

LESSONS OVERVIEW

Students will learn about the importance of trees and what they provide to the forest and to people. Students will understand the history of urban forests in Seattle, why the forests are in poor health and what role schools/communities can play in the forest restoration process. Students will learn about the native plants that make up the layers of the forest and how these layers provide habitat for a diversity of animals. Students will determine which plants would be good to plant at their forest restoration site. During their field experience, students will plant native plants and apply mulch. Finally, students will reflect and report out about what they have accomplished at their site.

Lesson 1 - *Introduction: The Importance of Trees*

Students will read a book about Wangari Maathai, who is responsible for planting millions of trees across Africa. Students will observe and draw a tree - examining the tree for evidence of it being used as a habitat.

Lesson 1A - (OPTIONAL) - *Tree/Forest Benefits*

Students will identify and measure the circumference of trees in their schoolyard or elsewhere. Students calculate the diameter. Then they will go to the www.treebenefits.org website to find out what their tree is worth in terms of total price and water uptake.

Lesson 2 - *The Design Process-Implementation of Solutions-Planting Native Plants*

By viewing the **PowerPoint**, students will get a sense of the history NW forests and why urban forests are in trouble. They will also understand their part in the restoration project and their part in the design process.

Lesson 2A - (OPTIONAL) - *Succession*

Students will see pictures of succession and hear a story about the life cycle of forests, also known as succession. Then students will reflect on how invasive plants affect succession in their urban forests.

Lesson 3 - *Native Plants*

Pairs of students will become experts on one of 11 native plants. Students will then teach the other students about their plant so the class learns to identify all 11 species. The plants are: Douglas-fir, western hemlock, western red cedar, hazelnut, Indian plum, salmonberry, sword fern, salal, red elderberry, snowberry, and Oregon grape.

Lesson 4 - *Layers of the Forest*

Students learn that forests have layers and these layers provide homes for different types of animals.

Lesson 5 - *Make a Plan for Planting Native Plants*

Students plan what native plants to install at their site using information from plant identification cards and the physical characteristics of their site.

Lesson 6 - *Field Experience Planting Native Plants*

Students will plant native plants to help restore the urban forest.

Lesson 7 - *Reporting out*

Students write up what they have accomplished, create reports, signs, web pages, or other ways to communicate what they learned from their project. They send information, including before and after photographs, to the high school class.

Lesson 8 - *Stewardship*

Students will reflect on their role in helping improve the health of their urban forest. Students write poetry to share their feelings about the forest. Each class will be awarded certificates for their part in restoring Seattle's urban forests.