

The year 2018 was once again a productive year for the Warrington Environmental Advisory Council (WEAC). With the support of active members, and many other volunteers, we were able to obtain two grants to support our programs, hold a highly successful Community Service Day, naturalize detention basins and enhance one of the Township Trails.

### **Return on the Environment 2018**

The WEAC continued a program to encourage homeowners to plant native trees and shrubs and create backyard habitats for birds, bees, butterflies and other pollinators. By getting your neighbors involved we can expand our natural system services and create a connected pattern of open space. This is the best way to maximize nature's ecological and financial value and maintain long-term ecological benefits. Only then can we build a foundation for a vibrant, balanced economy and a healthy, desirable community for current residents and future generations.

What we do to our land, impacts our quality of life, health, cost of living, sense of place and economy. Every resident has an important role to play. Our natural assets are essential to our everyday life.

- ☐ Reduce the size of your lawn by planting additional native trees and shrubs
- ☐ Create a pollinator garden
- ☐ Attract birds, owls and bats by installing houses
- ☐ Install rain gardens to capture roof run off
- ☐ Conserve water by installing rain barrels and water saving devices on showers
- ☐ Conserve energy by installing smart thermometers, insulating your attic
- ☐ Reduce the use of chemical fertilizers and pest controls and use natural products
- ☐ Replace your blacktop driveway with porous pavers

### **Native Plant Sale**

Our first annual Native Plant sale was held on April 21, 2018 at the Warrington Township building from 10:00AM to 2:00PM. This sale featured approximately 200 native trees and shrubs at wholesale prices. The trees and shrubs ranged in price from approximately \$6.00 to \$12.00. This is part of a program the EAC is sponsoring to promote planting of native plants, which are so important to improving our environment.



### **Bucks Beautiful donates 100 planted Trees to Warrington**

The EAC was fortunate to receive 100 Red Maple trees from Bucks Beautiful along with contractor time to plant. The trees were planted on Township owned open space near the intersection of Palomino Drive and Valley Road and the Playground and pond near Barclay Elementary School. The retail value of this effort would have cost taxpayers over \$15,000. The Return on Environmental Investment will exceed over \$160,000 over 50 years.





## Warrington Community Service Day - 2018

The Warrington Environmental Advisory Council's logo is "Think Globally, Act Locally". With that goal in mind, on Saturday April 28, 2018 we worked with our community and held our annual Community Service Day. Volunteers worked on several projects within our township.

Our keystone project occurred at the Storm Water Control Basin located on Warwick Road near Sarah's Lane. An Eagle Scout candidate, worked closely with members of the WEAC to select the best native tree and shrub species that would grow in the basin, and received donations of an augering machine and operator from Earthborne Equipment, fence from The Home Depot and mulch from Victory Gardens. The restoration project was made possible by the Tree Vitalize Watersheds Grant program, and the Plant One Million campaign, managed by the Pennsylvania Horticultural Society, with funding from the Pennsylvania Department of Environmental Protection's Growing Greener program, as well as Aqua PA for projects located within its source water protection zones. These trees and shrubs will improve water quality by absorbing pollutants, improve air quality by absorbing carbon, and provide habitat for birds and small animals.

In Lower Nike Park, volunteers weeded and maintained native trees and shrubs that had been previously planted adjacent to the trail and weeded and maintained the edible forest from the bird blind to the power-line. National Honor Society (NHS) students, several employees from TruMark Financial and WEAC board members worked tirelessly.

A similar project was conducted in the other Edible Forest that is along the trail, beginning at the Morning Walk basin down to the soccer fields at IPW.

A previously naturalized basin on Hidden Court was also maintained. Volunteers weeded all the trees and shrubs, spread mulch, planted replacement trees and installed tree tubes and cages around the trees and shrubs that showed deer damage.

Additional projects included flower planting at 8 locations at Twin Oaks, the entrances of IPW and Lower Nike Park and the Memorial garden at IPW Park. Many volunteers constructed bat houses, screech owl houses and bluebird boxes. The volunteers also weeded, mulched and maintained the Rain Garden and Butterfly garden adjacent to the soccer fields in IPW.

Another new project this year was a cleanup at the Willow Knoll. The Township provided a dumpster, gloves, trash bags and Walmart donated sandwiches to those residents who participated.

We would like to thank so many of our local businesses' for their generous support of our day of Community Service, 2018 event. Those businesses who donated include, Allstate Insurance (Eric Bonella), Bound Beverage, County Line Fence, Grow N Sell, Elbow Lane Day Camp, Eureka Stone Quarry, Home Depot, Mod Pizza, Panera, Sopranos, TrueMark Financial, Victory Gardens, Earthbourne Equipment, B.J's Warehouse, Walmart, WAWA, Wegmans, Lowes, Panera, Stutz Candy and Sopranos Pizza.



### Titus Butterfly Garden Improvements

Maintenance and Improvements were made to the Titus Elementary School Butterfly garden by members of the EAC, Titus students and teachers. In the Spring the garden was cleaned up from the winter and students helped by planting new perennials and annuals and finished by applying some mulch to help keep down weeds. In the fall before school started the garden was weeded and plants were pruned for a nice appearance when the students returned.



### **NHS Students Finish Bird Houses, Screech Owl Boxes and Bat Houses**

On May 17<sup>th</sup> National Honor Society students helped us paint over 30 bluebird, screech owl, and bat houses that were built during our Community Service Day.



### **Americorp VISTA volunteers sponsored by the Pennsylvania Horticultural Society Assist the WEAC**

On Wednesday July 25, 2018 Seven Americorp VISTA volunteers sponsored by the Pennsylvania Horticultural Society (PHS) worked with members of the WEAC to maintain over 500 trees and shrubs located throughout the Township that had previously been installed from grants provided through PHS's Tree Vitalize program. Locations included Lower Nike Park, Hidden Court and Sarah's Lane basins. Maintenance included removing and adjusting tree stakes, shrub and tree guards, and weeding.



## WEAC Publishes What We Do and How You Can Assist Pamphlet 2018

In the heat of the summer, members of the WEAC utilized our pictures and ideas to created our "What We Do and How You Can Assist Pamphlet"

**Lead a group...**  
And help us build these items that we sell, at cost, for the benefit of the community.



- Bluebird Houses
- Bat Houses
- Screech Owl Houses
- Rain Barrels
- Native Plants

**Adopt-A-Garden**  
Businesses and organizations who participate will have a sign with their name posted at their garden. They will be recognized by the Township on the website, TV station and quarterly Newsletter.

**Warrington Environmental Advisory Council**



*Here's how you can help us today!*

**Email us:**  
eac@warringtontownship.org

**Come to a council meeting**  
at the Township Building on the first Wednesday of each month at 7:30 pm.

**Facebook:** facebook.com/warringtonecac  
[tiny.cc/warringtonecac](http://tiny.cc/warringtonecac)

*Find us in your favorite neighborhood park or forest!*

**Warrington Environmental Advisory Council**




*Are you committed to environmental conservation?*

**We need your help!**

**How You can Help**  
*Participate or lead one of our sponsored activities or propose something new!*

Some of the activities sponsored by the Warrington Environmental Advisory Council (WEAC) include:

- Performing roadside cleanups through the Adopt-a-Road program.
- Encouraging homeowners to utilize sustainable gardening practices and native plants through the Healthy Yards program.
- Naturalizing storm water detention basins so that they absorb polluted runoff before it enters a stream and reduce flooding downstream.
- Working with community organizations such as local schools, boy/girl Scouts, nonprofits, and businesses.



**Day of Community Service**  
*Help us at our annual Day of Community Service each spring.*

Community members, local businesses, boy/girl scouts and local schools are invited to assist with Township beautification projects.



We plant trees and shrubs in parks and basins. We also maintain the gardens at Igoe Porter Wellings and Upper & Lower Nike Parks.

Volunteers help clean up local neighborhoods and roadways. They also build bluebird, bat, and screech owl houses.

**Contact Us TODAY!**  
eac@warringtontownship.org

**Warrington Community Day**  
*Come visit us at our booth during Warrington Community Day.*

We provide the community with educational pamphlets, fun activity books for kids, and other free giveaways.



We also teach children about point source and non-point source pollution using our interactive Enviroscape.





### Enhancements to Our Rain Garden 2018

Additional grasses and shrubs were planted in our existing rain garden in the fall to provide more coverage and help eliminate the problem of weed growth. Three shrubs were planted, Arrowwood Viburnum, Cranberry Bush Viburnum, and Common Ninebark. All will provide ornamental interest and more importantly, are beneficial to birds, pollinators and butterflies. The following grasses were also planted, Shenandoah Switchgrass, Tufted Hairgrass, Virginia Wild Rye, and Little Bluestem. All are beneficial to birds, pollinators, and butterflies. These grasses also add visual interest with their foliage and flowers in the summer.



### Information Campaign for the Spotted Lanternfly

In August the WEAC began an informational campaign on how to identify and control the Spotted Lanternfly. The Lanternfly is an invasive planthopper that has great potential to impact hardwood trees, ornamental plants, fruit trees and grapes.





## Warrington Day 2018

Warrington Day was held on Saturday, September 22, 2018. The day was beautiful and there were large crowds throughout the day at the WEAC booth. One of our main focuses this year was on disseminating information regarding the invasive plant-hopper, the spotted lanternfly. Many people asked questions about what they could do in their yards to eradicate this pest. However, what was encouraging was how many people already were aware of this infestation and steps they could take themselves. We had posters and handouts to share.

There was interest in our bat, blue bird and owl houses as well as rain barrels. There were people who thanked us for the work we do and others that wanted to know what we do. We handed out a pamphlet explaining some of the WEAC's goals and our focuses and how the community could help out with ongoing and future projects.

This year, we also demonstrated the EnviroScape®, a three dimensional portable landscape. The EnviroScape® is an interactive teaching model which illustrates various pollution sources and their subsequent impact on the watershed. The model employs land use that is typically found in Bucks County: residential, recreational, agricultural, and industrial sites, as well as roads and highways.

Children and adults learn by distributing watershed "pollutants" - such as chemicals or trash (represented by edible sprinkles) and oil (represented by soy sauce) throughout the environment to demonstrate how these actions may affect water quality, especially after a period of rain (using spray bottles to simulate a downpour).

It drew a lot of attention from children of all ages, from teens to toddlers. The kids were welcome to participate, and they did, with enthusiasm. Parents also got involved. Many of the older kids have seen this demonstration already, either in school or at a nature center. We were happy to see that most of them were already aware of the value of our water and wanted to help to keep the watershed healthy.



## Screech Owl Boxes Work 2018

Yes, Screech Owl Boxes do work. Following is a report from a home owner.

"For the past 6 years we have heard Screech Owls near and on our property and would see some young ones travel through at dusk. Having seen the owl boxes in the Warrington Township newsletter, we bought one.

Our Screech Owl box is located in our back yard in Doylestown. We installed it in December, 2016, and had a pair of owls in the spring of 2017. They were one red and one grey phase. We believe they had three owlets, one red and two greys. One of them stayed until mid-June. We only had a motion sensing trail camera and a camcorder then.

Late fall, 2017, we installed four small night-vision cameras in the box in the upper corners. Two face the floor from the front corners and two faces the entrance hole from the rear corners. One also has a microphone connected. In addition, we installed a few cameras outside of the box to view the owls in flight, entering and leaving the box as well as perching in the surrounding trees. Their eyes shine nicely from cameras' IR illumination. All of the cameras are connected to a security DVR system that shows multiple views on our HD TV and allows video recording with motion detection as well as on mobile phones and tablets.

Through this winter, 2018, the owl pair (we believe the same pair) frequented the box briefly many nights. The mother, red-phase, stayed longer as time approached late March. A few squirrels tried to move in to the box but we were determined to evict them and added plastic deterrents around the box."

## Forest Trail Enhancement for a Greater Community Experience

The WEAC continues to manage the forested areas adjacent to the trail between Morning Walk Drive and Igo - Porter - Wellings (IPW) Park and in John Paul Park at Lower Nike, just past the bird blind. Woods of Plenty provided Warrington with the expertise to establish our forests as a resilient long-term source of food for both humans and wildlife. With their intimate knowledge gained from studying and observing the forest, Woods of Plenty staff removed invasive plants and created bio habitats. When these trees and shrubs mature; these nuts and berries will be available for all to feast on. Take a walk, beginning at the Morning Walk detention basin. Enjoy the educational signs that describes the naturalized basin. Walk down the trail towards IPW Park where many of the trees and shrubs have been identified. This is our first edible forest. Step off the trail and enjoy the forest. Continue down into John Paul Park at Lower Nike, just past the bird blind, and you will enter our second edible forest.









### **Instilation of an Osprey Nest at the Bradford Dam**

The WEAC collaborated with the Pa Game Commission, the PECO-Exelon Company and Bucks County Parks and Recreation to choose an appropriate site to build and install an Osprey Platform at the Bradford Dam. PECO- Exelon will be donating and installing a telephone pole. The Pa Game Commission will be donating the platform to place on top of the pole. The Pa Game Commission will also be donating an educational sign describing the Osprey nest and the benefits of having nesting Osprey in our area. The following photo shows the area chosen for the nest. The installation should happen in the spring of 2019.



### **Articles Written for the Links**

Members of the WEAC contributed the following articles to the Link: Community Service Day, EAC Annual Report, Plant Sale and Warrington Day.

### **Show Your Support for the Warrington Environmental Advisory Council**

With all our (the WEAC) events, we aim to educate the public as to the importance of supporting our environment.

