

Tracking Nature's Seasons- Trip Planner

We are looking forward to your visit to Acadia National Park, which will provide your students with a special opportunity to explore how citizens can aid scientists by studying the biodiversity and phenology of a habitat. This program takes place along easy hiking trails and some off-trail areas with uneven ground in a forest that has downed logs and branches at multiple levels.

Please meet your ranger at the agreed upon time at Sieur de Monts in Acadia National Park. Please call the Education Office at 288-8823 if you would like more detailed directions. The program **is 3.5 hours long**. Plan a bathroom break just before departing school. Thompson Island picnic area at the head of Mount Desert Island has multiple toilets available for schools traveling a distance. If you have any questions about the program in advance, please call the education office at 288-8823, and/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.

Program Schedule (timing and sequence may vary):

9:00 Welcome, Logistics, Restroom Break
9:15 Bioblitz! – Forest Biodiversity Count
10:00 Snack Break
10:15 Nature's Phenology Calendar
10:45 Phenology and Ecology Walk
12:00 Conclusion and Restroom Break
12:30 Departure

Plan to Bring

Chaperones: Plan early! Acadia requires a chaperone for every ten students. Extra chaperones are welcome.

Food and Water: No food is available at Sieur de Monts. Each student needs to bring a snack and water in a resealable container. There is not a designated lunch break during the program, but if you'd like to eat in the Park or on the bus after the program, students can bring their bag lunches as well.

Clothing:

- Closed-toed supportive shoes are essential – no flip-flops. The ground in areas will be rocky and uneven.
- Wear layered clothing to accommodate changing weather conditions.
- Brimmed hats and sunscreen provide more protection from the sun.
- Please communicate to participants to wear long pants – no shorts please!
- Also, have them wear long white or light-colored socks so they can tuck their pant legs into their socks. This is done for tick safety. Rangers will bring extras just in case. Bug spray can be sprayed around socks as well for extra precaution.

Nametags: Students and adults need name tags. A piece of masking tape with 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 the suggested classroom activities.

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.

Preparing students to follow low-impact (Leave No Trace) practices.

- Minimize disturbance to the ground and the forest when hiking off trail.
- Respect each other and other visitors. Listen to nature and use quiet voices

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. Here is a link a Maine Tick/Lyme Disease Information Sheet for your reference:

www.maine.gov/dhhs/mecdc/infectious-disease/epi/vector-borne/posters/documents/tick-id-card.pdf

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 help students understand basic ecological principles by connecting to resources firsthand
- To introduce the role of scientific inquiry in protecting resources and park management

- To introduce the idea that environmental change caused by human action can affect cycle events and biodiversity
- To facilitate an appreciation of how the Park protects wildlife and habitat and to promote a sense of stewardship

Program Objectives:

Students will be able to:

- Define biodiversity and phenology and explain why they're important to study.
- Collect field data, make scientific observations, and explain why the collection of data over time is important.
- Describe how students, the community, and the Park use science to protect resources.
- Discuss the interconnections observed within an ecosystem and contemplate the effects of environmental change.

Learning Standards:

From the Next Generation Science Standards

Matter and Energy in Organisms and Ecosystems

5-LS2-1. Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.

Earth's Systems

5-ESS2-1. Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.

5-ESS3-1. Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.

From the Common Core Standards (Speaking and Listening)

Comprehension and Collaboration:

[CCSS.ELA-LITERACY.SL.5.1](#) Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 5 topics and texts*, building on others' ideas and expressing their own clearly.

Presentation of Knowledge and Ideas:

[CCSS.ELA-LITERACY.SL.5.4](#) Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.

Classroom activities (Request PDFs and links):

Suggested pre-trip activities:

- Nature's Notebook Checklist (from Nature's Notebook Activity Book listed below)
- Favorite Seasons (from Nature's Notebook Activity Book listed below)
- [iNaturalist Intro Video](#) – This is a 30-second introductory video about iNaturalist, which is an app we'll be using during the program.

Suggested post-trip activities:

- [Acadia's BioBlitz Web Page](#)
- "What is Phenology?" Slideshow (from Signs of the Seasons, University of Maine)
- Phenology Event Observations (from Nature's Notebook Activity Book listed below)
- BioBlitz Pocket Field Guide (from National Geographic)
- Backyard BioBlitz Survey (from: Windows on the Wild: Biodiversity Basics, A World Wildlife Fund Student Book)
- [Nature's Notebook Activity Book and Answer Key](#)– This contains more activities to choose from; they are geared towards a variety of age groups.

Online resources:

Acadia's Teacher Resources: www.nps.gov/acad/forteachers

WebRangers: www.nps.gov/webrangers

Map of Acadia: www.nps.gov/acad/planyourvisit/maps.htm