

# Field Trip to the Sakonnet Greenway Trail

## Directions to the Trail

The Sakonnet Greenway Trail is located on the east side of East Main Rd. in Portsmouth, between Sandy Point Ave and Union Street across from Oakland Farm Road. The entrance approaches fast and is tight, so be mindful after you pass Union Street (from the North) or Sandy Point Ave (from the South). On the web, at **Google.com** . . . type in Newport Polo Grounds, Portsmouth RI for a driving map.

Two big stone pillars mark the entrance of the Glen Farm Area with sports fields on each side. Continue down Linden Lane past the Brown Farm house (which is actually yellow), parking can be found in the open field on the left behind the stone wall. Look for the trail kiosk which marks the beginning of the Trail on the south side of Linden Lane. The Trail proceeds south from the kiosk along the stonewall.

## Things to Remember

- Please use caution when crossing roads (e.g. Sandy Point Ave. and Bramans Lane)
- Hands on interactive learning is encouraged, but please take only photos and leave only footprints
- Silence is good when observing nature!

## Things you may want to bring

- A drink
- Snacks for a break
- Note pads and writing utensils
- Binoculars and magnifying glass (if desired)
- Bug spray, sun screen and hat (recommended)
- Field guides of native species (if available)
- Additional clothing if weather is questionable
- First-Aid kit



You Are Here

See Rules & Regs. panel for a closer look at open trails

# Aquidneck Land Trust's Sakonnet Greenway Trail

— Approximate location of future section of the Sakonnet Greenway Trail

0 .25 .5 miles

- Properties conserved by the Aquidneck Land Trust
- Pedestrian and Equestrian Use
- Pedestrian Use Only
- P Parking

*The more clearly we can focus our attention on the wonders and the realities of the universe, the less taste we shall have for destruction.*  
 —Rachel Carson

## FOREST ECOLOGY

### Grades 3-5:

#### GLEs/GSEs: (from *The Living Environment*)

- ☑ Benchmarks 1 of 3— Diversity of Life  
By the end of 5<sup>th</sup> grade all students will know that-- **Some animals and plants are alike in the way they look and in the things they do and others are very different from one another.**
- ☑ Benchmarks 2 of 3— Diversity of Life  
By the end of 5<sup>th</sup> grade students will know that-- **Plants and animals have features (adaptations) that help them live (survive) in different environments.**
- ☑ Benchmarks 1 of 2— Diversity of Life  
By the end of 5<sup>th</sup> grade students will know that-- A great variety of kinds of **living things can be sorted into groups in many ways using various features** to decide which things belong to which group.
- ☑ Benchmarks 1 of 2— Interdependence of Life  
By the end of 5<sup>th</sup> grade students will know that-- **Animals eat plants or other animals for food and may also use plants for shelter** and nesting.
- ☑ Benchmarks 2 of 2— Interdependence of Life  
By the end of 5<sup>th</sup> grade students will know that-- Living things are found in a variety of places everywhere in the world. **There are different kinds of living things in different places.**

#### Context for the Lesson:

- ❖ The purpose of this lesson is to provide students with direct experiential connections with their natural environment and explore the interconnectedness of the outdoors. Concerns about Nature Deficit Disorders (NDD)<sup>1</sup> and the No Child Left Inside (NCLI)<sup>2</sup> Act both support the need for children and teenagers to explore, observe and interact with nature and wildlife. During a field trip to Sakonnet Greenway Trail, students will be able to see the many facets of our local natural habitat and engage in fun activities that stimulate intellect, memory, and observation skills.

#### Opportunities to Learn:

- 🗺️ **On the trail . . .** students will be hiking through local natural environments on properties that have been conserved by the Aquidneck Land Trust. The Aquidneck Land Trust is a (501)(c)(3) non-profit organization that works to preserve Aquidneck islands open spaces and natural character for the lasting benefit of our community. Numerous areas on the trail allow for discussion of terms used in the pre-trip vocabulary work sheet. In the grocery store activity and

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<sup>1</sup> Last Child in the Woods, by Richard Louv

<sup>2</sup> <http://www.naaee.org/ee-advocacy>

other worksheets students will use creative thinking and sensory specific observations as well as build upon team work abilities. All of the above GSE's can be incorporated into the activity and discussion at the teacher's discretion.

### **Objectives:**

- Students will practice using natural science vocabulary that focuses on the characteristics, habitat, basic needs, similarities and differences between plants and animals using the vocabulary worksheet.
- Students will understand there are many similarities and differences between various aspects of the living environment (interconnectedness) by completing the grocery store worksheet.
- In field, hands on discussion will provide students with opportunities to strengthen observation skills while learning important facts.
- Students will be able to compare and contrast animal and plant similarities and differences by completing the drawing worksheet and participating in the scavenger hunt.

### **Instructional Procedures: (Lesson Format)**

This lesson plan should begin with the attached vocabulary worksheet. Terms on the worksheet should be discussed in class based on the grade level and student ability before and after the field trip. Also, at the end of the field trip, previous knowledge of the outdoors and what it contains should be reviewed and talked about in relation to what was seen on the field trip.

On the trip teachers can organize the various activities in their own desired order but the activities should be conducted as specified below.

Grocery Store: Discuss the position of items in a grocery store. Have students look at the outside environment as a grocery store. What types of food are located on the top shelf (canopy), lower shelf (understory), bottom shelf (ground), and basement (underground). From what shelves do different animals 'shop'? Do most animals 'shop' from one specific shelf, or are they evenly distributed? On the worksheet provided, instruct students to brainstorm and then place different animals in different locations of the worksheet based on their physical characteristics.

Drawing Worksheet: This worksheet provides the students with the ability to develop their individual creativity and artistic ability. Each student should get a worksheet but they may work in groups to provide social comfort and successfully complete the task. After all students have completed the worksheet teachers can choose to let the students keep them or collect them and analyze later so that back in the class leaf shapes and characteristics can be discussed.

Scavenger Hunt: The scavenger hunt is a group activity in which students can build upon team work as well as develop the ability to think logically and improve their awareness of the natural environment.

After 15-30 minutes (teacher's discretion) have students gather to talk about and share what they found. Remember to minimize the amount of matter that is removed from its natural state.

## Assessment

Grading for this lesson will rely on teacher discretion, but all students should demonstrate a better understanding of The Living Environment as specified in the GSE's above. Worksheets can simply be given a  $\checkmark$  or  $\checkmark+$  for completion. A short summary of what the student learned or took interest in from the field trip should be required once back in class as a means of evaluating grammar and English abilities in the natural science department.

Evaluation should be based on student's ability to understand and provide examples of: plant & animal similarities and differences, features that help them survive, features that are distinct, and relationships that plants & animals may have with each other on a scale of (1-4); (1) meaning the student lacks the ability to demonstrate an understanding of the benchmarks, (2) meaning the student has the cognitive ability to recognize the outlined benchmarks but lacks the ability to confer their knowledge onto paper, (3) meaning the student has shown the ability to recognize and translate examples outlined in the benchmarks or (4) the student has a very strong understanding of the living environment and can successfully complete all worksheets as specified in the directions.

## Materials:

- Field guide or handout of commonly observed wildlife and plant species (if available)
- Worksheets (included), pencils, pens, a note pad to document observances and take notes, binoculars, magnifying glass and a clip board if desired
- Snacks and water bottles for a break if desired, sun block and insect repellent as well

## Suggestions for Teachers:

- 1.) Walking the trail, teachers should ask questions (at increments throughout the trail) in order to draw on the students observations and reinforce prior classroom knowledge so students can see connections between their observations on the trail and concepts like habitat, community, and ecosystem.
- 2.) At the end of the trail gather to ask questions about different observations noted as the trail was walked, and discuss as many topics and correlations as possible . . .
  - During the walk did anybody notice the different habitats? And which ones were noted?
  - What animals may be present in the various habitats that were observed along the trails?
  - Compare and contrast some ways in which humans interact with the natural environment

## Intended Outcomes:

Students should finish the day and have confidence in their ability to distinguish different habitats, the resources that those habitats provide for both plants and animals and some patterns and similarities that occur within those habitats. Students should increase their vocabulary and improve their ability to converse intelligently about environmental sciences as well as feel more comfortable and at ease when outdoors and surrounded by their natural environment.

**Vocabulary Work Sheet**

**Directions:** Fill in each of the blanks with the proper word from the word box below.

<b>predation</b>	<b>predators</b>	<b>prey</b>
<b>species</b>	<b>organism</b>	<b>ecology</b>
<b>resource</b>	<b>population</b>	<b>habitat</b>

- 1.) A \_\_\_\_\_ is a substance valued or required by an organism for survival.
- 2.) An individual that can react, reproduce, grow and maintain life is called an \_\_\_\_\_.
- 3.) A place where an organism is most likely found is its' \_\_\_\_\_.
- 4.) \_\_\_\_\_ is the study of interactions between organisms with each other and their environment.
- 5.) A group of organisms that have similar physical characteristics and reproduce together are called a \_\_\_\_\_.
- 6.) \_\_\_\_\_ is the action of an individual that exists by preying or consuming other organisms.
- 7.) A specific species that interbreed and live in the same place at the same time is called a \_\_\_\_\_.
- 8.) \_\_\_\_\_ capture and consume prey in order to maintain survival.
- 9.) An organism that is generally consumed or hunted by larger organisms is considered \_\_\_\_\_.

**Directions:** Along the trail there are different tree species. Find a Yellow Birch leaf and a Cinnamon Fern like the provided examples. Then trace a picture of two more leaves that you can find. If you can name the type of tree the leaf came from, fill in the blank space.

example:

**Yellow Birch**



Type of tree:

\_\_\_\_\_

Type of tree:

\_\_\_\_\_

example:

**Cinnamon Fern**



## Scavenger Hunt

**Directions:** Along the trail there are many living and nonliving aspects of the natural environment. Without any living organisms, find and collect as many of the items described below as you can. Afterwards please return all of these items before leaving.

- Find a leaf from a tree that is famously named after a type of syrup.
- Find a resource that would be eaten by a grazing cow or horse.
- Locate something a small or large bird might use when building a home (nest).
- Some trees and bushes produce seeds or nuts which help them reproduce. Find as many different seeds or nuts as you can on the ground.
- Find something that could be recycled by people.
- Find something that was once alive (living) but is now dead (nonliving).
- Find something that fell from a tree above.
- Evergreens produce pine needles and pine cones. Find one of the two characteristics of an Evergreen.
- Find something a Native American may have used as a tool a long time ago.
- Find where you think the best place for a little bird to hide would be. Why here?
- Find where you think the worst place for a little bird to hide would be. Why here?

### Grocery Store Work Sheet

**Directions:** Fill in the boxes with 3 different animals that you would find in each location (Top, middle, bottom shelf, and underground). Animals may be found in more than one location.

<b>Top Shelf</b>	1.	2.	3.
<b>Middle Shelf</b>	1.	2.	3.
<b>Bottom Shelf</b>	1.	2.	3.
<b>Underground</b>	1.	2.	3.

**Now brainstorm with your group why animals are found on those shelves and where they might shop for food with your group and be prepared to explain to the class and your teacher the conclusions that defend your groups answers?**