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Welcome Freya:

ECCD'S Newest Addition!

Our District manager Kate Wehler and her husband, TJ, proudly welcomed a new bundle of joy on August 19th! Freya Lyn is their first and they couldn't be more excited. The District staff are happy to have this sweet little recruit on the team, we're sure she'll be approving permits before she can walk!

Congratulations Kate and TJ!



Are You Noticing Damage to Your Lawn?

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**The Fall Army
Worm could be
the cause of your
lawn damage!**

A not so familiar pest made it to Elk County this summer. The army worm is typically a resident of warmer climates, but scientists think air currents generated by storms in the Mid-West, likely carried the armyworm egg-masses up to North Central, PA. The Elk County Conservation District has received several calls about these pests over the past few weeks.

The armyworm feeds on lawn turf which creates a dead or drought stressed appearance. The damage caused by armyworms is unique because there will be a clear line of damaged and undamaged grass, due to the armyworms moving as a group. The easiest way to know if armyworms are infecting your lawn is to inspect the affected area for the small caterpillar-like creatures. If armyworms are the culprit it won't be hard to find them.

If the infestation is caught soon enough, an insecticide containing a component called Pyrethroid will do the trick. Liquid application is preferred due to the pelletized applications taking 3-5 days to dissolve.

Keep an eye out for these pests if your lawn starts looking dry and unhealthy!

Trees and Streams:

A Closer Look at Riparian Buffers

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Have you ever heard of the term *riparian buffer*? If not, you are likely familiar with the concept, just not the technical term. A riparian buffer is defined by the U.S. Department of Agriculture as “...an area adjacent to a stream, lake, or wetland that contains a combination of trees, shrubs, and/or other perennial plants and is managed differently from the surrounding landscape, primarily to provide conservation benefits.” Simplistically speaking, this means buffers are a strip of vegetation running parallel to the stream along its banks.

Riparian buffers serve many purposes. One benefit of riparian buffers are that they filter out pollutants entering the stream. These pollutants can be things such as sediment, pesticides, or even manure. Other benefits of riparian buffers include stabilization of eroding banks, shade to keep streams cool, protection for downstream communities from flood damage, and they provide wildlife habitat corridors.

Some buffers can be classified as “multifunctional,” meaning the plants mak-

ing up the buffer provide the landowner with some type of direct benefit. Some of these benefits can include the harvesting of berries or nuts for the landowners to eat, sell, or make products out of.

Riparian buffers should be as wide as possible to ensure the maximum amount of pollutants are filtered out. Buffer width also corresponds with land use and overall stream quality. If the stream is in a high agriculture area, an area that has high chemical treatment such as golf courses, or the stream is spawning habitat for trout, a wider buffer will likely be recommended when compared with open– space areas.



If you or someone you know is interested in a riparian buffer on their property, please reach out to the Watershed Technician, Micaela, at the District!

814-776-5373 | mlefever@countyofelkpa.com

Annual SFI Workshop

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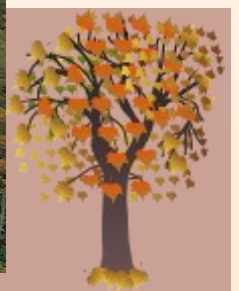
Potter County, PA— Each year Conservation Districts in our region team up to provide a Sustainable Forestry Initiative (SFI) Workshop. This workshop educates loggers, foresters, and members of the Timber Industry. The primary focus of the workshop is “Erosion Control in Our Forests” and discusses best management practices for timber operations; regulatory information and updates; permitting needs; other current environmental considerations; and a field portion to look at real-life BMP scenarios and challenges faced on timber harvest sites. The workshop also offers SFI credits for attendees to maintain their SFI certification.

This year's workshop was held in Potter County at the PA Lumber Museum, an ideal location for a workshop of this nature! Nearly 50 individuals from across the region attended the 2021 SFI workshop.

Last year, as with many things in 2020, the workshop had to be held virtually, with a virtual field portion. While we were pleased with the turnout last year, we were excited to once again be able to provide an in person workshop!



Left: Attendees tour a logging site and discuss methods and Best Management Practices to reduce erosion on timber harvest jobs.



THE MAGIC OF MONARCHS

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The Elk County Conservation District raised Monarch Butterflies in our office earlier this fall. Here are some of our favorite photos and fun facts we learned along the way!

After hatching, Monarch Caterpillars do a lot of chewing! They spend their whole time as a caterpillar eating. Did you know they only eat Milkweed?

Milkweed is the Monarch's host plant, which are plants that an organism lives on and lives off of. Milkweed has a poisonous sticky white sap. As caterpillars eat the

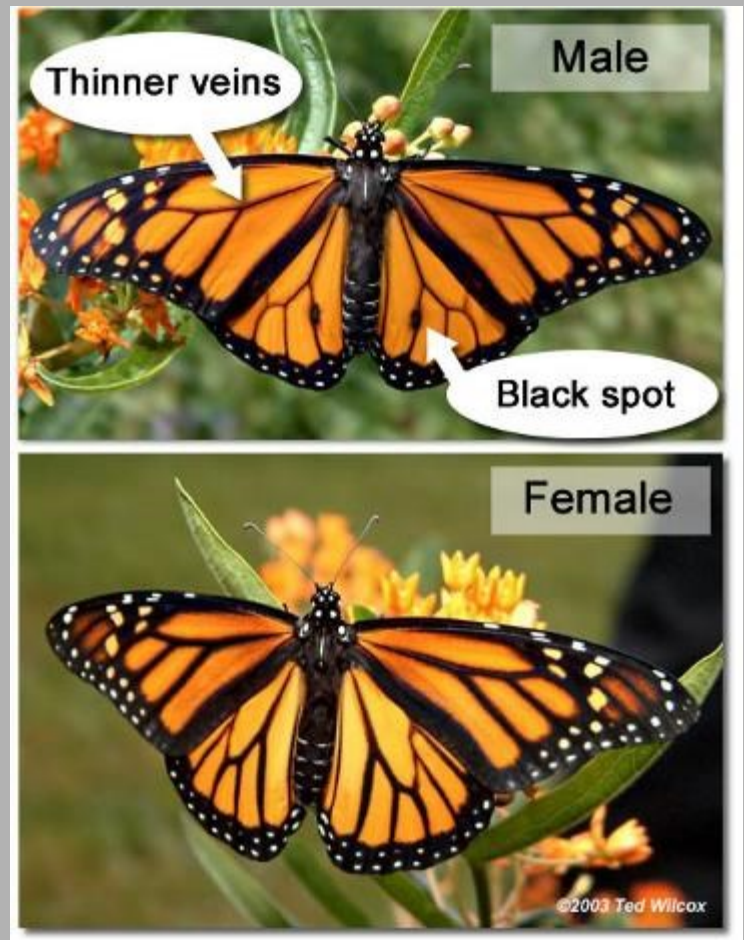
leaves of the milkweed they store the glycosides in their own bodies, which makes the caterpillar toxic. The adults retain the toxins too, making them poisonous, this helps act as protection from predators.



People everywhere are getting involved to save the Monarchs! By tagging monarchs, scientists can record how far they travel, how fast they travel and gain other information that could be the key to helping save this incredible insect!

Did you know you can tell a male Monarch from a female Monarch by looking at their wings?

Of the three Monarchs the Conservation District reared, we had 1 female and 2 males



Knowledge Check:

What do you think, are these butterflies Male or Female?



KEY: 1-Female, 2-Male

IT'S "SHOCKING" WHAT'S IN OUR STREAMS!

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Allegheny Nation Forest, Elk County-

Recently, Conservation District staff have been assisting PA Fish and Boat Commission and the US Forest Service with fish surveys around the area. These fish surveys are conducted using a technique called "electrofishing." Electrofishing is a scientific method used in freshwater ecosystems to sample fish populations. A controlled electrical current is distributed in the water, making it easier and faster to catch fish without harming them. Observers are typically surprised by the number of fish that are actually in the stream!



Native brook trout being measured during survey

Water quality tests, such as conductivity, are performed to aid in determining the proper amount of current to be applied to the water. The fish become temporarily stunned from this electrical current, which means they can be scooped into a net, identified, measured, marked, and placed back into the stream.

Electrofishing is used to determine:

- Species Occurrence– identify which species are present
- Population Estimates– how many fish are present in the surveyed section of the stream
- Population Dynamics– under-

standing the life processes of the trout population (reproductive rate, growth rate, mortality rate)

There are a few types of electrofishers, but the primary type used for our stream surveys are backpack electrofishers. In these units, batteries are used to

create the electrical cur-

rent. The information gathered in these surveys is commonly used to form the basis for current and future trout stream regulations. Electrofishing is primarily conducted March through October due to water levels, water temperatures, and spawning. Sampling of waterways commonly occurs annually or biennially.

Abandoned Mine Drainage Workshop: A Success

PAGE 9

Force, PA - Conservation Districts across the state are uniquely positioned to provide services that best address issues in their communities. Here in Elk County, Abandoned Mine Drainage (AMD) is a commonly seen issue in local streams due to the history of mining in our region. Because of this, the Elk County Conservation District felt there was a need to provide education on the topic of AMD. While most know what AMD is to see it, many folks don't really understand what it is or what it means for stream health.

Partnering with the Western Pennsylvania Conservancy (WPC) and utilizing grant funding awarded by the Pennsylvania Association of Conservation Districts, we were able to host an informative evening workshop followed by a tour of WPC's recently completed treatment system on Cherry Run in Force, PA. During the tour, attendees saw how the systems runs, grew to understand the difference between a passive and active system, and learned what they can do to get involved in improving their local watershed!



Above: Eli Long, from WPC, discusses how the system is run using a solar powered computer set-up

Below: Attendees learn what the different points throughout the AMD system are and what they do



DGLVR: Project Highlight

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Fox Township -

The DGLVR program funded a road improvement project this summer in Fox Township to mitigate erosion of Gardner Hill Road. Along this stretch of road, active springs and runoff have combined to create a massive erosion issue in the roadside ditch. The members of the program and township workers decided to get creative and use a product called Flex-a-mat to help stabilize this roadside ditch. Roadside ditches are not normally where you would see this product but its versatility and ability to halt erosion has made it a perfect fit for solving this erosion problem!

SAVE THE DATE

Our annual DGLVR update meeting for eligible entities will be held on November 23rd, at the Royal Inn in Ridgway. Breakfast will be served at 9:00 AM and the meeting will run till approximately 11:00 PM. Hope to see you there!

Clarion River Mussel Survey

PAGE 11

Millstone Township, Elk County—Starting just past the county line and working our way upstream into Elk County, representatives from the Elk County Conservation District (ECCD), Pennsylvania Fish and Boat Commission (PAFBC), Western Pennsylvania Conservancy (WPC), IUP Graduate Students, and the US Forest Service conducted a mussel survey.

This survey was being conducted to see if mussels are naturally reproducing in the Clarion after being stocked at several sites from 2015-2017. The goal was to see if stocked mussels had survived and if they had been able to reproduce yet.

This was done by snorkeling and at times using scuba gear. A “digger” wearing snorkeling gear held a quadrant and would dig



Above: Digger places the quadrant and digs substrate during a mussel survey

Below: Substrate is sifted in search of mussels



loose substrate, or stream bed material, in an area into a bag. The bag of material was given a tag based off of where in the stream the material had been dug. This helped to keep track of where mussels were found. Once completed, the digger would move on to the next quadrant and the bag would be taken to the sifting station.

At the sifting station the material would be poured onto a metal screen and sifted through for mussels. The juvenile mussels we were looking for are small, about 1/2 an inch long and oblong in shape. Finding juveniles would provide evidence that mussels were naturally reproducing in the Clarion.

If a mussel was found it was placed in a smaller bag with the tag and set aside to be cataloged, measured, and documented after the site was completed.



Above: Mussels are Identified, measured, and documented

While doing the survey, no juveniles were discovered. There are several possibilities as to why none were found. Mussels are sensitive, so it likely would have taken several years for them to acclimate after being stocked. Additionally, the past several years have been hard years, weather-wise, with either record droughts or record high water. All of these things place stress on the mussel and its ecosystem which could inhibit reproduction. And of course, its entirely possible we just didn't find them. The survey is just that, a survey, the entire bottom of the clarion wasn't scoured looking for juvenile mussels. The survey is conducted in a way to achieve the most accurate results without consuming large amounts of time. Even if we had scoured the entire bottom we may have missed them! They excel at camouflage, as you can see in the picture above. It's necessary to avoid predators such as river otters.



Above: An adult mussel blends in with natural substrate.

Some may wonder why we are interested in mussel reproduction. Turns out mussels are an important member of the ecosystem! They act as a natural filter for water and are often an indicator for water quality. So while we didn't find any juvenile mussels, we did find many of the stocked mussels from years prior. The fact that they are still alive and healthy after 5-7 years is a good indicator of stream health and we can only hope that in coming years we will find evidence of reproduction!



Above: Several species of mussels are displayed for identification

Fun Mussel Facts:

Can you eat native mussels?

While technically, yes, you can eat these native mussels, many native mussel species are protected because they are a species of concern.

In addition to that, while you can eat them, they don't taste very good. Remember they are a natural filter for toxins! To top it off, after they die they release a chemical making them taste even worse! Yuck!

How many species of native mussels are there in Pennsylvania?

67

Species of freshwater mussels call Pennsylvania home. However 13 have not been seen in decades and another 10 are currently considered endangered.

Yeah, We Recycle That!

PAGE 13

People are always amazed to find what a large and diverse number of items the **Elk County Community Recycling Center** takes for recycling. With such a wide variety, we want to feature an item each edition to educate our community about the incredible services available to them!

The Elk County Community Recycling Center is offering ANOTHER new service! The Center is now taking Latex paint for \$1.00/can. This is for cans of **useable** paint that are 1/2 full or more.

- If you have a can of paint that is nearly empty, mix it with cat litter, sawdust, etc. and throw it away.
- If you have cans that are already dry and hard, throw it away.

This is only for cans of usable Latex paint.

Collected cans will be picked up by our hazardous waste company and taken to *Matthew 25: Ministries*, an international humanitarian aid and disaster relief organization headquartered in Cincinnati, OH. Once there, it will be blended into new paint, which is why we can only take excess, useable, latex paint.



Oil-based paints can be dropped off at the Center anytime during normal hours of operation, free of charge.

The **Elk County Community Recycling Center** is located at:

850 Washington Street

St. Marys 15857

Ph.: (814) 776-5373

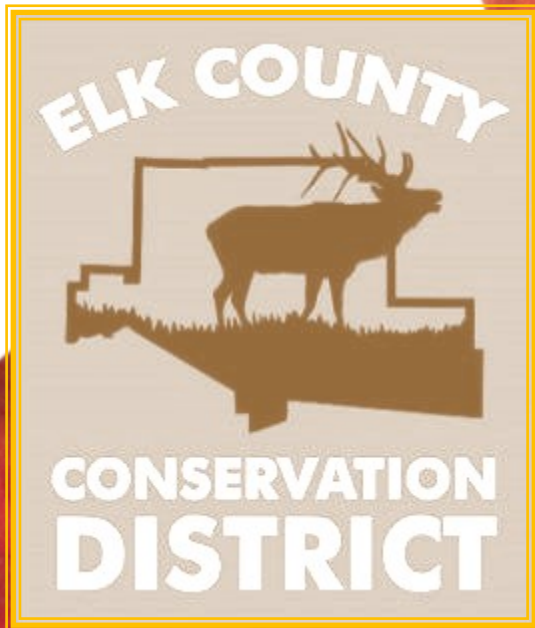
Hours of Operation:

Monday: 10-2

Wednesday: 12-7

Friday: 10-2





Elk County Conservation District

Elk County Community Recycling Center

850 Washington Street

Saint Marys, PA 15857

(814) 776-5373

Directors

Russ Braun- Chairman

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Joe Daghir- Commissioner

Ray McMinn- Farmer Director

Andy Sorg- Farmer Director

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Elk County (PA) Conservation District

