[the sylvanian]

spring 2017

Pennsylvania Chapter Sierra Club • pennsylvania.sierraclub.org

What history has taught us

How the current political climate affects:

- Environmental Protections
- Pollution
- Coal regulation
- Diversity



explore, enjoy and protect the planet.

[from the editors]

meeting the threat

With the environment under fire from the Donald Trump administration, we in the movement cannot throw our hands in the air and give up. We must recall that we have been here before. President Ronald Reagan was not a friend to the environment nor was Governor Tom Corbett.

We need to remember that when the environment is under threat and people realize that the government is not going to protect their air, water and land groups like the Sierra Club grow in numbers and therefore grow in power. We must welcome our new members and be ready to include them in our mission.

We have learned is that companies will only do what they have to do by law. Without regulation, they will dump whatever they are allowed into our air, our water and on our land. They will drill and build pipelines wherever they please.

Pollution is not only an environmental issue; it is a public health problem. **People** in Pennsylvania have died from air pollution.

Extraction industries are here today and gone tomorrow. Some of the most polluting industries lead to the boom and bust economic swings that rural Pennsylvania has experience for hundreds of years. And too often the busts include leaving an environmental mess to clean up.

When people are personally affected by an environmental problem, they will organize to meet the threat.





Wendi Taylor



Phil Coleman

DO YOU HAVE SOMETHING ON YOUR MIND?



Consider this your invitation to say it on our blog. Yes, the Sierra Club Chapter has a blog that allows our members to share their thoughts, ideas and peeves with the rest of us on Sierra Keystone Conversations.

THE PROCESS IS SIMPLE.

Submit your blog to: Chantal.Mulenga@sierraclub.org

Or, of course, you can just be a regular reader. Find it at: http://sierraclubpa.blogspot.com/

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This publication is dedicated to serving the Sierra Club Pennsylvania membership, and is a forum for internal policy discussion and debate among those truly concerned with protecting the environment. Opinions expressed herein are the personal opinions of their authors and may or may not reflect Sierra Club policy.

Contributor deadlines are June 15 (Summer issue), September 15 (Fall issue), and December 15 (Winter issue), March 15 (Spring issue). Anonymous contributions are not accepted.

SIERRA CLUB MISSION STATEMENT: To explore, enjoy and protect the wild places of the earth; To practice and promote the responsible use of the earth's ecosystems and resources; To educate and enlist humanity to protect and restore the quality of the natural and human environment; and To use all lawful means to carry out these objectives.

The Sierra Club seeks to become a fully realized multicultural organization and is working to make the systemic changes required to welcome, respect, support, and value any individual or group to fully participate. [the sylvanian]

[what history has taught us]

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[on the cover]

In this issue, we discuss how our past can impact how we deal with the present threats to our environment. [what history has taught us] is an important reminder of what is at stake.

To send photos by email: wendi.taylor@verizon.net or pcoleman19@tampabay.rr.com

To mail photos: Sylvanian, Sierra Club - PA Chapter, PO Box 606, Harrisburg, PA 17108

next deadline: June 15

Send articles & photographs to: wendi.taylor@verizon.net or pcoleman19@tampabay.rr.com

chapter directory

Due to space restrictions, the Chapter Directory was not included in this issue. To view the directory, go to: http://pennsylvanian.sierraclub.org and select "Volunteer Resources." The password is: VolunteersRule

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[a message from the chapter]

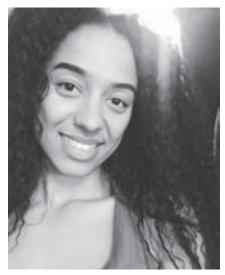
meet Chantal Mulenga

am new to the crew, just hitting my I sixth month mark shortly after this issue is published. As the Pennsylvania Chapter's new administrative assistant and proud tricenarian-veganista, I am eager to earn my stripes within the club. I have always been drawn to places that help make a way for others. I have helped immigrants and refugees work their way through layers of government forms, providing a sense of reassurance and peace through the process. I have served as a teacher guide for large groups of exchange students during their first stay in a foreign land. I've even taken students from nervous spectators to performing their own routines in competition, as a ballroom dance instructor.

I bring my own flavor to this job. While I am searching to discover my ways to best contribute to the Club's effort, I couldn't ask for a more supportive and nurturing group. Most of the people I work with have been active for years in many of the issues the Sierra Club faces. I'm soaking up as much knowledge as I can.

Anything I want to understand, I need exposure to it. For me, there was a disconnect between the environment and people. I still don't have all the answers, but at least now, I am getting the exposure.

Through my colleagues and all the amazing volunteers that make up the Sierra Club, I'm given a voice on issues that affect me, my family, community



Chantal Mulenga, administrative assistant and proud tricenarian-veganista.

and the environment that sustains all of us. People here are fighting for things that matter and I get to be a part of that in my own way.

answers to crossword puzzle BERLAN (from page 24) |W|A|TAcross ΜU L E N G A Cumberland Down Ε 0 0 Malkin Watt R Dave Bonta 0 Mulenga KN W L Т ANGER Thornbloom D В Anger Outdoors O CHMI D Knowlton 10 Smog O М 0 12 Trail 10 Schmidt 0 POOLS 13 EPA 11 Pools D W A R 13 Edwards 14 Nemacolin NEMACO

Sierra Club PA's Annual Outing Hickory Run State Park, Friday July 28 - Sunday July 3

Join us at Hickory Run State Park for an exciting weekend of camping, hiking, swimming, exploring, and enjoying the weekend of July 28 - 30.

The PA Chapter's team of volunteer leaders has planned a fun, welcoming weekend of events and we can't wait to meet you there!

Families and individuals of all ages and abilities are invited to take part in this celebration of the outdoors and all the natural beauty Penn's Woods has to offer.

We will be swimming, hiking, and strategizing at Camp Daddy Allen, a cabin camp located within the park. Come try out disc golf and orienteering. Join in a midnight hike with owls. Participate in a service opportunity to address Acid Mine Drainage and see the incredible remediation efforts of our Lehigh Valley group.

Do some climbing around the Boulder Field. Meet and Greet with Sierra Club members working on projects including: Ready for 100, Inspiring Connections Outdoors (ICO), running for office, exploring public lands, and Sierra Club Military Outdoors.

Leave with new skills and great memories, Become part of a dedicated community working to **Explore, Enjoy, and Protect Pennsylvania.**

Annual Chapter Outing Registration:

Date and Time:

Fri, Jul 28, 2017 3:00 PM (Local Time) - Sun, Jul 30, 2017 12:00 PM

Organized By: Pennsylvania Chapter

Location: PA-534, Jim Thorpe, PA 18229, USA

Open to:

Any supporter of Sierra Club's work - membership encouraged but not required.

Accommodations:

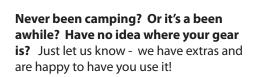
Camp Daddy Allen, a 'rustic' cabin camp located within the park. Cabins accommodate 2-4 people. There are bed frames but no mattresses. Participants should plan on providing their own sleeping gear, cooking equipment, and food.

Event Organizer:

Amy Kwasnicki | kwaszilla@gmail.com

Registration:

https://sierra.secure.force.com/events/details?formcampaignid=701310000 01DsfyAAC





[explore enjoy...pennsylvania]

tanbark trail – museum of monoliths

by Gray Thornbloom

Large rocks -- museum of monoliths or threading the needle --any of those mentioned in a book, article or conversation is enough to move me into the forest in search of the promise of a special place. After speaking with Robert Fish, Allegheny National Forest Forestry Technician, I found myself hiking 6.25 miles on the Tanbark Trail in the Allegheny National Forest.

Beginning at the trailhead along the Allegheny River is a climb away from the river and road and entrance into the silence of the forest, with its towering trees, moss covered boulders, and cascading stream in the hollow. Towering hemlocks dominate the forest. There are also many deciduous trees including black cherry, red oak, beech, black birch and maple.

Many of these venerable giants provide habitat for wildlife. Cavity dwelling birds and mammals have plenty of options in this forest. Hemlock thickets too dense to walk through take advantage of the sunlight wherever dead and fallen trees have released them to thrive in the sun.

Water runs in the hollow down the slopes and across the trail. Moss covers rocks and boulders. Fallen moss covered boles lie spread across the forest floor.

As the terrain flattens, the trail stretches southeast for a gentle mile before turning southwest and dropping to Slater Run.

Slater Run is a beautiful little stream running over sand and stones. There is a nice campsite near the stream. We searched without success for an old trail that went up and along the ridge to the west and included an area marked rocks on one of my maps. (Rocks will be a bushwhack adventure for another day.)

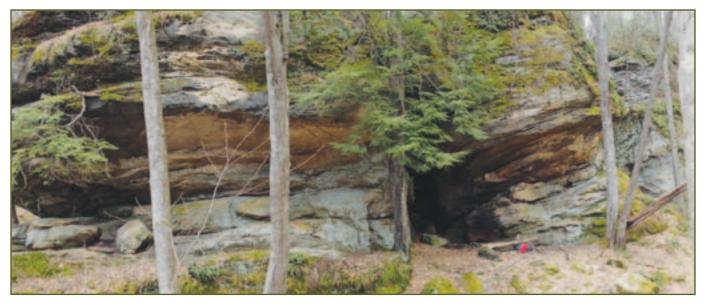
The grade remains gentle as the trail

approaches, and then crosses SR3005. Here, the forest is much younger. At this point we had hiked 3.1 miles. An informational sign on the far side of the road briefly explains how the Forest Service is

managing this area in response to the devastation caused by gypsy moths, one of the numerous pests introduced to this continent.

After an additional two miles of flat ter-





rain with thick patches of mountain laurel we began to see large rocks, and some crevasses back in the laurel. The trail passes a twisted mass of rock sandwiched between horizontal layers. A black birch grows next to the rock, briefly flattened, and then spread itself over the side of the rock. This is the beginning.

Moss covered rocks poke up out of the ground as we descended to a magical place in the forest where rocks give way to boulders, huge boulders — monoliths left lying a long time ago. Seeps and springs flow over the forest floor. But the boulders are what took my breathe away.

I settled in and contemplated the setting, and then explored intricate boulders with layering and weathering. Pathways go around, over, and through the boulders. There are crevices to crawl through. Small fern gardens. Tree roots flow from the top surface of the boulders and down the sides.

In early spring icicles extend from rough edges where water seeps out of the rock. Rock, water, moss, and time, lots of time, went into what is there today. Overhanging rocks offer shelter from inclement weather and offer a place to meditate, explore, have lunch, hangout ... and enjoy this place.

As we continued on the Tanbark Trail, we looked back at the rocks, savored the moment, and looked forward to return-

ing. As we departed, we walked along a rock wall covered in moss that glowed emerald green in the late afternoon light.

Soon we were on a small bridge that crosses East Hickory Creek. The trail continues past the stream and approaches more rocks.

As we worked our way toward the rocks, we again encountered rocks and moss. We threaded the needle as we climbed up and through this section of rock. Emerging from the final corridor of rock we saw a nice view that looks over the mountain valley that drops into the Hickory Creek Wilderness.

We were almost to the trailhead along SR 2002, where we left a shuttle vehicle.

There are special places, scenic and his-

torical, throughout Pennsylvania's Public Lands. It is worth the effort to take the time to visit these places. Some are nooks and crannies known primarily to local people. Some are more widely known. All of them are there for us to enjoy and to explore. The Tanbark Trail is one of these special places.

Directions: from Ridgway follow PA-948 N; continue on PA-666 and turn left onto Austin Hill Rd (SR2002). Continue on SR2002 to just past Hearts Content Recreation Site; leave a shuttle vehicle on the left in the parking area for the Hickory Creek Wilderness Trail. This is the end point for this hike.

Continue with a second vehicle north on SR2002 for 3.7 miles; turn left onto SR2005 (also called Sandstone Springs and Route 337); continue 1.9 miles and turn right onto Cobham Hill Road for 2.5 miles; turn right onto US 62. Continue about 2.5 miles; parking for the Tanbark Trailhead is on the left; the sign for the trailhead is on the right, parallel to the highway and very easy to miss.



[coleman's lantern]

a world apart

by Phil Coleman

told a woman form Downingtown that I was from Pittsburgh, and she said, "We're a continent apart." Maybe she's right. Well, half right. Look at geography. Eastern rivers flow to the Atlantic. Western rivers flow to the Gulf.

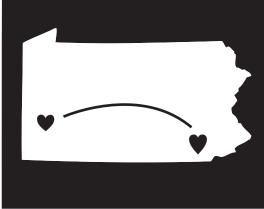
Historically, things look slightly different. Early easterners went to extremes to create a canal with locks that would carry freight and people over the ridges to Pittsburgh, but really only so they could go farther west. And the "Cumberland Road," connecting the east to the Monongahela, first traced by George Washington, was the first federally funded road. It was soon called the "National Road," and as it crossed the Monongahela it steered clear of Pittsburgh, aiming instead for St. Louis.

In people terms, eastern Pennsylvania was settled by western
Europeans and in the nineteenth century became a manufacturing center.
Western Pennsylvania later attracted eastern Europeans to coal mines and

steel mills, to do the dirty work English and French despised.

So east and west are worlds apart.

But the ridge system that separates us also holds vestiges of what Pennsylvania used to be. William Penn called the state Sylvania, but industrious farmers and timbermen cleared



much of the land. If it was suitable for agriculture, it stayed cleared, but the ridges recovered with second and third growth forests. The forests and rivers of this area hold the flora and fauna that have survived/recovered from the extensive timber operations of the nineteenth century.

That isn't to say they are not in danger of further abuse. The most obvious problem today is fracking. The state has endured tree cutting, then oil

wells, then coal mining, and steel mills. Each activity has proven to be boom followed by bust. People find short term economic prosperity – jobs – followed by decline as the industry moves on. Fracking follows the same pattern. Gas production will last for a few years (fewer than the industry projects). The gas will flow away. The profits will flow with it. What remains will be fouled water, abandoned wells, loss of jobs and little prospect of recovery.

I just hope our forests and streams survive, providing what's left of our wildlife heritage a haven our grandchildren can enjoy.

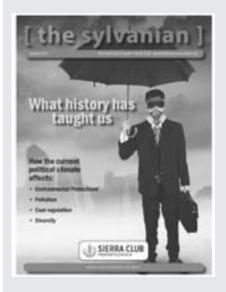
I thank the following old and somewhat old timers for reaching out in response to my Coleman's Lantern in the Winter issue:

Len Finegold, Marilyn Jordan, Michael Horgan, Jessica Krow, Polly Riddle, Stan and Darlene Smith, John Hargreaves, Marty Joyce, Richard Pratt for responding to my contact request. It was good – no great! – to hear from you and about your involvement in the Club. Two of you have been members longer than I have. All of you have done good work. And its nice that you took the time to write.

[what history has taught us]

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introduction: what history has taught us

In this issue of *The Sylvanian*, we are going to consider what the members of the Sierra Club have learned from working on environmental issues in Pennsylvania. Our state has had a long history of industries extracting our resources – oil, timber, coal, and natural gas. Pennsylvanians living in small towns across the state know about the cycle of boom and bust and how the wealth leaves when the resources are gone.

We know that industries will not curb their pollution, clean up their waste, or prevent harm from their operations unless they are required to by laws and regulations. And then we need government agencies big and powerful enough to enforce them.

Yet, we hear some lawmakers, governors and the President talk about what great citizens corporations are. They are the job creators and generate competition. In truth, corporations are created for one reason: to make a profit. (See note.)

The board of directors of a corporation have the fiduciary responsibility to maximize profits for the owners of the corporation – the stockholders. If the benefit of cleaning up their pollution

is not more than the cost of the clean up, a corporation will not voluntarily do it because it would violate the corporation's fiduciary responsibility to maximize its profits.

Currently, we have conservative elected officials that want to neuter the federal Environmental Protection Agency and eliminate the many environmental laws that protect public health. Most conservatives believe in limited government and that laws are meant to protect the freedom of one person to live as he or she chooses, as long as that person's freedom does not impact someone else's freedom. However, when the two interests intersect, there ought to be a law.

Nowhere is it more obvious that we need laws concerning air and water pollution. Why should a company be allowed to foul the air that others in the community must breathe or pollute the water that others must drink? That certainly impacts another person's freedom.

Note: There are a few corporations that have adopted triple bottom line principles, in which the board of directors can consider the interests of people and the planet, as well as profits.

Just In

Two townships that drafted local constitutions prohibiting fracking have been sued by the Department of Environmental Resources and told they must permit fracking companies to drill within their borders. Imagine that: the state whose constitution says DEP is "to protect Pennsylvania's air, land and water from pollution and to provide for the health and safety of its citizens" finds itself protecting the rights of two corporations, both of which have been cited several times for environmental violations.

And we can't blame this on Trump.

[what history has taught us]

we've been here before an extremist, anti-environmental president

By Jeff Schmidt

or many environmentalists, the election of Donald Trump is a real life nightmare. For some of us, there is a feeling of Déjà vu. The 1980 election of Ronald Reagan, a mediocre movie star and Governor of California, set the stage for major battles between an uncompromising anti-environmental president and environmental organizations like Sierra Club.

Reagan, who said that trees cause more pollution than people, appointed controversial cabinet secretaries, such as Interior's James Watt, who wasted no time in rolling back environmental protections and turning federal public lands over to the oil, gas and mining industries. And as Administrator of the EPA, Ann Gorsuch presided over numerous scandals, most notably the federal Superfund program, where some agency political appointees such as Rita Lavelle ended up in jail. If the name Gorsuch sounds familiar, it is because Ann Gorsuch's son Neil Gorsuch is Donald Trump's nominee to replace Antonin Scalia on the US Supreme Court. We can't make this stuff up!

Sierra Club took the lead in opposing Reagan's anti-environmental policies. They made Interior's James Watt the "poster boy for bad behavior", and started a petition drive to "Dump Watt". Sierra Club publicized Watt's outrageous actions, and rallied the public against Reagan's policies. In a savvy organizing move, the Dump Watt petition included a check-off for people who wanted to learn more about Sierra Club. Of the more than 1 million people who signed the petition, over 100,000 of them checked off the Sierra Club box. Of those, 90 percent joined Sierra Club. In two years, Sierra Club's national membership swelled from 180,000 to 360,000. In Pennsylvania, our membership grew from 5,000 to 10,000 in those two years. That increase in members in Pennsylvania actually gave the Sierra Club Pennsylvania Chapter the resources we needed to open a lobbying office in Harrisburg.



Wyona Coleman and Jeff Schmidt travelled to Washington DC to add the volunteers in *Pennsylvania Sierra Club's* 80,000 signatures to the Dump Watt petition.

Sierra Club Pennsylvania,

as around the country, eagerly circulated the Dump Watt petition. Our outings leaders talked about Watt's policies during hikes, and people signed. We had booths at street fairs and people signed. People who attended our meetings eagerly signed, and asked for petitions to circulate on their own. Petitions were inserted into our newsletters and got circulated.

I was one of two Sierra Club volunteer leaders who traveled to Washington to deliver our 80,000 signatures to Congress. Wyona Coleman, our Chapter Chair and I (Chapter Conservation Chair) added our petitions to the 1 million from around the country, placed in a large wheelbarrow on the steps of the US Capitol. It was the largest petition drive in the US to date, and generated enormous momentum for us. Both Democratic as well as a handful of Republican lawmakers joined us on the

steps to receive the petitions, on behalf of Congress. Sierra Club used that momentum in the 1982 mid-term election following Reagan's election, resulting in the defeat of a number of many GOP anti-environmental representatives and senators. That, in turn, helped create the bipartisan efforts in Congress to call for Watt's resignation and resistance to Reagan's policies. And it served to take the wind out of the sails of Reagan's rollback of environmental protections.

So we've been here before. Now is the time to organize for the coming battles. New members are once again flocking to Sierra Club and contributions are flowing in. We need all our members and supporters to help us build our capacity to resist Trump's policies, as well as prepare for the all-important mid-term elections of 2018. This is no time to be a spectator. Contact the Sierra Club PA Chapter office to find out how to get involved.

[special report]

appealing to more people

By Sue Edwards, Chapter Diversity Chair

n order to solve the climate crisis, protect our air and water, and prevent corporate greed from destroying our communities and special places, we need to build a stronger movement that appeals to and is accessible to more people with different backgrounds. We are learning more deeply that one cannot have environmental justice without social and economic justice.

An important conversation has been going on within Sierra Club around diversity: whether we should dispense with the word diversity in favor of equity, inclusion, and justice; what makes these principles essential to our mission; and what they require of us.

The thinking I've heard about changing our terminology is that achieving "diversity" is all too simple. Getting someone in the room who has a different skin color or ethnic background, different sexual orientation, different economic class or other difference from the current white middle class heterosexual majority means, for some within the Sierra Club, that we can check off that box and get on with our work of protecting the environment.

But we must go deeper and look at the ways we do (or don't) seek fairness in how we work, whether our organizational culture is (or isn't) welcoming to people from a variety of backgrounds or to people with different ideas about how to organize and care for the environment, and much more. It means we learn to "hang out" with and respect people we haven't in the past perhaps, and we pay attention to and educate others about the disparate effects of energy production and pollution. It also means reading about and discussing white privilege, the history of institutional racism, and

We can only move at the speed of trust. With the election of a President who embraced white supremacists during his campaign and hasn't disavowed their views, that trust has been badly damaged nationally.

whatever else is needed in order to thoughtfully reach out and partner with others.

Leslie Fields, Sierra Club's Director of Environmental Justice and Community Partnerships, put it this way: We can only move at the speed of trust. With the election of a President who embraced white supremacists during his campaign and hasn't disavowed their views, that trust has been badly damaged nationally. It has been further eroded by the President's pledge to build a wall to keep Mexicans out and his efforts to prevent immigration from some predominantly Muslim countries. The widespread public

responses to the very visible police killings of African American men have yet to yield very tangible changes in policing, and the legacy of Jim Crow in the over-incarceration of Black men means our efforts will be seen in these contexts.

Attempts in a number of states to restrict voting rights is part of the same pattern. If we're not fully aware of the

impact of these assaults in communities of color and are not speaking out about them, I don't think we'll succeed in building strong relationships to fight the battles that must be fought to stop the installation of yet more polluting industries and power plants in frontline neighborhoods and to prevail in the other struggles we need to take on together.

I hope we will all continue to talk about these issues, not sweep them under the rug. Look at them in your part of the state and bring up what our efforts must mean in your region.

[what history has taught us]

coal and the economy – boom and bust

by Phil Coleman

When outlaw Josie Wales enters a former silver mining town, he asks what happened.

"The silver left. The money left. Then we ran out of whiskey. Then the people left," he is told.

The experience of former coal towns is different in one regard. They don't run out of whiskey. But once the coal is gone, the money goes with it. There are no longer plentiful jobs. The able bodied workers leave.

Nemacolin, PA, is a fairly old example. Once a thriving coal town with a good grade school, police and fire protection, and a company store, and plentiful housing, it seemed to be stable with plentiful good jobs. After aggressive union organizing this town was an example of what thriving community would look like without total control from the company but still could not protect from mining out the resource. The company produced over a million tons of coal a year. But inevitably the coal played out. The company opened other mines elsewhere. Families who had purchased their homes found that the value was drastically reduced. They could stay but travel to iobs elsewhere, they could sell at a loss, or they could rent a low prices. The town has hung on as a town, but population has declined, the school has closed, and municipal services have been cut back. The company store is no longer a company store, but some still owe more than they can easily repay.

To add to the Nemacolin's problems, there is just north of town a mountain of coal waste, a slag heap with subterranean hot spots smoldering.



The company which was a pretty good boss and landlord while the mine produced, is now gone. It has left with no sense of responsibility for what it has left behind. The slag heap adds to the Monongahela river's pollution. A few decades ago, the state sued the company and for a modest price took over the job of treating the heap's effluent. The treatment almost works in fair weather, but heavy rain events overwhelm the settling ponds.

This is a pattern throughout southwestern Pennsylvania (with additional examples throughout the state). Things are good while the mine prospers, though the stability managed by a union is no longer there. The mines are not union mines. Once the coal is gone, the mine leaves, the people can also leave. The job of dealing with what is left becomes an obligation of the state.

Our taxes must support any cleanup efforts. Our taxes must pay for any social services those left behind require. We all live with the damage left behind.

pollution is a public health issue

by Wendi Taylor

The sign on the Donora Smog Museum in the small mill town of Donora, Pennsylvania, says: "Clean air started here." Between October 27 and October 31, 1948 the world was put on notice that air pollution can be deadly. Foul air killed 20 people in Donora and sickened about 6,000 more of the town's residents. By the end of November 1948, another 50 people died of respiratory ailments from the air that was polluted by the Donora Zinc

Works' American Steel and Wire Company, located on the Monongahela River in Washington County.

Sixty-eight years later, the incident in Donora is still considered one of the nation's greatest environmental disasters and considered by many the spark that touched off the environmental protection movement.

In the 1940's, the folks who lived and worked in Donora had gotten used to the haze of pollution that often hung over the area, which was home to about 14,000 people. Residents believed that the air pollution was the price they had to pay to have jobs.

As Halloween approached in 1948, a temperature inversion trapped the smoke from the zinc and steel mills over the town. As time went on, the air became so thick with smoke and the air was so filled with sulfur dioxide that people could not see even a few feet ahead of them.

Still, people did not understand that

the dangerous levels of pollution had begun to choke the life out of them. As more and more people reported to hospital emergency rooms, borough officials advised people with asthma and known breathing problems to leave town. Then, people were told to stay indoors until the fog passed.

Hoping to bring some relief to those that were having a hard time breathing, firefighters took oxygen door to door until doctors realized it was too

Foul air <u>killed 20 people</u> in Donora and <u>sickened about 6,000</u> more of the town's residents. By the end of November 1948, <u>another 50 people died...</u>

dangerous for the fighters to be out. By Saturday afternoon, October 29, 11 people had died.

National radio broadcaster Walter Winchell described the air pollution as a "killer fog." Even as people were dying, the company waited until Sunday, October 30, to shut down the Zinc Works. Later that day, the weather changed and it finally rained. This change helped to flush the pollution from the air.

Once the fog dissipated, the PA Department of Health and US Public Health Service, the United Steelworkers Union and the Donora Borough Council began their investigations into the incident and documented the health impacts of air pollution.

As a result of the disaster in Donora, air pollution was suddenly considered a public health issue, rather than a minor environmental concern. The City of Pittsburgh frequently experienced daytime darkness from the smoke being spewed from the many steel mills located along the river. Allegheny County proposed passing a countywide air pollution ordinance, which businesses and industry argued against enacting. They claimed that air pol-

lution laws would make consumers have to pay more to heat their homes. Even so, the ordinance enjoyed widespread support from the public and it was made law in 1949. (In the end, the net cost of heat was about the same as before the ordinance, due

to the improved efficiency of cleanburning furnaces.)

It took until 1955, for Congress to pass the Air Pollution Control Act, which gave states and local governments the responsibility to control air pollution. Eight years later, in 1963, Congress passed the federal Clean Air Act, which gave the federal government a role in enforcing the act. During the debate the events at Donora were frequently highlighted to remind people that air pollution can kill.

Maybe all of our lawmakers need to take a trip to Donora to visit the museum at 6th and McKean streets. For more information, visit its Web site: www.donorasmog.com/

Vernal Pools

by Bill Hamilton

S pring brings great changes to the woods of Pennsylvania. The vegetation resurges, animal life quickens, and there is the smell, the feel, and taste of water (from snow melt and spring rains) everywhere. Most of this water drains or evaporates out of our area quickly, but a small part lingers in saucer and trough shaped depressions cut off from the gravity pull of streams.

These transiently wet areas have many names including "woodland pools," "fishless ponds," and "salamander ponds." The preferred classifications for these temporary wetlands, though, are "vernal pools."

Vernal pools are small, shallow bodies of water with fluctuating water levels. Typically, these pools attain their maximum depths in the spring and their minimum depths in the summer. Many of these pools completely dry up especially in drought years or in years of meager snow fall. A vernal pool must stay flooded for two or three continuous months, so it is, indeed, something more than just a rain puddle.

Vernal pools have no inflows or outflows. They exist as isolated basins in the midst of their woodland ecosystems. This disconnection to streams and the possibility

of drying out generates a critical ecological feature of these pools: they do not have fish. This distinctive absence generates an aquatic habitat especially conducive to the development of a wide variety of amphibians whose eggs and especially whose immature life stages might be readily eaten by many fish species.

The types and densities of trees around a vernal pool affect its characteristics. A pool encircled by a continuous canopy of mature trees is highly shaded, and this shading reduces the rate of evaporation from the pool and, thus, extends its seasonal existence. Shading also keeps the water in the pool cool and greatly facilitates the development of amphibian eggs and larvae. Further, the autumnal influx of tree leaves into the pool or into its dry basin provides nutrients for algae (fueling a dynamic, pond food web) and also food for a wide variety of decomposer invertebrates.

Since leaves represent the primary source of a vernal pool community's nutrients, the amount of leaf materials and their chemical and physical characteristics affects the composition of the vernal pool community. Leaves rich in tannins (like locust or walnut leaflets) or leaves that are particularly tough and resistant to decomposition (like beech or oak leaves) will generate very different vernal pool communities than leaves rich in sugars (like maple leaves) or that have more easily degraded physical structures (like alder or ash leaves).

Vernal pools are rich nodes of biotic activity. They are comparable in terms of both biodiversity and ecological func-

tions to estuaries of ocean ecosystems. The richness and species composition, though, varies greatly from pool to pool reflecting the serendipitous nature of pool colonization and the significance of edaphic variables on the pool's overall habitat quality.

Animals found in vernal pools include many species found in almost any aquatic habitat and also many species that require the specific "fishless" environment of the vernal pool. Crustaceans (like water fleas and fairy shrimp), true flies (mosquitoes, midges, crane flies, deer flies, horse flies etc), caddis flies, water bugs, water beetles, dragonflies, damselflies, and mayflies are a broad list of likely insects. Water mites, snails, annelids (leeches and oligochaetes), and other invertebrates may also be abundant. Vertebrates may include salamanders, frogs, turtles, and snakes. Aquatic birds and visiting mammals (like raccoons, possum, skunks, squirrels, and deer) may also interact with the pool. Their footprints and sign are frequently seen in the wet soils around the receding edges of the pools.

Hamilton's articles can be seen at: (The Ecologist's Notebook, http://sites.psu.edu/ecologistsnotebook/



[letter to the editor]

Dear Wendy and Phil,

I would expect, yet another, deer bashing article in my local suburban paper but not in a Sierra Club publication! This completely editorial musing is not even labeled as such and is placed along side fact based articles. The article calls for a totally arbitrary 50% reduction in the deer population with no justification except they like to eat and feed on Phil's rhododendron (which I would venture to guess is not even a native plant). The people population in PA is 278 per square mile. Does Phil suggest cutting that in half? If the deer population is reduced by that amount hunters would have less the half the number of deer to shoot. Are you proposing to reduce deer hunting in PA by half?

According to Penn DOTs Pennsylvania Crash Facts and Statistics, 2014, there were a total of 121,317 reportable vehicle crashes in PA of which only 3,487 (2.9%) were with deer. Drivers were twice as likely to hit trees (8,974) than deer. Should we cut down half the trees in Pennsylva-

Deer are a huge wild life success story and opportunity to creatively build on and I would expect the Sierra Club to take a leading role. Please, no more anti-wildlife rants.

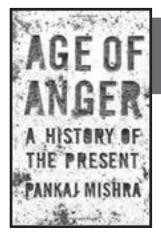
Thank you,

Mike Mays

From the editor: I want to thank Mike Mays, whose letter is above. When you disagree, its important for all of us to hear what you have to say.

Phil

[book review]



Age of Anger: A History of the Present by Pankaj Mishra Farrar, Straus and Giroux, New York, 2016 Reviewed by Phil Coleman

Age of Anger is a disturbing new book which ranges far and wide

to examine inequalities in the world. It finds that the growing awareness of inequality is a major cause of unrest, violence and revolution.

I want to look at one aspect of what Pankaj Mishra has to say, and to urge that more people read his book.

Mishra touches on mimetic desire at several key points. This is a psychological argument/concept that suggests that all desire emanates from copying what others do, from desiring to do what others are doing. He suggests that growing worldwide awareness of how other people live has greatly increased mimetic desire.

Let me begin by using my own experiences as an example. I spent my formative years in Alpine, Texas, a town of 5,000 citizens evenly divided between whites and Hispanics. Whites lived on the north side of the tracks, Mexican Americans on the south side. The grade school was segregated, but the high school was integrated. Mexican Americans and a handful of whites attended the Catholic Church, which was on the south side of the tracks. The standard assortment of protestant churches were on the north side, attended exclusively by whites. There were two Boy Scout troops, one Mexican, one white. We existed as separate communities, peacefully and not overly aware of inequalities. I was certainly aware that Mexicans were

"different," but I had no sense of social injustice. These "Mexicans" were by and large or entirely United States citizens, but I suspect that they had some vague general awareness that they were better off than their counterparts who lived south of the border.

In 1943, I got a job delivering special delivery letters on my bicycle, frequently to addresses south of the tracks. It was only then that I became aware that Mexican houses were smaller and more crowded than houses north of the tracks. It was then that I discovered that some of them had dirt floors. It was also only then that, when I delivered a letter to the Catholic Church and was let in to the kitchen, I discovered that Catholic priests drank wine, apparently in abundance. (In the Presbyterian Church, communion was celebrated with grape juice. No one admitted drinking any form of alcohol.)

But I wonder what a Mexican kid would have thought if he had seen the spaciousness of my house. Would he have been more aware of inequality if he had seen details of our differences?

Here's the problem as Mishra sees it: With cell phones available worldwide, with Internet available, as well as video, music and movies, everyone now has the ability to see inequalities everywhere. Forget about what kids across town might know. Kids in poor African countries can know us in detail. And everyone can have mimetic desire and want better than what he/she has. African Americans in Pittsburgh's hill district know how the rich and very rich live. They know that they don't even measure up to the comfortable, much less the rich. And mimetic desire leads them to act in ways

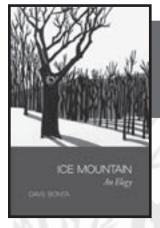
that would give them what they are missing. But kids in Iraq also know of these same disparities.

Those of us who are advantaged know that minorities in the United States are better off than they were 50 or 150 years ago. That is history. But the disadvantaged don't care about history. They know how things are right now. The abundance of Internet information, especially the pictorial evidence of our situation, plays on our mimetic desire. I resent billionaires; the poor resent those who don't owe money (people like me).

But this is not a local problem. Mishra details abuses of power and resulting suffering worldwide. His extensive study covers problems I've never heard of in countries I've barely heard of. The study is thoroughly annotated.

Mishra insists he is writing history. Historians describe events and situations, but since they are writing history, they are exempt from proposing solutions. An historian cannot undo slavery. Mishra does not solve the present age of anger. But he describes it in a convincing and disturbing way.

[book review]



Ice Mountain by Dave Bonta (Illustrations, Design and Editing by Elizabeth Adams) Farrar, Straus and Giroux, New York, 2016 Reviewed by Phil Coleman

In this morning's Peanuts strip, Snoopy despairs over

the strain of being the Head Beagle. He disappears, and his friends worry about him. But in the fourth panel, we see Snoopy being consoled by Peppermint Patty.

In his introduction to Ice Mountain, Dave Bonta compares his poetry to Peanuts, the tendency of Charles Schultz's comics to pose a dark picture in the first three panels, only to provide relief in the fourth panel. Dave's poems are each three three-line stanzas—no fourth panel.

These poems, tracking the calendar from January 22nd to May 10th, essentially grow out of what Dave has experienced on his walk each morning.

The image might be

"the frozen carcass of a cow pecked at by chickadees."

Or it might be

"fresh holes gape in a maple where a pileated woodpecker has extracted sleeping grubs."

Or it might be (in late April)

"mayapples are coming up green parasols shedding soil as they open." As in any good poetry, the images are all important, and in these slight verses, images pour out at you. This book is so slight that you can read it in one sitting if all you want to do is get through it (or if you have to get through it in order to write a review). But it shouldn't be read that way. It should be read like Peanuts. The comic grabs you, or not, each morning. You can recall it and mull over it through the day. If you read

"above the trembling surface of a vernal pond the first warblers' buzzy songs,"

you have some images to think on as the day progresses.

Dave has been living somewhat alone for a couple of decades, much longer than Thoreau stayed at Walden, but like Thoreau, he has not been really alone. His Mother lives near enough for him to visit

and enjoy a good occasional meal, but more to the point, he converses through blogs, Facebook and email with a legion of sympathetic souls. He shares poetry with many of them. Dave was somewhat active in the Moshannon Group twenty years ago. He had a running disagreement with Club members and leaders who were enthusiastic about windmills. He was and is concerned about mills on ridges that are migratory pathways for birds. And he sees the emptiness created for mill fields. There is an undercurrent of the windmills theme in this book of poetry. It rises to the surface occasionally and resides subliminal throughout.

Each of you should get a copy of *Ice Mountain*, leaf though it on occasion, become acquainted with the three-stanza format, and join Dave on the poetry of his walks.

[chapter news]

harrisburg inspiring connections outdoors (HICO)

Harrisburg Inspiring Connections Outdoors (Harrisburg ICO) has been around for 21 years. It is one of only two ICO groups in Pennsylvania and 50 in the entire country. Harrisburg's group of 10 volunteers serves about 20 youth from the Harrisburg School District each month. This year, we have put the wheels in motion to double our volunteers, gear up our fundraising, and increase our outreach to forty youth per month.

ICO doesn't seem to be well known throughout Sierra Club general membership. It tends to be looked over in the fast paced political and issue oriented business of the club. But more members should be aware of it, not only for the tremendous changes one can see in the participants, but also for the benefits the program provides for the volunteers. The ICO program is truly a win/win. You get to do what you enjoy outdoors, while sharing it with willing participants hungry for new experiences and eager to learn

new skills. An ICO volunteer need not be skilled in every activity, or for that matter, any activity. Volunteers can learn right along with the participants, at the hands of our trained, skilled certified leaders.

Harrisburg ICO organizes a variety of monthly outings. A typical year will include hiking, canoe/kayaking, orienteering, bicycling, wildlife identification, as well as overnight trips. Sound like fun? It certainly is. Yes, there are some work and planning involved, but the rewards are life changing.

- The open-mouthed amazement frozen on the face of a kid when he sees the ocean for the first time.
- The aura of satisfaction and newfound confidence emanating from a participant who just completed a 22-mile bike ride around the Harrisburg Greenbelt that she was sure she would not be able to finish.

quisitive wonder in the eves of a young student studying a strange new critter pulled from the creek. The jumping up and down joyful celebration from the group

The in-



that just learned the little compass tool they were carrying really can lead them through the middle of the woods to the next orienteering site.

Tears well up when I read a thank you letter from a young girl about a simple hike to a lovely overlook, saying, "I've never had a better time in my life!"

How is all this possible? HICO has been lucky to accumulate quite an inventory of equipment over the years. We have tents, backpacks, sleeping bags, water shoes and cooking gear. This equipment ensures that we are ready to go on most outings. Transportation remains our biggest expenditure. Most outings require a rental van or bus. Food for the participants is HICO's second largest expense. Camping and activity fees can add up too.

Where does the funding come from? Generous donors have helped us along the way, but fundraising is a never ending task. As we continually search for new fundraising ideas and grants, we still rely on the generosity of individuals to support our outings. Tax-deductible donations to Harrisburg ICO can be made via The Sierra Club Foundation, a separate 501(c)3 entity. Direct donations are also wel-



come. Both can be made through the Donate page on the new Harrisburg ICO website created with a grant from Harrisburg's JumpStreet program managers.

The real backbone of Harrisburg ICO is the dedicated volunteers. Volunteers not only take joy in sharing the outdoors with participants and form lifelong friendships. I've met some of my closest friends in ICO. There are always a few dedicated people that take charge and organize a continuing stream of exciting outings. Two newer leaders, Michael Horgan and Cassy Amour, have stepped up with new ideas and tremendous energy to keep outings moving right along. Michael has created a HICO Volunteer Facebook page, secured a grant for the outstanding new HICO video (https:// vimeo.com/201541775) and worked with HICO Chair Debby Rudy to create

the new Harrisburg ICO website (www.HarrisburgICO.org). Cassy excels at meal planning, logistics, and serves as group secretary. With this renewed leadership energy, Harrisburg ICO plans to double in size to serve 40 youths on two outings per month.

Out of the five volunteers who started Harrisburg ICO in 1996, there is one member who has been volunteering for all 21 years. Debby Rudy has not only been leading and volunteering on trips, but has been taking on the tough behind-the-scenes jobs of chair, treasurer, certified training leader, and fundraisers. That's right, she did the paperwork that most of us abhor. She also organizes our year end December wreath-making outing at her family's Christmas tree farm.

One of Sierra Club's stated goals for

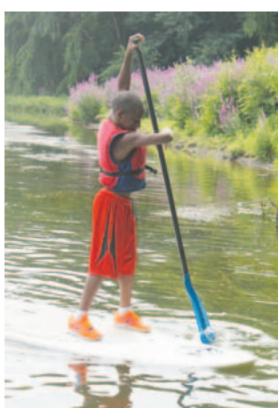
ICO is fostering new environmental advocates from children introduced to the outdoors. It was John Muir's assertion that people who experience wilderness firsthand are much more likely to preserve it for future generations. While Harrisburg ICO always includes environmental education on our outings, for me the outings are mostly about improving the lives of our ICO participants.

I remember a simple inner tube float down the Susquehanna back in 1996. We stopped at a gravel bar and began collecting little river creatures in a net. We were pointing out differences between larvae of mayfly, stonefly, and damsel fly-attempting to get across the food chain message and explain the connection of tiny animals to larger ones (i.e. human beings). I was beginning to think maybe it was looking too much like school, as kids became distracted by their new surroundings. Then a fisherman with a bass flopping at the end of his line turned all their attention away from the net. I figured we had lost them.

Oh well, it was lunch time anyway.

Later, we devised a quick game of baseball using tennis balls the kids had found and a stout stick for a bat. As I watched the kids enthusiastically playing river baseball, I heard a tiny voice calling behind me, "Mr. Pat, Mr. Pat." I turned around to see an inquisitive, future biologist pointing to a critter crawling across an upturned rock that she had just pulled from the river. "This one's a mayfly, right?" "That's exactly right, Cherelle, that's exactly right!"

Learn more about ways you can support the work of Harrisburg ICO at: www.HarrisburgICO.org





[author q&a]



Dead of Spring by Sherry Knowlton Available April 2017 Interviewed by Joan Kilgour

Sherry Knowlton, author of the Alexa Williams suspense novels, *Dead of Autumn* and *Dead*

of Summer and Dead of Spring (release April 22, 2017) was born and raised in Chambersburg, PA, where she developed a lifelong passion for books, and took on environmental issues while she was in college. She was active in the Pennsylvania Chapter back in its formative years. So it is not unusual that an environmental issue would crop up in one of her novels.

Dead of Spring, available in print or Kindle editions on Earth Day, April 22, 2017, Has an undercurrent of fracking. The novel will be available at Whistlestop Bookshop, Mystery Bookshop, and most other on-line retailers and bookstores including Sunbury Press, Amazon and Barnes and Noble.

Recently, Joan Kilgour talked to her about her writing. Here is her interview:

Q: What gave you the inspiration to make this upcoming novel in the Alexa Williams series deal with environmental issues?

When I was in college, I had a Sierra Club poster on the wall - one with mist-shrouded redwood trees and the Thoreau quote: In Wildness is the Preservation of the World. I've had a strong commitment to environmental issues ever since. In the late 1970's and early 1980's, I was very active in the Pennsylvania Chapter – served on the Executive Committee and edited the Chapter newsletter. Then, having a young child and a series of executive level positions in State government demanded all of my time, and I drifted away from active advocacy. But, the fight to preserve our planet and our wild spaces has always been one of my key concerns. In recent years, my husband and I have traveled to some of the far reaches of the world – and we've seen firsthand how climate change is affecting people, places and animals in those places. More locally, my work in Medicaid gave me a front row seat to Pennsylvania state budget battles - and the pivotal battle over a tax on fracking that dominated budget discussions for several years.

So, when thinking about the plot and theme for Dead of Spring, fracking and energy policy politics leapt immedi-

ately to mind. All my books include a historical subplot. As I thought about what this subplot could be for his new novel, I realized that there are a lot of parallels between the early days of nuclear energy in America and the wild abandon of the early days of the Marcellus Shale boom. Since I lived through the Three Mile Island crisis, I chose that as the focal point for the historical story.

Keeping in mind that I started researching and writing this book in late 2015, it's somewhat startling to realize how timely Dead of Spring's other theme -government corruption – has become. At the federal level, we've moved to a point where outsize influence by fossil fuel interests such as the Koch brothers almost seems quaint. Many key officials in this new Administration are the fossil fuel industry.

Q: Both nationwide, and in Pennsylvania, energy and the environment are controversial subjects - what role to you think fiction plays in the cultural dialogue surrounding these issues?

I believe that fiction can play a powerful role in educating people about issues such as energy and the environment – and exposing readers to ideas that they might be inclined to resist or dismiss in other forums. I think of it as stealth education. The main focus of Dead of Spring is suspense and mystery. I want to keep my readers on the edge of their seats as the plot unfolds. However, the backdrop for the entire story deals with fracking, the environment and the politics of energy, both current day and during the early days of nuclear energy. It's my hope that many readers will learn something new about fracking and energy policy and come to have a greater appreciation for the environment– at the same time they enjoy a good read.

In addition, humans have communicated through story since well before the written word was invented. I think many people relate to concepts more easily when they are presented in the context of a story. In recent years, television and movies have influenced popular opinion on a number of social issues. So, I'm convinced that contemporary fiction can play just as important a role in influencing the cultural dialogue on energy and the environment. If my suspense story leads even a handful of people to consider fracking and broader environmental issues in a more thoughtful way, that would be wonderful.

Q: How has your background working with state government and in the healthcare field shaped your perspective on the environmental problems we face in Pennsylvania today?

Most of my career has focused on the Medicaid program which provides health insurance to low income people as well as people with disabilities and those living in long term care. Certainly, some of the most prevalent diseases in the Medicaid population had an environmental connection: for example, asthma in children; an increase in heat-related illnesses as our summers have gotten warmer. But, the larger issues that impact environmental, healthcare and other important public policy are competition for limited government funding and a reluctance to ask corporations and citizens to pay even a modest increase in taxes. Compound that with the fact that the loudest voices heard in Harrisburg are business interests, not citizens. Of course, not all of that is the fault of business. A lot of Pennsylvanians simply don't engage with State or Federal government until something goes wrong in their own life. A pipeline is routed through their back yard. All the fish die in their favorite trout stream.

Everyone is busy. But, if more people routinely looked up from their own lives to appreciate the broader picture and engage, their collective voices could help balance the outsize influence of business and special interests. Hey, I know I'm preaching to the choir here. If you're a Sierra Club member, you're already looking at the broader environmental picture.

Q: Your novels feature a strong female protagonist - what message do you hope your female readers will take away from Alexa's story?

Alexa Williams is the protagonist of Dead of Spring and the preceding two books in the series. She's a young lawyer who has returned home to Southcentral Pennsylvania and joined her family's law practice after years at a big city law firm. She's looking for a more peaceful, less stressful life. She and her English mastiff live in a cabin near the Michaux State Forest. But peace keeps eluding Alexa. She's mostly an accidental heroine who keeps stumbling into dangerous situations, often as a result of crusading for a social or environmental cause.

Although there are a number of women protagonists in suspense novels, most of the lead characters in suspense and thriller series are men. I wanted Alexa to be a strong role model for women. Not because she's a cop or a CIA agent or a soldier. She's an ordinary young woman who is smart, articulate, emotionally-complex and a bit of a mess

when it comes to romance – but she finds the strength to fight – for a cause, for a friend, for her life, when necessary.

I'd like my female readers to hear the message that women can best protect themselves and make a difference when they recognize and develop their strengths.

Q: To write this novel, you invested a significant amount of time in researching the impacts from fracking and nuclear energy - what did you learn and what do you think the general public should know about these industries?

I thought I knew quite a bit about fracking. During my research for the book, I quickly realized that I had so much more to learn about the process and the impact on landowners and the environment. The most eye-opening moment came when I visited an old friend up in Tioga County who had leased his land to an energy company for fracking. He leased in the early days of fracking in Pennsylvania and was unaware of the problems he might encounter. He shared his experience by showing me his photographs of the process that transformed his property. A beautiful woodland that step by step by step turned into an acre of gravel and machinery. Pristine drinking water that now requires constant filtering just for showers and bathing. Battles with the energy company about compensation for various problems. And, then I saw the various steps of the fracking process both in research and on-site.

Based on my experience, I think it would be so enlightening for the general public – and all relevant government officials – to actually see fracking up close and personal. I understand that energy policy is not a black and white issue, like most public policy issues, it's complex. But, knowing more specifics about fracking might curb the current tendency to give short shrift to the near term impacts on individual families and the longer term impacts on the environment.

Q: If your readers could take one thing away from *Dead* of *Spring* - aside from the excitement of the story - what would you hope they continue to reflect on after finishing the novel?

One of the overarching themes of my work is the existence of evil – not the Biblical fire and brimstone type of evil, but the banal and destructive evil that often hides in familiar people and ideas. So, part of my message is always: be alert and aware.

But, I think the key thought that I'd like readers to take away from *Dead of Spring* is that individual (and collective) action

continued on page 23

The FDA, the supposed guard-

ian of consumers, doesn't do its

own research on the safety of the

products that we eat or use on our

bodies. It relies on the research

apply for FDA approval...

submitted by the companies that

[the gadfly]

very pure chemicals

by Mort Malkin

ver the winter, the more than 80,000 artificial chemicals in common use that have entered our environment, did not go into hibernation. They were still in the air we breathe, the water we drink, and the foods grown in the Southern Hemisphere. [For such accounting, Mexico is in the Southern Hemisphere.] Soon, the farmers in the US will start planting genetically engineered (GMO) seeds and spraying pesticides and herbicides like Roundup.

In a sneak attack, Monsatan (er, Monsanto) has slyly convinced

farmers, especially the industrial farms raising single crops, to plant GMO corn, GMO soy, GMO canola (still called rapeseed in Canada), GMO cotton, GMO sugar beets, and GMO alfalfa. In fact, over 90% of these crops that are grown in the US are genetically engineered to be resistant to chemicals in herbicides like Roundup and Friends, but to kill everything else – grasses, weeds, dandelions ... earthworms? bees? butterflies?

Monsanto and the other Big Biotechs have enlisted the help of rogue wordsmiths to find synonyms for those words of the trade

that might turn off fussy consumers. So far as I know, no poets have accepted their employment. Yet, they have come up with: bovine somatotropin (BST) to replace bovine growth hormone, genetic modification (GMO) for genetic engineering, and pure canola for rapeseed oil (packaged in plastic bottles, not glass).

The FDA, the supposed guardian of consumers, doesn't do its own research on the safety of the products that we eat or use on our bodies. It relies on the research submitted by the companies that apply for FDA approval – studies financed by the chemical giants who have been known to cut the funding of any research, before completion, that looks like it may demonstrate harm from GMO foods. Speak of the fox guarding the chicken coop.

Independent research, largely done in UK, Germany, Italy, Austria, and Australia, has indeed shown: severe inflammation of the stomach lining, tumor formation of the intestinal wall, interference with reproductive function, and suppression of the immune system — of mammals that are fed GMO food.

When a small experimental plot in California was found to contain GMO wheat, despite Monsanto's promises to the wheat

farmers of the mid-west, the substantial wheat exports to South Korea, Taiwan. and Japan were cancelled by these Asian countries

The fall-out extended to non-GMO produce. The apple growers of Washington State who use diphenylamine (DPA) to prevent the stored fruit from turning brown, are stuck with 400 million apples because the Europeans want nothing to do with them. DPA has been banned on all fruit treated with the chemical in the 28 EU nations since 2012. To be sure, anything grown in

the US is suspect — rightly so, in light of the recent scientific analyses of many common foods for glyphosate residues. Alarmingly high levels of the chemical were found in 29 different foods commonly found on grocery shelves, including: Cheerios, Oreos (ohh!), Doritos, baby foods, even spinach (wait till Popeye hears of this).

Even before this recent disturbing news came out, a few states had ballot initiatives to require labeling of products with GMO ingredients, and let consumers decide for themselves. The industry poured millions

of \$\$ into the campaign and barely defeated these initiatives in California, Oregon, and Washington. But, if GMOs were so advantageous to society and so harmless to consume, why didn't industry join the campaign to "Just Label It?"

One of the Gadfly Revelry & Research gang wondered, "Whatever did farmers do before 1950 when there were few if any chemicals to spray on crops?" Another gang member looked at him in a tone of eyes that said, "Mr. Pollyanna, they call it organic farming, now."

Going back to when Monsanto applied for a patent on the warped form of life created by gene insertion, they told the Patent Office that it was unique, never invented, and never found in Nature. After the patent was granted, they told the public skeptics, "Don't get so excited. It's nothing more than farmers have done for centuries by breeding plants and animals —simple hybridization."

Going forward, the next candidates are GMO grasses and GMO salmon. What will the hunters and fishermen say? They may suggest, instead, that Monsanto executives need a few genes inserted for ethics and honesty.

author q&a

continued from page 21

can create change. That the force of people caring about an issue and doing something to help can create positive outcomes.

Today, as I drive I-81, I smile when I see all the hawks along the road, hunting or resting on telephone poles and trees. It wasn't that many decades ago that the raptor population was in serious danger. Numbers were dropping. Pesticides and other factors were contributing to a rapid decline in numbers. I remember working with the late Maurice Forrester and others in the Sierra Club PA Chapter on a conference to bring attention to the problem. Banning DDT in the early 1970's and a concerted effort by the conservation and environmental community turned around the decline in many raptor populations. Of course, some species are

still in trouble – and there are new challenges such as lead bullets and wind turbines. But, if action can save some endangered raptors, I like to think individual and collective action may be able to save the planet.

Dead of Spring will be available in print or Kindle editions on Earth Day, April 22, 2017. The novel will be available at Whistlestop Bookshop, Mystery Bookshop, and most other on-line retailers and bookstores including Sunbury Press, Amazon and Barnes and Noble.

For more information about Sherry and the Alexa Williams suspense series, visit www.sherryknowlton.com.

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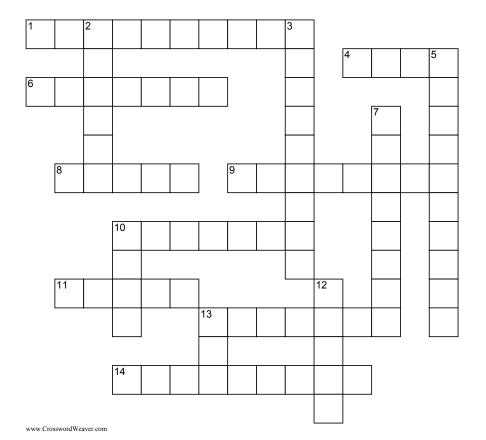
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explore, enjoy and protect the planet.

[spring crossword]



| Across | | |
|--------|-------------------------------------|--|
| 1 | Road | |
| 4 | Reagan Interior Secretary James | |
| 6 | Administrative Assistant Chantal | |
| 8 | Age of | |
| 9 | Suspense novelist Sherry | |
| 10 | Former Chapter Director Jeff | |
| 11 | Vernal | |
| 13 | Diversity Chair Sue | |
| 14 | Coal Town | |
| Down | | |
| | | |
| 2 | Gadfly Mort | |

- 3 Mountain poet
- Inveterate hiker, Gary ___
- 7 Inspiring Connections
- 10 Donora _____ Museum
- 12 Tanbark _____
- 13 _____ Administrator, Ann Gorsuch

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