

**Ecosystem Explorers- Kindergarten**

Sun Seekers

We are looking forward to your visit to Acadia National Park which will provide your students with a special opportunity to hike along a nature trail and learn about the connection between the energy of the sun and the resources of Acadia. This loop trail is considered easy; some areas have larger roots and uneven ground. It is a little over a ½ mile long. Note that students will NOT be in the water/mud/tidepool areas during this program.

Plan a restroom break just before departing school. If you have any questions about the program in advance please call the education office at 288-8823, or 288-8825 on the day of the program. If you will be more than 15 minutes late, please call the Visitor Center at 288-8832 so that they can contact the ranger by radio.

**IMPORTANT NOTE!**

**There is only one vault/pit toilet here (and no water fountain).**

**You MUST inform Lead Ranger Michael Marion before your field trip if you will choose Option 1 or Option 2 below. Option 2 allows for a bathroom break with more facilities at a nearby picnic area.**

**OPTION 1**: Meet at trail head (best for groups w/ less than ~12 participants and/or are very close by)

Meet your rangers at 9:00am at trailhead parking area. Rangers will be there to help manage parking. We will welcome the group, have a bathroom break (note there is only one toilet), and then begin the program. Remember that there’s not a water fountain here.

9:00 Welcome and Bathroom Break

9:15 Hike Ship Harbor Nature Trail. There will be a snack break during the program.

10:45 Bathroom Break

11:00 Depart

**OPTION 2**: Meet at Seawall Picnic Area for a pre-program bathroom break (best for groups with more than ~12 participants)

Meet your rangers at 9:00am at Seawall Picnic Area for a welcome and bathroom break, as there are multiple facililties here. Then, rangers will escort the bus to the trail (~5 minute drive) for the program. After the program, groups can drive back to the Seawall Picnic Area for a bathroom break if they choose to. Remember there’s only 1 toilet at Ship Harbor.

9:00 Meet Rangers at Seawall Picnic Area for welcome and bathroom break. Then drive to trailhead

9:30 Hike trail. There will be a snack break during the program.

11:00 Farewell to rangers. Drive to Seawall Picnic Area for bathroom break if needed.

11:30 Depart Seawall Pinic Area or stay and eat lunch, if applicable.

**Plan to Bring**

**Chaperones:** Plan early! Acadia *requires* a chaperone for every **ten** students and *suggests* a chaperone for every five students for Kindergarten. Extra chaperones are welcome.

**Food:**  A water fountain is available at Seawall Picnic Area, but not at the program site Ship Harbor. Also, there will be no food or drinks to purchase. Each student needs to bring a snack and a re-sealable drink. Although a lunch break will not be included in the program, you are welcome to plan to eat your bag lunches at Seawall Picnic Area before heading back to school.

**Clothing:** Wear layered outdoor clothing to accommodate changing weather conditions. Supportive shoes are essential—no sandals or flip-flops. It’s best to wear pants instead of shorts for extra tick protection.

**Nametags:** Students and adults need name tags. A piece of masking tape with the name in marker is sufficient.

**Signed photo release forms:** Please send photo releases home with students for parent signatures.

**Teachers’ Responsibilities**

* **Prepare students** for the program by utilizing suggested classroom activities or your own.
* **Adherence to school procedures** such as permission slips, insurance, transportation, etc.
* **Recruit chaperones** and inform them of their responsibilities. Please photocopy and distribute the chaperone handout.
* Prepare students to follow **Leave No Trace** practices:
  + Stay on trails if possible.
  + Respect, listen, and use quiet voices.
  + Leave all natural objects. Take trash with you. (You may want to bring a trash bag.)
* **Supervise students** and help them stay focused while on the program.
* **Notify trip participants** about the recommendation to check for ticks after visiting the park. Tick numbers here have risen in recent years.
* Ensuring that **safe practices** are followed throughout

**Program Goals:**

To provide an opportunity for students to connect to the resources of Acadia through sensory exploration & discovery

To increase students’ awareness of the importance of the sun and its connection to the resources of Acadia

To give the students a sense of the diversity of weather that day and throughout the year

To understand how the plants and animals at Acadia survive throughout the year

To increase the students understanding of different strengths of forces in the world

To foster a sense of respect and stewardship for Acadia and the environment

**Program Objectives:**

* Students will be able to:
* Name one reason why the sun is important.
* Explain why plants need the sun to survive.
* Understand the connection between the sun and energy.
* Make observations about the effect of weather on the landscape
* Understand the importance of weather in creating different habitats for animals
* Describe 2 different types of weather events.
* Understand the difference between weak and strong forces in our world.

**Learning Standards:**

**Next Generation Science Standards:**

**Interdependent Relationships in Ecosystems: Animals, Plants, and Their Environment**

K-ESS3-3 Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.

**Forces and Interactions**

K-PS2-1 Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.

**Weather and Climate**

K-PS3.1  Make observations to determine the effect of sunlight on Earth's surface.

K-ESS2-1 Use and share observations of local weather conditions to describe patterns over time.

K-ESS3-2 Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather.

**Disciplinary Core Ideas**

PS2.A Forces and Motion - Pushes and pulls can have different strengths and directions

PS3B Conservation of Energy and Energy Transfer - Sunlight warms the Earth's surface

PS3C Relationship between Energy and Forces- A bigger push or pull makes things speed up or slow down more quickly

ESS2.D Weather and Climate - Weather is a combination of sunlight, wind, snow or rain and temperature in a particular region at a particular time. People measure these conditions to describe and record the weather and to notice patterns over time

ESS3.B Natural Hazards - Some kinds of severe weather are more likely than others in a given region. Weather scientists forecast severe weather so that the communities can prepare for and respond to these events.

**Common Core State Standards for Mathematics**

**Counting and Cardinality**

Count to tell number of objects

CCSS.MATH.CONTENT.K.CC.B.5 Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects.

Compare numbers

CCSS.MATH.CONTENT.K.CC.C.6 Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g. by using matching and counting strategies.

**Measurement and Data**

[CCSS.MATH.CONTENT.K.MD.B.3](http://www.corestandards.org/Math/Content/K/MD/B/3/) Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.

**Common Core English Language Arts Standards: Speaking and Listening**

[CCSS.ELA-LITERACY.SL.K.1](http://www.corestandards.org/ELA-Literacy/SL/K/1/) Participate in collaborative conversations with diverse partners about *kindergarten topics and texts* with peers and adults in small and larger groups.

[CCSS.ELA-LITERACY.SL.K.3](http://www.corestandards.org/ELA-Literacy/SL/K/3/) Ask and answer questions in order to seek help, get information, or clarify something that is not understood.

[CCSS.ELA-LITERACY.SL.K.4](http://www.corestandards.org/ELA-Literacy/SL/K/4/) Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.