



**Success Grows on Trees...**

Accomplishments Through June 2015

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# Purpose of this Publication

This publication provides an overview of the TreeVitalize Program, its partners, and activities. Through this publication we hope to inform readers about the work our dedicated staff and partners do to make this program successful. Servicing the owners of our state’s communities—and everyone who benefits from these resources—is a huge challenge and can only be successful through the shared commitment of many stakeholders. It is impossible to describe all the work and efforts, but we hope that this publication will provide useful insights into the benefits accrued from our collaborative work for the forests of the Commonwealth.

The goals of this publication are to:

- Provide an overview of the breadth and depth of the program.
- Showcase the partners and the great work they have accomplished.
- Share success stories written by program partners and constituents that describe what this program has meant to them and to their communities.



We sincerely thank all the partners and constituents who contributed to this publication.

# What is ?



TreeVitalize® is a public-private partnership established by the Pennsylvania Department of Conservation and Natural Resources (DCNR) to restore tree cover in Pennsylvania communities. The program was launched in 2004, following two influential research reports showing that urban tree canopy, particularly in the greater Philadelphia region, had decreased significantly. Partners rallied together to fund the program, which paid for tree plantings and training of citizens and municipal officials through the PA Horticultural Society’s Tree Tenders® program. The program has since spread to all corners of the state, and what began as a tree planting and citizen education program has grown to encompass much more than that. TreeVitalize now covers a broad range of urban and community forestry subjects:

- Provide technical assistance to communities in a variety of tree-related subjects
- Give financial assistance to communities for tree planting, tree inventories, urban tree canopy assessments and tree improvement
- Create urban tree canopy assessments and plans
- Provide training for professionals and communities on how to complete tree inventories that assist communities in planning efforts – with additional value in combating threats such as the emerald ash borer

## Impact of TreeVitalize in 2014

<b># of Communities Served:</b>	<b>462</b>
<b>Trees Planted:</b>	<b>37,850</b>
<b>Tree Tenders Trained:</b>	<b>604</b>

## Total Impact of the Program (2004—2014)

<b>DCNR Grant \$ Awarded:</b>	<b>\$5,241,608</b>
<b>Total Match \$ Raised:</b>	<b>\$6,037,217</b>
<b>Trees Planted:</b>	<b>426,720</b>
<b>Tree Tenders Trained:</b>	<b>6,165</b>

- Train citizens and municipal officials on how to properly select, plant, and maintain trees in their local communities
- Provide coupons for private citizens to purchase trees at local nurseries
- Get the word out about trees by partnering with local sports teams and public radio station membership drives

# Benefits of Trees

Most people are aware of the common benefits that trees provide for us, such as beauty, shade, wildlife habitat, and oxygen production, but trees actually do much more than one might think. Trees are documented to have many benefits, including:

- Reducing annual heating and cooling costs for a typical residence by eight to 12 percent
- Improving air quality by absorbing hundreds of pounds of air pollutants that affect our health
- Improving water quality and reducing community flooding by absorbing and intercepting rainfall in their canopies, thus reducing stormwater that often carries pollutants to waterways
- Stimulating retail and commercial business districts by attracting shoppers, increasing sales and revitalizing declining downtowns
- Increasing property values by 10 to 15 percent
- Reducing stress, fatigue and aggression in people
- Reducing a hospital patient’s recovery time when there are views of trees and greenery
- Improving the ability to concentrate for children with Attention Deficit Hyperactivity Disorder
- Calming and slowing down traffic along streets
- Reducing crime and increasing social ties
- Reducing exposure to harmful UV rays that are causing increases in skin cancer and cataracts

## i-Tree Projected Benefits Provided by the 426,720 TreeVitalize Trees Planted To-Date

<b>Total # of trees</b>	<b>426,720</b>
Stormwater Reduced	1.5 billion gallons
Stormwater Savings	\$11.8 million
Total Nitrogen Reduction	38,400 lbs
Total Phosphorus Reduction	470 lbs
Total Suspended Solids Reduction	332,842 lbs
Carbon Sequestered	217 million lbs
Electricity Reduced	38 million kWh
Electricity Saved	\$5.3 million
Natural Gas Reduced	1.3 billion kBtu
Natural Gas Use Saved	\$19.4 million



The City of Lancaster uses trees to aid in their stormwater management projects

**Average annual benefits and savings from  
426,720 trees  
Planted through the TreeVitalize Program**

**Stormwater**

1.5 billion gallons  
Reduced  
\$11.8 million saved

**Carbon Dioxide**

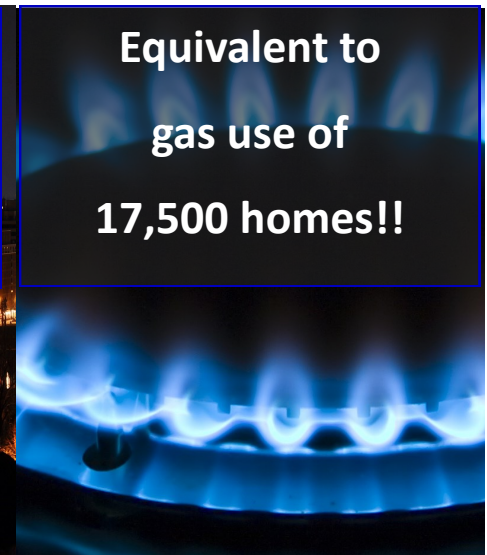
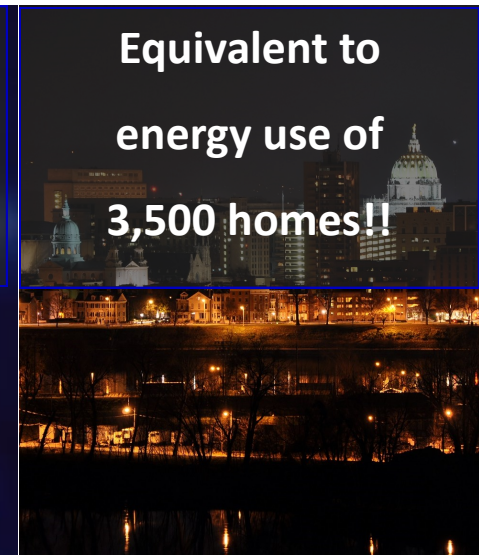
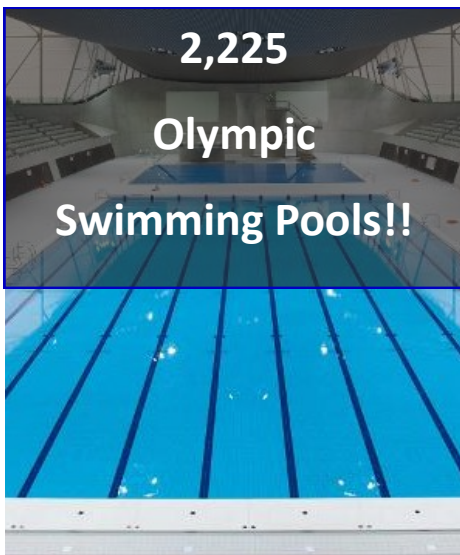
217 million pounds  
sequestered

**Electricity**

38 million kWh  
saved  
\$5.3 million saved

**Natural Gas**

1.3 billion kBtu  
Reduced  
\$19.4 million saved



*\* Data from USDA Forest Service's Northeast Community Tree Guide: Benefits, Costs, and Strategic Planting by McPherson, G. E.; Simpson, J. R.; Peper, P. J.; Gardner, S. L.; Vargas, K. E.; and Xiao, Q. August 2007*

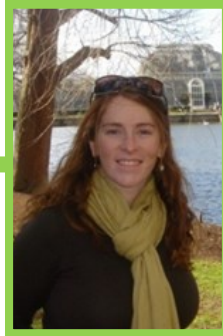


# Staff

TreeVitalize is directed and administered through excellent, dedicated staff members at DCNR:



**Ellen Roane, Training and Partnerships Specialist**



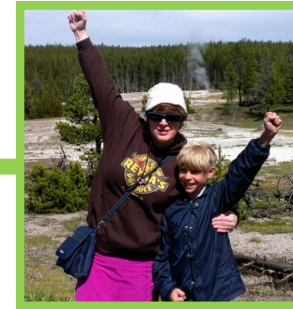
**Christine Ticehurst, Community Greening & Grant Specialist**



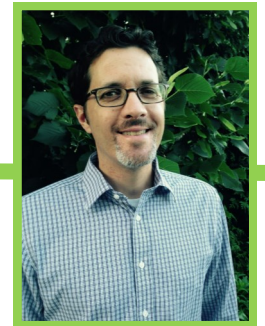
**Mark Hockley, Tree Canopy & Green Infrastructure Specialist**



**Jessica Cavey, Communication and Fiscal Administrator**



**Rachel Reyna, Section Chief, Rural & Community Forestry**



**Matt Keefer, Assistant Bureau Director**

The DCNR staff work closely with exceptional Urban Forestry staff at Penn State Cooperative Extension to successfully administer the program:



**Vincent Cotrone, NE Region**



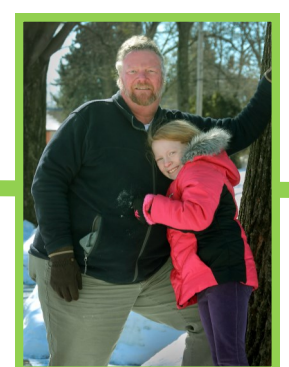
**Julianne Schieffer, SE Region**



**Scott Sjolander, NW Region**



**Brian Wolyniak, SW Region**



**William Elmendorf, PhD Associate Professor**

# Staff

The TreeVitalize Program receives grants and program assistance from staff at the **USDA Forest Service**:



**Sally Claggett,  
USFS Liaison  
Chesapeake Bay Program**



**Jason Henning,  
Research Urban Forester,  
Davey Institute/USFS**



**Julie Mawhorter,  
Mid-Atlantic Urban &  
Community Forestry**



**Phillip Rodbell,  
NE Area Urban &  
Community**



**Sara Low,  
Philadelphia Field Station  
&  
Coordinator Biological  
Scientist**

The DCNR staff receive advice and feedback from the **PA Urban and Community Forestry Council** comprised of representatives from federal, state, and local government agencies, non-governmental organizations, private woodland owners, forest industry, and forest consultants:



**Matt Erb,  
Council President**



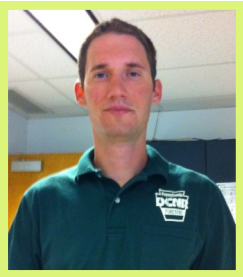
**Dan Hall,  
Council Vice President**



**Jason Lubar,  
Council Treasurer**

# Field Staff

DCNR also supplies the program with technical support from 35 Foresters that work in field offices across the state.



**Garrett Beers**  
District 19



**Lucas Book**  
District 3



**William Bow**  
District 5



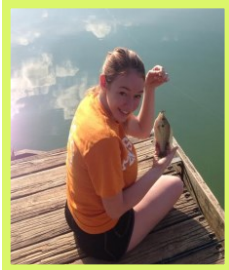
**Andy Brought**  
District 18



**Ryan Brown**  
District 11



**John Brundege**  
District 8



**Celine Colbert**  
District 4



**Dave Cole**  
District 8



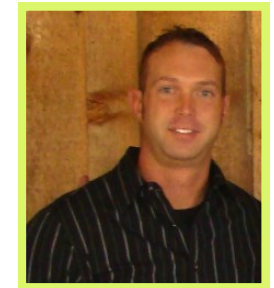
**Tim Cole**  
District 5



**Tom Erdman**  
District 14



**Chad Gadsby**  
District 20



**Russell Gibbs**  
District 4



**Gary Gilmore**  
District 8



**Lynn Greenaway**  
District 10



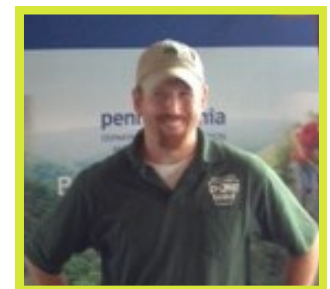
**Ben Hardy**  
District 11



**Toby Herzing**  
District 13



**Steve Hoover**  
District 16



**Gerald Hoy**  
District 7

# Field Staff (continued)



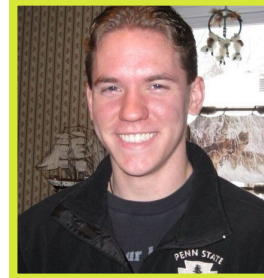
**Christopher Jones**  
District 6



**Rich Johnson**  
District 9



**Matt Kern**  
District 1



**Tim Latz**  
District 17



**Mark Lewis**  
District 14



**Robert Martynowych**  
District 18



**Eric Monger**  
District 15



**Michael Nelson**  
District 6



**John Nissen**  
District 17



**John Nobles**  
District 14



**Ty Ryen**  
District 14



**Jessica Salter**  
District 17



**Dave Scamardella**  
District 2



**Jake Scheib**  
District 8



**John Schwartz**  
District 1

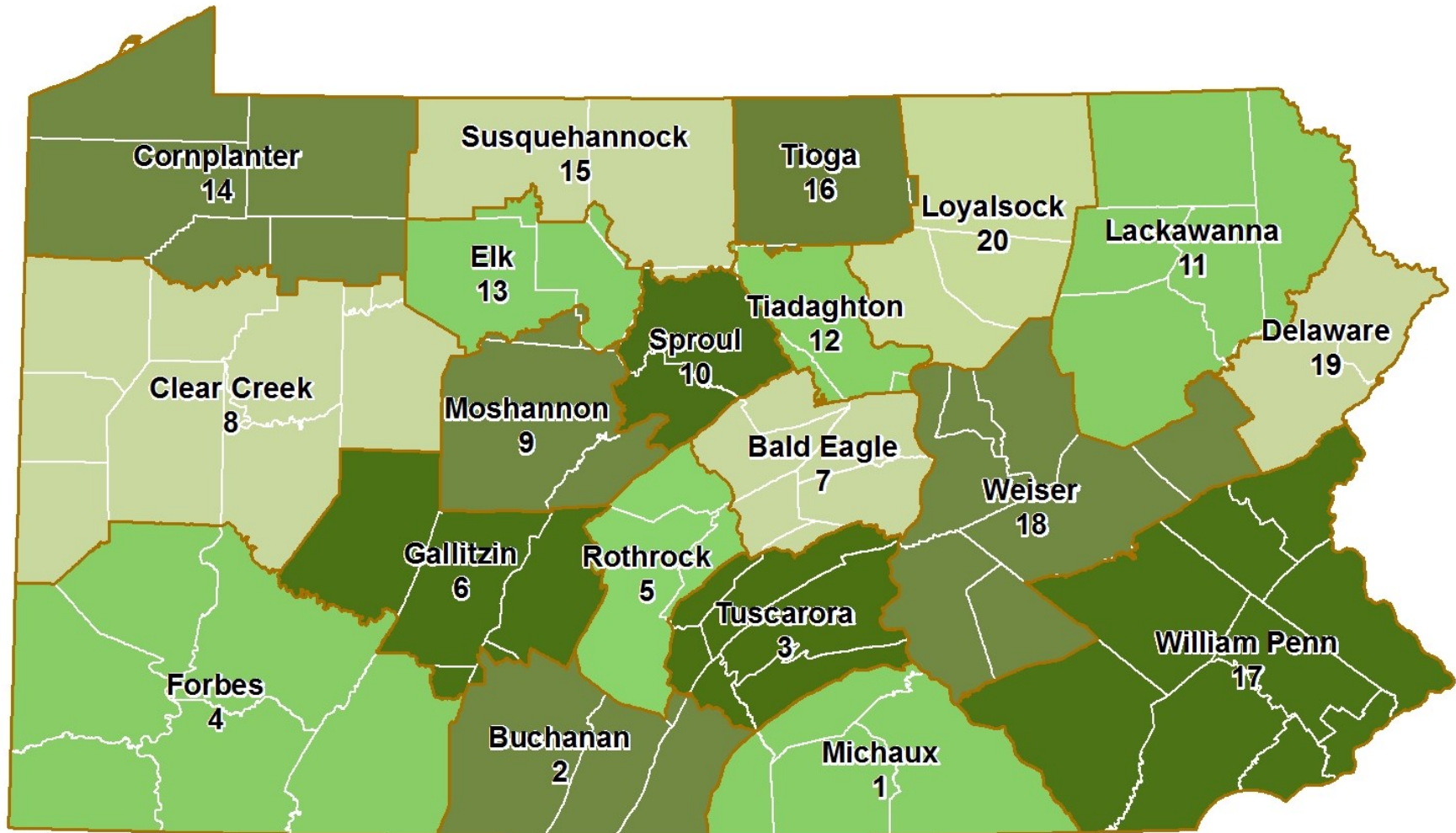


**Jason Smith**  
District 12



**Frank Snyder**  
District 18

# State Forest Districts



DCNR field staff work out of 20 forest districts in the state.

# Partners

In Pittsburgh and Allegheny County, DCNR partners with **Tree Pittsburgh, the Western PA Conservancy, The City of Pittsburgh, and Allegheny County Parks** to administer the program.



Danielle Crumrine,  
Tree Pittsburgh



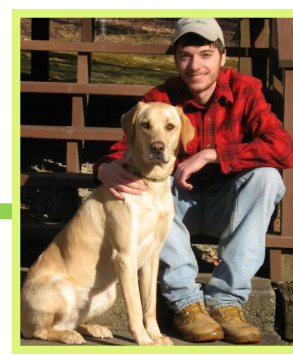
Matt Erb, Tree  
Pittsburgh



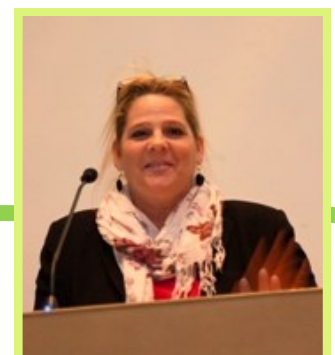
Jeff Bergman, WPC



Marah Vecenie, WPC



Brian Cooks, WPC



Lisa Ceoffe, City of  
Pittsburgh

In Philadelphia, DCNR partners with the **PA Horticultural Society** to administer TreeVitalize.



Glen Abrams



Dana Dentice



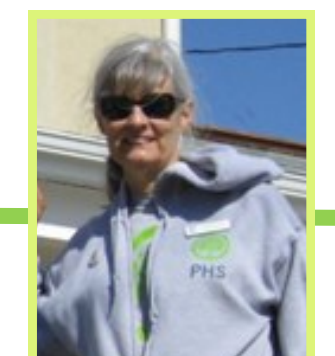
Emma Melvin



Mindy Maslin



Guina Hammond



Barley VanClief

# Partners

Albright College

Alcoa

Allegheny County Parks

Alliance for the Chesapeake Bay

Appalachian Regional Reforestation Initiative

Aqua America

Arbor Day Foundation

Borough of Carlisle Parks and Recreation

Borough of Lewisburg

Chesapeake Bay Foundation

City of Allentown

City of Bethlehem

City of Easton

City of Harrisburg

City of Lancaster

City of Pittsburgh

City of Philadelphia

City of Reading

Cities Scranton

City of Wilkes-Barre

City of York

Dauphin County Parks

Davey Resources

Delaware Valley Regional Planning Comm.

Dickinson College

Dincher and Dincher Tree Service

Environment Erie

Harrisburg Senators Baseball Team

Harrisburg University

Heinz Foundation

Journey Through Hallowed Ground

Kutztown University

Lehigh County Parks

Lehigh Gap Nature Center

Local Tree Nurseries

Local Tree Services

Local Tree Tenders®

Local Watershed Associations

Mellon Foundation

Montgomery County Planning

Morris Arboretum

National Park Service

PA Dept. of Community & Economic Devel.

PA Dept. of Environmental Protection

PA Dept. of Transportation

PA Downtown Center

PA Horticultural Society

PA Turnpike Commission

PA Urban & Community Forestry Council

Penn Del ISA

Penn State University

PennVEST

PlanIt Geo

PPL Electric Utilities

Roots Nursery

Slippery Rock University

Stroud Water Research Center

The Nature Conservancy

Tree Pittsburgh

University of Vermont Spatial Analysis Lab

USFS Urban Research Station (Philly)

US Forest Service NA Urban & Community For

US Forest Service Philadelphia Field Station

Western PA Conservancy

WDIY Radio

William Penn Foundation

WITF Radio

WQED Radio

WVIA Television

**And Many More...**

# Grants

The TreeVitalize Program offers grants to communities throughout the state to encourage the establishment and ongoing care of publicly-owned trees. Funding for grants is derived primarily from the DCNR and the USFS and grants are administered through partners such as the PA Urban and Community Forestry Council (statewide), PA Horticultural Society (Philadelphia and surrounding counties), and Western PA Conservancy (Pittsburgh and Allegheny County). Grants are currently being offered for tree planting, pruning, and for street tree inventories. Visit the following links for more information: <http://www.treevitalize.net/SubGrant.aspx>; <http://waterlandwildlife.org/216/treevitalize>; <http://phsonlione.org/greening/plant-one-million>. Proposals are vetted through a competitive ranking process and successful candidates must match their grants dollar for dollar through cash and/or in-kind services. Tree Tender training is required, and an approved planting plan must be submitted as part of the application process.

Grants for street tree inventories have been offered statewide since 2014. The work can be accomplished through a partnership with a local college/university or through a professional arboricultural firm. As part of their match, the community must survey its residents to determine their awareness and knowledge of the tree program and develop a written management plan.

New in 2015 are tree pruning grants for pruning street and park trees. This is a matching grant, and at least 50% of the match must be cash. A two-step application process is used. The preliminary application involves a list of the address, tree species, and diameter of each tree to be pruned and the type pruning to be completed, approved by a TreeVitalize forester. Once preliminary approval is granted, applicants must prepare bid documents, solicit at least three bids, and develop a budget based on the preferred contractor fees.

Philadelphia		Pittsburgh		Statewide	
Partner:		Partners:		Partner:	
Communities Served:	77	Communities Served:	89	Communities Served:	188
Total Funding Awarded:	\$2,200,000	Total Funding Awarded:	\$1,200,000	Total Funding Awarded:	\$1,037,649
Match to Date:	\$2,200,000	Match to Date:	\$2,564,878	Match to Date:	\$1,959,684
Total Trees Planted:	211,372	Total Trees Planted:	22,951	Total Trees Planted:	9,945
(Above information includes tree request data from 2004-2014)		(Above information includes tree request data from 2007-2014)		(Above information includes matching tree planting grant data from 2007-2014)	





# TreeVitalize Grant Success Stories



Tree planting team in Pittsburgh's Manchester neighborhood



# Lawrenceville ReLeaf

Submitted by Jen Kullgren, Community Forester, Tree Pittsburgh

## Pittsburgh Neighborhood Planning

In 2014, Tree Pittsburgh engaged in a neighborhood level urban forest master plan called ReLeaf Lawrenceville ([www.treepittsburgh.org/lawrenceville](http://www.treepittsburgh.org/lawrenceville)). Below are some of the great things that Lawrenceville is doing to protect and restore the urban forest.

## TreeVitalize Trees (2008-2014)

Between 2008 and Fall 2014, 910 trees have been planted in the three Lawrenceville neighborhoods. Seventy-nine different species were planted with the most common being hedge maple (*Acer campestre*) (11%), Japanese tree lilac (*Syringa reticulata*) (9%), elm spp. (*Ulmus spp.*) (6%), and silver linden (*Tilia tomentosa*) (5%). Using i-Tree Streets, the annual benefits of TreeVitalize trees when planted were \$24,418.

## Lawrenceville Tree Park

Beginning in 2008, the Lawrenceville Tree Tenders have been working in partnership with Lawrenceville Corporation, Lawrenceville United, and Tree Pittsburgh to create the Lawrenceville Tree Park. Lawrenceville Tree Park has transformed a once blighted and vacant lot into a beautiful space for neighboring residents to enjoy. The two major goals for the Tree Park are to enhance the quality of life of local residents through open space improvements, and educate the public about trees, sustainability, and the environment. It will also serve as a neighborhood demonstration project, helping to educate visitors about trees, their benefits and care, and encourage tree planting around their own homes. Tree species are native to Southwestern Pennsylvania which creates a unique urban park experience.



Lawrenceville Tree Park

# City of New Kensington Tree Planting

Submitted by Jane Glenn, City of New Kensington

Information received from the City of New Kensington about their successful tree planting project.



New Kensington volunteers planting a street tree

THOMAS D. GUZZO  
MAYOR  
TODD MENTECKI  
ACCOUNTS AND FINANCE  
TIMOTHY D. DIMAIO  
PUBLIC WORKS DEPARTMENT  
JOHN W. REGOLI, JR.  
PUBLIC SAFETY  
DOUGLAS J. AFTANAS  
PARKS AND BUILDINGS  
DENNIS F. SCARPINITI, Esq., CMC  
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JOHN S. ZAVADAK  
CITY CONTROLLER  
JAMES C. MOORE  
CITY TREASURER  
ANTHONY J. VIGILANTE, Esq.  
CITY SOLICITOR  
ANTHONY J. MALES, P.E.  
CITY ENGINEER  
THOMAS W. KLAWINSKI  
CHIEF OF POLICE  
J. EDWARD SALIBA  
FIRE CHIEF

The two tree plantings funded by TreeVitalize in New Kensington were a big success! In September 2014, 29 volunteers from Penn State Science Club, the River Church, the faculty of the Penn State biology department, Tree Tenders and the Shade Tree Commission members planted 12 trees along a major thoroughfare in downtown New Kensington. This planting replaced a stand of mature ash trees lost to the EAB. In May of this year, 41 volunteers from the same organizations planted 16 trees at 6 sites, downtown and residential. Before and after both events, volunteers were treated to coffee and doughnuts, subs and cookies, plus lots of water!

The sight of all those orange vests and volunteers of all ages digging away was very positive PR for our community - we had many comments, along with some newspaper coverage. Some nice working relationships were formed, with both Penn State and the church members offering to help us again anytime. We hope the volunteers learned some tree planting skills to be used again and we think this project has raised everyone's awareness of the beauty and value of trees to the community and to the environment. Penn State Extension forester, Brian Wolyniak, provided invaluable information and direction to everyone.

# Grants Available for Tree Planting in Erie County

Article by Dana Massing published in the Erie Times News

(link: <http://www.goerie.com/apps/pbcs.dll/article?AID=2013301169921#>)

Trees can bear fruit, help cut back on stormwater runoff, improve air quality, provide shade and reduce energy bills.

"Trees can be strategically planted to help cool your house in summertime," said Matthew Pluta, program manager with Environment Erie.

Environment Erie is encouraging local municipalities to plant trees and is providing grants to help cover the costs.

About \$42,000 remains available from a \$100,000 state Department of Conservation and Natural Resources TreeVitalize grant awarded in November to the Erie County Department of Planning, Pluta said. Erie County municipalities have until Feb. 11 to apply for a share of the money, he said. Nongovernmental organizations also can seek funding but must fill out a joint application with their municipalities.

The maximum grant a municipality can receive in a year is \$15,000, according to program information, and recipients must provide a 100 per-cent match that is a combination of cash purchases and volunteer services.

Environment Erie has already awarded \$42,167 to five municipalities to add about 370 trees in the region, officials said. Prior grants went to Erie, Corry, Harborcreek Township, and the boroughs of Girard and North East.

Pluta said some money went to plant fruit trees in Erie's Frontier Park. Another grant helped Gannon University students add trees along Erie streets. Penn State Behrend joined with Harborcreek to receive a grant, he said.

The kind of trees, as well as location, can vary, although Pluta said there's an effort to increase tree cover in urban and suburban areas by planting within rights of way and in public parks.

"The big goal is to increase shade cover," he said.

More than 340,000 trees have been planted through TreeVitalize since it started in 2004, according to the program. Its goal is to plant 1 million trees.

DANA MASSING can be reached at 870-1729 or by e-mail. Follow her on Twitter at [twitter.com/ETNmassing](https://twitter.com/ETNmassing) [Opens a New Window.](#)

# Two Communities Team Up for a Tree Planting Program

Article from the Lebanon Daily News

(link: [http://www.ldnews.com/local/ci\\_25736812/chautauqua-mt-gretna-borough-join-tree-planting-program](http://www.ldnews.com/local/ci_25736812/chautauqua-mt-gretna-borough-join-tree-planting-program))

## Chautauqua, Mt. Gretna Borough join for tree-planting program

*Lebanon Daily News*

UPDATED: 05/10/2014 11:13:14 AM EDT

0 COMMENTS

On Thursday and Friday, local volunteers and Mt. Gretna Borough staff planted a variety of 20 trees on Chautauqua grounds, with the planting funded in part by a TreeVitalize grant for \$2,020 from the state and the Department of Conservation and Natural Resources, according to a news release.

The Pennsylvania Chautauqua has established a Tree Maintenance and Preservation Committee to restore and improve diversity and health of the trees in the community, the release states. The committee is chaired by board member Michael Sherman.

The planting is part of the larger Gretna Green, a joint initiative of the Pennsylvania Chautauqua Foundation and Mt. Gretna Borough to re-establish tree diversity and develop healthy native species along borough streets and within parklands, the release states.

Improvement and maintenance of a diverse tree community will maintain and increase the attractiveness of the area, provide cover and food for wildlife, contribute to stormwater retention, and provide lasting shade and beauty for residents and visitors, the release states.

On July 25, the committee will present a program in the Chautauqua Hall of Philosophy on "Environmental Stewardship Around the Home," with presentations on tree care, shade gardening, native plants, stormwater control and other green ideas.



Vicki and Don Kensinger and Barney Myer work to plant a redbud tree in Mt. Gretna late in the week. On Thursday and Friday, local volunteers and Gretna borough staff planted 20 trees on Chautauqua grounds, funded in part by a TreeVitalize grant. (SUBMITTED)

# Philly Gets Down and Dirty with 1,200 Trees in Fall 2014

Submitted by Dana Dentice and Emma Melvin of PA Horticultural Society

We teamed up with our Tree Tenders partners in Fall of 2014 to distribute and plant 600 trees in Philadelphia and another 600 trees in Bucks, Chester, Delaware and Montgomery Counties. These 1,200 bare root trees were planted along streets, as well as in yards, parks and school campuses as part of the Plant One Million tree planting campaign.

We'd like to give a big thank to all the volunteers, individuals, and funders who helped make this possible. We couldn't have done this without your dedication, energy and love for trees. Whether you delivered or planted a tree, coordinated a tree planting event, or applied for a tree(s), your effort is much appreciated! We also thank our funders, including The DCNR's TreeVitalize program, Boeing Company, The Austelle Foundation and an anonymous donor.



We had more than 30 Philadelphia Tree Tenders groups from neighborhoods all over the city getting down and dirty planting trees with and for their neighbors. Many were greening their neighborhood streets by planting city-approved trees in existing and newly cut tree pits. PHS also partnered with the Philadelphia Housing Authority, its residents and the Urban Technology Project to plant 19 trees in the once shade-less backyards of Richard Allen Homes residents.

The SOSNA Green Tree Tenders group planted 5 street trees in Philadelphia on November 15. A total of 1,200 trees were planted by PHS Tree Tenders and volunteers in Southeastern PA. Photo by SOSNA Green

# The PHS Plant One Million Tool Trailer: Every Tree Matters

Submitted by Barley Van Clief of PA Horticultural Society

PHS's beautiful new Plant One Million tool trailer, funded through the PA Community Forests TreeVitalize program, has already proven itself invaluable at each major tree planting since its assembly in fall of 2014. To begin with, its exterior design, emblazoned with the motto "Every Tree Matters," sends a statement to everyone it passes. We see heads turn wherever we go and are proud to be the bearers of such an important message.

So far the tool trailer has participated in six volunteer community plantings of 40-50 trees each in Upland, Bensalem Township, Upper Merion Township, Montgomery County Community College/Blue Bell, and Charlestown Township.



**Kids equipping for a planting via the Tool Trailer**



**The Tool Trailer: ready for business!**

When we arrive at the planting site and open the doors of the trailer, we hear volunteers' exclamations: "Wow, look at all those shovels." "We don't need to share one stake pounder!" "Wheelbarrows!! No more hauling mulch by the small bucketful!" "Check out the augur!"

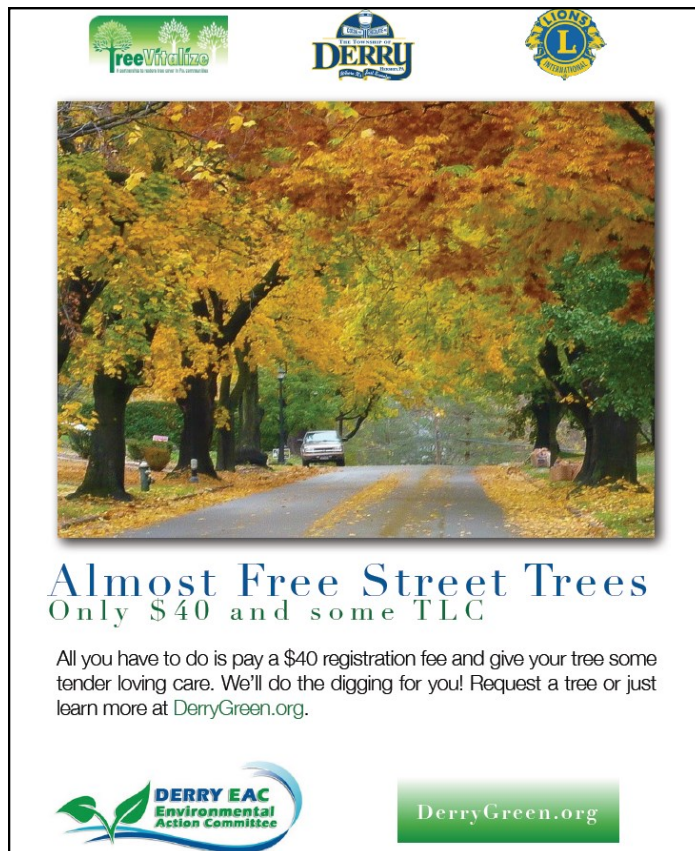
That's what the PHS Tree Team thinks also!! Just like the new puppy in the family, we wonder how we ever got along without it!

# Derry Township Tree Program

Submitted by Derry Township (Dauphin County)

Derry Township's Derry Green program partners with TreeVitalize to offer street trees in their community through the grant process.

Check out their website at <https://derryeac.wordpress.com/>



The flyer features logos for TreeVitalize, Derry Township, and the Lions Club at the top. The central image shows a road lined with trees in vibrant autumn foliage. Below the image, the text reads: "Almost Free Street Trees Only \$40 and some TLC". A paragraph explains that a \$40 registration fee covers digging, and users should visit DerryGreen.org for more information. At the bottom, there are logos for the Derry EAC Environmental Action Committee and the website DerryGreen.org.

Flyer for Derry Township tree program



The Facebook post is from the Derry Environmental Action Committee, dated November 5, 2014. The text of the post says: "We planted 10 trees along the Jonathan Eshenour Trail this past weekend! We'll plant a lot more there next year to make this wonderful trail even better. Thanks so much to our hardy volunteers and those from the Manada Conservancy for planting the trees (it's a lot harder than it looks) and to the Township of Derry for digging the holes." The post includes three photos: one of a person measuring a tree in a hole, and two others showing a group of people planting trees in a field. The post has 1 like and 1 share.

Derry Township shares their tree project on facebook



# Other Innovative Tree Planting Efforts:

## Communities Save Money Using Bare Root Trees

Submitted by Vinnie Cotrone, Penn State Extension Urban Forester for the Northeast Region



A family plants a bare root tree near their home in Northeast Pennsylvania

Since 1999 the extension urban forester has coordinated a group ordering of large caliper bare root trees that communities in the northeast take part in. Each spring and fall, municipalities and organizations order bare root trees through the extension urban forester, who is able to provide advice on species selection and planting. By grouping orders, communities save money on delivery (shipping is about \$3.50 per tree), as the pitch in to unload the tractor trailer at 2 designated drop-off sites in Northeastern Pennsylvania. By using bare root 1.5-2 inch caliper trees, communities save money on the nursery stock as well as planting costs by using volunteers and little to no machinery. Since the inception of the organized group tree orders it is estimated that communities have saved \$1.5 million dollars that they might have had to spend using B&B trees, machinery and contractors versus volunteers. Communities can plant more trees because of reduced costs and tree are planted at the proper depth because roots and trunk flares are visible.

# Tree Tenders®

Tree Tenders® was originally a program of the Pennsylvania Horticultural Society (PHS), developed in partnership with Penn State Extension, to involve citizens in the care of urban trees. The program offered a thorough primer on how to plant and provide long-term care for trees, especially those that are planted in the difficult environs of the urban and suburban landscape. Tree Tenders was adopted as a component of TreeVitalize when the program began a decade ago, and has been exceptionally successful throughout the state.

To qualify as a Tree Tender in the TreeVitalize Program, individuals are required to complete a 7-hour workshop offered over a full day or over a period of weekly sessions. Instruction is provided through the Bureau of Forestry, Penn State Extension, Tree Pittsburgh, and the Pennsylvania Horticultural Society. Participants leave with a greater awareness and appreciation for the importance of urban trees and with the tools to organize tree planting and maintenance projects in their own neighborhoods.

Completion of Tree Tenders training is required to qualify for trees or grants through TreeVitalize. Workshops to further educate Tree Tenders are offered through TreeVitalize staff and partners. In the Philadelphia and Pittsburgh areas, TreeVitalize partners offer both work parties and social events regularly to keep Tree Tenders engaged. Through TreeVitalize, a network of thousands of dedicated volunteers has been mobilized to help to ensure support for urban forestry into the future.

Beginning in 2014, an Advanced Tree Tenders course was piloted in the Philadelphia area.



## Total Tree Tenders Trained

Philadelphia:	3,504
Pittsburgh:	1,464
Other Cities Statewide:	933
Online:	264
Grand Total:	6,165



# Tree Tenders<sup>®</sup> Success Stories



Tree Tender training in Chambersburg



# Lawrenceville Tree Tenders®

Submitted by Matt Erb, Tree Pittsburgh

## Lawrenceville Tree Captains

Since 2008, the Lawrenceville Tree Tender Steering Committee has met once a month to discuss topics including: street tree requests, tree concerns, pruning and mulching events, outreach efforts, and social events. The steering committee meets early in the year with Tree Pittsburgh staff to schedule mulching parties and pruning workshops for the year ahead. Members attend the monthly meeting and act as liaisons to address challenges and opportunities for residents in their ward. They conduct numerous outreach events each year to help inform residents on the benefits of trees and why they are so important to the health of the neighborhood. With the completion of the Releaf Lawrenceville plan, they have even larger targets for implementation. One of the strategic goals of the plan is to prune newly planted TreeVitalize trees twice in the establishment period of five years.



Lawrenceville Tree Tenders have appointed Tree Captains for each ward of the neighborhood that help to keep an eye on newly

# PHS Tree Tenders® at Work in Counties Surrounding Philly

Submitted by Dana Dentice and Emma Melvin, PA Horticultural Society

About another 30 Tree Tenders groups planted trees in the counties outside of Philadelphia, including 100 trees planted at schools in Bucks and Montgomery Counties. On November 13, students from Cecelia Snyder and Shafer Middle Schools in Bensalem, Pennsylvania, and the Phillie Phanatic came out to celebrate the Phillies' Home Runs for Trees program by planting a tree for every home run the players made in 2014. They planted 50 trees with us on the two school campuses to provide shade, beauty and improve the air quality around the schools for students and pedestrians.

PHS also partnered with Montgomery County Community College (MCCC) to restore the urban tree canopy on the school's campus. With the help from professors, students and MCCC ground staff, 50 trees were planted along roads and walkways within the campus on November 14. Volunteers concurred cold temperatures and wet soils to get the job done. PHS staff trained volunteers on proper planting techniques and assisted volunteers during planting to ensure the bare root trees will survive the winter and provide shade, stormwater reduction and beauty for years to come.



The Phillie Phanatic helps celebrate trees



Tree Tenders planting at Montgomery County Community College

All trees were purchased as bare root stock from our good friends at Schichtel's Nursery Inc. in Springville, New York [trees were purchased out-of-state due to lack of locally grown bare-root trees in PA—the partners are working to remedy this situation]. We love bare root trees for their light weight, lower cost, and more dense and intact root systems.

We can't wait to see these 1,200 new trees leaf out next spring and hopefully grow to their full potential. Over the years, they will add to the region's tree canopy and the many benefits that our urban forest provides our communities and neighborhoods.

# Advanced Tree Tenders® Philly

## Submitted by PA Horticultural Society

PHS's first Advanced Tree Tenders Training Series ran from September 2014 to April 2015, attracting 127 students. The series consisted of eight, 2-hour classes, offered once a month. Each class was focused on a specific topic and designed for individuals with pre-existing basic knowledge, either from the Tree Tenders basic training or other life experience. The students could attend the live session in Center City Philadelphia, view the real time webcasts of the classes, or if that timing didn't work out, see the archived version at a later time. Pre and Post tests were given for students wishing to receive an Advanced PHS Tree Tenders certificate and for those seeking ISA CEUs. Thirty-five students took all 8 tests and graduated.

The PHS Advanced Tree Tenders program was successful due to an amazing collection of partners: Penn State Coop Ext, TreeVitalize, Bartlett Tree Experts, TNC, ACTrees Morris Arboretum and Casey Trees all provided speaker and logistical support vital to the program. The series is still available on the Penn State Adobe Connect Site as 8 individual archived webinars. Quizzes are also available for those interested in receiving a PHS Advanced Tree Tenders Certificate. We are considering offering a second series in 2016.

### Month/Organization/ Topics for Advanced Tree Tenders series are:

Sept. 17	Penn State Coop. Ext.	Advanced Tree Identification
Oct. 29	USFS Field Station	Tree Health Monitoring
Nov. 19	Bartlett Tree Experts	Structural Problems in Trees/ Advanced Tree Pruning
Dec. 3	TNC	Non-native Invasive Insects/Diseases
Jan. 28	ACTrees/Casey Trees/PSU	Nurturing your Inner Tree Advocate
Feb. 11	Morris Arboretum	The Soil–Tree Relationship
March 25	Penn State Coop. Ext.	Choosing the Right Tree for the Right Place
April 15	PHS	Riparian Plantings



Advanced Tree Tenders classroom session

# Online Tree Tenders®

Submitted by Vinnie Cotrone, Penn State Urban Forester

Tree Tender Training has been delivered online during the winter months for the past three years, attracting over 150 participants year each from across the state and country. Seven weeks of lectures at noon (geared to municipal staff at work) and 7pm (geared towards volunteers) are followed by online tests that measure participants knowledge learned, as well as provide ISA, SAF, and ASLA continuing education credits. Live lectures are recorded and archived, providing the participants to complete a section that was missed.

In 2015, the extension urban forestry program partnered with the Pennsylvania Horticultural Society to deliver Advanced Tree Tender Training online (via Adobe Connect) as well as live in Philadelphia. Through this partnership, PHS was able increase attendance and provide the program statewide.



# Other Innovative Educational Efforts:

## Penn State Extension Trainings and Workshops

Submitted by Bill Elmendorf, Associate Professor, Penn State University

Extension Urban Foresters provided 184 talks and presentations which along with workshops provided 41,340 seat hours of education. The program provided assistance to thirteen culturally and/or economically diverse municipalities and organizations. In partnership with the Chesapeake Bay Foundation and Harrisburg Authority, Penn State students under the supervision of Bill Elmendorf completed formal computer/GIS-based street and park tree inventories and summary management report for the City of Harrisburg which supported the formation of a city tree commission and the hiring of a city arborist. A street and park tree inventory was also completed for the borough of Philipsburg. An inventory of 8000 public trees in Ferguson Township was started in December of 2014.

We continued to build partners and work closely with the Western Pennsylvania Conservancy, Tree Pittsburgh, Pennsylvania Horticulture Society, International Society of Arboriculture Penn-Del Chapter, Delaware Valley Planning Commission, and Pennsylvania Municipalities Planning Education Institute on state-wide educational programming and technical assistance.

As in past years, three, four day Arborist Short Courses and the Eastern Pennsylvania Tree Climbing School continued to assist arborists in their profession and in preparing for the Certified Arborist Exam of the International Society of Arboriculture (ISA). In 2013 and 2014, Bill Elmendorf served as President of the ISA Penn-Del Chapter and was responsible for organizing the 2014 and 2015 Shade Tree Symposiums. This three-day annual symposium provided educational opportunities to about 600 arborists and other members of the green industry. Extension publications and PowerPoint presentations on tree planting, tree pruning and care, tree risk assessment, and preserving trees in construction continue to inform arborists involved in tree care and are included in the programs Lunch Urban Forestry Webinar. TreeVitalize tree planting grants continue to involve coordination and education with tree nurseries and arboricultural firms. In cooperation with the ISA Penn-Del Chapter, a three-day *Tree Risk Assessment Workshop* was provided to 12 qualified participants in November of 2014.

### Examples of Trainings

#### Completed within the Last Year

Tree Inventory Workshops (3)

Arborist Short Courses (5)

Utility Training Sessions (4)

Online Tree Tenders (7 sessions)

Water Quality Workshops (4)

Green Commercial Development

Municipal Stormwater (2)

Tree Symposium

Tree Risk Workshop

And many more...



# Other Innovative Educational Efforts: Arborist Short Courses and Electric Utility Trainings

Submitted by Vinnie Cotrone, Penn State Extension Urban Forester, Northeast Region

## Arborist Short Courses:

The Arborist Short Course was developed in 2000 in Northeastern Pennsylvania as a way to educate tree workers about proper tree care and increase the number of ISA Certified Arborists, by providing a 4 day short course that prepared participants to take the ISA certification exam. Since its inception, over 1000 people have



Climbing demonstration at an Arborist Short Course



Directional pruning

## Electric Utility Trainings:

By partnering with utility companies such as PPL and Citizens Electric, the program has provided Line Clearance Crew Trainings throughout the eastern half of Pennsylvania. These 3-hour training sessions typically reach over 600 PPL Utilities Line Clearance workers and focus on how to directionally prune trees from electric conductors, Emerald Ash Borer detection, tree identification and tree risk assessment. The cost of the trainings, including extension educators travel was covered by the utility company.

# Other Innovative Educational Efforts: Reaching New Audiences

Submitted by Vinnie Cotrone, Penn State Extension Urban Forester, Northeast Region

## Reaching New Audiences:

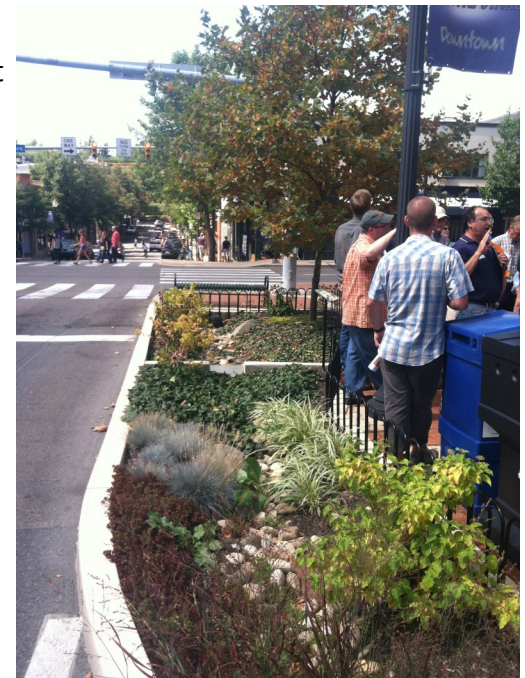
The Penn State Extension Urban Forestry Program has been delivering outreach programs and assistance to communities in the area of stormwater management since 2006 reaching municipal officials, engineers, residents, watershed organizations, and the landscape industry.

Besides reaching new audiences with the Green Infrastructure webinar series, the extension urban forester in northeastern Pennsylvania continues to work with the engineering community throughout the state on stormwater management and green infrastructure issues. A presentation titled “The Role of Trees in Managing Urban Stormwater” was presented to over 200 professional engineers at Villanova Urban Stormwater Partnership Conference.

Traditional foresters were also exposed to urban forestry and backyard woods when a presentation titled “Ecosystem Services Provide by Trees and Forests was presented at the annual meeting of the Pinchot Chapter of the Society of American Foresters in 2015.

In the spring of 2014, a Green Stormwater Solutions Bus Tour was held in Lackawanna County. Approximately forty attendees, mostly engineers and municipal officials toured new and innovative stormwater practices such as rain gardens, porous paving, bio-swales, and green roofs.

In August, a program entitled “Ensuring Water Quality in Your Watershed: Protecting Streamside Forests” was held in Luzerne County. This workshop explored the latest research on the importance of streamside forested buffers for maintaining water quality. Participants from across the region heard speakers from the Stroud Water Research Center, the Department of Environmental Protection, DCNR Bureau of Forestry, and Penn State University explain how to protect water quality and streamside buffers through new tree plantings, streambank restoration, invasive species management, and local and state regulations and ordinances.

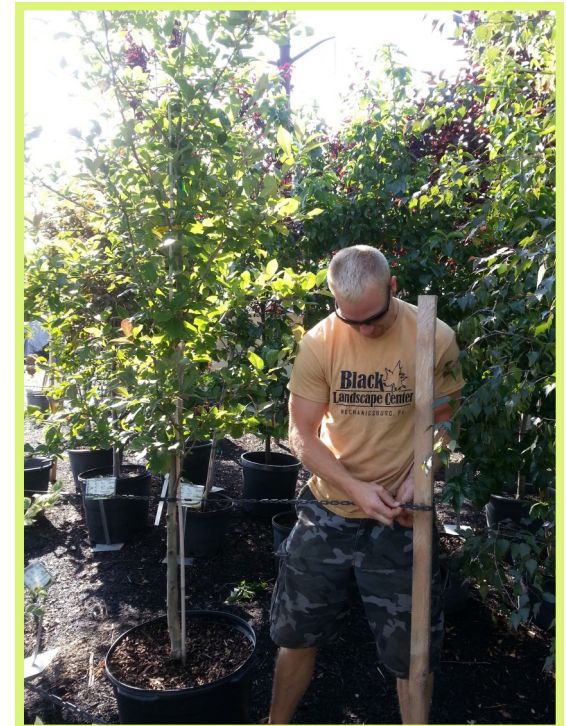


Rain garden stop on a PA green infrastructure tour

# Tree Coupon Program

In 2009, TreeVitalize received seed funding from the Alcoa Foundation to offer tree coupons to citizens in Cumberland, Dauphin, Lancaster, Perry and York counties. A number of tree nurseries in those counties now participate in the TreeVitalize tree coupon program. Each coupon offers savings of \$15 off the purchase of a tree that costs \$50 or more.

The program continues with DCNR TreeVitalize funding. New nurseries have been added in the Southeast region, with help from the PA Chapter of the Audubon Society and its "Bird Town" program.



TreeVitalize advises planting native species whenever possible. Below are suggested native tree species.

## Plant a tree. Save some green!

Common Name	Scientific Name
<b>Large Trees</b>	
Red Maple	<i>Acer rubrum</i> cvs.
Sugar Maple	<i>Acer saccharum</i>
Northern Catalpa	<i>Catalpa speciosa</i>
Common Hackberry	<i>Celtis occidentalis</i>
Thornless Honeylocust	<i>Gleditsia triacanthos</i> var. <i>inermis</i>
Kentucky Coffeetree	<i>Gymnocladia dioica</i>
Sweetgum	<i>Liquidambar styraciflua</i>
Tulipree/Hellowoplar	<i>Liriodendron tulipifera</i>
Cucumber Magnolia	<i>Magnolia acuminata</i>
Black Tupelo/Black Gum	<i>Nyssa sylvatica</i>
American Sycamore	<i>Platanus occidentalis</i>
White Oak	<i>Quercus alba</i>
Swamp White Oak	<i>Quercus bicolor</i>
Scarlet Oak	<i>Quercus coccinea</i>
Northern Pin Oak	<i>Quercus ellipsoides</i>
Shingle Oak	<i>Quercus imbricaria</i>
Bar Oak	<i>Quercus macrocarpa</i>
Pin Oak	<i>Quercus palustris</i>
Willow Oak	<i>Quercus phellos</i>
Red Oak	<i>Quercus rubra</i>
Shumard Oak	<i>Quercus shumardii</i>
American Linden	<i>Tilia americana</i>
Elm species	<i>Ulmus</i> spp.
<b>Medium Trees</b>	
Heritage River Birch	<i>Betula nigra</i> 'Heritage'
American Hornbeam	<i>Carpinus caroliniana</i>
Eastern Redbud	<i>Coronilla canadensis</i> cvs.
Thornless Cockspur Hawthorn	<i>Cotoneaster oragealis</i> var. <i>inermis</i>
Winterking Hawthorn	<i>Cotoneaster virginicus</i> 'Winterking'
Carolina Silverbell	<i>Halesia carolina</i>
Highbush	<i>Ostrya virginiana</i>
Sourwood	<i>Oxydendrum arboreum</i>
Sargent Cherry	<i>Prunus sargentii</i>
<b>Small Trees</b>	
Allegheny Serviceberry	<i>Amelanchier laevis</i>
Crabapple species; many	<i>Malus</i> spp.
Common Chickacherry	<i>Prunus virginiana</i> 'Schubert'

Save \$15 Off a Tree TODAY! (coupon inside)

Learn more about planting trees at [www.treevitalize.net](http://www.treevitalize.net)

Coupons are available for spring and fall planting seasons and can be downloaded at [www.treevitalize.net](http://www.treevitalize.net) and at participating nurseries. This program has helped plant many additional trees in the state and has driven business to local nurseries.

"We have helped Pennsylvania reforest over 500 trees with the help of the TreeVitalize Coupon"

-Scott Kelly  
Black Landscape Center Manager

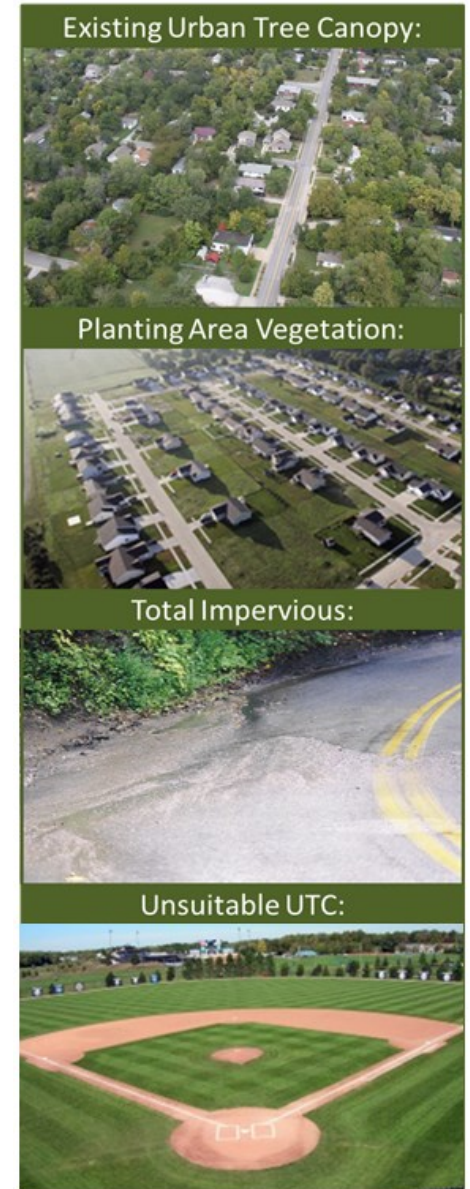
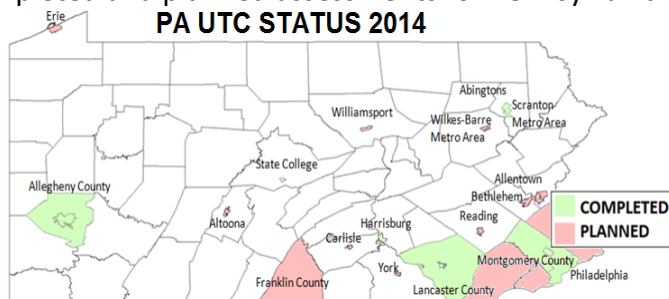
**Trees Planted Via the Coupon Program:  
10,687**

# Urban Tree Canopy

While many communities and their residents value the benefits that trees provide, these resources are often taken for granted. Studies show that trees save energy by reducing wind flow during the winter months and providing shade during the blistering heat of the summer days. Tree canopy acts as an umbrella, capturing up to one inch rain events, reducing or eliminating stormwater runoff. Beside the ecosystem services that trees provide, they also give a wide range of social and health benefits, such as an increased sense of community, crime reduction, and increased property values. But what would happen if these trees were removed? What would happen if more trees were planted and properly maintained? It's these benefits and the questions raised that make urban tree canopy (UTC) assessments an essential component of a community's infrastructure planning and management.

In 2010, 81 percent of the population lived in urban areas (populations from 2,500 to over 200,000) with that number expected to rise. Within each urban area of Pennsylvania, approximately 30 percent is covered by tree canopy. This important natural resource comprises a large part of our communities' assets and therefore must be planned for and managed properly.

Urban tree canopy assessments offer a snapshot of a boundary's tree canopy cover along with other land cover classes such as pavement, buildings, roads, grass, water and bare soil. Tree canopy assessments use high resolution imagery, including 2012 NAIP and Light Detecting and Ranging (LiDAR), to identify existing tree cover and potential planting sites and monitor threats to canopy/ecosystems for a community or region. These assessments offer the information and tools for setting tree canopy goals, prioritizing planting locations, and developing comprehensive tree management plans. Communities in Pennsylvania have used the data for acquiring tree planting grants, designing stormwater management plans, calculating ecosystem services of their urban forest, and planning for green infrastructure. Throughout the state, assessments have been completed, ranging from small communities to entire counties. The image on the right shows the completed and planned assessments for Pennsylvania.



As public awareness of the importance of urban tree canopy grows, so does community interest in assessing the makeup, condition and value of tree cover. New tools and new technologies make more accurate assessments more readily available than ever.



# Urban Tree Canopy Success Stories

LAND COVER IN HARRISBURG

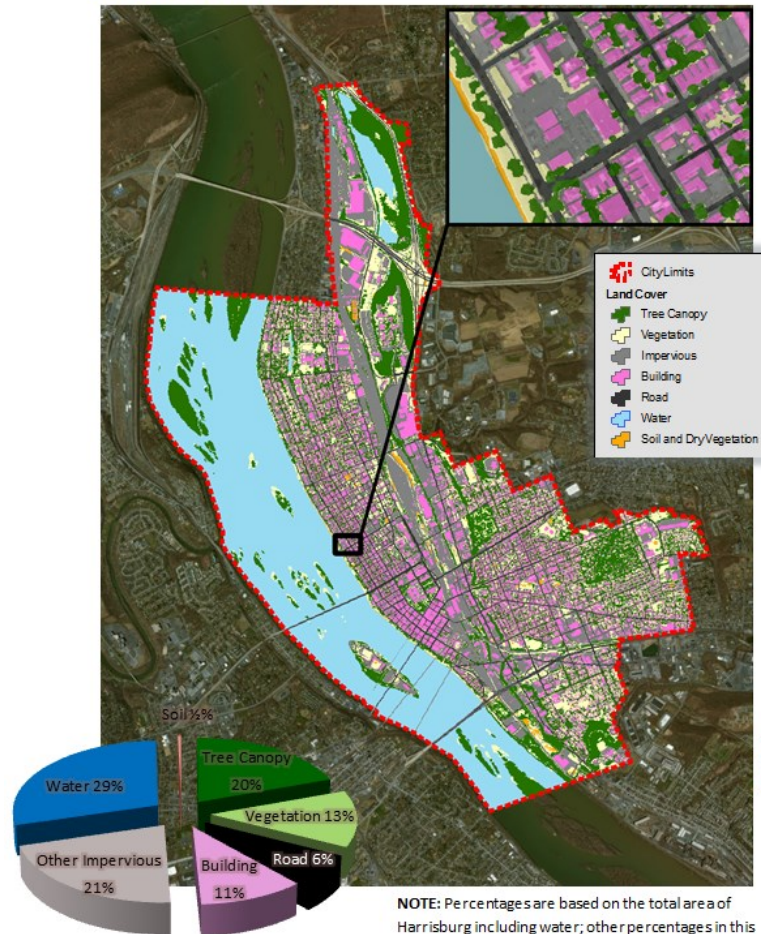


Figure 5:  
7 class land  
cover in  
Harrisburg

NOTE: Percentages are based on the total area of Harrisburg including water; other percentages in this report are based on land area only.

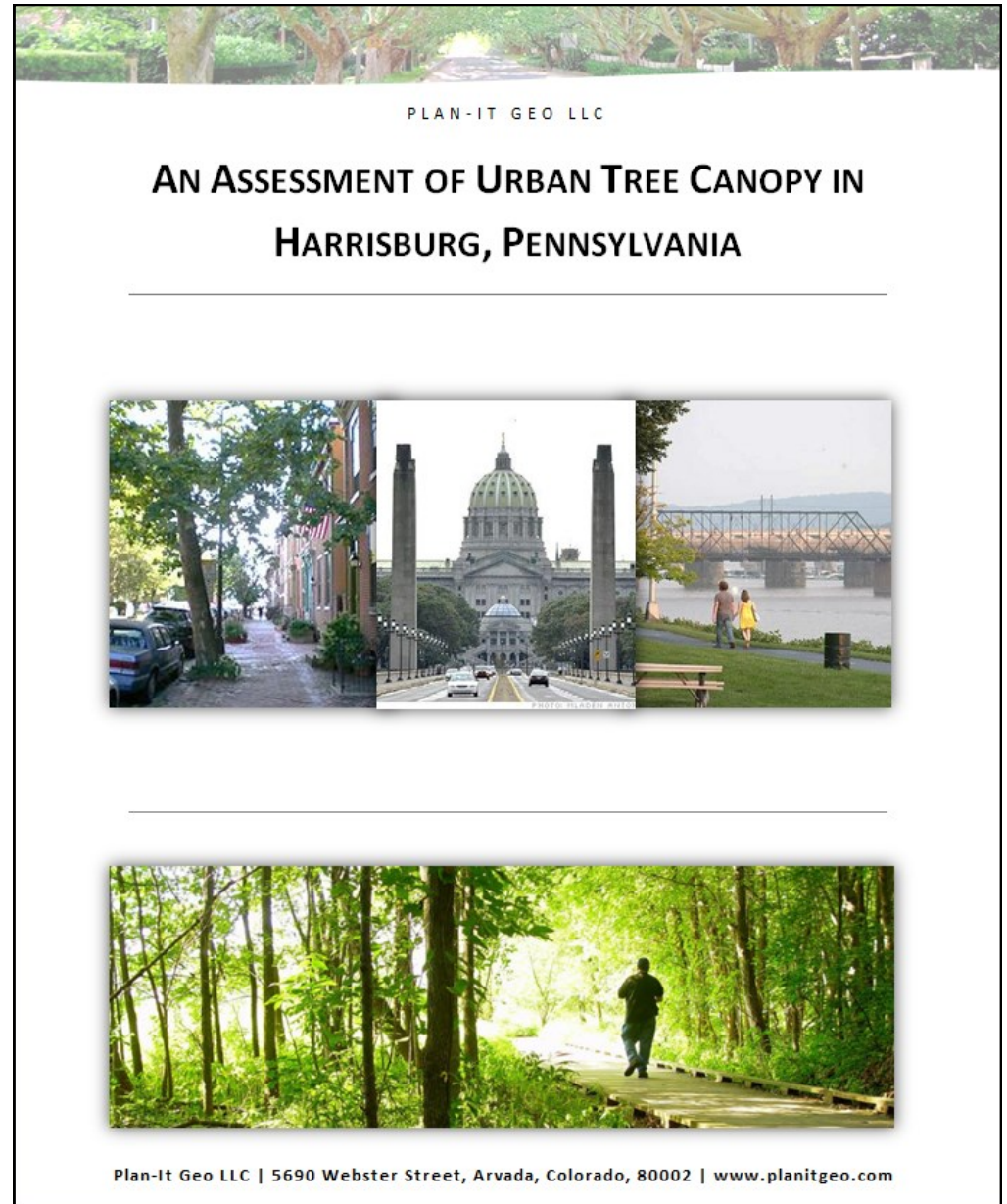


# Harrisburg Urban Tree Canopy Assessment

Submitted by Plan-It Geo

This study encompasses 7,472 acres (11.7 square miles) defined by the city limits of the City of Harrisburg, Pennsylvania. Based on a land area (after excluding water) of 5,295 acres, the City has 1,459 acres (28%) of existing tree canopy, 924 acres (17 %) of Vegetated Possible Planting Area, or PPA Vegetation, which is defined as non-canopy vegetation where tree planting is possible. Additionally, 1,564 acres (30 %) of Harrisburg is likely unsuitable for tree planting (i.e. buildings, roads). The land cover data was used to assess similar metrics for the City's large and small watersheds, stream buffers, and parcels.

This canopy assessment, in addition to a recent street tree inventory, has prompted the City of Harrisburg to hire a city arborist.



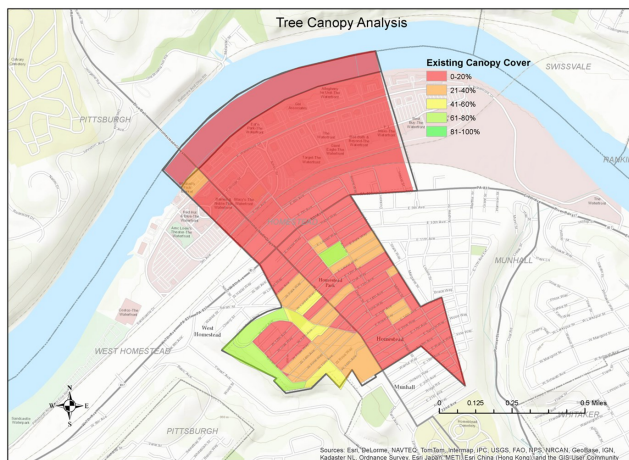
# Conservancy Helps Communities with UTC Assessments

## Submitted by Western Pennsylvania Conservancy

Western PA Conservancy has been working with a variety of communities to assess opportunities to use various types of greening to enhance local quality of life, environment and economic development. One important component of each assessment has been a UTC analysis to help communities understand the value of their urban tree canopy and the services that the living trees provide. In each case a street tree inventory was done, then a UTC analysis was performed with existing Lidar data to identify low-canopy areas, and then an i-Tree analysis was conducted to detail the benefits of current trees. In some cases i-Tree was used to project potential benefits should a future planting plan be followed.

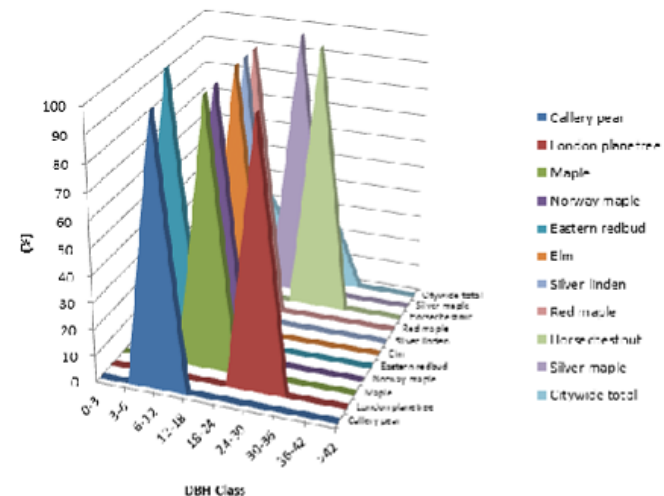
The results have been remarkable. In most cases communities quickly recognize the benefits of trees in a more comprehensive way and make the connection between trees and important community challenges such as storm water and air quality. In some cases the more detailed analysis has led to specific plans to apply for TreeVitalize trees, to add trees to parks, and to change ordinances and management practices to better ensure tree health. In one community with a dearth of street trees, the Shade Tree Commission has pledged to work on a park project to improve shade cover. In another community multiple projects have been organized to apply for state and county grants.

Below is a sample of the maps and charts we have used showing the tree canopy, the species and age distribution, and the environmental benefits of the trees in the community of Homestead, PA.



**Homestead**  
**Relative Age Distribution of Top 10 Public Tree Species (%)**

9/10/2014



# Training Scholarship Program

Education is a very important part of the Council's mission, and a small scholarship fund has therefore been created to allow Pennsylvania practitioners, interested individuals, educators, etc., to attend workshops, conferences or classes that will expand their knowledge about urban and community forestry or tree-related issues in the urban environment.

The Pennsylvania Community Forests Scholarship Program awards scholarships four times a calendar year. The schedule is as follows:

## 1st Quarter (for programs in January, February, and March):

- Deadline is **January 1st** for completed applications.
- \$1000 will be available

## 2nd Quarter (for programs in April, May, and June):

- Deadline is **April 1st** for completed applications.
- \$500 will be available

## 3rd Quarter (for programs in July, August, and September):

- Deadline is **July 1st** for completed applications.
- Only funds not awarded in previous quarters will be available, therefore Scholarship amounts may be limited or unavailable.

## 4th Quarter (for programs in October, November, and December):

- Deadline is **October 1st** for completed applications.
- \$500 will be available

Application for scholarship must be made prior to the event

This is a reimbursement scholarship program – If you are an awardee, you must pay for the awarded costs up-front and send us a receipt. PCF will reimburse you for the awarded amount when we receive your receipt.

Allowable expenses include conference/class registration fee and housing only.

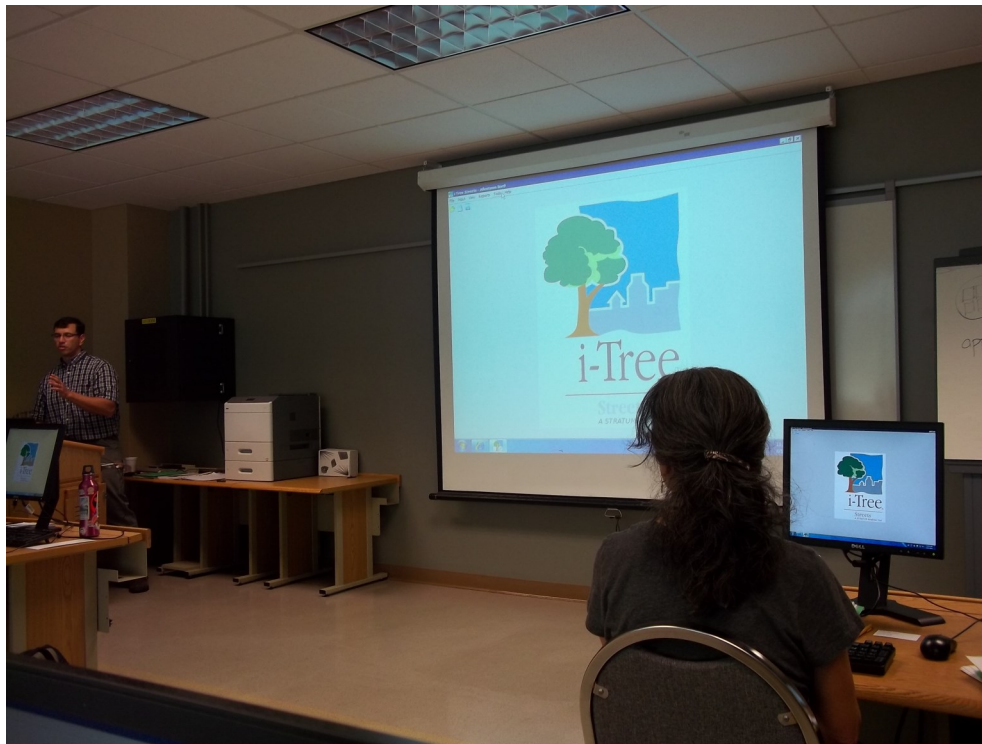
Preference will be given for events in Pennsylvania, but out-of-state events will also be considered.







# Training Scholarship Program Success Story



# Municipal Forestry Institute

Submitted by Curtis Helm

Curtis Helm, a project manager representing Philadelphia Parks and Recreation (PPR), Dept of Urban Forestry and Ecosystem Mgmt., attended the Municipal Forestry Institute 2015 training seminar held in Silverton, Oregon, Feb 22 - 27, 2015. The MFI Conference included approximately 60 arborists and foresters representing municipal, state and federal agencies, non-profits, and arboretums, from across the country, and even one from Hong Kong! The MFI training is focused on teaching the principals and skills of leadership and communication as tools to be used to advance your urban forestry/forestry, non-profit, or arboretum program. The course work is separated into four primary teaching modules, which include; developing a leadership approach to managing your program; thinking and planning strategically; working effectively with those that impact your program; and learning effective communication and relationship management skills. This was the 10<sup>th</sup> year that the course has been provided, and there are now a total of 479 graduates.

As urban foresters, our formal education is generally focused on scientific principles and practices, such as dendrology, plant pathology, botany, wildlife biology, soils and etc. We are not taught how to effectively communicate, lead, identify and set goals, advance our priorities, or inspire our peers. In fact, these concepts, though critical to the success of an urban forestry program (and most any program for that matter) are entirely missing. The MFI training seminar provides a wonderful opportunity to learn and think about these previously unexplored topics, be inspired to expand your horizons, and importantly, to network with like-minded folks with similar issues and intentions. It provides you with techniques and strategies to help you communicate the value of your program, along with tools and concepts to help you connect communities to natural resources. It is, in short, a wonderful educational experience that will, over time, help me to identify, prioritize and achieve both professional and personal goals.



# Green Infrastructure Lunchtime Webinar Series

## Reaching New Audiences

Submitted by Vinnie Cotrone, PSU Extension Urban Forester for the Northeast Region

A series of free webinars focusing on green infrastructure and stormwater management were developed with partners that included USDA Forest Service NE Experimental Station (David Nowak), SUNY-ESF, Stroud Water Center, Penn State University, Villanova University, DCNR-Forestry, Green Infrastructure Center, and the City of Lancaster. The 12 lunchtime webinars typically attracted over 200 participants from across Pennsylvania and the country, many of which were professional engineers, planners, landscape architects, or municipal officials. By reaching new audiences such as engineers, urban forest management is being introduced and recognized for helping to manage stormwater and improve water and air quality. The webinars have been recorded and posted on the extension website where they are being viewed by many who could not attend the live webinars.

The recordings are listed at the <http://www.pacomunityforests.org>, the site of the PA Community Forestry Council.



### Green Infrastructure Webinar Series

As we continue to change our landscapes, converting fields and forests to buildings, parking lots and lawns, we fragment forests and other productive landscapes and impact our streams, lakes and rivers with polluted stormwater runoff. Learn how Green Infrastructure such as open space, parks, street trees, rain gardens, rain gardens, green roofs, permeable pavers, and rain barrels are helping to conserve viable natural resources and capture, infiltrate and evapo-transpire rain where it falls. Green Infrastructure improves both the quality of life and environment in our communities.

Join us for the Green Infrastructure Webinar Series as we explore how green infrastructure can put our communities and our landscapes on the road to sustainability. The first in this series will concentrate on introducing green infrastructure and explore maintenance of these structural systems. Beginning in late summer, the webinars will discuss non-structural topics such as open space conservation, green infrastructure elements, natural resource conservation standards, and conflict resolution.

Vincent Cotrone  
Extension Urban Forester  
Penn State Extension

William Elmendorf, Ph.D.  
Associate Professor & Extension Specialist,  
Community Forestry, Penn State Extension

**The webinars are free to participants and begin at 12pm (EST), with the exception of March 9**

- February 10** **Green Infrastructure Planning at Multiple Scales: From Landscape to Site** - Ms. Karen Firehock, Executive Director, Green Infrastructure Center.
- February 25** **Ecosystem Services Provided by Green Infrastructure: Using iTree Hydro** - David J. Nowak, Ph.D., Project Leader, Urban Forests, Human Health & Environmental Health, USDA Forest Service
- March 9 (3pm)** **Green Stormwater Infrastructure: An Overview of Villanova's Research** - Robert Traver, Ph.D., PE, Professor of Civil and Environmental Engineering & Director of the Villanova Urban Stormwater Partnership (VUSP), Villanova University
- March 16** **Maintaining the Green Infrastructure Systems in Your Community** - Robert Traver, Ph.D., PE, Villanova University
- March 31** **Incorporating Green Infrastructure to Revitalize Your Community: Leading the Way in Lancaster, PA**—Charlotte Katzenmoyer, Director of Public Works, City of Lancaster
- April 13** **Penn State Center's Stormwater Mitigation Initiatives in Pittsburgh** - Lisa Kunst Vavro, RLA, ASLA, Sustainable Environments Manager, The Penn State Center in Pittsburgh
- April 28** **The Ecology of Streams and Forested Buffers** - Bernard W. Sweeney, Ph.D., President & Director, Stroud Water Research Center
- May 5** **Tips for Success in Establishing and Maintaining Forested Stream Buffers** - David Wise, Watershed Restoration Manager, Stroud Water Research Center
- May 19** **Green Roofs for Stormwater Management** - Rob Berghage, Ph.D., Associate Professor of Horticulture, Director of the Center for Green Roof Research, Penn State University
- May 26** **Artful Rainwater Design** - Stuart Echols, Ph.D. Associate Professor of Landscape Architecture, & Eliza Pennypacker, Department Head & Professor of Landscape Architecture, Penn State University
- June 2** **Green Infrastructure in Practice - Engaging Philadelphia; Retrofitting an Existing GI System** - Tommy McCann, Horticulture Educator, Penn State Extension

**PENN STATE**  
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College of Agricultural Sciences

**For More Information and Registration**  
<http://extension.psu.edu/green-infrastructure>  
Email: [vjc1@psu.edu](mailto:vjc1@psu.edu)

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# Arbor Day of Service

Submitted by Ellen Roane, DCNR TreeVitalize

The first Harrisburg area Arbor Day of Service was held on Wednesday, April 22 at the historic Harrisburg Cemetery. By all accounts, the day was a great success. Nine companies contributed personnel and equipment, including two cranes, several bucket trucks, chippers, and highly skilled climbers and ground crews. The Victorian era cemetery was designed as a park and includes a beautiful collection of trees, some of which may date back to when the cemetery was established in the mid-1800s. The cemetery is the final resting place of many of the city's founders, state and local elected officials, and war heroes since the Revolutionary War. Yet maintenance costs far exceed the budget of the non-profit cemetery association.

Through the contributions of those participating in the Arbor Day of Service, five trees were removed, three of which were huge standing dead trees that could only have been removed with the help of a crane. Two other dead trees were partially removed to reduce risk, and eight healthy trees were pruned as well. Joining the group for the day were Dauphin County Master Gardeners, who planted trees as part of an ongoing effort to replace those that have died. Harrisburg Mayor Eric Papenfuse also joined us to help plant a tree and to read an Arbor Day Proclamation. Cemetery staff prepared a delicious hot lunch for the crew and provided commemorative T-shirts for all.



# Emerald Ash Borer Preparedness

The emerald ash borer (EAB) continued its devastation across Pennsylvania in 2014. The beetle has been confirmed in 57 of the 67 counties in the state. EAB is an invasive insect from Asia that was first discovered in the US in 2002 in Michigan. It has since spread throughout much of the country, causing virtually 100 percent mortality of American ash species. While chemical treatments exist, many communities fail to plan proactively and instead face massive tree removal costs that they can ill afford. In 2013, the USDA Forest Service awarded the Bureau of Forestry a significant grant to help communities prepare for the environmental and financial consequences they will soon be facing. TreeVitalize staff worked in partnership with staff from the Division of Forest Pest Management to provide service statewide.

A student intern from West Chester University, Kendra McMillin, has worked closely to assist ten communities in developing EAB preparedness plans. Guidelines for EAB Plan development, a sample plan, and other important and useful resources were made available on the DCNR website at: <http://www.dcnr.state.pa.us/forestry/insectsdisease/eab/index.htm>. A number of communities with current tree inventories were targeted for assistance in the development of an EAB plan; others without a current tree inventory were targeted for assistance in completing one, as a necessary prerequisite for the development of an EAB plan.

## Communities with EAB Plans

Easton  
Lancaster  
Lewisburg  
Philadelphia  
Pottsville  
Reading  
State College  
Tioga County  
West Chester

In the summer of 2014 students and faculty from three universities completed street tree inventories for communities near them: Slippery Rock University inventoried the communities of Grove City and Slippery Rock, Albright College inventoried the City of Reading, Kutztown University inventoried Pottsville and Kutztown. EAB plans have been completed or are underway.

**Emerald Ash Borer Management Plan**  
City of Ashville, Pennsylvania

5800 Horizon Avenue, Ashville, PA 17080  
Phone: (808) 000-8888, Fax: (808) 100-8888  
[www.ashvillepa.gov](http://www.ashvillepa.gov)

**Mayor:** James Hilton

**Council Member:**  
Joseph Harrisburg (Ward 1) Jane Scranton (Ward 2)  
Michael Reading (Ward 3) Garry Mansfield (Ward 4)  
Lee Pittsburgh (Ward 5) Michelle Allentown (Ward 6)

**City Forester:** Bruce Paxton

May 20, 2012



# Emerald Ash Borer Preparedness Success Stories



# Lewisburg Ash Tree Removal and Replacement

## Letter to the Editor written by Trey Casimir, Lewisburg Shade Tree Commission Chair, printed in The Sunbury Daily Item

On Saturday, May 16, we planted the last of 76 new trees in Hunt Park in Lewisburg, replacing the 150 infested ash trees that were recently removed.

We members of the Lewisburg Shade Tree Commission are very proud of this accomplishment, and eager to acknowledge all who made it possible. First on the list is the Borough of Lewisburg. From the Borough Council to the Borough Crew, with everything capably managed by the Borough Manager and the rest of the office staff, we have received nothing but cheerful, steadfast and competent support.

DCNR's Bureau of Forestry is next in line for thanks. From technical assistance in our planning to financial assistance with both planning and tree purchasing, the Bureau of Forestry has acted just the way you hope a state agency will -- ready with advice and a helping hand, but following our lead every step of the way.

Next come the Board and staff of the Buffalo Valley Recreation Authority. Our onsite hosts, BVRRec was very helpful with logistics for the three planting days, and will be vitally involved in the ongoing care and maintenance of the new trees.

Finally, we have to thank the many volunteers who came out and did most of the heavy lifting. Community service volunteers provided the bulk of the labor, and were hard-working, cheerful and dedicated to doing the best job they could. In addition, we had Bucknell students attend each planting day, from the group of Phi Psi brothers who helped the first week to the individual students who came to help out, just to pay something back to their temporary home town. We also had a steady stream of other tree-loving locals, from Boy Scouts to home gardeners, who gave their time and energy to help re-create this park. Thanks also go to Dunkin' Donuts and Domino's Pizza in Lewisburg for their generous donations of snacks to fuel the volunteers.

Finally, I would like to acknowledge the dedication, perseverance and generosity of our Shade Tree Commission members. Although it's "only" 76 trees, planted "only" over three weekends, months and months of planning and preparation went into making this project so successful, and my hat is off to my colleagues on the Commission. We are grateful and humbled to realize that we live in a town whose residents care for their natural resources and are willing to put time, energy and tax dollars into preserving those resources for future generations.

Thanks to you all.

Trey Casimir



# Street Tree Inventories

Urban forest management involves maintaining in good health a desirable mix of tree species across all age classes, while keeping purchasing, pruning and removal costs in check. An inventory of what is currently growing in the community provides the first step toward more active management. The lack of staff in support of urban forestry is a common obstacle that communities face, and volunteer shade tree commissions often lack the training and dedicated time to complete such work. The Urban Forestry program at Penn State University's Department of Ecosystem Science and Management has responded to the need by employing forestry students during the summers to complete inventories for communities in need. Software developed through the university has been used, and TreeVitalize has provided grants to some communities to pay for an inventory. Over the past decade, the U.S. Forest Service has invested heavily in research to develop tools to assess urban forests and determine the value of environmental, economic and social services that urban trees provide. The tools that have resulted have been packaged and provided to the public at no charge as components of "i-Tree Tools," available at [www.itreetools.org](http://www.itreetools.org).

In 2013, the Bureau of Forestry initiated an effort to partner with a number of colleges to establish a workforce available to help communities with the field work involved in tree inventories, utilizing i-Tree Tools. Negotiations began with botany and geography professors at Slippery Rock, Albright, and Kutztown Universities to train students and staff in inventory protocol and the use of i-Tree Streets software.

The Bureau, in partnership with the PA Urban and Community Forestry Council, successfully obtained a grant from the USDA Forest Service to further this effort. Data collection was completed during the summer of 2014 and reports have been provided to the communities.

Grants for street tree inventories have been offered statewide since 2014. The work can be accomplished through a partnership with a local college/university or through a professional arboricultural firm. As part of their match, the community must survey its residents to determine their awareness and knowledge of the tree program and develop a written management plan.

**Current  
University Partners**

**Albright**

**Bloomsburg**

**Kutztown**

**Penn State**

**Slippery Rock**





# Street Tree Inventory

## Success Stories



A PSU student assisting Allentown with a street tree inventory



# Pittsburgh Street Tree Inventory

Submitted by Marah Vecenie, Western PA Conservancy

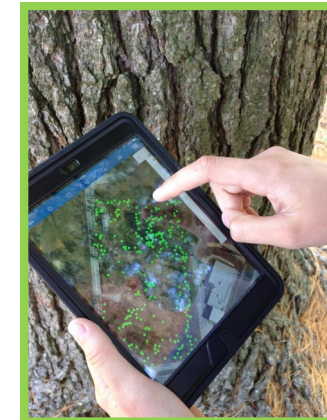
The Heinz Endowments awarded funding to the Western Pennsylvania Conservancy to complete a street tree inventory and 25 year maintenance system for the City of Pittsburgh in 2014. Together with matching funding from the Pittsburgh Shade Tree Commission, the Davey Resource Group was hired to conduct the inventory and required to create a ten-year Management Plan and an i-Tree Analysis Report with their results.

A comprehensive inventory had not been done in the city for nearly 10 years, the last one being completed in 2005. The results of the new inventory revealed some great numbers. The City of Pittsburgh has a total of 33,498 street trees, of which 84% are in Good condition. The city trees have increased from a species diversity of only 130 species in 2005, to 196 different species in 2014. The most dominant species of tree is maple (*Acer*) at 29%, but this number has decreased from 36% in 2005. The appraised value of Pittsburgh's inventoried tree population is \$51,018,501.



These trees count! Trees in Pittsburgh's Market Square

This baseline data provided by the 2005 inventory has allowed the City of Pittsburgh to measure its progress in urban forestry practices. The Western Pennsylvania Conservancy, Pittsburgh Shade Tree Commission, City Forestry Division, and Tree Pittsburgh are currently using this information to educate the public and advocate for more funding to help maintain their urban forest.



Data Collection

# Ferguson Township Street Tree Inventory

Submitted by David Modricker, Director of Public Works, Ferguson Township

Thanks to Bill Elmendorf and the Penn State students for completing the street tree inventory and summary report for Ferguson Township. The inventory was submitted in Microsoft Access format that lets the township utilize the data in many ways and generate useful reports. In addition, the Township imported the data into our ARC INFO Geographic Information System that allows us to generate useful maps based on the various attributes of the trees. We will use the data to prioritize deadwood removal,

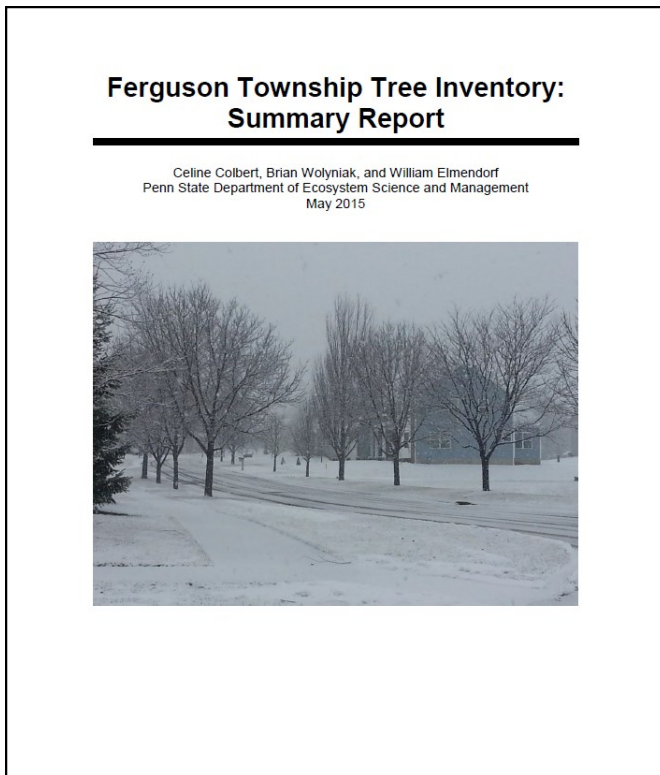
sidewalk and street tree clearance pruning, and for establishing geographic areas to conduct routine pruning. The inventory also provides useful data on tree species diversity and age distribution. The

township arborist and tree commission are anxious to put

this data “to work”. Unlike past inventories, a very detailed summary of the data and recommendations accompanied this report. This information was very useful and allowed me to prepare a “dashboard” view of the state of the urban forest.



Ferguson Township Street Trees—Photo by Matt Puchalsky



Front cover of Ferguson Township's Tree Inventory Report

# Crawford County Planning Commission Praises TreeVitalize Staff for Work Done on Inventory

Submitted by Arlene Rodriguez, Planning Director, Crawford County Planning Commission



## CRAWFORD COUNTY PLANNING COMMISSION

Arlene Rodriguez- Planning Director  
Courthouse -- Meadville, PA 16335  
Phone: 814-333-7341  
Fax: 814-373-2731

June 26, 2015

Bill Elmendorf, Ph.D.  
Associate Professor  
Extension Specialist  
Community and Urban Forestry  
Penn State Department of Ecosystem Science and Management

Dear Dr. Elmendorf:

In 2012, the Crawford County Planning Commission (CCPC) was asked by the Crawford County Board of Commissioners to analyze the County's physical holdings, which consist of a County Forest, a County Farm and a County Fairgrounds. Scott Sjolander is one of nine members of the CCPC and serves as Chairman of the Environmental and Agricultural Committee of the Planning Commission. As the Planning Commission members and the Planning Commission staff discussed the proper approach to this project, it was determined that Scott would work with PA Regional Forester Mark Lewis to survey the trees of the Crawford County Fairgrounds.

Scott and Mark presented a detailed survey of the County Fairgrounds trees to the Planning Commission staff in June 2014. The level of detail in the County Fairgrounds Inventory Field Sheet is impressive; there are 105 trees at our Fairgrounds and we now have detailed knowledge of all of them. Our County Maintenance staff has used this Inventory Sheet to better tend to the trees; defective limb pruning, clearance pruning, removal, etc. Scott and Mark also gave tips on what variety of trees to plant going forward.

To sum up, Scott volunteered his extensive urban tree knowledge to help on a local project at a place that is special to a lot of Crawford County residents.

Sincerely,

Arlene Rodriguez  
Planning Director  
Crawford County Planning Commission

Website: [www.crawfordcountypa.net/planning](http://www.crawfordcountypa.net/planning) \* Email: [planning@co.crawford.pa.us](mailto:planning@co.crawford.pa.us)  
*Crawford County is an equal opportunity employer*

# Doubles for Trees

The bats were swinging, the State Forester was pitching, Smokey Bear was dancing, and the fans were watching. And, when it was all over, the DCNR-Harrisburg Senators team effort to show the value of planting trees in special Arbor Day activities was hailed a success.

Held in cooperation with the Pennsylvania Urban and Community Forestry Council, a series of Arbor Day evening activities April 24 accented an ongoing “Doubles for Trees” program at the team’s Metro Bank Park in Harrisburg. Since April 1, fans have been told whenever a Senators player hits a double during a home game, two trees will be planted within the greater Harrisburg area as part of DCNR TreeVitalize program.

The Senators lost to the Reading Fightin’ Phils, 7-4, but their bats stroked two doubles before a crowd of 3,265, who saw Bureau of Forestry Director Dan Devlin throw out the first pitch. Devlin, who also serves as Pennsylvania’s State Forester Dan participated in an on-field interview before the first pitch, then was the focus of a fourth-inning interview in the stadium press box.

“Dan was able to tout our fantastic state forest and park systems in Pennsylvania, along with the many benefits of urban trees,” said the Bureau of Forestry’s Christine Ticehurst, who organized the event. “Dan mentioned trees are the backbone of healthy communities, and that 75 percent of the wood for Major League Baseball bats is sourced from northern Pennsylvania.”

To date, the Harrisburg Senators have hit 15 doubles during home games. TreeVitalize will match each double hit during a home this season. Anyone can track the doubles hit via the TreeVitalize Doubles for Trees” tracker found at <http://www.treevitalize.net/doubles.aspx>



**With Smokey Bear checking out his form, Bureau of Forestry Director Daniel Devlin delivers the first pitch in the Harrisburg Senators-TreeVitalize “Doubles for Trees” effort.**



“All in all, the Arbor Day festivities made for a great evening!” said Ticehurst, a community greening and grant administration specialist who oversees the bureau’s TreeVitalize efforts. “Smokey Bear was in attendance and was a huge hit with the fans. He even made his dancing debut on the big screen during the game. The evening went so well that an event will be scheduled in September or October along with Smokey to announce the number of total doubles hit/trees to be planted through the season long partnership. TreeVitalize will also promote fall tree planting and fire awareness.”

TreeVitalize is a statewide urban and community forestry program designed to increase and improve tree canopy, educate citizens and increase community forestry capacity. DCNR offers matching grants to communities and non-profit groups seeking to improve and expand local tree cover.

# Tree Ordinance Assistance

It's not just ordinances and zoning in rural areas that can cause issues related to tree resources. Ordinances and other planning tools in urban areas can limit when, where and what species of trees get planted and how they are maintained (or not). Even when an ordinance has a positive focus on street trees, many municipalities lack the resources to enforce them. When that happens, trees may be cut down or improperly pruned by property owners, with little regard for replacement value.

Service foresters and other staff in the field deal with these urban municipal tree issues across the state. The TreeVitalize partners, as leaders of urban tree canopy promotion and care, should be the go-to resource for municipalities wishing to write or update their street tree and other related ordinances, as well as be a guide for new and pre-existing municipal shade tree commissions.

The TreeVitalize staff work with field staff, other organizations like the Pa. Land Trust Alliance and Penn State Extension to ensure that ordinances and other municipal planning tools have minimal impacts on urban trees within Pennsylvania. Several small work groups have formed to focus on a variety of different tasks, including:

- Creating a model street tree ordinance and making municipalities aware of it and how to use it
- Assessing the existing resources on urban street trees that could benefit municipalities and determining which need to be updated or re-written completely
- Writing an educational document for MS4 (Municipal Separate Storm Sewer System) communities on the benefits of trees in storm water management



**Trees in parking lots can help MS4 communities manage their storm water run-off**



# Tree Ordinance Success Story



Downtown Williamsport



# Ferguson Township Street and Park Tree Ordinance

Submitted by David Modricker, Director of Public Works, Ferguson Township

The street and park tree ordinance and accompanying resolutions that Bill Elmendorf prepared were adopted in December of 2014. The ordinance replaced an outdated existing street tree ordinance, provided a section for the establishment of a township street tree commission, updated the permit process for tree planting, pruning and removal, and provided clarity for the process and role of the public works department dealing with street trees including issues such as hazardous and potentially hazardous trees on private property. The two resolutions updated the approved street tree planting list and established arbor care standard when working on township trees. The newly established tree commission recently heard concerns of a homeowner association's objections to a street tree planting plan and was able to provide recommendations to the public works department. The tree commission is getting involved in review of planting plans for land development plans and providing guidance on particular street tree issues. They are working on a municipal tree plan that describes the state of the urban forest and its management plan. In July they will be conducting a field view of next year's proposed tree removal and replacement sites.



A shaded parking lot in Ferguson Township



# Tree City USA

Tree City USA is a program of the Arbor Day Foundation implemented through the state forestry agency in each state. The program requires communities to meet four criteria deemed necessary for an effective urban forestry program:

1. a tree board or department
2. a tree care ordinance
3. annual community forestry budget of at least \$2 per capita
4. an Arbor Day observance and proclamation

Communities achieving the Tree City designation receive a sign and flag to display proudly. Those that can illustrate growth in their program since the last year can be recognized with the Growth Award. DCNR Service Foresters and PSU Extension Urban Foresters are available to assist communities in meeting Tree City and Growth Award requirements. Most Pennsylvania communities lack full time staff dedicated to the management of the urban forest, and depend heavily on the efforts of a volunteer Shade Tree Commission. Consequently, the number of communities continuously participating in the Tree City Program fluctuates from one year to the next.

The Arbor Day Foundation also coordinates the Tree Line USA program for electric utility companies, and the Tree Campus USA Program for colleges and universities. As for the Tree City program, applicants must demonstrate that they have met specific criteria that suggest responsible management of tree cover. Utility companies directly impact the care of trees growing beneath power lines. College campus tree cover can be managed continuously in a manner similar to a small community, and must illustrate the personnel, funding, and plan in place to do so.

TreeVitalize encourages community participation in Tree City USA. It provides a good foundation on which TreeVitalize grants and technical assistance can build. Colleges participating in Tree Campus and utilities participating in Tree Line demonstrate an awareness of the importance of urban tree cover, and can become excellent partners in growing community tree programs.



## Tree City Accomplishments

*(As of December 2014)*

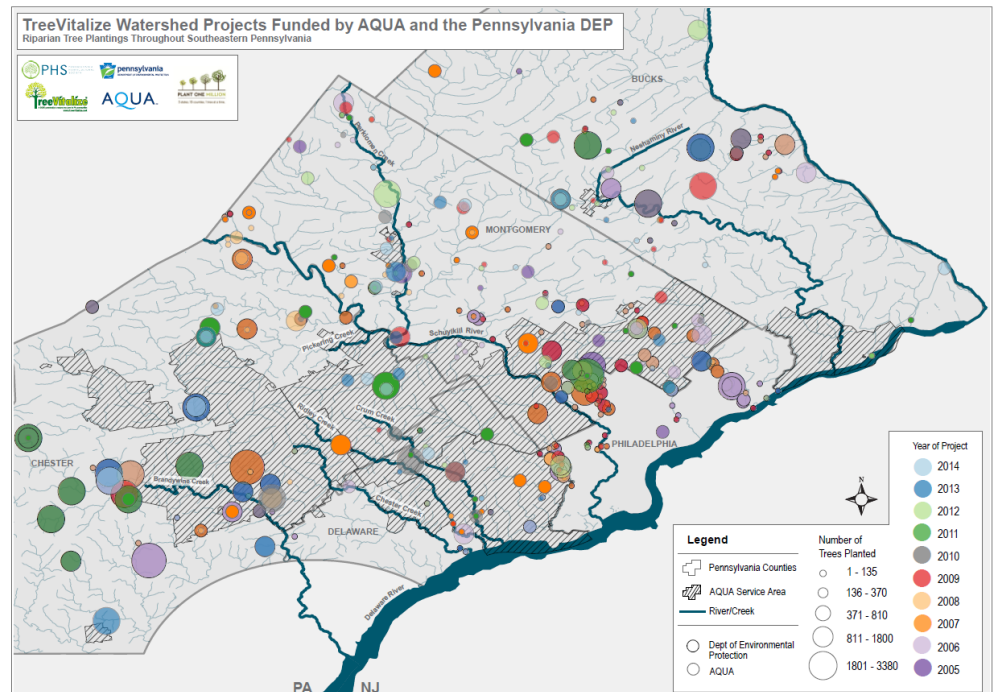
<b>Tree City USA:</b>	105 communities
<b>New in 2014:</b>	Mansfield Borough
<b>Growth Awards:</b>	Seven communities
<b>Tree Line USA:</b>	Citizens Electric Duquesne Light First Energy PPL
<b>Tree Campus USA:</b>	Bryn Mawr Carnegie Mellon Chatham Haverford PSU Erie University of PA Washington/Jefferson

# Riparian Trees

A wealth of research indicates that riparian (streamside) tree planting is highly beneficial for riparian ecosystems and water quality. From its inception, the TreeVitalize program has supported the planting of riparian trees.

TreeVitalize Streams, led by the DCNR in partnership with the Pennsylvania Urban & Community Forestry Council, offers a \$1 per tree reimbursement to county conservation districts and watershed associations. Funding for this reimbursement opportunity is supported through a grant acquired through the National Arbor Day Foundation. Reimbursement requests are accepted year round.

TreeVitalize Watersheds led by the Pennsylvania Horticultural Society (PHS) in the five-county southeastern Pennsylvania region, has focused on tree planting along stream corridors, adjacent upland areas, headwaters and “naturalized” stormwater basins. Through this program, dozens of such watershed restoration projects are conducted throughout the region every year, resulting in thousands of trees planted in those sensitive water protection zones. The program receives funding from the Pennsylvania Department of Environmental Protection (DEP) and corporate sponsor Aqua PA, as well as substantial in-kind contributions from various partners.



**Trees Planted Via TreeVitalize Streams (Statewide): 37,679**

**Trees Planted Via TreeVitalize Watersheds (Philadelphia Region): 152,745**

# Radio Partnerships

DCNR's TreeVitalize program has been partnering with various local public radio stations through their membership drives since 2009. For every membership that is gained by requesting to plant a tree, DCNR matches that tree with another, allowing one membership to sponsor two trees. Trees are planted by volunteers led by DCNR personnel within the stations' listening areas. This partnership has benefited all parties involved: it helps incentivize membership in public radio, gains notoriety for the Department and TreeVitalize, helps citizens feel good about their efforts, and plants trees in areas that need them. Since 2009, we have completed successful tree plantings in riparian, abandoned mine land and historic locations.

In total, these partnerships have planted over 5,690 trees – and the benefits do not stop there. Each time a fund drive is initiated, both DCNR and the TreeVitalize program are mentioned on the radio repeatedly. This provides exceptional exposure for the department and the program. DCNR employees have been interviewed on the air many times, and excitement and publicity are generated at each planting event.

## Radio Partnership Statistics

5,690 trees planted

DCNR mentioned on-air well over 160 times

DCNR staff have done 8 live, on-air interviews



# A Look to the Future

The TreeVitalize Program was founded on forward thinking ideas. The program partners continue to forge new paths at the forefront of urban and community forestry work in Pennsylvania and the nation.

Future exciting plans for TreeVitalize include:

- The creation of monitoring plans to assess mortality rates and reasons for success and failure. This will help us make more informed decisions in the future.
- Creation of an urban wood utilization program that will build on existing synergies between the needs of municipalities and the wood industry.
- Utilization of new imagery from the University of Vermont Spatial Analysis Laboratory that will assist with addressing issues ranging from impaired waterways to urban heat island effect, provide a highly accurate and comprehensive accounting of land cover, and increase our ability to address issues of high importance to environmental planning efforts.
- Utilization of a new “framework for estimating high-resolution carbon stocks and dynamics and future carbon sequestration potential using remote sensing and ecosystem modeling linked with existing field observation systems such as the USFS Forest Inventory” that is under development by NASA, in collaboration with the University of Maryland, University of Vermont, USDA Forest Service, Sigma Space Corp, and Michigan State University.
- Evaluating how we can assist with trees in the urban farming arena, helping to provide additional environmental benefits while providing solutions to food desert issues.

# Conclusion

DCNR's TreeVitalize program is a continued success. Through TreeVitalize, the partnership has improved quality of life in Pennsylvania communities and expanded the recognition of DCNR and its partners in those communities. State-of-the-art programming allows the benefits that the program provides to communities to be calculated and expressed in ways that are meaningful to decision makers. The program provides and communicates myriad environmental and economic benefits and has achieved much in a relatively short timeframe.

**In 2014 alone, the total population in the communities served by TreeVitalize was 6,141,799, which is about half the citizens of Pennsylvania.**

This publication has presented a comprehensive “snapshot time.” The TreeVitalize program continues to grow and expand its reach and influence. In 2013, TreeVitalize began to provide financial support to communities and non-profit organizations for procuring tree inventories – grant opportunities—the grants were further expanded in 2014 and 2015 to assist communities with proper maintenance of trees, and tree removal (with the specification that at least one tree will be planted and maintained for every tree removed). These are areas that communities have struggled with for many years and there is considerable excitement from communities that funding is available. TreeVitalize continues to expand its Urban Tree Canopy program, and the PennTreeMap website, designed to assist communities and professionals with tree planning decisions, will be launched officially in 2016. The program staff continue to partner with a wide variety of groups – and the number and scope of program partners continues to expand. TreeVitalize staff and partners look forward to exciting years ahead.



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Western Pennsylvania  
Conservancy

