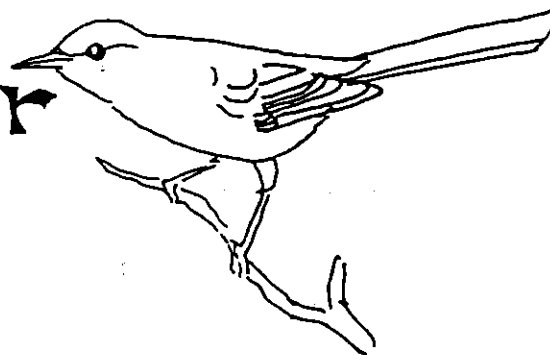


The Gnatcatcher



Newsletter of the
Juniata Valley Audubon Society

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

Vol. 29, No. 1 — February 1997

Colette Heller Retires Longtime JVAS Board Member

After having served six years as Education Chair, Colette Heller has resigned her position so that she can take a much-needed rest. She has labored long and hard for the Juniata Valley Audubon Society since she first joined back in 1977. Within a year she was the treasurer and in 1980 became the president. In that position she was especially remembered for starting the yearly printed programs and bringing in many new members. Colette served as vice president under John Orr in 1983–84 and was a director from 1984 until 1990. Those were her official roles.

Unofficially, she served as my chief advisor during the four years I was president (1984–88), and we spent many hours on the phone discussing what needed to be done to improve our society. For many years she also planned our annual banquet. I especially remember the year J. Peter Myers — then Science Director of the National Audubon Society and now head of the J. Alton Jones Foundation — was our banquet speaker. The banquet was held in the Calvary United Methodist Church in Bellwood, and the room was totally decorated as a rain forest. That was in honor of Pete's interest in international issues relating to migrating birds. Pete was overwhelmed and so was I. Colette also was an active member in our then extremely active International Issues Committee.

For all the time and thought she has given to the JVAS over the years, we thank her greatly. I know that she will continue to be part of our Speakers Bureau since she especially enjoys talking to youngsters and adults about birds. And I have no doubt that she will find other ways to contribute to the well-being of our society. ❖

— Marcia Bonta

February Program

"PENNSYLVANIA'S HERPETOLOGICAL ATLAS" — Dr. Arthur Hulse, director of the Pennsylvania Herpetological Atlas, will present a slide show about the Keystone State's reptiles and amphibians.

7:30 p.m., Monday, Feb. 17 at the Visitor Center, Canoe Creek State Park, off Rt. 22, east of Hollidaysburg.

Field Trips

We shall take a break from JVAS field trips during the winter and hope to see you again on Sunday, Apr. 20 for a trip to the Dunning Creek Wetlands, in Bedford Co.

Next Board Meeting

7 p.m., Monday, Apr. 7 at President Stan Kotala's residence. All members are welcome. Phone Stan at 946-8840 for directions.

The Gnatcatcher

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The Juniata Valley Audubon Society (JVAS) is a chapter of the **National Audubon Society**, and *The Gnatcatcher* is a benefit of membership in the chapter.

Articles may be submitted directly to the editor. The deadline for the March 1997 issue is Friday, Feb. 28.

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*.

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Officers and Chairpersons

President	Stan Kotala	946-8840
Vice President	Bill King	942-7673
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Director	Anne Borland	695-9718
Director	Francis Burgoon	695-5857
Director	Dave Kyler	643-6030

President's Message

In less than a month wood frogs will be calling and Jefferson salamanders will be traveling to their breeding ponds. The 1997 Herpetological Atlas season will have begun.

The Pennsylvania Herpetological Atlas project is the first attempt to acquire extensive field data on the distribution reptiles and amphibians in the Keystone State. The data is being collected by volunteers from all across the state. Several JVAS members already have started working on this long-term project, which began last year, and they already have made several significant discoveries!

The director of the project, Dr. Arthur Hulse, of the Indiana University of Pennsylvania, will be the speaker at our next program meeting on Monday, Feb. 17 at 7:30 p.m. in the visitor center at Canoe Creek State Park. I hope to see all of you there for this outstanding program.

If you'd like to join the JVAS board members and Dr. Hulse for dinner at the U.S. Hotel (in Hollidaysburg) prior to the program, please call me at 946-8840 or Paula Ford at 695-4799.

Stan Kotala

Nominating Committee Seeks Candidates

The Nominating Committee will be nominating candidates for the offices of vice president and treasurer at the February meeting. If you wish to be a candidate or to nominate someone else, please contact one of the members of the committee before the meeting. Members are Dave Kyler (643-6030), Debbie Haine (695-8239), and Marcia Bonta (684-3113). ❖ — MB

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

CONSERVATION
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By Paula Ford

Hard Times for Frogs

It's not easy being green, according to Kermit the Frog, and many biologists believe it's getting more difficult all the time. They are concerned that frogs, toads, salamanders, and other amphibians are dwindling in number at an alarming rate throughout America and other countries. While the status of frogs in the Northeast and Mid-Atlantic states is not as bleak as in, say, Costa Rica where the golden toad apparently became extinct sometime in 1989, several species are declining.

The extinction of one or more species of frogs might have seemed unthinkable a few years ago, but biologists now see unmistakable evidence of precisely that. In 1989 and 1990, two conferences — the First World Congress of Herpetology and one sponsored by the Biology Board of the National Research Council — were organized to consider the causes for this phenomenon and to recommend for action.

Frogs never have had a particularly easy time. They complete their life cycle in two very different environments — in water as tadpoles and on land as adults — so they are subject to a variety of predators and environmental stresses. And because of their physiology — amphibians breathe through their permeable skins — they are highly susceptible to pollution such as acid rain.

Richard Wyman, biologist and director of the Edmund Niles Huyck Preserve and Biological Research Station in Rensselaerville, N.Y., recently conducted an informal survey of researchers from Maine to Virginia, an area that is home to 15 species of frogs and toads. Of nine frog species being studied, only one seems to be holding its own — the wood frog (*Rana sylvatica*). Another species, the bullfrog (*Rana catesbeinana*), is increasing, at least in southeastern New England. But the remaining seven species have been classified as uncommon, declining, rare, or threatened. These are the north-

ern cricket frog (*Acris crepitans*), tree frogs (*Hyla* spp.), the spring peeper (*Hyla crucifer*), the chorus frog (*Pseudacris triseriata*), the northern leopard frog (*Rana pipiens*), the mink frog (*Rana septentrionalis*), and the carpenter frog (*Rana virgatipes*).

Most of these species are in trouble in the Northeast and Mid-Atlantic regions because, being at the edge of their ranges, they live marginal lives and so are less able to cope with environmental stresses such as drought or climate change. "In fact," says Wyman, "models of the effects of climate change caused by global warming predict exactly this kind of decline at the edges of ranges."

Loss of habitat is another factor in the demise of frogs and other amphibians. Frogs need wetlands and clean bodies of water, including ephemeral spring ponds, for breeding; they need woodlands during their adult lives. But wetlands are being drained and forests thinned or cleared, so frogs have found diminished habitats.

Fragmentation of their habitats compounds the problem. Often their breeding habitat is separated from their woodland habitat. If a frog must migrate across a highway to lay its eggs, it is less likely to survive to breed successfully than if its woodland home were adjacent to a breeding site.

Even selective timbering — considered less invasive than clear-cutting — contributes to the reduction of amphibian populations. From 1984 to 1986 Wyman and his students studied the spring migration of frogs and salamanders from a forest on one side of a road to a swamp on the other. The researchers counted 716 amphibians including 493 frogs; 790 amphibians including 533 frogs in 1985. After a landowner selectively harvested timber in 1986, the researchers found only 57 amphibians including 34 frogs. "The amphibians either were squashed by the skidders used to harvest the trees," says Wyman, "or the soil was compacted so badly that the frost penetrated deeply enough to kill the hibernating amphibians."

Because the forest was selectively timbered, its amphibian population may recover in a decade or so. But, Wyman notes, "It would take at least 80 years if the forest had been clear-cut." The forest is sur-

rounded by farms, roads, and other developments, so Wyman hesitates to predict the future of the creatures.

Acid rain, snow, fog, and dust cause heavy metals and aluminum to accumulate in soil, adding yet another stress to a frog's already precarious life. Wyman found that acid soils deplete an amphibian's body sodium by altering the balance of fluids in its body. When it loses 50 percent of its sodium, the amphibian dies.

Acidity also affects a frog's ability to reproduce. Even slightly acidic solutions can lower the motility of frog sperm, making it less likely that the sperm will reach the eggs laid by the female, according to Benjamin Pierce, an associate professor of biology at Baylor University. Many frogs breed in ephemeral spring ponds where they are exposed to acidity in snow that has not been buffered by contact with soil.

If mating is successful, the acidic water below can profoundly affect a frog's development. Embryos may not hatch properly in water below a pH of 4. Those embryos that develop at a pH between 4 and 5 may hatch, but they often have deformities. Tadpoles exposed to acidic conditions for periods as short as three days grow more slowly than those not exposed to acidity. A slower growth rate may mean that the tadpoles will not develop fully before their aquatic habitat dries up.

Because they breathe through their delicate skins, amphibians are especially vulnerable to air pollution, pesticides, herbicides, and other toxic chemicals. A frog's skin also is highly susceptible to damage caused by ultraviolet light. As the earth's protective ozone layer is destroyed, more ultraviolet light reaches the earth, causing more skin damage and breathing difficulties for frogs.

Some environmental stresses have multiple effects on the ecosystem, further compounding the problems frogs and other amphibians face in their struggle for survival. Deforestation, for example, not only destroys or fragments habitats but also causes global warming that intensifies the effects of acidity.

Predators, especially stocked game fish, are another factor in declining numbers of frogs. "In

some cases, game fish can eliminate frogs," says Roy McDiarmid, a Smithsonian-based biologist who works for the U.S. Fish and Wildlife Service. "In areas stocked with trout for fishermen, frogs are rare or, in many instances, gone."

Widespread declines in frog populations are alarming because frogs occupy crucial positions in two food webs: at the top of the detritus-based food web (the web that decomposes nutrients in both leaf litter and water) and at the bottom of the grazing food web.

As tadpoles, frogs consume large amounts of algae and play an important role in maintaining their ecosystems. Tadpoles can actually delay a pond's eutrophication (the degradation of a pond by excess nutrients) by removing nutrients. Adult frogs are important consumers of the insects that feed on the microorganisms in leaf litter.

As part of the grazing food web, frogs at all their life stages are a source of food for other animals. Frog eggs are eaten by birds and fish and by other amphibians. Tadpoles are food for birds, fish, mammals such as raccoons, and even insects such as the predaceous diving beetles (family *Dytiscidae*). Adult frogs are consumed by numerous species including humans.

If frogs were to become extinct, insect populations could explode. And the animals that eat frogs might have trouble finding enough other food to survive.

Because few amphibian groups are being monitored, biologists have many unanswered questions about them. For example, although the wood frog is found throughout the area Wyman evaluated in his three-year study, the only research project on it that he could find was in Pennsylvania — a small area of a range that extends across northern North America. So it may not be accurate to say that the wood frog is doing well throughout its range.

What can be done? A group of herpetologists is setting guidelines for monitoring the animals. But for most of the world, databases of amphibian populations do not exist. Says McDiarmid, "We have a scattering of data points through time and space."

McDiarmid has been studying amphibian biology for 25 years. He's worried. Although he doesn't think a single factor is causing the global decline, he does trace all of the causes back to human activity.

"If we can better understand what's going on," says McDiarmid, "we can at least try to attack some of the problems. Amphibians are reasonably resilient, and they produce an awful lot of offspring. In that sense, I'm optimistic. On the other hand, if it's some sort of atmospheric thing, I'm pessimistic." He doesn't believe we can afford to study the problem for 10 more years and then evaluate the data.

"If some of the trends we are seeing in these amphibian populations are what they appear to be," says McDiarmid, "I don't think we're in any other situation than we are with the spotted owl. These things could get to the point where they are endangered species."

Frogs play the same role in the environment that canaries used to play in coal mines: When they die, something is wrong. The worldwide reduction of amphibian populations indicates environmental degradation that has implications for all species, including humans. ❖

Dedicated ALLARM Monitor Retires

The Alliance for Acid Rain Monitoring, better known by its acronym ALLARM, comprises an army of volunteers who regularly take samples of stream water and test their acidity.

John Rice, hubby of JVAS member Lynne Rice, began monitoring in 1988. He took samples from Tipton Run, Vanscoyoc Run, Big Fill Run, and Bald Eagle Run. He monitored each of the streams with extreme consistency for two years, providing some excellent data for the ALLARM database. He took

a short hiatus and then resumed monitoring in the summer of 1996, continuing with all four sites. It's this kind of consistency and dedication that enables ALLARM to identify general trends in pH and alkalinity, pinpoint specific problem areas, and make the data useful to other environmental organizations as well as the state government.

John, of Tyrone, has been a conservationist for many years. He has held positions in Trout Unlimited and is presently involved with Keystone Sportsmen for Youth, the Rocky Mountain Elk Foundation, and other groups. For more than 20 years John has been teaching hunter safety seminars for the Pennsylvania Game Commission and trying to get young hunters involved with the environment. On top of this, he's a full-time worker for GPU, an avid fly fisherman, and a proud family man. Despite all of his activities, he still made time to monitor faithfully for ALLARM.

After eight years, John has resigned and handed over his test kit to someone else in Trout Unlimited so that he can spend some time with his four granddaughters and brand-new grandson. ❖

Shad Restoration Program Reaches Blair Co.

More progress has been made recently in the effort to restore American shad to their historic spawning streams in the Juniata Valley: The 14-foot-high Williamsburg Generating Station Dam was demolished last fall, providing free passage to the shad that the Pennsylvania Fish & Boat Commission is restoring to our area.

The removal of this impediment opens the upper Frankstown Branch of the Juniata River and its tributaries to the reintroduction of shad and other native migratory fishes. ❖

(K)

In Remembrance — Melvin Lane

Last week I said goodbye — for the last time — to an old friend, Wm. Melvin Lane. Melvin was a longtime member of the Audubon family, but more than that, he was an inspiration to us all. Always there with a helping hand, a bit of advice, or some wealth of information, Melvin was a positive influence on all of our lives. Whether establishing nesting-box trails, assembling bird displays, or working with youth through Envirothon, he was always teaching — by example — to all who would listen. His life of giving to others and caring for our natural world was his legacy. Melvin — the outdoorsman, a "prankster," the sage, the good friend — will be sadly missed by all.

— Dave Kyler

'96 JVAS Christmas Bird Count

I extend a big THANK YOU to all who helped with the '96 CBC. The 53 species seen or heard was about average. The two "best birds" were a turkey vulture seen by Dave Kyler (possibly a first for our count) and a rusty blackbird seen by Randy Harrison (also a count first).

The count was conducted by 16 counters in 11 parties in addition to three feeder watchers. We spent 19 hours at feeders, four hours "owling," and 58 total hours birding. We covered 28 miles on foot and 228 miles by car.

Thanks again for all the help. Mark your calendars now for Saturday, Dec. 27, 1997 for the 98th annual Christmas Bird Count.

TALLY

Great blue heron 5; Canada goose 100; American black duck 1; mallard 115; **turkey vulture 1**; sharp-shinned hawk 3; Cooper's hawk 5; red-tailed hawk 15; American kestrel 12; ring-necked pheasant 2; ruffed grouse 9; wild turkey 9; rock dove 291; mourning dove 154; eastern screech-owl 8; great horned owl 7; belted kingfisher 3; red-bellied woodpecker 33; downy woodpecker 47; hairy woodpecker 15; northern flicker 4; pileated woodpecker 12; horned lark 171; blue jay 78; American crow 158; common raven 7; black-capped chickadee 243; tufted titmouse 135; red-breasted nuthatch 1; white-breasted nuthatch 72; brown creeper 10; Carolina wren 5; winter wren 3; golden-crowned kinglet 15; ruby-crowned kinglet 1; eastern bluebird 51; hermit thrush 4; American robin 15; northern mockingbird 3; cedar waxwing 23; European starling 750; yellow-rumped warbler 2; northern cardinal 93; American tree sparrow 101; song sparrow 47; white-throated sparrow 52; white-crowned sparrow 8; dark-eyed junco 539; **rusty blackbird 1**; purple finch 8; house finch 111; American goldfinch 126; house sparrow 144. ❖

— BK

Acid Precipitation Depletes Ridgetop Soils

Pennsylvanians long have been aware of the destructive effects of acid rain on aquatic organisms. Here in the Keystone State its effect is seen most dramatically in small headwater streams, which, as a result of acid precipitation, have undergone a decline in fishes, amphibians, and macroinvertebrates over the past 30 years.

Now, researchers have found that acid rain can have deleterious effects on the health of forests by means of depleting soils of minerals essential to plants.

Scientists at the Hubbard Brook Experimental Forest in New Hampshire have found that acid rain leaches calcium and magnesium out of the soil and exports these essential elements out of the watershed. This action has resulted in severely curtailed tree growth and long-term damage to many forest ecosystems.

The effects of this leaching are especially severe in forests that have steep terrain and poorly buffered soils, such as the ridges of our bioregion.

In addition, acid precipitation mobilizes aluminum in the soil, which normally is inert, resulting in a toxic effect on tree roots. This effect prevents the roots from absorbing calcium from the soil, thus stunting tree growth and eventually leading to decreased vigor and death.

Donald Buso, manager of field research for the Institute for Ecosystem Studies at Hubbard Brook Experimental Forest, stated that previous research into the effects of acid rain in North America and Europe focused on sulfuric acid in precipitation and ignored the effects on the soil.

"Some forest ecosystems already are suffering severe damage that may be very difficult to reverse," said Buso. In conclusion, he remarked, "We do have some very compelling evidence that we need to further tighten — not relax — air-pollution regulations." ❖

(K)

During a recent session, the Pa. legislature adopted the leopard frog as the official amphibian and the eastern box turtle as the official reptile of Pennsylvania.

Earth Watch and Long-tailed Manakins in Costa Rica

By Shirley Wagoner

My second 1996 birding trip was with an Earth Watch research project in rural Costa Rica and was even more interesting than the trip to Turkey I wrote about in the last issue of *The Gnatcatcher*. I went down a week early on my own and spent most of a week in a northeastern rain forest, Rara Avis, where a great effort is being made to make the rain forest commercially viable without destroying it and to demonstrate to the locals and to the world that it works. Part of the effort is tourism, of course, but it is certainly not limited to that.

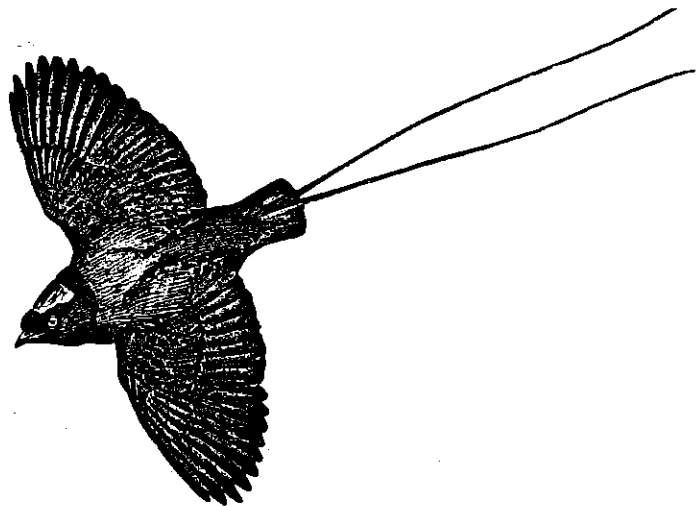
Rara Avis is quite a place — remote and interesting. To get there we took a local bus from San José to the Rara Avis office, where we boarded a cart behind a large tractor. Then we were hauled for a slow, rough, eight-mile ride on a dirt and rock road, during which we forded two rocky rivers because the tractor was too wide for the bridges. We decided to walk the last two miles through the forest and let the tractor go ahead with our baggage. This was a good decision even though we had to ford two streams, which we did without getting water in our boots.

The lodge was both rustic and luxurious for the surroundings. Although our rooms had running water — and hot water too — we had no electricity. We were provided with gas lanterns that emitted light too little to read by. The dining area was in another building about 100 yards downhill from the lodge. Our food was local style — “Tico” food and always delicious — mostly rice and beans, spicy squash, and fresh vegetables.

Each day we were invited on guided walks led by naturalists who explained and showed us many ways in which the local flora and fauna were intricately adapted to the rain forest and to one other. There were falls nearby; a group of howler monkeys lived close enough to hear every day; many colorful and interesting birds were to be seen, such as swallow-tailed kites, mealy parrots, blue-and-white

swallows, chestnut-headed oropendolas, several species of flycatchers, wrens, robins, finches, warblers, tanagers, and hummingbirds, to mention a few.

It was a very special experience. The topper was a climb, via harness and rope, 100 feet up into the canopy. I climbed up under my own power, made possible by the apparatus; neither ascending nor descending was easy. If I began to feel queasy about the “altitude,” I just refrained from looking



down — there was plenty to see at eye level.

When the day came to leave Rara Avis, I opted to send my bags out with the tractor and walk the 10 miles down to the office, rather than endure the bone-crushing ride on the cart — partly because I had been told that the birding from the road going down would be wonderful. It truly was! Unfortunately, it also was a day of heavy rain showers — our first of the week, and I did get soaked. My bird book and my feet (in high, rubber boots) came off the worst.

When I got to the office I changed into dry clothes before catching the bus back to San José. I strongly recommend this rain forest experience rather than the half-day tourist excursions into the canopy elsewhere in the country — providing one is willing to rough it.

I had one night back in San José before meeting the Earth Watch group at the Gran Hotel in the middle of town. The next two weeks I didn't have to worry about a thing. Everything was arranged

for us: transportation by bus to the town of Monteverde in western Costa Rica, a rental house, and food cooked for us every night (although we did have to fetch it!)

The first day was orientation to the farm and to the blinds that we'd have to find on our on each day to observe the manakins. The group consisted of seven others and myself.

We found ourselves trekking confusedly on dirt roads, over or under barbed-wire fences, across large pastures populated with horned cattle, and through extensive woods following barely discernible paths and using compass readings and markings to locate the blinds. We were placed on three two-hour watches each day, seated on a slightly padded board seat, equipped with spotting scopes and tripods (which we had to carry) as well as our own binoculars and bird books. The birds we saw were jet black, azure blue, and red. Their behavior was quite spectacular. The project was called "Dancing Birds," and the name does not exaggerate their behavior. They "popcorned," "leapfrogged," and "butterfly-flew." Not that they performed all the time or even for long, but all of us saw all these behaviors repeatedly. Some of us were even able to read the bands on their legs (with the help of the scopes). I couldn't do it during the training, so I knew I wouldn't be able to see letters or numbers attached to the birds' legs. I was able to see color once!

We had one day free and went together to the cloud forest called Monteverde to see the resplendent quetzals and whatever else we might see. An official guide accompanied us — a person who was part of our project — and that helped. People who had no guide didn't seem to see as much. At the entrance to the forest was a hummingbird garden with several feeders constantly attended by at least eight species of hummingbirds. We did see quetzals, including one on a nest as evidenced by the long tail feathers protruding from a tree cavity. We heard three-wattled bellbirds and howling monkeys. We also saw and heard keel-billed toucans, emerald toucanets, masked tityras, azure-hooded jays, and many others.

The paths in the cloud forest were excellent. It was possible to hike to the continental divide a few miles away, although only two of our group actually did this. The forest was only a little drier than the rain forest at Rara Avis; there was some difference in the vegetation but not a tremendous difference. There were streams and beautiful falls here too. Although there were other groups of people at the cloud forest, it never seemed crowded or overrun.

Back at the farm: Some of the spectacular sights there were spider monkeys and capuchin monkeys. I became aware of them because of the scolding of the large brown jays and the loud rasping of some keel-billed toucans. We also saw toucanets, motmots, several of the many species of wrens and robins found in Costa Rica, and some North American migrants that had not left yet for the north — or perhaps not all of some species actually leave the tropics where many of them winter?

I have more than 90 species on my list of birds seen in Costa Rica, so those I've named here only begin my list. And 90 just dents the surface of the species native to the country; my book shows about 850 species in all! I can't imagine having studied all of them in a lifetime, yet the author of my Costa Rican bird book has since published a separate book on the birds of Panama.

This research trip was well-planned — the research seemed important, and the arrangements worked smoothly. I definitely recommend a research trip with Earth Watch and hope to make more such trips. ❖

Stone Mountain Hawk Watch '96

The 1996 fall migration season at the Stone Mountain hawk watch was characterized by below-average flights of red-tails and sharp-shins. However, the number of sightings was very good for several other species of hawks.

Season records were established for ospreys, bald eagles, golden eagles, American kestrels, merlins, peregrine falcons, and goshawks. The most raptors were sighted on Sept. 18. On that day, 450 broad-winged hawks, 48 ospreys, 35 kestrels, and

six bald eagles were counted.

Through late September and early October few birds of prey were observed migrating through central Pennsylvania. Then, on Oct. 28, Bill King and Nick Bolgiano recorded 25 golden eagles. Later that week, on Oct. 31, 12 more golden eagles were seen. A total of 61 golden eagles were counted during 40 hours of coverage from Oct. 28 through Nov. 2. By the end of November, a total of 97 golden eagles had been tabulated.

Although there have been numerous reports of black vultures in the area, only five black vultures were counted during the 1996 hawk watch at Stone Mountain, compared with sightings of 159 turkey vultures.

Other count totals include 755 sharp-shinned hawks, 746 red-tailed hawks, 678 broad-winged hawks, 151 ospreys, 126 American kestrels, 94 Cooper's hawks, 50 northern harriers, and 43 red-shouldered hawks. The most unusual sightings were five northern goshawks and one Swainson's hawk.

During the period of 56 days (316 hours of observation), 3017 raptors were counted by the project team of Greg Grove, Bill King, Nick Bolgiano, Dave and Trudy Kyler, and Rob Creswell. ❖

Beyond Project Tanager — A New, Expanded Forest Bird Research Program

This coming spring the Lab of Ornithology will launch Birds in Forested Landscapes (BFL) — an ambitious new research project linking volunteer birders and professional biologists in a study of the habitat requirements of North American forest birds. Based on the protocol developed for Project Tanager, BFL will expand the original project to include several other forest-dwelling songbirds and raptors.

Initially, BFL will focus on seven species of forest thrushes as well as the sharp-shinned hawk and Cooper's hawk. Although thrushes may be common in most forest habitats, many of their populations are thought to be declining. Forest hawks also may be declining, but we know little about how habitat fragmentation is affecting their populations. By collecting critical data on distribution and nesting

success of these species, participants will help with the development of conservation strategies to help forest-bird populations.

Participating in the project involves selecting appropriate study sites, making two or more visits to the sites to census birds and determine their breeding status, searching for nests, filling in computer-scannable data forms, and returning the forms to the Lab for compilation and analysis. Participants will receive complete instructions and reference materials in addition to a tape or CD for learning bird vocalizations and for playback in the field during census-ing. ❖

— From *Birdscope*, Winter 1997, newsletter of the Cornell Lab of Ornithology

Join Birds in Forested Landscapes

Help us collect critical information for bird conservation. There's no charge to participate. Everyone who takes part in this vital project will receive a participants' packet, with complete instructions and a tape or CD of forest bird vocalizations. Sign up today!

Name _____
Address _____
City _____
State _____ ZIP _____
Phone _____

Send this coupon (or a copy) to

BLF
Cornell Lab of Ornithology
159 Sapsucker Woods Rd.
Ithaca, NY 14850

Or call (607) 254-2440

Or send e-mail to
<birdeducation@cornell.edu>

Educational Media Available Through JVAS

The Juniata Valley Audubon Society has a variety of educational media available to borrow for classroom, civic group, or personal use. Speakers can be scheduled for all slide shows.

The following is a complete listing of JVAS slide shows and videos, some of which will be reviewed in upcoming issues of *The Gnatcatcher*.

SLIDE SHOWS

Wildflowers	45 mins.
Bluebirds	45 mins.
Birds of Blair Co.	45 mins.
Calls of Frogs and Toads	45 mins.
Water	45 mins.
Birds in the Balance	15 mins.
Wood Warblers	45 mins.
Soil	20 mins.
Wetlands	15 mins.
Bird Feeding	45 mins.

VIDEOS

On the Trail of Pa. Black Bears	100 mins.
Wolves	16 mins.
Endangered Species	10 mins.
Our Threatened Wildlife Heritage	20 mins.
Acid Rain	15 mins.
Endangered Species Act	10 mins.

Call JVAS Education Chair Alice Kotala (946-8840 or 949-3663) or Debbie Haine (695-8239) for further information.

— AK

Canoe Creek SP Seeks Summer Volunteers

Canoe Creek State Park is seeking volunteers for the 1997 summer season. Volunteers must be 14 or older and will have duties ranging from staffing the visitor center, identifying wildflowers and trees, designing and planting of an herb and butterfly garden, and assisting with various nature programs.

Applications are due by May 2 and can be obtained by calling the park office at 695-6807 weekdays from 8 A.M. to 4 P.M. ❖

BOOK REVIEW



***Pennsylvania State Parks:
A Complete Outdoor Recreation Guide for Campers,
Boaters, Anglers, Hikers and Outdoor Lovers***

By Bill Bailey

1996, Globebox Guidebooks of America
(1112 Washburn Pl. E., Saginaw, MI 48602-2977)

With one of the largest and most varied park systems in the country, you'd think Pennsylvanians would have had a worthy, comprehensive guidebook available a long time ago. Unfortunately, we're still waiting.

Don't get me wrong — this book isn't absolutely worthless (unlike, say, *Pennsylvania Wildlife: A Viewer's Guide*, reviewed here last year). Sure, the quality of editing is poor (the Foreword by State Parks Director Roger Fickes, for example, contains two glaring factual errors, and in the Presque Isle chapter, a paraphrase of Walt Kelly's Pogo — "We have met the enemy, and they are us" — is wrongly attributed to Oliver Perry). Then there's the writing style: when it's good, it's trite, and when it's bad, well . . . But the author does go into considerable detail about many of the parks, describing the different features of cabins, for instance, the kind of fish likely to be caught (and sometimes with which lures), and the wildflowers and birds likely to be observed from the trails. Each chapter is well organized, beginning with several paragraphs of historical and other general-interest information — the "armchair section," if you will. What follows is more specific data which, in most cases, seems to have been gleaned not merely from park brochures but from the author's own visits — impressive for an out-of-stater.

Audubon members should find his inclusion of a paragraph on birds in most chapters to be helpful, although they may be surprised by the mention of a few variants hitherto unknown to science, such as the black turkey buzzard.

Without a doubt, the most frustrating thing about this book is the total lack of any explanation for why only 71 of the state's 114 parks are included. This, of course, belies the subtitle's claim of completeness. Certainly many of the parks Bailey excludes are little more than glorified picnic areas, but I feel that a guide designed for the glove box should respect the needs of interstate travelers to find secluded spots for a picnic lunch, say. Utility also might have been improved by a regional, rather than an alphabetical, organization scheme.

Nevertheless, until something better comes along, I do recommend this book, especially for new residents of the Commonwealth, retired folks, or families with young children. And considering the volume of information crammed into this 400-page paperback, \$15.95 isn't too much to pay, despite all its shortcomings.

— Dave Bonta

Decline of the "Winter Chippies"

For years I could depend on hearing the tinkling-Christmas-bells feeding calls of a couple dozen American tree sparrows at our feeders from early November until mid-March. Their music was one of winter's defining characteristics throughout the seventies and most of the eighties. But about the time house finch numbers surged on our mountain, American tree sparrow numbers plummeted. After a brief rally last year, when an average of 13 appeared at my feeders, I have hit an all-time low of two. And those two are silent and furtive, seemingly intimidated by the hoards of house finches and dark-eyed juncos.

Concerned by this decline, I consulted the most recent research on American tree sparrows, an 11-page *The Birds of North America* account of them written by ornithologist Christopher T. Naugler in 1993. He claims that they are "an abundant species, breeding in remote, undisturbed areas; [in the North often above the tree line] populations are thus in no immediate danger. . . . There are perhaps 10 to 20 million pairs of this species."

I was relieved to learn this. However, he is extrapolating those numbers from his own and others' research mostly in northern Manitoba. Yet the range map shows that they breed across northern Canada. Most likely the American tree sparrows we see here in the winter have bred directly north of us in northern Quebec and Labrador.

Ted Floyd, writing in *Pennsylvania Birds* (Jan.-March 1996), says, "Recent declines in populations of American Tree Sparrow (*Spizella arborea*) that winter in Pennsylvania may . . . be due to climate change. But the period of decline coincided with

habitat loss, changing Christmas Bird Count demography, and the arrival of the House Finch. Any factor, or a combination of several, could be at play here."

Known as "winter chippies" because their rusty caps are reminiscent of those of chipping sparrows, they have a black spot on their breast that distinguishes them from their look-alike relatives.

American tree sparrows prefer shrubby habitat both here and on their breeding grounds. They are ground nesters and raise a single brood of four to six. Generalists in their eating habits, they consume a wide variety of seeds and insects. On a snowy

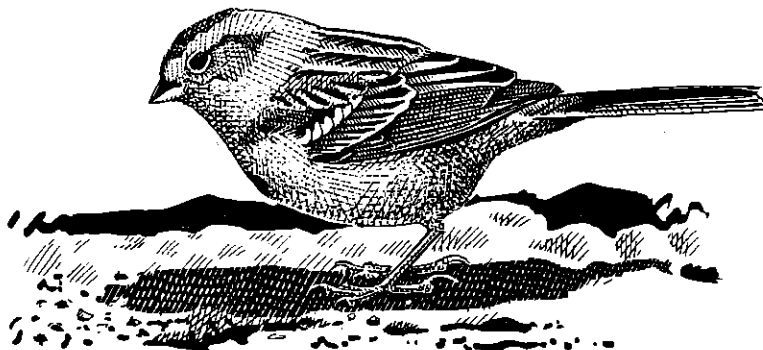
winter day I have often watched them beat weeds with their wings to release seeds that they then pluck from the ground. They also take berries and catkins from trees and shrubs. A short list of preferred wild seeds in the winter includes pigweed, lamb's quarters, crab

grass, timothy, bindweed, smartweed, and the goldenrods. In addition, they eat a wide variety of insects, their eggs, and larvae. At the feeder they prefer millet, followed by black oil sunflower seeds.

American tree sparrows migrate at night, mostly in same species' flocks but sometimes with other species as well, and leave the North during the last two weeks in September. By early November they reach our mountain. According to Naugler, their center of winter abundance is central Nebraska, Kansas, Iowa, and northern Missouri. They head back north in late March and early April and reach their breeding grounds by late May or early June.

Although both sexes emit their musical feeding calls, only male American tree sparrows sing, which

By Marcia Bonta



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they begin in late winter and on spring migration. If you are lucky, you can hear them in early morning when they sing most intensely either from song perches or while they are foraging.

But it is their feeding calls I long to hear again. Perhaps, in the coldest depths of February, enough American tree sparrows to form a chorus will find our feeders. I can only hope so. ❖

PGC Survey Reveals Six Eagles

In January, observers from the Pennsylvania Game Commission conducted the annual midwinter bald eagle survey on Raystown Lake. One immature and five mature bald eagles were sighted at the lake, which was generally ice-free. As the lake freezes

over, opportunities to view eagles improve until such time that there's no more open water. Then the eagles will gravitate south.

The PGS's Southcentral Region Director, Willis Sneath said, "Because open water is crucial to eagle survival, the unfrozen part of the lake should concentrate these big birds."

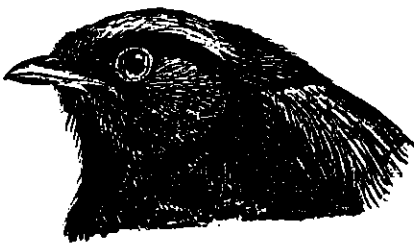
Although no documented eagle nesting has yet to occur on Raystown Lake, it's a favorite location for bald eagles because of the tremendous rough fish population, particularly carp.

According to Sneath, bald eagles seem to stay on the lake until springtime boat traffic pushes them on. "We're always hopeful that one day a mated pair of eagles will take a liking to Raystown Lake." ❖

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