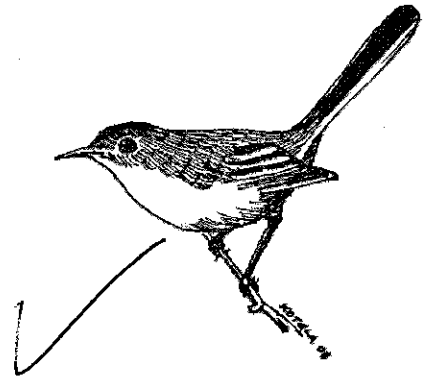


The Gnatcatcher

Newsletter of Juniata Valley Audubon

Volume 41 No. 5 November/December 2009 www.jvas.org



Audubon program recommends creating backyard habitat

By Jimmy Mincin, jmincin@altoonamirror.com

This article first appeared in the Altoona Mirror on September 3, 2009

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Pennsylvania's Audubon At Home wants you to reconnect with nature. The project's Bird Habitat Recognition program is encouraging state residents to contribute to bird conservation by transforming their private property into a natural habitat.

"The project is about taking individual conservation action that can sustain birds, wildlife and healthy habitats in our yards and neighborhoods," Audubon Pennsylvania Executive Director Phil Wallis said. "It's very significant to engage residents in the stewarding of their own immediate environment. The more we can do to help encourage that and to share knowledge on how to do that, the better off we'll be."

Any property, regardless of size, can be transformed into a valuable habitat and contribute to bird conservation, Wallis said. The process is simple: Begin planting native plants to provide food (insects and plant), cover and nesting sites; add a fresh water pond; then register your property with Audubon Pennsylvania through its Web site (pa.audubon.org/habitat/index.html).

"Through birds, you have this portal to interest people in living more sustainably - a fun, exciting and non-threatening way to invite nature into your backyard," Wallis said. "Once kids and families get into this, they try and learn about all the different birds. The program expands the mind in many different ways."

Audubon At Home currently has more than 3,000 acres on 200 properties in 38 counties across Pennsylvania enrolled in the Bird Habitat Recognition program, Steve Saffier, Audubon At Home Coordinator for the Pennsylvania office of the National Audubon Society, said. The program is working to get to 1,000 homes by December 2010. To find out how your yard rates and whether you qualify for the program, visit the Web site. The program's fundamental idea is to transform a property from a sterile, chemical-bound monoculture to one that is a living component in the natural mosaic of Pennsylvania's complex ecosystems, Saffier said, adding birds serve as visible indicators of environmental vitality and well-being, while native plants provide the foundation.

"Birds are sensitive to changes in the environment. If they don't have proper resources, their numbers will drop off," he said. "Scientists have been able to track (environmental) trends according to bird numbers. ... A lot of birds pass Pennsylvania on migratory paths, and we need to create spaces on our properties to provide places for these birds to rest and refuel."

Attracting birds, insects and other wildlife is an admirable goal, but aiming to support them on your land will have greater and more sustainable outcomes, Saffier said. This type of support requires the kind of plant diversity found in specific plant communities. In most parts of Pennsyl-

vania and across its seven physiographic regions that often means a forest type. Learn about the forest types of your region and conditions of your property.

"Twenty-five percent of the woody plants (trees and shrubs) on your property need to be native - that is key," Saffier said. "Birds are naturally geared toward trees and shrubs. ... Insects are key to the food chain of birds, and native insects are attracted to native plants."

It's difficult in Pennsylvania to find a natural area or even private property that has not been invaded by an aggressive exotic plant, Terry Wentz, president of the Juniata Valley Audubon Society, said. There are more than 60 invasive exotic plants in the mid-Atlantic and they range from groundcover to trees and everything in between. The unbalanced deer population that finds most invasives unpalatable doesn't help and is also detrimental to the native plants in their futile effort to regenerate. Birds, addled with a selection often dominated by exotics, help spread the seeds. Replace exotic invasives with a native alternative. For a list of invasives, visit <http://www.nps.gov/plants/alien/pubs/midatlantic>.

But in the end, it comes down to helping the birds.

"A lot of people who live in Blair County naturally love the outdoors and wildlife. And this is a nice way to attract and support that wildlife. ... We're also right under the migratory flyway, so that makes this is an ideal place to foster a bird habitat in our own backyards," Wentz said.

Altoona Mirror Staff Writer Jimmy Mincin is at 946-7460.

<http://www.altoonamirror.com/page/content.detail/id/522175.html>

Fact Box

Six principles of creating a bird habitat:

Reduce pesticide use

Conserve water

Protect water quality

Remove invasive exotic plants

Plant native species

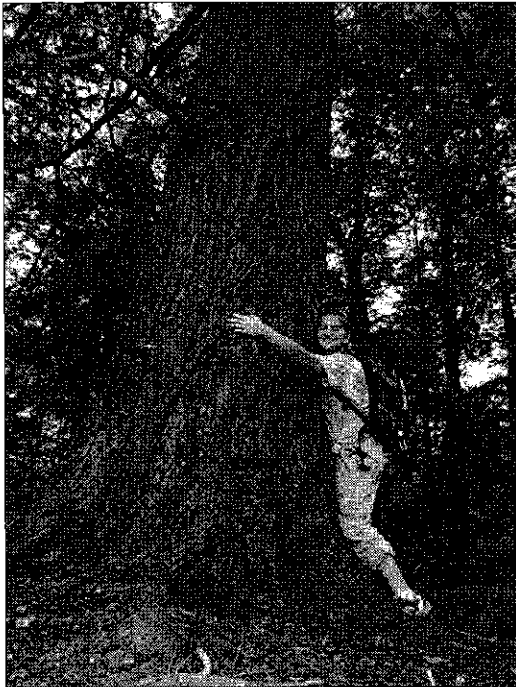
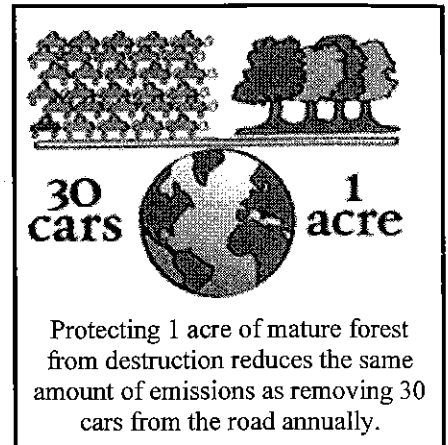
Support birds and other wildlife on property

Preserve Forests to prevent Global Warming

Scientists are learning more each year about the important role forests play in keeping our climate stable by capturing and storing carbon dioxide, the most common greenhouse gas. With help from organizations like The Nature Conservancy, which recently purchased close to 700 acres on Brush Mountain near Altoona, people around the world are beginning to appreciate living forests.

Forests provide many services to people and the land. Like all green plants, trees produce oxygen, of course, but they also give us shade, cool the air, and filter the water that runs off the land and into the lakes and streams that we use for drinking water. A thick forest corridor keeps our streams healthy by trapping sediment, cooling the water and sloughing off the nutrient-rich plant material that serves as the foundation of the aquatic food chain.

However, **cutting and burning forests accounts for roughly 20 percent of global carbon emissions, more than the climate-changing pollution caused by all the planes, trains and automobiles in the world.** Trees take in carbon dioxide and hold onto it, in their limbs and branches and in the soil around their roots. Halting deforestation over the next 15 years would make a huge difference in reducing those carbon emissions, slowing global temperature growth, and, perhaps, preventing the most catastrophic climate change projections from coming true.



Helena Kotala hugs an ancient hemlock in the Bear Meadows Natural Area

Clearly, a living tree has a lot to offer beyond the makings of a kitchen cabinet. But knowing the science isn't enough. Many people cut trees because they can make money at it. In many parts of the world, deforestation continues to be seen as the pathway to more money.

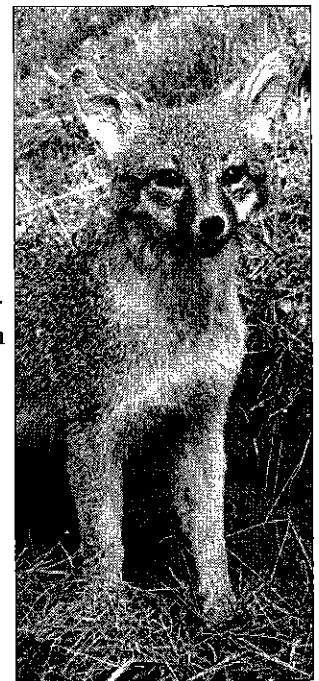
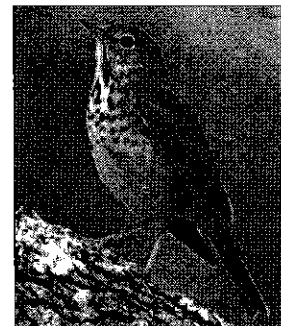
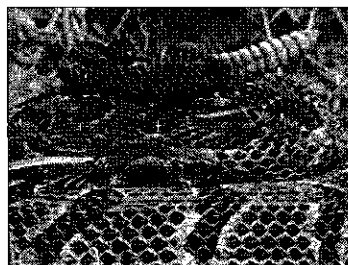
That's the case in Indonesia, where tropical rainforests are being cut down at an alarming rate to make way for profitable palm oil plantations, producing 80 percent of the country's carbon emissions and placing it among the world's top emitters of greenhouse gases. Here, and in other places around the world, The Nature Conservancy is helping landowners and communities exploit the growing demand for carbon credits – allowances that can be traded on the open market to help balance carbon dioxide emissions elsewhere in the world.

By accurately measuring the amount of carbon that is captured and stored in these forests, we can help these countries benefit from carbon trading while at the same time protecting habitat for endangered wildlife and protecting the water quality and the livelihoods of local communities. To make sure the demand for forest protection stays strong, representatives from The Nature Conservancy will be in Copenhagen, Denmark this December, when the world's governments meet at the United Nations climate change conference, to help ensure world leaders know how important it is to make forest protection part of a comprehensive effort to combat climate change.

Here in Blair County, The Nature Conservancy is working to restore a healthy forest at the Brush Mountain Preserve overlooking Hollidaysburg and Altoona as habitat for rare and endangered species, as well as other wildlife. Old logging roads cutting through the tract require reforestation, grading and, for some, planting in wildlife-beneficial grasses. Some of the logging roads present opportunities for conversion into hiking trails.

The preserve will be open for passive recreation, such as hiking and birding.

Grateful inhabitants of The Nature Conservancy's Brush Mountain preserve:
L to R— Timber rattlesnake,
hermit thrush, and gray fox.



*The Penn State Altoona Division of Arts and Humanities
is proud to present*

**"From Division to Cooperation:
Converting the former 'Iron Curtain' into a
Trans-European Ecological Network "**

Monday, November 9, 2009

7:30pm Slep TV-Lounge

Penn State Altoona

Boris Erg

Director & Project
Coordinator

European Green
Belt Coordination
Office

IUCN Programme
Office

for South-Eastern
Europe

Boris Erg, Director of the International Union for Conservation of Nature, will be speaking about the EUROPEAN GREENBELT at the Penn State Altoona campus on Monday, November 9, 2009.

The European Greenbelt is an effort to turn the old border between east and west Europe, the "Iron Curtain", into an ecological network of parks, biosphere reserves, and conservation areas that will protect the flora and fauna of the region, as well as promote sustainable development.

This presentation is sponsored by several groups on campus, including the German Club, History Society, and Environmental Studies program, in commemoration of the 20th anniversary of the fall of the Berlin Wall. The presentation is open to the public at no charge, and will be held in the Slep Student Center at the Altoona Campus at 7:30 pm. For more information, please contact Helena Kotala at hdk5018@psu.edu or 814-502-7967.

Here are links to the Greenbelt and IUCN sites:

<http://europeangreenbelt.org/>

<http://www.iucn.org/>

www.greenbelteurope.eu

*The 'Iron Curtain' divided Eastern and Western Europe
for almost 40 years, cutting off contacts between people on both sides.*

Nature seized the deserted border areas.

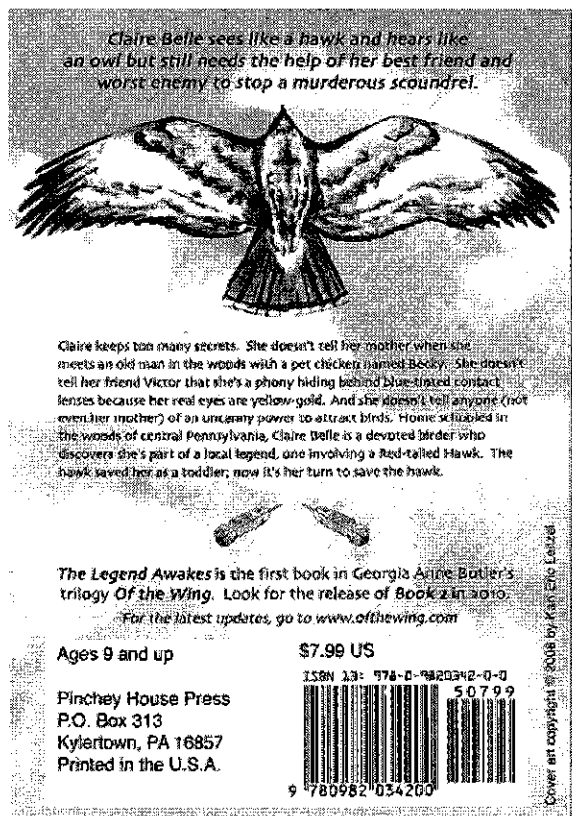
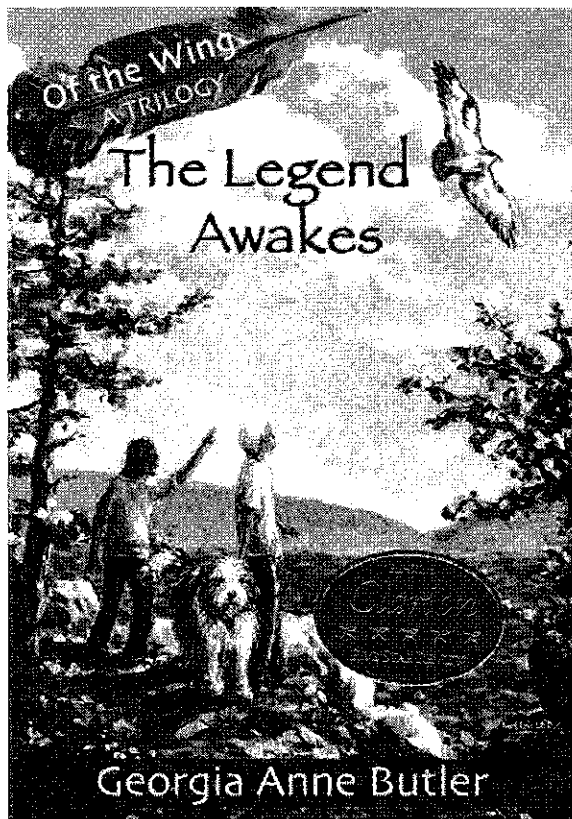
*Today a string of beautiful habitats with rare plants and animals
connects European landscapes and forms
a living monument of European history.*



european
greenbelt

TURKEY

The Legend Awakes



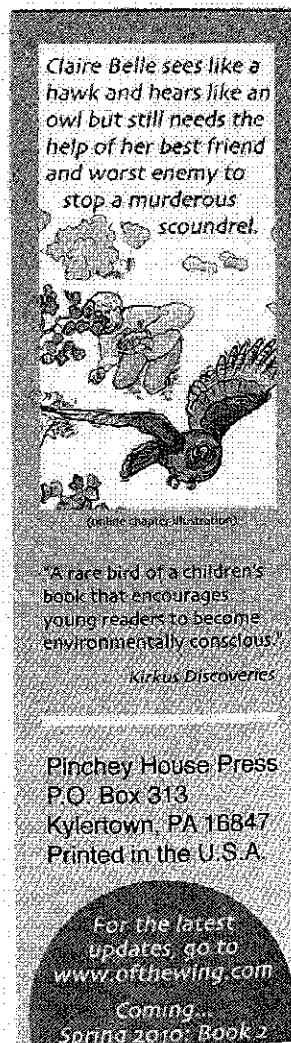
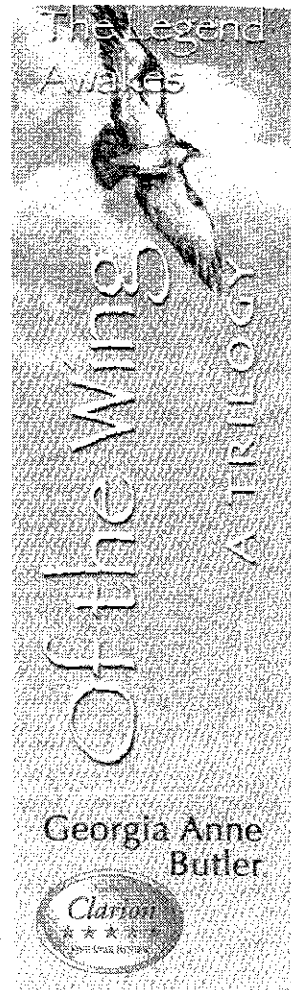
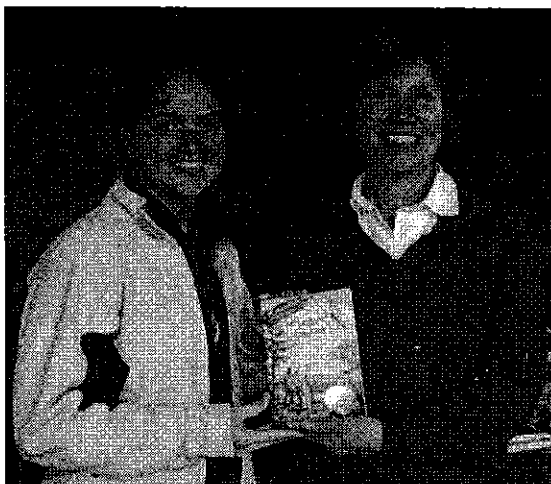
The Legend Awakes is the first book in Georgia Anne Butler's new *Of The Wing* trilogy, a series of short chapter books appropriate for children and adults alike.

Claire Belle is a young girl who lives in Pennsylvania with her mother, Louise. As a toddler, Claire was saved by the red-tailed hawk when she became lost in the woods. She has since become an avid birder who has the special ability to attract her feathered friends. However, she hides this gift from the world, along with her other unique trait: the golden color of her eyes. Her favorite thing to do is take long walks in the woods with her dog Sammy and look for birds. One day, during her walk, Claire meets a man with a chicken named Jerry. Soon, Jerry, Claire, and her friend Victor are involved in a fight to save the red-tailed hawk from Claire's gun-wielding neighbor, who happens to be the father of Billy, the class bully. Claire must also struggle to deal with Billy, whom she sees as a threat to her friendship with Victor because of Billy and Victor's shared interest in video games. Claire must fight to win over Victor while saving the birds she loves so much.

This is a great book for children above the ages 8 or 9, and is also a good light read for adults of all ages! In the book, many different bird species are mentioned and described, helping to teach both children and adults how to identify birds. It also instills in children a respect for nature and wildlife through this inspiring story of a young girl and her unique connection to the natural world.

Georgia Anne Butler lives in Central Pennsylvania and is an avid birder and stargazer as well as author. She plans on releasing the next book in this trilogy in 2010.

Georgia will be attending the November JVAS meeting and will have copies of her books available! Remember, Christmas is right around the corner!



JVAS Jackson Trail Hike

October 11, 2009

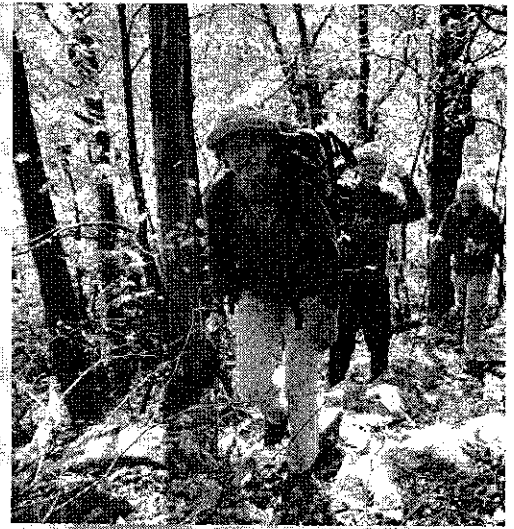


A dozen hikers joined Helena Kotala on the JVAS tour of the Jackson Trail and Mid State Trail on Tussey Mountain and through Pine Swamp valley on Sunday, October 11.

Temperatures in the 60s and gorgeous autumn skies set the stage of this hike that began and ended at Jo Hays Vista on Tussey Mountain just east of Pine Grove Mills.

Our group first descended the mile-long Pine Grove Trail, part of the MST, through dense mountain laurel till we approached Shaver's Creek, where we turned north (left) to follow the MST through a mixed deciduous/coniferous forest.

Crossing a series of rivulets emanating from upslope springs that feed the Beaver Pond wetland, the hikers enjoyed rays of sunlight breaking through the multicolored canopy. A rich forest floor covered with freshly fallen leaves, mushrooms, woodland asters, and New York ferns was our carpet.



Hiking upstream parallel to Shaver's Creek for about 3 miles helped us gain altitude to ease the steep, but short, ascent up the boulder-strewn eastern flank of Tussey Mountain to rejoin the Jackson Trail at the ridgetop, where we paused for snacks and drinks.

Turning southward back toward our destination, we hiked from talus slope to talus slope, breaking for lunch at the largest rock slide overlooking Pine Swamp, Rudy Ridge, and Stone Valley. We all marveled at the view, which also

included Little Flat and Big Flat looming above Hubler Gap.

Ridgetop landmarks such as the Lone Pine and David's Vista provided us with many reasons to stop and engross ourselves in nature's awesome beauty. One of the rockslides provided a view to the west, overlooking Scotia Barrens (SGL 176) towards Bald Eagle Ridge, with the Allegheny Front forming a backdrop.

Although the 7-mile hike was rigorous, too soon we returned to our starting point, Jo Hays Vista, refreshed by autumn's splendor in this magical part of Rothrock State Forest.



"I still quite often go for walks on the trail near my home, especially if I am stuck on something I am working on. Most of the time I am sunk in thought, but at some point on each walk there comes a moment when I look up and notice, with a kind of first-time astonishment, the amazing complex delicacy of the woods, the casual ease with which elemental things come together to form a composition that is — whatever the season, wherever I put my besotted gaze — perfect. Not just very fine, or splendid, but perfect, unimprovable."

Bill Bryson, *A Walk in the Woods*

Dispelling Illusions about Industrial Wind Energy

10 Frequently-Asked Questions

by Laura Jackson, JVAS Board Member and Chair of Save Our Allegheny Ridges

The impacts of industrial wind facilities on wildlife, natural habitats, and human communities are complex. As I type this, I am watching a young red-bellied woodpecker gobble down peanut hearts at the feeder just outside my window. I'm also enjoying the view out my window for other reasons. I can see lots of wildflowers swaying in a gentle breeze. We don't get much wind here at the eastern base of Tussey Mountain, but up on top (which stretches up from my backyard) it is windier. My house is at an elevation of about 1400 feet, while the top of Tussey Mountain reaches an elevation of 2200 feet above my house. One of the delights in reaching the top of that 800-foot climb is to enjoy the cool mountain breeze that usually sails from west to east.

For millions of years, the only animals that took advantage of that wind were birds, bats, and insects. Two times a year, every fall and spring, millions of flying creatures glide over the ridge and valley system, riding the thermals, or catching the stiff winds of a cold front as they migrate north in the spring, or south in the fall. But now there is a new competition in town – industrial wind facilities. Developers of these projects see the ridges as a source to be exploited for clean, renewable energy.

Investing in clean energy has a lot of advantages over relying on dirty non-renewables, such as coal. Wind turbines are powered by an inexhaustible source of energy – the wind. And, turbines don't produce any waste products. The concept of obtaining energy from a renewable source that doesn't require any water and doesn't produce any pollution sounds wonderful. And that's all the wind developers want you to know about wind energy. If only that were the whole story!

Unfortunately, what sounds wonderful from an engineering or manufacturing point of view isn't always clean and green when put into practice. When one looks beyond the façade of gleaming white turbines, one sees another, darker side of wind energy.

Industrial wind turbines kill birds, bats, and insects. Industrial turbines degrade natural habitats. Industrial turbines infringe on people's lives to the point of causing health concerns. The controversy over industrial wind will tear apart families and communities.

As members of Juniata Valley Audubon Society, we are charged with a responsibility. National Audubon is "*dedicated to the conservation and restoration of natural ecosystems, focusing on birds, other wildlife, and their habitats for the benefit of humanity and the Earth's biological diversity.*" As members at the local chapter level, we are the "army" of volunteers needed to implement National Audubon's mission. It doesn't take a rocket scientist to understand that industrial wind development on our forested ridges contradicts the very mission we are charged to fulfill.

What should we know about industrial wind turbines? The remainder of this piece is a series of talking points, to help you become informed about this new technology. Although people have used windmills for thousands of years, those old-fashioned machines are no match for today's industrial giants, which are called industrial wind turbines. The proliferation of wind turbines is really just beginning in South Central Pennsylvania.

Here are the numbers, as of August 20, 2009:

County	Constructed Turbines	Proposed Turbines
Bedford	0	Dunning Mountain: 24 Bedford: 102
Blair	Allegheny Ridge: 8 North Allegheny: 16	Chestnut Flats: 19 Sandy Ridge: 16
Cambria	Allegheny Ridge: 32 North Allegheny: 18 Highland: 25	Ebensburg: 13 Patton: 14 Rock Run: 28
Centre	0	Airtricity: 5 Sandy Ridge: 9
Huntingdon	0	0
Somerset	Casselman: 23 Forward: 14 Garrett: 8 Lookout: 18 Meyersdale: 20 Somerset: 6 Stony Creek: 35	Savage Mtn: 100 Shaffer Mtn: 30
Total	223	360

Ten Frequently Asked Questions about Industrial Wind

1. Will industrial wind turbines reduce our dependence on foreign oil? *Wind turbines only produce electricity. Most of the foreign oil imported into the U. S. is used for transportation. We actually export more oil to Mexico than we use for electricity production. Only 3% of the oil in the U.S. is used to fire up power plants for electricity production, and that oil is a tarry residual.*

2. Won't more wind turbines mean we can get rid of our coal-power plants? *Comparing wind to coal is a false choice. Wind energy cannot replace coal power plants, as wind is too volatile and unreliable. If you want to support an electricity source that is cleaner than coal, and can even replace coal, then consider nuclear power. Nuclear power does not have any carbon dioxide emissions. But, it is an extractive resource, it produces radioactive waste, and there is the safety issue.*

Another electricity source with a lot of potential is rooftop solar. We don't have to damage wildlife habitat for rooftop solar. Millions of homes can be powered with their own solar system installed on the roof.

Wind is very limited and won't allow us to abandon fossil fuels. Customers lose power, or have to deal with rolling blackouts when just 4 - 6% of the electric grid is supplied by wind power. Problems with wind's instability have already occurred in California, Texas, Denmark, Spain, and Ontario.

Americans use the most electricity in the summer, when winds are calm, and very little electricity is produced from wind turbines. Wind energy can't be stored. Ironically, when wind enters the grid in the Pacific Northwest, hydropower (a clean, renewable energy) is the first energy source to be shut down, or scaled back.

3. Doesn't every little bit of renewable energy help? *Yes, wind is a little bit when it comes to electricity production. But it comes with a big price tag. Wind and solar get the highest subsidies of any electricity source.*

Average Subsidy in 2007:

Coal - \$0.44/MWh

Nuclear - \$1.59/MWh

Wind - \$23.37/MWh

Solar - \$24.34/MWh⁶

The Production Tax Credits (PTC), reductions in tax liabilities, and research and development monies provided by the American taxpayer cover up to 2/3 of the cost per turbine. A \$2 million turbine only costs the developer about \$700,000. The PTC covers about one-third of the cost, and other subsidies and support equal another one-third.

"Over 4,000 2.0-MW wind turbines will be required to generate an annual amount of electricity equivalent to 10% of Pennsylvania's projected demand in 2030. This will require 500 miles of ridgeline devoted to wind turbines in Pennsylvania. But 13,000 2.0-MW wind turbines likely will be needed to produce 10% of the amount of electricity consumed in the Mid-Atlantic States by 2030!"

The huge impact of industrial wind on our forested ridges is creating ecological havoc in habitats that should be off-limits to development. Our shortsighted approach toward the energy crisis is actually exacerbating the biodiversity crisis. Many warblers and other songbirds require large blocks of unfragmented forests to successfully reproduce and escape predation.

4. Isn't electricity from industrial wind cheaper than electricity from coal or nuclear power plants? *Wind is competitively priced due to subsidies and larger turbines, but it is not cheaper than other sources of electricity. Bedford REC does not buy wind power because it is "more expensive" than other traditional sources. Electricity produced by wind projects goes into the PJM Grid. We may use it locally, but it is mixed with other traditional sources of electricity. Electricity from wind facilities goes into the grid and is mixed with electricity from other sources like coal and nuclear.*

Most of the turbines today are 2 MW in size and cost about \$3.5 million installed.

Because wind is variable and unreliable, we don't get much work out of the turbines - they produce only 30% of the electricity that they are capable of producing. This is called capacity factor. Wind developers like to tell us how many houses will be powered by wind turbines, since a residence uses about 10,000 kWh of electricity per year. But, since wind turbines don't produce electricity on a reliable basis, who would want to rely solely on electricity from a wind turbine?

5. How long does it take for a wind turbine to pay for itself? *Remember that a 2MW turbine costs \$3.5 million dollars. The lifespan of turbines is estimated to be about 20 years. If you financed the entire \$3.5 million at 7% it would be require a payment of \$330,000 per year. This does not include the cost of maintenance, transmission lines or operating conventional power plants to balance the fluctuating output. Glenn Czulada has worked out the following scenario to show how wind developers rely on subsidies. I used 6 cents per kWh because Allegheny Ridge Wind Project receives that rate from First Energy, which buys their electricity.*

The capacity factor of a 2 MW turbine is only .6 MW over the entire year. There are 8,760 hours in the year, yielding a production of 5,256 MWh. Multiply by 1,000 to convert to kWh and the yield is 5,256,000 kWh. This is the average electricity produced by a 2 MW turbine in our area.

Each kWh is worth about 6 cents wholesale for a total production of \$315,360 per year, yet the owner will have a payment of \$330,000 per year to cover capital costs. Let's estimate another \$70,000 per year to cover maintenance, landowner leases, local government kickbacks, transmission lines and extra costs of conventional power plants backup. There are approximately 3 - 5 full time workers for every 20 turbines. Even using the gross underestimation of \$70,000 per year of ongoing costs, the investors would need \$400,000 per year to yield only \$315,360 in electricity payments.

But wait, we haven't factored in the 2/3 subsidies from the Production Tax Credits, state subsidies, or double-accelerated capital appreciation. This is how the investors are making the large profits.

6. Won't industrial wind projects help our economy? *Economic benefits are limited. White Construction Company from Indiana does most of the construction work in our area. Many of their employees are from out of state. The concrete work in the foundations will benefit local companies, such as New Enterprise Stone and Lime. Most, if not all, of the steel is usually imported.*

The Operations and Maintenance Crew typically consists of 3 - 5 people for a project of about 20 turbines. That isn't much job increase. These are the only permanent jobs.

Landowners who lease their property to wind projects do get a windfall: approximately \$3,000 per turbine per year for the 2 MW turbines.

7. Won't industrial wind facilities reduce greenhouse gases and mercury pollution? *At best, wind development in the eastern United States will only slightly lessen the increasing rate of growth in demand for more power, which is expanding at about 2% per year. The Mid-Atlantic Region showed a 2% drop in carbon dioxide emissions from 1995 - 2003 - before wind facilities were developed. Most of our air pollution comes from oil burned for transportation. Wind turbines only produce electricity.*

8. How many turbines will we need to equal the electricity output of a single nuclear power plant in PA? *Limerick is a large nuclear power plant located just north of Philadelphia, PA. It has a capacity of 2,276 MW and can achieve a capacity factor of 97%. This means that it produces 97% of the electricity that it is capable of making. Wind turbines achieve only about 30% capacity factor. It will take 4,904 industrial wind turbines to provide an equivalent amount of electricity as just one nuclear power plant in PA. Since most turbines are spaced 8 per mile, these turbines would cover 613 miles of ridgetop.*

9. Doesn't a property owner have the right to do what they want to on their own property? *When someone decides to construct a noisy, industrial power plant on their property that reduces their neighbor's property value, quality of life, and enjoyment of their land and home, then proper setbacks should regulate where turbines belong. Yes, property rights are important, but actions should not imperil the health and welfare of neighbors.*

Landowners who sign wind leases or waivers actually give up the right to take legal action against wind developers. A good example of this is excerpted from Iberdrola Renewables' lease for landowners: "9.8 Waiver of Nuisance. Landowner has been informed by Lessee and understands that the presence and operations of the improvements on the Permitted Area and on adjacent property will potentially result in some nuisance to Landowner, such as: (i) higher noise levels than currently occur at the Permitted Area and the surrounding area; (ii) visual impact; (iii) "flickering" reflections and/or shadowing from the wind turbine rotors. Landowner hereby accepts such nuisance and waives any right that Landowner may have to object to such nuisance (and Landowner releases Lessee from any claims Landowner may have with respect to any such nuisance). Lessee will exercise reasonable efforts to keep such nuisances, if any, to a minimum."

10. I've stood right under a wind turbine and they are quiet. How can you say they are noisy? *The real problem with noise from wind turbines is the low-frequency noise and vibrations that affect people through their ear bones. Dr. Pierpont's book, due to be published in October by K-Selected Books, has been peer-reviewed and exposes the impact of wind turbines on human health.*

Yes, it can be quiet under a turbine - especially if it isn't very windy. But people who live close to turbines experience the harmful effects of low-frequency noise. It doesn't happen all the time, but it is frequent enough to be a serious issue for many people.

Dr. Nina Pierpont, a fellow of the American Academy of Pediatrics: "There is no doubt that my clinical research shows that the infrasonic to ultrasonic noise and vibrations emitted by wind turbines cause the symptoms which I am calling wind turbine syndrome. There are about 12 different health problems associated with WTS and these range from tachycardia, sleep disturbance, headaches, tinnitus, nausea, visual blurring, panic attacks with sensations of internal quivering to more general irritability.

In conclusion, I hope these 10 questions have generated even more questions about the inefficacy of industrial wind in fighting global warming, air pollution, and generating electricity. Many people don't know very much about wind energy. Try some of these talking points the next time you get together with friends and family. Keep it light. Keep it simple. But help to spread the truth about industrial wind projects.

Nature's Calendar

By Heidi Mullendore

Ensnconced in my big red reading chair with a good book, I winced as a shaft of sunlight seared my eyes. Sighing, I vacated my spot – a seasonal move as the position of the afternoon sun neatly speared the windows to shine on my chair.

For several weeks each October and April the late afternoon sun makes my reading spot unusable. The sun's path along the horizon is a precise indicator of the seasons- a beacon that marks time and drives seasonal changes that have come to mark nature's calendar. At some dim point in history some ancient must have equated the sun's movement across the hills with seasonal happenings, an observation picked up by astronomers tracking the course of the sun across the walls of their studies, putting pen to paper to link this union for the rest of human-kind.

For most of our lives we live by the clock and paper calendar, tracking meetings and appointments, and setting our alarms in order to get to work. Outside of our busy schedules however, the need for clock and calendar fade as nature reveals the passage of the year through an unchanging pattern of milestones as predictable as the tides.

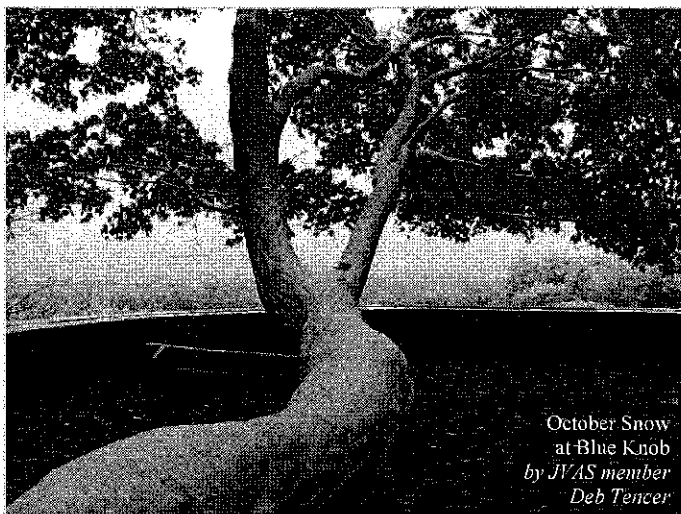
The fall equinox marks the end of summer and welcomes autumn with its harvest time and holidays. But for me, it is the first frost which brings an end to the warm season. That first true dip into cold temperatures withers the delicate leaves of jewelweed, browning their stems and bending their bejeweled heads low to the ground. Hardy asters and goldenrod withstand such frosts but the plants of the summer succumb, marking the true end of the season.

With the warm-loving plants now gone, I now look to the ridge behind my house to enjoy the last few weeks of turkey vultures roosting in the trees. Each evening through spring and summer almost one hundred vultures circle as the sun dies, settling in the trees on the hill. As autumn commences, their silent shadows are seen no more as they vacate their roost and move on. As another page in nature's calendar turns, the roost is empty and the lights of fireflies are gone and the quick shadows of bats flitting in the night sky are a summer memory.

With the onset of autumn I now arise before the sun and many times must scrape frost from my windshield before heading to work. The deer that stalk the country roads have lost their rich cinnamon coats and are now a dull brown, blending in with the fading foliage.

Huge flocks of grackles cackle from the trees as they move down the ridges and across farm fields. Starlings form huge flocks and swirl like schools of fish as they swarm to feed in the fields alongside the grackles. The quick flash of red that signaled the turning of maples and Virginia creepers is now gone and just the oaks retain their burnished orange leaves. The quick fire of early autumn moved from the valleys and slowly spread up the ridges, leaving in its wake the dull gray and brown of bare branches.

A few warm days in October bring ladybugs by the thousands accompanied by their hungry predators, the assassin bugs. The morning spider webs are now silvered with frost and titmice squabble with house sparrows among the browned seed heads of the wildflower garden.



As the sun moves further south along the horizon, nature's calendar relentlessly marches forward and the ridge top where once vultures stood watch is now bare; branches bear the weight of the first snow of late fall. Conifers stand out in the forest as the only greenery to catch the eye. The days are at their shortest and dinner the lights are turned on by five o'clock. November passes and the first snow squalls of winter arrive. I can hear the ghostly

calls of migrating tundra swans as I awaken in the night under the down comforter that now covers the bed.

On my human calendar, filled with its multi-colored entries marking the profess of the season in meetings and school programs, the winter stretches before me, an unimaginative expanse of time to endure and to fill with projects and computer time. Away from my desk, however, the time speeds by as each miraculous milestone appears and flickers for a brief time before giving way to the next. Fall and winter pass easily under the turning of the sun, a string of unique happenings that reveal the vitality of the cold season.

"Last December 21, the first day of winter, the winter solstice, when the day was shortest, the sun rose farthest to the south. It stayed there for several mornings, but then started back north along the horizon, playing hide-and-seek for a fortnight among the chimney pots and television fish bones on a distant roof before moving off through a tangle of bare branches. Morning after morning, the sun rose each day a little farther to the left until on march 20, the vernal equinox, the day I had been waiting for, the sun rose due east, directly over the center of the windowsill, and the shadows from the mullions fell straight across the bed. I proclaimed it spring."

-Roger b. Swain, *Field Days*

Lawns' turf the largest of all plantings in Chesapeake region

The largest "crop" in the Bay watershed is no longer corn or soybeans, according to new research, but turf grass. More than 3.8 million acres of grass - or 9.5 percent of the 64,000-square-mile watershed - is made up of lawns or other grass-covered areas such as parks and golf courses, according to a soon-to-be-released paper.

That's slightly more than the amount of land covered by corn, soybeans, wheat and other row crops in the watershed, according to Tom Schueler, coordinator of the nonprofit Chesapeake Stormwater Network, and Peter Claggett, a research geographer with the U.S. Geological Survey, who independently analyzed different sets of data but came up with similar figures.

Overall, the amount of turf grass in the watershed appears to have tripled in the last three decades, according to ChesNet Storm News, the stormwater network's newsletter.

Extrapolating from that data, Schueler estimates that 215 million pounds of nitrogen is applied to lawns each year. **Lawns in the watershed receive about 19 million pounds of pesticides per year**, which are commonly found in urban streams. Chesapeake Bay watershed residents spend about \$5 billion a year maintaining lawns.

Lawns also use a huge amount of water. During summer months, the equivalent of 7,875 cubic feet per second of water is applied to lawns. That's roughly equivalent to the freshwater flow of the Potomac River in the District of Columbia during the summer.

Lawn and garden equipment, which generally have poor pollution controls, are the second leading emitter of smog-causing pollutants during the summer, just a bit behind cars and trucks.

Whipple Lake Trail

by Helena Kotala

If you're looking for a relatively easy hike close to home, then check out the Whipple Lake Trail at Whipple Dam State Park. The park is located only 12 miles from State College, and offers a variety of recreational opportunities, including picnicking and pavilion rentals, a beach area, and boat rentals in the summer months.

Whipple Lake Trail is approximately 3 miles long and does not have rocky technical sections or mountains to climb, so it is perfect for families or anyone new to hiking. It also offers a variety of habitats and many opportunities for wildlife watching.

It is easiest to access the trail from the beach side of the lake. Park, then walk upstream along the edge of the lake until you come to the sign proclaiming the beginning of the Whipple Lake Trail. Before entering the forest, stop and take a look out onto the vegetated portion of the lake. If you are lucky, you may see a painted turtle basking on one of the partially submerged logs, or maybe a muskrat or beaver gliding through the water.

Begin hiking through the woods, and notice how the habitat changes from lakeside to streamside hemlock forests. The ground tends to be a little muddy, especially after a rain, so wear appropriate footwear! Along this stretch of trail, there are many scenic spots along the stream to take a break or take some photos. After hiking about a mile and a half,

you will come to a bench on the right hand side of the trail and a bridge crossing Laurel Run. Cross the bridge, and this begins the only uphill section of trail, a short climb up Rudy Ridge.

Before you know it, the climb will be over and you will be strolling along a flat path that follows the top of the hill. Whipple Lake will be to your left, but it will hardly be visible through the woods. The trail then joins with Beidler Road for a few hundred yards before descending the ridge.

You will come out of the woods across the lake from the beach, at a parking area and pavilions. As you cross the bridge back to the beach area, take notice of the dam, for which the park is named. The original dam was built slightly downstream from the existing dam in 1868 by Osgood M. Whipple for use for his sawmill. It was rebuilt in 1927, and then the present dam was constructed in 1935 by the Civilian Conservation Corps.

If your stomach is grumbling after the hike, sit down and have a picnic in the park, or stop at Doan's Bones Barbeque or the Whipple Dam Store, both located on the way out of the park.

Helena Kotala is Outings Co-Chair for the Moshannon Group of the Sierra Club, and a student at Penn State University.

Philadelphia Inquirer Editorial: Drilling for Friends October 10, 2009

It is shocking, shocking that a top aide to Gov. Rendell was lured away to work for a gas-drilling firm with a major stake in Pennsylvania's natural gas deposits.

K. Scott Roy is stepping down from his \$146,000-a-year job as Rendell's executive deputy chief of staff. He'll start work Monday in a job that pays goodness-knows-how-much with Range Resources Corp., a Texas company with leasing rights to 900,000 acres in the state's gas-rich Marcellus Shale region.

Until now, Roy had been the governor's liaison on drilling issues. Now he will be Range Resources' point man in Harrisburg for government relations and regulatory affairs.

Nice work if you can get it.

Roy's move comes at an extremely awkward moment for Democrat Rendell, who began the year calling for a severance tax on gas drilling but recently did a full 180-degree turn.

Here's Rendell during his Feb. 9 budget address: "We have a Pennsylvania gold rush going on in the form of drilling for natural gas." He estimated that the tax would bring in \$632 million over four years to the depleted state coffers.

But then, in late August, Rendell abandoned the severance tax - at least for one year. He said industry leaders persuaded him that it would hamper the growth of drilling in the state.

Fascinating, because Rendell also said in his February speech: "Some have suggested that exacting such a tax would hinder development of this important resource. However, I spoke personally with West Virginia Gov. Manchin, who told me that their [severance tax] did not inhibit gas extraction and that it is continuing at a record pace, and it's reaping critically needed revenues so

the state can provide services to its citizens."

The recession hasn't appeared to hurt the drillers' plans either. In the first four months of this year, the state Department of Environmental Protection issued more than 2,000 drilling permits. Range Resources, by the way, spent more than \$400,000 in the first half of this year to lobby Rendell and legislators on how it couldn't afford a severance tax. (So the governor and legislature instead tried to tax arts groups, whose lobby isn't so wealthy). A Rendell spokesman said Roy's new job had nothing to do with Rendell's changing course and postponing a severance tax; Senate GOP opposition to the tax played a part. But the timing looks about as bad as bad can be.

For example, when did Roy start talking to Range Resources about a job? Rendell's spokesman said he doesn't know. He also said Roy doesn't remember facilitating any contacts between the governor and Range this year.

Rendell isn't the only one in Harrisburg being wooed by the oil and gas industry. Talk about a gold rush - oil and gas companies are donating furiously to the reelection campaigns of a number of state legislators. And the legislature is doing its selfish part by refusing to impose campaign finance limits.

One legislator who has struck gold is Senate President Pro Tempore (and Lt. Gov.) Joe Scarnati (R., Jefferson). One firm alone, Reliant Energy of Texas, has donated \$11,000 to his campaign in the past two years through its political action committee.

By the way, Scarnati's Republican-led Senate on Monday approved a new spending plan that would cut the DEP's budget by 30 percent - from \$229 million to \$160 million. Less money for environmental protection must have drillers weeping with joy.

GOVERNOR RENDELL'S ENVIRONMENTAL LEGACY: \$980 MILLION CUT, DIVERTED FROM ENVIRONMENTAL PROGRAMS OVER THE PAST 7 YEARS!

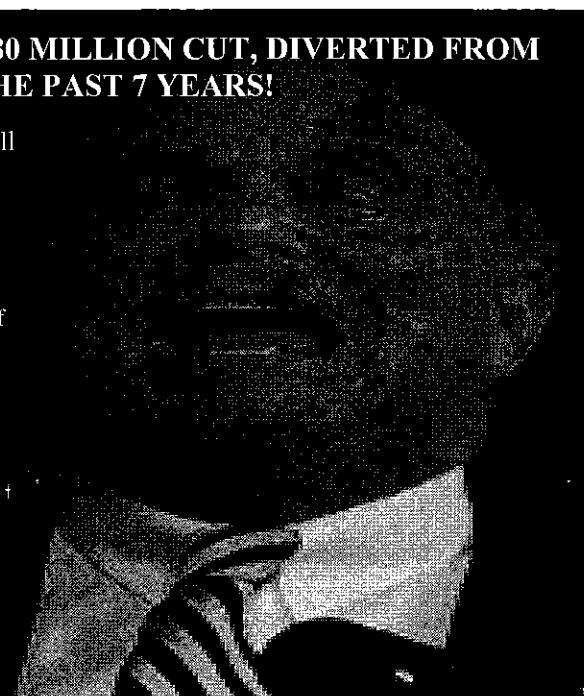
Senate Leaders, House Democrats and Gov. Rendell agreed to and passed a budget bill -- House Bill 1416 (D.Evans-D-Philadelphia)-- that includes the **largest single cut in General Fund environmental spending ever**, erasing 13 years of environmental progress.

The budget reduces overall General Fund moneys to the Department of Environmental Protection by 26.7 percent (\$58 million) and includes an 18.5 percent reduction for the Department of Conservation and Natural Resources (\$21 million).

The new budget for DEP may mean the furlough of over 300 employees.

After signing the budget, Gov. Rendell said, "This budget preserves everything voters say they care about- education, economic development and medical care."

With the budget for 2009-10 now finalized we can now total up the score for environmental programs and it is not pretty-- **over the last seven years \$980 million have been diverted or cut from environmental programs** to help balance the state budget or to fund programs that could not get funding on their own.



LOCAL CONSERVATION GROUPS OPPOSE SANDY RIDGE WIND FARM PERMIT

The DEP currently is considering an NPDES permit for the Sandy Ridge Wind Farm in Snyder Township, Blair County, and Rush and Taylor Townships, Centre County. The Moshannon Group of the Sierra Club, the Little Juniata River Association, Save Our Allegheny Ridges, Juniata Valley Audubon, and SAVE ICE MOUNTAIN are opposed to the issuance of this permit and request a public hearing.

The concerns of these local conservation organizations include particulate, chemical, and thermal pollution of special protection waters; increased surface runoff resulting in altered hydrology; and severe degradation of a Blair County Natural Heritage Area described as being "of exceptional conservation value" in the Blair County Natural Heritage Inventory because of its unfragmented forests.

The developer (Gamesa) proposes to widen 9 miles of insignificant forest road and construct 5 miles of new road in this forested Blair County Natural Heritage Area. Adjacent to the road, the developer proposes to construct transmission line corridors, resulting in clearings averaging 60' in diameter but approaching 300' with cuts and fills in sensitive areas. Up to 28 industrial-scale wind turbines will be placed in clearings bulldozed in this forest and additional scalping of the mountainside will take place to accommodate substations and accessory buildings.

Big Fill Run in the project area is classified as Exceptional Value (EV), the highest water quality level that can be designated. Given our resource energy practices of the past, the Allegheny Front region of Blair and Centre possesses few waters that achieve this status. The EV status of Big Fill Run mandates that permit reviews of projects in its watershed undergo more strenuous examination including an antidegradation review. The developer must demonstrate that their activity will maintain and not degrade water quality without exception. We believe that the developer has failed to meet this requirement.

The developer's NPDES Permit Application underestimates the exact limits of earth disturbance. We are particularly concerned with the wide and steep road that the developer intends to cut into the northern slope of Gardner Mountain (Taylor Township, Centre County) in the headwaters of Big Fill Run, just a short distance upslope from this EV stream. Bulldozing a roadway into the extremely steep hillside will result in either cut slopes or fill slopes that vary as they tie into the existing topography.

A review of the disturbance limits shown in the developer's application indicates several areas where direct impacts (i.e., fill placement or excavation) to aquatic resources are likely:

1. Crossing of Sink Run tributary by two parallel roads near the SGL 60 boundary in Snyder Township.
2. Crossing of Vanscoyoc Run in Snyder Township.
3. Crossing of several Big Fill Run tributaries in Taylor Township.

There are also locations within the proposed project area where indirect impacts (effects to the hydraulic forces or hydrologic regime of a resource) to wetlands, springs, and seeps appear not only likely, but unavoidable under the current design. This design would not only permanently reduce the amount of water available to some of the area's wetlands, springs, and seeps, but would also permanently increase the surface flow of water into adjacent tributaries. This increase in surface water volume would change the hydraulic characteristics of the stream flow, risking increased channelization, bank erosion, and sediment loading in these currently stable tributaries. This impact will be particularly severe along Big Fill Run (EV), which will be bordered by a steep and wide heavy-duty roadway for close to two miles up its narrow originating hollow. The developer's plans for containing this excess water flow are grossly inadequate.

In addition to the direct and indirect impacts described above, high potential exists throughout the project area for sediment impacts to the Exceptional Value and High Quality coldwater fishery aquatic resources. The proposed roadway alignments themselves seem to invite aquatic resource degradation from sedimentation. Again, this is particularly true for the steep and wide roadway proposed along Big Fill Run and its headwaters.

Because of impacts to EV wetlands (wetlands associated with HQ and EV waterways), this permit application will require a detailed alternatives analysis, including the analysis of off-site and no-build alternatives for the proposed project. Thus, the developer must look at different areas for access and/or site locations for avoidance.

The Moshannon Group of the Sierra Club, Save Our Allegheny Ridges, the Little Juniata River Association, Juniata Valley Audubon, and SAVE ICE MOUNTAIN call for a public hearing to address the inadequacies of Gamesa's NPDES permit application for the Sandy Ridge Wind Farm. We believe that this application, in its present form, should be denied.

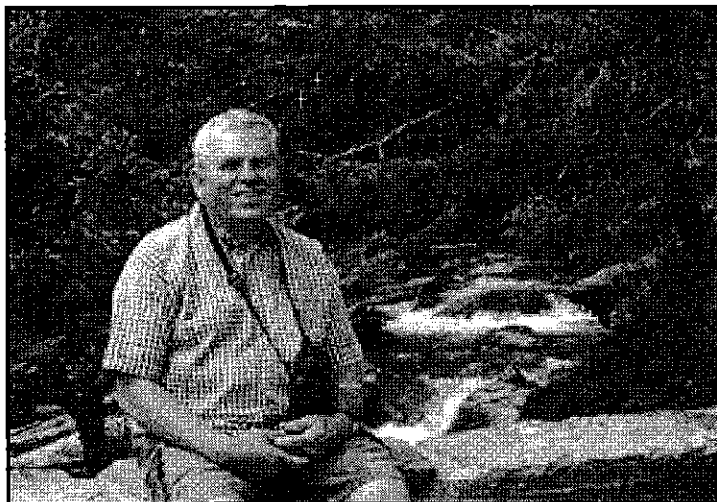
Contact Information:

Little Juniata River Association - President Bill Anderson - bjuniata@verizon.net 814-684-5922
Juniata Valley Audubon - President Terry Wentz - twentz2@verizon.net 814-693-6563
SAVE ICE MOUNTAIN - Spokesman Stan Kotala - ccwiba@keyconn.net 814-946-8840
Sierra Club - Moshannon Group - Chairman Gary Thornbloom - bearknob@verizon.net 814-353-3466
Save Our Allegheny Ridges - Chairwoman Laura Jackson - mljackson2@embarqmail.com 814-652-9268

The DEP will hold a public meeting at 6:30 p.m. followed by a public hearing at 8 p.m. on Monday, Nov. 23, at the Fraternal Order of Police Bald Eagle Lodge 51, 1979 Reese Hollow Road, Port Matilda to discuss and accept testimony on the permit application for the Sandy Ridge Wind Farm.

JVAS President's Message

The Pennsylvania State budget battle is finally over this fiscal year, almost; except for approving games of chance for casinos in Pennsylvania. What a disaster it has turned out to be for the environment which sets the Department of Environmental Protection back at least 13 years as far as money available to enforce environmental laws. All this comes at a time when Pennsylvania is sitting on a boom from oil shale exploration and an increase of more than 17% to state park attendance over the same period the previous year. The Pennsylvania State Park system has just received the award as best state park system in the nation by the National Recreation and Park Association in October at their annual meeting in Utah.



I realize cuts have had to be made everywhere in state government; DCNR and DEP are no exceptions. It does seem a little unreasonable that state parks received an 18% decrease, forestry a 13% decrease and DEP a 26% decrease. At the same time our state legislature, largest in the nation, absorbed cuts of 9.6% in the Senate and 3.8% in the House. All this has occurred as the Pennsylvania state government has decided not to charge a severance tax on gas exploration, take funds for leasing oil and gas exploration on state forest lands from DCNR to be used for other expenses, and increase acreage for gas exploration on state forest lands possibly an additional 300,000 acres. Where are we going?

*This brings me to a recent telephone call I received from a local citizen who read a letter to the editor (LTE) from a JVAS Board member opposing gas oil shale exploration because of damages being done to streams and water supplies. The reader being very well informed about the issue, agreed with the LTE, and wanted to know why JVAS doesn't do more. I discussed the JVAS battle over wind farms, our successes, and time consumed by JVAS members fighting the battle. Unfortunately there is a limit to the amount of time JVAS members are able to devote to issues and the battle site is best fought in the local community with township ordinances which takes great amounts of time to attend local meetings, etc. **We have the knowledge, but not the manpower!!***

The JVAS Board welcomes informed citizens who are passionate about environmental issues to join the fight. We have a few openings on the Board of Director's and we will gladly let you take the lead with our guidance. Without more citizen opposition, we will see some state parks closed, more state forest land open to drilling, and more waterways polluted. As resulted from coal strip mining in the 1940's thru 1960's, lack of enforcement and good regulations will result in another period of environmental wasteland that will take decades and millions of dollars to reclaim.

Terry

The Bedford County Arts Council will sponsor a fine art photography exhibit, Celebrating Nature, during November, featuring the nature photography of Mike and Laura Jackson. The Jacksons have printed 40 of their favorite nature photographs to share with the public, most of which highlight the spectacular beauty found in Pennsylvania during the various seasons. A variety of landscapes and wildlife photographs should appeal to viewers of all ages. The reception, free and open to the public, will be held on Monday, November 8, 2009 from 1 - 3 PM in the historic Arts Council building on Pitt St. in Bedford, PA.

The show will be exhibited from Nov. 4 - Nov. 27, Tuesday through Saturday 11 - 5 PM. There is no charge for admission.

Directions to the Arts Council may be found at

<http://www.artsinbedfordpa.org/index.html>

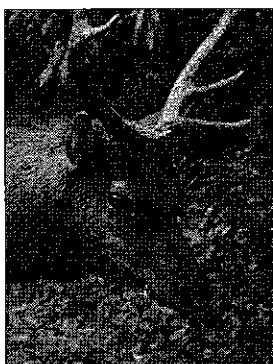


Sometimes we get caught up with what we perceive as our problems. Sometimes our thoughts (that may or may not be true) take all our attention. We can forget the simple things. We loose our ability to live in the moment and enjoy the present.....if we could just slow down and really see.....really appreciate the warmth of the sun, the sound of the birds, the enjoyment of a crusty piece of bread.....

JVAS member Deb Tencer



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Become a chapter-only member: _____ Individual: \$15 _____ Family: \$20 _____ Supporting: \$35

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SOAR Representative....Laura Jackson 652-9268

mljackson@hughes.net

NOVEMBER/DECEMBER PROGRAMS

NOVEMBER 17 — "EVERYTHING YOU ALWAYS WANTED TO KNOW ABOUT BATS"

Bat expert Dr. Michael Gannon will cover general information on bats, bat myths, and bat biology, before delving into the specifics of Pennsylvania bats, including the latest on wind turbines and white-nose syndrome.

Georgia Anne Butler, author of "The Legend Awakes", will be present at the November JVAS meeting with copies of her book, which make great holiday gifts!

NOVEMBER/DECEMBER FIELD TRIPS

NOVEMBER 14 Saturday—**AROUND THE LAKE AT CANOE CREEK STATE PARK:** 4-mile hike around Canoe Lake. Bring binoculars because you'll likely get good views of **waterfowl**. Meet at the beach patio at 9am. Leader: Dr. Stan Kotala 946-8840

NOVEMBER 22 Sunday —**MID STATE TRAIL SHUTTLE HIKE:** 4- mile hike on the Mid State Trail, from Colerain Road to the Little Juniata Natural Area. Meet at the Little Juniata Natural Area parking lot at noon. **DIFFICULT HIKE.** Leader: Dr. Stan Kotala 946-8840 ccwiba@keyconn.net

DECEMBER 19 Saturday - **ANNUAL CHRISTMAS BIRD COUNT:** Spend the day in the field and enjoy fellowship at the Hoyers' for a covered-dish supper and bird tally for the day. Compiler: Steve Bonta 684-1175 stevebonta@yahoo.com Please call Marge Hoyer 684-7376 to coordinate dishes.

ABOUT JVAS PROGRAMS: Programs are presented on the *third Tuesday of each month, September through May (except December)*. They begin at 7 PM in the **BELLWOOD-ANTIS PUBLIC LIBRARY**. Take the Bellwood Exit off I-99, go straight thru the traffic light at the Sheetz intersection, proceed about 4 blocks and turn right just before crossing the railroad overpass. Turn left at the next intersection, another 2 blocks and the library is on the right.

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—The Beaver Dams