

# Cooks Current

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

Volume 7, Issue 2

Newsletter of the Cooks Creek Watershed

Summer 2010

## 2010 Events

### Regular Board Meetings:

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

July 22, Aug. 26, Sept. 23, Oct. 28,  
Nov. 18, Dec. 16, 2010 *All are welcome! We appreciate your involvement!*

### Special Events:

Oct. 2 Fall Dinner

Nov. 13 Fall Clean Up



Become  
a member!

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.**

### Board Members:

#### President:

W. Scott Douglas

#### Vice President:

Hans Reimann

#### Treasurer:

Jim Orben

#### Communications Director:

#### Recording Secretary/Editor:

Lois Oleksa

#### Additional Members:

Siobhan Royack

Stephen Smith, MD

Pat Raynock

#### Layout & Graphic Design:

Ellie Scheitrum

## From Across the Board...

We start off the summer season with several major successes. First, our cleanup went smoothly, with more roadsides cleaned up than ever. Many thanks to all who helped, and to those who are doing a better job of keeping things cleaned up in between times. Next year's cleanup will be back to the first weekend in April, I hope to see you all there again. If you feel the need for more cleaning, you can always help us out with our little section of Route 212, between Gallows Rd. in Durham and the intersection of Route 212 and 412 in Springtown in the fall – November 13.

The second success is the passage of the Riparian management amendments to the Springfield Zoning Ordinance. These amendments change the way we protect our riparian areas; ensuring that they are allowed to do their natural functions of cleaning rainwater and slowing down floodwaters. Remember that while you are "grandfathered" for current uses, if you let an area go "fallow" you will be expected to keep it that way! Major kudos to anyone who either lets these areas return to natural conditions, or engineers a buffer zone. If you have an area you would like to see restored, make sure to drop us a line for some input. Or visit either a CCWA Board Meeting (fourth Thursday at the Springtown Firehouse) or a Springfield Township EAC meeting (first Thursday at the Spring-



*James Douglas, Conservation High School Student of the Year, with over 800 hours of service!*

field Township Building) and talk to me or Hans.

The third success is as much a personal one as it is one for the CCWA. For the third time, the Bucks County Conservation District has recognized the efforts of the CCWA in its annual conservation awards program. This year, the Conservation High School Student of the Year goes to my son, James Douglas, for his nearly 800 hours of service time over the past several years. Much of this time was spent in the watershed working with us as we monitored water quality, picked up trash, and surveyed our resources. James is planning to attend the School of Environmental Science and Forestry at Syracuse in the fall. We hope we are sending him off well prepared to do good things for our environment. We certainly appreciate all his efforts over the years. We will report on the findings of his

research on water quality in upcoming issues.

Last but not least, we did have our annual meeting in April and selected a "new" Executive Board. Jim Orben will be taking over from outgoing Treasurer Charlie Klein. Please join me in thanking Charlie for his help over the past several years. The other officers will remain the same; I have agreed to be our President for a fourth term, Hans will be Vice President and Lois Oleksa will be the Secretary and Newsletter Editor.

Yours in conservation

W. Scott Douglas

President



## Rabies By: Steve Smith



If you are ever really lonely, and want to receive some phone calls from concerned folks, just take a specimen testing positive for rabies to the state lab. Within twenty-four hours your phone will be ringing off the hook.

Very early one morning last May my two Jack Russell terriers attracted my attention with incessant and aggressive barking, the male having more of a shriek than a bark. It was hard to tell at first if they had cornered a groundhog or a raccoon since the animal was obviously sick. When I got closer and confirmed that it was indeed a raccoon the thought of rabies occurred immediately.

Knowing that the brain is the organ to be tested, the animal was sacrificed with a single .22 shot to the neck. As the male Jack Russell thought he had a trophy I had to grab the animal with my bare hands and hold it aloft while carrying the actively bleeding carcass to the barn. Having decapitated the animal, and having obtained driving directions from our veterinarian, the head was taken to the state lab near Downingtown. This building is not marked and is not easy to find.

As I had some cuts on my hands from outdoor work I was concerned about possible exposure if the specimen proved positive. The next day I received the first of many calls; yes the raccoon had rabies. First the dogs went to the veterinarian for rabies booster injections. Because they had been previously immunized, the second phone caller assured me that the terriers would only have to be quarantined for three months rather than for six months. It can take up to a year for rabies symptoms to appear however. A very nice young lady from the state department of agriculture obligingly showed up to look the dogs over and to provide the chartreuse placards to be placed in the window, perhaps warning other dogs to stay away.

Immunization to the rabies virus for humans is now given in a series of four rather than five injections; on days zero, three, seven and fourteen. Rabies immune globulin is given if the animal cannot be observed or tested but generally has to be ordered (as it may not be kept on hand in the ER) and so it is not given as a rule with the first injection. There may be a remarkable amount of red tape and forms that the emergency room nurses have to fill out so be a patient patient.

The injections, contrary to popular folklore are not in the least painful and are now given in the extremities rather than in the abdomen. Removing the band-aids hurts more than the shots. Rabies is invariably fatal if the symptoms appear. In medical school we were shown a silent black and white documentary of a Turkish farmer who had been bitten by a rabid wolf. It was a day-by-day sequence and left an indelible impression. Dr. Axle Munthe in his book, The Story of San Michele, recounts how the Tsar of Russia sent five peasants bitten by a rabid wolf to the Pasteur Institute for "treatment". Unfortunately, it was too late as they were already symptomatic and their fate was described in excruciating detail.

Birds do not get rabies but any mammal can. Bats, skunks, raccoons and foxes are the mammals most likely to transmit the virus in our area but feral cats and dogs that have not been immunized also have the potential to transmit the disease. The virus is concentrated in the salivary glands therefore bites are the primary means of transmission but the disease produces symptoms primarily from brain involvement.

*Additional Information: <https://health.google.com/health/ref/Rabies>*

## Creature Feature: Mink (*Neovison vison*)

By: *W. Scott Douglas*

*This is the 15th installment of a series of articles on the fauna of Cooks Creek.*



The first time I ever saw a mink, I was kayaking on the Lehigh River near Lehighton. It was sunning itself on a large rock and scrambled out of sight once I got close. I looked back over my shoulder as I passed and saw him peeking out at me from under a rock. Since that time I've seen them around Springtown and even saw one last summer on the coast of Maine. They are fascinating creatures, cautious but curious, and always in a hurry about whatever they are doing. Mink are about the size of a house cat, but more sinuous and lower to the ground. Their pelt is a luxurious brown about an inch to inch and a half long, with a white patch under the chin. The tail is moderately long and bushy. They can excrete a nasty smelling musk from their anal glands which they do to mark territory or when they are excited or frightened.

Mink are found along streams and rivers and in wetlands all over this part of Pennsylvania, despite the fact that very few people have actually seen them. I know I have seen their tracks much more often than I have seen the animal. They live in burrows dug into the stream bank; either ones they have dug themselves or appropriated

muskrat or fox holes. These tunnels are 8 to 12 feet long, have multiple chambers and may have as many as 5 entrances. Mink are tireless and agile hunters, taking prey as large as muskrats, rabbits and ducks, but frogs, fish, birds, crayfish, mussels, turtles, snakes and lizards make up the majority of their diet. They will store food in the den, but are careful to not urinate or defecate in it. They do not hibernate, but forage under the ice in winter. Each mink will take up 1 to 2 square miles of habitat, so there are not very many at any one time in the watershed; if you have one you are indeed lucky. It also means that there is plenty of prey about, so the quality of the water and riparian areas is very good.

The breeding season for mink is late February to early April, with the litters being born in early May. At birth the kits are blind, naked and helpless, but they grow fast. The eyes open approximately 25 days after birth, and they are weaned at 5 to 6 weeks. By 8 weeks the young can capture their own prey. They are fully grown by four months. The young are taken on hunting trips by the parents and are active and playful. The parents sometimes carry the young about by the scruff of the neck (like cats or dogs carry their young). By August, the families disperse. Mink usually live from three to six years in the wild.



Photo by Mark S. Werner

Picture and more information:  
<http://dnr.wi.gov/org/caer/ce/ee/critter/mammal/minks.htm>

## Green Tip #12:

### Compost and Mulching

It's the time of year for compost and mulching our trees, shrubs and gardens. If you do not have a compost pile to draw from, you might want to check out the Saucon Valley Compost Center just over the hill in Hellertown. It's an excellent deal, and you can choose from one or two year aged mulch and wood chips. You do not have to be a resident of Lower Saucon to pick up mulch – but you do in order to drop off. I pulled this off the Lower Saucon Township website:

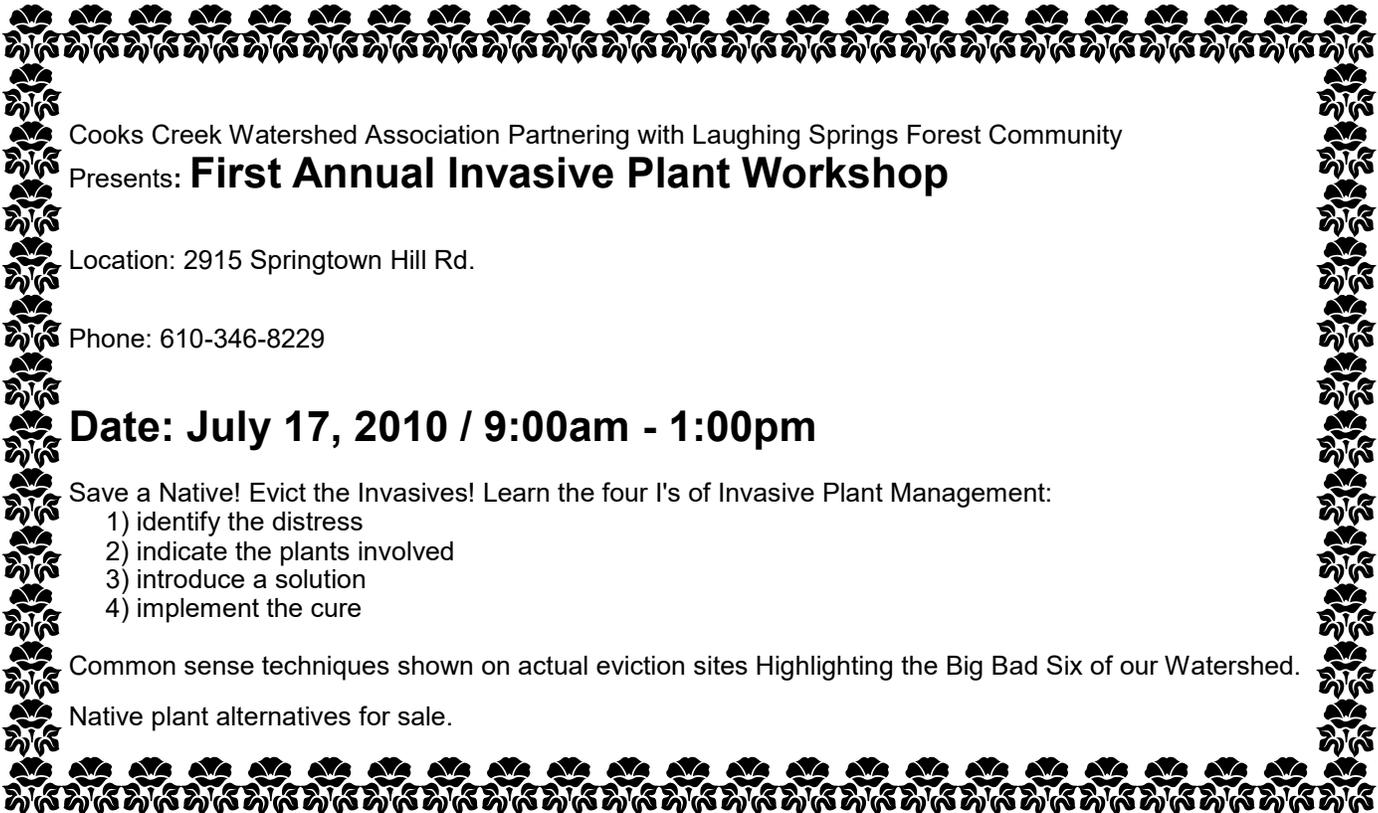
The Saucon Valley Compost Center is located at 2011 Springtown Hill Road and is open on Fridays and Saturdays from 9 a.m. to 1 p.m. from April through the end of November. Accepted materials include:

Leaves - loose and in bags (brown paper only)  
Small brush - up to 4" in diameter (no longer than 6 ft.)  
Hedge trimmings, garden plant residue  
Christmas trees (without tinsel)

Items NOT Accepted:

Grass  
Sod  
Tree stumps  
Commercial business materials

You can either load the mulch yourself, or have it loaded into your pickup for a \$10 fee (checks only, no cash). Remember when you place mulch not to build it up close to the trunks of trees or bushes, it will rot the stem. Make a ring of material around the stem to trap moisture instead. When I picked up a load, it was still steaming, so if you are using it for bedding material make sure to let it cool by tilling it in.



Cooks Creek Watershed Association Partnering with Laughing Springs Forest Community

Presents: **First Annual Invasive Plant Workshop**

Location: 2915 Springtown Hill Rd.

Phone: 610-346-8229

**Date: July 17, 2010 / 9:00am - 1:00pm**

Save a Native! Evict the Invasives! Learn the four I's of Invasive Plant Management:

- 1) identify the distress
- 2) indicate the plants involved
- 3) introduce a solution
- 4) implement the cure

Common sense techniques shown on actual eviction sites Highlighting the Big Bad Six of our Watershed.

Native plant alternatives for sale.

## Children's Backyard: Keeping those Pesky Flies Away

By: David and Lois Oleksa

*Adult house fly, Musca domestica Linnaeus.hotos*

[http://entnemdept.ufl.edu/creatures/urban/fly/house\\_fly07.htm](http://entnemdept.ufl.edu/creatures/urban/fly/house_fly07.htm)



Here's a disgusting question: What eats poop, spoiled vegetables, and rotten meat and eggs? If that's not disgusting enough, imagine that their method of eating it is to spit on it first, let it turn into a liquid, and then suck it back up. It's hard to believe that such a creature lives at all but when you consider that you see and we are in contact with these creatures every day, it's a scary thought. The answer to the question is "the common house fly".

The fly is an insect and like all insects has six legs and a body that is made up of three parts: a head, a thorax, and an abdomen. Its skeleton is

on the outside and it has a pair of transparent wings. Another interesting fact about flies is that they can taste things with their feet as well as with their mouth. House flies are usually  $\frac{1}{4}$  to  $\frac{1}{2}$  inch in length and are dark gray in color. If you look at them carefully, you will be able to see four dark stripes down their backs.

The female fly lives only 2 and 1/2 months but in that time will lay over 1,000 eggs. The eggs (as you can imagine) are tiny and are usually laid in manure or other warm rotting material. The eggs hatch in about 12 hours into white worm-like creatures called maggots. When the maggots grow to 1/2 inch in length they burrow into the ground to develop into their next stage. In about 5 to 6 days (as long as the weather is warm) an adult fly will crawl out of the ground ready to start its part of the life cycle.

Because of its habits, it's not surprising to find out that flies are often carriers of diseases like anthrax, typhoid fever, cholera, and dysentery, to name a few. The way that the flies spread these diseases is by picking up the bacteria on their leg hairs and then sitting on food that we eat. Sometimes a fly eats and then throws up what it has eaten onto food that people are about to eat.

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*Adult Head*

[http://entnemdept.ufl.edu/creatures/urban/fly/house\\_fly08.htm](http://entnemdept.ufl.edu/creatures/urban/fly/house_fly08.htm)

## Children's Backyard Activity: Construct a Cheesecloth Fly Hoop



*Elderberry branch ready to be cut for the hoop of the food cover*



them, we would have a lot more decaying materi-  
*Cheesecloth food cover*

al to contend with.

Meanwhile, the best thing to do is to make sure that flies are kept away from any food you have out. One way is to:



*Close up of the ribbon lashing on the food cover*

1) Using a branch of elderberry, red twig dogwood, or willow, all of which are bendable, construct a hoop.

2) Take two wire coat hangers and twist them together into a + sign shape with the hook of one of the hangers remaining in the center of the +

# Of Birds and Power Lines...

By: W. Scott Douglas

Creeping through the brush at Laughing Springs, on the way back from a morning watching the warbler migration, I was treated to my third sighting of a Louisiana Waterthrush in our Watershed. This large warbler feeds on insects in and around fast-moving water. Because it needs a diverse and abundant invertebrate population, its presence meant that this little headwater ecosystem is strong and healthy. Perhaps this is because the caretaker of Laughing Springs, Hans Reimann, has taken great pains to restore the natural flow of water, remove invasive plants, and encourage a healthy riparian buffer.

Hans' property is a significant contrast to the razed ecosystem just to the west of the creek where PPL Corp. had recently sprayed and mowed the power line right of way. Contrary to previous years, they completely removed ALL of the low shrubs and bushes, even those that would never even come close to the power lines if they lived for hundreds of years. This kind of management is happening more and more due to changes in right of way management policy due to the wide-spread blackout caused by the transmission line failure in the Midwest. A failure caused, by the way, by wires that had loosened and dropped into the trees, not by overgrown trees.

Although a few landowners complained to PPL about their slash and burn management policy, many rights of way in the Watershed were burned out and destroyed, leaving nothing but sprouting invasive plants for the returning spring songbirds. The only reason that Waterthrush could find food that day was because the stream's source is above the area where PPL stopped their spraying. Their single-minded and high-handed management style is completely unacceptable. Unfortunately, international corporations like PPL do not see the need to work with landowners to create a better alternative. In contrast, PECO has been working

with landowners to preserve riparian corridors, control invasive plants, and create a landscape that fits in with the ecosystem. I guess PECO still feels the need to be a good neighbor and practice sustainable policies. Too bad we cannot choose our power carrier as easily as we can our power generator.

What is needed today is just a little environmental awareness and a willingness to act. Thanks to a few caring folks in Springfield, the Township recently passed a comprehensive revision to its Zoning Ordinance that specifically protects riparian areas. It is probably the most significant change in development practices that has occurred in the Watershed since the passage of the Exceptional Value status for Cooks Creek. I applaud all those who worked on the ordinance, and the Board of Supervisors who passed it unanimously. This summer, Springfield will again be in court trying to stop the new transmission line running through the Tohickon Watershed. That line crosses the Tohickon almost a dozen times in different places. If Springfield is not successful in their appeal of the PUC decision, the Upper Tohickon will certainly be destroyed. We wish the Township and our friends in the Upper Tohickon Watershed Association the best of luck.



<http://www.dan-dare.org/freefun/games/cartoonsmoviestv/MonstersIncForTheBirdsWallpaper1024.htm>



# EARTH DAY CELEBRATION AT PALMS:

Supported by Cooks Creek members and the community



Here are some of our sixth graders and the tree they helped move during our trip to Lake Nockamixon

On Thursday, April 22<sup>nd</sup> the Palisades Middle School observed Earth Day's 40<sup>th</sup> anniversary in a big way! The anniversary celebration included a variety of activities and guest speakers.

Highlighting the day's events were Scott Douglas from the Cooks Creek watershed who spoke about keeping our local watershed healthy, Hans Reimann from Laughing Springs in Springtown, who addressed the 8<sup>th</sup> graders about invasive plants, and our very own Alan Klingbeil, who spoke on behalf of the middle school and how the school is becoming greener. The 6<sup>th</sup> graders learned about biodiversity, created an environmental book, and continued their Earth day activities into Friday, April 23<sup>rd</sup> by actively participating in the Lake Nockamixon State park clean-up. The 7<sup>th</sup> graders created temporary art in nature, built and hung small bird houses, and planted a native garden. The 8<sup>th</sup> graders conducted an invasive plant pull from the cross-country track, manicured the front planter, and also assisted in the planting of the native garden.

By all accounts the day was a resounding success with the help of everyone who participated. Again a big thank you to Joseph McCormick Landscaping of Upper Black Eddy for donating over 30 native plants, to Helverson Brothers Firewood and Mulch for donating top soil and mulch, to Sandra Yerger from the Heritage Conservancy group of Doylestown for assisting throughout the days activities, and to Hans Reimann, Karen Bedics, the Vieczorek family and Scott Douglas for also donating native plants to the garden and for providing great gardening advice!

Article From: Palisades School District E-Alert



# Dead Trees and Living Streams – A Dynamic Duo

By: Joe Mihok



Those of us who spend a lot of time along streams (probably everyone reading this article), whether fishing, hiking, bird watching or just needing an excuse to avoid real work in general, will have noticed some trees along the stream bank being undercut by the current and eventually toppling into the water. And since those of us who like to ramble along streams are, in general, also of the tree-hugger sort, seeing these trees come to the end of their life (and the trees that fall in tend to be large mature specimens) can feel a sense of despair. However, when we learn to look more deeply at what is occurring, we will see that although many of the ecosystem functions that the living tree provided have been lost; nesting sites for birds, food for insects, shading of the stream to lower water

temperature, and removal of nutrient pollution before it enters the stream to name just a few, a whole new set of ecosystem functions that are critical to healthy streams will have been created by the downed tree.

Stream scientists have a name for trees (and tree branches) that fall into streams, Woody Debris. Most trees and many branches would actually be categorized as Large Woody Debris (LWD) i.e. wood with a minimum diameter of 4 inches and a minimum length of 6 feet, as opposed to Fine Woody Debris i.e. smaller branches and twigs. As we know, the ecological benefits of the living tree beside the stream are lost once it becomes “LWD” but in death it begins to function in new ways in the stream ecosystem. Some of these functions are the creation of fish habitat, stream bank and channel stability and increasing the diversity of the food web.

The fishermen and fisherwomen out there instinctively realize the importance of LWD to fish. Many of the most likely spots on a stream to cast a lure or fly are created by wood in the stream channel. An entire tree that falls across a relatively small stream like Cooks Creek will almost always create a slack water pool on the upstream side and a plunge pool downstream. The tree trunk, whether it is parallel or perpendicular to stream flow will create overhead cover for fish as refuge from predators. Essentially any wood that is large enough to remain stable in the stream for a period of time almost always results in the scouring of a pocket that can be utilized by fish. During periods of low stream flow these pools and pockets serve as deep water refuges for fish. During floods,

*(Continued on page 11)*

*(Continued from page 10)*

the downstream sides of LWD serve as velocity shelters for fish. Photo #1 shows a stream in Bucks County in which LWD is functioning as fish habitat.

LWD also functions to maintain stream channel and stream bank stability. Stream channels and banks tend to be relatively stable in the short term and dynamic over longer periods of time. Depending on their angle relative to stream flow, downed trees can protect stream banks from the erosive force of floods by redirecting flow. They can also influence channel stability by affecting how sediment is transported downstream; creating areas of scour and also slack water areas where sediment will deposit.

The diversity of the aquatic insect community in a stream is also influenced by LWD. Algae will colonize the surface of the portions of LWD that remains submerged. This algae becomes food for many species of aquatic insects. Like a cow grazing on grass in a pasture, many aquatic insects are “grazers” of algae. LWD will also create nooks that trap smaller twigs which in turn trap leaves that fall into the stream in autumn. Leaves in the stream are the food source for the aquatic insects that are characterized as “shredders”; they chew leaves to obtain their

food. Actually, they are shredding the leaves to get at their real food source, the fungi and bacteria that have colonized the leaf surface. It’s sort of like peanut butter on crackers for us; the leaf is the cracker and the bacteria and fungi are the peanut butter. It is important to note that in streams lacking in LWD, whether removed by humans or simply not present because stream banks are not forested, leaves that enter the stream tend to flush through the system much more rapidly than in those with LWD. Without these collection nooks that LWD provides, the aquatic insect shredders present in the stream tend to be less numerous and diverse. Of course, all these shredders and grazers are an important food source for trout and other fish.

As mentioned above, streams can be lacking in LWD and this will negatively affect stream health. When this is the case, LWD can actually be put back into a stream. Photo #2 shows an example of this. On this stretch of stream, formerly pasture, woody debris in the form of “root wads” has been placed along a previously eroding bank. Root wads are tree trunks from 12 to 24 inches in diameter with the root mass still attached (on the project pictured they were salvaged from land being cleared for development). Placement of these root wads has helped to restore the ecosystem functions that LWD provides, habitat for fish, stream bank



# Recycle!

## Local Recycling Information

### Durham Township Recycling Center

Location: Municipal Building, 218 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, plastic, aluminum and cardboard.

Please note that this facility is available to all, not just  
Durham Township residents!

Contact Joe Kulick at the township building for more info.  
610-346-8911

### Springfield Township

Location: Township Building, 2320 Township Road

Paper 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: 10 AM to 5 PM,  
Saturday 9 AM to 5 PM, Sunday 11AM to 4 PM

Accepting glass, cans, plastics, newspapers, all books,  
magazines, catalogs, cardboard, mixed office paper, met-  
als, 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 ser-  
vices for businesses and private individuals. If you  
have 4 or more boxes, call 610-865-7082 to schedule  
an appointment.

Hours of Shredding: Weekdays: 10 AM to 2:30 PM,  
Saturday: 9 AM to 2 PM

### City of Bethlehem Compost Center

Location: 1480 Schoenersville Rd., Bethlehem

Non-Bethlehem residents are not allowed to drop off  
materials at the composting center but the mulch and  
compost is available for free to anyone if loading ser-  
vices are not needed. They actually produce much  
more than what they can distribute, so they encourage  
anyone to take as much as they would like! Loading  
services are provided for a fee of \$10/cubic yard in  
the spring and fall. Call 610-856-7082 for hours.



# Schedules of Local Government Meetings

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

**Supervisors:** 2nd Tuesday @ 7:30 PM  
**Planning Commission:** 1st Wed. @ 7 PM  
**Supervisors/Planning Commission**  
 Work Session: 3rd Thurs. @ 7 PM  
**Environmental Advisory Council:**  
 2nd Thurs. @ 7:30 PM  
**Historic Commission:**  
 3rd Tuesday @ 7:30 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:** Quarterly on the 3rd Tuesday of  
 January, April, July, October @ 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:**  
 3rd Thurs. @ 7 PM  
**EAC:** 1st 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:**  
 3rd Mon. @ 7 PM

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

**Supervisors:** 2nd and 4th Mon. @ 7 PM  
**Planning Commission:** 3rd Tues. @ 7 PM  
**Preservation Board:** 2nd Thurs. @ 7 PM



## WIP Notes...

### *Palms Watershed Integration Program*

The WIP students had a great year and learned a lot about our local environment.

The selection process for next year has been completed, so look for the exciting things going on next year in the Palisades Middle School WIP Program!



*WIP students at Haycock Run*

## Please Join Us... Cooks Creek Watershed Association-Membership Form

All of us who reside in the area enjoy the beauty of Cooks Creek.

Those of us who are fortunate enough to live here are dependent upon this watershed not only for the beauty of the creek but our wells, the wetlands, the wildflowers and all of the beautiful landscapes in our townships.

It's up to all of us to protect this treasure. The Cooks Creek Watershed Association asks that you become a member and help in the task of protecting this special resource.

Name: \_\_\_\_\_

Other household members: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_ E-mail: \_\_\_\_\_

Please send me CCWA e-news and alerts   
 CCWA does not share your e-mail address with any other organization.

**Interests: (circle)**

Newsletter	Website	Roadside Cleanup	Event Planning
Membership	Fundraising	Stream Studies	Wherever I'm Needed

Individual Membership Fee: \$ 15.00 per year \_\_\_\_\_

Family Membership Fee: \$ 25.00 per year \_\_\_\_\_

Student Membership Fee: \$ 10.00 per year \_\_\_\_\_

Donation: \_\_\_\_\_

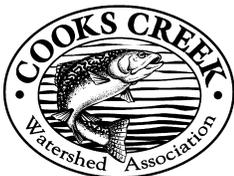
Total: \_\_\_\_\_

Please detach and mail to Cooks Creek Watershed Association , (CCWA)

P.O. Box 45, Springtown, PA 18081. **THANK YOU!**

*Checks can be made payable to Cooks Creek Watershed Association.*

*CCWA is a 501 ( c ) (3) non-profit organization.*



Cooks Creek Watershed Association  
 P.O. Box 45  
 Springtown, PA 18081  
[www.cooks creekpa.org](http://www.cooks creekpa.org)

NON-PROFIT ORG.  
 STANDARD MAIL  
 DURHAM, PA 18039  
 PERMIT NO. 6

If you hold precious the beauty that surrounds us in the Cooks Creek Watershed area and would like to be actively involved in its preservation, then consider joining our association as a member. Reach out to your community! We would love to hear from you! Please drop us a line at [info@cooks creekpa.org](mailto:info@cooks creekpa.org)

*CCWA is a 501 ( c ) (3) non-profit organization.*