[the sylvanian]

fall 2015

Pennsylvania Chapter Sierra Club • pennsylvania.sierraclub.org

[getting there] there's a better way to get around





[from the editors]

vote on november 3 (and every year, twice a year)

Does it scare anyone else that most of our elections are decided by 15 percent of the eligible voters? Worse yet, many people who come out every other year to vote for their representative to Congress think they vote "every time."

There is something very wrong when the average person in the United States does not use the most fundamental way to participate in the operation of their country – voting. Maybe it's time to fund a government sponsored advertising campaign to encourage people to VOTE every year, twice a year.

Political reporters are calling this November's election "an off-year" election. We call it historic! On November 3, registered voters will have the opportunity to select three Pennsylvania Supreme Court Justices. The last time there were three vacancies on the high court was 311 years ago. In 1704, when the high court was called the Provincial Appellate Court, the justices were appointed by the British Crown.

We need to celebrate this historic moment by making sure that all of us get out to vote! This is not the off-year but the election to go to the polls and vote for the justices that will protect the rights as guaranteed by the Pennsylvania Constitution. This is the moment that the citizens of Pennsylvania will decide what kind of Supreme Court they want. Do we want a court that interprets the law through the eyes of people looking toward the future or people who are looking back to support the way we have always done things?

The decisions made by this court will last a lifetime. We need to make sure they are good decisions and that starts with us making the right decision when we vote.

WENDI TAYLOR AND PHIL COLEMAN Co-editors of *The Sylvanian*

PS – The PA Chapter is also engaged in an important election for At-large Delegates and change in its bylaws. Please turn to page 23, and VOTE.



Read our Blog: http://sierraclubpa.blogspot.com/



Find us on Facebook: http://www.facebook.com/PASierra-Club



Follow us on Twitter:

@SierraClubPA



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: wendi.taylor@verizon.net

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

PENNSYLVANIA CHAPTER OFFICE

Phone: 717-232-0101 Email: pennsylvania.chapter@

sierraclub.org Website:

www.pennsylvania.sierraclub.

Editors: Wendi Taylor &

Phil Coleman

Feature Writer: Gary Thornbloom

Design: Sydney Willis

Strategy Design Studio

The Sylvanian, © 2015 Sierra Club Pennsylvania Chapter. Issued four times per year.

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 December 15 (Winter issue), March 15 (Spring issue), June 15 (Summer issue), and September 15 (Fall 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.

Sierra Club's sexual harassment policy can be found online at http://mitchell. sierraclub.org/leaders/policies/sexual-harassment.asp or by contacting the Harrisburg office.

PRINTED ON RECYCLED PAPER WITH SOY INKS



[the sylvanian]

[getting there]

special report

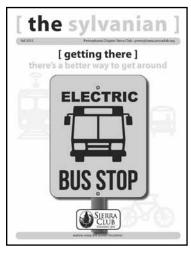
- 9 A Switch to Green Transporta-
- 10 Bus Rapid Transit
- 11 Electric Buses Surge Forward
- 12 Why Don't People Use Mass Transit?
- 13 All Aboard the Zero Emissions Bus

landmarks

- 2 From the Editors
- 4 View From Harrisburg
- 5 Poem
- 6 Coleman's Lantern
- 8 Explore, Enjoy... Pennsylvania
- 19 Book Review
- 24 Crossword

news & outings

- 7 PA Supreme Court Candidates
- 15 Headlines Matter
- 16 Hundredfold Community
- 18 Pat Reilly For the Love of Kids
- 20 At-Large Delegate Candidates
- 22 Wyona Coleman Scholarship Recipients
- 23 Delegate Ballot
- 23 Meetings and Outings



[on the cover]

The cover of this issue of *The Sylvanian* reminds us to think about whether there is a better way to get where we are going? Read and learn where we are headed with mass transit... and individual travel. Too often, when we get into our cars, we are going the wrong way.

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: December 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://pennsylvania.sierraclub.org/PA_Chapter_2008/chapter-directory.html

[the view from harrisburg]

by Joanne Kilgour, Chapter Director

IS THE STATE BUDGET BEING HELD HOSTAGE BY THE NATURAL GAS LOBBY?

To say that Harrisburg is in a state of budget gridlock, while accurate, does not convey the gravity of legislative dysfunction in the Capitol of our Commonwealth



this session. This year's budget stalemate is a sobering example of just how far the legislature has fallen into the arms of the natural gas industry - and how little regard our elected officials have for the lives of everyday Pennsylvanians. In the absence of a sound state budget, our schools, social service providers, environmental and conservation initiatives, and state agencies struggle to hold strong the foundation of our

society, and all the while those who have been elected to govern are instead sacrificing good policy for bad politics. Despite efforts to compromise with respect to public pensions and state liquor stores, the GOP-controlled legislature has refused to give even an inch on one of the most sensible sources of revenue (not to mention a source that has broad support from the general public) – a natural gas severance tax.

The gas industry has made a calculated business decision to fund political cam-

paigns rather than pay taxes to the Commonwealth for its extraction of shale gas, polluting our democracy in addition to our environment and incentivizing politicians to hold hostage the state budget. Since 2007, the oil and gas industry through PACs and executives alike - has flooded Pennsylvania political campaigns with more than \$8 million in contributions. In the PA House alone, the gas industry gave more than \$660,000, including support for Speaker Mike Turzai and the House Republican Campaign Committee. It gave more than \$846,000 to Senate President Joe Scarnati, Majority Leader Jake Corman, and the Senate Republican Campaign Committee. Since the Governor's severance tax proposal would generate tens of millions of dollars each month, with every month of delay in implementation, Senator Corman, Senator Scarnati, and Speaker Turzai are paying back their campaign contributors at the expense of ordinary people just like

The most recent example of this was a stopgap budget bill passed by the State House and Senate – an effort that would have barely kept the lights on for schools and some other government activities for the next few month, but that would have done nothing to serve the medium and long-term fiscal problems faced by the state. Recognizing that we do not need weak band-aids that will only serve as disincentives to earnest negotiation, Governor Wolf vetoed this stopgap budget. In doing so, the Governor urged the legislature to work on a real solution that would fund our schools for the longhaul, truly address the deficit and reject gimmicks and quick fixes, and provide property tax relief for average Pennsylvanians rather than severance tax-avoidance for the oil and gas industry.

One thing is clear – Pennsylvania needs a state budget that will put people, not extractive industries, first and return us to a state of long-term fiscal solvency. What is not yet clear is whether our elected officials will put the interests of industry aside and think of you and your neighbors as they move into the next round of budget talks. For a state that seems disgusted with the dysfunction of Washington DC, we might want to take a serious look at our own lacking legislature.

ANOTHER BAD BILL: SB 886, SPON-SORED BY SEN. HUTCHINSON, WOULD GIVE MORE TAX BREAKS TO THE OIL AND GAS INDUSTRY!

Despite the fact that fossil fuels in Pennsylvania are already subsidized at a rate of about \$3.2 billion per year - or the rough equivalent of \$794 per taxpayer each year - state legislators led by Senator Scott Hutchinson (R – Oil City) are pushing a bill that would provide even more tax breaks to the oil and gas industry. SB 886 would seek to create so-called "Affordable Energy Development Zones" that would provide a full decade of tax relief to businesses that locate in counties with natural gas wells and that use fracked gas from unconventional shale formations like the Marcellus. The measure also requires the business to either hire 10 or more staff or invest at least \$500,000 in new capital in a manufacturing or energy business within the zone, which can be owned or leased, to qualify for the 10-year abatement. At a time when the oil and gas industry refuses to pay its fair share, it is disappointing, but not surprising, that legislators like Senator Hutchinson and the co-sponsors of this bill would seek to further subsidize the industry at the expense of their constituents.

LOVE PA FORESTS? WEIGH IN ON THE STATE FOREST RESOURCE MANAGE-MENT PLAN!

In Pennsylvania alone, there are more than 2.2 million acres of state managed forests potentially threatened by oil and gas extraction. Of that, nearly 1.5 million acres are underlain by the Marcellus Shale formation and are of interest to the oil and gas industry. Of that 1.5 million,

more than 700,000 acres are available to the drilling industry, either through leases from Department of Conservation and Natural Resources (DCNR) as well as those areas where the drillers own the gas rights. And, natural gas development is not the only issue facing DCNR in its management of our state forest system.

In late September, DCNR released its draft State Forest Management Plan and also announced that it will hold 12 public input sessions according the following schedule:

- Wilkes-Barre/Scranton, Oct. 6 at The Woodlands Resort;
- Stroudsburg, Oct. 7, at the Stroudsmoor Inn;
- Philadelphia, Oct. 8, at the Fairmount Park Horticultural Center;
- Renovo, Oct. 21, at the Renovo High School Cafeteria;

- Coudersport, Oct. 22, at the Pa. Lumber Museum;
- Bedford, Oct. 27, at the Bedford Travelodge;
- Pittsburgh, Oct. 28, at the Double Tree Hotel in Monroeville;
- Clarion, Oct. 29, at the Park Inn by Radisson;
- State College, Nov. 3, at the Ramada Inn-Nittany Room;
- Carlisle, Nov. 10, at the Comfort Suites:
- Williamsport, Nov. 12, at the Genetti Hotel-Terrace Room; and
- Harrisburg, Nov. 17 or 18, Rachel Carson State Office Building.

Copies of the plan can be found on the DCNR Web site using this link: http://www.dcnr.state.pa.us/forestry/stateforestmanagement/sfrmp/2015sfrmp/index.htm

Many Sierrans have recreational and scientific expertise with respect to the management of our public lands, and we encourage you to join one of these input sessions or submit written comments to DCNR. Written comments will be accepted until November 30. Interested parties may submit comments at State-ForestPlan2015@pa.gov; at one of the public meetings; or by mail at: Bureau of Forestry Planning Section, P.O. Box 8552, Harrisburg PA 17105-8552. There is also a web-based survey, available at the above website, which is a convenient way to provide feedback on the plan. For more information or to get involved, please call our office at 717-232-0101.

[poem]

Centuries ago, a clever philosopher asked, "If a tree falls in a forest and no one is around to hear it, does it make a sound?" But consider the obverse: "If you are around to hear a tree fall, is the forest already gone?"

Lily Run trickles through the woods beside my house and tumbles on through deeper woods to the river below.

What Have We Done to Lily Run?

1)

My neighbors built across the road from me

because they like the woods.

They liked the woods they ripped apart to

plant their house.

They like what woods remains.

It haunts their rear view mirrors as they drive away,

and flickers in periphery of slanted glimpses.

He backs his truck out his muddy drive.

wheels a sweeping arc, and powers down the road.

I watch the puddled mud he leaves behind.

2)

She told me that they moved out here to get away from city noise, braying so I could hear her over her car radio.

3)

They hauled in soil so they could grow chem lawn where they had scraped the trees away.

It grows like a lime green carpet clear to the wheels of the truck he hasn't sold yet. 4)

They smile.

Their children smile with even teeth.

They feel good about their house and home,

with sewage trickling where trillia used to grow.

— Phil Coleman

[coleman's lantern]

caves and cement

by Phil Coleman

A fter reading One Voice (see page 19), I am toying with two ideas at once -- a cave and cement.

Forty years ago, before Quebec Run area was designated a wild area, it was a favorite spot for me and my sons to go hiking. I had an old topographical map that showed, among other things, a gold mine and a cave. We looked for the gold mine, but all we found was an abandoned set of bed springs. Then we looked for the cave and without too much difficulty found Barton Cave.

Barton Cave seemed to be a crack in a limestone ledge that went back about 60 feet to what looked at first like the end of the cave. But there was a very small low opening that a non-obese person could wriggle through. Armed with three flashlights, one of which had good batteries, we wriggled for about 25 feet (it seemed like 50) till the cave opened up into a small room. We could have gone further, but that was enough adventure for us that trip.

I went back occasionally after that, but never wriggled through the tunnel again. I am not a dedicated caver. I suspect my sons went back on their own, I'll have to ask them. [Both sons called this morning. I asked them. They remembered going through the tunnel (which Phil described as 50 feet long) and on in to what seemed the entire cave, an extensive and beautiful structure ending in a rock pile from a sink hole.]

I was reminded of this adventure when I read Kim Opatka-Metzgar's book. She is a caver and belongs to caving organizations. Her organization, the Karst Conservancy, installed and years later removed a gate on Barton Cave's entrance to keep people out when the bats needed protection from intrusion and were declining because of white-nose syndrome. Barton's bat population was almost com-

pletely lost.

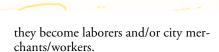
White nose syndrome is a fungal infection that seems to grow on bats' noses as they hibernate. It itches and tends to interfere with

hibernation. In fact, some bats awaken in mid-winter and fly out looking for nonexistent insects. Activity without food leads to dehydration and starvation.

Quebec Run Wild Area is located on the east side of Chestnut Ridge, just north of the West Virginia border.

There has been a limestone quarry on the west side of the ridge for as long as I have been in the area -- a big, sprawling hole. We all hate to see intrusions on our natural areas. And we certainly don't want to see caves destroyed. But we don't hate intrusions enough to give up highways and buildings.

A recent report revealed that China has used more cement in the last four years than the United States used in the entire 20th century. This is astounding. But what the report did not say was that the United States has already used almost as much cement in the 21st century as we used in the 20th century. We continue to build and repair highways and bridges, and we continue to build high rise buildings. In fact, one change has been that building construction has moved away from extensive use of steel and toward cement. Most of China's concrete has gone into an explosive building of cities accompanied by a massive movement of previously agrarian people to cities where



Sylvanian Sam Explores Barton Cave

America's citification took place more gradually over the last 150 years. But we built houses with wood and then built skyscrapers with steel, so our burgeoning use of cement has been gradual. Even so, our country is dotted with limestone mines (wherever limestone is near the surface) and we also import some cement.

We should be replacing cars and truck with railroads, but we aren't; and as airline travel becomes a great energy sink, we seem to be hooked on cars, a habit more addictive than nicotine.

You don't go caving without driving to the cave. But once there, you spend the rest of the day confined, away from your habit. If you get stuck, you might spend days away from your car.

We are addicted to cars. We are the only industrialized nation that doesn't have high speed rail connecting major cities. When a strip mall wears out, we find it cheaper to move to a corn field and start over than to do whatever it takes to stay put. Cement will continue to infringe on natural and agricultural areas, and our only justification will be to claim China is worse.

Somehow, I've linked my two ideas.

voter turnout critical for PA supreme court environmental candidates

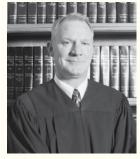
The Sierra Club PA Chapter has endorsed three candidates for the November, 2015 judicial elections. With a rare three juror vacancy on the seven member court, environmental voters have an opportunity to gain a favorable majority on Pennsylvania's highest court.

In their interviews and questionnaires all of the endorsed candidates expressed concern about climate change, and reacted favorably to a recent court decision curbing corporate control over natural gas extraction.

"Low voter turnout in off-year elections makes grassroots campaigning all the more essential," Chapter Political Chair Dave Hemberger noted. "By assisting our endorsed candidates' campaigns with canvassing and phone banking, individual Club members can make a difference in this election."

Members interested in assisting with campaigns are encouraged to contact their local group political chair.

The endorsed candidates: Judge Kevin Dougherty



Judge
Dougherty,
the former
head of Philadelphia
Family
Court, is Administrative
Judge of the
Court of
Common

Pleas and a Democratic nominee for the Pennsylvania Supreme Court. He believes in restorative justice, and has focused a significant portion of his judicial career on child welfare reform in Philadelphia. "The judges and employees of Family Court see the worst that life has to offer our children and families," he said. "We strive to try to redeem one social condition, reunite one family or rescue one child from abuse and create hope." Judge Dougherty is the first in his family to graduate college. It was during his college experience that he committed himself to protecting the environment. "Courts play a pivotal role in protecting the environment".

Judge David Wecht



Judge David Wecht a Democratic candidate for the Pennsylvania Supreme Court, and currently serves as a judge on the

Pennsylvania Superior Court. Judge Wecht received a "highly recommended" rating by the Pennsylvania Bar Association for his "forward-thinking approach to the law, unquestioned legal ability, integrity and judicial temperament." Judge Wecht is also the only candidate for the Supreme Court who has presented a comprehensive ethics and transparency plan to address the current crisis in Pennsylvania's courts. Judge Wecht has also served on the board of directors of the Audubon Society of Western Pennsylvania. He lives in Allegheny County with his wife, Valerie, and their four children, Nathan, Jacob, Alex, and Emma. He expressed concern about the "degradation of our environment" and our responsibility to protect it for future generations, noting that the Pennsylvania Constitution puts an obligation on the Commonwealth to safeguard "clean air, pure water, and . . . the preservation of the natural, scenic, historic and esthetic values of the environment."

Judge Christine Donohue



Judge Christine Donohue the longest serving appellate court judge in the race and Democratic nominee for Supreme Court Justice. She

received a "highly recommended" rating from the Pennsylvania Bar Association. She has 35 years of legal and judicial experience and has served on boards and tribunals in Pennsylvania responsible for enforcing the rules and laws governing lawyers and judges. Before being elected to the Superior Court in 2007, Judge Donohue spent nearly three decades representing a variety of clients including injured persons and commercial litigants, earning a listing multiple times in Best Lawyers in America. A graduate of East Stroudsburg University, Judge Donohue hails from northeast Pennsylvania, the daughter of a union coal miner father and union seamstress mother from Carbon County. She earned her J.D. at Duquesne University School of Law in Pittsburgh where she has lived and worked since completing law school. Prior to her career in law, Judge Donohue served as coordinator for the PA Comprehensive Water Quality Management Act, enacted to address acid mine drainage in the Schuylkill River Basin.

[explore enjoy...pennsylvania]

living and hiking with the eastern timber rattlesnake

by Gary Thornbloom

Crotalus horridus horridus, the Eastern Timber Rattlesnake, has been driven from much of its natural habitat. However in parts of Central Pennsylvania it is doing quite well and increasingly is more commonly seen and encountered by hikers and by residents.

Timber rattlesnakes are usually in or near dens from October through April. As

the season warms the pregnant females will bask near the den until late summer when they give birth. The males travel away from the den - 2 miles is typical. They must return to their den to survive the winter.

Christopher Urban, Nongame & Endangered Species Coordinator with the Pennsylvania Fish and Boat Commission (PFBC), wrote this description:

The timber rattlesnake...is a large (up to 74 inches), heavybodied snake of the pit

viper family...This snake has transverse "V" - shaped or chevronlike dark bands on a gray, yellow, black or brown body color. The tail is completely black with a rattle. The head is large, flat and triangular...head color has two distinct color phases. The black phase has a black head with black eyes, and the yellow phase has a yellow head and yellow eyes. The pupils are elliptical.

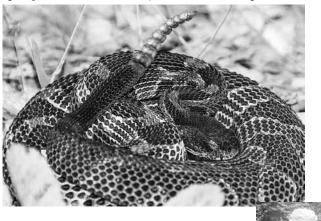
Timber rattlesnakes are pretty obvious once you develop an eye for them.

Prior to this summer I knew two people who had been bitten by timber rattle-snakes. The first person's situation can

be summed up as a "guy thing" - "hey look at this" fueled by alcohol. The other person was a researcher who had the bad luck of a snake's fang that found its way through a stitch in the seam of "snake-proof" gloves. Both survived the snake bite.

Events this summer were very different.

On July 19, around midnight Mr. Davis,



Above: Hikers come upon a timber rattlesnake.

Right: Field Specialist Matthew Wilson is pictured holding two shed timber rattlesnake skins during a hike sponsored by the Moshannon Group.

39, was at a camp in Elk County when he was bit on his ankle by a timber rattlesnake as he tended a campfire. While being taken to medical assistance he soon experienced severe breathing problems, convulsions,

acute respiratory distress, and finally full cardiac arrest. At 5:30 a.m. he died. The cause of death was anaphylactic shock, a life threatening allergic reaction, in this case to the snake venom.

The PFBC may hear of 2-3 bites in a

year, but many years there are none. Mr. Davis' death, while heartbreaking, was the first death in Pennsylvania caused by a timber rattlesnake bite in 25 years.

This summer two friends of mine were bit by timber rattlesnakes. The first bite was in June. Down the road from where I live along the Allegheny Front a friend was clearing brush in an unmowed area behind his home. He stepped on the snake and looked down to see the open mouth, fangs and the strike to his leg. He spent 4 days in the Intensive Care Unit, had a painful recovery period, and 5 weeks later led a 250 mile bike trip.

In July another friend was hiking on the Mid-State Trail. While hiking through thick blueberry bushes she felt the snake bite her. She called 911, hiked 2 miles to a waiting ambulance, and was on her way to the hospital. She spent a day in the ICU, and in 3 weeks went on a 50 mile back-

packing trip.

Timber rattlesnake bites are rare, and rarely fatal. Victims describe the pain as intense. Immediate medical attention is necessary. There are serious risks and the recovery period includes severe discomfort.

Understanding timber rattlesnakes is the first step to hiking in their habitat. These snakes are usually very timid. Most hikers never know they were near a snake. It is also typical, but not guaranteed, that a rattlesnake will rattle - a buzz-

ing sound that is hard to mistake once you have heard it.

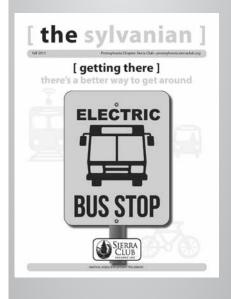
The warning that a rattlesnake gives is too often its death knell when humans instead of moving away will unnecessarily kill the snake. Timber rattlesnakes are protected

continued on page 14

[getting there]

special report articles

A Switch to Green
Transportation9
Bus Rapid Transit10
Electric Buses Surge Forward11
Why Don't People Use Mass Transit?12
All Aboard the Zero Emissions Bus13



introduction to getting there

A mericans use so much oil that the figures we could quote are almost meaningless. Billions of barrels, trillions of gallons – a fantastic amount. We drive as though there is no tomorrow.

We use up a finite resource, and we foul the air while doing it.

Our subject this time around is transportation. What changes can we make in the way we travel that will reduce consumption, clean the air, and slow global warming? The answers are not easy. Some solutions depend on changes that go beyond travel. For instance, electric vehicles are clean, but if we continue to generate electricity by burning coal, gas, and oil, we continue to pollute. Wind and solar technologies are important.

But let's not shift the blame. When we love our cars, the problem is us. Can we get our government and ourselves to shift emphasis and funding away from highways and to rail, mass transit, and person power?

Transportation Chair Dennis Winters leads by example. He doesn't own a car. In the following pages, he makes some heady suggestions.

Read on.

a switch to green transportation

by Dennis R Winters

In S. David Freeman's soon-to-bereleased book, "An All Electric America," he makes the case that renewably produced electricity is the only way for the planet to avoid the catastrophic consequences of global warming. He also makes the point that it is not too late to order an annual reduction of 3 percent in greenhouse gases, primarily carbon dioxide and methane.

Freeman is an American engineer, attorney, and author, who has had many key roles in energy policy. He has been called an "eco-pioneer" for his environmentally oriented leadership of the Sacramento Municipal Utility District (SMUD) and the Tennessee Valley Authority (TVA), after President Jimmy Carter appointed him to head the TVA board in 1977. Freeman changed the TVA focus from one of growth to energy conservation. He also stopped construction of several nuclear projects. He has headed other major energy organizations, including the New York Power Authority and the Los Angeles Department of Water and Power.

David Freeman's professional philosophy provides excellent support for the Club's "leave it in the ground" fossil fuel and "green transportation" policy.

Leaving one's car at home offers the choice of taking one of two zero-energy options -- walking and biking-- or taking public transportation. While today's transit option offers a substantial reduction in fossil fuel use compared to the average automobile, converting bus and rail fleets to electricity from renewable energy sources would provide even more environmental benefits. Today only bits and pieces of this country's public transportation systems are truly all electric (as opposed to diesel and electric hybrid vehicles).

Some American cities have systems that include light-rail or trolley lines, the nation's largest cities have electrically powered elevated and subway systems, a few so-called "trackless trolley" routes exist in a few places, and there are even instances where the trial use of all electric buses

continued on page 14

[gettingthere]

bus rapid transit — a low cost way to decrease commute time

by Dennis R. Winters

B us rapid transit, or BRT, refers to a system of buses that operates more like a conventional rail system than the usual fixed-route buses most of us are accustomed to riding. Although express and limited stop bus services, where they exist, have been around as long as buses have existed, the combination of declining public transit dollars and an increased interest in providing better quality transit service has moved BRT to the head of transit discussion worldwide as an alternative to more expensive light rail projects.

Bus rapid transit comes in many flavors. A typical BRT line might consist of conventional, often articulated, transit buses stopping at much greater intervals than would be the case for ordinary local buses. BRT stops are usually located one-half to one mile apart. Most BRT lines are designated differently from regular bus routes in some manner, this can include a unique bus design, a different color scheme, and the line may be referred to similar to elevated or subway style signage such as the "Blue Line" instead of more traditional bus route num-

ber. However, it may have both types of designation.

Philadelphia area commuters may get a taste of BRT service in the near future. New Jersey Transit has received a federal grant toward a BRT route connecting south Jersey to center city Philadelphia. As a typical BRT application, the new line would allow rush-hour buses to travel in bus-only lanes (mostly on highway shoulders and in medians) for part of the trip to Philadelphia, with the hope of easing commutes by reducing single-occupant vehicle use. Transit activists in Pittsburgh are working to improve the not-quite-there BRT system in their city.

Depending on the cost of the BRT line, it might operate in mixed traffic like other bus routes, in reserved bus lanes, or even in rights-of-way that are separated from other traffic by some physical means. BRT stops themselves, can look like traditional bus stops or can be extensive shelters, with platforms at vehicle floor level, with real time arrival and departure information displays. There can also be ticketing from off-street kiosks to step up the speed of boarding.

BRT lines usually operate with greater frequency (headway) compared with regular bus routes in the system, usually buses come equal to or more frequently than every ten minutes, although some public transportation systems with less robust BRT operate on a fifteen minute frequency.

The main advantage of BRT has been the lower capital investment required compared to a light rail line. Buses are cheaper to buy than rail cars and can be stored in existing vehicle garages instead of new facilities built to house the rail cars. In addition BRT does not require the acquisition of private right-of-way or the cost of laying track. Certain aspects of the BRT line, fancy stops for instance, can be added at a later date after the line goes into actual operation. If it turns out that the line is not as successful as originally projected, not only will those fancy additions never have to be built, but there will be no rails to remove to return the dedicated lane to mixed traffic service.

continued on Page 14



Brazil's Electric Bus Line

[specialreport]

electric buses surge forward

by Dennis R. Winters

In order to avoid jeopardizing future Legenerations with the catastrophic results of run-away global warming, the Sierra Club is calling for the remaining fossil fuels to be left in the ground...natural carbon sequestration if you will. Part of the effort to keep carbon, in the form of CO2, out of the atmosphere is a campaign to promote the use of electric buses in the country's public transportation systems. Here in Pennsylvania the Club will be working with SEPTA (Southeastern Pennsylvania Transportation Authority), the largest system in the state, to begin replacing its diesel and diesel-electric hybrid buses with those that are all electric.

In addition to CO2 emissions, concerns about diesel-powered buses causing poor air quality and the inevitable depletion of fossil fuels, transit systems across the United States are increasingly looking at a future that uses different propulsion systems. Electric buses are powered solely by batteries, and should not be confused with hybrid buses, which are powered both by batteries and either a gasoline or diesel engine that activates after the bus has gone a certain distance.

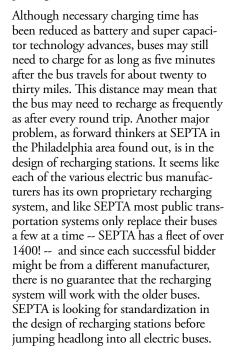
Though natural gas-powered buses are on the increase - a trend that I would expect to accelerate in the future as an enormous amount of natural gas supply has been discovered in the United States, causing a significant decline in the price of the gas - electric buses, particularly those operating on sun- or wind-generated electricity offer the complete solution to the fossil fuel headache.

The same fear of being stranded if and when the vehicle's batteries have been depleted that haunts electric car owners can also be applied to electric buses. Due to the much larger mass of a bus, electric buses have an effective range much lower than an electric car has - as little as thirty miles. Since most buses are out on the road for twelve hours and 150 miles or more per day, it is clear that without

some ability to recharge en route electric buses will not be able to be deployed in the nation's bus systems.

Because the electric bus battery range is so low, buses will need to be charged periodically at a convenient place along the route, preferably at the

layover point to avoid inconveniencing the passengers.



Operational reliability is important, of course, but what about the vehicles themselves? Do they break down a lot? Range anxiety aside, there have been no major reported problems with electric buses that are any different or more frequent than problems with other kinds of buses.

Proterra, a major manufacturer of electric



Proterra Electric Commuter Bus

buses, says that although its electric buses cost more than comparably equipped diesel fuel buses, over the lifespan the two costs are comparable. Since Proterra says its buses will save the owner \$700,000 in fuel and maintenance savings over a 12 year period, we can infer that their capital cost is \$700,000 more than a diesel bus. Of course, this does not include the cost of necessary charging stations, which can be up to \$50,000 each. As the technology advances and more systems purchase electric buses it is reasonable to think that costs would come down.

Electric bus usage in the United States is still small and mainly concentrated in the airport and other short shuttle route arena. One notable counter example is found in the service area of Foothill Transit, a provider that covers the far northeastern suburbs of Los Angeles. Foothill Transit operates several electric buses on Route 291. You can even see in the printed timetable the short recharging periods at Pomona TransCenter. Several major American cities are vetting electric buses in their systems, most notably Seattle, and Dallas and San Antonio, Texas. Toronto and Montreal in Canada also feature electric buses in their fleets.

For Sierra Club members living in the Philadelphia area, look for updates on the Club's efforts to help SEPTA place electric buses into operation in your area.

[gettingthere]

why don't people use mass transit?

by Dennis R. Winters

H aving sold my car in 1991, I bike and take public transportation most trips in and around the Philadelphia area. I qualify it with "mostly" because once every month or so, I use car-sharing for trips made necessary by the occasional large and/or bulky purchase. I keep a list of those on my fridge until there are enough of them to warrant sharing a car for two or three hours.

I have used SEPTA (Southeastern Pennsylvania Transportation Authority), PATCO (Port Authority Transit Corporation), New Jersey Transit, and Amtrak to get me places too far to ride my bike (although I often use my bike for a trip extended by taking transit first). Between the Internet, iPhone apps, and maps there is virtually nowhere in the tri-state region I cannot get without a car. Granted, I live alone and my children, grandchildren, and great grandchildren live in other states, but now that I am over 65 it seems foolish to not avail myself of SEPTA's fabulous public transportation service in the Philadelphia area...because it's largely FREE, thanks to the Pennsylvania Lottery.

I am a regular bus rider. I have eliminated my contribution to the congestion, pollution, and streetscape dominance from too many cars. Given the cleaner

air, fuel savings, and elimination of the cost of automobile ownership (getting rid of mine was like an immediate 30 percent raise!); I wonder why more folks don't use public transportation. Most advocates of mass transit dismiss drivers as selfish, shortsighted and unconcerned about the environment, instead of asking whether mass transit itself is to blame for its own problems. Of the former, I believe most drivers are simply acting (with insufficient forethought, perhaps) in their own self-interest; of the latter, there is a lot of evidence to indicate that much

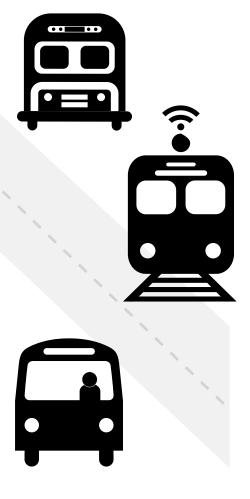
public transportation does suffer from bureaucratic inertia and bad management, in many cases a result of neglect and/or lack of sufficient revenue from public officials.

The great majority of people will always opt for the choice that is most convenient. When it comes to transportation most folks view a trip by auto as more convenient than by bus or other public transportation mode. What's more, driv-

ing alone offers privacy and the privilege of "doing one's own thing" (probably why many people dismiss car pooling as well!).

Many studies have shown that including the "external costs" of driving, e.g., pollution emissions including ozone and green house gases, crash costs to life and property, and suburban sprawl, exceed by far the costs of ownership and gasoline. But most people, and especially commuters, also place a high value on their time; and the cost of the time waiting for and taking public transportation, in many instances, simply appears too expensive. And, of course, they have to sacrifice much of the aforementioned privacy and convenience of private transportation. Is it no wonder that most fail to even give a thought to taking the bus...or trolley...or train?

So as long as public transportation remains grossly under funded and, in most cases, has to operate on the same streets with mixed traffic (with the exception of rail service), private vehicles will remain the vehicles of choice. We can only hope more people choose to accept the chance to address many of problems automobile traffic causes in Pennsylvania's urban communities by replacing at least a few of their daily trips by taking public transportation. They might be surprised by the opportunity to relax in traffic and catch up on their reading or the latest New York Times crossword.



all aboard the zero emission bus!!

by Chris Gibbons

grew up in California and as is pretty typical of many Californians, I grew up outside. Some of my first memories are hiking with my parents in the dormant volcanoes of the Eastern Sierra, looking for interesting rocks in the Mojave Desert, and taking weekend trips to the Pacific Ocean. I loved it.

It was during these adventures that my mom and dad taught me what is one of their most important rules: pack it in, pack it out. They taught me that when you go out into beautiful places you leave them the way you found them. They also taught me that part of being a responsible hike is helping to clean up messes you stumble upon.

We brought extra ditty bags along with us to bring back trash that we'd found along our hikes. You'd be amazed with where you can find plastic bags, popped balloons, and barely recognizable water bottles! It was just part of hiking. The "leave no trace" or "pack it in, pack it out" ethic informed much of my life and is in fact what propelled me into a career in environmental organizing.

In college I studied English and Philosophy at California State University, Sacramento. I wanted to be a teacher because I believe that informing young people about important issues is crucial to solving them down the road. But I began to feel overwhelmed with how many problems we already know about, we already have solutions to, and for some reason they're not being solved. It became clear to me that the real issue was political.

It came down to a simple equation:
What adds up to the most money? Does stopping global warming by burning less oil or coal make the oil or coal industry the most money? Does conserving land by stopping development make the developer the most money? Does protecting our oceans from plastic pollution

by banning single use plastic bags and water bottles make the plastics industry the most money? If the answer to these questions is "no," and it most certainly is, why would the let it happen?

This left me in a pretty dark place. It upset me that companies hadn't learned to leave no trace. And to add to it, I would never have more money than the oil industry, big developers, or the plastics lobby. So how could I make a difference on the issues I cared about? The answer for me is through organizing people because I believe people are more powerful than money.

Right now in Philadelphia we're working to clean our air, protect public health, and stop global warming by convincing SEPTA to go all-electric with its buses.

Oiil produces 40% of the carbon pollution in the US and most of this oil used by our cars, trucks, and buses. Not only does this air pollution lead to global

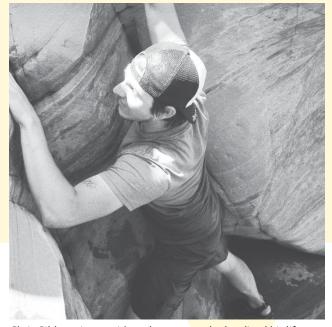
warming, but it can also leads to and even worsen diseases such as asthma and heart disease. Despite the evidence against diesel, SEPTA is still replacing aging buses with diesel hybrids. It's past time we change the way we travel and invest in cleaner transit options.

The good news is that we have many tools to do it right now. We can cut vehicle emissions to reduce carbon pollution AND improve air quality by replacing aging buses with zero emission buses. Many zero emission buses run off batteries that can be charged off-peak hours,

which saves money on fueling cost as well.

We have a huge opportunity here in Philadelphia. SEPTA is going to decide by November whether to start going electric, but they're going to hear a lot of arguments from the oil and gas industry to keep buying hybrids. So we're working all across Philadelphia to drum up a broad base of support to show SEPTA this is a popular thing to do.

During this campaign I've thought a lot about hiking with my parents and I've connected with a lot of people who learned the same pack it in, pack it out lesson from their parents. The people are looking for solutions and we need our decision makers to do the same. How nice would it be to get on a bus and know you're leaving no trace.



Chris Gibbons is an avid outdoors man who has lived his life trying to leave a minimal impact on the environment.

explore, enjoy...

continued from page 8

in Pennsylvania and it is illegal to kill or capture them without a permit.

Timber rattlesnakes have a place in the forest, and most of them live on Public Land above 1800 feet. People rarely encounter them.

Each of us who choose to live and hike in timber rattlesnake country can learn about the snakes - their behavior, their value in the ecosystem - and then act in ways that keep us safe. Not handling the snakes and seeing where you are placing your hands and feet remains the standard!

Some people I hike with have worn snake gaiters for years. I recently purchased a pair, and will be wearing them on certain summer hikes, as well as while working in brush around my home. My awareness has been heightened.

Information and articles on the PFBC website provide information about Crotalus horridus horridus. The Sierra Club has hosted programs and hikes focused on timber rattlesnakes led by experts. There are also presentations about these snakes at State Parks.

A friend of mine has known that a timber rattlesnake was living in her barn for the past month. She "...does not have a problem with letting it live there, and eating as many rodents as it can" and she is willing "to give the snake its space."

By better understanding Crotalus horridus horridus, hopefully we can all give timber rattlesnakes the space they need to survive.

a switch to green

continued from page 9

is underway (see accompanying article). Amtrak's Northeast Corridor (including the Keystone Line to Harrisburg) is electrified, but most long distance service across the country uses diesel locomotives.

The earliest municipal public transportation systems were not only more extensive, they were largely all electric. Unfortunately vehicle manufacturers (thank you General Motors!) and the fossil fuel industry put an end to that before the middle of the last century. Now given the rather long service life of transit vehicles already in the fleet and public transportation agency inertia, conversion to electric propulsion will be slow and with great bureaucratic resistance.

In the case of SEPTA, the millions of dollars originally set aside for natural gas powered buses were ultimately used to purchase the first diesel hybrid buses in its fleet. Today diesel hybrids are used exclusively to replace retiring vehicles. With a fleet of approximately 1,400 vehicles, of which well over half are now diesel hybrids, it is unlikely that there will be any quick conversion to all electric buses. Along with SEPTA bus fleet, Philadelphia also has single car trolleys that operate both on street and in Center City tunnels, the Market-Frankford and Broad Street lines that provide traditional elevated and subway service, and the Norristown High-Speed Line with its one and two-car mix is powered from a high-voltage third rail. SEPTA also has its own trackless trolleys on three Philadelphia city routes.

bus rapid transit

continued from page 10

BRT mavens around the world credit Curitiba, Brazil, with creating the first BRT system almost forty years ago. Among its innovations, Curitiba's BRT system features off-street fare purchase, floor-level platforms, and exclusive lanes. Over the years, the system has been extended many times.

In North America, probably the best example of a BRT application is the system of transit ways in Ottawa, Ontario, Canada. Service is provided with frequent headways on segregated rights-of-way from outlying suburbs to downtown.

In addition to Ottawa, Los Angeles has embraced the BRT concept in both its traditional and BRT "light" service. The traditional BRT line is LA's Orange Line. Begun about ten years ago, the Orange Line serves the San Fernando Valley from North Hollywood to Warner Center. Although the line has been largely successful, expanding it is stymied by its lack of right-of-way segregation. The signal priority it has at grade crossings, for example, will not work if the line operates more frequently than every four minutes. Los Angeles' extensive network of "rapid" bus routes represents its BRT "light" network. These routes operate in mixed traffic lanes with mostly traditional stops every ½ to 1 mile.

Philadelphia area commuters may get a taste of BRT service in the near future. New Jersey Transit has received a federal grant toward a BRT route connecting south Jersey to center city Philadelphia. As a typical BRT application, the new line would allow rush-hour buses to travel in bus-only lanes (mostly on highway shoulders and in medians) for part of the trip to Philadelphia, with the hope of easing commutes by reducing single-occupant vehicle use. Transit activists in Pittsburgh are working to improve the not-quite-up-to-par BRT system in their city.

...gas money penetrates every crevice of our political system, much like the toxic slurry of injected chemicals penetrates every fracked nook and cranny of a gas well.

headlines matter

by Mark Lichty

When the EPA came out with its long awaited water contamination report in late May, headlines in papers read, "The EPA Finds No Widespread Contamination of Water from Fracking" (Houston Chronicle), and "Fracking Does not have Big Effect on Water Supplies," (New York Times). After years of EPA waffling on the matter, the study clearly did establish what affected homeowners have known for years, fracking can indeed contaminate water supplies.

Suggesting that the contamination was not "widespread" is a slap in the face to the hundreds of families whose water supplies have been contaminated and health has been affected (To see, google: "The List of the Harmed"). Ask one of the families who have had their water contaminated and had to move whether the contamination is "widespread." Ask a mother whose child was sickened by air or water contamination if the problem is "widespread." There are now over 400 studies establishing the health and environmental effects of fracking.

What is widespread is the contamination of our media and our democracy by gas money. In the process of doing thousands of hours of research for our film *Groundswell Rising*, I have found that that gas money penetrates every

crevice of our political system, much like the toxic slurry of injected chemicals penetrates every fracked nook and cranny of a gas well.

There is no doubt that money contaminates how our legislative and executive branch views fracking... those who support fracking got four times more money in their campaigns than those who had a more cautious attitude about it. (Check out Common Cause's report, Deep Drilling, Deep Pockets.)

I myself went through a metamorphosis. I was pro-fracking when I spent thousands of dollars converting my manufacturing plant to gas eight year ago. At that time I was in good company with the Sierra Club and other environmental organizations supporting fracking. I was hypnotized by the bright blue, nearly smokeless flame. I bought into the propaganda that gas had less of a carbon footprint, and I could see it would be cheaper. I was right about the latter, wrong about the former.

Another important point is that the headline only spoke of water contamination. When we started our film, the threat of water contamination was the main thing on my mind. As we progressed in the film, we kept uncovering more of fracking's threats to our lives, like ambient air contamina-

tion, methane release (which is a far greater threat to global warming than CO2), earthquakes, traffic, rendering apart of the fabric of communities, etc. Water contamination, while a significant threat, for me was dwarfed by some of these other issues. On this point, a more informative headline might have been, "EPA Confirms threat of Water Contamination from Fracking, but Water Remains Only One of the Many Threats Requiring Further Study."

Headlines matter. In fact, they may matter more that the article itself. A press that is free and uncontaminated by industry influence matters. The media loses its credibility when it does not trumpet its independence in headlines and the stories it presents.

Mark Lichty is the Executive Producer of the film, Groundswell Rising, and has been a member of the Sierra Club for more than a decade.

hundredfold community

by Joel Plotkin

If you give a man a fish, he will have a meal.

If you teach a man to fish, he will have a living.

If you are thinking a year ahead, sow seed.

If you are thinking ten years ahead, plant a tree.

If you are thinking one hundred years ahead, educate the people.

By sowing seed once, you will harvest once.

By planting a tree, you will harvest tenfold.

By educating the people, you will harvest one hundredfold.

- An Anonymous Chinese poet, 420 B.C.

n a sunny September day in Cashtown, solar panels on the roofs of the ten houses of Hundredfold Farm Cohousing community are generating electricity and heating water; residents use rainwater stored from the previous day's storms to irrigate their gardens. When they flush their toilets, the waste water is sent by grinder pump to an on-site wastewater treatment plant. The nutrients in the water are digested in algae-filled tanks and sent to be filtered by two large beds of wetland plants until clean water emerges that is sent back to the houses to flush toilets.

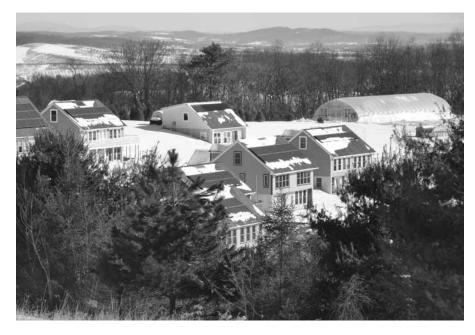
Green construction guarantees that the houses use only a third of the regional average of natural gas for heating. Water conservation reduces their daily water consumption to about one fourth of the average American home. Most houses generate more electricity than they use, sending the excess back to Adams Electric Cooperative grid.

But walk on the pedestrian road between the hillside and the earthbermed houses, and you see the daily life of a sub-division, mowing lawns, tending vegetables and flowers, hanging clothes out to dry or chatting with neighbors. Look a little closer--no garages. Cars are parked in lots above and below the houses to foster neighborly conversation and interaction. And the lawn mower and weed trimmers you see are common property, shared among neighbors.

Cohousing is a Danish concept that came to North America over thirty years ago. It is a type of intentional, collaborative housing in which residents actively participate in the design and operation of their neigh-

borhoods.

Cohousing residents consciously commit to living as a community. The neighborhood's physical design encourages both individual space and social contact. Private homes contain all the features of conventional homes, but residents also have access to extensive common facilities such as open space, courtyards, a playground, and a common house.



 $Hundred fold \ Farm \ Cohousing \ community \ -- \ a \ concept \ community \ that \ is \ not \ only \ green, \\ but \ built \ to \ intentionally \ promote \ community \ and \ shared \ decision \ making \ among \ residents.$

Most cohousing communities share features such as pedestrian-friendly living spaces, shared decision-making, shared meals and activities. At Hunmeetings, or gathering for fireside parties or movie nights.

country near Gettysburg, with 270 degree views over the green hills of south central PA. The community is actively looking for new members who share our goals of sustainability and low impact living. Five lots are available for construction to owners' specifications by our Green building contractor. The community can share designs and

It is located in the beautiful orchard

Winner Cohousing residents of Green consciously commit to living as a community.

floor plans to assist new homeowers.

Tours of our energy-saving houses and facilities are offered on

the first Saturdays of every month or by appointment. Call 717.334.4587 or visit: www.hundredfoldfarm.org. More information about co-housing is available on the extensive website of the National Association — www. cohousing.org.

dredfold, our common house is a modernized pre-civil war farmhouse -- a place for doing laundry, sharing pot luck or prepared dinners, holding

Building awards from the Gettysburg Chamber of Com-

merce and the Central PA Green Building Association, as well as citations from PA legislative leaders, Hundredfold Farm welcomes visitors from local colleges and civic groups to show that an eco-village can be a mainstream, affordable option for those seeking sustainability.

Did You Know?

When you see one of these icons in an email or post, you can easily click on it to post to your own account. A great way to spread the word to your network.





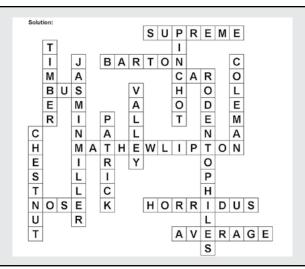


answers to crossword puzzle

(from page 24)

16 Average

Across	Down
1 Supreme	2 Pinchot
5 Barton	3 Timber
	4 Jasmin Miller
7 Car	6 Coleman
9 Bus	8 Rodent Ophiles
13 Mathew Lipton	10 Valley
14 Nose	11 Patrick
	12 Chestnut
15 Horridus	



Pat Reilly – for the love of kids

by Debby Rudy

or 19 years, Patrick Reilly has added joy and knowledge to the lives of many city kids. He is a biketo-work, river paddling, hiking, totally immersed in the outdoors, environmental steward and Renaissance man. He has spearheaded yearly Susquehanna River cleanups, championed creation of a hometown riverwalk, actively engaged youth from the Boys & Girls Club in the outdoors, been a river island steward, and volunteered for the Governor Pinchot Group of the local Sierra Club for three decades. For thirty years he has dedicated his time to Sierra Club's GVP group.

But his greatest accomplishment is his 19 years as a leader with GVP's Harrisburg Inner City Outings (HICO). Pat was a formative part of the creation of HICO in 1996 and one of the original five volunteer Certified Outing Leaders.

From its inception Reilly has invented ideas for safe, yet challenging outings

led youth who were unaccustomed to being outside and afraid of the sound of silence, crickets or owls, to become eager participants who feel secure in both a forested environment and on the water.

In 2015, he is still active on HICO outings and imparting his vast knowledge of biking, hiking, paddling, mammals, plants, birds, rivers, fish, snakes and outdoor safety to Harrisburg city youth.

Reilly's main interest is that participants have fun while they learn something new. Youth who attend HICO outings do not have easy access to the outdoors. Pat shows them that they can easily access nature, right from their home, via the Harrisburg Greenbelt or the Harrisburg Riverwalk.

His interest in water activity led to the formation of a "Canoe Corps" within HICO in early 2000. He led a group

of participants with no prior boating experience through a multi-month paddling program. The youth learned to canoe on calm water at Pinchot Lake, then paddled on a slow section of the Susquehanna, followed by a full day on the river, culminating in an overnight camping trip on the river. Several of the participants of his summer paddling programs have won medals in canoe races at the annual Harrisburg Kipona. In the years since, the HICO canoe program has grown to include kayaks and paddleboards. Because of Pat, HICO participants learn not only how to paddle a boat, but also how to have fun and still be safe on the water.

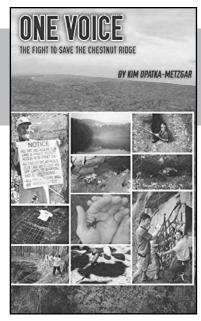
Debby Rudy is the chair of HICO and a member of the Governor Pinchot Group

Editor's Note: The name "Inner City Outings" has been changed to "Inspiring Connections Outdoors."





[bookreview]



One Voice: The Fight to Save the Chestnut Ridge by Kim Opatka-Metzgar

Self-Published available on Amazon and at other retailers; May 2015

Kim Opatka-Metzgar was an advocate for almost fifteen years, trying to stop development, especially a limestone mine, on Chestnut Ridge. She has written a book about the efforts -- hers and others' -- that finally led to success. The book, at least in one sense a

difficult read, can be instructive to those embroiled in environmental battles.

She details the challenges along the way, the numerous friends and allies who joined the fight, the battles lost along the way, and finally success in getting a portion of the ridge bought by a conservancy and turned over to the state as protected forest.

Metzgar began as a caver interested in exploring numerous small caves on Chestnut Ridge. Because of its history as an uplifted region that brought thick limestone deposits to the surface, the ridge is a natural for an abundance of caves and cave access. The very limestone that houses caves is also valuable for cement production. And use of cement for roads and bridges and buildings continues to be a growing industry. Some of the caves would have been destroyed by the mining operation.

Metzgar's book describes in detail the efforts, the tactics, the testimony prepared, and the meetings attended and participated in. It describes the organizations that participated and solicited. It even mentions an article she wrote for *The Sylvanian*, back in 1992.

I won't list all details of hers and others' efforts. But one aspect of the cavers' arguments is instructive. Chestnut Ridge is home to the Allegheny Woodrat, a species listed as threatened in the Pennsylvania Game and Wildlife Code. The cavers' organization argued that the limestone mining would further threaten the species.

The Allegheny woodrat is a distant relative of the packrat. Its relationship to the Norway rat is even more distant. It dens under rock shelves and in small caves. When the cavers argued for protection of the species, the local newspaper called them "rodentophiles," even in headlines. The general public makes no distinctions between Norway rats and Woodrats, and the general public hates all rodents.

Wood rats were not the only threatened species. White nose syndrome was endangering several species of bats. Bats are cave dwellers more so than woodrats and need the kind of protection cavers are attempting.

Cavers were joined in their fight by the town of Blairsville, which had water concerns; the Chestnut Ridge Conservancy, which was interested in plants and dust problems; the Community Hillside Association, interested in deeds and property lines; and, finally, the Western Pennsylvania Conservancy, which had the financial wherewithal to purchase the property.

Reading this book is a slog. Though it is well written it goes on and on as Metzgar and her friends went on and on fighting their battle for years. For that reason it is instructive. Anyone who undertakes an environmental battle will discover that nothing is easy, and success is remote. Some take up an issue, and then tire. Only the strong and determined keep up the battle. Metzgar is one of those. Read the book at your peril. Decide whether you are in for the long haul.

[chapter elections]

for the sake of the chapter - vote!

This is not your average At-Large Delegate election. You are being asked to elect your At-Large Delegates and vote to change the Chapter Bylaws to add two additional At-Large Delegates to the Pennsylvania Chapter Executive Committee (Ex Com).

In the spring, the Chapter was notified that the National Sierra Club Board of Directors had changed its policy concerning group delegates. It eliminated the option to allow groups proportional representation on the Chapter Ex Com. Instead, it limited each group to one and only one delegate to the Chapter's governing body. This meant that the Southeast PA Group lost two delegates and the Allegheny Group lost one. All chapters are bound by the policies set by the National Board.

After much discussion, the PA Chapter Ex Com voted to add two At-Large Delegates to mitigate the effect of this change.

On the ballot, you will see the question: Do you approve changing the PA Chapter bylaws to add two (2) At-Large Delegate positions to the PA Chapter Ex Com? We are urging a "yes" vote on this question.

The Nominating Committee has recruited an excellent slate of candidates for At-Large Delegates. Any and all of them will represent the club well. The top vote getters will serve two-year terms (January 2016 to January 2018). All members of the Sierra Club – about 24,000 of you – are eligible to vote for the three candidates of your choice.

These are very important positions. Delegates to the Chapter Ex Com set policy for the Pennsylvania Chapter, approve the budget, hire staff, elect the officers, decide which environmental issues to pursue, select which candidates to endorse for office, and settle other critical issues.

You will find eight statements for the candidates running for At-Large Delegate. Please read them and decide who will best represent you at the Chapter Ex Com. The ballot is on the inside back cover and includes the address label on the back cover, which verifies that you are a member of the Sierra Club – PA Chapter. Your ballot must be mailed to the Election Committee listed on the ballot and received on or before December 19, 2015. The order of the candidate statements and the names on the ballot were determined by a drawing of lots.

At-Large Delegate Statements

Tom Au

Governor Pinchot Group

I have been a member of the Sierra Club for over 30 years. Hiking, biking, and getting outdoors helps me gain a deeper perspective on protecting our natural heritage. As Conservation Chair of the Pennsylvania Chapter and of the Governor Pinchot Group, I believe that strong advocacy makes a big difference.

Over the past several years, I have worked closely with the chapter's chairs on climate change, water issues, air quality, coal, energy, public lands, wildlife, and oil and gas. We have sponsored conferences, prepared training, submitted comments, organized rallies, testified, and participated in face-to-face meetings with legislators. Sierra Club has taken the lead on shale gas issues and endangered species legislation. I seek to involve all members of the chapter in these activities. Sierra Club's message should be easy to understand, and should communicate our values to public officials and the media.

I have served as an environmental attorney in state government for 28 years before retiring in 2004 and becoming an active volunteer in the Sierra Club. I try to respond to the need -- from stuffing envelopes to picking up trash along the highway. All volunteer work is valuable to the environment.

Veronica Coptis

Allegheny Group

Veronica Coptis grew up in Greene County near a massive coal preparation plant. She lives in Carmichaels, PA, where shale gas activity is dotted across the landscape. Veronica is the Deputy Director with the Center for Coalfield Justice, which is a grassroots environmental justice advocacy organization working with communities impacted by mining and drilling. She previously was a community organizer with the Mountain Watershed Association. Veronica serves on the board for the Harry Enstrom Chapter of the Izaak Walton League and is an executive committee member of the Allegheny Group of the Sierra Club. She holds a bachelor's degree in Biology from West Virginia University and enjoys spending time outdoors with her husband and dog.

Veronica is currently serving as the state mining chair for the Pennsylvania Chapter of Sierra Club. As an at-large delegate she hopes to bring her experience living on the frontlines of fossil fuel extraction into the conversation. She is also very passionate about the need for a just economic transition so as we move beyond coal the people in the coalfields are not left behind.

Dave Hemberger

Kittatinny Group

I was fortunate to grow up in an area that provided unrestricted access to nearby natural environments: a field, creek and woods. Spending time exploring and discovering wildlife proved crucial in establishing an enduring respect and love of nature. Although career and family obligations in later years limited my time outdoors, I always felt an inner loyalty and kinship to the natural world. I now seek opportunities to improve and protect these natural places and resources.

My wife and I became Sierra Club members in 1987, but my active involvement with the group and chapter started upon my retirement in 2011. Since then I have served several roles with the Kittatinny group, including secretary, political chair, as well as volunteer and outings chair. At the Chapter level I currently serve on the Personnel Committee, and have been the Chapter Political Chair for the past two years.

Solutions to our national and global environmental problems will unfortunately continue to rely upon the actions of our political leaders, who are uniquely positioned to promote solutions by enacting proactive environmental legislation. As a chapter leader my priority will be to continue efforts to assist our ten groups in identifying political candidates for endorsements and campaign support, ultimately filling our legislatures with "environmental champions."

Jim Wylie

Southeast Pennsylvania Group

I have been a Sierra Club activist in the Philadelphia area for many years, contributing to committees and programs in Chester County at first, and then as I met more people like me, volunteering for bigger projects in the Beyond Coal Campaign, organizing for the Peoples Climate March, and raising awareness about the evils of mountaintop removal coal mining. I also serve as the Conservation Committee Chair for the Southeastern PA Group. I help with the website administration and email management for Southeastern PA Group. Local issues in our focus include the risks posed by the growing infrastructure of gas pipelines and oil trains.

My "thing" is climate change – encouraging solutions and discouraging our continued addiction to fossil fuel based energy and consumable products. My day job is renting and selling electric bicycles. I try to give people reasonable alternatives for short trips in a car. It is very rewarding.

I look forward to having an opportunity to contribute to the PA Chapter as an at-large delegate. I hope to contribute to chapter and group initiatives that aim to improve the quality of Pennsylvania's air, waterways and open spaces.

Sue Edwards

Southeast Pennsylvania Group

Sue Edwards has been a member of the Sierra Club since 1995 and became an active volunteer with the Beyond Coal Campaign in the Philadelphia area in 2011. She was determined to

make a difference on the issue of climate change, which greatly concerned her. She made a transition from being an anti-war activist to an environmentalist, and in the process she read everything she could get her hands on to educate herself. In service to the Sierra Club, she has done outreach in communities to organizations and individuals; helped organize demonstrations; done lobbying in Harrisburg and Washington DC; created street theater for Beyond Coal and helped build up an activist team in Philadelphia. Her particular area of interest is in fostering the Diversity, Equity, and Inclusion work of the Club. In recognition of her efforts in this area, she was asked in 2015 to be the first ever Diversity Chair for Pennsylvania. In that capacity she leads monthly diversity conference calls, and she is available to groups and members who want to consult with someone about doing this work effectively. Although not a member of the SPG Executive Board, she has attended many of its meetings.

Brian Brown

Otzinachson Group

I have been a member of the Sierra Club since 2002 and a member of the Otzinachson Ex Com for about two years. Since the summer of 2012, I have been serving as Chapter Treasurer. In that capacity, I maintain the books for the Chapter, create financial reports for the Ex Com and Chapter staff, advise on the budget, and submit expenses to the National Sierra Club for reimbursement to the Chapter.

I am an avid trail runner and I enjoy spending time in the woods. I believe that we need to reduce the amount of drilling and fracking in the Commonwealth, especially on public lands. We need to support energy conservation initiatives and encourage the development of clean, renewable energy sources, such as solar and wind. We need to preserve our natural heritage and strengthen protections for wildlife.

Working with the Pennsylvania Chapter has been an enjoyable and enriching experience for me. Our Chapter has been an effective advocate for the environment for many years and working together, we can build upon those past successes and forge a brighter future for Pennsylvania.

Dennis Winters

Southeast Group

I have been environmental activist since the original Earth Day and a Sierra Club member for over 35 years. I have served as chair and political chair of the Club's Pennsylvania Chapter and currently serve as vice-chair and treasurer of the Southeastern Pennsylvania Group. In 2011 I received a lifetime achievement award from the Pennsylvania Chapter for "dedicated volunteer service and outstanding work in pursuit of the conservation and protection of Pennsylvania's environment."

I have also served ten years as president of the Bicycle Coalition of Greater Philadelphia, two years as president of the Green Woods Charter School board of trustees, and six years as chair of the Regional Citizens Committee of the Delaware Valley Re-

continued on next page

nization for the nine county area of Pennsylvania and southern New Jersey.

I believe climate change and its impact on biodiversity, the oceans, our families, and human society, is the greatest threat we have ever faced. Fossil fuels and the carbon they contain should remain in the ground safely sequestered away from earth's atmosphere.

I am running for Delegate-at-Large and I ask for your support.

Tom Wolper

Allegheny Group

Reason for seeking an at large seat: In order to comply with a new national Sierra Club policy, the PA Chapter has reduced its representation from the Pittsburgh and Philadelphia areas. I am seeking an at-large seat to keep western Pennsylvania well represented at the Chapter Executive Committee.

Background: I began involvement in the Sierra Club through participation in outings in 1997. I soon became an outings leader followed by becoming a leader of the Allegheny Group. I served as the group chair and as the chapter's conservation chair. I have also taken volunteer leadership roles at the national level, including the Building Environmental Communities Committee and serving as a team leader of the national Organizing Team.

meet the recipients of the 2015 Wyona Coleman scholarship

ongratulations to the 2015
Wyona Coleman Scholarship recipients, Matthew Lipton and Jasmin Miller. The scholarship is designed to encourage young people to pursue careers that will help preserve the environment.

Matthew of Yardley is a sophomore at Delaware University and a second-time recipient of the scholarship. He is majoring in Environmental Science and is described as a curious student with great potential. Matthew hopes to use his degree to address global warming and its impending consequences. Matthew said he has "accepted the responsibility and taken steps to educate myself to solve or mitigate this ever worsening problem."

Jasmin Miller of Reading is a junior at the University of Pennsylvania and a former Sierra Club intern, who worked in the PA Chapter office in 2014. She is majoring in Philosophy, Politics, and Economics, concentrating on sustainability and environmental policy. Jasmin said she would like to use her education to solve the real problems that are threatening the environment: "unbridled and continuous exploitation coupled with sheer ignorance and political neglect."

The scholarship fund was established in 2006 by contributions made to the Sierra Club in memory of Wyona Coleman, who died in December 2005. Ms. Coleman was a long-time environmen¬tal activist, who worked for many years on issues related to surface and deep coal mining, and was instrumental in the pas-sage of state and federal laws dealing with reclamation, mine subsidence and water replacement. She worked as a journalist, a newspaper editor and was for many years a librarian at the public library near her home in West Brownsville, Pa.

The scholarship is given to Pennsylvania students that are majoring in an environmental related field, who demonstrate service to the community, a dedication to protecting the environment, and financial need. Each scholarship is \$1,000



Mathew Lipton



Jasmin Miller

[pennsylvania chapter sierra club]

Vote for no more than three (3) candidates. The second set of boxes is for the second Sierra Club member of a joint membership only. The blank line is for write-in candidates.

THOM AU	S	J	SUE EDWARDS	S	J
VERONICA COPTIS	S	J	BRIAN BROWN	S	J
DAVE HEMBERGER	S	J	DENNIS WINTERS	S	J
JIM WYLIE	S	J	TOM WOLPER	S	J
WRITE IN	S	J	Do you approve changing the PA of add two (2) At-Large Delegate post Chapter Ex Com? (Vote "yes" to ap disapprove.)	sitions to the	PA
			S J _{Yes}	S J	No

Your ballot must be received by December 18, 2015.

Your mailing label which appears on the reverse side of this page is used for validation. The label must be legible, including the indication S/SNGL or J/JNT. No facsimiles.

Please mail your completed ballot to:

Sierra Club PA Chapter Election Committee attn.: Roy Fontaine 503 Wilson Street Williamsport, PA 17701-3521

[connect with your sierra club group]

Chapter Executive Committee

http://pennsylvania.sierraclub.org/

Follow us on Facebook: http://www.facebook.com/PASierraClub

Follow us on Twitter: @SierraClubPA

Allegheny Group

www.alleghenysc.org

Governor Pinchot Group

https://gvpsierraclub.wordpress.com/

Kittatinny Group

http://kittgroup.weebly.com/

Follow us on Facebook: https://www.facebook.com/Sierra.Kitt.Club

Lake Erie Group

www.lakeeriegroup.webs.com

Lancaster Group

www.lancastersierraclub.org

Follow us on Facebook: https://www.face-book.com/sierraclublancaster

Email: sierraclublancaster@yahoo.com.

Lehigh Valley Group

http://sierraclublv.wordpress.com/

Follow us on Facebook: http://www.face-book.com/sierraclubly

Moshannon Group

www.sierramsh.org

Follow us on Facebook: http://www.facebook.com/#!/groups/112180198821601/http://pennsylvania.sierraclub.org/moshannon/outings.html

Northeastern Group

http://pennsylvania.sierraclub.org/northeastern

Otzinachson Group

http://otzinachson.wordpress.com

Follow us on Facebook: (https://www.facebook.com/Otzinachson?ref=ts&fref=ts)

Southeastern Group

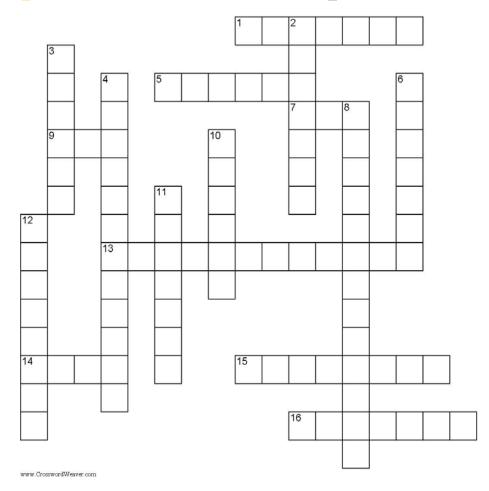
http://pennsylvania.sierraclub.org/southeastern

Pennsylvania Chapter Sierra Club P.O. Box 606 Harrisburg, PA 17108 NON-PROFIT US POSTAGE PAID HARRISBURG PA PERMIT NO. 705



explore, enjoy and protect the planet.

[fall crossword]



Across

Pennsylvania _____ Court
Cave
Leave your ___ at home.
Rapid Transit
Scholarship Winner
White ____ syndrome
Crotalis ____ horridus
Not Your ___ Election

Down

Governor _____ Group
Rattlesnake
Scholarship winner
Wyona ______ Scholarship
love woodrats
Tennessee _____ Authority
_____ Reilly, HICO
_____ Ridge

answers on page 17