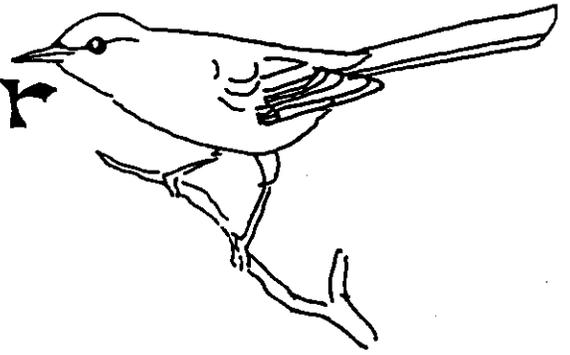


# The Gnatcatcher



Newsletter of the  
**Juniata Valley Audubon Society**

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

Vol. 30, No. 2 - April 1998

## **JVAS Receives \$500 Grant For Frankstown Riparian Reforestation Project**

By Dr. Stan Kotala

The Juniata Valley Audubon Society has been awarded a \$500 grant for our plans to restore riparian forest along the Frankstown Branch of the Juniata River. The project will take place on the grounds of Frankstown Elementary School. It will complement the Frankstown Wetlands Project, which was started at the school last year by teacher Rhonda Calhoun.

Prior to 1997, the area between the school building and the river consisted of mowed lawn with a 20-foot-wide strip of trees along the stream. Last year, however, Ms. Calhoun directed the construction of two ponds in this area. This year, native plants raised by Ms. Calhoun's students in the wetlands greenhouse on school grounds will be established in and around the ponds.

The JVAS Education Committee applied for and received a \$500 grant from the Alliance for the Chesapeake Bay Inc. to purchase native trees for the reestablishment of a forest between the river and the school.

Trees to be planted include tulip tree, sugar maple, eastern hemlock, white pine, serviceberry, and hawthorn. The area surrounding the ponds will be planted with winterberry holly, silky dogwood, arrowwood, and nannyberry.

All plantings will be done by the students of the Frankstown Elementary School in April and May. Any help, however, will be welcomed.

If you would like to participate in this exciting ecological restoration project, please phone JVAS President Dr. Stan Kotala or JVAS Education Chair Dr. Alice Kotala at 946-8840.

Thanks for your help! ❖

### **April Program**

*JVAS ANNUAL SPRING BANQUET at the Sassafras Cafe, on Old Rt. 220, Tipton. Rob Criswell, land management supervisor for the Pennsylvania Game Commission, will present a slide show on the rare flora and fauna of the Juniata Valley. Phone Marge Hoyer at 684-7376 for ticket availability.*

*Monday, Apr. 20, 6:30 P.M. (social at 6 o'clock)*

### **Field Trip**

*COOK FOREST STATE PARK. See the sizable stand of virgin white pine and hemlock that is designated as a national natural landmark by the U.S. Park Service. Observe spring migration and wildflowers. Will leave Altoona at 7 A.M. Preregister with trip leader Janet Huber at 944-5905 (W) or 942-5752 (H).*

*Saturday, Apr. 25*

### **Next Board Meeting**

*7 P.M., Monday, Apr. 6, at the Kotalas' residence. All members are welcome. Phone 946-8840 for directions.*

## 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  
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Articles may be submitted directly to the editor. The deadline for the May 1998 issue is Wednesday, April 29.

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 . . . . .	Dr. Stan Kotala	946-8840
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Director of Ornithology . . .	Bill King	942-7673
Director . . . . .	Dave Kyler	643-6030

## President's Message

This my last message to you as the president of the Juniata Valley Audubon Society.

I extend sincere thanks to all those who made my burdens lighter by doing their share of the work in running the Chapter. In particular, I thank former vice president, Terry Wentz, for his organization of this year's programs, Gene Zielinski for serving as our secretary, Marge Hoyer for her outstanding reports of the Chapter's financial status, Charlie Hoyer for editing and producing the newsletter, Paula Ford for giving generously of her time for the benefit of this and future generations' rights to intact ecosystems and a healthy environment, Dr. Alice Kotala for her innovation in presenting the urgency of the need to preserve and restore the natural world to students of all ages, Barb Corle for extending the JVAS welcome to all, Barb Baird for recording the events of our Chapter, Anne Borland for helping to keep the JVAS fiscally sound, Janet Huber for arranging many field trips for the enjoyment of JVAS members, Bill King for organizing and compiling the North American Migration Count and the Christmas Bird Count as well as leading numerous birding trips for novices and experts alike, and Dave Kyler for helping to guide the direction of the JVAS and serving it in a multitude of capacities.

I also thank those members who, although not serving as officers, committee chairs, or directors, have given outstanding service to the Chapter. Jody Wallace, Debbie Haine, Dr. John Lennox, Jean Sinal, Dan Sinal, and Mike and Laura Jackson have served on the Education Committee and, through their presentations, have helped countless youngsters to better understand the natural world. I thank Marcia Bonta for sharing her insights on nature with Gnatcatcher readers.

I thank all those who've participated in Chapter projects such as our Special Areas Projects (SAPs), bluebird monitoring, stream monitoring, and our restoration projects at Shaw Run, Glenwhite Run, and Piney Creek.

It's all of you who make the JVAS without question the best Audubon chapter in Pennsylvania. I'm sure you'll help our newly elected president, Terry Wentz, as much as you have helped me.

Best of luck to you all! See you in the field!

*Stan Kotala*

## CONSERVATION

ORNER

By Paula Ford

### Kick the Habit

Many of us routinely use lawn-care chemicals, either applied by a commercial firm or by ourselves. Some of these chemicals are expensive; there are other costs besides the financial ones. Lawn pesticides (weed and bug killers) have been found to cause serious health problems such as cancer, birth defects, reproductive problems, hormonal imbalances, and gene mutations in laboratory animals. The chemicals also damage the nervous system, kidneys, and liver.

Registration of pesticides by the EPA is *not* a consumer safety program. Federal law prohibits pesticide manufacturers and pest control services (including lawn care companies) from making safety claims on the basis of EPA registration.

#### Effects on Children

As the Safer Pest Campaign points out, it shouldn't be dangerous for a child to run barefoot through her yard or to make a necklace of dandelions. But these activities can expose children to pesticides, and those pesticides can be tracked indoors by people and pets. A study published in *Environmental Science Technology* measured pesticides in carpets, on home furnishings, and even in house dust. Another study in the *American Journal of Public Health* found that the use of law pesticides correlated with a four-fold increase in the risk of children developing cancer of nonbony tissues. Yet another study, in *Archives of Environmental Contamination and Toxicology*, found that children who live in homes where pesticides such as diazinon for lawn care, flea collars on pets, and indoor pesticide bombs were used had two to six times more childhood brain cancer than children in homes that did not use these types of pesticides.

According to the National Research Council, children are at greater risk from the health effects of pesticides because they have faster metabolisms than

adults, their organs are developing, and they retain toxins longer than do adults. Typical childhood behaviors such as playing on the ground or the floor and putting items in their mouths also expose children to relatively more pesticides.

#### Effects on Pets

A study of pet dogs (*Journal of the National Cancer Institute*) showed that when dog owners applied 2, 4-D (the most frequently used lawn chemical), the pets had a two-fold increase in canine malignant lymphoma. Dogs with this cancer were 30% more likely to have lived in a home where 2, 4-D had been applied than dogs without this type of cancer.

#### Effects on Wildlife

Nonselective use of pesticides kills beneficial insects such as ladybugs and praying mantis. Microorganisms in the soil are also killed. Of course, birds and other animals that eat insects will be exposed to the pesticides by consuming insects in treated lawns. Or the wildlife will have less food available.

#### What You Can Do

Join the Yards for Nature campaign. Send a check for \$15 to the Safer Pest Control Project to receive a lawn care fact sheet, "Chemical Free" yard sign, and a copy of the booklet "Great Lakes Great Lawns."

Check your local library for books about natural lawn care. ❖

• Many thanks to Kelley Tucker, Project Associate at the Safer Pest Control Project, for the fact sheets on which this article is based and for permission use the material.

For more information, contact:

Safer Pest Control Project

17 E. Monroe St.

Suite 212

Chicago, IL 60603

e-mail: [spcp@iname.com](mailto:spcp@iname.com)

voice: 312-641-5575

## South Carolina Birding in an El Niño Year

By *Charlie Hoyer*

After a couple of weeks traversing Florida in February, Marge and I left my mom's place near the Gulf Coast and traveled to Hilton Head Island, South Carolina, for our final wintertime vacation week. We traveled six or eight hours ahead of the tornadoes that devastated several areas in central Florida. Yes, we have taken note not to visit the southeastern U.S. in a future El Niño year!

### PINCKNEY ISLAND NWR

While we were staying at Hilton Head we took the opportunity to visit the nearby Pinckney Island National Wildlife Refuge. The refuge is one of seven making up the Savannah Coastal Refuges complex that spans a 100-mile stretch of coastline near the mouth of the Savannah River.

The 4,053-acre refuge comprises Pinckney Island, Corn Island, Big and Little Harry Islands, Buzzard Island, and numerous small islands called tidal hammocks. Protected from sea storms by Hilton Head Island, the refuge offers a safe haven for migratory birds and native animals. Pinckney is the largest of the islands and is the only one open to the public. Much of the refuge consists of salt marsh and tidal creeks. A wide variety of land types exist on Pinckney Island alone: salt marsh, forestland, brushland, fallow fields, and freshwater ponds.

Marge and I walked the trails leisurely, expecting to view herons, egrets, ibises, gulls, terns, and sandpipers — and perhaps the endangered wood stork — that feed on mudflats, oysterbeds, and shores. We encountered beautiful vistas of broad Carolina salt marshes, pine forests, and freshwater ponds. At the ponds we had close looks at some migrating American coots along with a beautiful common moorhen.

The bird of the day, however, was the yellow-rumped warbler. Dozens — perhaps hundreds — of them were flitting in and out the tangled brushland. Everywhere we looked in the brush we saw yellow-rumped warblers! I told Marge that we must have

incurred a large wave of these warblers in their spring migration.

As we peered down at the marsh mud we saw bustling armies of fiddler crabs, probably the only creatures outnumbering the yellow-rumped warblers that day. Fiddler crabs are named for the male's one large front claw, which is used to attract a female and also for defense.

### AUDUBON NEWHALL PRESERVE

On Hilton Head Island, there is a small wildlife preserve that was established in 1965 when Caroline ("Beany") Newhall, recognizing the need to conserve woodlands on the rapidly developing island, persuaded Charles Fraser of the Sea Pines Company to deed fifty acres of land for a nature preserve. Over the years, Beany devoted endless hours to saving plants from the paths of developers and transplanting them in this protected area.

In 1976, Beany deeded the preserve to the Hilton Head Island Audubon Society, together with an endowment fund to ensure its ongoing maintenance. The restoration of the pond in 1993 created a focal point for the Preserve.

Although the trails were wet from the succession of El Niño storms, Marge and I covered four of the eight areas of the Preserve. The areas consist of Florida scrub, the pocosin (Indian word for bog), the pond (where we saw five female hooded mergansers), and the pine flatwoods (where water covered the ground in this low, level basin). A boardwalk provided easy access to the pocosin, but the pond's observation deck was underwater due to the rains.

With the completion of the long-awaited Cross-Island Parkway, the Preserve's entrance on Palmetto Bay Rd. is finally clear of construction. And HHI Audubon members have readied the Preserve for spring visitors. So, if you're going to be golfing in the area, stop by and visit the Audubon Newhall Preserve. While you're there, read the plaque that was dedicated in 1994 to Beany: "She walked softly, but the imprint she left upon the Island will benefit all for generations to come. We are eternally grateful for her endowment of this Preserve." ❖

## Butterfly Plant of the Month — Butterfly Weed

By Dr. Alice Kotala

It's a familiar sight along dry, open roadsides in mid-summer — the showy, orange flowers of butterfly weed (*Asclepias tuberosa*). A member of the milkweed family, butterfly weed, like other *Asclepias* species, provides larval food for the monarch butterfly (and the queen butterfly in the South) and is a preferred nectar source for a variety of adult butterflies. Opportunities for butterfly photography present themselves frequently in a garden with butterfly weed, as monarch, fritillaries, tiger swallowtails, and pearl crescents languish atop the bright, orange blooms sipping nectar. Amid the butterfly weed foliage, one may be lucky enough to find a monarch caterpillar or its gold-flecked chrysalis and observe its awesome transformation into an adult monarch butterfly.

Late last summer, my daughter and I found three caterpillars and observed their metamorphosis into adult monarchs. After some "show-and-tell" at her school, we then tagged the butterflies for Monarch Watch and sent them on their way to Mexico.

Also known as pleurisy root, butterfly weed grows to be one to three feet tall. It prefers poor, dry soil in a sunny location. Its foliage emerges very late in the spring with many alternate, lanceo-



late leaves on hairy stems. Its range is southern New Hampshire and Vermont to Minnesota and Colorado, south to Florida and Texas. ❖

### Cerulean Warbler Atlas

Cerulean warblers are declining in some parts of their range and may be expanding into new locations. The Cornell Laboratory of Ornithology has launched a nationwide project to produce a detailed atlas of all cerulean warbler breeding sites in northeastern U.S. Volunteers are needed to survey the birds and may report on as many or as few sites as they wish. Incidental reports and reports of migrating birds also are needed. Participants receive instructions, data forms, and a free cassette tape of cerulean warbler songs. For more information, call Sara Barker at (607) 254-2446 or write to her at forest\_birds@cornell.edu by e-mail. ❖



**Don't forget to send your BiLo Foods and Riverside Markets cash register tapes to Anne Borland at 138A Larch St., Hollidaysburg, PA 16648. Anne redeems the tapes for \$\$\$ for the JVAS.**

## Using Bioindicators to Develop an Index of Ecological Integrity For Forested Headwater Ecosystems

*Reprinted from Penn State's Environmental Resources Research Institute Newsletter, Winter 1998*

Forested headwater streams make up 60 to 75% of the total stream length and watershed area in the Mid-Atlantic states. Various environmental stressors affect these headwater streams. Given the cumulative importance of headwaters to the ecological integrity, recreational quality, and food production of riparian ecosystems, a team of researchers from three institutions hopes to develop an index that managers and decision-makers can easily use to target protection and restoration efforts.

Robert Brooks, associate professor of wildlife ecology and director of the Penn State Environmental Resources Research Institute's Cooperative Wetlands Center, together with Robert Mulvihill, field ornithologist with the Carnegie Museum of Natural History, and Terry Master, associate professor of biology at East Stroudsburg University, will determine the reliability of three bioindicators for detecting changes in forest headwater ecosystem condition caused by anthropogenic stressors. They will use population parameters of the Louisiana waterthrush to calibrate more easily measured indicators and assess ecological condition across riparian and forested landscapes.

The three bioindicators to be explored include avian productivity, primarily for the Louisiana waterthrush; macroinvertebrate communities; and avian communities. Previous studies suggest that each of these bioindicators is directly related to the ecological condition of its associated habitat components. The Louisiana waterthrush is an excellent indicator of healthy forested riparian ecosystems in the eastern U.S. Macroinvertebrate and avian communities are established as useful predictors of instream conditions and landscape pattern, respectively. The productivity, population density, and abundance of the Louisiana waterthrush link the other two bioindicators and provide a means to calibrate them. This calibrated index of regional

ecological integrity may be useful in identifying thresholds of environmental disturbance related to multiple stressors in Mid-Atlantic headwater forests. The researchers hypothesize that differences in a series of population, community, or habitat measures for the Louisiana waterthrush will predictably discriminate between relatively pristine and impacted sites. They believe that these relationships will be consistent across a regional gradient.

Brooks and his colleagues will conduct field sampling in headwater streams and riparian habitats over three years within three ecoregions in Pennsylvania: the Pocono Mountains, central Pennsylvania, and the Laurel Highlands. Data analyses will compare bioindicators and their habitats in three relatively pristine, or reference, watersheds and three impacted watersheds per ecoregion.

The research team will focus on stressors that alter the natural vegetation, degrade water quality, and change the surrounding landscape from the reference standard. The primary stressor of interest is forest fragmentation and the habitat changes it causes, such as sedimentation, thermal changes, and nest parasitism. Acidification is a primary stressor in some regions.

Intensive field sampling will occur during the first two years of the study. Field work related to the Louisiana waterthrush will include locating and monitoring nest locations, banding the adult breeding population, identifying foraging sites, and describing the riparian habitat. Macroinvertebrate sampling will occur during a period in the spring coinciding with waterthrush fledging. Stream channels will be physically characterized through measurement of several hydrologic and habitat suitability parameters. Water chemistry also will be assessed. Streamside bird communities will be censused using ten-minute point counts of birds seen or heard in a standardized plot. Existing digital spatial data including

land use and land cover will be used to investigate relationships between landscape patterns and various biotic and abiotic indicators.

During the third year, the research team will census avian communities and monitor nest sites for returning birds. Much of the data analyses will occur during the third year.

The scientists will determine how environmental stressors prevalent in the region affect the presence, abundance, and productivity of bird and macroinvertebrate populations at multiple spatial and temporal scales. Relationships between the bioindicators and the condition of their respective habitats will be clearly established. Based on these findings, a set of measures will be selected for inclusion in an index of regional riparian ecosystem integrity in the Mid-Atlantic region. This index will help ecologists, land managers, and policy makers document trends, prioritize issues, and target restoration activities in forested headwater ecosystems. ❖

### EPA To Conduct Juniata Valley Wetlands Study

Prominent conservationists from throughout the Juniata Valley gathered at a meeting held February 10 in the South Central Regional Office of the Pennsylvania Game Commission, in Huntingdon, to direct the U.S. Environmental Protection Agency in a study of the Juniata Valley's wetlands, which is to begin this year.

The project is designed to provide local stakeholders with better data on the effectiveness of management efforts to protect and restore wetlands. It will focus on the development and use of bioindicators (plants, amphibians, birds, etc.) as a means of assessing wetlands, with particular emphasis on wetlands that are in need of restoration.

At the meeting Art Spingarn, of EPA Region III, discussed the general format of the study, which is part of the EPA'S Environmental Monitoring and Assessment Program (EMAP). Wetland sites to be studied intensively will be selected this summer. A workshop for selecting appropriate biological indica-

tors of wetland health is planned for fall 1998. Field sampling and data analyses will take place in 1999, resulting in a final report in 2000.

This study could not be more timely, considering the intense development pressure on the upper Juniata Valley — especially the Frankstown Branch and the Little Juniata River. The orgy of greed devouring Logan Valley, which ignores the long-term health of our communities in favor of the short-term profits of a few, is a real threat to the ecosystem. The EMAP project will help us to save some parts of God's creation from man's sinful destruction. ❖

(K)



*JVAS' coldwater ecology course, "Stream Class," was presented to the Wertz family, of Wertz Landscaping & Nursery Inc., in Sinking Valley, this past December. In appreciation of our efforts to safeguard local streams, Lee Wertz donated a handcrafted aquatic kick net to the JVAS (shown here by JVAS President Dr. Stan Kotala) to be used in future Stream Class presentations. The next time you're in the Valley, stop by Wertz Landscaping & Nursery and express your appreciation for their generous gift!*

## '97 JVAS Christmas Bird Count

Thanks to all the counters and feeder watchers who helped with the '97 CBC. Participants totaled sixteen counters in nine parties plus ten more feeder watchers. We counted for forty-four hours and covered 138 miles by car and on foot.

A very special thank-you to Marge and Charlie Hoyer for once again opening their home to the cold and weary.

Thanks also to Terry Wentz for filling in as compiler. I'll be on vacation for this year's count. To paraphrase a great T-shirt writer, "A bad day birding is better than a good day at work!"

Mark your calendars now for the **99th Audubon Society Christmas Bird Count, Saturday, December 19, 1998.**

### TALLY

Great blue heron 5; Canada goose 23; mallard 76; oldsquaw 1; sharp-shinned hawk 1; Cooper's hawk 3; red-tailed hawk 11; American kestrel 5; ring-necked pheasant 11; ruffed grouse 13; wild turkey 12; ring-billed gull 5; rock dove 408; mourning dove 83; great horned owl 1; belted kingfisher 3; red-bellied woodpecker 10; yellow-bellied sapsucker 1; downy woodpecker 32; hairy woodpecker 10; northern flicker 5; pileated woodpecker 10; blue jay 16; American crow 112; black-capped chickadee 89; tufted titmouse 74; white-breasted nuthatch 54; brown creeper 1; Carolina wren 1; winter wren 2; golden-crowned kinglet 17; ruby-crowned kinglet 2; eastern bluebird 27; American robin 4; gray catbird 1; northern mockingbird 2; cedar waxwing 4; European starling 660; yellow-rumped warbler 3; northern cardinal 69; American tree sparrow 90; song sparrow 1; white-throated sparrow 19; white-crowned sparrow 1; dark-eyed junco 238; house finch 212; common redpoll 200; pine siskin 53; American goldfinch 90; house sparrow 47.

Also seen during the count week, but not on Saturday: red-breasted nuthatch, horned lark, Lapland longspur, and evening grosbeak. ❖

— Bill King

## JVAS Education Committee Activities Fall/Winter '97-98

28 Sep 97	Stan Kotala	"Amphibians"	Shaver's Creek Family Fun Festival	15
14 Dec 97	Stan Kotala	"Stream Class"	Lee Wertz & Family	10
21 Jan 98	Alice Kotala	"Winter Bird Feeding"	Talus Rock Brownie Girl Scouts - Troop #1215	10
28 Jan 98	Stan Kotala	"Stream Class"	Juniata College	25
11 Feb 98	Stan Kotala	"Stream Class"	Juniata College	35
14 Feb 98	Stan Kotala	"Stream Class"	Juniata College	25
28 Feb 98	Stan Kotala Jeen Sinal John Lennox	"Stream Class" "Acid Rain" "Fossils"	Super Science Saturday of Juniata Gap Elementary School	40

## 1998 Ecology Youth Camp

The West Virginia Audubon Council and the Mountain Institute once again are offering a summer camp for youths ages 10-14. The camp is located at the Spruce Knob Campus in Circleville, W. Va.

"Activities include hiking, caving, canoeing, orienteering, bird identifying and banding, animal tracking, and environmental monitoring."

The cost is \$400 for each of the two one-week sessions, June 14-20 or June 21-28, 1998. Each session is limited to twenty participants.

Brochures and applications will be available at the April JVAS meeting, or you can contact the Mountain Institute at (800) 874-3050 for more information. ❖

## Hummingbird Life — Not All Roses

Hummingbirds rarely are reported to be eaten by birds other than hawks, but it does happen. A note in the Michigan Audubon Society newsletter describes two incidents in which ruby-throated hummingbirds fell prey to birds not thought of as avian predators. Last May bird-watchers on a field trip witnessed a male scarlet tanager grab a hummingbird, beat to death against a log, and then eat it. The whole event took about fifteen minutes, and the

(Cont'd on page 10)

## Wood Frog Fever

My passion for watching wood frogs finally has been vindicated. This spring, as I sit hour after hour, mesmerized by the calling, swimming, mating, and egg laying of forty wood frogs in our six-foot-by-three-foot pond, I will no longer be alone in my passion for the frog with the robber's mask — *Rana sylvatica*.

The eminent biologist Bernd Heinrich also has been infected with "wood frog" fever. As a scientist and writer, he made his reputation when he published a ground-breaking book on insect thermoregulation (*Bumblebee Economics*) back in 1979. Since then he has studied great horned owls



(*One Man's Owl*), common ravens (*Ravens in Winter*), and his Maine woods (*A Year in the Maine Woods* and *The Trees in My Forest*).

But several years ago he took up wood frogs, trying to answer questions I rarely thought to ask. Why, for instance, do they choose temporary ponds in which to lay their gelatinous egg masses? Such locations often dry up in a couple months, so the development from eggs to tadpoles to mature frogs must be swift and many don't make it. But those

that do avoid fish predation, Heinrich points out, which probably means an overall higher survival rate for wood frogs.

Heinrich also thinks that males born in one pond return to that pond to mate but that females go to any pond with calling males. Since the females move around, inbreeding is avoided. So no doubt I am watching some of the same wood frogs from year to year.

Another question that Heinrich asks is why females lay all their eggs in one large mass in a single pond? To keep them warmer, he concludes, after he recorded the temperatures of large egg masses on warm and cold days and found that they were warmer than single egg masses.

Now, in late March, I crawl through the dried weeds of First Field and ease myself up on the hillock that overlooks the pond. After a few minutes the wood frogs spot me and dive out of sight, so I sit down in front of the pond without moving for at least half an hour until one by one silent, froggy heads pop up. They watch me for a long time before they begin calling and bumping into each other as they test to make sure there are no unattached females in the pond. But today all thirty-five frogs are males.

Who knows what magic they evoke to pull me down day after day to watch in the brilliant sunlight. Is it their froggy shapes, particularly their long legs that propel them elegantly through the water? Or is it the evocative setting — the dried, beige stalks of weeds and grasses matted around the pond, the "coo" of a mourning dove, the souging of wind in the white pines, the sparkling pond water, the singing of song sparrows and chickadees, the call of eastern phoebes. All bespeak the first stirrings of spring and all are enriched by the sound and sight of male wood frogs calling in females for their annual mating ritual.

In any case, I no longer feel like a lone eccentric. Somewhere in Maine Bernd Heinrich also is watching wood frogs. ❖

By Marcia Bonta

**Hummingbirds . . .** (cont'd from page 8)

tanager seemed to have trouble, suggesting he had not eaten very many hummingbirds before. The tanager grabbed its victim after the hummingbird approached too closely, and the observers wondered if the hummingbird mistook the tanager's bright red plumage for a flower.

On another occasion an observer watched a great crested flycatcher nab a hummingbird out of the air. The flycatcher also beat the hummingbird against a branch, killing the bird before consuming it.

Bird-watchers occasionally mistake large, flying insects for hummingbirds, and vice versa; it seems that birds can make mistakes, too. ❖

— From *Bird Watcher's Digest*, Mar/Apr '98

### Environmental Education Programs At Canoe Creek State Park

**Sunday, Apr. 12, 2 P.M.**

**Butterfly Gardens** — Butterflies are fun to watch. Enjoy an afternoon learning about the different flowers that butterflies like to feed on and how you can design a small butterfly garden. Slide presentation. General audience. Meet at Visitor Center. Duration — approx. 1 hr.

**Sunday, Apr. 19**

**2 P.M. Earth Day Scavenger Hunt** — Children 6–12 years old will look for items on a list that pertain to Earth Day. Prizes will be awarded to participants. Children must be accompanied by an adult. Meet at Visitor Center. Duration — approx. 1 hr.

**4 P.M. Wildflower Walk** — Enjoy a guided walk along Limestone Trail to look for early spring wildflowers. Dress for the weather. General audience. Meet at Visitor Center. Duration — approx 1½ hrs.

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