

MORGANTOWN TREE BOARD

The Need for Trees in Cities

Morgantown's street and park trees constitute an important component of the City's infrastructure – its "green infrastructure." Trees in commercial, residential, and park areas contribute significant benefits to a City's citizens. Documented benefits of the urban forest include reduced heating and cooling costs, increased property values, increased economic stability and activity, reduced storm water runoff, improved soil retention and fertility, and an improved sense of community pride (see attached appendix). A City's trees are thus important assets, requiring care and maintenance along with other components of the City's infrastructure. The City and its citizens need to be prepared for maintenance and replacement of the urban forest as time passes.

The Morgantown Tree Board (MTB) works to sustain Morgantown's urban forest through tree replacement, pruning, and care. Further, the MTB works towards increasing awareness of the benefits of urban trees through Arbor Day activities, newspaper articles, and other educational activities. The MTB has been working with City agencies and citizens to improve awareness and appreciation of the benefits of Morgantown's street and park trees.

In 2002, the Morgantown Tree Board continued and expanded on several activities involving trees in the public domain.

Demonstration City Grants

To support its activities, the Tree Board applies to the West Virginia Division of Forestry's Demonstration City Grant Program. Funds from this program in 2001/2002 (\$5,000 State, \$5,000 City match) were used to continue the Morgantown Street Tree Inventory and support the City's Arbor Day Celebration. The Demonstration City Grant application was also successful for 2002/2003 (\$4,000 State / \$5,000 City match), and this will provide funding to start the Street Tree Management Plan, support the City's Arbor Day Celebration in 2003, and purchase trees to plant in Morgantown.

Arbor Day Celebration

Arbor Day festivities and tree planting were held on April 20, 2001, at Krepps Park. Observance of Arbor Day included speeches by Mayor Scafella and tree experts from the State Division of Forestry and West Virginia University. This year, the MTB partnered with BOPARC and the Greenspace Coalition to present a slightly larger suite of activities than in past years. Arbor Day activities included:

- a demonstration on tree planting and early care
- children's activities led by students from the WVU Chapter of the Society of American Foresters
- a display of part of the tree trunk from a Chinkapin oak, which died in the Arboretum this year
- educational displays by the US Forest Service, Greenspace Coalition, and the Department of Biology at WVU
- awarding of Morgantown's Five Year Tree City USA award
- awarding of the International Society of Arboriculture's Gold Leaf Award to the MTB for exceptional activities in Morgantown's urban forest.

Following the Arbor Day activities, citizens helped MTB members plant 20 trees throughout the north side of town, including Krepps Park, the Suncrest neighborhood, Burroughs Run Park, and the Evansdale neighborhood.

In 2003, the Board plans to again partner with BOPARC and will increase the scope of activities for Arbor Day 2003.

Hazard Tree Assessments

MTB members are called on by the Streets Department to assess the hazard potential of trees in the City right-of-ways. This year, 44 trees were visited and inspected. Reports from these inspections are filed with the Morgantown Street Department.

Consulting with City Agencies

In addition to performing hazard tree assessments (above), the Tree Board works with other City agencies when requested. In 2002, the MTB worked with BOPARC to remove and store trees during construction at Ruby McQuain Riverfront Park. MTB members also worked with the Morgantown Library Board to remove a significant hazard tree from the Garlow House property.

Public Domain Tree Maintenance

Members of the Tree Board set aside two working days per year to prune and mulch previous Arbor Day project trees. In addition, replacement trees are ordered and installed when plantings fail. MTB members regularly remove suckers from trees Downtown and work on trees in other public spaces (minor pruning, grate removal, mulching, etc.). These activities are designed to foster tree establishment and health.

Public Assistance

The Tree Board often receives calls directed from City Hall concerning tree issues. While not necessarily related to public tree issues, members of the Tree Board return calls and visit people who have concerns about their trees. In 2002, consultations took place with citizens on Walnut Street (1), Park Street (3), Grand Street (2), Elm Street (1), and Spruce Street (1).

Replacement of Morgantown Tree Board Trees

Survival of trees planted in urban environments is limited. In an effort to maintain the integrity of various plantings that the MTB has undertaken, we recognize that a portion of trees planted will need to be replaced. In 2002, the MTB removed and replaced trees from previous Arbor Day activities, including sites at Jack Roberts Park (1 tree), Mountainview Elementary (1 tree), and the Evansdale Neighborhood (2 trees).

Street Tree Inventory

Critical to the management of the City's trees, an inventory of tree locations, tree hazard status, and potential planting spaces is being supported by the Demonstration City Grant. The actual inventory is undertaken by ACRT, Inc., a private forestry-consulting firm from Cuyahoga Falls, OH and will be finished by year-end 2002.

Municipal Tree Restoration Program (MTRP)

Allegheny Power provides electrical service to the Greater Morgantown Area. One ongoing cost and potential conflict with the power service are poorly selected street trees that grow into overhead utilities. Working with the Tree Board, Allegheny Power implemented the MTRP in Morgantown in 2001. The goal of this program is to supply local tree commissions/boards with funds to replant appropriate tree species under utilities after inappropriate trees are removed. This year, Allegheny Power allocated \$4,000 to the Tree Board to oversee this program. The Tree Board is facilitating the planting of 21 trees in Jerome Park, the Evansdale neighborhood, South Park, and the Warf District.

Utility Line Clearance and the Public

In an effort to improve relations between Allegheny Power and the citizens of Morgantown, the MTB met with foresters from Allegheny Power to establish guidelines and procedures for clearance trimming in 2002. In addition, the MTB and Allegheny Power together adopted an ad that ran in the Dominion Post outlining these goals and the schedule for line trimming.

SUMMARY

- Completed Morgantown's Street Tree Inventory
- Hosted larger Arbor Day Celebration
- Trees Planted: 41
- Hazard Trees Assessed: 44
- Funds Acquired: \$9,000

Benefit of Trees in Cities

(Source: *Benefits of Urban Trees. Urban and Community Forestry: Improving Our Quality of Life.* USDA Forest Service, Southern Region, Forestry Report R8-FR17, April 1990).

Infrastructure and Economy

- Trees are an important asset for cities and towns, just like other infrastructure (roads, sewers, public buildings, etc.). They require care and maintenance just like other public property.
- Trees have been shown to increase property values up to 25%.
- Trees enhance community economic stability by attracting businesses and tourists.
- People linger and shop longer along tree-lined streets.
- Apartments and offices in wooded areas rent more quickly, have higher occupancy rates and tenants stay longer.
- Businesses leasing office space in wooded developments find their workers are more productive and absenteeism is reduced.
- A community's urban forest is an extension of its pride and community spirit.

Character and Beauty

- Trees add natural character to our City.
- Trees provide color, flowers and beautiful shapes, forms and textures.
- Trees screen harsh scenery.
- Trees soften the outline of masonry, metal, and glass.
- Trees can be used architecturally to provide space definition and landscape continuity.
- Trees create feelings of relaxation and well-being.

- Trees provide privacy and a sense of solitude and security.
- Trees surrounding hospitals have proven to be responsible for shortened post-operative recovery.

Air Pollution Reduction

- Trees help remove, trap and hold particulate pollutants (dust, ash, pollen, and smoke) that can damage human lungs.
- Trees absorb carbon dioxide and other dangerous gases and, in turn, replenish the atmosphere with oxygen.
- Trees produce enough oxygen on each acre for 18 people everyday.
- Trees absorb enough carbon dioxide (a “green house gas”) on each acre, over a year’s time, to equal the amount you produce when you drive your car 26,000 miles.

Water and Soil Conservation

- Trees create organic matter on the soil surface from their leaf litter. Their roots increase soil permeability.
- Trees reduce surface runoff of water from storms. This is a significant way to manage storm water on a City level.
- Trees reduce soil erosion and sedimentation of streams.
- Trees increase ground water recharge that is significantly reduced by paving.
- Trees intercept chemicals and other contaminants before they reach streams and rivers.
- Trees reduce wind erosion of soil.
- Without trees, cities would need to increase sewage and storm water drainage channels and waste treatment capacities to handle increased runoff.

Trees Save Energy

- Strategically placed trees can be as effective as other energy saving home improvements, such as insulation and weather tight doors and windows. Trees can help reduce heating and cooling costs.

- Trees save energy through cooling in the hotter months. Shade trees placed around homes can reduce air conditioning costs up to 30%. Shade trees offer best benefits when: 1. placed on the south and west sides of buildings; 2. hard surfaces such as driveways, patios and sidewalks are shaded to minimize heat load; and 3. deciduous trees (drop leaves in fall) block sun in the summer months, but drop leaves and admit sunlight during the winter.
- Evergreens (which retain needles all year) can serve as windbreaks and provide an energy savings of 10-50%.

Trees Modify Local Climate

- Trees help cool the “heat island” effect in areas built up with many buildings, parking lots, and an abundance of paved surfaces. Heat is stored in these surfaces. Heat islands are 3 – 10 degrees warmer than the surrounding countryside.
- Trees reduce air temperature.
- Trees increase humidity in dry climates.
- Trees reduce glare on sunny days.
- Trees reduce wind speed.