

In Morrisville, the tree inventory and database also revealed much needed information. The inventory provided a snapshot of the current tree canopy and confirmed many existing observations about their trees: that the canopy was aging and in many places dying out. In addition, the borough learned more about the diversity of the trees in their canopy. For example, the current public tree stock is mostly older sycamores, along with a large number of walnuts. While the borough had previously observed many of these facts through their own work, the new study and data provided an increased degree of confidence and authority to their observations. In addition to providing this database, Dr. Yang and the Temple Ambler students also wrote a municipal forestry management plan for Morrisville.

Like Yardley, Morrisville put this new information directly into practice. Using the tree inventory as an indispensable reference guide, Morrisville initiated several additional tree planting projects. In 2008 the borough planted 44 new trees with the assistance of TreeVitalize, and this fall (2009) the borough will plant another five trees on public land.

Morrisville credits its success with these projects to the ongoing partnership with Yardley Borough and TreeVitalize. As closely-situated boroughs with similar governmental structures, these communities are ideal partners. In addition, TreeVitalize offered a large amount of assistance to both communities: attending community meetings to aid with tree planting preparation and providing Tree Tenders® training for both municipal employees and citizen volunteers. Staff members of the Morrisville Borough Department of Public

Works were particularly supportive of their borough's efforts, attending Tree Tenders® training and volunteering for tree planning projects.

With so many successful joint projects under their belts, these boroughs are well-poised to continue in a green direction. ●



photo courtesy of Morrisville Borough

"Tree Tenders" is a registered trademark of the Pennsylvania Horticultural Society

The following case study is part of a series highlighting successful projects funded by the TreeVitalize Municipalities Municipal Forestry Incentive Grant Program. For more information on the series, contact Patty Elkis, DVRPC, at [pelkis@dvrpc.org](mailto:pelkis@dvrpc.org).

TreeVitalize Municipalities is a partnership program of the Pennsylvania Department of Conservation and Natural Resources (DCNR), the Pennsylvania Horticultural Society (PHS), the Delaware Valley Regional Planning Commission (DVRPC), the Penn State School of Forest Resources Cooperative Extension, and the Morris Arboretum. For more information on the TreeVitalize Municipalities Program, please contact Michael Leff at TreeVitalize / PHS [mleff@pennhort.org](mailto:mleff@pennhort.org).

For more information on Yardley tree projects, please contact Susan Schneck in Yardley Borough (215-493-6832, [jisis2@gmail.com](mailto:jisis2@gmail.com)). For more information on Morrisville tree projects, please contact Debby Colgan, Morrisville EAC (215-337-9430, [debbycolgan@verizon.net](mailto:debbycolgan@verizon.net)).

# TreeVitalize Municipalities

A partnership to restore tree cover in Southeast PA

## Municipal Forestry Incentive Program

### Case Study: Yardley and Morrisville Boroughs, Bucks County

Yardley and Morrisville boroughs are small, historic communities located northeast of Philadelphia on the Delaware River, across from Mercer County, New Jersey. Originally settled in the 19th century, these communities contain older tree canopies that are in poor condition. Several areas within these communities had older trees that were removed or lost and not replaced. In addition, many of the street trees were pruned or managed in such a way that these trees are misshapen and weakened. For decades neither borough had a current tree inventory, and the last inventory took place in the 1950s.

#### Keys to Yardley's and Morrisville's Success:

- ◆ Ongoing successful multi-municipal partnership
- ◆ Using updated tree inventory to directly impact future budgeting, purchasing, and tree management decisions
- ◆ Municipal commitment to shade trees

With these issues in mind, Yardley and Morrisville boroughs applied for a TreeVitalize Municipalities Municipal Forestry Incentive Grant in 2007. The boroughs' application, administered by Yardley, included the additional partnership support of Landscape Architecture professor Dr. Jun Yang from Temple University Ambler Campus.



photo courtesy of Morrisville Borough

*In their joint application, each borough shared the same stated goals: to “develop written municipal forestry programs... that will explain the importance of tree cover for the economic and social vitality of our communities” and to “guide our governments in the long- term management and improvement of our municipal trees.” This project set out to develop both an updated tree inventory for each borough, and also a long-term and sustainable municipal forestry program plan in each municipality. For this project, the boroughs requested and received \$13,000 to accompany an in-kind match of \$6,000.*

**“The inventory provided a snapshot of the current tree canopy and confirmed many existing observations about their trees: that the canopy was aging and in many places dying out.”**

### **Previous Success and Existing Support**

*Part of what made this project a shoe-in to receive TreeVitalize funding was that Yardley and Morrisville boroughs had excellent past success with grant monies for urban greening. Over the course of eight years, Yardley Borough received nearly \$200,000 in grant money from the Pennsylvania Department of Conservation and Natural Resources, Department of Environmental Protection, and Department of Community and Economic Development. Yardley used this money for the construction of Buttonwood Park, an exemplary urban green ‘infill’ project located in the center of the borough. This park includes open space, walking and biking paths, landscaping with native shrubs and trees, and municipal parking. One interesting and fiscally sustainable aspect of the Buttonwood Park project is that the borough rents parking spaces to local businesses that do not have enough parking to satisfy zoning requirements. The borough then uses this money from rentals to maintain the green space in the park.*

*Morrisville also had an existing tree and greening framework in place to support this project. The Morrisville Environmental Advisory Committee (EAC) runs an annual cleanup of the Greystone Natural Preserve, six-acres of protected open space*

*in the borough. This cleanup involves removing debris, invasive plant species, and informal volunteer training of tree and shrub maintenance. The Morrisville EAC also actively pursues funding for new native species of trees and shrubs. In addition, borough subdivision and land development, zoning, and state stormwater management ordinances all contain elements on tree protection and maintenance.*

*With Yardley and Morrisville’s past successes, but lack of tree inventories, it was clear that the two boroughs should partner together for a TreeVitalize Municipalities grant application.*

*The joint project included three specific tasks. First, both municipalities desired tree inventories in order to accurately account for the existing tree stock and to replace the extremely outdated inventory from 1956. Next, the municipalities proposed to use these new inventories to create tree management plans for each borough. These plans would identify hazardous trees and priority actions for those trees; create maintenance plans for existing trees; propose recommendations for the replacement of older trees and for new tree-planting sites; and create a list of appropriate tree species for various sites. Lastly, the joint project contained a strong public outreach element. Both boroughs identified a need for increased public education and private landowner education, which would not only help individuals understand the importance of trees in their communities, but would also help them select and plant appropriate tree species.*

### **Morrisville’s Experience: Priorities and Challenges**

*Along with the updated tree inventory and municipal forestry plan, at the time of the application Morrisville had additional specific tree project goals. Challenges for Morrisville are similar in many ways to those that Yardley faces: Ongoing budget constraints have limited their ability to enhance tree cover and maintenance at various parks and open spaces.*

*For example, Manor Park playground at Williamson Park is a highly valued municipal open space that dates back to the early 1900s and needs dedicated tree maintenance. The more recently acquired Greystone Natural Preserve is also in need of a protective management plan, as this site is a climax forest with historical, ecological, and botanical significance.*

*Another challenge Morrisville faces is that borough trees are managed separately from street trees on private land. Frequently, private land owners remove trees that cause problems such as lifting sidewalks and curbs. An updated tree inventory and a municipal forestry plan would assist the borough in improving overall management of their street trees, on both public and private land.*

### **Yardley’s Experience: Priorities and Challenges**

*Yardley Borough had many municipal elements in place to support implementation of this project. The borough has an active Shade Tree Commission and Environmental Advisory Council, as well as a Buttonwood Park Committee to support that new and successful park site. The borough also has a tree reimbursement plan for residents that allows for reimbursement of new street trees up to \$75. In addition, despite the fact that Yardley Borough is built-out, with few places left for public space, the Borough Planning Commission, the Zoning Board of Adjustments, and the Borough Council are all actively committed to planning for open space and tree coverage.*

*Yardley’s location on the Delaware River also impacts the borough’s open space planning. During the two years prior to their grant application, the borough experienced significant flooding in low areas near the river. As a result of this flood damage, the borough hopes to restrict development along the river in order to allow the floodplain to remain intact. Yardley has had two FEMA buyouts of floodplain lands, which created additional open space. The flooding is a huge financial stress on the borough and its property owners. Multi-municipal planning through grants like the TreeVitalize Municipalities Municipal Forestry Incentive Grant program can help both Yardley and Morrisville boroughs become more fiscally efficient by avoiding duplication of efforts by both municipalities.*

### **Successes and Future Efforts**

*The positive collaboration between Yardley, Morrisville, and Temple University Ambler Campus led to great success in meeting this project’s goals. Over the summer of 2007, Temple landscape architecture students completed thorough tree inventories for both boroughs, which provided a wealth of new data. Students assembled an extensive database of tree species, with information on the condition of the trees and their age. In addition, the students prepared a report for each borough that indicated specific trees that need immediate attention, either due to potential hazards or problems with tree health. The report also provided tables of recommended tree species based on different types of planting locations. Each borough was then able to apply this new information to their municipal forestry planning efforts.*

*Given Yardley’s small size and limited capacity for municipal forestry planning, this new information was extremely helpful. Yardley discovered that their tree canopy is somewhat younger than Morrisville’s canopy; that they have an overabundance of maple trees; and that the borough has several areas in need of additional tree planting. This new information was then directly applied to their future budgeting and purchasing decisions. They also used information from the inventory to write a new residential tree planting guide, which was posted online and distributed to private landowners receiving trees through their reimbursement program and to citizens interested in volunteer tree tending.*



photo courtesy of Morrisville Borough