

WV Wildlife Diversity NEWS



Bob Wise, Governor

VOLUME 20, NUMBER 1

SPRING/SUMMER 2003

Down By The River

A long stream and riverbanks throughout the Mountain State, resides unique wildlife that sometimes goes unnoticed. But not this spring. From beautiful dragonflies buzzing in the air and rare crayfish creeping under rocks to a little known turtle basking in the sun, the research opportunities will have biologists busy.

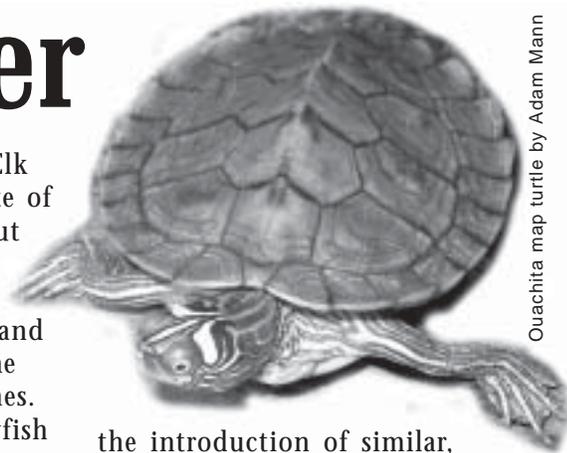
This past year, fourteen research projects were partially or fully funded by the DNR with several awards going to water-related projects that have begun this spring.

Danny Jones, research assistant from Clemson University, will be studying the little known Elk River crayfish (*Cambarus elkensis*) which gets its name from the area it is endemic to: West Virginia's Elk River drainage. Currently listed as a Species of Concern because of its

extremely limited range, the Elk River crayfish is an invertebrate of mystery. "Little is known about *C. elkensis*, including basic information about life history patterns, habitat preferences, and the status of populations in the Elk River watershed," says Jones.

Although small in size, crayfish are of vital importance to the ecology of streams. As Jones explains, Elk River crayfish, like other North American freshwater crayfish, are important components of aquatic ecosystems in terms of their function as processors of energy and as prey items for aquatic vertebrates, such as the eastern hellbender. However, they are vulnerable to extirpation because of the narrow range of their habitat requirements, he adds. The two chief anthropogenic or man-made threats are habitat degradation and the introduction of non-native crayfish.

During his study, Jones will be investigating various aspects of the life history of the Elk River crayfish. "Patterns such as population age structure, maturity and timing of reproduction are important because they can indicate critical junctures in the life cycle," Jones says. Of special concern is how



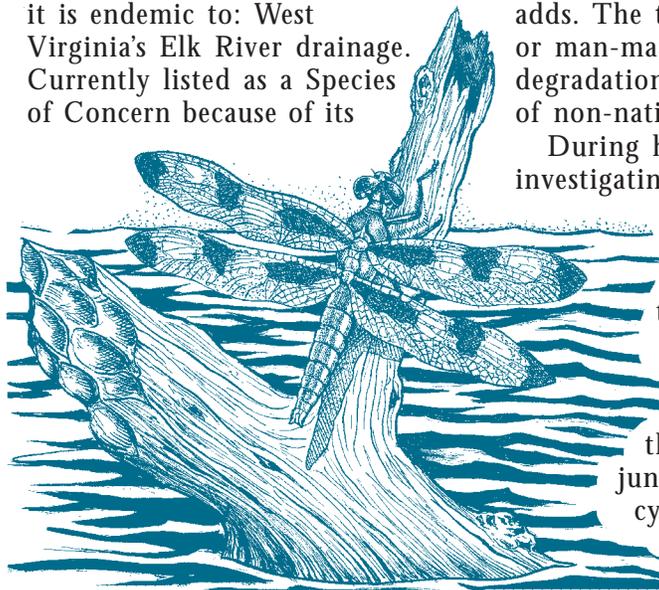
Quachita map turtle by Adam Mann

the introduction of similar, non-native species can impact that life cycle.

While Jones will be looking at the Elk River crayfish's natural history, research assistant Jeremy McComas of Marshall University will be working on creating a detailed database of the distribution of this rare species. Each location selected will be referenced using a Global Positioning System and then incorporated into GIS maps along with the database information. "Additional data will be gathered on other species of crayfish and macroinvertebrates species to statistically ascertain their influence on the distribution and density of the Elk River crayfish," McComas explains.

Marshall University graduate

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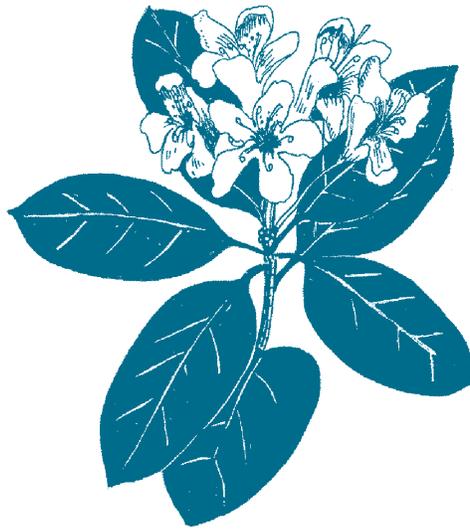
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Our State Flower: The Rhododendron

This year marks the Centennial of the beautiful and showy *Rhododendron maximum*'s designation as West Virginia's state flower. There are many names for this state treasure and member of the heath family that is characterized by its large dark evergreen leaves and delicate pale pink or white blooms. The many common names for this shrub include rosebay, rosebay rhododendron, big laurel, great laurel, great rhododendron and white rhododendron.

The *Rhododendron maximum* was selected by the Legislature to be our state flower in 1903 and was the result of a vote by public school students.

The range of rhododendron extends along the Appalachians from Georgia north to New England, and also in parts of Canada. In 1736, Peter Collinson and John Bartam introduced *Rhododendron maximum* to England, selling plants to gardeners in London with hopes of financing future plant expeditions.



Bartam later became the King's botanist in America. However, his laurel never became a favorite of gardeners in England because of its small flowers.

The rhododendron is characterized by having rose pink or white showy flowers that form large round clusters and bloom in June to July. Its leaves are simple, alternate, up to 9 inches long, elliptical in shape and have a leathery texture. The fruit is a sticky capsule.

Rhododendron are found in ravines, shaded hillsides in cool moist locations, and favor acidic soils. It often grows in dense thickets that can become impenetrable. These thickets may cast so much shade that other species of plants and trees are eliminated from the understory. Though not a commercial product, the wood is used in making small craft items such as briar pipes. It easily regenerates through root suckers, sprouting from stumps, or from layered stems after it has been cut or even burned.

Rhododendron exhibit an unusual and distinctive adaptation to cold temperatures. The leaves droop and roll lengthwise. The colder it gets the tighter the roll gets until the leaves have the shape of hollow slender cylinders. This may be a way for the tree to minimize water loss, especially in dry winter winds.

Since the use of common names leads to confusion we need to address another beautiful member of the heath family that can be confused with *Rhododendron maximum*. *Kalmia latifolia* is a smaller shrub that has many common names but is often called mountain laurel or ivy. *Kalmia latifolia* has smaller leaves (3/4 to 1 inch across) than great laurel and small candy striped white or pinkish flowers. It blooms in rocky woods during May to July, and at 5-15 feet, is smaller in stature than the great laurel.

Another relative that is sometimes called "mountain laurel" is the Catawba rhododendron (*Rhododendron catawbiense*). Its darker pink or purple flowers are more common in southern WV. One thing that all three "mountain laurels" of the heath family have in common is their beautiful evergreen foliage and their toxicity to humans or livestock if ingested.

--Rose Sullivan

Upcoming Birding Events

May 10 Three Rivers Avian Center's Migration Celebration at Winterplace Ski Resort

An all day event (10 a.m. -6 p.m.) with free admission and exciting events for the whole family. For more information call 304-466-4683.

May 10 & 17 Annual Spring Bird Walk at Prickett's Fort State Park

Join DNR bird experts on this Saturday morning Bird Walk. Programs begin at 8 a.m. Contact: (304) 367-2731

May 8-11 42nd Wildflower Pilgrimage at Blackwater Falls State Park

Bird walks, nature programs and beginner wildflower and bird identification workshops. Call (304) 558-3370

May 10 North American Migration Count at Pipestem Resort State Park

Join the Park Naturalist and

members of the Bibee Nature Club in a day long survey of our birds. Reservations required. Contact: Jim Phillips (304) 466-1800

May 10 Bird Migration Count at Canaan Valley Resort State Park

Intermediate to advanced birders can contribute to our knowledge of migrating birds in Tucker County. Participants spend the day counting total species and numbers of migrating birds along designated travel routes. Pre-registration is required. Contact: John Northeimer (304) 866-4121

May 31 Memorial Bird-a-Thon at Blackwater Falls State Park

Count birds between 7 a.m.-noon and collect pledges from sponsors based on the number of species seen. The event allows all skill levels, even beginners, an opportunity to experience bird watching. Pre-registration is required. Call (304) 259-5216 or visit www.blackwaterfalls.com.

Rare Species at a Glance

Jefferson Salamander

Scientific name: *Ambystoma jeffersonianum*

State status: Uncommon in West Virginia, with 23 occurrences in 17 counties (nearly half of these are historical occurrences).

Global status: Uncommon in parts of its range.

General description: The Jefferson salamander is dark brown or grey with small bluish flecks along the sides of its body from head to tail. Its belly is lighter grey. It can be distinguished from other *Ambystoma* species by its long toes.

Habitat: The Jefferson salamander spends the majority of its time underground, in wet leaves, or under logs and rocks. In the spring they move to pools for breeding.

Total range: This species occurs in the mid-Atlantic states west to Illinois and north to New Hampshire and Ontario.

State range: The Jefferson salamander has been documented from Berkeley, Cabell, Fayette, Greenbrier, Hampshire, Hardy, Jefferson,

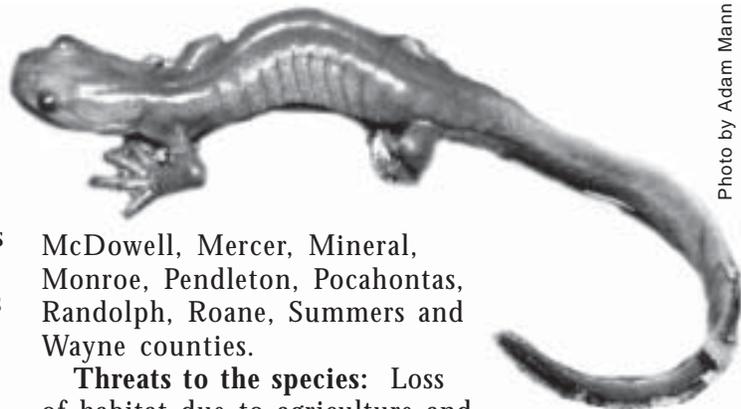


Photo by Adam Mann

McDowell, Mercer, Mineral, Monroe, Pendleton, Pocahontas, Randolph, Roane, Summers and Wayne counties.

Threats to the species: Loss of habitat due to agriculture and development threaten this species throughout its range.

Best time to look: Look for the Jefferson salamander in the spring when it is migrating to breeding pools.

Sources: Green, N.B. and T.K. Pauley. 1987. *Amphibians and Reptiles in West Virginia*; Wildlife Diversity Program files.

Prairie Flax

Scientific name: *Linum lewisii* var. *lewisii*

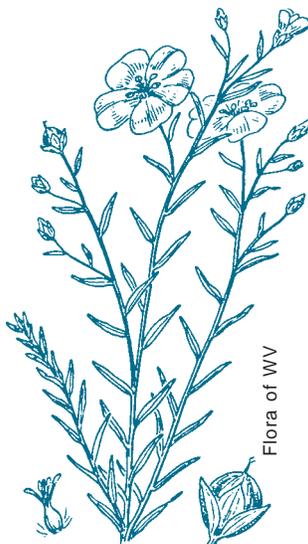
State status: Rare in West Virginia, with eleven occurrences in four counties.

Global status: Uncommon in parts of its range.

General description: Prairie flax is made of up several leafy stems which can attain a height of two feet. The leaves are linear and are just under an inch long. The blue flowers are one-half to three-quarters inches wide.

Habitat: In West Virginia prairie flax is found on limestone derived soils.

Total range: As its name implies, prairie flax is a species of the western prairies. It is found in the western two-thirds of the United States, with disjunct



Flora of WV

occurrences in West Virginia and Virginia.

State range: This species is found in Grant, Hampshire, Hardy and Pendleton counties.

Threats to the species: Prairie flax is currently threatened by second home development and the invasion of non-native plant species.

Best time to look: Look for prairie flax during the summer when it is in bloom during June and July.

Sources: Gleason, H. and A. Cronquist. 1963. *Manual of Vascular Plants of Northeastern United States and Adjacent Canada*; Strausbaugh, P.D. and E.L. Core. 1970. *Flora of West Virginia*; Wildlife Diversity Program files.

--Barbara Sargent

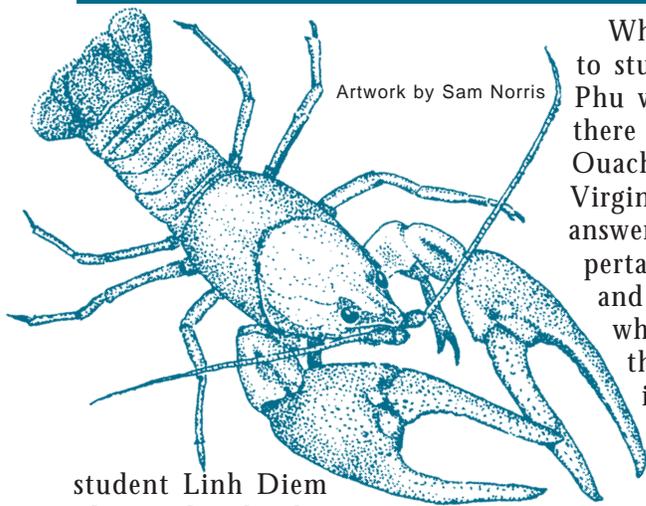


Hop To It!!

Deadlines For Cooperative and Research Grants is Oct. 1 and OWLS Grants is Nov. 1, 2003. Call 304-637-0245 or go online for more information:

www.dnr.state.wv.us

Water Research, Continued



Artwork by Sam Norris

student Linh Diem Phu, under the direction of Dr. Tom Pauley, will be investigating the natural history, distribution and behavior of map turtles. Of

special interest is the Ouachita map turtle which is more commonly found in the

Ouachita River area of the Midwest. In West Virginia, there are only two records of its occurrence, both in Wirt County.

The common map turtle, found in nine counties of the state, and the Ouachita map turtle both have a well-defined keel in the middle of its uppershell. The many distinctive thin lines that cover the skin and scutes lead to the name "map turtle," says Phu. "They tend to prefer large, slow moving rivers and water bodies that contain surface objects used for basking sites," she adds.

Like many aquatic species, habitat degradation and pollution impact map turtle populations. However, they are also affected by nest predation and commercial trade, Phu says. "During the late 1980s and early 1990s large numbers of wild-caught map turtles were shipped overseas for human consumption or the pet trade."

While her primary objective is to study map turtles in general, Phu will try to determine whether there is a population of the Ouachita map turtle in West Virginia. "This research should answer some basic questions pertaining to the natural history and ecology of map turtles which will provide insight into the management of this genus in West Virginia," she says.

The Elk River will also be the site of a study to determine the types of dragonflies and damselflies (Odonata) found there. According to John Enz, assistant professor of biology at Alderson-Broaddus

College, "the dragonflies of West Virginia are an understudied and under-documented group."

This particular region has few dragonfly species records and has not been sampled since 1971. Enz plans to perform a comprehensive survey of the adult and larval Odonata in the study area of the Elk River Drainage and Webster County for a period of 15 weeks this summer. His research will not only provide significant survey information, but will also provide specimens for each species found to be added in a state collection accessible to the public.

Students will be trained in the scientific method of collecting, preserving, identification and cataloging of Odonata specimens.

"This area of the Elk River

is of great concern due to its uniqueness and importance to other non-game species," Enz says. "Information concerning dragonfly diversity may reveal clues into the overall quality of the Elk River drainage which could be important in understanding distributions of other organisms such as the crayfish *Cambarus elkensis*."

Robert Makowsky, another Pauley graduate student, is looking at various life history aspects of the Eastern Hellbender, North America's largest salamander. The hellbender occurs mainly in cool, permanent mountain streams and rivers of the Ohio River drainage. Makowsky will be looking at diet and juvenile habitats while attempting to radio-track several adults. From past research, it is unclear where hellbenders go at certain times of the year.

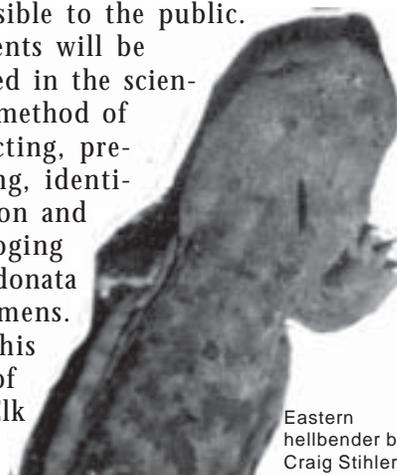
Hellbenders are considered rare throughout their range and have shown declines from habitat destruction and decreased water quality. This project should shed light on some unknown aspects of hellbender life history and will aid in conserving the species.

"Protection of animals, especially those with smaller populations, should be of special concern," says Makowsky. "Before protection can begin, knowledge of how to protect the species must be obtained."

Wildlife Diversity Program zoologist Jennifer Wykle is enthusiastic about the outcome of these aquatic projects. "The studies will provide much needed data for these Species of Concern," says Wykle. "The information gathered will help guide us as we plan strategies to ensure the conservation of these species in West Virginia."

--WDP staff and research abstracts

"The information gathered will help guide us as we plan strategies to ensure the conservation of these species in West Virginia."



Eastern hellbender by Craig Stihler

Wildlife Diversity Weekend Schedule Set

The 20th Annual 2003 Wildlife Weekend at Blackwater Falls State Park in Davis, WV will be held this year on June 6, 7 and 8.

The cost will be \$130 per person for a lodge room or cabin (for children 5 to 12 years of age the cost is \$65 per person). This fee includes registration, two nights lodging, 3 meals (Saturday breakfast, lunch and dinner) and evening refreshments Friday and Saturday. Room prices are based on double occupancy.

If you wish to participate and do not need lodging, the cost will be \$65 per person. This covers meals Saturday, evening refreshments and registration. There is a \$20 registration fee for the weekend, or \$15 for just Saturday if you do not require meals or lodging.

Friday, June 6, 2003

1pm Registration Begins

2:00-4 or 5:00pm

• **Tour of Canaan Valley National Refuge** - Jackie Burns, USFWS

• **Amphibian Foray** - Jeff Hajenga, WV DNR

• **Nature Printing** - Rose Sullivan, WV DNR

3:00pm- **Tour of Blackwater Falls State Park** - Paulita Cousin, Assistant Park Naturalist

Dinner On Your Own

6:30pm- **Welcome/Introduction**

6:30 to 7:45pm- **Evening Program for Children**, Elizabeth Gallaher, WVDNR

7:00pm - **Wild Mushrooms: The Mystery and the Joy**- Bill Roody, WV DNR

8:00pm- **Dragonflies of WV**- John Enz, Alderson-Broadus College

9:00pm - **Social/Field Trip Sign-Up**

9:30pm - **Evening Field Trips**

• **Salamanders** - Tom Pauley, Marshall University

• **Owl Prowl and Night Sounds** - Rob Tallman, WV DNR

• **Bats** - Kieran O'Malley

• **Insects of the Night** - Michael Donahue - USFS

Saturday, June 7, 2003

6:30am - **Bird Walks**

Breakfast Buffet, Lodge

All Day Field Trips - Must pre-register (in registration packet)

7:00am - **Warbler Walk at Fernow Experimental Forest** - Rob Tallman, WV DNR and Brian McDonald, WV DNR

8:45am - **Dolly Sods Field Trip** - Jennifer Wykle and Kieran O'Malley, WV DNR

8:00-11:00am - **Bird Banding** - Robert Hogan, Naturalist

9:00am **Choice of One Workshop:**

• **Amphibian Identification and Walk** - Jeff Hajenga, WV DNR

• **WV Snakes** - Frank Jernejcic, WV DNR

• **Small Mammals** - Sue Olcott, WV DNR

• **Fish Identification and Streamlife** - Dan Cincotta, WV DNR

• **Cathedral State Park** - Pat Hissom, Park Naturalist

• **Nature Workshop for Children: Crafts, Scavenger Hunt, Animal Painting and More** - Jim Fregonara, WV DNR

• **Historical Uses of Animals and Plants by the Indians of the 18th Century** - Doug Wood, WV DEP and Dianna Anestis, Naturalist

• **Flower Photography** - Michael Witt, Nature Photographer

• **Orienteering Workshop** - PJ Harmon, WV DNR

NOON: Lunch Buffet, Lodge

1:30pm **Choice of One Field Trip:**

• **Animal Tracking** - Doug Wood, WV DEP and Dianne Anestis, Naturalist

• **Canaan Valley Wetland and Amphibian Walk** - Ed Michael, West Virginia University and Tom Pauley, Marshall University

• **West Virginia Mushrooms: Coming Soon to a Forest Near You!** - Bill Roody and Donna Mitchell, WVDNR

• **Cave Trip** - Craig Stihler and Jack Wallace, WV DNR

• **Dobbin House Trail: History, Botany and Wildlife** - Emily Grafton, Naturalist and Sue Olcott, WV DNR

• **Streamlife Scavenger Hunt for**

Children - Dan Cincotta, WV DNR

• **Trip to Snake Den** - Frank Jernejcic, WV DNR

• **Geology and Paleocology of Canaan Area**- John Northeimer, Canaan Park Naturalist

• **Butterfly and Other Invertebrate Foray** - Michael Donahue, USFS

• **Orienteering Hike** - PJ Harmon, WV DNR

4:30-6:30pm Dinner Buffet, Lodge

7:00pm - **Neotropical Migratory Birds**, Robert Whitmore, WVU

8:00pm - **"A Journey Through America"**, Michael Witt, Nature Photographer

9:00pm - **Social**

9:30pm - **Evening Field Trips:**

• **Salamanders** - Tom Pauley, Marshall University

• **Owl Prowl and Night Sounds** - Rob Tallman, WV DNR

• **Bats** - Jack Wallace and Craig Stihler, WV DNR

• **Insects of the Night** - Michael Donahue, USFS

Sunday, June 8, 2003

6:30am - **Bird Walks**

Breakfast On Your Own

8:00-10:00am - **Bird Banding** -

Robert Hogan, Naturalist

8:30am- **Sunday Service**

9:30am - **Informal Workshops:**

• **Amphibians and Reptiles** - Jeff Hajenga

• **Mammals** - Sue Olcott

• **Mushrooms** - Bill Roody and Donna Mitchell

• **Fish** - Dan Cincotta

• **Other Displays** - Staff

11:00am - **Recap of Weekend Events** - Jim Fregonara, WV DNR

11:15am - **Door Prizes and Adjournment**

PLEASE NOTE: SCHEDULE IS SUBJECT TO CHANGE

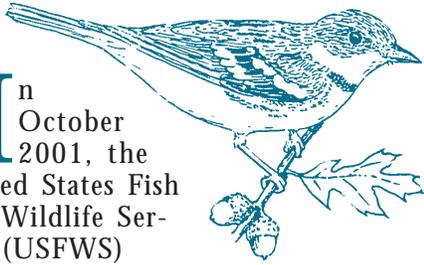
Make Tracks to Come!

If you are interested in attending this year's event, please write Dawn Hale, WV DNR, PO Box 67, Elkins, WV 26241, call (304) 637-0245 or email dhale@dnr.state.wv.us for a registration packet. You must send your reservation form directly to Blackwater Falls State Park.

Cerulean Warbler Considered For Threatened Listing

In October 2001, the United States Fish and Wildlife Service (USFWS) received a petition from the Southern Environmental Law Center to consider the cerulean warbler (*Dendroica cerulea*) for listing as threatened under the Endangered Species Act. In the following months the USFWS determined that the petition contained information indicating that listing the species may be warranted. The official announcement of those findings was published on October 23, 2002 in the Federal Register.

These findings in turn initiated further evaluation of the status of the cerulean warbler. A 90-day public comment period was opened to allow for comment from state and other federal agencies, and the general public. The public comment period ended on January 21, 2003. After reviewing all information submitted, the USFWS will decide whether or not to initiate a 12-month finding to consider all additional data received during the status review.



If listing is determined to be warranted, the cerulean warbler will be elevated to candidate status and assigned a listing

priority number. The USFWS prepares proposals to list the candidate species in priority order.

--Rob Tallman

WATCHING FOR WEST NILE VIRUS

The West Nile virus continues to expand its territory each season. Currently the virus is found in 44 states, the District of Columbia and Canada. In West Virginia, 77 dead birds tested positive for the virus in 2002. Three West Virginia counties also had WNV-positive horses, and three positive human cases were reported from two counties.

Wild birds are the primary reservoir host; however, the American crow, blue jay, and other corvids and raptors (hawks, owls and eagles) are particularly susceptible. Horses, humans and other animals are considered to be dead-end hosts and do not have virus levels high enough to infect mosquitoes and other animals.

Because birds are particularly susceptible to the virus, large numbers of dead birds in a community may indicate a higher risk of having human cases. If you notice dead birds in your community you are encouraged

to call their local health department, especially during the West Nile active surveillance season (May-November).

Birds appropriate for testing include those that have died recently (less than 24 hours old), however all dead birds should be reported. Recently deceased birds may then be submitted for West Nile virus testing.

The WVDHHR recommends:

- Emptying standing water in old tires, cemetery urns, buckets, plastic covers, toys, or any other container will reduce mosquito breeding sites.

- When outdoors during peak mosquito activity (dusk to dawn) wear long-sleeved shirts, long pants, and apply a repellent containing DEET. *Always follow label directions when applying repellents.*

For more information contact the WVDHHR, Infectious Disease Epidemiology Program at (304)558-5358 or www.wvdhhr.org.

--Greg Chrislip, WVDHHR



Who Wants To Be A Biologist?

Congratulations to our contest winner, **Ted Elonis of Sutton** whose name was picked at random from all the received correct entries. Ted correctly answered last issue's question: **How many National Wildlife Refuges are there in West Virginia and what are their names?** The answer is two: Ohio River Islands National Wildlife Refuge and Canaan Valley National Wildlife Refuge. Interestingly, Canaan Valley National Wildlife Refuge was our nation's 500th refuge.

Ted will receive the **WV Wildlife Viewing Guide**. Other correct answers were submitted by: *Beth Conley*, Chapmanville; *Linda Brennan*, Chapmanville; *Kay Kish*, Clendenin; *Robert Dilley*, Beckley; *Art Yagel*, Summersville; *John Peters*, East Bank; *Jerry Grady*, Cottageville; *Koneda Devrick*, Point Pleasant and *someone* from Beckley. Thank you all for playing!

Here's this issue's question. **What is the only marsupial found in West Virginia?**

Hint: This critter is also the only marsupial found in the United States.

Official Rules:

Clearly print your answer on a postcard along with your name, address and phone number and send it to: Wildlife Diversity News newsletter, P.O. Box 67, Elkins, WV 26241, Attention: **trivia contest**. or email jfregonara@dnr.state.wv.us.

Only one postcard will be accepted per household, per question.

Postcards for this issue's contest question must be postmarked by **August 1, 2003** and this issue's winners will be sent the **WV Wildlife Viewing Guide**

Please do not call our office and ask for the answers. That would be too easy, but you can visit our website:

www.dnr.state.wv.us and search for clues.

Employees of the WV DNR and their families are ineligible. Each winner will be chosen at random from all correct entries received by the postmarked deadline.

Federal Funding Update

Recently, Congress finished the fiscal year 2003 appropriations bills. State Wildlife Grants (SWG) received \$85 million nationally in 2002, and you may remember that the House had passed \$100 million for SWGs just last July. Unfortunately, only \$65 million was allocated for 2003.

For West Virginia, this means a reduction from \$776,000 to \$582,000. Reasons included the worsened economic climate with the continuing economic downturn, re-ordering of priorities with homeland and foreign security issues. Both the House and Senate supported a lower level of funding and other conservation programs saw similar cuts in the budget.

The President's proposed 2004 budget also calls for only \$60 million for SWGs, thus, soon the process will begin again to endeavor to raise this level so that important conservation work for species at greatest risk can continue. In an upcoming newsletter issue, we will report how West Virginia plans to spend its SWG funding. Thanks to all who have contacted their repre-

sentatives and worked to have funding increased to ensure that all species will be protected for future generations.

--Kathy Leo

WV Natural History Listserve Created

A new way to share information about the natural history of WV and surrounding areas has been started by Sam Norris of Elkins. He has created a listserve on Yahoo Groups called "West Virginia Natural History." As he states on the listserve website, it is "a forum for all who have a broad interest in the natural history of mid-Appalachia and the Mountain State: plants, animals, fungi, geology, etc. This is a place to share news and information, to ask and answer questions."



The listserve was started in January 2003 and has already been widely used to share information. Announcements about educational events, grant programs, job opportunities and observations relating to natural history have already appeared.

Joining in on the fun is easy. 1. Register with Yahoo. 2. Join this group.

The address is: <http://groups.yahoo.com/group/WestVirginiaNaturalHistory/>

--Brian McDonald

Time To Bring Out The Hummingbird Feeders

Soon hummingbirds will be zooming around West Virginia backyards looking for familiar feeders filled with



nectar. Nectar solutions are available commercially; however, there is a low cost alternative. A sugar solution can easily be made at home by combining four parts water to one part sugar (for example: 1 cup water + 1/4 cup sugar). *Do not use more than this.* Heat water to dissolve the sugar, and let the solution cool. Fill the feeder with the solution and place any extra solution in the refrigerator. This solution closely replicates the natural nectar of many flowers used by hummers. Do not use honey, brown sugar or other sweeteners in feeders. They can promote the growth of harmful bacteria.

Also, do not use red food coloring in feeders. Some scientists report that red food coloring may harm hummingbirds. Food coloring is also not needed because a little red color on the feeder itself is usually enough to attract the birds.

Don't forget to clean feeders every five to seven days in order to prevent the growth of harmful bacteria. Throw away the old solution and rinse the feeder well with hot water. Do not use soap or detergent. The feeder can be cleaned by using a vinegar solution and some uncooked rice grains and shaking vigorously.

--WDP Fact Sheet

HOT OFF THE PRESS!

Mushrooms of West Virginia and the Central Appalachians

By William C. Roody

For both the seasoned mycologist and the novice mushroom hunter, *Mushrooms of West Virginia and the Central Appalachians* serves as a solid introduction to the mushrooms of the region. Some 400 species are described and illustrated with the author's own stunning color photographs, and many more are discussed in the text. Detailed mushroom descriptions assure confident identifications. Each species account includes remarks

about edibility and extensive commentary to help distinguish similar species. Published by the University of Kentucky Press.



Cost of the book is: Softcover, \$35/ Hardcover, \$60, plus tax, shipping and handling. Call 304-637-0245 to order!

Kids Krafts

What's Out There: Backyard Biodiversity



Have you ever wondered how many different kinds of plants and animals there are in the world, or in our state, or how about your own backyard? Here's a fun activity anyone can do to get a small sample of the diversity or how many different kinds of living things there are on a small scale in your own yard.

Materials: All you need are four nails, a four-foot long piece of string, small shovel, magnifying glass, paper and pencil to record what you find.

Procedure: Pick out a spot in your backyard that has a lot of different kinds of plants and is in an area you can dig up. Use the four nails and mark off a 1-foot square, then tie the string around the nails to mark off the boundary of your 1-foot square plot. Now count the different kinds of plants and count the individuals. For example: you may have 3 clover plants, 2

dandelions, 50 blades of grass, etc. Record your observations. You don't have to identify each plant; noting that they are different species is important.

Once you are through counting the plants, it is time for the animals. Carefully start on the surface and count the different kinds of critters you find. Once again, count the number of different kinds of bugs and the total number of each kind. Now carefully start digging and see what you find.



Remember to use the marked boundary for your observations and for digging. Dig down, layer by layer, until you can't find any more critters. Use the magnifier to observe the really small insects and other invertebrates. You'll be amazed by what you find. This is just a tiny 1-foot plot. Just imagine the diversity of life on the total planet! Start observing!

--Jim Fregonara

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is a free biannual newsletter published by the WEST VIRGINIA DIVISION OF NATURAL RESOURCES (WVDNR) Wildlife Resources Section's Wildlife Diversity Program. This program is dedicated to the conservation and enhancement of the state's non-game wildlife and botanical resources.

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*Curtis I. Taylor - Chief
Wildlife Resources Section*

Kathleen Leo - Editor-In-Chief

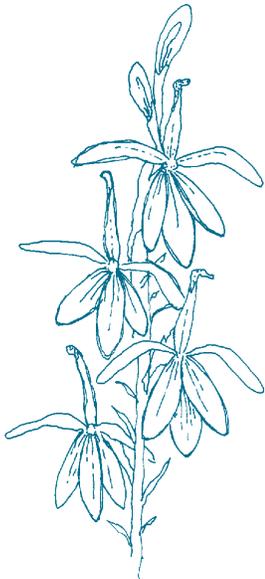
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