

# Unit E: Urban Forestry

## Lesson 1: Defining Urban Forestry

# Terms

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- Arboriculture
- Arborist
- Certified arborists
- Street tree ordinances
- Tree ordinances
- Tree protection ordinances
- Urban forestry
- View ordinances

# What Is Urban Forestry?

- ***Urban Forestry*** is a specialized segment of forestry.
  - Takes place in populated areas of cities.
  - Offers challenges in managing trees not often found in forests.
- Air pollution, confined growing space, and compacted soils are some factors that can make the management of trees difficult.

# What Is Urban Forestry?



- The care of trees is called **arboriculture**.
- **Arborists** are people that see to the care of trees.
  - Certification enhances arborist credentials.
- **Certified Arborists** prove through studies and exams qualification.

# What Is Urban Forestry?

- **Certified Arborists are regarded as “professionals” in the following areas:**
  - Tree Nutrition and Fertilization
  - Tree Identification and Selection
  - Tree Installation and Establishment
  - Safety/Tree Climbing and Cabling/Bracing
  - Tree Risk Assessment and Pruning
  - Tree Diseases and Diagnosis/Treatment
  - Tree Biology and Forest Ecology
  - Soil and Water Relationships



# What are the benefits of urban forest and urban trees?

- Healthy urban forests improve the quality of life by cleaning the air.
  - They remove smog & pollutants from the air. This is important since we take 23,000 breaths in a day.
- Trees produce oxygen
  - A half hectare of trees produces enough oxygen for 25 people.

# What are the benefits of urban forest and urban trees?



- Trees absorb carbon dioxide
  - A half of a hectare of trees produces enough carbon dioxide in one year to offset the amount produced in driving a car 41,843 kilometers.

# What are the benefits of urban forest and urban trees?

- Trees serve as barriers
  - Trees can serve as windbreaks
    - Very useful in winter months.
  - Trees can block unsightly views
    - Blocks industrial highways or areas.
  - Trees can lower sound pollution
    - Reduces noise near places of work.
    - Improves residential quality of life.



# What are the benefits of urban forest and urban trees?

- Trees have a cooling effect on summer days.
  - Air temperature under a large shade tree can be 15 degrees cooler than the temperature in the sun.
- A single large deciduous tree in leaf provides protection from UV rays.



# What are the benefits of urban forest and urban trees?

- Trees are beautiful, and some have showy flowers, or attractive foliage.
  - Well-landscaped houses with mature trees can be valued at 10 to 15% more than houses lacking trees.



# Which would you pay more for?



# What are the benefits of urban forest and urban trees?

- Although difficult to measure, trees have a positive affect on humans.
  - Research shows urban forests to be good for mental health.
- Urban forests contribute to a healthy environment.
  - Reduces storm water run-off & soil erosion, produces oxygen, and provides food/shelter for wildlife.



# What are the various aspects of urban forestry management?

- Urban forests are managed with different uses in mind.
- In urban settings trees impact watersheds, wildlife, fish habitats, and wood production.
- Urban forestry programs address the need to educate the public on the role of trees in the environment.

# What are the various aspects of urban forestry management?

- Urban forestry management programs have a variety of objectives:
  - Inventorying trees as to species, size, age, and value.
  - Care and Maintenance of trees
    - Includes pest and disease management.
  - Installation and Removal of trees
    - Urban forests are always changing therefore the removal of trees due to death, decline or safety is necessary.

# The General Goals for Community Forest Programs

1. Establish & maintain maximum tree cover.
2. Maintain trees in a healthy condition through good cultural practices.
3. Establish and maintain an optimal level of age & species diversity.
4. Promote conservation of tree resources.
5. Select, situate, and maintain street trees.
6. Centralize tree management.
7. Promote efficient management of urban forestry.
8. Foster community support for forestry.

# What are the various aspects of urban forestry management?

- Municipalities often adopt **tree ordinances** to meet goals of attaining a healthy, vigorous, and well-managed community forest.
  - Provide authorization & standards management activities.



# What are the 3 types of tree ordinances?

- ***Street tree ordinances*** primarily cover the planting and removal of trees within public rights-of-way.
  - Often contain rules regarding private trees, which pose a hazard to traveling public.
  - Planting requirements, like those in parking lots, are generally outlined.



# What are the 3 types of tree ordinances?

- ***Tree protection ordinances*** involve protection for native trees or trees with historical significance.
  - Usually require that a permit be obtained before protected trees can be removed or pruned.
- ***View ordinances*** outline rules pertaining to trees that block views or sunlight.

# Review / Summary

- Define urban forestry.
- Explain the benefits of an urban forests and urban trees.
- Describe various aspects of urban forest management.

