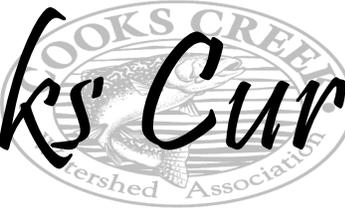


# Cooks Current



*"To protect, preserve and improve the quality of water, land and life in the Cooks Creek Watershed"*

Volume 17, Issue 2

Newsletter of the Cooks Creek Watershed

Spring 2020

## 2020 Events

**Regular Board Meetings:** TBD Check our website for details

**Springtown Fire House- 7:30PM**

4<sup>th</sup> Thursday of the month except Nov. and Dec. which is the 3<sup>rd</sup> Thursday;

May 28, June 25, July 23, Aug.27, Sept. 24, Oct. 22, Nov.19 (3<sup>rd</sup> Thursday), Dec.17 (3<sup>rd</sup> Thursday) **All are welcome! We appreciate your involvement**

**All Events:** TBD please check our website!

**June 20**, Sat. of Father's Day weekend, **Mini Monster Mayhem**, 9:30 am-Noon, The Douglas', 3450 Rt. 212, Springtown, PA TBD

**Native Plant and Invasive Workshop**, TBD

**Springfield Community Day - TBD**

**Oct. 3**, first Sat. of Oct., **Fall Dinner**, 5pm-9pm, Springtown Rod & Gun Club TBD

**Oct. 4**, first Sunday of Oct., **Walk in Penn's Woods**, TBD

**Oct. 10**, second Sat. of Oct., **Durham Community Day**, Noon-3pm, Durham Mill Green TBD

**Nov 14**, second Sat. of Nov., **Fall Clean-Up**, 9-Noon, meet at Old Philadelphia & Rt. 212 & Gallows Hill Rd. TBD



See back for details!

**We're on the web!**  
[www.cooks creekpa.org](http://www.cooks creekpa.org)

Cooks Current is a publication of the Cooks Creek Watershed Association.

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## From Across the Board...

The current health crisis we find ourselves in may in fact be a direct result of our own inability to control our population growth and impact our footprint on our planet. These are tough words, and certainly not the position of this Association, however many prominent scientists in this country and abroad believe that this indeed may be the case. Our population density, global travel and trade, and incursions into the remotest parts of the world to find food have put us in direct contact with organisms that we have never been exposed to and which are particularly vulnerable to rapid world-wide transmission. Some believe that our voracious burning of fossil fuels and subsequent increase in global temperature may also be playing a role in the release and spread of new diseases like the coronavirus.

Regardless of the reason, we find ourselves in the same position as the indigenous peoples of the New World when smallpox arrived; battling an



**Bald Eagle and large nest (right)** Photo by: Lois Oleksa

unseen and unknown adversary with dire consequences. Smallpox took down what may have been some of the most advanced societies of humans on the planet, leaving the western hemisphere ripe for conquest by European adventurers. What will happen to our society as a result of the current pandemic remains to be seen. While it seems unlikely that it will be a civilization end game, it is certainly going to change our world and our viewpoints. In a way, going through this pan-

demic and the challenges we have put upon ourselves to attempt to control it, may be a good thing. Struggle makes us stronger as individuals and may make our society stronger in the long run. Now is the time to examine our actions, and think about what we particularly value and what we would like to change about the society we live in.

I challenge you all to consider taking the time to do

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(Continued from page 1)

some things for yourself, your community, and the planet itself while you await the return to some semblance of normalcy.

- Make as many purchases locally as you can, particularly when it comes to food and produce.
- Plant a Victory garden! It can be as simple as planting some vegetables in pots on your deck, or a full-blown raised bed garden, but the act of growing anything is healing to you and the planet.
- Learn to preserve food by freezing or canning.
- Eat less meat, but when you do, consider where and how it was raised. Buy it locally if you can.
- Plant some native plants for beauty and for our native pollinators.
- Build a raingarden to trap and infiltrate stormwater.
- Reduce your water consumption through efficient appliances or simply reduce the amount of time in the shower.
- Allow some areas of your yard to grow up enough for the native flowers to bloom.
- Remove invasive species like garlic mustard or multiflora rose.
- Consider switching your energy provider to a green source.
- When you return to work, ask your employer to consider allowing you to work from home at least a few days a week if possible.

I wish you and your family safety and health through this crisis, and I am looking forward to the time that we will all be able to get together again to celebrate this very special place we call the Cooks Creek Watershed. In the meantime, all of our usual activities are on hold including the Mini Monster Mayhem and the July Native Plant Workshop. We will keep you updated as the summer progresses and more direction is provided by our leaders.

Yours in conservation,

W. Scott Douglas, President



**\* Botanical Focus: American Elder (*Sambucus canadensis*)** By: David Oleksa \*

\* This is the 15<sup>th</sup> installment in a series of articles on the flora of the Cooks Creek Watershed. \*

\* One of the most common, yet interesting plants has to be the American Elder or *Sambucus cana-* \*

\* *densis*. Normally growing to a height of 10 to 15 feet, this shrub/tree has something to consider \*

\* about each of its parts. Many experts consider it to be the same species as the common black or \*

\* sweet elder of Europe even though that plant is known by a different scientific name, *Sambucus* \*

\* *nigra*. The tree has a relatively smooth bark of a gray/tan nature with some darker colored speckles. \*

\* The stems are thick but very weak with few branches. The weakness is due to a large pithy core. \*

\* When this core is pushed out, you are left with a wooden tube which can be put to many uses – \*

\* blowguns, maple sap spiles, and more. The word “Sambucus” is derived from the Greek word \*

\* “sambuke” which means musical instrument so it should come as no surprise that the wood is also \*

\* used for making whistles and flutes. If you decide to make your own elder whistle, be aware that \*

\* the leaves and wood of the American elder give off a strong noxious odor when bruised or cut. \*

(Continued on page 3)





*(Continued from page 2)*

The plant flowers in late June and early July and the copious white blossoms can be easily seen along roadways and especially along areas that are moist. The flowers grow in clusters called cymes, and each of these 7 to 10-inch diameter cymes may contain hundreds of blossoms. The flowers have many edible uses. The pollen can be used as a flavoring; the cymes can be battered and fried to a golden brown “fritter”; and surprisingly enough – in some cultures, the dried blossoms are layered with apples stored for later use. The elder blossoms cause the apples to have a distinct pineapple flavor.

When the fruit forms, it becomes a rather small berry only about one quarter inch in diameter or smaller. It is a dark reddish-purple berry that is packed with a sweet purple juice that immediately stains the hands or clothing of whatever comes in contact with it. The plant makes up for the small size of its berries by producing enormous numbers of them in clusters which when ripe, hang downwards often causing the branches to bend under the weight of their burden. Birds love the sweet fruit and in seasons where the yield is lower than others, they can strip the trees bare leaving behind nothing but empty stems. Fortunately seasons of this type are few and far between and most years there are enough berries for our feathered friends as well as two-legged foragers. It takes little effort to gather the berries. The best way is to cut off the clusters into large buckets or containers and then using a fork as a sort of comb, separate the berries from their stems. The berries can be used in a variety of ways. After destemming, add one quart of water to a gallon of berries and bring to a boil. Mash the berries and strain through a cloth or jelly bag. The juice can be used “straight” although many people are not fond of its flavor. However, diluting it with another juice (such as apple) can create a delightful drink. The straight juice was used for millennia as a treatment for illnesses similar to influenza and even today, many people subscribe to its efficacy. However, there is little medically accepted study that supports this use. The fruit does not contain enough pectin to make jelly but mixed with lemon juice, wild grape juice or apple juice, a beautiful deep pink colored jelly can be produced. There are many advocates of the superior wine that can be made from these berries and because of the ease in harvesting the fruit, many homemade wines are enjoyed.

A note of caution should be made here, however. There are some people who experience uncomfortable reactions to the consumption of elder berries especially if ingested raw. If you have never experienced eating elder berries in any form, raw or cooked, be careful of the amount you consume until you are sure that they agree with your system.

The American elder is not imposing by its size or its shape. It is seldom used as an ornamental addition in landscapes. But its proliferation in the wild, its abundant flowers and fruit which can be both used as food and drink and its other uses make it a forager’s dream come true.



*American Elder (photos from arborday.org)*

*When blooming and then with berries*



## **Back to the Past: Disease Outbreaks Devastating our Past Communities** *By: Lois Oleksa*

On March 11th, 2020, the World Health Organization officially changed its designation of COVID-19, the illness caused by a coronavirus, from an epidemic to a *pandemic*. This shift prompted a considerable number of people to turn to the dictionary, in order to ascertain the difference between the two -demics. What is the difference between an epidemic and a pandemic?

An *epidemic*, according to Merriam-Webster, is defined as “an outbreak of disease that spreads quickly and affects many individuals at the same time”. A pandemic is a type of epidemic (one with greater range and coverage), an outbreak of a disease that occurs over a wide geographic area and affects an exceptionally high proportion of the population. While a pandemic may be characterized as a type of epidemic, you would not say that an epidemic is a type of pandemic.

Were there pandemics in years gone by? Today’s global world connects us all together through modern day travel. Countries in Colonial times were isolated. We’ve heard of the pandemic of 1918 compared to this COVID-19 infection. The 1918 pandemic occurred because there were many people traveling between countries due to World War I.

Throughout the course of history, disease outbreaks have ravaged humanity, sometimes changing the course of history and, at times, signaling the end of entire civilizations. Here are 20 of the worst epidemics and pandemics, dating from prehistoric to modern times. <https://www.livescience.com/worst-epidemics-and-pandemics-in-history.html>

I thought it might be interesting to search through some old documents looking for local epidemics. In our region, in times past, many diseases along with their epidemic effects are visible in documents.

### **Cholera**

During the cholera epidemic at the Durham furnace, July, 1849, when one hundred and eleven persons were stricken, Mr. Pennypacker personally directed the cleaning of the dwellings, disinfecting the houses wherein the disease had been raging. Fearing that to cart the dead to Haycock and other cemeteries would spread the disease ; he arranged a graveyard on the north slope of Rattlesnake hill, but after interring at that place James Stevens, one of the cholera victims, he was beset by others mortally ill with the disease, requesting that they be buried in the Catholic cemetery at Haycock. Fifteen were afterwards buried at Haycock and one at Durham.

### **The Durham Historical Society is currently looking for this grave; any info contact DHS.**

From: Pg. 247-8 “The Durham Iron Works.” By Charles Laubach, Durham, PA.

A COLLECTION OF PAPERS READ BEFORE THE BUCKS COUNTY HISTORICAL SOCIETY; PUBLISHED FOR THE SOCIETY BY B. F. Fackenthal, Jr. RIEGELSVILLE, PA.; VOLUME I.

### **Typhus Fever/Camp Fever**

The death of Mr. Dick was surrounded with pathetic circumstances, and great sadness.

The typhus fever was epidemic in Doylestown, in the Winter of 1815, and he was one of the victims, dying February 18, after a few days' illness. He was the first person buried in the Presbyterian graveyard. A young member of the bar, and Mr. Dick's intimate associate and friend, and who was with him in his last moments, in a letter written to a friend in the lower end of the county, thus speaks of this sad event:

"My friend, John L. Dick, died to-day at 2 p.m., of the typhus fever. How frail is man! Ten days ago he was in the vigor of health. Alas, how visionary our hopes of earthly happiness; but two months since he married Miss Erwin, the daughter of the richest man in the county. How soon their fondest anticipations of future bliss and domestic felicity were destroyed." The writer of this letter caught the fever of Dick and died in a few days—himself, mother, sister, and a young lady, a member of the family, all dying in the

(Continued on page 5)

*(Continued from page 4)*

same house within two weeks.

From: Pg. 439 "Half an Hour with the Old Taverns of Doylestown." BY GEN. W. W. H. DAVIS, DOYLESTOWN, PA. (Doylestown Meeting, January 19, 1897).

A COLLECTION OF PAPERS READ BEFORE THE BUCKS COUNTY HISTORICAL SOCIETY; PUBLISHED FOR THE SOCIETY BY B. F. Fackenthal, Jr. RIEGELSVILLE, Pa. 1909; VOLUME II.

On December 3, 1776, Dr. Baldwin arrived, bringing with him a letter to Rev. John Ettwein of the Moravian church, stating that General Washington had ordered the removal of all sick and wounded to Bethlehem. Two days later, on December 5, these unfortunates began to arrive in charge of Surgeons Warren, Shippen and Morgan. They were quartered in the Single Brethren's House, now known as "Colonial Hall", the center of the Moravian College and Seminary for Young Women. This building and also several others, were used for hospital purposes from December, 1776, to April, 1777, and again from September, 1777, to April, 1778. As many as 1,000 sick and wounded were cared for at a single time. Camp fever became epidemic among them, and before the hospital was abandoned more than 500 had died. These found their last resting place on the hillside west of the Monocacy. Who they were the recording angel only knows. For many years they slept in unmarked graves. What should now be a national cemetery, is included in the borough of West Bethlehem, and only a small block of granite marks the spot where these fallen heroes sleep.

From: Pg. 28 "THE TOWN OF BETHLEHEM" BY JOHN A. RUTH, BETHLEHEM, PA. (Doylestown Meeting, January 15, 1901.)

A COLLECTION OF PAPERS READ BEFORE THE BUCKS COUNTY HISTORICAL SOCIETY PUBLISHED FOR THE SOCIETY BY B. F. Fackenthal. Jr. RIEGELSVILLE. PA. 1909; VOLUME III.

### **Smallpox**

Smallpox, that scourge of the aborigines, happened to prevail among the red men, and Mary, the wife of Edward, contracted the disease. The husband saw no ray of hope for his wife, without comfortable surroundings, medicine, nursing and medical skill. These were not to be obtained at Great Swamp, or anywhere else nearer than Philadelphia, but at North Wales, now Gwynedd, there was a possibility of shelter and such treatment as might prove effective in saving her life. The faithful husband hesitated not an instant, but placing his sick wife and child again on their horse, he returned along the Indian path to the kindly Welsh brethren at North Wales, where she was nursed back to health and in five or six weeks, they returned joyously to Great Swamp, which was to be their home and that of their descendants for several generations.

From: Pg.54 "OLD RICHLAND SETTLERS" BY ELWOOD ROBERTS, NORRISTOWN, PA. (Meeting in Friends' Meeting-house, Quakertown, May 28, 1901.)

A COLLECTION OF PAPERS READ BEFORE THE BUCKS COUNTY HISTORICAL SOCIETY PUBLISHED FOR THE SOCIETY BY B. F. Fackenthal. Jr. RIEGELSVILLE. PA. 1909; VOLUME III.

### **Yellow Fever**

In our neighboring Williams Township, "Mammy" Morgan Hill, is named after the Elizabeth Bell "Mammy" Morgan who was married to a Dr. Abel Morgan, a physician in Philadelphia. During the 1793 major epidemic of yellow fever in Philadelphia, Dr. Morgan brought his wife to Williams Township to escape the epidemic and he returned to Philadelphia to assist with the epidemic, however, he died only a few days after his return.

From: *Bicentennial History of Williams Township*, By Williams Township Historical Society, Fourth Printing (2019)

## Green Tip #49: Common Toxic Chemicals — And How To Avoid Them

*From: The Environmental Magazine, Green Guide by: Sam Heller, December 17, 2019*

*This is a series of articles on synthetic chemicals with recommendations in avoiding them.*

### Part 2

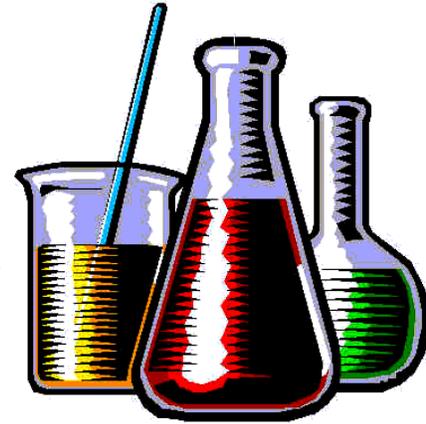
#### Dioxins

Dioxins can disrupt the endocrine system, cause cancer, and create issues with the reproductive system. Fortunately, their use has been greatly reduced in the past several decades.

They are a common byproduct of burning many materials, including those that may be seemingly innocuous, such as wood. Once released, dioxins flow through the environment and can bioaccumulate in living organisms.

To reduce exposure, refrain from burning trash and cut down on the consumption of fish.

To learn more about dioxins, click here... <https://www.medicalnewstoday.com/articles/17685.php>



as

#### BPA

Bisphenol A, also known as BPA, is an industrial chemical that is frequently used in the production of plastics and resins.

Food containers, particularly cans and bottle tops, often contain the BPA.

There are concerns about the effects that BPA may be having on the brain and prostate gland of young children and fetuses. Research has also indicated a possible link between BPA exposure and increased blood pressure.

To reduce your exposure to this chemical, try to select containers marked BPA free, cut back on your consumption of canned foods, and avoided heating polycarbonate products (you can do this by not putting them in the microwave and or dishwasher.) Also bear in mind the fact that containers marked “BPA free” might still contain bisphenols, such as bisphenol S, which have also been shown to be potentially harmful.

Receipts often contain BPA, so try to avoid touching them if you can.

For more information on BPA, click on the links below... <https://www.mayoclinic.org/healthy-lifestyle/nutrition-and-healthy-eating/expert-answers/bpa/faq-20058331> <https://www.niehs.nih.gov/health/topics/agents/sya-bpa/index.cfm>

#### Arsenic

This toxic element can be found in food, drinking water, and tobacco leaves. It is both an endocrine disruptor and a carcinogen, and has been linked to weight gain,

*(Continue on page 7)*

*(Continued from page 6)*

immunosuppression, insulin resistance, growth retardation, and skin, bladder, and lung cancer. You can reduce your chances of exposure by filtering your drinking water and refraining from smoking.

## **Radon**

Estimated to cause over 20,000 deaths from lung cancer per year in the U.S alone, this airborne toxin is a serious problem. Opening windows and sealing cracks are a great way of reducing exposure.

You can also order a radon test kit to determine whether levels in your house are out of the safe zone.

To learn more about radon, click here... <https://www.cdc.gov/features/protect-home-radon/index.html>

## **Teflon**

Manufacturers use teflon to coat non-stick cookware.

Exposure to this substance has been associated with several health issues. Though regulations have made teflon safer in recent years, many are still concerned that it could be having deleterious effects. If you're concerned about exposure, consider switching to stainless steel or cast iron cookware. If you use non-stick pans, it's probably a good idea to not use them for cooking at temperatures above 570 degrees Fahrenheit (The temperature at which Teflon coatings begin to break down and percolate into the air.)

To learn more about Teflon, click here... <https://www.healthline.com/nutrition/nonstick-cookware-safety#section3>

## **Lead**

Though just about everyone knows that lead poisoning can cause issues, there is less knowledge about ways in which you can reduce your exposure to this heavy metal. Some good strategies include testing your water for lead and filtering it if lead is present, only using lead free paint, and making sure to buy only lead free toys for your children (lead is still used in the manufacture of some toys, particularly those from foreign countries.)

To learn more about the symptoms of lead poisoning, the long term health problems it can cause, and more ways in which you can avoid it, click here... <https://www.healthline.com/health/lead-poisoning#prevention>



**Creature Feature: Bald Eagle** By: *W. Scott Douglas* This is the 52nd installment in a series of articles on the fauna of Cooks Creek Watershed.



Our national symbol, the Bald Eagle, was once on the brink of extirpation in the lower 48 of these United States. One of the largest birds in North America, it was reduced from a colonial era population of 300-500,000, to as few as 412 breeding pairs, limited mostly to Alaska and Florida. I remember the first time I ever saw an Eagle was in Florida, on my way to visit the Kennedy Space Center as a boy. Eagles were so rare at that time, their nests were carefully monitored and guarded. Since moving to this Watershed in 1990, I have seen many more Bald Eagles, and now I see one at least monthly somewhere close by. Eagles have been nesting for years now on the island in the Delaware River at the confluence with Gallows Run. A couple years ago, someone reported that a young Eagle was trying to build a nest on one of the high-tension power line towers in Springtown. He was not successful. I have seen Eagles perched in trees in our Water-

shed many times now, but no nests. However, this spring, for the first time in decades as far as I know, Bald Eagles are again nesting and raising their young in the Cooks Creek Watershed. At an undisclosed location in Durham, an eaglet has been spotted in a nest high in a tree overlooking the Creek!

The Bald Eagle, *Haliaeetus leucocephalus*, is a fish eagle, and one of the largest birds in North America. An adult female (males are 25% smaller than females) can weigh up to 14 pounds and have a wingspan of seven and a half feet. Eagles are long-lived and can survive in the wild for 20 years or more. While adults have the unmistakable majestic appearance with the pure white head and tail contrasting with a dark chocolate brown body and wings, the juveniles are muddy brown and streaked with white on the breast. Adult plumage is obtained when they are 4-5 years old. Eagles typically nest in trees, using sticks and branches to craft a nest platform that can be huge; some of the largest are 3 meters across and 6 meters deep, and can weigh as much as 2 tons! These nests are a sign of a highly successful pair of Eagles, as the same pair will return and add to the same nest year after year. The pair bonds for life, unless one of the pair dies. Each year, the female will typically lay 3-4 eggs (February in PA), but usually the pair only raise two eaglets to fledging. The pair shares the incubation, and later the hunting and feeding responsibilities. The young grow fast; they begin exercising their wings at 8 weeks and fledging takes another 6 weeks. The juveniles remain in close proximity to the nest and the adults for another 8 weeks or so, and then disperse.

Bald Eagles primarily feed on fish and fish carrion, but they can and do kill and eat other birds and small mammals. Eagles are opportunistic hunters, and will take the prey of other birds and mammals if given the chance. Their fish meal of choice is salmon or trout, but they will also catch shad, carp and any fish that is sick or dying on the surface. No animal other than man routinely kills adult Eagles, but eggs and young can be preyed upon by foxes, coyotes, bears and raccoons. The result is that usually only about half of the eaglets hatched survive their first year. Once that milestone is passed however, most Eagles lead long lives.

Like most raptors, the Bald Eagle has had a fraught relationship with man. Seventy percent of Eagles that die prematurely die from interactions with man, either by colliding with cars or structures, or through accidental or intentional killing, despite the fact that harming an Eagle is strictly prohibited by numerous Federal and State laws. Some people believe that Eagles will take young livestock, pets and even children as prey. However, this is extremely rare. Eagles prefer natural food. However, their predilection for taking an easy meal, even carrion, has probably resulted in them being blamed for kills they did not make. This, along with their size, made them routine hunting targets until the passing of the Migratory Bird Act in 1918. Despite the law, people continued to shoot the birds, for sport or for a continued belief that they posed a threat to livestock. However, the most insidious threat to the Bald Eagle came in the form of artificial pesticides that were put into widespread use after World War II. Pesticides almost took away our national symbol forever. In particular, the chlorinated hydrocarbon insecticide DDT causes disruption of calcium metabolism in Eagles and many other raptors, making it impossible to create eggs that are sturdy enough to survive incubation. Since DDT was banned in 1972, primarily as a result of the efforts of conservationist Rachael Carson, Eagles have been steadily recovering. The Bald Eagle was removed from the federal Endangered Species list in 1995 and even from the Threatened Species list in 2007 (note that some states still retain the Bald Eagle in protected status). Today there are almost 10,000 nesting pairs in the lower 48 States.

If you want to see a Bald Eagle, they can frequently be seen at many locations along the Delaware and Lehigh Rivers. There is an active nest on the northeast side of Lynn island that can be viewed from the tow path. You will need powerful binoculars or a spotting scope to get a good view of the eaglets. The Eagle nest in Durham is on private property, so I cannot disclose the location. If you do discover a nest, observe quietly from a distance so as not to disturb the parents. Remember that a Bald Eagle is 10-14 pounds of sharp beak and talons and can dive at a speed of almost one hundred miles an hour.... you do not want an Eagle mad at you!



## Children's Backyard: Hunting for Mini-monsters *By: Scott Douglas*

- You will need to gather a plastic dish pan, an ice cube tray, some containers of various sizes, some plastic pipettes (or clear straws), and a magnifying glass. Print the identification key and make yourself a seine net. 

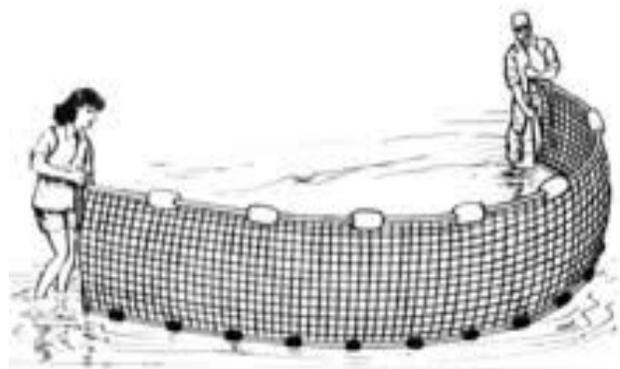
- Building a seine net will require these materials: Some fiberglass window screening at least 2'x4', two 30" wooden dowels (an old broom handle works fine) or small scrap lumber, about 4-6 inches longer than the screen is wide.

Instructions for net:

- Cut the screen to be about 2' wide by 4' long.
- Cut the handles to be about 30" long, about 6 inches longer than the screen is wide.
- Roll out the screen and place the handles on top, making sure that one of the ends is even with the bottom of the screen.
- Wrap the screen around the handle, just so that the screen is on top.
- Staple the screen to the handles, starting just off the bottom of each stick and working to the top of the screen, putting in a staple every couple of inches.
- Roll the screen around the sticks working both sides at the same time to carry or store the net.

- Finding the Right Spot:** Pick a spot that is shallow, with lots of small rocks and cobble (riffle) and that has an adjacent open flat area to work. The water should be moving swiftly, but not be more than about 6 inches deep. As you hunt, work from the bottom of the riffle to the top to keep as much of the area undisturbed as possible before you sample. 

- Capture your Mini-monsters:** Open the seine net, leaving a couple of turns of screen on the handles. Stand in the stream facing upstream. Place the net firmly on the bottom in good current, with the top leaning backward toward you. Have a friend scuffle their feet or hand scrub the rocks and gravel for a couple of feet upstream of the net for about a minute. When done, rinse the collected material into the center of the net and scrape it carefully into the plastic tray. Examine the net carefully for any stray creatures. 



Your net will be smaller. *Picture from - [https://en.wikipedia.org/wiki/Seine\\_fishing](https://en.wikipedia.org/wiki/Seine_fishing)*

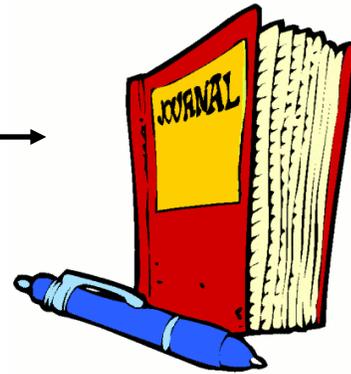
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- Take a few minutes to just watch what is going on in the tray. You will probably see quite a few creatures! Using the pipettes or straws you can move the material around and even capture some animals. Put some water in the containers and place your captured monsters in them to more closely observe their form and behavior. Using the simplified key, see how many different organisms you have collected. You can use the ice cube tray to sort your zoo. When done, return all the material and insects to the stream.



- Keep a journal of your observation and what you find in the creek and draw a pictures of what you find. Next Brochure we will have more information on creatures you find and information on the water cycle. Get to know your creek up close and personal! And it is FUN!



- Soon, more information on the web at [www.cookscreekpa](http://www.cookscreekpa)

Tolerant Taxa is more tolerant of pollutants

## Tolerant Taxa

**Odonata (dragonflies and damselflies)**

**Mollusca (snails and clams)**

**Crustaceans (amphipods and crayfish)**

**Diptera (craneflies, midges, blackflies, horseflies, etc)**

**Annelids (worms and leeches)**

(Continued on page 11)

(Continued from page 10)

Sensitive Taxa is less tolerant of pollutants

# *Sensitive Taxa*

**Mayflies**  
(Ephemeroptera)

**Stoneflies**  
(Plecoptera)

**Caddisflies**  
(Trichoptera)

(Continued on page 12)

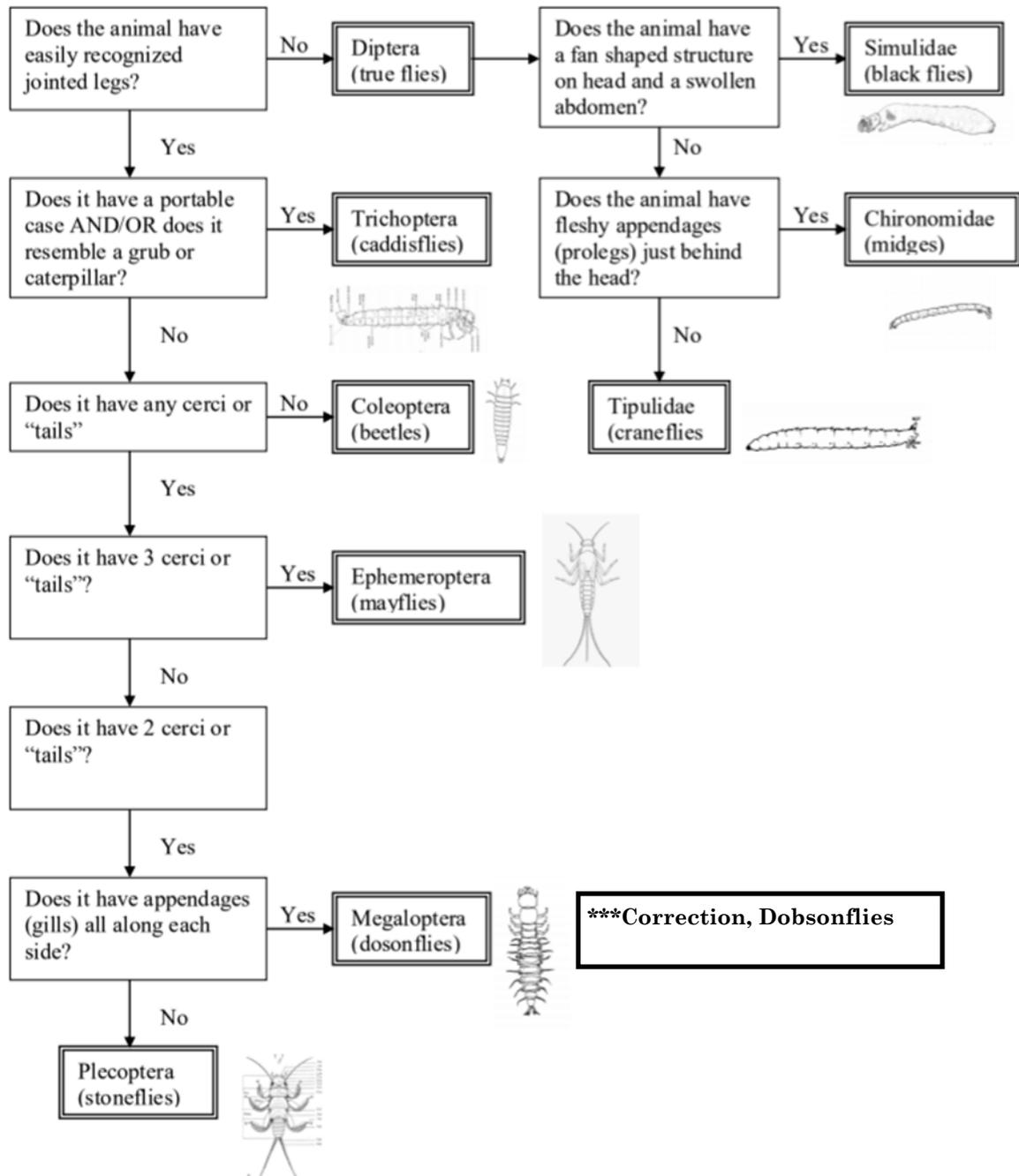
Despite what is happening now, our organization is still working hard to protect our creek. Cooks Creek is an important resource for our community, so stay up to date on issues concerning our Watershed.

Help continue these good works for now and the future and renew your membership for 2020.

If you want to get more involved, come to a virtual meeting and share your talents and interests!

(Continued from page 11)

Simplified Key to Common Benthic Invertebrate Families



**\*\*\*Correction, Dobsonflies**

Soon you can check out more Mini-monsters on the web:  
[www.cookscreekpa](http://www.cookscreekpa)



## *Just a Dream* By: Debra Orben

*In January I was very optimistic. 2020 seemed like it would be an amazing year. After all it was the 100 th anniversary of Women's Right to Vote and the 50 th anniversary of the First Earth Day.*

*Unfortunately, changes were in the air and not the kind I had hoped for. A tiny virus led to a world- wide pandemic that made life, as we had known it, come to a halt. This small speck of RNA has run havoc throughout our planet, spreading death and disease, poverty, and heartbreak. Everyone is suffering, though to varying degrees. The debt we owe to first responders, those still working in hospitals, food stores, and essential businesses can never be repaid.*

*As part of the old and vulnerable population I am grateful to all the workers and to everyone who is sheltering in place, trying to flatten the curve, and send this virus into the realms of historic plagues, never to be seen or heard from again. There is no silver lining in a catastrophe of this magnitude. Too many people are dying. Too many are unemployed, hungry, and afraid.*

*Still, perhaps in the midst of all this darkness, there are lessons to be learned. So even as we bury my mother-in- law who died, not from COVID-19, but from natural causes and I get down on my knees to plant another garden, I will dare to dream and wonder.*

*Please indulge me in this Earth Day fantasy. What if the clearer air we see and the quieter streets were not caused by a hideous virus but by the transition to cleaner more efficient renewable energy. Electric cars, busses, and trains, fueled by wind and solar power, would not emit carbon or create air pollution. Imagine if the Military Industrial Complex could be transformed into the Health and Environmental Cooperative. Our priorities would change. We would be building hospitals, providing health care, and funding medical research instead of building bombs, providing weapons, and funding military bases all over the world.*

*Communities would be supported in their efforts to create local food supplies, organic fruits and vegetables, and home gardens. There would be safe places to walk and bike for everyone, more parks and street trees, more forests and wilderness areas. Green grass forever perfect lawns would become a relic of the past and we would see more bees and*

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*butterflies, more birds and wildlife. Children would have safe and healthy schools and quality education would not be measured by tests but by access to real life learning, indoors and out. Relationships and communities would matter. The natural world would be available to all and the balance of life respected. There would be more justice and less strife. Racial inequities would be addressed and we would learn from the mistakes of our past. There would be less income inequality and more people paid living wages. Political parties would come and go but not divide us and keep us from working together to solve real life problems. We would evolve as humans. We would learn to respect and learn from each other, to cherish the earth and all its gifts, to protect our air, water, and soil, to treasure and protect diversity and the myriad creatures on our planet, to make life joyful and sustainable for future generations. This is my Earth Day fantasy. It is just a dream but I wanted to share it with you.*

### Delaware is River of the Year for 2020

**Current Matters**



American Rivers gave the Delaware River the honor of “River of the Year 2020” to recognize its momentous progress for water quality, river restoration and community revitalization.



Showy Orchis (Galearis spectabilis)



Wood Anemone (Anemone quinquefolia)



Black Morel



Crane Fly on Hickory leaf buds bursting out in Spring

## Recycle! Local Recycling Information

### Durham Township Recycling Center

Location: Municipal Building, 215 Old Furnace Rd, Durham

1st Saturday of every month ( 2<sup>nd</sup> Saturday if 1<sup>st</sup> Saturday is on a holiday weekend)

Hours: 9:00AM – 12:00 noon.

Accepting newspapers, magazines, junk mail, phone books, glass, tin, food grade plastic, aluminum and cardboard, and CFL bulbs, rechargeable batteries (during office hours).

Please note that this facility is just Durham Township residents!

Contact Dani McClanahan at the township building for more info. 610-346-8911

### Springfield Township

Location: Township Building, 2320 Township Road. Note: Springfield residents only. Cloth/clothes only at Springfield Fire company.

Paper/cardboard Recycling Bin Available at Township Building.

A Recycling bin was recently placed here and is available to anyone. Cut down on trash and help the township earn extra money. You can drop off: Magazines, Shopping Catalogs, Phone Books, Newspapers, Office and School Papers, Mail.

Please do NOT include: Plastic, glass, metal, trash

Hours: Anytime ; See website: [www.springfieldbucks.org](http://www.springfieldbucks.org) or call 610-346-6700.

### Blinderman & Son

Location: 1320 Whitaker St, Hellertown. 610-838-9221

Hours: 7:30AM – 4:00 PM, Monday – Friday

7:30 AM – 11:30AM, Saturday

Accepting cardboard and most metals.

### City of Bethlehem Theis/Cornfeld Recycling Center

Web site: [www.bethlehem-pa.gov/recycle/services/theis\\_cornfeld.htm](http://www.bethlehem-pa.gov/recycle/services/theis_cornfeld.htm)

Location: 635 Illick's Mill Rd, Bethlehem

Phone: 610-865-7082 Hours: Weekdays: 9AM to 5 PM, Saturday 9 AM to 4 PM, Sunday 11AM to 4 PM

Accepting glass, cans, plastics, newspapers, all books, magazines, catalogs, cardboard, mixed office paper, metals, textiles (clothing, shoes, etc.), large appliances (certified freon-free). Call or go to the web site for specifics.

**Bonus!!** They provide FREE on site shredding services for businesses and private individuals. If you have 4 or more boxes, call 610-865-7082 to schedule an appointment.

## Schedules of Local Government Meetings

**Springfield Township:**  
[www.springfieldbucks.org](http://www.springfieldbucks.org)  
610-346-6700  
2320 Township Road

**Supervisors:** 4th Tuesday @ 7:30 PM  
**Planning Commission:** 1st Wed. @ 7 PM  
**Environmental Advisory Council:**

2nd Thurs. @ 7:30 PM  
**Open Space Committee:**  
As required

**Historic Commission:**  
2nd Wed. @ 7:00 PM

**Durham Township:**  
[www.durhamtownship.org](http://www.durhamtownship.org)  
610-346-8911  
215 Old Furnace Road

**Supervisors:** 2nd Tuesday @ 7:30 PM  
**Planning Commission:**  
1st Tues. @ 7:30 PM  
**EAC:** 3rd Tues. @ 7:30 PM

**Lower Saucon:**  
[www.lowersaucontownship.org](http://www.lowersaucontownship.org)  
610-865-3291  
3700 Old Philadelphia Pike

**Council:** 1st and 3rd Wed. @ 7 PM  
**Planning Commission:**  
4th Thurs. @ 7 PM  
**EAC:** 2nd Tues. @ 7 PM

**Williams Township:**  
[www.williamstwp.org](http://www.williamstwp.org)  
610-258-6060  
655 Cider Press Road

**Supervisors:** 2nd Wed. @ 7 PM  
**Planning Commission:** 3rd Wed. @ 7 PM  
**Land Preservation Board:**  
4th Tues. @ 7 PM

**Richland Township:**  
[www.richlandtownship.org](http://www.richlandtownship.org)  
215-536-4066  
1328 California Road

**Supervisors:** 2nd Mon. @ 7 PM  
**Planning Commission:** 3rd Tues. @ 7 PM  
**Preservation Board:** 2nd Wed. @ 7 PM

