

# Urban & Community Forestry

Alaska Department of Natural Resources / Division of Forestry / Community Forestry Program  
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**Urban forestry** is the management of forests and related natural resources in communities.

**Urban, or community, forests** are composed of the trees, vegetation, and other natural elements of a forest, plus the roads, buildings, utilities, and other developments found where people live. The relationships between these natural and human-made resources are important factors in urban forestry.

**An urban forester** is a natural resource specialist in community planning who develops and implements urban forest management plans.

**Community forestry programs** vary depending on the size, location, and needs of a community. In general, such programs are responsible for:

- Developing and implementing a management plan for trees in developed areas—along streets and trails, public facility grounds, rights-of-way, parks, and recreation areas.
- Developing and implementing a management plan for natural areas and greenbelts.
- Participating in planning and development that affects public trees or forests, and providing technical advice to municipal departments, school districts, and utilities.
- Providing publications, technical assistance, and educational programs for homeowners, businesses, nurseries, arborists, landscape architects, and other natural resource professionals.
- Recruiting and training volunteers, and developing partnerships to support community forestry.

An urban forestry program increases efficiency and reduces costs. It improves the coordination and cooperation between those who design, install, and maintain the built components in a city (buildings, streets, and utilities) and those who manage the living components (landscaping, green spaces, and natural areas).

## Benefits of Community Forests

Community trees and forests, when properly managed, contribute to the ecological, social, and economic health of a community. Following are some of these benefits.

### Ecological Benefits

- Runoff from forested areas is about 17 percent less than from developed areas. Less runoff reduces flooding, pollution, sedimentation in rivers and lakes, and the need to build bigger stormwater systems.
- Forests improve water absorption and retention, which increases the recharge of ground water.
- A forest canopy softens the impact of raindrops and allows rain to slowly soak into the ground.
- Forests improve water quality by acting as filters and decreasing the amount of pollutants transported to streams.
- Roots stabilize the soil and vegetation creates a wind barrier that reduces soil erosion.
- Forest litter improves the soil, reducing the need for fertilizers.
- A variety of species and ages of vegetation increases the diversity of wildlife—both migrants and year-round residents.
- Plants absorb carbon dioxide and release oxygen.
- Plantings that lower energy use reduce pollution associated with energy production and conserve resources.
- Vegetation helps purify the air by filtering dust and pollutants. Dense plantings in a large city can reduce the dust count by 75 percent downwind of the planted area.
- Trees and shrubs can reduce noise levels, especially when plantings are combined with land forms and solid barriers.

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## **Climate Moderation**

- Trees and shrubs can be used to control blowing and drifting snow.
- Groups of trees can reduce wind speeds by 60 to 80 percent, depending on the density of the planting.
- Trees help moderate temperatures. This is especially beneficial during the summer around parking lots, streets, and other large paved areas which retain heat, and buildings with walls that are mainly glass.
- Transpiration puts moisture into the air and moderates air temperature changes.

## **Monetary Benefits**

- Trees and vegetation are community assets. They increase property values by 5 to 20 percent, thereby increasing the tax base.
- Houses on lots with attractive trees sell for six to 10 percent more than identical houses on lots with no trees.
- Landscaped properties have higher occupancy rates and rent and sell more quickly.
- Appropriately placed trees reduce heating and cooling costs.
- Vegetation creates an environment that attracts businesses, shoppers, and tourists.
- Planting and caring for trees creates jobs in nurseries, garden centers, and landscaping and tree care businesses.

## **Aesthetics**

- Trees accent and frame desirable views and screen undesirable views.
- Vegetation adds color, texture, repetition, scale, and unity to the built environment.
- Trees provide variety, seasonal change, and color.
- Trees and forests bring nature into a city.

## **Architectural / Engineering Functions**

Trees and shrubs:

- control glare from sun, headlights, and street lights; and reflected glare from glass, water, snow, steel, and wet pavement;
- define space and create buffers between different use areas, such as homes and highways;
- separate pedestrians and vehicular traffic;
- accent buildings and provide for privacy;
- create vistas and frame views.

## **Recreational, Psychological, and Social Values**

- Studies show that trees in urban landscapes evoke a “relaxation response” in people and contribute to their physical and mental health.
- Wooded areas and green space offer places for recreation, social events, and community interaction.
- Studies show that patients recovering from surgery in a room with a view of trees require fewer pain relievers and are released from the hospital sooner than those with a less pleasant view.
- Businesses leasing office space in wooded developments find their workers are more productive and absenteeism is reduced.
- Planting and caring for trees and other plants provides positive physical and psychological benefits for people.
- Trees contribute to the image of a livable city and to feelings of belonging and stability. Trees help connect people to a place.

## **Information & Technical Assistance**

The Division of Forestry Community Forestry Program can provide information on developing inventories and management plans for community forest resources. Staff can also provide technical assistance, presentations, and classes in any aspect of urban forestry including species selection, tree planting, pruning and maintenance.