

Cooks Current

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

Volume 3, Issue 1

Newsletter of the Cooks Creek Watershed Association

Winter 2006

2006 CCWA Events

- *Regular Board Meetings: Springtown Fire House 7:30 PM*
Mar 23, Apr 27,
May 25, Jun 22, Jul 27, Aug 24,
Sept 28, Oct 26, Nov 16, Dec 21.
All are welcome! We appreciate your involvement!
- *April 1 (no kidding) Spring Cleanup*
- *April 22 Annual Meeting*
- *June 17 Mini Monster Mayhem*
- *October 14 Fall Fellowship Dinner*
- *November 4 Fall Cleanup*

We're on the web!
www.cooks creekpa.org

Become
a member!

See Page 9 for details

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

Board Members:

President:
W. Scott Douglas

Treasurer:
Margaret McDonald

Membership Chair:
Sherry Brodhead

Recording Secretary:
Jim Orben

Lois Oleksa

Hans Reimann

Stephen Smith, MD

Layout & Graphic Design:
Karyn Oleksa
Lois Oleksa

From Across the Board...



Photo by: Adam Oleksa

Spring will be coming early this year, with one of the mildest winters I've experienced in a long time. Thankfully the water table is up, despite the lack of snow. I will soon be resuming the mapping of headwater streams; hopefully the new map will be ready in time to coincide with the new Zoning Ordinance in Springfield Township. If the proposed language passes, new protective buffers for even the smallest streams will be in place, ensuring that the water quality in Cooks Creek stays worthy of Exceptional Value status. If you are interested in having me map the headwaters in your neighborhood, please drop

me a line at info@cooks creekpa.org. The first weekend in April marks our third annual Watershed-wide cleanup. I am thinking positively about the weather so that you'll all come out to help (and eat up the chili!). Please mark your calendars and tell your friends. This year our plan includes tackling the much neglected Richlandtown Pike. CCWA has been working closely with the Gallows Run Watershed Association to develop a Regional Environmental Advisory Council. Read more about that effort inside. The *ad hoc* committee evaluating the Springtown Water System is proceeding well, with a final decision expected some-

time before our next newsletter. Given the efforts of numerous CCWA members and other concerned citizens, I am convinced that the right decision will be made. Also regarding Springfield, the Sourcewater Protection Plan for Springfield has been finalized and approved by both Springfield and Lower Saucon. You can view the plan, and CCWA's role in implementing it, on our website: www.cooks creekpa.org.

Yours in Stewardship,

W. Scott Douglas, President

A Word from your Membership Chair

by Sherry Brodhead

Our January 2006 membership drive was a huge success!

Here is a great big

THANK YOU

to all of you who expressed support to The Cooks Creek Watershed Association through your generous donations and new and renewed memberships. We are particularly grateful to those that utilized the opportunity to sign on as lifetime members and to our wonderful sponsors with their generous offer of gift certificates for this membership drive. Our gratitude goes to The Springtown Inn, The Ferndale Inn, Vera's Country Café, Indigo Gardens, and to Mary A. Shafer, author

of Devastation on the Delaware: Stories and Images of the Deadly Flood of 1955, for their contribution in making this our most successful membership drive to date! With the expansion of our membership base comes the opportunity to apply for more funding and grants, which will enable us to expand and continue our conservation projects in our neighborhoods in Springfield and Durham Townships.



Durham Township Family Preserves Three Significant Properties in Cooks Creek Watershed

By: Jeffrey Marshall, Vice President of Resource Protection, Heritage Conservancy
Reprint of a news release by Heritage Conservancy

Doylestown, PA. – On December 21, 2006, Heritage Conservancy signed agreements with Clarice DeLimantour and her two sons, Julio and Jose, placing conservation easements on their three contiguous properties in Durham Township.

The Limantours' 57 acres include 23 acres owned by Mrs. DeLimantour and 16.42 acres owned by each son. The conservation agreement will permanently protect 45 total acres of the family lands.

Situated adjacent to several properties that have already been conserved, the Limantour properties are bordered to the south by the Cooks Creek and to the north by the Durham Union Cemetery. The preservation of the Limantour properties, in tandem with other contiguous pre-

served properties, will create an area of over 784 acres of permanently protected open space in Durham Township.

The three-property project was funded by the Bucks County Natural Areas Program, which contributed \$217, 422; the Department of Conservation and Natural Resources, which contributed \$67,000; and Heritage Conservancy, which contributed \$128, 680.

All of these organizations consider the properties environmentally significant due to their location in the Cooks Creek Watershed. The County's Natural Areas Program has designated the properties a priority I area for protection. The PA Department of Environmental Protection has designated Cooks Creek, which

borders Mrs. DeLimantour's property, an Exceptional Value stream that supports birds, reptiles and amphibians native to the area, and includes the only coldwater fishery in Bucks County, providing habitat for a naturally reproducing brown trout population.

Jeffrey Marshall, Heritage Conservancy's Vice President of Resource Protection who supervised the project, stated, "This project has been rewarding on many levels. On a land conservation level it accomplishes several goals. The conservation easement protects land along the Cooks Creek, an exceptional value stream, and serves as a linkage between two large collections of preserved properties. Contiguous open space is almost always more important than isolated pockets of preservation."

Bio-heating Oil Has Arrived in Upper Bucks

By Sherry Brodhead

The response to my article in the last issue of *Cooks Current* has been very encouraging. More households in our area have signed up as members of The Energy Cooperative enabling them to receive bio-heating oil delivered through The Good Fuels Co. This kind of heating oil, also called bio-fuel, contains between 20% and 50% renewable fuel made from recycled vegetable oil. No conversion is needed to your current oil furnace to use this heating oil so it is an easy and economical switch. Price per gallon is currently \$2.27 for the season, and for every customer that you refer, you can have \$ 0.10 deducted per gallon! If you missed the article in our previous newsletter and would like more information feel free to call me, Sherry Brodhead at 610-346-8484, or call The Energy Cooperative at 215-413-2122 (www.theenergy.coop)

Feel good about doing your part to improve the quality of our air and to protect our fossil fuels!

We just had to take this picture of The Good Fuels truck when it came to deliver our oil for the first time.....The first pretty oil delivery truck that I have ever

seen!! I hope to see it around the neighborhood more frequently!

Photo by Bill Brodhead



How Will Alternative Fuels Work for Us?

By Jim Orben

Anyone who has watched the Torino Winter Olympics has probably seen General Motors advertising its flexible fuel vehicles. These cars and trucks will operate on either regular gasoline or the new home grown fuel, E85 ethanol. It turns out that other U.S. auto manufacturers produce flexible fuel cars and trucks too. The problem is that here in the East, E85 ethanol is not available because gasoline is our locally produced fuel. E85 ethanol burns cleaner and is nearly carbon neutral.

The carbon that burns within the engine is part of our modern carbon cycle and not fossil carbon being returned to the atmosphere after millions of years below ground. As

more vehicles become E85 ready perhaps it will become available across the country making a significant inroad into the amount of oil we import and use. To help this along, Illinois has eliminated its sales tax on E85 ethanol, making it cost less than regular gas.

As we discovered in the last newsletter, biodiesel is a viable, if hard to find, home grown fuel for the few of us who have cars and trucks that burn No. 2 fuel oil. It has been proven that biodiesel used at only ten percent of the fuel mix improves emissions and the operation of the motor. (At one hundred percent, it makes the vehicle exhaust smell like popcorn or French fries).

Sometimes an end run is needed for suc-

cess, while other times a bold step forward is what it takes. Here, it's appropriate to point to Honda's efforts as it prepares to introduce its natural gas Honda Civic GX to new car showrooms later this year. The GX has proven itself a worthy fleet vehicle over the past five years, and now Honda is taking the step of marketing this alternative fuel vehicle to consumers with a twist. Available with the Civic GX is a home refueling unit called "Phill," a fueling appliance priced under \$2,000 that allows a GX owner to conveniently refuel his vehicle overnight at home.

While this refueling method may work for natural gas vehicles since many homes have natural gas service, not all alternative fuels are this convenient. Infrastructure

(Continued on page 4)

CCWA and GRWA Team up for the Region

by W. Scott Douglas

The CCWA and the Gallows Run Watershed Association recently initiated an effort to form a Regional Environmental Advisory Council. GRWA President Todd Stone and CCWA President Scott Douglas, inspired by the regional interest shown regarding the Springtown Water System controversy, capitalized on the heightened awareness to hold exploratory meetings with Supervisors and EACs from Springfield, Durham, Nockamixon, Lower Saucon and Tinicum. The first meeting was held in December and was attended by about 20 people from across the region. It was decided at that meeting that CCWA and GRWA should take the lead in holding regular

meetings on topics of regional interest. In January, a meeting was held to discuss the Highlands Conservation Act. John Meade of the Heritage Conservancy, a member of the PA Steering Committee on the Highlands Act, agreed to tell us what he could about the Act. The Highlands is a geographic region that stretches from the Reading Prong to northwest Connecticut and includes the water supply for much of the greater NY metropolitan region. It also includes a large chunk of the unspoiled recreational and wilderness land left on the eastern seaboard. Unfortunately, although Congress passed the Act recently, the Bush Administration failed to provide any funding for open space acquisitions in this critical region. The

group grilled John for an hour on what the region might gain from the Act, and despite some disappointment, everyone felt that the meeting had been a success. The group agreed to continue to meet on topics of regional interest on a quarterly basis, with the CCWA and GRWA continuing to take the lead on the meetings. The next meeting is tentatively scheduled for April on the subject of groundwater protection.



How Will Alternative Fuels Work for Us?

(Continued from page 3)

development remains a critical component in making alternative fuel vehicles a long-term success.

Hydrogen used as a fuel to power automobiles is the subject of much controversy. Last year, President Bush made this technology a main plank in his alternative fuels policy. While there are no commercially available hydrogen powered vehicles, the U.S. Department of Energy is running tests to gauge the viability of hydrogen as a fuel for motor vehi-

cles. Hydrogen is also being tested in a twenty percent mixture with compressed natural gas to see if it improves the performance of the natural gas powered engine. There is ongoing research into electric powered vehicles using hydrogen fuel cells as the source of electricity to turn a motor.

Most of these fuels have potential and some even show promise in the long run. Here in the short run it seems that the answer to the fuel availability problem lies with us, the fuel users. I hate to say it

because it sounds so 70's, but I do believe it's true. Our best and most readily available source of energy is conservation. If what we have now lasts longer because we use less of it, some of these alternatives may have time to become the new energy and power for our future.

Pennsylvania's Ethanol Fuel Incentive Program

For more information or to download an application, visit the DEP's website at www.depweb.state.pa.us, Keyword "alternative fuels," or contact: Cleo Arp, Grant Officer, carp@state.pa.us, 717-772-8912

Local Government Meetings

Springfield Township:

610-346-6700
(www.springfieldbucks.org)
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

Durham Township:

610-346-8911
215 Old Furnace Road
Supervisors: 2nd Tuesday @ 7:30 PM
Planning Commission: 1st Tues @ 7:30 PM
EAC: 3rd Tuesday @ 7:30 PM

Lower Saucon:

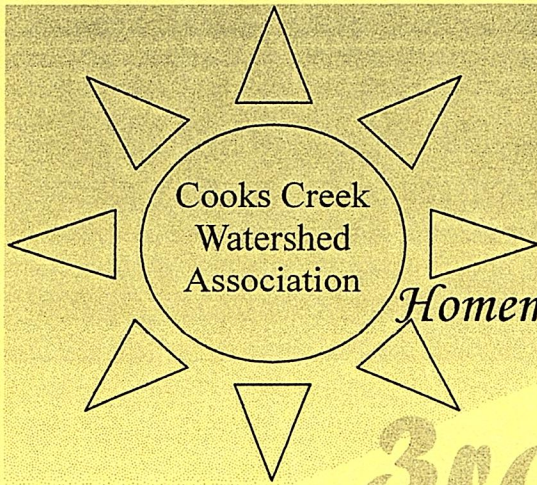
610-865-3291
3700 Old Philadelphia Pike
Council: 1st and 3rd Wed. @ 7 PM PM
Planning Commission: 2nd Mon @ 7 PM
EAC: 1st Tues @ 7 PM

Williams Township:

610-258-6060
(www.williamstwp.org)
655 Cider Press Road
Supervisors: 2nd Tues @ 7 PM
Planning Commission: 3rd Wed @ 7 PM
Land Preservation Board: 3rd Mon @ 7 PM

Richland Township:

215-536-4066
1328 California Road
Supervisors: 2nd and 4th Mon @ 7 PM
Planning Commission: 3rd Tues @ 7 PM



**From 9 to 4 Saturday, April 1, 2006
Meet at the Springtown Firehouse
For Coffee, Donuts, and Supplies**

Homemade Chili Lunch provided for all workers!

3rd Annual Watershed Green-Up Day

*For more information, to pick a roadway and to
register yourself or your group, contact Scott Douglas
at 610-346-1604*

We will be giving away door prizes again this year! Come and get 'em!

Supporting Organizations (so far):

Springfield Township EAC,
Springfield Historic Commission,
Durham Historical Society,
Durham Township EAC,
Springtown Lutheran Church,
Springtown Fire Company,
PennDOT,
Heritage Conservancy,
Boy Scout Troop 27,
Kids for Kindness/SADD, PEAT,
Willey Aqua Farm....you?

Last minute volunteers welcome;
just come to the Springtown Fire
Company!

Get outside in the spring sunshine with
your friends, help clean up our
neighborhood roadways, and
protect our watershed all at the same time!

Avian Influenza

Stephen H. Smith, M.D.

Twice in my life, field fires were started by a match in my hand; once in a state of youthful pyromania, and once later in life by a similarly ill-considered act. The more one studies influenza, the more it becomes analogous to a brush fire, or in the case of a pandemic, a raging forest fire.

Influenza is endemic in the USA and around the world; it is always present in some form and with some prevalence. Although generally felt to be little more than a nuisance illness, it is responsible for roughly 36,000 deaths annually in the US. It is a highly contagious respiratory illness, transmitted by aerosolized droplets from sneezing and coughing, and from hand to mouth, nose, or eye contact. The generally mild nature of the endemic form of influenza is a result of our acquired partial immunity to the virus.

Avian, or bird flu, is a special case; something very different. Whereas influenza in humans is a respiratory illness, influenza in birds is a different disease in birds, affecting only the gastrointestinal tract. Persons in close contact with fowl have some chance of contracting avian flu directly from a domestic flock, but will not transmit it to other humans; that is to say, it is not contagious. It is, nevertheless, lethal, because humans have no immunity to an avian influenza virus.

Avian flu can jump to pigs and from pigs to humans, but in doing so loses much of its virulence (lethal effect). However the passage through swine to humans can make it contagious, giving it the power to cause an epidemic, or in the worst-case scenario, a pandemic.

Viruses mutate at various rates and the mutations can make them more lethal or less lethal and more or less contagious. A phenomenon known as genetic drift can cause an increase or decrease in the level of contagiousness and lethality of a given virus, much like the way the wall of flames in a brush fire reacts to a gust of wind, or a higher or

lower density of combustible material. Genetic shift, however, causes a more radical change in the biology of a virus and can mark the start or end of an epidemic. It can be the match that is dropped into tinder.

The event most feared in bird flu is something called genetic re-assortment. This occurs when a person, most likely a farm worker, already has a highly contagious, endemic human type influenza in his body and, at the same time, becomes infected with an avian influenza virus. This has the potential to make the highly deadly, but ordinarily non-contagious avian virus into a very contagious hybrid virus. This is the great concern, and the reason why millions of chickens and other domestic fowl are routinely, albeit with great economic loss, killed, when found to be infected with an avian flu virus. There is a definite risk of re-assortment of the genetic material when humans are in contact with an infected flock and if this were to occur it would be like a wild fire in a windy canyon, full of dry brush and mature trees. It would be difficult, perhaps impossible, to control. (Influenza viruses are little more than bits of RNA, which, when present by the trillions in an infected organism, are bound to mutate to either a more or less dangerous form.)

Current immunization for flu is effective, both in preventing individual cases, lessening the severity of a given case, and in preventing epidemics. Flu shots do not, despite rumors to the contrary, ever cause flu. The problem facing the CDC (Center for Communicable Diseases) is anticipating the type of influenza virus most likely to cause the next wave of disease. To make the process more effective, killed viruses of several of the most likely suspects are used (therefore, called polyvalent). In the case of an explosive pandemic, a worldwide tsunami of severe illness and death caused by the emergence of a new, highly contagious (from genetic re-assortment) and highly lethal virus (humans have no resistance to avian

flu), the challenge of control through immunization and quarantine would be immense. In the 1990's, one strain of influenza virus was so virulent that it killed the eggs in which the virus was being incubated for vaccine production. Vaccine production using eggs is labor intensive and time consuming, as one egg produces only one dose of vaccine. One of the most promising developments is the possibility of growing influenza virus in a caterpillar cell culture. This has the potential for producing a more highly effective vaccine, much more quickly, and in the massive quantities needed for epidemic control.

The H1N1 influenza virus caused the 1918 influenza pandemic. (H for hemagglutinin, and N for neuraminidase, two properties of the virus affecting its virulence and antigenicity). It was a catastrophe of historic proportions and a model for what teams of scientists are working to prevent. One virus we read about today is H5N1 and this needs to be monitored very carefully. New influenza viruses will emerge with time and old ones will "burn out" as human immunity to them increases. One lesson from the 1918 pandemic is that planning, globally, nationally, and at the community level, is of paramount importance. There are, of course, not only public health issues, but political issues as well.



See page 6: Biosecurity for the Birds

BIOSECURITY FOR THE BIRDS

Avian Influenza

Avian Influenza (AI) or "bird flu" is a contagious disease that can infect all types of birds.

Know the Signs of AI

- Sudden death without clinical signs
- Lack of energy and appetite
- Decreased egg production and/or soft-shelled or misshapen eggs
- Swelling of the head, eyelids, comb, wattles, and hocks
- Purple discoloration of the wattles, combs, and legs
- Nasal discharge, coughing, sneezing
- Incoordination
- Diarrhea

How AI Spreads

AI spreads quickly by bird-to-bird contact. Viruses can be carried by manure, equipment, vehicles, egg flats, crates, clothing, shoes, and people who have come in contact with the virus. Migratory waterfowl can also carry the disease.

Practice Backyard Biosecurity

To prevent the possible spread of disease:

- Restrict traffic onto and off your property.
- Disinfect shoes, clothes, hands, egg trays or flats, crates, vehicles, and tires.
- Avoid visiting other poultry farms or bird owners.

Smart Practices When Buying Birds

Buy from a reputable dealer; request certification from suppliers that birds were legally imported; maintain records of all sales and shipments of flocks; keep new birds separated from your flock for at least 30 days; keep young and old birds and birds of different species and from different sources apart.

Report Sick Birds at 1-866-536-7593.

If your birds are sick or dying, call your local cooperative extension service, your local veterinarian, the State Veterinarian's office, or the U.S. Department of Agriculture's (USDA) Veterinary Services toll-free at **1-866-536-7593** to find out why.

You are the best protection your birds have.

United States Department of Agriculture
Animal and Plant Health Inspection Service
Program Aid No. 1767 • Issued June 2004
USDA is an equal opportunity provider and employer.

Book Review

By W. Scott Douglas

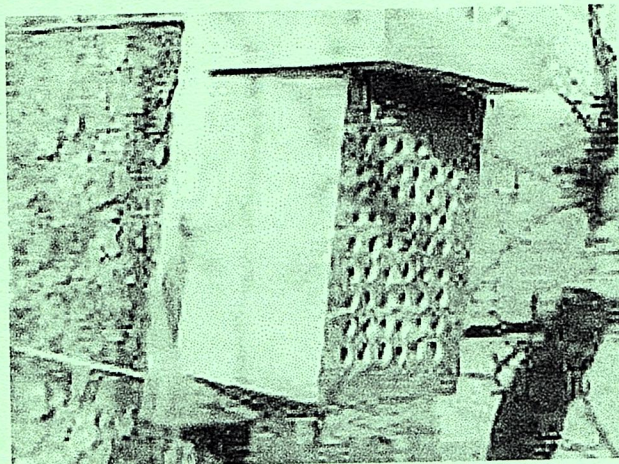
The Ghost with Trembling Wings
by Scott Weidensaul, published by North
Point Press, New York, NY, 2002.

This book is for anyone who has spent hours chasing a flitting bird with binoculars through a thorn filled thicket just for the ability to place a check mark next to a name on a list. In a style reminiscent of John McPhee, Weidensaul has assembled a series of essays on rare, endangered and extinct species and those who search for them. The author recounts his experiences in backcountry, from Africa to the Caribbean, searching out animals that may or may not exist. His excitement over the hunt and sense of personal loss for extinct species is conveyed in an easy, eloquent style that makes the book read more like an adventure novel than a treatise on natural resources. I was just as fascinated by his discussion of the real-life Jurassic Park efforts to use genetic engineering to bring back extinct species from museum samples as I was by the drama of trying to get the last black-footed ferrets to breed in captivity. His straightforward discussions of extinct and possibly extinct species such as the Eastern Cougar or the Tasmanian Tiger remind us all that it really wasn't that long ago when folks were paid by the government to exterminate. Weidensaul points out that almost as soon as these animals disappeared, we idealized them as mascots and symbols, reminiscent of suburban developments being named for the resource that was destroyed when they were built. If you are someone who strives to protect resources BEFORE they become mere symbols, even at the risk of being labeled a radical, you will like this book.

Author Scott Weidensaul has a brand new book out: Return to Wild America.

Children's Backyard: Solitary Bee Wooden Nesting Block

By Lois Oleksa



1) To make a nesting block, take a piece of old, untreated wood (4 X 4's are ideal). Drill many horizontal holes into the block, as deep as your drill can go without penetrating the opposite side since the bees need a closed end to start their nest. A drill press works great. Hole centers are spaced at least ½ an inch apart. (They can be placed randomly.) Drill holes as smooth as possible, a "brad-point bit" leaves a nice smooth hole. Holes should be ¼" to 5/16" in diameter. Clean all sawdust out of the holes. Fix the block 2-6' above the ground in the sunniest spot of your garden, facing the morning sun, and under some cover to protect it from the rain. A source of water is necessary so the bees have access to mud.

2) Put the nesting block up in March before the bees begin nesting and remove it in early to mid summer when nesting is complete. Store in an unheated garage or shed. The following spring, put the nests back out in the yard or where you had them before. Watch for signs of emergence. To reuse the nesting blocks, the holes need to be cleaned out.

3) In order to study the nests, transparent plastic or glass tubes can be placed in the drilled holes and removed for observation. Nests lined with straws, bamboo, reeds, or small wood nests can be split open after the nest is complete to see what's inside. Once a bee starts to use the nest, don't try to move it. These insects memorize their surroundings and would not be able to find their way back to the nest if it has been moved.

Alternative Nesting Block-

Take a plant with a hollow stem, such as bamboo or teasel, and cut the stems into 6" to 8" lengths. Be careful to cut the stems close to the stem node to create a tube with one end open and the other closed. Take 15-20 stem pieces of a variety of internal diameters and tie them into bundles with the closed ends of the stems together. Fix the bundle to a stake, fence, or a tree with the stems horizontal to the ground.

Solitary Bees

By Lois Oleksa

Most bees do not live in hives with queens, workers, and drones; most bees are not social; most bees do not store honey; most bees rarely sting. Most bees, 85%, are solitary. What does this mean?

Solitary bees live out their lives as single bees, making single nest cells, rather than working with many other bees to raise huge numbers of offspring in shared nests. All solitary bee females reproduce. These bees are solitary yet they nest close together, forming aggregations.

There are many species of solitary bees, yet they have common traits: they are naturally active at the time a crop blooms, stay within a small area, can reproduce on a diet of nectar and pollen from the crop, and are ideal candidates for management as pollinators to augment our rapidly declining honey bees.

Pollination is important in orchards as it increases the number and size of the fruit. They are resistant to parasites and diseases of honeybees, are gentle, easy to manage, and cannot breed with Africanized bees. Solitary bees and honeybees do not compete with each other in the orchard since they have different foraging patterns.

There are about 3,500 native species of solitary bees in the U.S.A. *Osmia lignaria* is a solitary bee, commonly called a blue orchard mason bee. This bee is currently being used to pollinate tree fruit and almonds in the western U.S. They are present here in the east, although, they are not abundant. The humid east coast is not favorable to them. The hornfaced bee, *Osmia cornifrons*, was the first bee to be used on a large commercial scale to pollinate crops. It thrives in the humid east coast. Japanese

apple growers managed them 50 years ago, and they were introduced first into Utah where they did not thrive, and later into Maryland where the climate resembles central Japan.

The hornfaced bee has a "fuzzy" appearance and is named for prominent horn-like prongs on the lower part of the face. The hornfaced bee may be a suitable alternative to the blue orchard mason bee in Pennsylvania.

Solitary bees are active in early spring even when the weather is cold and wet. Males emerge first, females a few days later. Both males and females visit flowers. Males are just as efficient at pollination as female honeybees. Females collect pollen and carry it on the lower surface of their abdomens in contrast to honeybees, which carry pollen on their legs. When the females are

(Continued on page 8)

Highlighting this quarter's INVASIVE PLANT: Invasive plant warning list and native plant sale list

By: Hans O. Reimann Jr., The View from Laughing Springs

Listed below are the plants sold in our free market nursery trade that are listed on both state and federal publications recognizing the invasive nature of these species. These plants are dangerous to local native biodiversity since they crowd out our own backyard niches. Please note that scientific names are in parenthesis.

1. Princess Tree (*Paulownia tomentosa*) Sold as: Royal Empress
2. Butterfly Bush (*Buddleia davidii*)
3. Ivy (*Hedera helix*) Sold as: Sub Zero Ivy
4. Privet Hedge (*Ligustrum*)
5. Creeping Euonymus (*Euonymus fortunei*) Sold as: Purple Winter Creeper
6. Crown-vetch
7. Norway Maple (*Acer platanoides*)
8. Winged Burning Bush (*Euonymus alatus*)
9. Honeysuckle (*Lonicera tatarica*) Sold as: Pink Honeysuckle
10. Barberry (*Berberis thunbergii*) Sold as: Red Leaf Barberry
11. Knotweed (*Polygonum*) Sold as: Silver Lace Vine
12. Periwinkle (*Vinca minor*)
13. Russian Olive (*Elaeagnus*)

The following list shows examples of native plants that nursery companies sell. These plants represent good choices for consumers and our local environment. These are plants that adapt well to our local climates and require little care once established. The scientific names are in parenthesis.

1. Purple Coneflower
2. Black-eyed Susan (*Rudbeckia*)
3. Creeping Phlox (*Phlox subulata*)
4. Blazing Star (*Liatriis spicata*)
5. Monarda
6. Sugar Maple (*Acer saccharum*)
7. Red Maple (*Acer rubrus*)
8. River Birch (*Betula nigra*)
9. Trumpet Vine (*Campsis radicans*)
10. Rhododendrons
11. Hemlock (*Tsuga canadensis*)
12. Butterfly Plant (*Asclepias tuberosa*)
13. Native Day Lilies (*Heimerocallis fulva*)
14. Gaillardia
15. American Hazelnut
16. Black Walnut
17. Butternut tree
18. White Pine
19. Red Oak (*Quercus rubra*)
20. Pin Oak
21. American Linden
22. American Bittersweet

23. Sassafras
24. Red Twig Dogwood (*Cornus*)
25. Flowering Dogwood
26. Sweet Shrub, Carolina Allspice
27. Garden Phlox (*Phlox paniculata*)
28. Wood Poppy
29. Virginia Bluebells
30. Trillium
31. Meadowsweet
32. Lady Fern
33. Cinnamon Fern
34. Maiden Hair Fern
35. Jack-in-the-Pulpit
36. Dutchman's Breeches
37. Mountain Laurel
38. Black Gum

I was pleasantly surprised to find that nursery companies, whether mail order or internet order, are actually increasing their varieties of native plants. This is due in large part to increasing consumer demand for these plants. You the consumer can help sustain this trend and promote a healthy biodiversity for us all. As I have stated in previous articles, only a limited number of "bad" plants are promoted by the nursery industry. So, when talking and dreaming about spring planting with family and friends, think native and ask questions as to plant origins. As an informed consumer you can be a powerful catalyst for positive change in the nursery trade marketplace. Thank you and think spring.

Solitary Bees

(Continued from page 7)

ready to lay their eggs, they collect pollen and place it into a hole, then collect and regurgitate nectar, which is placed on the pollen. The sticky nectar holds the egg, which is laid. After the egg has been laid, the female collects mud, and builds a wall between the filled cell and what will be the next cell. Finally, she caps off the hole with mud. One to two cells can be made per day when the solitary female bee is young. As she gets older, her wings wear out and she dies.

The eggs will develop into larvae, which consume the pollen ball. Next, a cocoon is spun and pupation begins. Later, the pupae turn into adult bees. These adults will remain in their cells until the following spring.

Providing nesting sites for the native pollinators residing in the area is important. The first approach is to provide habitat. Bees that nest in holes in wood would benefit from brush piles. Planting a diversity of fruit trees with staggered blooms will maximize the variety of solitary bees available for pollination. Ornamental varieties of fruit trees

are of interest, as well as the ornamental shrub *Pieris japonica*. Other plants, such as raspberries, blackberries, and strawberries are good choices. Mustards flowering in fields attract many solitary bees.

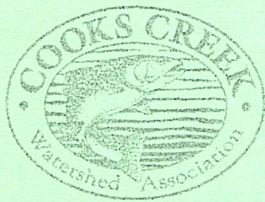
It is interesting to observe them from man-made nesting materials. Try making the wooden nesting bee box. See these great websites: sources of information, supplies, and bees for managing solitary bees. www.pollinator.com, www.loganbeelab.usu.edu, www.Pollinatorparadise.com, www.xerces.org, and www.papertubes.com.

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: _____

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 _____

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.

Be sure to list info@cooks creekpa.org as a favorite in your e-mail account if you wish to receive last minute updates. CCWA does not share your e-mail address with any other organization.

John Eakin Farm Tile

The Springfield Township Historical Commission is offering the John Eakin Farm as the first in a series of tiles. This 2006 limited edition tile is hand-crafted by local artist Erika Bonner. Tiles are available for a minimum donation of \$35 towards continued historic preservation within Springfield Township. The John Eakin Farm, historically known as Kooker's Tavern, was built in three sections between 1738-1773, and is located at the east end of Springtown. Tiles are 4" x 6". For additional information, please contact Karen Freeh at (610) 346-6948.





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

Cooks Creek Watershed Association
P.O. Box 45
Springtown, PA 18081
www.cooks creekpa.org

At both of the public meetings on the water system, the Springtown Fire Company opened up their meeting hall for all of us to participate (not to mention they host our CCWA Board meetings every month). At both meetings Fire Chief Robert Cressman presented his plan for emergency address markers at every home in Springfield, and throughout the Fire Company's service area. The signs are reflective green and have the numerical street address on them. Perhaps you have seen them sprouting up around Springtown? These markers allow emergency services (Fire, Ambulance, Police) to find your home quickly in the dark of night.

Allow emergency services (Fire, Ambulance, Police) to find your home quickly in the dark of night!



Obtain a sign by calling the Fire Company at 610-346-8383 or stop by the Firehouse. Signs are \$10 each, to cover the cost of the sign.

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 as a board member. The Cooks Creek Watershed Association currently has vacancies for the addition of 2 more members to the board. Reach out to your community! We would love to hear from you! Please drop us a line at info@cooks creekpa.org or **Scott Douglas @ 610-346-1604**

CCWA is a 501 (c) (3) non-profit organization. Fully Tax Deductible.