



**Jupiter Inlet Lighthouse**  
**Outstanding Natural Area (ONA)**  
*Palm Beach County School District*  
*Field Research Ranger Program*  
**Grades K-2**



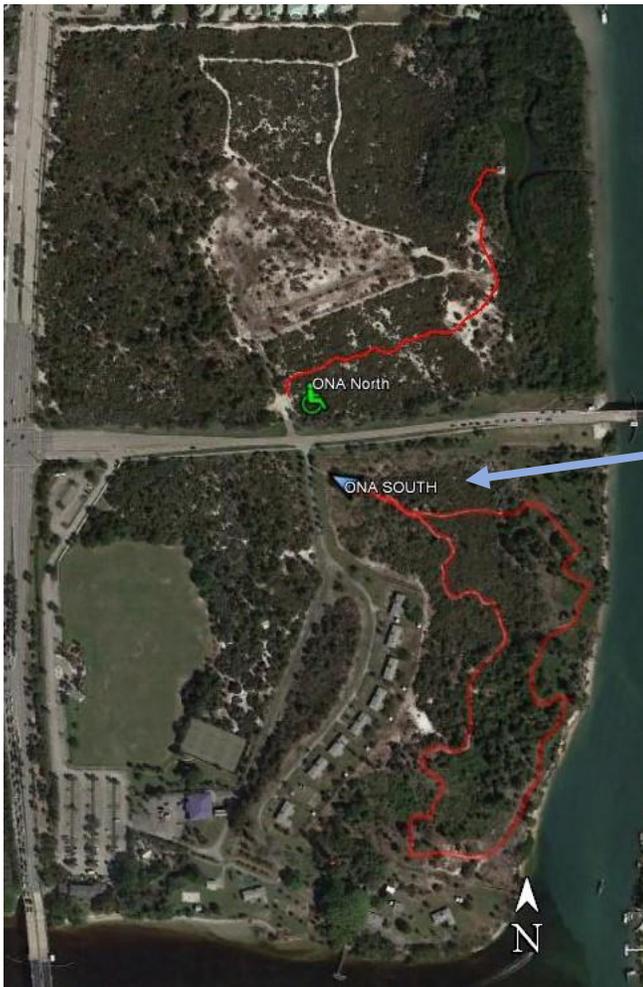
This activity is to be completed with a partner (a collaborative effort). Working with others in a “collaboration” has the following benefits: it is safer, more fun, provides more input and helps in answering questions. In this activity, you and your partner (friend, parent or other adult) will make observations on the ONA, record those observations (data) and analyze or interpret that data to answer questions about the ONA environment and its living and non-living parts.

**DO NOT TOUCH OR TASTE ANYTHING, THERE ARE POISONOUS PLANTS ON THE ONA.**

**Make your observations (collect data) on one or both ONA trails.**

The “**North Side Trail**” is a half mile round trip ADA concrete trail leading to a boardwalk and a covered pavilion overlooking a tidal lagoon. The parking lot area is located on the north side of State Road 707 at the following coordinates: 26° 57’ 09.31” N, 80° 04’ 53.25” W.

The “**South Side Loop Trail**” is a one mile mulched loop trail with an elevation change of about 30 feet. The trail head is located on the south side of State Road 707 at the following coordinates: 26° 57’ 07.22” N, 80° 04’ 55.04” W. (see map below)



**\*RECOMMENDATION:**

The “South Side Loop Trail” is recommended for this activity as it has signs that may help with observations and understanding.

**Activity Instructions:**

With your partner, answer the items below then take a walk with your partner or partners to make your observations (collect data) and complete the data sheet as you walk. **Remember to stay on the trail and be careful, do not touch or taste anything, some plants are poisonous.**

You will need to stop in the Jupiter Inlet Lighthouse and Museum after you complete this activity to get your "Field Research Ranger Passport" stamped.

**Let's get started:**

Use the word bank to answer the questions below before you start your walk.

basic needs   scales   feathers   fur   environment   senses  
survive   investigation   fruit   leaf   seeds   flower   nonliving

The place where plants and animals live is called their \_\_\_\_\_.

\_\_\_\_\_ include **air, water, shelter and space to grow**, and are what all **living things** need to continue living.

To be able to continue living means to \_\_\_\_\_.

Things that do not need the **basic needs** of air, water, food, shelter and space to grow, are called \_\_\_\_\_ things.

We **observe** by using our \_\_\_\_\_ of seeing, hearing, touching, smelling and tasting.

Observing is an **inquiry skill** used to do an \_\_\_\_\_.

**Characteristics** of animals may include: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.

**Characteristics** of plant may include: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.

Discuss your answers with your partner so everyone understands these words.

**Now go to the trail and make your observations.**

**Don't forget your "Observation Data Sheet".**

## K-2 Observation Data Sheet

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Time of Observation		Location of Observation	
Start time _____	End time _____	North Trail _____	*South Trail _____
Weather Observations			
Wind speed _____ mph	Wind Direction _____	Temperature _____	Rain fall _____
Weather conditions above were (check one): measured _____ estimated _____ taken from a report _____			

**Make careful observations along the trail to complete the following scavenger hunt:**

Object or Organism	Describe or Draw the main characteristics of the object	Is it Living or Nonliving? (Circle one)	What senses did you use to observe this object? (check all that apply)	If this object is living, check the organism's basic needs you observe.
<b>An Animal's Home</b>		Living  Nonliving	Sight _____ Smell _____ Hearing _____ <b>Do not</b> <b>Touch or Taste</b>	Air _____ Food _____ Water _____ Shelter _____ Space to grow _____
<b>An Animal's Track</b>		Living  Nonliving	Sight _____ Smell _____ Hearing _____ <b>Do not</b> <b>Touch or Taste</b>	Air _____ Food _____ Water _____ Shelter _____ Space to grow _____
<b>An Animal (different from the home or track)</b>		Living  Nonliving	Sight _____ Smell _____ Hearing _____ <b>Do not</b> <b>Touch or Taste</b>	Air _____ Food _____ Water _____ Shelter _____ Space to grow _____
<b>A plant with spines or thorns</b>		Living  Nonliving	Sight _____ Smell _____ Hearing _____ <b>Do not</b> <b>Touch or Taste</b>	Air _____ Food _____ Water _____ Shelter _____ Space to grow _____
<b>A plant with flowers, seeds or fruit</b>		Living  Nonliving	Sight _____ Smell _____ Hearing _____ <b>Do not</b> <b>Touch or Taste</b>	Air _____ Food _____ Water _____ Shelter _____ Space to grow _____

Use the information from your **Observation Data Sheet**, along with your partner's help, to answer the following:

1. How are the plants and animals that you observed **different**?

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2. How are the plants and animals you observed **the same**?

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3. What **sensory organ or organs** did you use most to make your observations?

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4. What **sensory organs** did you use most to record your observations?

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5. Based on your observation data, what **basic need or needs** seem to be missing from this environment?

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6. Write a question you have about something you observed and how you might find the answer.

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ONA website:

<https://www.blm.gov/programs/national-conservation-lands/eastern-states/jupiter-inlet-lighthouse>

ONA Phone Number: 561-295-5953

## ANSWERS:

Use the word bank to answer the questions below before you start your walk.

**basic needs**    **scales**    **feathers**    **fur**    **environment**    **senses**    **survive**    **investigation**  
**fruit**    **leaf**    **seeds**    **flower**    **nonliving**

The place where plants and animals live is called their environment.

Basic needs include **air, water, shelter and space to grow**, and are what all **living things** need to continue living.

To be able to continue living means to survive.

Things that do not need the **basic needs** of air, water, food, shelter and space to grow, are called nonliving things.

We **observe** by using our senses of seeing, hearing, touching, smelling and tasting.

Observing is an **inquiry skill** used to do an investigation.

**Characteristics** of animals may include: scales, feathers, fur.

**Characteristics** of plants may include: fruit, leaf, seeds, flower.

## OBSERVATION DATA SHEET:

The observations and follow-up answers will vary depending on what is on the trail at the time.

For the weather observations, the information may be measured if you have the equipment, it can be estimated just a guess or the information can be taken from a weather report or on-site weather station.

Place a check mark on the line indicating which of the three ways the weather data was observed.

**Animal Homes:** There are many animal homes that one may see on the trail. They may include burrows in the ground (gopher tortoise), holes or nests in trees (birds & squirrels), webs (spiders & insects).

**Animal Tracks:** common tracks include raccoon, opossum, rabbit, bird, tortoise, cat and dog.

**Thorny plants:** include Prickly Pear Cactus, Tallow-wood, Smilax vine, Nickerbean, Hercules' club, Saw palmetto, Sandspurs.

**Plants with flowers, seed or fruit:** Sea Grape, Cocoplum, Prickly Pear cactus, Fox Grape, Spanish Needle, many others.

**Senses used:** mostly sight, smell, hearing. DO NOT touch and taste due to some plants are poisonous.

Please understand that age, experience and ability will determine the details and completeness of both observations and recording of those observations. The goal is to have a positive interaction with young people in the field observing and learning about the world around them.

Associated SSS Benchmarks:

SC.K.N.1.1, SC.K.N.1.3, SC.K.N.1.5, SC.K.L.14.3, SC.1.N.1.3, SC.1.L.14.1, SC.1.L.14.3, SC.2.L.17.1, SC.2.N.1.1

## Glossary of terms for Grades K-8 Field Research Ranger Program

<b>air/vapor</b>	The parts of the atmosphere that the prefix "Atmo" represents.
<b>autotrophs</b>	Organisms that can make their own food.
<b>basic needs</b>	Water, Air, space and shelter, things that all living things need to survive.
<b>chlorophyll</b>	Basically, the green compound in plants that together with sunlight allow plants to make their own food.
<b>community</b>	A group of different species living together in a specific habitat.
<b>Decomposers</b>	An organism that breaks down dead matter.
<b>Ecosystem</b>	A system that includes all living and non-living factors functioning together as a unit.
<b>endangered species</b>	Any species that is in danger of becoming extinct.
<b>energy</b>	Useable power transferred between parts of a system in the production of a physical change.
<b>environment</b>	The general place where plants and animals live.
<b>extinct</b>	No longer existing, gone.
<b>feathers</b>	Characteristic covering on the skin of birds.
<b>flower</b>	Characteristic reproductive part of a plant, usually bright in color.
<b>fruit</b>	Characteristic fleshy product of a plant that contains seeds.
<b>fur</b>	Characteristic hairy covering on the skin of mammals.
<b>Habitat</b>	The natural home of a plant, animal or other living organism.
<b>heterotrophs</b>	An organism that requires organic compounds for its principal source of food, cannot make their own food.
<b>icy/frost</b>	The parts represented by the prefix "Cryo" in the term Cryosphere.
<b>investigation</b>	The systematic examination or research of something.
<b>leaf</b>	Characteristic, flattened, blade-like part of a plant, usually green in color.
<b>life/living things</b>	Components that the prefix "Bio" in the word Biology represents.
<b>nonliving</b>	Inorganic objects that do not need the basic needs of live (food, water, space, shelter) to exist.
<b>Photosynthesis</b>	The process by which green plants turn sunlight into energy.
<b>pollution</b>	Anything in the environment that is harmful or poisonous.
<b>population</b>	A group of one species living in the same area.
<b>scales</b>	Characteristic thin plates covering the skin of fish and reptiles.
<b>seeds</b>	The part of the plant that, under appropriate conditions, grows into a new plant.
<b>senses</b>	One of the faculties of sight, smell, hearing, taste or touch.
<b>species</b>	A group living organisms of similar individuals. A basic unit of biological classification and taxonomic rank.
<b>survive</b>	Continue to live or exist.
<b>the Earth</b>	The solid parts of the planet, represented by the prefix "Geo" in the term Geosphere.
<b>trophic levels</b>	Levels in an ecosystem, comprised of organisms that share the same function in the food chain.
<b>water</b>	A basic need of living things represented by the prefix "Hydro" in the term Hydrosphere.