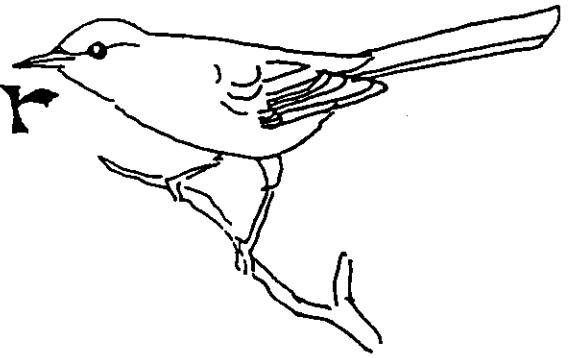


The Gnatcatcher



Newsletter of the
Juniata Valley Audubon Society

R.R. 3, Box 866, Altoona, Pennsylvania 16601

Vol. 29, No. 7 – October 1997

Volunteer Macroinvertebrate Monitoring Begins on Little Juniata River

By Stan Kotala

Sometime in the summer of 1996 an unknown pollutant was discharged into the Little Juniata River near Ironville, in Sinking Valley. As a result, 95% of the downstream benthic macroinvertebrate population was killed.

Benthic macroinvertebrates are bottom-dwelling organisms such as stoneflies, mayflies, caddisflies, crayfish, and snails, which make up the food base in our streams. Since they spend almost all their lives underwater, they are excellent indicators of water quality.

Their decline was first noted by Norm Shires, a local angler, who brought the matter to the attention of the Pennsylvania Department of Environmental Protection (DEP). The DEP monitors the macroinvertebrate population in the Little Juniata River only once per year. In response to Mr. Shires' concerns, William Botts, a DEP biologist, sampled the macroinvertebrate population in the stream and found a catastrophic decline in their numbers south of Ironville. Mr. Botts also analyzed trout collected from the Little Juniata River this summer and found that the flesh contained DDT, chlordane, dieldrin, and mirex.

As a result of this event in particular, and the general degradation of the Little Juniata and its tributaries in the Altoona-Tyrone-Bald Eagle corridor, a river monitoring group is being formed. Its purpose will be to evaluate the macroinvertebrate population in the river on a quarterly basis. This will be done at six sampling stations that already have been selected and approved by the DEP. The data will be used by the DEP

Cont'd on page 5

October Program

"MIGRATING RAPTORS." Greg Grove, of the State College Bird Club, will detail identification of migrating raptors.

7:30 P.M., Monday, Oct. 20 at the visitor center, Canoe Creek State Park, off Rte 22 east of Hollidaysburg.

Field Trips

HIKE TO THE BAT HIBERNACULUM at Canoe Creek State Park. Stan Kotala will lead a hike up Moore's Hill to the old limestone mine shelter that in winter is occupied by six species of bats (see page 5). Preregister with the trip leader at 946-8840.

1-4 P.M., Sunday, Oct. 19

STONE MOUNTAIN HAWKWATCH PLATFORM. Observe approximately eight different species of migrating raptors including golden eagles. Preregister with trip leader Dave Kyler at 643-6030.

10 A.M. to 4 P.M., Saturday, Oct. 25

SHAVER'S CREEK ENVIRONMENTAL CENTER. See the birds of prey display and a possible program. Bring the family. At least 15 persons must attend to warrant a program. Program cost is \$5 per person — admission to Shaver's Creek is additional. Participants must preregister with the trip leader and pay for the program by Oct. 24. Trip leader: Janet Huber, 942-5752

10 A.M., Sunday, Nov. 2 (Meet at the visitor center)

Next Board Meeting

7 P.M., Monday, Nov. 3 at the Kotalas' residence.

The Gnatcatcher

is published eight times a year (in February, March, April, May, June, September, October, and November) by the

Juniata Valley Audubon Society
Charlie Hoyer, Editor
P.O. Box 32
Tyrone, PA 16686-0032

Articles may be submitted directly to the editor. The deadline for the November 1997 issue is Friday, October 31.

The Juniata Valley Audubon Society (JVAS) is a chapter of the National Audubon Society serving members in Bedford, Blair, Fulton, Huntingdon, and Mifflin Counties.

Program meetings of the JVAS are held in the Visitor Center at Canoe Creek State Park, near Hollidaysburg, on the third Monday of the month in February, March, May, June, September, October, and November at 7:30 p.m. (A business meeting is at 7:15.) The public is invited to attend.

The JVAS Board of Directors holds its meetings, which are open to any concerned JVAS member, as announced in *The Gnatcatcher*.

For membership information, please contact Charlie Hoyer at 684-7376.

Officers

President Stan Kotala 946-8840
Vice President Terry Wentz 692-4224
Secretary Eugene Zielinski 353-8212
Treasurer Marge Hoyer 684-7376

Committee Chairs

Membership Charlie Hoyer 684-7376
Programs Terry Wentz 692-4224
Conservation Paula Ford 695-4799
Field Trips Janet Huber 942-5752
Publications & Publicity Charlie Hoyer 684-7376
Education Alice Kotala 946-8840
Cochair, Debora Haine 695-8239
Finance (*Open*)
Hospitality Barb Corle 276-3428
Historian Barb Baird 946-0256

Directors

Fund-raising Director . . . Anne Borland 695-9718
Director of Ornithology . . . Bill King 942-7673
Director Dave Kyler 643-6030

From the President's Desk

All JVAS members should be sure to arrive early for October's program meeting at Canoe Creek State Park's visitor center on Monday, Oct. 20. The business meeting, which begins at 7:15, will be devoted entirely to the Chesapeake Bay Foundation's Juniata Project, an ecological restoration plan for the streams of the Juniata Watershed.

Deb Nardone, of the CBF's Huntingdon office, will discuss this exciting endeavor, including current projects in our area, future plans, and possible funding through the Department of Conservation and Natural Resources' Rivers Conservation Grants. She also will detail how riparian forest buffers, stream-bank fencing, wetlands restoration, and native warm-season grass meadows can improve water quality in our streams and in the Chesapeake Bay.

Hope to see all of you there at 7:15!

Stan Kotala

Wildlife Activities Survey

Fish and wildlife activities continue to create a powerful economic force, according to the National Survey of Fishing, Hunting, and Wildlife-Related Recreation.

The survey, completed in 1996 for the U.S. Fish & Wildlife Service by the U.S. Census Bureau, shows that the numbers of hunters and anglers sixteen years and older have remained relatively constant during the past five years. There were 14 million hunters in 1996, 14.1 million recorded in 1991. And there were 35.2 million anglers in 1996, compared with 35.6 million five years ago.

Total annual expenditures of hunters and anglers, however, rose dramatically during the past five years. Spending by anglers increased to \$36.2 billion from \$24.6 billion. Hunter expenditures jumped from \$10.1 billion to \$17.7 billion.

The number of bird watchers, wildlife photographers, and other nonconsumptive participants dropped 17 percent during the five-year period from 76 million to 63 million. Their expenditures, however, rose 39 percent to \$29 million. ❖

— From *Outdoor News Bulletin*
Wildlife Management Institute

CONSERVATION
CORNER
By Paula Ford
I-99 Project

Because many JVAS members don't get the *Altoona Mirror*, I want to share with Chapter members my response to a recent editorial.

Editor:

As a local environmentalist for more than 18 years, I'm getting used to seeing the *Altoona Mirror* always take an editorial position in favor of whatever highway is proposed. I can't understand, however, the claim in the editorial on Sunday, Sept. 7, that "Deaths show the need for I-99 project." You said, "As groups debate whether to take homes and businesses or a natural area on the side of a mountain, people are dying in automobile accidents."

I was as saddened as anyone to hear about the deaths of the Bancroft girls. I know I speak for all members of the Juniata Valley Audubon Society (JVAS) when I say that my heart goes out to their families — especially their parents.

Allow me to point out a few facts: First, I-99 was built from Bedford to Bald Eagle without any outcry from the environmental community. We recognize the need for good highways. In fact, in JVAS' testimony prepared for the February 1, 1995 public hearing on the environmental impact statement (EIS) for the proposed Bald Eagle to Port Matilda section of the highway, I said, "As residents of this area, we fully recognize the importance of good, safe highways to both local residents and visitors to our area." I further pointed out that one of JVAS' main objections to the proposed route was that "this ridgetop highway will expose motorists to unsafe conditions." Another concern we had was for the very high construction costs of the proposed route and for very high maintenance costs after construction, due to the need to use large amounts of salt and other de-icing agents.

In your editorial, you asked, "How often do you hear of fatal accidents on the new road stretching from Bedford to Bald Eagle?" The *Mirror* library may hold the answer to that question. The *Mirror* library certainly has several stories about the 1994 pileup on Cresson Mountain that involved 27 vehicles and killed four people (see, for example, the November 23, 1996 *Mirror* article that dealt with the ongoing lawsuits that arose from the pileup).

Many of the opponents of the proposed corridor from Bald Eagle to Port Matilda are very concerned that conditions on the ridgetop route will lead to additional such pileups. Research conducted by Professor Dennis Thompson, Professor and Head of the Department of Meteorology at Penn State, predicted that people who would drive the proposed route would encounter valley and/or ridge fog on 157 days per year. He pointed out that drivers would often encounter both, driving from fog to clear to fog — hardly a safe condition. In addition, on January 2, 1995, when winds in the valley were intermittent, Professor Thompson recorded winds in excess of 70 miles per hour at the elevation the proposed road would be built. He said in his testimony on the EIS, "These same winds, which are capable of overturning vehicles, will also be of sufficient magnitude to produce significant blowing snow and ice, and, thus, reduce visibility to less than the stopping sight distance. This type of 'whiteout' phenomenon is particularly dangerous because it is not a matter of the obstruction to visibility being apparent to the oncoming driver. Rather the 'obstruction' is often literally blown into the traveling vehicle."

If the highway is built as proposed, wildlife will lose habitat, sportsmen will lose state game lands, and motorists will face high winds, ice, snow, fog, and whiteouts. Let's build the highway, but let's do it in a safer corridor.

Paula Ford
Conservation Chair
Juniata Valley Audubon Society

JVAS Field Trip To SGL 166

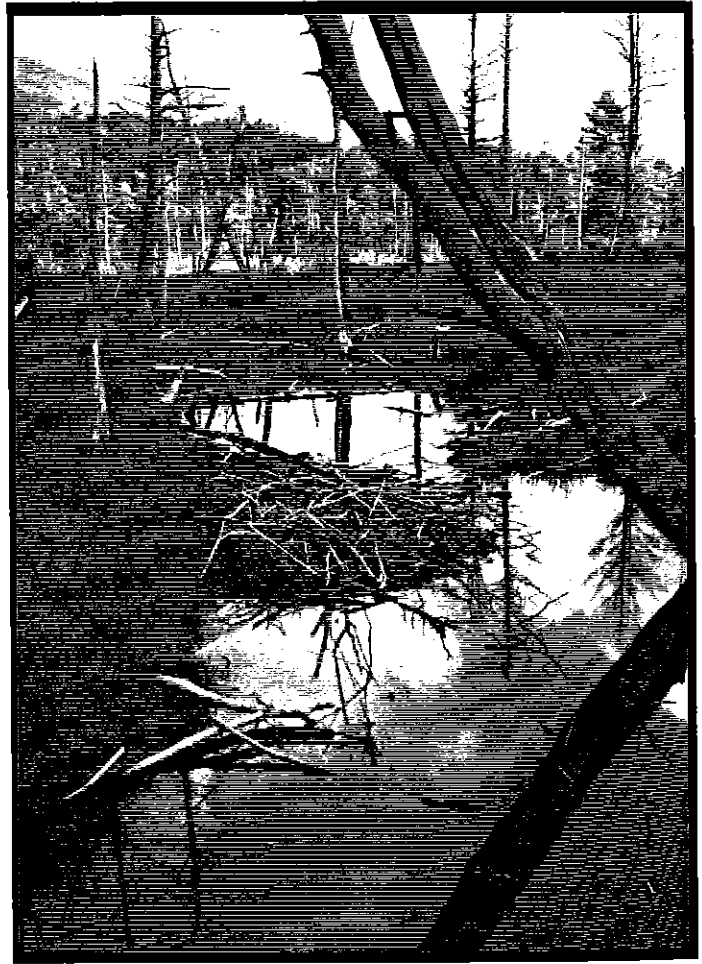
September 14, 1997

Photos and Text
By Stan Kotala

Pennsylvania Game Commission Land Management Supervisor Rob Criswell leads JVAS members on a tour of State Game Lands 166, crown jewel of Blair County's natural lands.



JVAS Education Chair Alice Kotala explores a beaver dam in the heart of the game lands. Blair County's only great blue heron rookery can be seen in the distant flooded timber.



A beaver lodge in the game lands. This area is dominated by tussock sedge (*Carex stricta*) and soft rush (*Juncus effusus*). Swamp white oak (*Quercus bicolor*) and white pine (*Pinus strobus*) grow in the surrounding swamp.

Field Trip: Hike to Bat Hibernaculum

JVAS President Stan Kotala will lead a hike up Moore's Hill in Canoe Creek State Park to Pennsylvania's largest bat hibernaculum. The old limestone mine at the top of the hill serves as a hibernation site for the six species of bats that permanently reside in our area of Pennsylvania, including the Indiana bat, an endangered species.

Although we will not enter the hibernaculum, Stan will give a presentation on the ecology and life history of these cave dwellers while we are at the site.

Bring some snacks, and be prepared for an invigorating fall outing!

Meet at the visitor center at Canoe Creek State Park on Sunday, Oct. 19 at 1 P.M. Trip duration, 1-4 P.M. Preregistration required. Call Stan at 946-8840. ❖

. . . Macroinvertebrate Monitoring *Cont'd from first page*

for investigative and enforcement purposes.

The new citizens' monitoring group is the brainchild of Tyrone's John Pascavage, who brought together Greg Hoover, a Penn State entomologist; Diane Wilson and Cheryl Snyder of the DEP's Bureau of Watershed Conservation; and DEP biologist William Botts to guide the formation of the Little Juniata River Association.

Its initial training session was held on the Little Juniata River at the Greene Hills Camp near Barree on Sept. 27, 1997. Thirty-six concerned citizens were in attendance, among them JVAS President Stan Kotala, Blair County Trout Unlimited President Bob George, and high school biology instructor and outdoor journalist Mark Nale of Spring Creek Trout Unlimited.

Further training is planned for later this fall, with actual monitoring to begin in 1998. If you are interested in helping us, call John Pascavage at 692-7062 or Stan Kotala at 946-8840. ❖



DEP biologist William Botts (kneeling, far right) assists Little Juniata River Association volunteers in the identification of benthic macroinvertebrates collected from the river near Barree.

Butterfly Plant of the Month — New England Aster

By Alice Kotala

As I drop off my child at school this early autumn season, I'm greeted by a delightful bloom of pink, magenta, lavender, and blue "starplants" — New England asters (*Aster novae-angliae*) — part of the butterfly and hummingbird habitat created last spring by the students at Penn-Mont Academy. Fellow parents are amazed at the attractiveness of these native perennials, though still immature and despite having received little or no care during the summer recess. Since they have evolved with the native flora, fauna, soil, and climate, if planted in the right place (half-day of direct sun and not too rich a soil), they should thrive on their own and function within an ecosystem providing food for native animals and in balance with other native plant species. Asters provide the only food for pearl crescent larvae and are an excellent nectar source for a variety of adult butterflies.

Blooming three weeks or more in September and into October, these showy, tall wildflowers (as high as four feet in rich soil) are found from southern Canada to the Rockies and south to the Gulf Coast and New Mexico. There are seventy-five native aster species east of the Rockies, but hybridization can make species identification a challenge in the wild. Most garden cultivars are hybrids of the New England aster or New York aster. Called starworts in England (*wort* is Middle English for *plant*), the English took our New England aster and developed hybrids that have since escaped and have become "wildflowers" all across Europe.

I think about the rumored prospect of a fast food restaurant replacing the wet meadow adjacent to the school. As more land becomes developed to fulfill human needs and desires, thereby reducing wildlife habitat, we have within our personal means a way to help ameliorate this negative human impact in the choices we make as we landscape our own properties. In this schoolyard garden we hope to inspire appreciation for our native plants and promote gardening for native wildlife as a valuable and aesthetically pleasing landscaping alternative. ❖

[This the first of a series of articles about the native plants used in Penn-Mont Academy's butterfly and hummingbird garden]

Bats Need Your Help

Due to a recent resurgence of the use of toxic chemicals on bats dwelling in Pennsylvania buildings, Bat Conservation International asks you to send a letter of concern to Mr. Jim Garrhan at the Pennsylvania Department of Agriculture. The use of poisons against bats poses serious health hazards to people and results in the needless destruction of valuable bat populations.

With this newsletter is a sample letter that you may use as a guide, or use it directly, to be sent to Mr. Jim Garrhan. Your participation in this manner is greatly appreciated. ❖

Last Month's Program

Bill Riley, of Clearfield, talked about the organization he helped establish: the Eden Hill Conservancy. The conservancy is located in Huntingdon

County, just west of Spruce Creek. Bill discussed the history of the area, noting that much of the land was deforested, then taken over by dairy farms. The Rileys' property did not have enough water for a dairy farm, so it was reforested and part of it used as a tree farm. Eden Hill presently is under residential development pressure due to its proximity to the rapidly growing State College area; the conservancy was formed to help protect at least some of the area from development.

The audience then viewed the conservancy's video, which illustrated the organization's purpose: to conserve the natural, cultural, and historical tradition of the Eden Hill area. The program concluded with a Q&A session in which Bill talked about the layout of his property and discussed the necessity of dealing with local government officials, particularly those of the county, in order to form an effective land preservation organization. ❖ — EZ

Too Many Deer?

I may have solved the mystery of the disappearing pinesaps — those close relatives of Indian pipes that appeared on the Guesthouse Trail in 1984 and '85 and then did not reappear again until 1995. In that year I found only three on Black Gum Trail, but last year I found thirty-four in four different locations.

This September 6 I was ecstatic to discover twelve along Short Circuit Trail, three on Black Gum Trail, three on Laurel Ridge Trail and *ninety* at the confluence of Short Way and Laurel Ridge trails. On September 23 all but two of the ninety pinesaps were gone. Looking more closely, I discovered a few stems that had had their blossoms nipped off. When I checked the other pinesap locations, only eight were left on the Short Circuit Trail. Those on Black Gum and Laurel Ridge trails also had been eaten.

The culprits were white-tailed deer. That is why pinesaps seem to come and go. No doubt many more germinate but are consumed before I find them.

How many other beautiful wildflowers would we have if the deer population were lower? The one round-leaved orchid I found at the Far Field several years ago only survives because we fenced it after it was nipped off two years in a row. We did not fence the three nodding ladies' tresses I discovered at the edge of the Far Field in 1994 and '95, but those were the years when the deer population was lower because of the previous harsh winters and heavy hunting pressure.

So I was thrilled last September to find seventeen nodding ladies' tresses. The population of this fall-blooming orchid was expanding. Then days later only five remained. The others had been nipped off.

To my distress and that of many other wild-

flower lovers, the 1997-98 deer license numbers were reduced by nearly 100,000 despite testimony from the Pennsylvania Game Commission's own deer biologists that we still have more deer in many areas than the habitat can support.

By Marcia Bonta

In an article in the June 1997 issue of *Pennsylvania Sportsman* entitled "Where Has All the Science Gone?"

Bill Palmer, formerly the commission's chief deer biologist and now the agency's woodcock and grouse specialist, writes, "Today deer management increasingly appears to be based on emotion instead of science."

During the late 60s and through the 1970s, Game Commission biologists studied how many deer a healthy forest can support. They concluded that the goal should be twenty-one deer per square mile. Biologists at the Allegheny National Forest, which has little forest regeneration due to an overpopulation of deer, would be happier with ten deer per square mile. In reality, the average is now thirty and in



some hard-hit counties like Bedford, forest landowners I know who allow hunting on their land, claim they have forty to sixty deer. When I walked with them in their forest this September I saw no wildflowers, no understory, and *not one* tree seedling. They are justifiably furious that the number of licenses has been drastically reduced in their county.

Our forest is in much better shape than theirs. We do have forest regeneration, an understory, and almost 200 species of wildflowers. But our hunters have taken between thirty and thirty-five deer on our square mile every year since 1993.

This autumn, because of political pressure from politicians and their constituents who want to see a deer behind every tree, there will be no bonus tags for our hunters to purchase. Not only will our deer

numbers increase, but, unlike the last two winters, there is no large mast crop to feed the deer so they will be eating every tree sapling they can find.

Those of us who care about trees, wildflowers, shrubs, nesting birds, and the other components that make up a healthy forest should inform our commissioners and politicians that we expect them to manage the deer population based on science, not emotion. After all, the commission's deer management

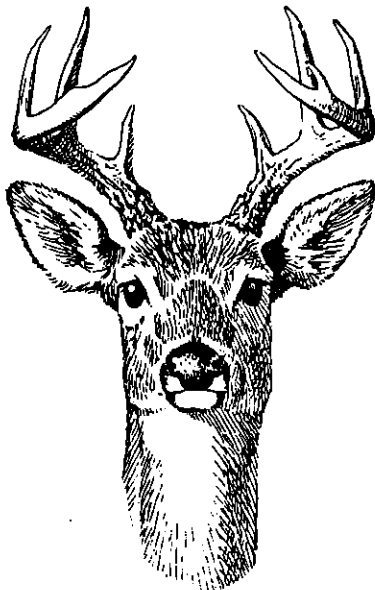
policy states, ...“the commission will endeavor to manage deer on the basis of compatibility with other land uses,” and that it “recognizes that responsible deer management must be based on sound information through continuous research and inventory.”

To invest the time and money in such research and then to ignore it when the biggest mouths complain sets a dangerous precedent. ❖

Send your BiLo Foods and Riverside Markets cash register tapes to Anne Borland at 138A Larch St., Hollidaysburg, PA 16648. Anne redeems tapes for \$ for the JVAS. Thank you!

PRINTED BY WICK COPY CENTER, 503 E. PLANK RD., ALTOONA

**Juniata Valley Audubon Society
R.R. 3, Box 866
Altoona, PA 16601**



Non-Profit Org.
U.S. POSTAGE
PAID
Altoona, Pa.
Permit No. 238

October 1, 1997

Mr. Jim Garrhan
Pennsylvania Department of Agriculture
Route 92 South
Box C
Tunkhannock, PA 18657

Dear Mr. Garrhan:

A recent resurgence of the illegal use of toxic chemicals by unethical pest control operators against bats roosting in buildings poses serious health hazards to Pennsylvania homeowners. When bat colonies are poisoned, the bats become sick and unable to fly, often falling to the ground, where they die slowly and may be picked up by inquisitive children or pets. Researchers have found that even a single application of a toxicant can result in a 700% increase in human contact with bats. It is also hypothesized that physiological stress imposed by sublethal levels of pesticide toxicity may increase bat susceptibility to viral infections such as rabies.

As well-informed public health officials are aware, there are safe and effective ways of excluding bat colonies from people's homes. Responsible pest control operators exclude bats using netting or other one-way valve devices. This forces bats to exit but not re-enter homes. Only proper exclusion techniques will safely exclude bats from homes, thereby protecting both people and bats.

As primary consumers of night-flying insects, including many serious agricultural pests, bats have both an ecological and economic value to the residents of our state. Even a colony of just 150 big brown bats can eat enough cucumber beetles in a single summer to protect local farmers from 33 million rootworms, pests that cost up to a billion dollars annually in North America.

The hazards of pesticide application against bats are long-term, sometimes persisting for up to six years. In addition to posing serious health hazards to humans, the use of toxicants in this manner results in environmental contamination and the needless destruction of bats. As residents of the state of Pennsylvania, we expect our state Department of Agriculture to enforce responsible approaches that consider both human and wildlife safety. Your assistance in this matter will be deeply appreciated.

Sincerely,