

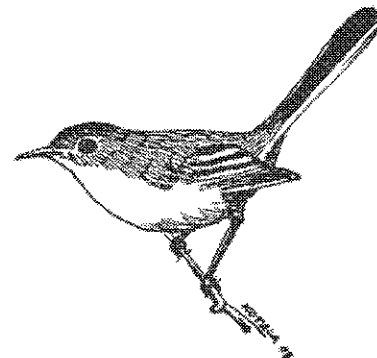
The Gnatcatcher

Newsletter of Juniata Valley Audubon

Volume 41 No. 1

Jan/Feb 2009

www.jvas.org



JVAS Chapter-only Memberships due

Juniata Valley Audubon has about 450 members. Close to 100 of you have opted to be chapter-only members, that is, members only of the JVAS and not the National Audubon Society. Chapter-only membership costs only \$15 per year for individuals, and family as well as other levels of membership are considerably less than National membership. Switching to a JVAS chapter-only membership offers a considerable savings in these difficult economic times.

Chapter-only membership in the JVAS confers all the benefits of National Audubon membership with the exception of Audubon magazine. However, all chapter-only dues stay with the JVAS and are used locally here in the Juniata Valley for conservation education and advocacy in Blair, Huntingdon, Centre, Bedford, and Mifflin Counties.

Chapter-only membership is on a calendar-year basis, thus chapter-only members' dues for 2009 are due now.

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 _____

E-mail (optional) _____

Mail this form to

Juniata Valley Audubon

P.O. Box 148

Hollidaysburg, PA 16648

*To know that even one life has breathed easier
because you have lived, that is to have succeeded.*

- Ralph Waldo Emerson

JVAS Mid State Trail Hike

November 2, 2008

"Why do large numbers of hikers venture into the wet, wild woods with biting insects and stinging nettles, on trails lined with roots and studded with rocks? There is something different and deeply appealing about hiking in the out-of-doors. The wilder and more beautiful the land, the better the hiking. Clearly, these experiences are spiritual. It is the deep, but bright, secret of hiking. Spiritual experience is essential to our well being, so hiking remains popular."

- Tom Thwaites

Last November, Juniata Valley Audubon members sampled a 4-mile segment of the 320-mile Mid State Trail. This wilderness footpath stretches from Pennsylvania's border with Maryland all the way to Tioga, at the edge of New York State.

Tom Thwaites, a retired physics professor at Penn State University, founded the MST in 1969 when he was faculty adviser to the Penn State Outing Club's hiking division. He set out to build a trail that intersected the state after he found an old trail system cutting through the state forests that dated back to the early part of the 20th century. Students pitched in to help him construct the

MST, using those old trails as a starting point. Until his retirement from Penn State in 1989, he and the students kept the project going, with assistance from a Keystone Trails Association Trail Care Project, but the volunteer effort started losing momentum and they completed only about two-

thirds of the work.

Last spring, volunteers from the Moshannon Group of the Sierra Club adopted the segment of the MST between Colerain Road and the Little Juniata River in Rothrock State Forest. Clearing the trail and painting blazes took two weekends, and resulted in a first-class ridgeline hiking path.

JVAS's hike on the MST took place on a beautiful autumn day. About two dozen of us hiked from Colerain Road along the top of Tussey Mountain south to the Little Juniata River near Barree in Huntingdon County. The 4-mile-long hike took most of the afternoon with frequent stops for natural history lessons and snacks. Much time was spent on the large rocky outcrop near the confluence of Spruce Creek and the Little Juniata River, where we enjoyed panoramic views of Canoe Valley, Canoe Mountain, the northern end of Sinking Valley and beyond to Brush Mountain, Bald Eagle Mountain and the Allegheny Front. Even Mt. Charma could be seen in the distance.

The rugged ridgetop is home to many species that are adapted to its harsh conditions: timber rattlesnakes, Allegheny woodrats,

chestnut oaks, and common ravens. The ridgetop is windy and dry, causing the vegetation to be smaller than you'd expect for trees and shrubs of that age. On some of the outcrops white pines formed bonsai-like sculptures because of constant winds from the west.

The entire 4-mile-long hike was over rocky terrain, testing our agility and stamina. As we descended Tussey Mountain into the Little Juniata River gorge, we observed how nature is reclaiming the old gabbro quarries. Below us was the silver ribbon of the Little Juniata River, an internationally-renowned trout stream.

After arriving at our vehicles in the Little Juniata Natural Area parking lot, some of us went to the Main Street Café in Alexandria for a post-hike meal and relaxation, a great ending to a wonderful day on the Mid State Trail.

Above: Nancy Parks, Ben Cramer, and George Mahone in the vanguard.

Right: Helena Kotala and Tom Komir in the foreground, followed by JVAS Past President Charlie Hoyer on the right and John Betting on the left.



Model Stream Buffer Ordinance to protect Water Quality, alleviate Flooding, and enhance Wildlife Habitat in the Little Juniata and Frankstown Branch Watersheds

Our area contains many wonderful streams which make significant contributions to our environment and quality of life. But some of our waters have recently been described as impaired, where water quality has been degraded by non-point pollution sources. The PA Department of Environmental Protection (DEP) has moved forward with the implementation of the Chesapeake Bay Tributary Strategy which established aggressive goals for reductions in the amount of sediments and nutrients that our streams contribute to the Susquehanna River drainage area and ultimately the Chesapeake Bay. These signs point to the need for the consideration of tools like stream buffer regulations and a coordinated effort at the local level to protect the health of our streams and waterways.

A riparian or stream buffer refers to the land located directly adjacent to a creek or stream that directly impacts water quality. A healthy riparian area contains trees and vegetation which enhance water quality by trapping and filtering sediments and nutrients. Healthy stream buffers also support aquatic life by providing shade to reduce stream temperatures and protect our

local cold water trout fisheries, provide habitat for a diversity of wildlife species, prevent erosion of stream banks by holding soil in place, safeguard local water supplies by protecting groundwater recharge areas and reduce flooding by impounding, filtering and infiltrating storm water runoff.

Juniata Valley Audubon, the Little Juniata River Association, and the Blair County Conservation District have teamed up to prepare a draft of a model stream buffer ordinance for municipalities to consider for protecting and maintaining stream buffers in the Little Juniata River and Frankstown Branch watersheds. This model ordinance proposes the formation of two stream buffer zones; the first 35 feet and the second zone a distance of 65 feet for a total each side of a stream of 100 feet. Both zones allow some permitted and some conditional uses. The model also provides for a Stream Buffer Management Plan to be prepared when future subdivision, land development or redevelopment activities are proposed within these established buffer areas and finally contains a listing of recommended native trees and other plantings appropriate for restoring impacted buffer areas.

Stream Buffers: Good for the Economy and the Environment

The savings to taxpayers and benefits to our communities from a requirement for buffers along our streams are considerable.

Here are the facts:

Buffers increase property values. Forested buffers increase the market value of nearby houses, and increase local property tax revenues too!

Buffers save taxpayers money. Buffers can reduce the costs for treating drinking water, for controlling stormwater, and for property damage from flooding.

Buffers don't stop development, they make it better. Many towns in Monroe and Chester Counties already have buffer requirements, yet these counties continue to be among the fastest growing places in the state.

Conservation groups also support a new state proposal that would move farming and feedlots back from the edge of streams. We want farms to do their share...but developers need to do their fair share too. And not building a

new house along the edge of a stream is much simpler than trying to move a 100 year old farm away from a stream!

The Buffers 100 proposal would require that new developments be at least 100 feet from the edge of streams and rivers. Existing structures would be grandfathered, along with properties mostly located within the buffer zone. Courts have already ruled that with these sorts of exemptions, buffer requirements are not a "taking", saying they are a reasonable effort to protect the public health and well-being.

Keeping new development back from the edge of our streams is just common sense. It will reduce the danger of flooding, and keep houses out of harms way, should floods happen. It will keep our streams clean, protecting our drinking water and keeping the stream healthy for fishing, boating and tourism. By enhancing tourism and saving taxpayers money, the Buffers 100 proposal will actually help improve both the state's economy and environment at the same time!

JVAS Field Trip to Alan Seeger Natural Area

22 November 2008

JVAS members enjoyed a cold and snowy morning at the Alan Seeger Natural Area in the Rothrock State Forest on the weekend before Thanksgiving.

Although the trail is only 0.8 miles in length, it provides the discriminating hiker with a multitude of fine examples of Pennsylvania's native trees, free of the constraints imposed upon most of the Commonwealth's forest land.

The trail isn't painted with blazes, but it is well marked with logs lining the edge of the trail for the first 0.4 mile. After this you'll enter a thicket of rhododendron with the main trail the only easy navigable path through.

Ancient eastern hemlocks, black gums, white pines and tulip poplars soared above us as we walked through a sea of dense rhododendrons along the headwaters of Standing Stone Creek in northern Huntingdon County.

This 390-acre area along Standing Stone Creek includes virgin white pine and hemlock. Towering above the trail as it winds through 20-foot-high rhododendrons is a hemlock forest bypassed by the loggers at the end of the 19th century. Here are magnificent trees, many over 4 feet in diameter at breast height and reaching several hundred years old. Scientists believe the largest tree in the area could be over 1,000 years old, possibly the oldest in the state, some on small islands in the middle of Stone Creek. Other tree species in the area include white oak, red maple, white pine, pignut hickory, black gum and black birch.

Old-growth forests like these make up only a tiny percentage of Pennsylvania's forested habitat but they are home to species that require large trees and the unique conditions created

by these forest giants. In other words, while we speak of old-growth forests in terms of the major tree species found there, old-growth is really a term describing entire ecosystems. The other plants and animals who live within the tree-defined framework are vital to the whole.

One of the Commonwealth's few pairs of goshawks nests in this area, as do barred owls, winter wrens, and black-throated blue warblers.

Old growth forests are considered an endangered habitat in Pennsylvania. Breaks in the canopy would be caused by falling trees, dying of old age or struck by lightning. "Tip-ups," the masses of roots turned up when a big tree falls over, would be common.

There really aren't any remnants of the horizon-to-horizon forest that was encountered by the first European settlers. Most of that was cleared for farms. Most of the remainder was logged off by the 1920s. What we have left now as "old growth" were, with one or two notable exceptions, largely the inaccessible, steep slopes or accidents of boundary overlaps. It's those that we celebrate here. They give us a fascinating glimpse of the majesty and complexity that was Pennsylvania old growth forest.



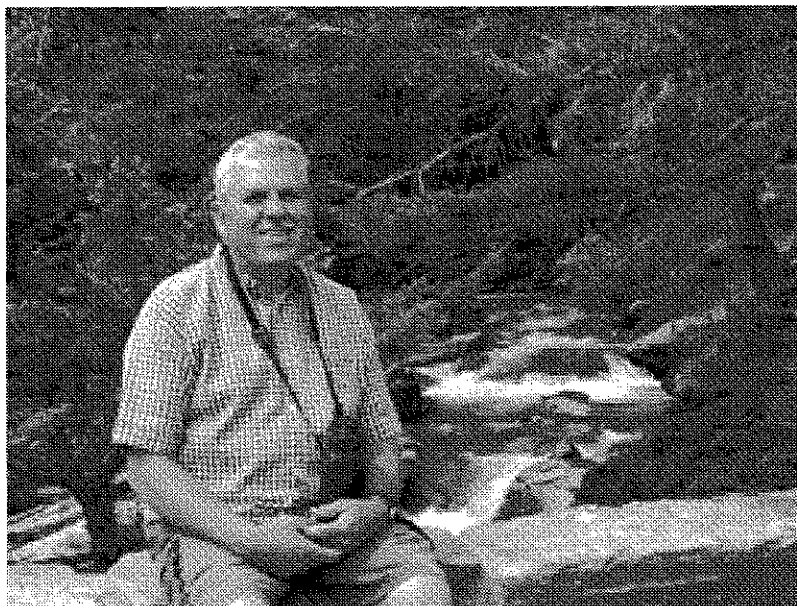
JVAS President Terry Wentz in a sea of rhododendrons.



FROM THE GNATCATCHER'S NEST

Welcome to a new year. Do you remember Y2K? We have almost completed a full new decade and no one certainly predicted all the challenges facing humanity. I remember January 1, 2000 and being required to check computers where I worked to be sure they would operate in the new millennium. I was excited about a new century and thought the year 2010 was somewhere beyond comprehension. Guess what, it's next year!

As we begin the New Year, the challenges facing President Obama seem unbelievable, no one could write a story like this; hope it has a happy ending.



Juniata Valley Audubon Society has made significant progress on environmental concerns this past year. Wind turbines seem to be the choice of renewable energy at this time. Thanks to efforts by a few JVAS members, turbine development in our immediate Allegheny's region has been kept out of our Important Bird Areas at least for now. The battles will continue well in to this year, so please support our efforts.

Some other issues our very active Conservation Chair Dr. Stan Kotala has been working on include buffer zone ordinances to control development along streams and drilling for gas in Marcellus shale. Stan can use help, so if you have a passion about any of these issues, please give Stan a call. He gets overwhelmed keeping up with all the issues and writing letters of concern. Legislators and local supervisors receive very little correspondence on issues; just a few letters or attendance at township meetings makes a big difference. With Pennsylvania's form of government, the power is at the local level, be it township or borough.

Field trips for this winter are road trips to indoor facilities. January will be a trip to Cabala's Sporting Goods Store near Allentown and February will be a trip to Pittsburgh to visit the aquarium, zoo, and Carnegie Museum. Please join us for some time out of the house with good friends.

JANUARY 24: Van service will be provided to **Cabela's in Hamburg** with a minimum of 10 individuals interested in going. The cost will be **\$15** per person and includes cost of the van and gas. Food and other expenditures at your own expense. Reservations must be paid in advance by January 20. Contact Terry Wentz for reservations 693-6563.

FEBRUARY 21: Van service will be provided to **Pittsburgh Aquarium, Zoo, and Carnegie Museum.** The cost will be **\$50** per person and includes the van, gas, admissions to the aquarium, zoo, and Carnegie Museum. Food and other expenditures at your own expense. Reservations must be paid in advance by February 17. Contact Terry Wentz for reservations 693-6563.

Raffle tickets for an **Emotion Glide Kayak** will be sold at the Juniata Clean Water Partnership dinner at \$15 each. There will be only 100 tickets sold. Call Tom Komir at the JCWP office to reserve a raffle ticket. 814-506-1190 tkomir@jcwp.org

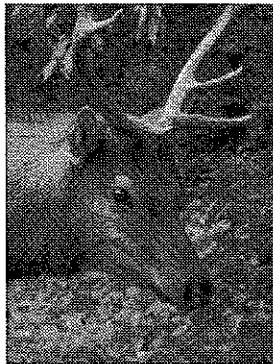
Emotion Glide Kayak with One Free Day on the JCWP Sojourn from Rothrock Outfitters and JCWP

The JCWP Annual Dinner will be on Friday, January 30, 2009 at the Huntingdon Country Club. Happy hour starts at 5PM and dinner will be served at 6PM (see p. 7).

Please RSVP to the JCWP office (814-506-1190) by January 15th.

<http://jcwp.org/>

JVAS THANKS ITS CORPORATE SPONSORS



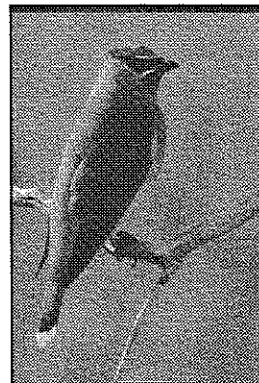
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Left: Juniata Clean Water Partnership Director of Education and Outreach Thomas Kómir enjoys a cup o' Joe on a rocky outcrop overlooking the Little Juniata River valley. Tussey Mountain on the left, Canoe Mountain in the distance.

MID STATE TRAIL ASSOCIATION VISION STATEMENT

Today's urban society disconnects us from nature. Glass, steel, asphalt, concrete; they all distance us from nature. All too easily we cling to the false hope that we have mastered nature, rather than standing in respect and stewardship of all things within nature, around us. Restoring our connection to nature, actually our place within nature, requires of us that we get back to nature, removing all those obstacles put between us and nature by our urban society.

Primitive nature experiences restore one's sense of inner peace and strengthen one's soul. Foot travel over a remote primitive trail brings an exhilaration, an aliveness that cleanses us of our worldly woes and restores our spirit.

The Mid State Trail was created to foster these simple, natural, spiritual experiences, so that we may all enjoy a greater respect for nature and therefore protect nature for all future generations. The foot path's length offers an extended unity with nature to long-distance walkers.

The Mid State Trail Association seeks out remote, quiet natural corridors for placing the Mid State Trail, constructs and maintains only foot paths, and acts to protect the quiet, wild and scenic, natural and cultural resources of the corridor through which the trail passes. Within a natural setting, hikers enjoy a diversity of experiences. We recognize the importance of those areas with significant historic, cultural, geological, or other features of interest to hikers, and work to have the foot path visit those features, where feasible. At times, sections of the foot path may be, unnecessarily, in non-natural areas or on non-natural surfaces. Our goal is to relocate these sections to remote, primitive natural places.

<http://hike-mst.org/vision.html>

Above: JVAS members explore ridgetop habitats along the top of Tussey Mountain on the Mid State Trail



Under the Snow

By Heidi Mullendore

A diamond snow shivered and winked in the morning glare as I followed an awkward scattering of opossum tracks through the freshly laid powder. Despite this silken cover of new snow, beneath lay a hard crust, lending a strange quality to my walk as the wispy snow puffed with each crunching step. Ducking under beech saplings, their yellow leaves whispering across my shoulders, I traced the crablike tracks to a snow-covered log across a stream.

At the end of the log, the tracks turned where the opossum had paused to investigate a small tunnel disappearing into the snow. Brushing away the powder, I found a tunnel winding its way along the log, then turning and leading away from the log's protection.

I had found a pathway into the hidden subnivean (meaning "under the snow") zone, where small mammals such as chipmunks, voles and shrews are free find food and search out caches away from the sharp eyes of weasels, foxes and owls.

The snow was especially beautiful this winter morning, its cover softening the sharp angles of branches and rocks. Millions of facets of snow crystals reflected sunlight to form a rainbow-strewn surface. Scooping up powder onto the arm of my jacket, I relished the fanciful designs of the gleaming crystals.

These intricate crystal formations begin their journey high in the atmosphere as water molecules that condense and freeze around miniscule grains of pollen, volcanic ash or dust from some faraway place. Not exactly 'pure as the driven snow' considering what is at the heart of each snowflake. The final design, from simple to intricate, is entirely a result of temperature, humidity, and timing.

Each snow crystal tells its unique history of precise atmospheric conditions in the beautiful but ephemeral language of symmetry and structure that will always be a mystery to mankind. The famous snowflake photographer Wilson Bentley wrote, "was ever life history written in more dainty hieroglyphics?"

The very nature of snow is ephemeral, as it is vulnerable to the slightest change in temperature and pressure. Already, the fine powder on tree branches was beginning to take on a rumpled look as the morning sun raised the temperature a few degrees. Despite the delicate appearance of individual snowflakes, billions of these delicate crystals are weighty enough to compress lower layers, forming a snowpack that snow scientists can read like a book.

It is when snowpack reaches a depth of 8 - 10 inches that enough air is trapped between snowflakes that snow actually forms an insulating ground cover. Protected from the cold winter air, the lower layers next to the warmer ground turn grainy and loose, often called *sugar snow*, or *pukak* (Inuit word). It is in the thermally stable pukak of the subnivean zone, that voles, mice and shrews make extensive rambling tunnels connecting them to food and shelter.

As I sat by my log on the streambank and looked around, a sharp winter wind picked up fresh powder and spun small glittering white plumes. A brilliant cobalt sky flattered the smooth gray beeches and wrinkles of maple and ash. The forest was quiet this

morning and to many, the winter scene would be devoid of life in this, the 'dead' time of year.

But to the shrew with a voracious appetite or to the vole seeking greens for dinner, the snow represents a lifeline and protection. I left the opossum tracks and uncovered more of the small tunnel, following its wandering path to the edge of the stream, then back up the slope where it split in two directions, one leading to a pile of rocks, the other passage splitting again.

At some spots along the retreat were vertical shafts, perhaps made by a vole seeking a layer of snow rich in seeds, trapped between snowfalls. Voles will also make ventilation shafts to release a buildup of noxious carbon dioxide from their sanctuary.

Not wanting to destroy more of the tunnel, I headed back to the stream and log to listen. Faint rustlings and scrapings could be heard as something scuttled under the edge of the log. Every now and again it would pause, and I could hear a quick crunching or chewing. I caught a brief glimpse of a shrew moving by before it disappeared under the log again. I was tempted to try to catch the tiny gray bundle of fur, but with so many branching tunnels, it would be a lesson in futility. Only a fox with its acute sense of hearing would be able to follow the path of a shrew munching its way under the snow.

Bill Pruitt, professor emeritus at the University of Manitoba in Winnipeg concludes that the lives of these small herbivores, small carnivores and invertebrates are so heavily dependent upon *pukak*, that without it, large parts of the far northern forests would be devoid of small mammals. The absence of snow would be unthinkable; the food web of the forest is inextricably linked to its smaller residents; it would be something akin to separating a tree from its roots.

Stretching and stamping my feet to warm them up, I tramped up the slope, past fresh deer rubs. The thick crust over which I was moving had developed over a few successive freezes and thaws and was strong enough to hold me. A crust like this is a double-edged sword, preventing deer from reaching grass, yet provides easier access to twigs and buds. Snow offers a complex set of advantages and disadvantages, its depth and consistency often determining whether it represents an obstacle or aid.

It is the demise of winter that often provides the most stressful time. Freezing and thawing change snow structure rapidly, rotting or crusting over the surface, collapsing the lowest layers and saturating all with dripping water. These rapid changes can lock small mammals out of their food stores, entomb them in ice-encrusted snow or leave them vulnerable on open ground.

A sharp crack overhead abruptly pulled me from my musings. As I searched the canopy, shielding my eyes from the bright sun, a stiff wind shuddered through the woods. Branches scratched and clattered and lacey curtains of white rippled through the forest settling silently; another page added in the story of snow. High in the atmosphere, microscopic pollen, dust and ash will wed with water and join the complex cycle that continues to test the strength of each species' ability to adapt to the ever-changing elements.

Mark Your Calendars!

Dear Friends of the Juniata Clean Water Partnership,

You are invited to the Juniata Clean Water Partnership (JCWP) Annual Dinner.

When: Friday, January 30, 2009 at 5:00PM

Where: Huntingdon Country Club

Cost: \$35 for an individual, \$60 for a couple

Happy hour will start at 5PM, dinner will be served at 6PM, and our guest speaker will be Ben Cramer, editor of Pennsylvania Hiking Trails. Ben will be giving a presentation on hiking in Pennsylvania for all ages and interests at 7PM. The meal will consist of salad, rolls, oven roasted turkey, roast beef, mashed potatoes and gravy, green bean casserole, corn, stuffing, and assorted fruit pies.

The prizes will be raffled off at 8PM. There will also be a chance to win an Emotion Glide Kayak from Rothrock Outfitters with one free day on the JCWP sojourn along with many other great raffle items (See p. 12). Come enjoy an evening of great food, drinks, prizes, friends, and entertainment. **Please RSVP by Thursday, January 15th.**

The Juniata Clean Water Partnership is a non-profit coalition of conservation groups, county planners, conservation districts, watershed associations, and citizens. We have been assisting community groups, schools, and organizations in implementing watershed conservation projects and activities throughout the region for over nine years now.

In order to continue our programs and events we rely on our memberships and fundraisers. That is why your contribution is vital to our organization. Please bring a friend and plan to attend our fundraiser. If you have any questions or to RSVP please contact our office. We greatly appreciate your support!

The attachment is information on the guest speaker, raffling, and the cut off reservation form. Please mail your reservation form to the JCWP office or just call the JCWP office to reserve your seat at the annual dinner by January 15th.

With gratitude and appreciation,

Thomas Komir

Juniata Clean Water Partnership
Education and Outreach Coordinator

Juniata Clean Water Partnership
416 Penn Street
Huntingdon, PA 16652

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E-mail: tkomir@jcwp.org
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Golden Eagles and Wind Power Facilities: What Decision Makers of the Proposed Ice Mountain Wind Facility Should Know

Tricia Miller, The Pennsylvania State University and Carnegie Museum of Natural History

Todd Katzner, National Aviary

David Brandes, Lafayette College

Michael Lanzone, Carnegie Museum of Natural History

Dan Ombalski, State College Bird Club

The size of the eastern North American population of golden eagles is small and therefore highly vulnerable to demographic perturbations. Even low levels of turbine-associated or other mortality may be significant for long-lived species with low reproductive rates and slow maturation rates (Drewitt and Langston, 2006; Katzner et al. 2006). Golden eagles tend to migrate and winter within areas of the central Appalachians that are currently under development or targeted for future development by wind energy companies. This species commonly uses slope soaring and ridge updrafts during migration and foraging, flight patterns which are known to increase collision risk (Barrios & Rodriguez, 2004; Hoover & Morrison, 2005). Additionally, a pilot study conducted by Farmer (2007) found that 88% of migrating bald and golden eagles flew at an altitude within the rotor swept area of modern turbines. It is for these reasons and others that golden eagles therefore may be highly susceptible to collision with some wind turbines (Hunt, 2002; Smallwood & Thelander, 2004). Because of their demography, migration and winter flight behavior, and vulnerability to wind turbines, we consider eastern golden eagles to be the raptor species at greatest risk of population-wide impacts from wind energy development in the Appalachians.

Available monitoring data and modeling strongly suggest that eastern golden eagles migrate through a narrow corridor in south-central Pennsylvania (particularly during spring; Brandes & Ombalski, 2004). This corridor includes portions of Bedford, Blair, Centre, Fulton, Huntingdon, Mifflin, and Somerset Counties and likely extends southward through Maryland into West Virginia. Thus, we consider the Allegheny Front and the five adjacent ridges to the east to be a zone of high risk for potential impacts to golden eagles.

Our tracking data show that three of five golden eagles that migrated through Pennsylvania used the area in and around Ice Mountain. Data points were collected at one-hour intervals. One bird roosted within the proposed facility and the data suggest that this bird foraged in the same area. There were a total of

19 hourly locations within 3000 m of the facility, with eight points falling within 300 m of a turbine. The closest location to a proposed turbine location was 65 m. Of the 19 points, 17 locations were stationary, while two locations were from two different birds in active flight. The altitudes of these two points were 1086 m and 849 m above sea level. The mean total height (elevation plus turbine height) of the turbines at Ice Mountain is $855 \text{ m} \pm 35 \text{ m}$. Thus, one of the flight locations was within the rotor swept area of the turbines at Ice Mountain. Based on these preliminary data, Ice Mountain appears to provide important migratory habitat for golden eagles.



In addition to the high use wintering areas on West Virginia and parts of Virginia, our preliminary telemetry data and remote camera surveys suggest that many more golden eagles winter in Pennsylvania than was previously known. Importantly, for the two telemetered birds that wintered in Pennsylvania, greater than 95% of their telemetry points were located in high elevation, remote wooded areas. This suggests that, in addition to providing important migration habitat, Ice Mountain may

provide prime golden eagle wintering habitat. Furthermore, studies suggest that raptors are at highest collision risk when foraging (Hunt, 2002; Hoover & Morrison, 2005), thus land managers should consider the potential conflicts that wind energy facilities may pose, not only in critical migratory habitat, but in important wintering areas as well.

To summarize, our data tell us that golden eagles will be impacted by wind power development on Ice Mountain. Nevertheless, they do not tell us the scale of that impact - how many golden eagles may be at risk from wind power development at Ice Mountain, nor do they tell us exactly what will happen to eagles, should turbines be built there. The decision to put turbines at this site will have consequences for these Pennsylvania ridge tops and there will be impacts on golden eagles and other species. We hope that our limited preliminary data are useful to those of you who will make the decision whether or not to develop this site.

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 _____

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mljackson@hughes.net

NOTE NEW MEETING LOCATION BELOW

JANUARY/FEBRUARY PROGRAMS

January 20 — JVAS members' night, featuring Terry and Debbie Wentz with slides of nature in Germany. Bring your own slides or other original, nature-related creations. (Call Terry to reserve a slot.)

February 17 — Steve Bonta, “North to Alaska by Car” In summer 2007, Steve drove from central Pennsylvania to the shores of the Arctic Ocean and back with his brother Mark and niece Eva.

**PLEASE NOTE NEW JVAS MEETING LOCATION
BELOW.**

JANUARY/FEBRUARY FIELD TRIPS

Saturday, January 24, **Cabela's Hamburg, Pennsylvania**
Retail Store Explore Cabela's habitat re-creation retail store
 in Hamburg, northern Berks County. Van transportation.
 Bring snacks and drinks. Lunch at Cabela's, and dinner along
 the way home. **RESERVATIONS REQUIRED** Terry
 Wentz twentz2@verizon.net

Saturday, February 21, **PPG Aquarium & Carnegie Museum of Natural History, Pittsburgh**—Observe more than 40 aquatic exhibits in the PPG Aquarium, in Pittsburgh. Enjoy the wonders of the collections and exhibits of the Carnegie Museum of Natural History, also in Pittsburgh. Features 20 exhibit halls including the blockbuster *Dinosaurs in Their Time*. Admission fees and van transportation cost. Meet at Unkel Joe's Woodshed, Altoona, at 8 a.m. Bring snacks and drinks. Lunch along the way. **Prepaid reservations required.** Terry Wentz twentz2@verizon.net

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 -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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New Meeting Location! Bellwood Library!

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