Woodland Stewardship

Grades: Highschool (9-12)

Key Words and Definitions

STREET TREE A tree planted on or by a public street, median, or sidewalk.

URBAN FOREST The trees that grow within an urban setting. It can refer to a single growth of trees or the entire network of tree populations in a city.

ECOSYSTEM SERVICES All of the direct (clean air, water, storm mitigation) and indirect (economic value, etc.) benefits that ecosystems and their components (trees, buildings, etc.) provide humans.

Pre-Field Trip Activity: A Street Tree by Your School
One 30-minute session; pre-visit

Learning Objective

Students will be able to identify characteristics of street trees near their school and consider their environmental benefits and the larger urban forest network.

Materials

- Street Tree by Your School Worksheet
- Pencils
- Clipboards

Procedure

1. Explain to the students that they will be observing a tree near the school grounds and documenting their findings to prepare for their upcoming visit to Wave Hill. Ask the students to imagine what the trees near the school look like. With that image in mind, ask the students what they expect to see when observing a local tree.

2. Hand out a pencil, the Street Tree by Your School Worksheet, and a clipboard to each student. Then, take the class outdoors to examine a nearby tree and fill out their Street Tree by Your School Worksheets for fifteen minutes.

3. After completing their worksheets, take the students back to the classroom and give the students ten minutes to discuss in groups what they found. Did the tree have any unique factors? Did you notice anything about the tree that you wouldn't have before?

4. After a small group discussion, ask the class to consider what benefits the tree provides to its neighborhood. Some possible benefits include providing shade on hot days, reducing stormwater runoff, and improving air quality.

5. Explain to the class to keep this activity in mind during their upcoming trip to Wave Hill, where they will learn more about trees in NYC and their benefits.

Sources

🌐 Street Tree Map | NYC Parks

🌐 Benefits of Trees to NYC | NYC Parks

Post-Field Trip Activity: What Makes a Good Street Tree?

One 30-minute session; post-visit

Learning Objective

Students will develop their research and critical thinking skills by formulating an argument for or against the planting of a specific tree species as a street tree near their school.

Materials

- Woodland Stewardship Data Collection Packet (from the field trip)

- Street Tree by Your School Worksheet (filled out from pre-visit extension, if possible)

- Computers, tablets, or other devices to conduct research

Procedure

1. For the first five minutes, ask the class to reflect on what they learned during their trip to Wave Hill. Pass out each student's Woodland Stewardship Data Collection packet that they filled out during the trip to jog their memory. Did anything surprise them? What are some of the considerations foresters and other stewards need to make when forming a tree's care plan? What are some of the benefits that trees and urban forests provide?

2. Afterwards, explain to the class that they are going to act as urban forestry specialists by researching and writing a recommendation to their local city council regarding planting tree species outside their school. Students will focus on the species their group studied at Wave Hill and write a proposal for or against planting that type of tree.

3. Working in the same groups they had when developing a tree care plan, students should research if their tree would work well as a street tree in the area. Have students prepare a short presentation explaining why that species should or should not be planted outside of the school.

4. When developing their presentation, groups should consider the following questions:

   - What are the common environmental conditions and/or factors that street trees face? Are any of those factors present in your area?

     - If the students completed the pre-visit activity, hand out the Street Tree by Your School worksheet as a reference point for local street tree conditions.

   - What possible benefits could your tree provide (to humans, other animals, etc.) in this space? Examples: shade, aesthetic value, habitat, stormwater drainage

   - Does the tree have any factors that would promote or prevent its use as a street tree? If so, what are they?

   - Have each group present their recommendations to the rest of the class. Vote as a class on which tree species the city council should plant outside the school.

Sources

🌐 [Caring for Street Trees | NYC Parks](#)

🌐 [Street Trees | New York Botanical Garden](#)

Scan for a page with all links

Street Trees by Your School

Name _____ Date _____

While often overlooked, street trees (trees that are planted by streets and sidewalks) serve an essential role in urban ecosystems. Your assignment is to assess a street tree near your school. Observe the tree and use the table below to record your observations (P: present, A: absent).

Street Name _____ Time of Observation _____

Street Tree Data Table	
Describe the appearance of the tree (ex: the shape and color of the leaves, if any, the texture of the bark, any seeds, flowers, etc.)	
Describe the tree's location (ex: what streets is it near? Buildings, etc.)	
How tall is the tree? (estimate)	
Dead branches?	
Roots covered by asphalt?	
Garbage or pollution? (ex: food wrappers, pet waste, vehicles nearby, etc.)	
Lichen or moss?	
Animals? (ex: birds perched on the tree, a nest in the branches, squirrel, or insects)	
Any unique factors? (ex: bike chained on tree, tree on road median, sign on tree, etc.)	