

Fall/Winter 2020 Newsletter Volume 6, Issue 3

Conservation Quarterly

A Welcome New Year...

I'm guessing many of us will be happy to see 2020 come to an end. It has been an interesting year. Our office, like many of you, found ourselves working in a very unusual environment and had to make changes very quickly. As difficult as it was at times, we strived to operate in a manner that would serve the residents of Northumberland County in the best way we could.

At the time that I am writing this, our office is closed to the public. We typically have one staff person in the office each day to collect mail and voice mail messages. The majority of our office is working remotely, but they can still be reached via email. If you have trouble reaching anyone, please reach out to me at jbecker@nccdpa.org or 570-898-3710.

We are having discussions as to how we will move forward with events in 2021. I have received a few inquiries about our annual tree sale. If we do hold a sale, it will be on a much smaller scale. If you are not on our mailing list, please contact me to be added if you are interested. Everyone on the mailing list will be notified as to how we will proceed with the sale.

I am hopeful that 2021 brings more opportunities to interact with the public than we had in 2020. We do miss seeing you, but we also recognize the responsibility we have to keep our staff and members of the public safe. In the meantime, I do wish you a very happy and healthy New Year.

Judy Becker

CHEMSWEEP OPERATING IN NORTHUMBERLAND COUNTY IN 2021

CHEMSWEEP provides Pennsylvania farmers and other licensed pesticide applicators with a means to dispose of canceled, suspended or unwanted pesticide products. Through CHEMSWEEP, applicators can legally dispose of unwanted pesticides, generally at little or no cost. Almost all of the waste pesticides collected are burned in EPA-approved incinerators. The remaining pesticides are treated and placed in EPA-permitted hazardous waste landfills.

CHEMSWEEP operates in a selected number of counties each year. In 2021, they will be operating in Northumberland County. Licensed farmers, professional



pesticide applicators and pesticide businesses in the counties selected for that year are eligible to participate. If you are a pesticide applicator in agriculture, pest control, lawn care or other professional capacity, or a pesticide dealer, complete the CHEMSWEEP registration form and return it by the deadline of February 28. You can find the registration form at agriculture.pa.gov, or contact James Cunningham at 717 -772-5210 or jgcunningh@pa.gov.



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"Conservation Quarterly" is a quarterly newsletter published by the Northumberland County Conservation District, Sunbury.

<u>Our Programs</u>: Erosion and Sedimentation Control, National Pollution Discharge Elimination System (NPDES), Dam Safety and Waterway Management, Environmental Education, Chesapeake Bay Program, Dirt & Gravel Roads, Agricultural Land Preservation, Watershed Protection and Education, Mosquito-borne Disease Control

Visit www.nccdpa.org for more information. We are also on Facebook at www.facebook.com/nccdpa.

A BID FAREWELL

Farewell, Goodbye, Auf Wiedersehen, Adieu

A letter to the citizens of Northumberland County:

On February 22, 2011, I began work as an Erosion Pollution Control Technician for the Northumberland County Conservation District. Nine years and almost 8 months later, I must say goodbye. At nearly 73 years

of age, it is time for me to finally retire. I thank the District's Board of Directors for giving me the opportunity to serve the residents of Northumberland County and assist them with their construction and stormwater concerns. Working for the District has been both fun and rewarding. I have met many good people from all walks of life with varying life experiences and outlooks on life. It has been my experience that the majority of the residents of Northumberland County want to do what is legally allowed and recommended to protect the environment while working on their projects.

I appreciate the Board of Directors for their real concern for the environmental welfare of the county and its citizens. They have always put the care of the county's resources above their own interests.



I commend the District staff for their dedication to the environment and the concerns of the county

citizens. Several of the staff I have worked with have moved on to bigger and better positions within the environmental family of stewards. I wish them all well as their careers develop and grow.

The project owners, their consultants and contractors have generally been receptive to the rules and regulations they must work under to protect the environment. Many of these people, as well as staff at neighboring conservation districts have become my friends, and I will miss them all.

I wish you all a healthy and prosperous future. And request that whoever is hired to replace me be given the same cooperation and respect that I have received during my tenure with the District.

Sincerely and with best wishes,

Michael D, Mc Cleary

Michael D. McCleary



NORTHUMBERLAND COUNTY CONSERVATION DISTRICT'S 2020 MEMBERS

Conservation Benefactor-\$1,000:

KW Enterprises, LLC, Milton

Friend of Conservation-\$500:

Hoffman Brothers Lumber, Inc., Richfield Trumbull Corporation, Pittsburgh

Associate Members-\$100:

Anonymous Aqua PA, Inc., Shamokin In Memory of Marlin R. Becker Dan Shingara Enterprise, Inc., Paxinos Dave Gutelius, Inc., Mifflinburg Donald H. Beagle Excavating, Inc., Danville Ferster Excavating, Dalmatia Fine Line Homes, Winfield Forman Grain, LLC, Watsontown

Associate Members (continued):

H.H. Knoebel Sons, Inc., Elysburg KIZ Resources, LLC, Altoona **KPI Engineering Consultants & Keefer** Assoc. Surveying, Sunbury LandPro Equipment, LLC, Watsontown Sandra Shaffer Mattern, Dalmatia Moser Seed Agency, New Columbia New Enterprise Stone & Lime Co., Inc., **New Enterprise** Northumberland County Anthracite Outdoor Adventure Area, Shamokin RJ Hoffman & Sons, Inc., Mt. Pleasant Mills Robert C. Snyder Farms, Inc., Northumberland Rovendale Ag & Barn, Inc., Watsontown

Associate Members (continued):

Turbotville National Bank, Turbotville Watson Excavating, Inc., Turbotville

Contributing Members-\$75: Dutch Mill Bulbs, Hershey

The Northumberland County Conservation District Board of Directors and Staff would like to thank our 2020 members for their kind donations. We would not be able to accomplish the work we do without our members' support! For more information on becoming a member of the NCCD, visit our website at www.nccdpa.org or call 570-495-4665. A membership form is also available below.

NCCD Membership Drive Form

Northumberland County Conservation District

Your Information (please print or type)

Namo					
Billing address					
City					
State					
ZIP Code					
Telephone (home	2)				
Telephone (busin	ess)				
Fax					
E-Mail					
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Membership Ty Affiliate Contributing	De (please circle ond Name in 1 NCCD newsletter. Name in 2 NCCD newsletters.	e) \$50.00 \$75.00	Friend of Conservation Conservation Partner	Business Ad in 2 NCCD newsletters. Business Ad in 3 NCCD newsletters.	\$500.00 \$750.00

FULL-SERVICE CONSTRUCTION FOR HEAVY HIGHWAY





INTRODUCING NEW EROSION & SEDIMENTATION TECHNICIAN, CHRIS TANCZOS



Hi! My name is Chris Tanczos, and I just recently became the Erosion and Sediment Control Technician for the Northumberland County Conservation District. I'm a 2018 graduate of Mansfield University with a degree in Watershed Management. I worked for LandStudies, Inc. in Lancaster County as a Sustainable Landscape Installer for my first two years out of college. I am an avid outdoorsman and can be found hunting, fishing, and recreating on my time off. I'm excited to progress my career in the county and get to work!

Chris will be administering the Chapter 102; Chapter 105; and Dirt, Gravel, and Low Volume Roads programs.

To reach out to Chris, you can contact him at ctanczos@nccdpa.org or 570-495-4665 x302.

END OF 2020 MOSQUITO SEASON UPDATE

by: Brandon Ball, Mosquito-borne Disease Program Coordinator

As we move towards the end of 2020, we can breathe a sigh of relief. Coming into the vector season this year we were dealing with a very different type of public health threat that had us operating in a way that we had not ever experienced before. Fortunately, the state government determined that vector control work was essential to the proper function of society in the Commonwealth. However, this meant that our work would look very different. Weekly sample collections were processed on tailgates or picnic tables. Our homes became our offices, and our work vehicles became mobile self-sustaining units. There was a point in the middle of the season that I had so many supplies in the cab of my truck that there was hardly enough room left for me. Now that winter is here, we can untense our shoulders and say we made it. I would like to thank our seasonal technicians, Tyler Heeter and Alexis Bowser for another great mosquito season.

This season was very different as everyone was largely working from home due to the quarantine. My usual educational



Brandon Ball provides information about mosquito control efforts in our area via Zoom during an interview on WNEP's Power to Save program. Image credit: <u>wnep.com</u>.

setting is in-person presentations, but this season it was either a Zoom call or a "socially distanced" conversation with a resident that was usually just happy to speak to another person. An added benefit of the quarantine was the yard work getting done. Everywhere you looked people were in their yards weeding, mulching, and mowing. This almost surely had to help to reduce adult harborage area. The low precipitation levels led to much fewer biting complaints and treatment requests from residents.

The tick surveys that we conducted this year were more successful than in past seasons. Statewide, it appears that collectively we all were more successful than last year. The previous two seasons were much wetter, making it difficult to

find optimal dragging conditions. This year was drier, and the nymphs seemed to enjoy this.

This year we collected 384 mosquito samples from 116 unique sites within Northumberland County. We did not see any instances of West Nile Virus in the county. We did, however, collect a few West Nile positive traps in Union County. However, there were no instances of West Nile Virus in humans or horses in any of the five counties that make up the Northcentral Coalition.

Editor's note: Brandon Ball has moved on from his position as Mosquito-borne Disease Program Coordinator. We wish him all the best in his new position, and we will miss having him at the District!

WHY IS THE WATER ORANGE?

by: Chantel Shambach, Watershed Specialist

Our District receives many questions related to water quality. Many of these questions refer to the county's main impairment cause: agriculture (excess phosphorus, nitrogen, and sediment). However, not all of our water pollution comes from agriculture. Acid Mine Drainage (AMD) is another major water quality problem flowing through Northumberland County. Vastly seen in the southeastern portion of our county within the coal region, you are sure to find visual indications of the impact.

The coal mining industry once flourished in our area. Many years ago, coal mining provided a bountiful economy, an abundance of job opportunities, and a well-known, connected community. One of the reasons it was so successful here is because the area's geology supplied the highest quality coal; anthracite



coal. This type of coal is known for its high carbon content, few impurities, and it has the highest energy density of all types of coal. One of the mining techniques used to extract this coal in our area was the "room and pillar" method (see photo below). This practice was used to extract large sections of coal, the rooms, leaving the areas of unmined coal in between them, the pillars. The purpose of the pillars was to provide stabilization for the roof. Over time the mines were referred to by the types of entries to the mine. Shaft mines use a vertical opening, Slope mines use an inclined opening to reach coal at great depth or below the stream, and Drift mines use a horizontal opening to mine coal that occurs above stream level. Though the coal industry was once beneficial to our local economy, it came with severe environmental impacts.



Due to the extensive caverns and shafts that were created, it allowed for water access and collection. During the active mining periods, water that entered the mines was pumped to the surface to prevent flooding. Most of the deep mines were abandoned by the 1960s, pumping ceased, and the mines filled with water. Over time they overflowed, and mine water eventually made its way back to the surface, exiting the mine through a mine entry point or faults in the ground where it now continues on the path into a local stream. Once water makes contact with exposed coal areas, it becomes more acidic and carries with it heavy metals, such as aluminum, calcium, iron, magnesium, manganese, and sulfate. The iron precipitate is what gives the Shamokin Creek its orange color. The settling of these heavy metals collects on the bottom of the stream channel, destroying plant life and

macroinvertebrate habitat. The combination of concentrated heavy metals and low pH leads to the demise for all sensitive fish species and most invertebrate populations.

Fortunately there has been some progress made since the abandonment of these mines, both on a federal and local level. In 1977, the Surface Mining Control and Reclamation Act (SMCRA) was enacted. SMCRA is the federal law that regulates the environmental effects of coal mining in the United States. It branched off into two programs: one for reclaiming abandoned mine lands and a second for regulating active coal mines. Before SMCRA was passed, the coal mining industry was primarily unregulated.

The Shamokin Creek Restoration Alliance is a local, volunteer, non-profit organization with a goal to restore Shamokin Creek so it can support normal aquatic life. The Shamokin Creek Watershed drains approximately 137 square miles of land and contains over 60 discharge points. All of Shamokin Creek's headwaters have succumbed to acid mine drainage. Throughout the years, the watershed group has provided AMD education on all levels, organized various cleanup events, conducted water sample testing, and treated AMD water before it enters a local stream.

The group members maintain multiple passive treatment systems that help increase pH and filter the water (see photo on the next page of one of their systems). The first step, and sometimes the most difficult, is to find an adequate area to construct a system and to obtain landowner permission to access a drainage point, if located on private property. Next, over

WHY IS THE WATER ORANGE?



the course of multiple years, the members collect and analyze the water volume, types/concentration of metals, and pH from the discharge area. The collected data is then used to design a properly sized system that will treat the identified pollutants. Lastly, the pursuit for funding ensues. Once a grant is secured, the construction phase of the project can begin. Due to the extensive nature of the project and the attempts to be awarded a grant, these systems can take several years from the initial planning process to completion.

Site 15: Passive Treatment System- off of the 901 East Exit, Coal Township. Designed with a series of settling ponds, which slow water flow and allows iron precipitate to settle out and collect on the bottom of the ponds rather than coat the stream channel. The first, top pond, is where the discharge initially enters the system. The first pond is much darker and more concentrated than the rest, slowly getting clearer and clearer as the water progresses downstream to the exit.

Mushroom compost and limestone rocks are also assisting the health of the water. The compost contains bacteria to process metals and alters water chemistry to prevent coating of the limestone rock, and the limestone helps raise pH levels.

This is a collaborative effort for the improvement and future enjoyment for all to benefit from. There has been considerable progress, but still much more to go. Most stream channels of Shamokin Creek are still orange, but some areas where fish were long gone now have reported signs of life. If you are interested in volunteering with the Shamokin Creek Restoration Alliance, please contact Watershed Specialist, Chantel Shambach at 570-495-4665 ext. 306 or <u>cshambach@nccdpa.org</u> for more information on meeting times and upcoming events.

WINTER MANURE SPREADING by: Rachael Moore, Agricultural Conservation Technician

With winter upon us, I wanted to give a reminder of winter manure application requirements and regulations. Winter application of manure is an option for farmers in Pennsylvania; however, it is not suggested and comes with additional regulations and requirements.

Winter application occurs between December 15th through February 28th, or any time the ground is snow covered or frozen 4 inches in depth.

Winter application of manure should be avoided, but if it must occur, the following restrictions apply:

- Regulations require a cover crop or 25% residue.
- Regulations require 100-foot setback from environmentally sensitive areas (i.e. streams, ponds, public/private drinking wells, ditches, etc.).
- Manure application is prohibited on slopes greater than 15%.
- Avoid spreading on poorly drained fields.
- Regulations limit application rates in the winter to the following:
 - No greater than 5,000 gallons/acre of liquid manure
 - No greater than 20 tons/acre of dry non-poultry manure
 - No greater than 3 tons/acre of poultry manure

If you have any questions about winter spreading or manure management, please contact me at <u>rmoore@nccdpa.org</u>.



IS 'RAINSCAPING' THE NEXT NEW YARD TREND? HERE'S HOW TO MAKE YOUR YARD WATER-FRIENDLY by: George Weigel, Special to PennLive

Editor's note: This article is being reprinted with permission from the author, George Weigel, Special to PennLive. The article originally appeared on PennLive's website: www.pennlive.com/gardening. The links in this article can be accessed through the online version of this newsletter posted at www.nccdpa.org. George Weigel is garden writer for the Patriot-News in Harrisburg, Pa., and also owner of a garden-consulting business for do-it-yourselfers, garden-tour host, frequent garden

speaker, Pennsylvania Certified Horticulturist and certified gardening nut. Visit his website for more information at <u>www.georgeweigel.net</u>.

Water is arguably the most important ingredient of a successful garden.

Not enough can slowly kill even the most drought-tough plants, while too much can rot roots and lead to the same outcome.

A hose (along with money to cover the water bill) is an antidote to the problem of not enough water.

However, it's much harder to head off trouble from excess water after a heavy or prolonged rain has waterlogged our often clayish and poorly drained soil.



Increasingly extreme precipitation swings are causing more of these kinds of yard-flooding.

Now that excesses both ways seem to be the norm, a new word has crept into the gardening lexicon – "rainscaping."

Rainscaping is crafting the yard in a way that manages water smartly, both coming into the yard and leaving it.

Gravitating toward drought-tough native plants and covering soil with mulch, for example, are ways to make the most of limited water during dry spells.

Building a rain garden keeps rain on-site and lessens flooding when we get hammered at the opposite end.

And reducing pesticide use, cleaning up after pets, and cutting down on lawn fertilizer are ways to ensure that any runoff leaving the yard is as non-polluting as possible.

In other words, rainscaping is about making our yards water-friendly.

If that resonates with you, Penn State Extension's Master Watershed Stewards and the Easton-based Nurture Nature Center have teamed up to create a new statewide program to encourage Pennsylvanians to create water-friendlier yards.

It's called the Watershed-Friendly Property program, and residents whose yards pass a free, online certification test qualify for a Watershed-Friendly certificate and a Watershed-Friendly yard sign.

"This is a way to show publicly how you support this effort," said Lehigh County Master Watershed Steward Julia Lukas in announcing the new program via webinar. "It also encourages neighbors."

The idea is similar to Penn State Extension's <u>Pollinator Friendly Garden program</u>, which offers certificates and yard signs to residents who maintain yards that are welcoming to bees, butterflies, birds, and other pollinators.

A watershed is an area whose land channels water into a particular network of waterways. Pennsylvania has six different watersheds.



Residents who meet sound water-management practices in their yard can qualify for this sign.

The bulk of central Pennsylvania falls into the Susquehanna River watershed, which itself is part of the larger Chesapeake Bay watershed.

To qualify as watershed-friendly, Pennsylvanians fill out a <u>five-page application on the Nurture Nature Center website</u> that asks a series of questions about water management and practices.

If you meet at least 85 percent of the goals, you qualify. If not, the site is loaded with tips and links to help you make changes that then qualify you.

Why care?

One reason is that flooding has been a big and increasing issue in recent years across Pennsylvania, which is second only to Alaska in the number of stream miles statewide (85,000 miles of them).

Some 18,000 of those stream miles are impaired enough to squelch aquatic life and limit their use for drinking and recreation, Lukas says.

The more rain that people can retain to soak into their own properties, the less runs off into downstream neighboring properties or into storm drains that flood creeks and streams.

Also, a problem is polluted runoff.

"Stormwater runoff is our biggest source of water pollution in Pennsylvania," Lukas says. "We're always going to have some level of runoff, but what does run off, we want to keep as clean as possible."

All sorts of pollutants can be carried by rain runoff into our creeks, streams, and groundwater, including lawn fertilizer, insecticides, pet waste, driveway oil and gas leaks from cars, and salt from winter deicers.

"All of these things can be collectively carried by surface runoff," says Brian Vadino, a watershed specialist with the Montgomery County Conservation District. "People don't always realize our storm sewage systems are direct conduits to our waterways."

The Watershed-Friendly Property program aims to help by targeting four action areas: 1) reduce stormwater runoff; 2) reduce water pollution; 3) conserve water, and 4) support wildlife and pollinators.

Ten steps that address them:

1) Plant trees. "Trees are fantastic for providing infiltration," says Lukas.

One North Carolina study, for example, found that a wooded area absorbs three times as much rain as a typical lawn before runoff occurs.

Read George's column on 10 native trees that make good landscape choices

2) Add garden beds, especially ones planted with native plants. Only about 10 percent of rain typically runs off of planted space, Lukas says, compared to as much as 55 percent from space dominated by houses, driveways and sidewalks.

3) Build a rain garden or two. These are well-drained, sunken beds planted with species that can tolerate occasionally wet soil and designed to absorb all captured water in 24 to 48 hours.

See Three Rivers Rain Garden Alliance website for details on how to build a rain garden

Read about Harrisburg Area Civic Garden Center's rain garden

4) Install one or more rain barrels to capture water from downspouts. These intercept some of the water coming off roofs and store it for use later when the weather is dry.

Read George's Q&A on how to build a DIY rain barrel



This is an example of a rain garden, planted to capture parking-lot runoff at Fairville Park in West Hanover Twp.

(continued on next page)

5) Minimize the use of pesticides and fertilizers. Or switch to less-toxic, less-polluting products and sweep up any lawn-fertilizer granules that end up on sidewalks and driveways.

Avoid using rock salt to melt snow and ice in winter.

Read George's article on how to beat bugs without poisoning yourself

Read George's post on how to grow "good enough grass"

6) Conserve water in the yard and gardens. Water only when plants need it, keep a two- to three-inch mulch cover over soil to reduce evaporation loss, choose low-water-need varieties, and consider drip irrigation instead of overhead hoses.

Read George's tips on garden water-saving



Bare soil, especially on slopes, leads to erosion.

7) Avoid bare soil. Bare soil allows more and faster runoff, which erodes sediment along with it. Add new grass seed to bare spots in the lawn, and either plant or mulch other bare areas, especially slopes.

Read George's article on how to fix your ratty lawn

8) Create grassy or vegetated swales. Steer water away from houses or other areas where you don't want flooding by digging slightly depressed channels that lead in a preferred direction, especially where water can soak into the ground.

If these swales are vegetated as opposed to concrete, some water will be absorbed as it's redirected.

9) Be kind to Mother Nature. Plant trees to shade ponds and streams, remove invasive

species, let grass clippings compost into the lawn instead of bagging them, allow brush piles that serve as shelter for wildlife, and don't dump grass clippings or animal waste into creeks or streams.

10) Buffer those streams. If you have a creek or stream running through your property, plant the banks with native shrubs, perennials, and groundcovers to capture pollutants and sediment and to help hold the soil in place. Planted buffers are more helpful than keeping mowed grass right up to the water's edge.

Penn State Extension Master Watershed Stewards are volunteers trained to foster water awareness and watershed improvement, such as coordinating stream cleanups, offering educational events, and carrying out habitat-improvement projects.

The program began in 2013 in Lehigh and Northampton counties and now comprises more than 500 volunteers in 20 Pennsylvania counties.

<u>The Nurture Nature Center</u> is a non-profit environmental education and protection group that was founded in 2007 in the wake of repetitive flooding in the Delaware River Basin.



Planted buffers along streams stops erosion better than grass.

WARRIOR RUN NATIONAL WATER QUALITY INITIATIVE OUTREACH EVENT by: Chantel Shambach, Watershed Specialist and Janette Lesher, District Conservationist with Natural Resources Conservation Service



Another great community outreach event was held in the Warrior Run Watershed. This time the day was focused around trees. On Saturday, November 14, the event was held at the Warrior Run Church grounds. The day was a dual event, with one activity being a free tree give-away to residents within the watershed, and the other event involved helping Turbotville Boy Scout Troop 622 complete a service project by planting a riparian buffer along a tributary in the watershed.

Northumberland County Conservation District Watershed Specialist, Chantel Shambach secured hundreds of free trees and shrubs through the "Ten Million Tree Partnership" program. The native species assortment included American Hornbeam, Arrowwood, Basswood, Eastern Redbud, Elderberry, Hackberry, Highbush Blueberry, Paw Paw, Persimmon, Red Chokeberry, Red Maple, Red Osier Dogwood, River Birch, Serviceberry, Silver Maple, Sweet Bay Magnolia, Tulip Poplar, Winterberry, and Witch Hazel. Residents living within the Warrior Run Watershed were invited to come pick up free trees at the event. Complying with COVID-19 restrictions, residents did not have to leave their vehicles. Staff from the Northumberland County Conservation District, Natural Resources Conservation Service, and local landowner volunteers assisted residents with loading trees along with stakes and tree shelters which were free for all participants. Within two hours, the group successfully distributed 457 trees and shrubs. In addition to the days event, various watershed landowners/

farmers obtained over 300 trees and shrubs.

The Boy Scouts selected trees from these species and were led to a tributary within the Warrior Run Watershed. The Watershed Specialist taught the scouts about the importance of riparian buffers and the work that trees do to enhance the water quality. They were then shown how to properly plant their selected trees and how to correctly place shelters around

them. Learning quickly, the scouts worked together and planted over a dozen native tree and shrub species establishing a multifunctional riparian buffer. As these trees grow, they will strengthen the stability of the stream bank, enhance the soil quality, and become a great root filtration system treating runoff pollutants. During the trees' maturity, they will also support local wildlife and pollinators providing shelter and bearing berries and nuts.

The Warrior Run Watershed is nestled in the northern tier of Northumberland County and a small portion of Lycoming County. It spans over 21 square miles. Within that area, there are 68 miles of stream that have been labeled as impaired due to organic enrichment and sediment from agricultural land use and municipal point sources. Due to this designation, the watershed was selected to participate in the US Department of Agriculture's National Water Quality Initiative (NWQI). A watershed assessment plan was developed with the help of stakeholders, and money has been set aside for the development of Environmental Quality Incentive Program (EQIP) contracts to assist in getting conservation work installed. NRCS has partnered with the Northumberland County Conservation District (NCCD) in an effort to reach out to the community to develop strategies together to help improve water





Signs that will be displayed at projects in the watershed.

funding to implement these strategies.

the

within

watershed and to secure

The Warrior Run NWQI steering committee and partners want to thank the Warrior Run Church and the members of the Warrior Run Heritage Society for offering the perfect, centralized location to host this event and future events. NCCD and NRCS want to thank all past and present partners of this initiative and look forward to all future partnerships in the goal to improve the quality of the natural resources within the Warrior Run Watershed.

MAKING A DIFFERENCE

by: Chantel Shambach, Watershed Specialist

As stated in the previous article, various watershed landowners/farmers obtained over 300 trees and shrubs, including Paul and Caprice Huffman.

Paul and Caprice Huffman are proud owners of the Trailing Pines Tree Farm, located within the Warrior Run Watershed. On Saturday October 31st, the couple partnered with the Penn College Physical Therapy Assistant Program to allow volunteer students to plant trees obtained by the "Ten Million Tree Partnership" program on the Tree Farm property. Together they have planted various species in past seasons. This past fall they continued their partnership, and students planted 150 Swamp Oak. The Huffmans look forward to this tradition for many years to come. The conservation team would like to thank the passionate landowners for continuing their environmental



stewardship along with the Penn College Physical Therapy Assistant Program for continuing to make a difference.

TIRE COLLECTION EVENT by: Brandon Ball, Mosquito-borne Disease Program Coordinator

On a chilly Saturday morning in September, several boy scouts from Troop 309 and a few of their parents volunteered their time to assist District staff members in putting on our 2020 county-wide Tire Collection Event. The event, held at the County Agricultural Services building where the District Office is located, was a great success. The purpose of these events is to reduce the number of waste tires lying around the county, as tires are a big problem when it comes to mosquitoes.

Several species of mosquitoes will lay eggs inside waste tires that hold water. There are a few reasons why mosquitoes gravitate towards using tires to breed. First, tires hold water very well naturally based on their shape. Larval mosquitoes need water to reside in while they complete their growth cycle. Second, they also frequently get grass clippings, leaves, and other organic materials inside them. Mosquito larvae feed on the organic material as it floats in the water. Third, they are black and therefore they are a heat sink during the day, meaning they absorb large amounts of heat from the sun and hold that heat for several hours after the sun goes down. This heat helps to accelerate larval mosquito growth. This combination of factors makes tires perfect breeding grounds for mosquitoes, and that is why it is important to



properly dispose of waste tires as soon as possible. If you cannot dispose of them properly right away by taking them to a recycling facility or local garage, then they should be stored where they can remain dry. If there is no water in the tires, then there is no mosquito issue!

We utilized signs and blocked off most of the parking lot at the District Office so that we could establish a one-way route through the property to help speed things along. Individuals who registered for the event pulled up to our registration table, where they signed in and made their payment. They then drove their vehicles, one at a time, to the west side of the property where District staff and volunteers unloaded their tires and loaded them in a trailer. Masks were required for the event, and nobody had to get out of their vehicle. In total, we were able to recycle approximately 1,120 tires for a total weight of 33,200 pounds, or 16.6 tons. That is an average weight of around 30 pounds per tire.

This event was funded through a PA Department of Environmental Protection (DEP) Mosquito Habitat Reduction and Education grant, as well as the tire recycling fee of \$1 per tire. We hope to hold more tire collection events in future years. Thanks to all District Staff who participated in the event: Chantel Shambach, Rachael Moore, Tyler Heeter, Shirley Snyder, and Judy Becker. With their help, the event flowed smoothly.

Northumberland County Conservation District 441 Plum Creek Road Sunbury, PA 17801 Phone: (570) 495-4665 Website: www.nccdpa.org



Northumberland County Conservation District

The NCCD, formed in 1943 under the Conservation District Law, is a subdivision of state government and is one of 66 Conservation Districts throughout the state of Pennsylvania. The purpose of the Conservation District is to promote protection, maintenance, improvement, and wise use of the land, water, and other natural resources.

Directors

Mike Hubler: Chairman, Public Leon Wertz: Vice-Chairman, Farmer Joseph Klebon: Commissioner Gary Truckenmiller: Farmer John Kopp: Farmer Natalie Wertman: Public Rich Daniels: Farmer Mike Erdley: Associate Dave Crowl: Associate Lynn Wilson: Associate Albert Mabus: Associate John Pfleegor: Associate Ted Carodiskey: Associate

Staff

Judy Becker: District Manager, AgLand Preservation, Editor Shirley Snyder: Administrative Assistant, Secretary and Treasurer Chantel Shambach: Watershed Specialist Chris Tanczos: Erosion & Sediment Technician, Dirt & Gravel Roads Rachael Moore: Agricultural Conservation Technician

> NCCD Board of Directors Upcoming Meetings: January 7th, February 4th, March 4th at 12:30pm; all held via Zoom. Please visit www.nccdpa.org for connect information.