

Our Northern Forests

Grades 5-8



What to Expect

Our 4-hour *Our Northern Forests* program gives students a field-based opportunity to answer the question “What is a forest?” through hands-on lessons and guided inquiry. As a jumping-off point, we head into the Audubon Center’s forests and ask students to create a “recipe for a forest” based on their existing knowledge and observations. From here, we will deepen students’ understandings of what makes a forest a forest with fun lessons and activities on topics such as tree identification, forest soils, forest food webs, and forest measurements. Everyone will then have a chance to create another more complex “recipe” in a different forest based on their new knowledge. We will also take time to hunt for products we use in our everyday lives that are made from Vermont tree species, such as Sugar Maple, White Ash, Eastern Hemlock, and American Beech. In addition, we will reconstruct the general history of Vermont’s landscape over the past 300 years, and use the patterns we learn about to add to our understanding of the Audubon Center’s forests. Depending on what we see and your students’ interests and questions, each trip will be a little different, but every program delivers plenty of time for exploration and follow-up discussion that connects students’ observations with the essential question and understandings listed below.

Essential Questions and Understandings



What is a forest?

- Forests are ecosystems characterized by trees with many other interconnected living and non-living components.
 - Not all forests are the same; they have different soils, plant species, and habitats for wildlife.
 - Trees can be identified and classified by branching patterns, and leaf, bud and bark characteristics.
 - Soils are a dynamic, living layer of forests that support plant growth.
 - People rely on many products from Vermont forests such as maple syrup, clean water, building materials, and places to recreate.
- People have had a big impact on Vermont’s forests; many of our forests today grow on sites that were once cleared for use as fields and pastures.

Vermont Grade Expectations

S1-2: Scientific Questioning, Predicting & Hypothesizing – Students work with the Teacher/Naturalist to observe, ask questions about, and make predictions regarding forest systems (i.e. Why is this forest deciduous and that forest is evergreen?).

S35: Food Webs in an Ecosystem – Students construct a forest “web of life” comprised of Vermont species at all levels of the food chain.

S37: Recycling in an Ecosystem – Students explore how forest soils support plant growth by decomposing dead organic matter and recycling nutrients.

S38: Classification of Living Things – Students identify tree species with a dichotomous key by looking at leaf, bud, twig, and bark structures.

S49: Natural Resources – Students identify products (i.e. maple syrup, wooden flooring, paper etc) made from different Vermont tree species.

Key Words

1. Forest
2. Decomposition
3. Soil
4. pH
5. Canopy
6. Understory
7. Seedling
8. Sapling
9. Snag
10. Deciduous
11. Coniferous
12. Food web
13. Producer
14. Consumer
15. Predator
16. Prey
17. Slope
18. Aspect
19. Dispersal
20. Competition
21. Disturbance
22. Regeneration
23. Forestry
24. "Diameter at Breast Height" (DBH)

Recommended Resources for Forests

Coming soon!