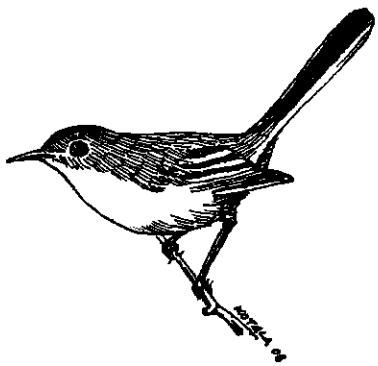
The Gnatcatcher

Newsletter of Juniata Valley Audubon

Volume 40 No. 4 Sept/Oct 2008 www.jvas.org



Juniata Valley Audubon urges support for PA House Bill 1676

Although State Game Lands are owned and maintained by the Pennsylvania Game Commission primarily for hunting, those who visit such areas often are not hunters. Those visitors are likely hiking, bird-watching, biking or riding horses through the forest oasis.

Pennsylvania hunters paid for the acquisition of about 1.4 million acres across the state --- and they continually pay for the maintenance of those lands each year — that are open to everyone to use. They also pay for the management of all the state's wildlife, including threatened and/or endangered species, such as bald eagles.

Under a bill that's circulating through the Pennsylvania legislature now, people who don't hunt, fish or boat soon could be required to chip in as well.

State Rep. David Levdansky, D-Allegheny, has proposed House Bill 1676, which calls for taking a small portion of Pennsylvania's sales tax and dedicating it to the Pennsylvania Game Commission and the Pennsylvania Fish and Boat Commission. The Game Commission would get .00116 percent of the annual state sales tax revenues and the Fish and Boat Commission would get .00058 percent under Levdansky's proposal. Pennsylvania's sales tax generates about $10 billion each year.

That adds up to about $10 million for the Game Commission, which has an annual budget of about $65 million, and $5 million for the Fish and Boat Commission, which budgets about $45 million each year.

Mike Schmit, the Game Commission's deputy executive director, recently told the House Finance Committee that *"the commission's current funding structure is largely dependent upon hunting and trapping license revenue. The commission's duty, however, extends far beyond managing game and furbearers for sportsmen. In Pennsylvania, the preservation and protection of natural resources, including wildlife, is a constitutional mandate, and the commission is the state agency tasked with fulfilling this mandate."*

"HB 1676 would not radically alter Pennsylvania's current fish and wildlife funding structure, as sportsmen will continue to pay the lion's share," Schmit told the House Finance Committee. *"However, HB 1676 addresses the fact that it is inequitable and unrealistic to expect sportsmen to remain the only source of funding for wildlife conservation and protection in Pennsylvania."*

Likewise, the Fish and Boat Commission is charged with managing all reptiles and fish — not just game fish, such as trout.

That's a "broad mandate, with a narrow funding stream," Levdansky said. "We're at the point where we can't depend solely on license fees any more," he added.

"Hunting and fishing have a huge economic impact in Pennsylvania," Levdansky said. "They are responsible for a lot of that sales tax revenue. I'm only asking for $15 million out of that $9 or $10 billion."

The Game Commission has left vacant positions representing nearly 15 percent of its workforce because it can't afford to fill those jobs. And even without increases in license fees, statistics show the number of hunters and anglers is declining in Pennsylvania and across the country.

HB 1676 would provide the two agencies with a funding stream that is not dependent solely on hunters and anglers.

"These agencies benefit all Pennsylvania residents, so I'm saying all Pennsylvania residents should contribute to their mandates," Levdansky said.

"And, more importantly, HB 1676 provides much needed assistance to our wildlife and their habitats. HB 1676 will allow the commission to work harder to preserve the things we value, as well as to better fulfill our constitutionally mandated responsibility to manage all wildlife on behalf of all citizens."

PLEASE CONTACT YOUR PENNSYLVANIA STATE REPRESENTATIVE AND ASK HIM OR HER TO SUPPORT H.B. 1676

Maxine Leckvarcik
in memoriam

Maxine Leckvarcik passed away this past summer. Although most JVAS members, including some of her fellow board members, didn't know it, Maxine had been battling cancer for several years. She did not let this interfere with her life.

Maxine was a JVAS board member for many years, serving as our hospitality chair. She organized our picnics, hosted the annual JVAS planning meeting every August and our April banquet, assisted with the preparation of our newsletter, and made sure that we all had enough food and drink during the "social hour" following our meetings.

Maxine also took part in many JVAS citizen science projects: She regularly gathered data for the JVAS/ Pennsylvania Game Commission early-successional habitat project at State Game Lands 322 north of Huntingdon; she provided records for the Pennsylvania Herpetological Atlas Project; she participated in golden-winged warbler monitoring at Canoe Creek State Park; and she assisted with the gathering and compilation of data that led to the designation of the Canoe Creek Watershed as an Important Bird Area.

Maxine (center) at Fort Roberdeau Natural Area with (L to R) Alice Fleischer, Laura Jackson, Mike Jackson, Shirley Wagoner, and Bob Washburn.

Maxine served as a JVAS education committee volunteer at Fort Roberdeau County Park for several years, teaching children about nature. She was a regular participant in JVAS field trips and always brought us smiles and laughter with her great sense of humor.

Maxine is missed by us all.

In Maxine's honor the JVAS board of directors decided to name our annual picnic the Maxine Leckvarcik Memorial Picnic.

Maxine displays a polyphemus cocoon that she found during a hike at the Fort Roberdeau Natural Area prior to the JVAS banquet. Heidi Boyle at left.

Untouched Forests store 3 Times more Carbon

About 35 percent of greenhouse gases in the atmosphere is a result of past deforestation and 18 percent of annual global emissions is from continued deforestation

Untouched natural forests store three times more carbon dioxide than previously estimated and 60 percent more than plantation forests, says a new study of "green carbon" and its role in climate change.

Green carbon occurs in natural forests, brown carbon is found in industrialized forests or plantations, grey carbon in fossil fuels and blue carbon in oceans.

The role of untouched forests, and their biomass of green carbon, had been underestimated in the fight against global warming.

Untouched forests can carry three times the carbon presently estimated, if their biomass of carbon stock was included.

Currently, forest carbon storage capacity is based on plantation forest estimates.

Not only did natural forests store **more** carbon but, because they remained untouched, they stored the carbon **for longer** than plantation forests which were cut down on a rotation basis.

The report found that "natural forests are more resilient to climate change and disturbances than plantations".

Co-author of the report Brendan Mackey said protecting natural forests served two purposes: it **maintained a large carbon sink** and **stopped the release of the forest's stored carbon**.

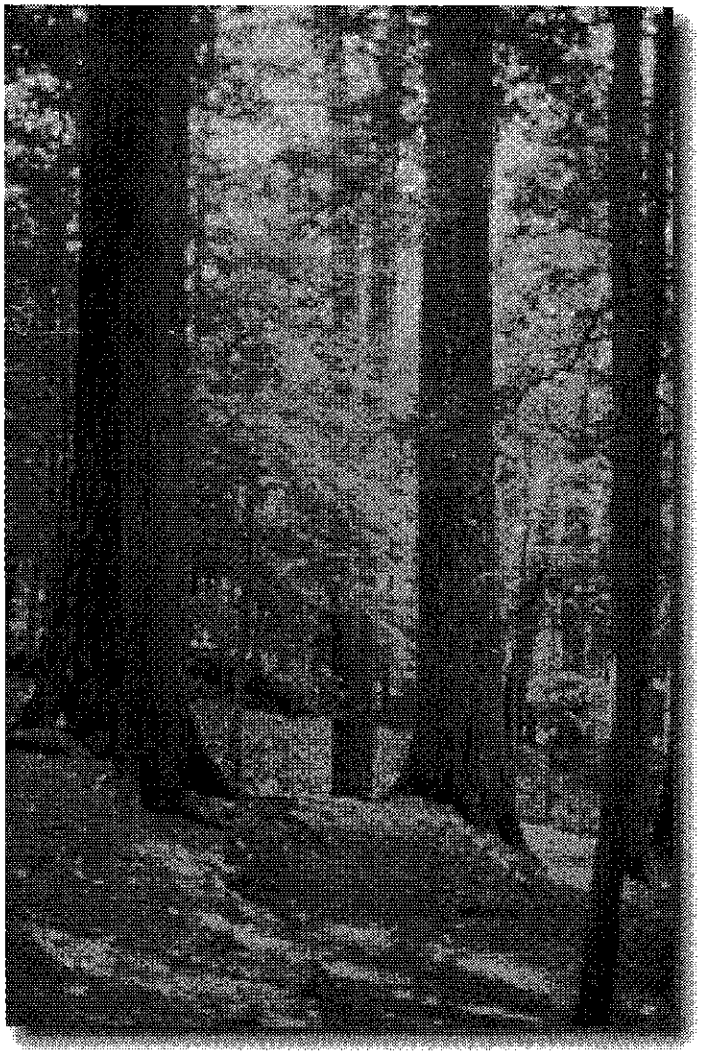
"Protecting the carbon in natural forests is preventing an additional emission of carbon from what we get from burning fossil fuel," said Mackey.

The carbon stored in the world's biomass and soil was approximately three times the amount in the atmosphere, said the report. **About 35 percent of greenhouse gases in the atmosphere is a result of past deforestation and 18 percent of annual global emissions is from continued deforestation.**

The report said **logging resulted in more than a 40 percent reduction in long-term carbon compared with unlogged forests**.

"The majority of biomass carbon in natural forests resides in the woody biomass of large old trees. Commercial logging changes the age structure of forests so that the average age of trees is much younger," it said.

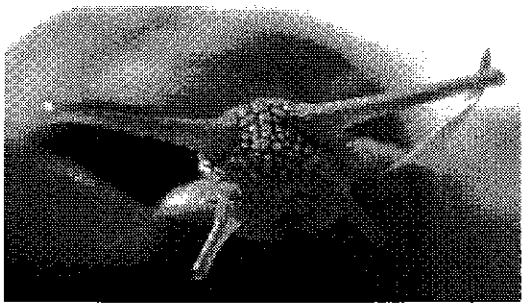
"The carbon stock of forests subject to commercial logging, and of monoculture plantations in particular, will therefore always be significantly less on average than the carbon stock of natural, undisturbed forests."



Protecting forests from logging so that old growth can develop is an ecologically sound and important means of preventing global climate change.

Slime Trails

By Heidi Boyle



Dropping my backpack, I slumped down a tree trunk, tiredly settling myself into the duff, resenting the thick morning air near saturation with humidity. In this kind of weather, sweat has no place to go, and a long hike can drain you of energy quickly. Looking forward to the first sip of cold water, I reached back for the pack, my hand closing over something mushy and slimy. Although my tired brain identified the offending substance as a harmless slug, I was already up dancing, frantically wiping my hand over and over on shirt and pants to rid my skin of the slick mucous.

This reaction is a familiar one when it comes to slugs. They are completely harmless, offer no threat upon our person, nor will they ever muster enough speed to chase us, and yet the slime-producing gastropods seem to ratchet up the yuk factor in humans.

Now that the slime on my hand was reduced to mere stickiness, I turned to my pack to reveal the greenish-brown slug placidly clinging to the wet material that held my water bottle. The dark green weave of the pack showed the slick tracings of the slug's journey. The slime trail was narrow and clear, and slightly sticky to the touch. Slugs are the experts in using several recipes of slime as an aid in reducing or increasing friction, depending upon the surface they've chosen to explore. Slime is only one part of the secret to locomotion; they rely on hundreds of tiny hairs to anchor themselves while muscular movements pull them along.

Gastropods (translates as 'stomach-foot') literally travel on this muscular foot through duff, dirt, vegetation, tree bark, rock, siding, backpacks and anywhere else they want to travel. They can climb on any surface in any direction with the aid of the proper secretion.

The beautiful 1.5" long slug was likely part of a congregation (yes, really) of slugs gathered on a nearby tree trunk. The old hemlock trunk, now devoid of bark and riddled with holes and beetle trails, bore an intricate tracery of slime trails. A good two dozen slugs ranged over the surface, oozing over the rotting wood and crossing paths.

I lay in the duff and watched in fascination at this slow motion stampede. Two shiny slugs approached each other, the edges of their feet inching slowly along, until delicately touching. Their two pairs of tentacles retracted in a flash, only to slowly re-emerge as the slugs caressed each other. The longer tentacles revealed tiny black spots at the tips – primitive eyes used to take in light. As the slugs continued in their slow motion waltz, gently reaching forward, their shorter tentacles stretched out to survey, acting as feelers to taste and smell.

The observation of slugs is a study in patience. The scientific study of slugs and snails, with the elegant name of malacology, surely must call for a certificate in sainthood. Since slugs of many species are so similar in characteristics and appearance, dissection is often the key to identification. One goal of the North American Slug Project is to identify all slug species, both native and introduced, ~~being that~~ since slug field guides are far and few between.

Snails and slugs are most easily seen in the mornings or on humid days. Snails prefer moist environments, but slugs have the advantage of being able to absorb water directly from the air and rarely need to retreat beneath bark and leaves as do their shelled cousins.

Malacologists profess their love and dedication to snails and slugs (both are called land snails, although slugs are shell-less) because of their variety and sometimes-humorous peculiarities. Sexual reproduction in gastropods feeds the imagination and provides fodder for dissertations. Most slugs and snails are hermaphroditic, having both male and female reproductive parts (although there are some solely male or solely female gastropods). Despite the possibilities of being a hermaphrodite, slugs must still mate to exchange sperm to fertilize their own eggs. The genital opening is on the head of the animal, and many shoot calcareous 'love darts' into their partner to facilitate sperm survival in the recipient. Slugs may lay hundreds of eggs in one season, with only a few surviving numerous predators to reach adulthood.

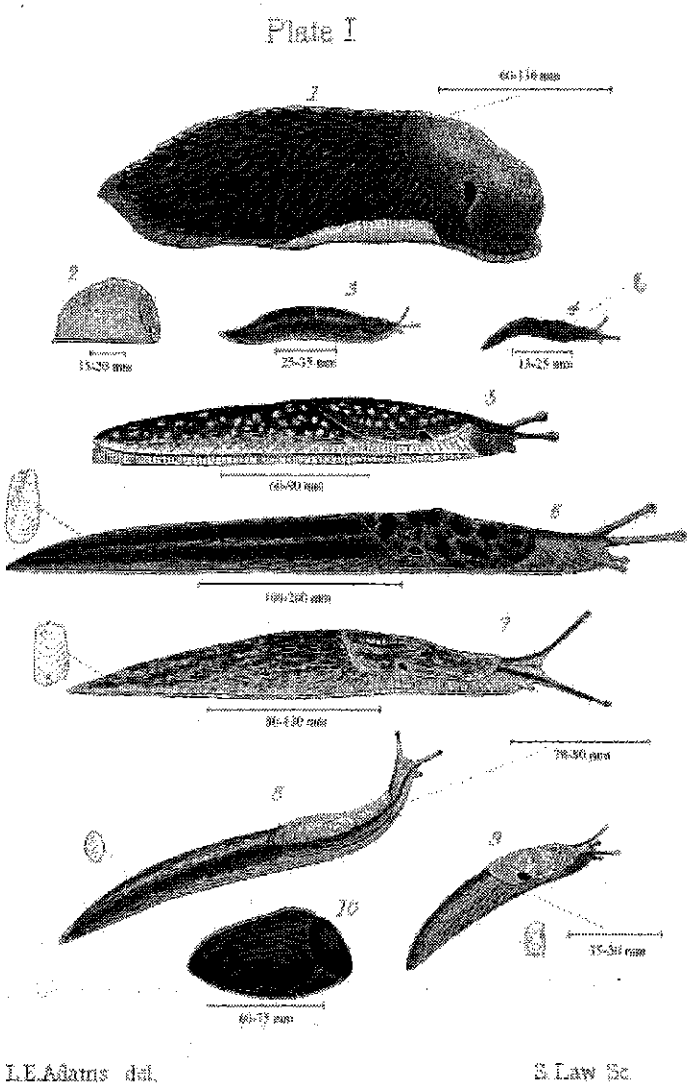
As mosquitoes fought over my sweaty skin in the thick air, I watched ~~as~~ the slugs continued their leisurely greetings of congregational members. By Olympic standards, slugs are anything but fast, ~~but~~ although they can travel several feet in less than five minutes. Their bovine foraging includes leaves, fruit and fungi. Observing them dining requires close proximity, as their mouth is on the bottom of their head, under their feelers. They scrape away at their food with a radula, a rasp-like tongue covered with thousands of tiny, sharp teeth.

Gastropods have been known to go without food and water for several days; one species of Pennsylvania snail can even seal itself in against drought conditions. There is a curious story from 1846; two snails of the same species were glued to cardboard in the mollusc collection of a British museum. In 1850, the cardboard got wet and one of the snails crawled away. In four years the snail had had no food, water or exercise but still lived.

As slugs spend their days in slow motion, foraging, traveling, mating and resting, they have little need to hide, as they often have slime that tastes bad to would-be predators. Slugs are vulnerable to mites, nematodes, flies, millipedes, and snails. And since slugs (and snails) are vulnerable to pollution they are excellent indicators of environmental conditions and problems.

There are nearly 100 species of snails and slugs in Pennsylvania. It is estimated that an acre of forest or meadow can contain millions of snails and hundreds of thousands of slugs. Monies from the Wild Resource Conservation Fund help fund the study of slugs and snails of PA in hopes of learning how they interact with the environment and how they can reveal problems we may not yet see.

Checking my backpack again, I saw only a glistening footpath the slug had left behind. I had crouched in the humid air for the better part of an hour while watching the slugs trace patterns on the rotting stump. A slug's life is played out in a small area of forest or field, and yet is an entire existence of food, sex and predators in a shaded world where people rarely deem to look.



Research reflects increasing Concern about High Bat Mortality Rates at Industrial Windplants

Tens of thousands of bats are being killed each year at industrial windplants in North America. Biologists generally assumed that the bats were dying in collisions with the giant, spinning turbine blades. But now it appears that another culprit may be involved: many bats seem to be dying because the blades cause a sharp drop in nearby air pressure.

In research published in the journal *Current Biology* and reported in *Scientific American* online, Erin Baerwald of the University of Calgary describes her examination of bats killed at a Canadian windplant: Nearly half of the bodies showed none of the external injuries that would be expected from bat-blade collisions.

Scientific American reported that Baerwald autopsied the killed bats and found that nearly all them died of burst blood vessels in their lungs. "What we found," she said, "is a lot of internal hemorrhaging."

Air pressure drops sharply behind the turbine blades and "any bat unlucky enough to blunder into such an undetectable low-pressure zone would find its lungs and blood vessels rapidly expanding and, quickly, bursting under the new conditions."

"If bats have a lungful of air as they fly through the air-pressure change, there's nowhere for the air to go," Baerwald told *Scientific American*. "The small blood vessels around the lungs burst and fill the lungs with fluid and blood."

The full impact of these bat-killing pressure zones extends far beyond the wind farm, the magazine said. "Such migrating bats travel from Canada as far as Mexico, eating thousands of insects en route, including crop pests such as moths and beetles. … 'Bats killed in Canada could have a detrimental impact in America or Mexico,' Baerwald notes. **'It's not local. It's an ecosystem-wide issue.'"**

The Following Letter to the Editor was published in the Altoona Mirror Last Month

To the editor;

An unbiased assessment of the conservation value of Ice Mountain near Tyrone was done by the Blair County Planning Commission through the Blair County Natural Heritage Inventory about 5 years ago. As its name implies, the Blair County Natural Heritage Inventory is a catalog of our county's natural habitats, focusing on only the best natural areas remaining in the county. These areas are designated as Blair County Natural Heritage Areas and they comprise about 15% of the county. Almost all of the Blair County Natural Heritage Areas are on mountains, because the valleys have almost no remaining natural habitats left (they've been almost 100% converted to agricultural and urban uses). Most of the Allegheny Front, of which Ice Mountain is a part, does NOT have Blair County Natural Heritage Area Status, because of fragmentation by residential areas and strip mines. Ice Mountain is one of the few areas of the Allegheny Front that has earned County Natural Heritage Area status, and the only one that is described as being EXCEPTIONAL.

County Natural Heritage Areas are divided into those of exceptional, notable, and high value. Only the best of the best earn the EXCEPTIONAL title. In the Blair County Natural Heritage Inventory, Ice Mountain (Allegheny Front LCA # 1) is designated as EXCEPTIONAL.

The Blair County Natural Heritage Inventory makes recommendations regarding the management of Blair County Natural Heritage Areas. Regarding Ice Mountain (Allegheny Front LCA #1), it recommends that the area not be fragmented with additional roads.

The Executive Summary of the Blair County Natural Heritage Inventory describes Landscape Conservation Areas as "large contiguous areas that are important because of their size, open space, habitats, and/or inclusion of one or more Biological Diversity Areas." It goes on to say;

"These large regions in relatively natural condition can be viewed as regional assets; they improve quality of life by providing a landscape imbued with a sense of beauty and wilderness, they provide a sustainable economic base, and their high ecological integrity offers unique capacity to support biodiversity and human health. Planning and stewardship efforts can preserve these functions of the landscape by limiting the overall amount of land converted to other uses, thereby minimizing fragmentation of these areas."

Ice Mountain and its surrounding area were also designated as Greenways in the revision of the Blair County Comprehensive Plan; which was based on public comments received in 2002-2005 . Greenways are areas where the preservation of the natural landscape should be given first priority. The Areawide Comprehensive Plan for Blair County (adopted by the Blair County Commissioners in 2006) states;

"The ridge tops in Blair County are one of its defining characteristics. As one looks in any direction, the mountain ridges dominate the landscape. They demonstrate the power and constancy of the natural forces that shaped them. Development along ridge tops should be discouraged so that their imposing beauty is preserved. Ridge lines that should be conserved are the Allegheny Front and Dunning, Short, Loop, Lock, Brush, Bald Eagle, Canoe, and Tussey Mountains."

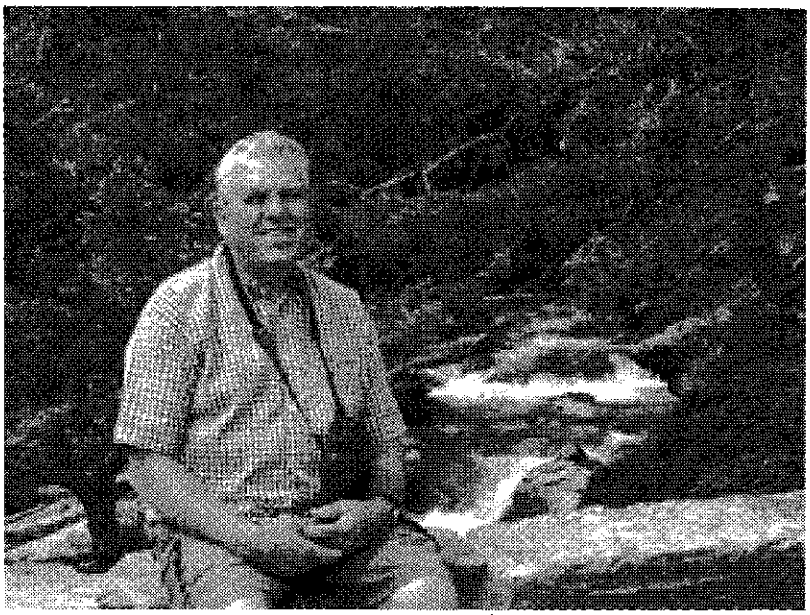
Were a "wind farm" to be built on Ice Mountain then the "wind farm," not the mountain, would dominate the landscape. It is hard to imagine a more shocking and obtrusive feature on the mountain than arrays of 450-foot tall towers with 140-foot long whirling blades. It's not possible to respect the status of Ice Mountain as a unique Blair County Natural Heritage Area of exceptional conservation value and then vote YES to a project that would carve it up with miles of new heavy-duty roadway, large transmission line corridors, substations, clearings for industrial wind turbines, as well as dominate the mountain with gargantuan turbines. That kind of development is inconsistent with the Blair County Natural Heritage Area designation which has been given to Ice Mountain.

Tyrone Borough Council has a responsibility as stewards of Ice Mountain to heed the recommendations of the Blair County Natural Heritage Inventory and the Blair County Comprehensive Plan. Juniata Valley Audubon asks that Tyrone Borough Council members vote NO to any proposal to convert Ice Mountain into an industrial windplant.

Terry Wentz

President, Juniata Valley Audubon

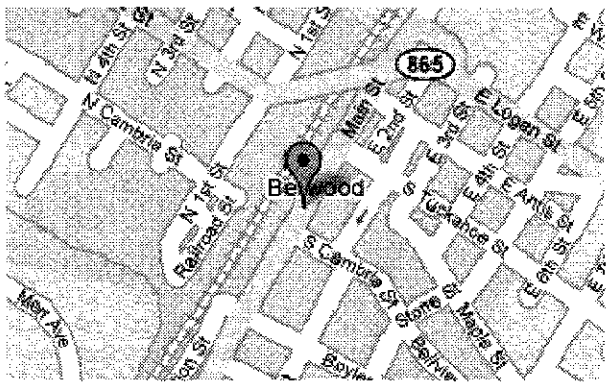
FROM THE GNATCATCHER'S NEST



Welcome to a new season for Juniata Valley Audubon. I am the new president, Terry Wentz, elected for a 2 year term at the annual meeting in April 2008. I follow Stan Kotala past president for 4 years whose leadership and energy will be hard to match. As you know Stan has been instrumental in the wind turbine fight in our region and has been quite successful with his efforts.

Some of you know me from my past as Canoe Creek State Park Manager for 24 years; I retired in 2005 with 33 years of service in Pennsylvania State Parks. Since retirement, I have founded an eco-tourism business, Waxwing Associates, which specializes in nature, local culture, and historic tours in the 7 county Allegheny Region of Central PA.

This season brings several changes to Juniata Valley Audubon; the most noticeable change is the location of our monthly meetings to ***BELLWOOD-ANTIS PUBLIC LIBRARY located on 526 Main St. in Bellwood. 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 onto Main St., another 2 blocks and the library is on the right.*** *We thank Cindy Moore for hosting the meetings at Alto Rest for more than 5 years. Meetings will continue to begin promptly at 7 PM with a short business meeting prior to the speaker. Refreshments will be served during and after the meeting so we can exit the library by 8:30 PM, closing time.*



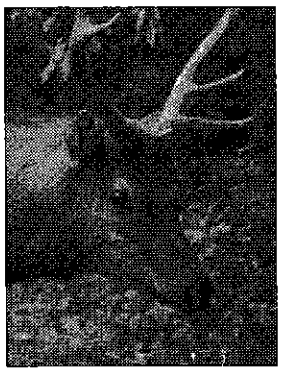
Please review the Program and Field Trip Brochure enclosed with this newsletter. I think you will find an exciting and interesting variety of activities for the new season. We tried to branch out and provide something of interest for everyone; Juniata Valley Audubon is not just a birding club. Our members have a great variety of interests and are experts in many disciplines. ***Please come to an activity and get to know us.***

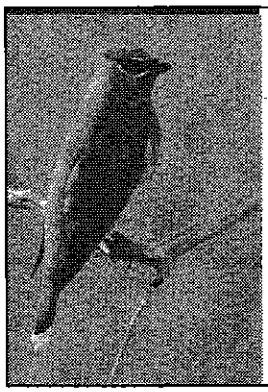
Terry

REGISTER FOR JVAS e-NEWS!

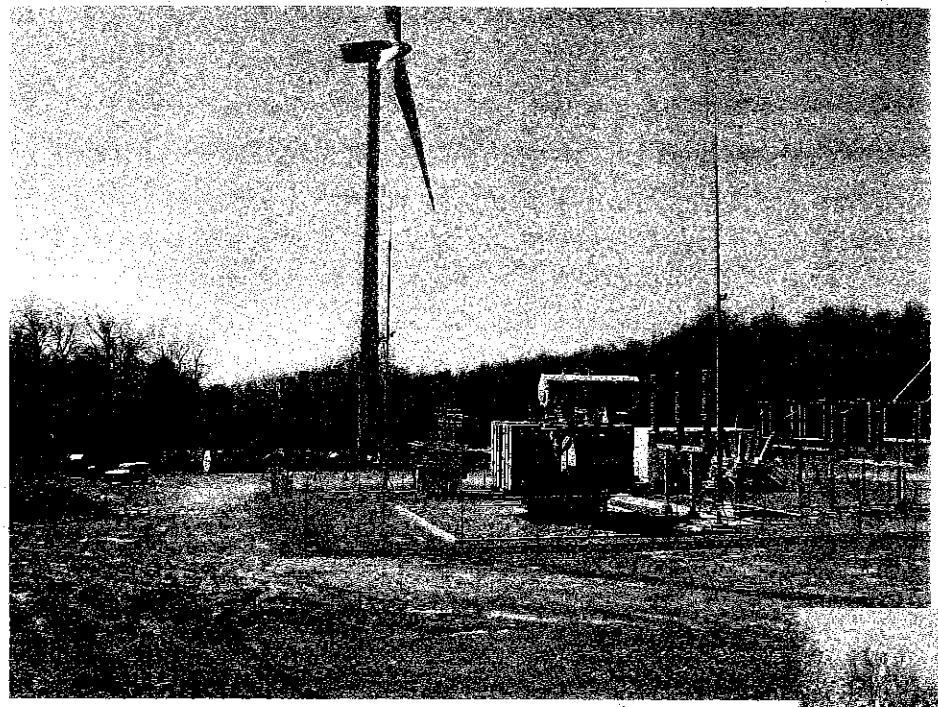
JVAS members interested in receiving timely notice of events such as meetings, field trips, JVAS Juniata Club river trips, and local conservation issues should send their name and email address to JVAS eNews editor Dr. Stan Kotala at ccwiba@keyconn.net to subscribe to our free news service.

JVAS THANKS ITS CORPORATE SPONSORS





Allegheny Ridge Industrial Windplant
Located between Blue Knob and Route 22



Ridgetop wind turbine and substation

Windfarm road being used by 4x4 and ATV

Ridgetop road and industrial wind turbine.

Lilly Mountain Road

Before

and

After

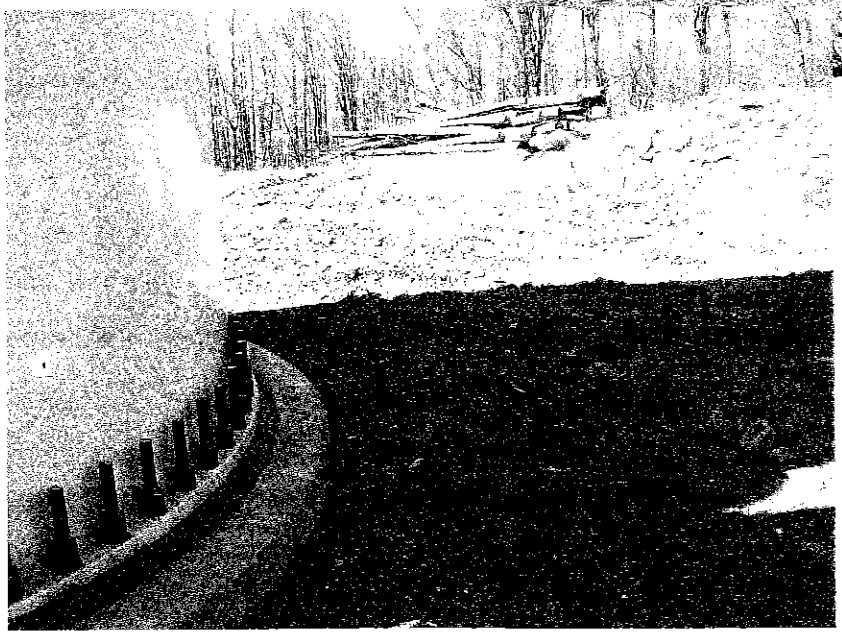
The Spanish company Gamesa began constructing the Allegheny Ridge Industrial Windfarm 2 years ago. None of the industrial wind turbines are operational yet.

Phase 1 of the project was sold to the Australian company Babcock and Brown last fall.

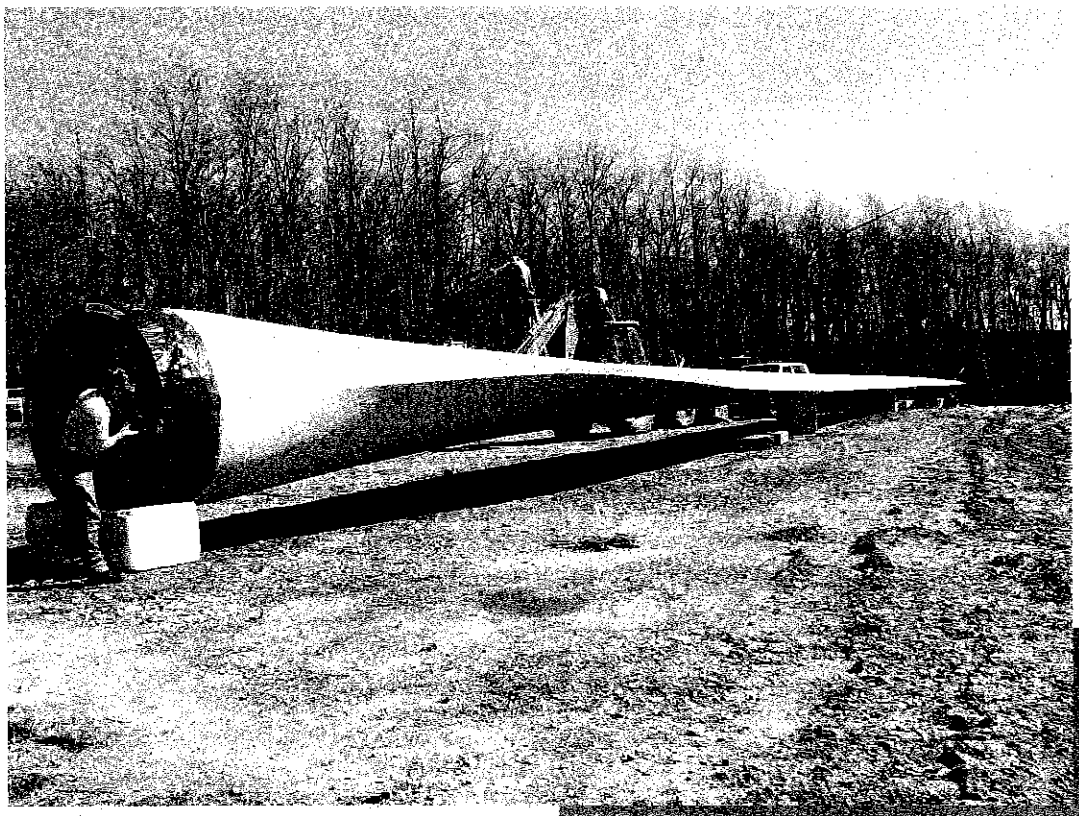
The industrial windplant will have about 90 turbines installed along 13 miles of ridge between Blue Knob and Route 22 by 2008.

Industrial wind turbine pad site.
Liquid in the foreground is diesel fuel spilled in tire ruts.

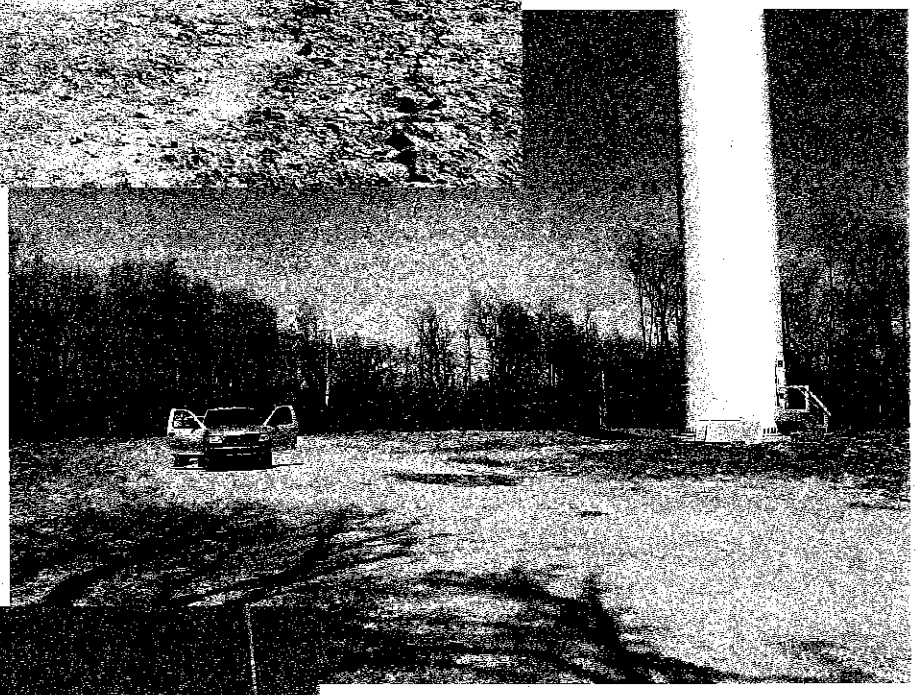
Road leading to industrial wind turbine pad on Lilly Mountain. Object in foreground is a 120' turbine blade.



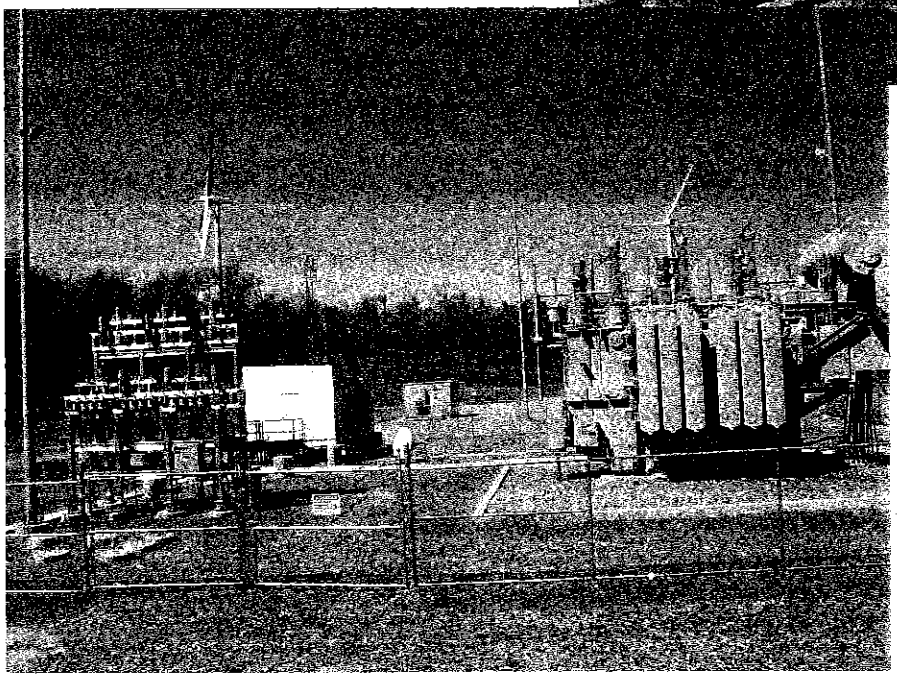
Industrial wind turbine pad.



Industrial wind turbine blade on road connecting turbines.



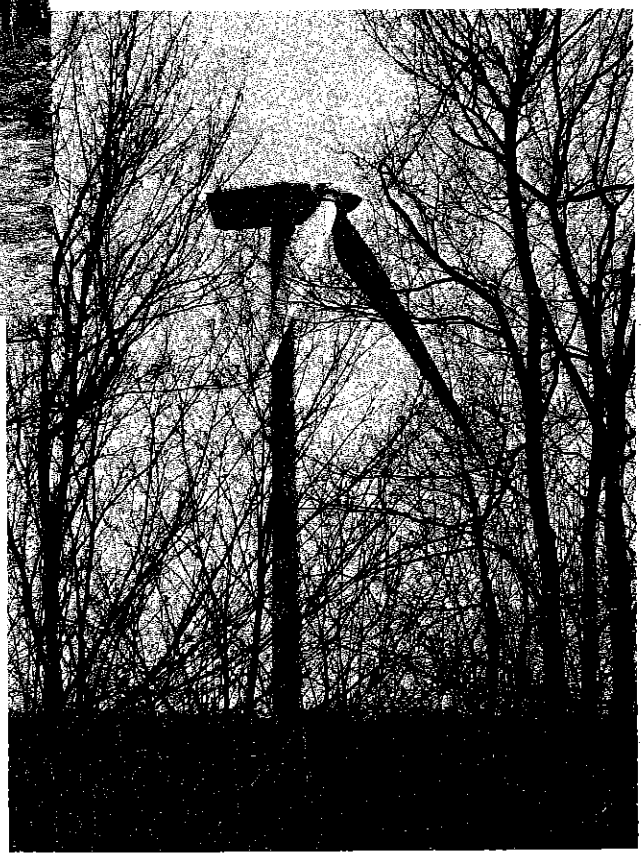
Industrial wind turbine pad and access road.



Ridgetop substation covering ~5 acres.

Industrial windfarm road connecting turbines.

Windplant road between turbines.



Allegheny Ridge Industrial Windplant turbine that threw blade parts ~ 700 feet. Each industrial wind turbine is 450' tall..

"The ridge tops in Blair County are one of its defining characteristics. As one looks in any direction, the mountain ridges dominate the landscape. They demonstrate the power and constancy of the natural forces that shaped them. Development along ridge tops should be discouraged so that their imposing beauty is preserved. Ridge lines that should be conserved are the Allegheny Front and Dunning, Short, Loop, Lock, Brush, Bald Eagle, Canoe, and Tussey Mountains."

The Areawide Comprehensive Plan for Blair County, 2005
Blair County Planning Commission

join JUNIATA VALLEY AUDUBON!

Juniata Valley Audubon membership provides you with the following benefits:

- Notification of Juniata Valley Audubon's exciting activities including nature programs, field trips and other events
- Subscription to the bimonthly chapter newsletter, *The Gnatcatcher*
- Opportunities to participate in conservation projects and environmental advocacy, and ***have fun!***

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

_____**Friend of JVAS:** $50 _____**Corporate:** $100

_____**Life Membership:** $500– JVAS Life Membership provides you with all the benefits listed above for a once-in-a-lifetime fee of $500.

Name_____

Street_____

City_____State_____Zip_____

Phone_____

E-mail_____

Mail this form to

Juniata Valley Audubon

c/o Dr. Alice Kotala

Membership Chair

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CBC Coordinator.....Heidi Boyle 949-9302
<hboyle@state.pa.us>

NAMC Coordinator.....Dr. Stan Kotala (see above)

NOTE NEW MEETING LOCATION BELOW

SEPTEMBER/OCTOBER PROGRAMS

SEPTEMBER 16 – Dr. Margaret Brittingham, **Birds of a Feather Flock Together – The Ecology and Behavior of Winter Roosting Crows:**
The ecology and behavior of crows on their winter roosts and the role that local citizens took in directing management options at a large crow roost in Lancaster, which may contain as many as 35,000 birds.

OCTOBER 21 – Tom Dick, **Raptors Over the Alleghenies – Lessons from the Allegheny Front:**
Tom will give an overview of findings from 15 years of monitoring raptors in both fall and spring in the west-central ridges.

PLEASE NOTE NEW JVAS MEETING LOCATION BELOW. SEE MAP ON p. 7

SEPTEMBER/OCTOBER FIELD TRIPS

SEPTEMBER 20 Saturday – **Whitetail Wetlands & Allegheny Hawk Watch.** Visit Bedford County wetlands managed for birds with an afternoon stop atop the Alleghenies to watch hawk migrations. Bring snacks and drinks. Restaurant stop for lunch. Leader: Terry Wentz 693-6563. Meet in Uncle Joe's parking lot 8am. Carpool to Bedford.

OCTOBER 4 & 5 Saturday & Sunday – **Cherry Springs Dark Skies Cherry Springs State Park** in Potter County has been certified has a national dark skies viewing site for astronomy. A guide from Crystal Spheres, adventures in stargazing, will provide telescopes and narrative about the dark heavens. One overnight in a motel. Return late Sunday afternoon. Van service to Potter County– 3 hour drive. Costs include van, guide and motel accommodations. Meet in Uncle Joe's Parking Lot, Altoona 10am. Bring snacks, bagged lunch, drinks for Saturday. Leader: Terry Wentz 693-6563 **Prepaid reservations required.**

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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A Red-tailed Hawk perches with its prey, an Eastern Cottontail, atop Jeff Meitrott's canoe.

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DAVE BONTA
PO BOX 68
TYRONE PA 16686-0068

NEW MEETING LOCATION:
BELLWOOD
LIBRARY

Juniata Valley Audubon
P.O. Box 148
Hollidaysburg, PA 16648