tools do they use to do their jobs?
- 5. Why is their job important to the park?





Fort Discovery Hunt



Gulf Islands National Seashore has a lot of forts. The forts were built to help protect our country over a hundred years ago. Circle the name of the fort you are visiting today.

Fort Massachusetts

Fort Pickens

Fort Barrancas

Advanced Redoubt

Although all the park's forts look different, they actually have many things in common. Circle the names of the fort features you can find!

| Sallyport (front door) | Cannons How many are there? |
|---------------------------|--------------------------------------------------|
| An arch made out of brick | A hidden or locked room where gunpowder was kept |

Who built the fort you visited?

A Soldier's Life

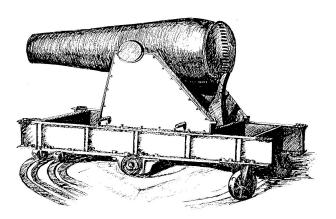
Soldiers during the Civil War sometimes used secret codes to get important messages to other soldiers.

They used secret codes so their enemies would not discover their plans. See if you can decipher this code and learn about what a soldier's life was like.



| a = 🖍 | h = 🎔 | o = 🔶 | v = X |
|-----------------|----------------------------|--------------|-------|
| b = 🔎 | i = ? | p = 🔺 | w = 🕨 |
| c = 5 | j = 🕁 | q = 🛡 | x = 🛍 |
| $d = \boxtimes$ | $\mathbf{k} = \mathcal{D}$ | r = 🕷 | y = 🗪 |
| e = 🖗 | 1 = ◀ | s = X | z = ₩ |
| f = 8 | m = ±ī | t = O | |
| g = ⊖ | n = 🖞 | u = 🌌 | |

Cannon Talk



You can find a 15-inch Rodman cannon at Fort Massachusetts in Mississippi and Fort Pickens in Florida.

This cannon weighs over 50,000 pounds!

Wormer – inserted in the gun's barrel and twisted, it removes the remains of cartridge (powder) bags and other debris. It looks like a double cork screw fixed to a long handle.

Sponge – covered with lambskin and dipped in water, it is used for cleaning and cooling the barrel. After firing it was important to make sure there were no sparks inside.

Cannon Ball – cannon balls can be either a solid iron shot or hollow shell with a charge inside. A shot fired from a 15-inch cannon weighed over 400 pounds.

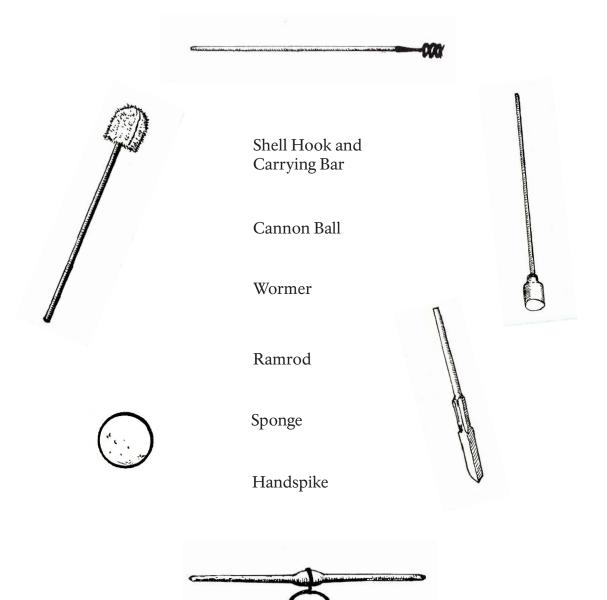
Ramrod – a wooden cylinder that pushes the powder charge and cannon ball to the back of the barrel.

Shell Hook and Carrying Bar – used for lifting and carrying cannon balls.

Handspike – used to move the carriage and to lift the barrel.

Artillery Match Up

Draw a line from the name to the matching piece of artillery!



My Seashore Visit

| Write a letter to a friend about your visit to the park. If you want to mail it, cut out this page on the dotted line. | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------|--|
| | Date: | |
| Dear | | |
| am visiting the park with I learned that | | |
| Gulf Islands National Seashore | is home to many | |
| and | I saw | |
| My favorite thing I did was | I also | |
| learned that | | |
| The smelled re | eally | |
| I was surprised by | | |
| Your friend, | | |

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Gulf Islands National Seashore

Junior Ranger

Certificate of Achievement



As a Junior Ranger, I will:

- explore the wonders of National Parks and the nature and history all around me
- learn the importance of living things
- teach others what I have learned.

Park Ranger

Date

National Park Service U.S. Department of the Interior



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EXPERIENCE YOUR AMERICA