Habitat Herald

A Publication of the Loudoun Wildlife Conservancy

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www.loudounwildlife.org

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Gardening for Wildlife

by Nicole Hamilton

"Nature, wild nature, dwells in gardens just as she dwells in the tangled woods, in the deep of the sea, and on the heights of the mountains; and the wilder the garden, the more you will see of her." Herbert Ravenal Sass

I first read those words when I moved to Loudoun County and was faced with gardening for the first time. I remember looking at this space of lawn that we planned to transform into a flower garden and worrying that I would do something "wrong" because I didn't know the "rules" of gardening. However, Sass's words stayed with me; so, as I read about gardening, I also made a small stone plaque with the words, "let your garden be a wild place." I put that plaque at the side of the garden to remind me of his message as I dug in the dirt.

These days, that plaque is often seen crowded by milkweed, coneflower, grasses, tickseed and cardinal flowers that grow up around it, providing food for monarch caterpillars, hummingbirds and goldfinches and serving as great places for spiders to spin their orbs or dragonflies to perch. Indeed, the words proved true. The less I "clean up" the garden, the less I try to control and organize it into colors or patterns, the more wildlife, large and small, arrive, and the more fun I have.

Gardening for wildlife is rewarding and exciting in so many ways. It can be done on the smallest balconies and porches or on the largest patches of land. It gives us the opportunity to interact with nature on the most basic levels and be a part of the changing cycles of the seasons. One of the first things we see when gardening for wildlife is that everything is connected. Nature is a complex web of interrelated elements that, when working

The Loudoun Wildlife Conservancy is a non-profit 501(c)(3) group of volunteers who share a common goal of protecting and perpetuating natural habitats for the benefit of both people and wildlife. Contributions are tax-deductible to the extent allowed by the law.

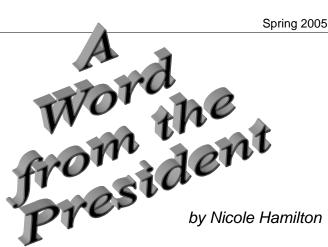
The Loudoun Wildlife Conservancy Board meets the first Tuesday of each month. Board meetings are open to all members. For more information, or to suggest topics for discussion at upcoming meetings, contact Tom Bjorkman.

You can also visit us at:

www.loudounwildlife.org

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On June 7, 1995, the Loudoun Wildlife Conservancy held its first public meeting. It was held at the Loudoun Valley Community Center in Purcellville, and Jocelyn Sladen gave a talk on how to create habitat for wildlife. And so it began, the birth of Loudoun Wildlife Conservancy — an organization that grew out of the passion of Joe Coleman, Diane Gilliam and Leslie Metzger to help preserve and protect habitat for wildlife in our county.

In 1995, the Dulles Toll Road was in the final stages of completion and the "development" of Loudoun was just kicking in. Joe, Diane and Leslie could see the changes in our landscape taking place, subtly at first, but then more dramatically as wetlands were filled in, fields were replaced by lawns, and forests were cleared for malls and houses, thereby displacing wildlife and changing the face of our county. They recognized that this development machine was on the fast track, and someone needed to speak up on behalf of wildlife. Something needed to be done to raise awareness and offer residents information and options on the impact that we were and are having on our surroundings and the creatures that live here.

It is no small feat to establish a nonprofit organization, especially one like ours that runs entirely on volunteer support and hard work. It is even more significant to recognize that only three out of ten nonprofits typically survive into their tenth year. Many of you were with us in those early days. Many more of you joined in following years, perhaps reading about our programs in the paper, or as I did after picking up a brochure at a library, and finding a family of like-minded friends who care and have that passion for nature.

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in balance, provides the elements that living things need to thrive. Through our gardening, we have the chance to see this web of life and watch its interdependencies play out right before our eyes. In this way, we can experience having a positive impact on the world around us.

Habitat is what wildlife calls home. Just as we provide food and shelter for ourselves in our houses, outdoor habitat provides many necessities for wildlife — food, shelter, sites to raise young, safe places to play, and protection from predators and harsh weather. For insects, that habitat may include soil or rotting wood where they can build nests, plants from which they can sip nectar or hunt other insects, and leaf litter within which they can gain protection. For birds, habitat may mean dead trees, tall grasses or dense bushes in which to nest, berry bushes and leaf litter in which to feed, and thickets where they can seek protection. For foxes, habitat may mean fallen snags of trees where they can build a den, dense shrubs to escape from predators, and grassy fields where they can play or hunt for mice.



However, just having the right elements is not enough; timing is important, too. Plants and animals have evolved together over the eons, each timing its seasonal entrance and exit to be in concert with the entrances and exits of others. Consider the bumblebee. In the early days of March, the hibernating queen emerges from her burrow in the soil. At the same time, certain native plants that she requires to survive are starting to flower. She has only a short time before her energy reserves from the previous fall are depleted. She needs to find a nesting site, lay her eggs, and then go in search of the flowers that will feed herself and her young. With our planting lawns and non-native plants that take over the places where native plants once thrived, it becomes more difficult for her to find the flowers that she needs to survive. Non-native plants like those introduced from Europe or Asia may not bloom at the right time or may not display the same triggers to attract her to their blossoms. If she does not find the flowers she needs in time or has to travel too far, then she and her young will not survive. With her demise, countless fruit and berry bushes and flowers will not be pollinated. This means that birds will not find berries and seeds that they need, and they, too, will need to go elsewhere to survive.

The loss of open space across Loudoun, the use of pesticides, herbicides and chemical fertilizers, and the proliferation of non-native plants that are sold through every nursery in our area have taken a toll on our wildlife and the health of the habitat at large. By being aware of the ecology around us, we can do things (and <u>not</u> do things) that will help maintain diversity and strengthen the web of life around us. Through gardening, we can help rebuild our native ecology.

Thus, when we garden for wildlife, we are really helping to build/restore habitat. I don't know of a more rewarding place to start this than in our own back yards. To begin, first take a look at the space where you want to focus your gardening. All wildlife, large and small, has four basic needs: sufficient space, shelter, food, and water.



Space: When looking at your space, realize that you can have many different types of habitat in one area. You may have an open garden area that you can plant with wildflowers for a grassland-like habitat. This may be bordered by trees where you can also plant shrubs for a woodland habitat. You can add water features and rock gardens to accommodate wildlife that prefer those habitats, too. The amount of space and type of habitat you have available will play a key role in the specific wildlife that will be attracted to your area. If you are working with a small space such as a deck, you might want to focus on providing the elements needed for butterflies and hummingbirds to visit. This will include an assortment of plants that have open flowers, as well as tubular ones, in colors ranging from yellows to

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especially reds. For an amazing experience, you can plant milkweeds such as butterflyweed with its pretty orange flowers. In doing so, you may attract a female monarch butterfly looking to lay its eggs on the milkweed in August. You can then watch the caterpillars devour your milkweed plants and later reward you with the opportunity to see a butterfly emerge and fly off on its way to Mexico in the fall.

If you have a larger space such as a yard with which to work, you can develop layers of habitat that include tall trees that provide a canopy, mid-range trees and shrubs that provide an under-story, and wildflowers and native grasses to provide a foundation and open space. The more complex and diverse the habitat, the more life it will be able to support.

Shelter: Shelter needs to be looked at from a couple of different aspects – species as well as the purpose of the shelter: protection from predators, buffers from harsh weather, and nesting sites for raising young. During the winter, birds and other animals need dense shrubbery where they can be protected from harsh winds and snow. During summer, this same shrubbery can provide nesting sites or places to hide from predators. For some animals, like raccoons and foxes, shelter may be a den that they make in an old, hollowed out tree. So, it's good to leave these old snags around. Rabbits appreciate the thickets or other low-growing shrubbery where they can

escape a pursuant fox or hawk. Butterflies need shelter, too. Many are not strong fliers and prefer to visit flowers that are buffered from the winds. At night, they go into wooded areas to sleep on branches of trees. You can also augment natural shelter such as these with other garden elements that you build or buy such as birdhouses, bumblebee nest boxes, and toad houses.

Food: Food for wildlife is as varied as there are animals. When selecting trees, bushes, and wildflowers for your garden, select varieties that provide benefit to the wildlife that you are interested in attracting. On the LWC website we have compiled a "Gardening for Wildlife" plant guide that you can download. It lists native trees, shrubs and wildflowers as well as the wildlife that each plant attracts/benefits. If you enjoy butterflies, by all means plant flowers to attract adults as they pass by, but if you really want to enjoy butterflies, plant host plants for the caterpillars to eat. As you garden, you will see more and more insects move in. These will include spiders, crickets, grasshoppers, beetles, moths, flies, and more. This is a sign of successful wildlife gardening because in order to garden for birds, for example, we have to garden for insects. Similarly, if we really want to garden for butterflies, we also have to garden for caterpillars. Insects serve as the food for others up the food chain: songbirds, mice, voles, snakes and others. These creatures in turn serve as food for others higher in the food chain: owls, foxes, hawks, and so on. So, celebrate the insects when they come! They will reward you ten-fold with the wildlife they support up the food chain.



Water: Every living creature needs water. You can provide water by setting up a birdbath. One that sits on the ground provides water for more animals than a post mounted version since some animals may not feel comfortable crawling up to reach a higher water source. Alternatively, you can build a large or small pond. Even a small pond of three or four feet in diameter will attract frogs that will take up residence. Butterflies enjoy "puddling," so they need a shallow pan with dirt, sand and pebbles that they can land on to sip the water. Because they generally puddle in order to get salts and minerals, you will need to add some of these to attract them as well.

As you plan your garden or augment an existing garden space, keep these four needs in the back of your mind and continually identify elements that you can add to fill each of these requirements. Look at your

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AUDUBON NATURALIST SOCIETY WATER QUALITY PROGRAMS

The water quality of Loudoun County's streams is integral to the well-being of local wildlife and is an indicator of overall ecosystem health. Most of Loudoun County's streams support diverse communities of aquatic life, but in the nation's third-fastest growing county, these irreplaceable resources are under daily threat of destruction and need constant vigilance. Streams and shoreline habitats provide food, shelter, and travel corridors for animals and many of the migratory bird species that make their seasonal journeys across our landscape.

Stream Monitoring classes are taught by Cliff Fairweather of Audubon Naturalist Society (ANS). As our volunteer base grows, the LWC, in partnership with ANS, Loudoun Soil and Water Conservation District and the North Fork Goose Creek and Catoctin Watershed Committees, plans to establish stream monitoring teams for every watershed in Loudoun County. These program are made possible, in part, by grants from the Virginia Chesapeake Bay Restoration Fund and the Virginia Department of Environmental Quality.

Please join us for one of our sessions. They are educational, good for the environment, and fun for the entire family.

Classes are held at the **Rust Sanctuary** in Leesburg, VA - Reservations for these programs must be made at least two weeks in advance using the registration form on page 6.

MACRO-INVERTEBRATE IDENTIFICATION II: FAMILY LEVEL

Sunday, March 13 (1:00 - 4:00 p.m.) — Beetles and Trueflies

Join us to develop your knowledge and identification skills for aquatic insects to the family level. Since the tolerance level of particular families can vary widely within an order of insects, family level identification gives a more precise reading on stream health. These classes are only available to current ANS monitors with a good grasp of order-level identification.

MACRO-INVERTEBRATE ID REVIEW & QUIZ

Section AR: Saturday, March 26 (10:00 a.m. - 12:00 p.m.)

Section BR: Friday, April 15 (10:00 a.m. - 3:00 p.m.) self-service test

Section CR: Sunday, April 17 (1:00 - 3:00 p.m.)

Before being sent into the field, all stream monitors are asked to demonstrate their ability to identify aquatic macro-invertebrates by taking a quiz using preserved specimens. Macro-invertebrate identification sheets and keys can be used to complete the quiz. Participants who decline to take the quiz will be assigned to a team to assist with data collection and other field logistics. Current monitors must take the quiz before each monitoring season. *Specify section*.

MONITORING PROTOCOL PRACTICUM

Section BR: Sunday, April 24 (1:00 - 3:00 p.m.) — **Note:** This class is for Loudoun Stream Monitoring Program participants only. Others should attend a Clifton/Manassas area session. Master the skills of abiotic data (temperature, pH, and several habitat assessments) gathering, and finetune your techniques for capturing stream organisms. Learn the data collection protocol developed for the ANS Water Quality Monitoring . New monitors should attend this class prior to their first monitoring session, and current monitors are encouraged to attend this class periodically as a refresher.

For more information go to www.audubonnaturalist.org.

PROTECTING LOUDOUN'S STREAMS AND WATERWAYS

If you are interested in becoming a stream monitor, please fill in the following form and mail it to:

Stream Monitoring Project c/o Audubon Naturalist Society ATTN: Cliff Fairweather Rust Sanctuary 802 Children's Center Rd, SW Leesburg, VA 20176

Street: City, State, Zip:	(H)					
List the Classes and Dates you	are interested in:					
Class	1st Choice		2nd Ch	2nd Choice		
List the Stream you are interes	ted in monitoring:					
1st Choic	ee	2nd Choice				
If neither of those streams is ava monitor a site designated by the	□ Yes	□ No				
Are you interested in being one of	☐ Yes	□ No				
Would you be interested in helpi functions (typing, maintaining o	ve □ Yes	□ No				

LWC PROGRAM CALENDAR

Space is limited for many of these programs.

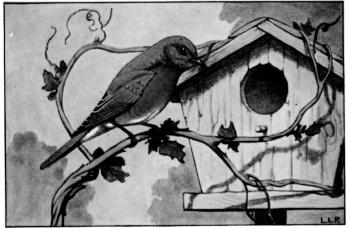
Please call the designated program contact for further information and to reserve your spot.

VANISHING VERNAL POOLS & THEIR AMPHIBIAN INHABITANTS — Saturday, March 5, 9:00 a.m. to 3:00 p.m. As the hours of daylight lengthen and temperatures begin to rise, animals that have spent the winter in hibernation begin to stir. Some of the earliest to become active are certain frogs and salamanders that use vernal or temporary pools for breeding. Unfortunately, these pools and their breeders are facing many threats. Held at the Audubon Naturalist Society's Rust Nature Sanctuary in Leesburg, this program will include an indoor session on vernal pool ecology, followed by an outdoor exploration of vernal pool habitats at Rust and other nearby locations. The program is co-sponsored by the Loudoun Wildlife Conservancy and the Audubon Naturalist Society. COST: Members (of either ANS or LWC): \$27; Nonmembers: \$38 — to register online go to www.audubonnaturalist.org. Questions call 301-652-9188 x14 or x16

BIRDING BANSHEE — **Saturday, March 12, 8:00 a.m.** Join the Loudoun Wildlife Conservancy and the Friends of Banshee Reeks at the Banshee Reeks Nature Preserve for the monthly bird walk. Because of its rich and varied habitat, this part of the county is a birding hot spot. Please bring binoculars. *Questions:* contact Joe Coleman at 540-554-2542 or jandkcoleman@erols.com.

BLUEBIRDS AT BROADLANDS — Saturday, March 12, 9:00 a.m. - noon, Broadlands Stream Valley Park Nature Center (703-729-9726), 21907 Claiborne Parkway, Ashburn, VA 20148. Registration Required. Join us at the Broadlands Nature Center for a morning program where Nicole

Hamilton of the Loudoun Wildlife Conservancy and the Virginia Bluebird Society will discuss bluebirds and their habitat needs. Because of the efforts of many caring people, bluebirds have made a comeback, but they still need our help, especially after a bad year like 2003. Program participates will watch a video on bluebird behavior, view typical nests that are built by cavity nesters, and then build nest boxes, complete with predator guards and mounting poles that can be posted in yards. The bluebird trail monitoring protocol will be reviewed so data can be collected through the nesting season. We will then submit this information to the Virginia Bluebird Society in the fall. The program fee is \$35 per family to cover the cost of materials. To register, contact the Broadlands Nature Center at 703-729-9704.



BIRDING THE BLUE RIDGE CENTER — **Saturday, March 26, 8:00 a.m.** On the fourth Saturday of each month the Loudoun Wildlife Conservancy leads a bird walk at the Blue Ridge Center for Environmental Stewardship (BRCES). This beautiful 900-acre preserve is located on Harpers Ferry Road, Rt. 671, in northwestern Loudoun County. Only a few miles south of Harpers Ferry and the confluence of the Potomac and Shenandoah rivers, the property includes meadows in the valley and heavily forested slopes on the Blue Ridge. Meet at the Neersville Volunteer Fire Station on Rt. 671 at 8:00 a.m. *Questions:* contact Joe Coleman at 540-554-2542 or jandkcoleman@erols.com.

BIRDING BANSHEE – Saturday, April 9, 8:00 a.m. See the March 12 listing for details.

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EASTERN COUGARS: SCIENCE, SCATS, AND SKEPTICISM - Wednesday, April 13,



7:00 p.m., Audubon Naturalist Society's Rust Nature Sanctuary, 802 Children's Center Road, SW, Leesburg. Sightings and other field evidence of cougars in the East have dramatically increased over the past 30 years. Chris Bolgiano, the widely published author of <u>Mountain Lion: an Unnatural History of Pumas and People</u> and the keynote speaker at last year's Eastern Cougar Conference, will discuss evidence that at least a few cougars exist in the East and their importance to us as a symbol of wilderness. Chris is also the Vice President of the Eastern Cougar Foundation, an organization dedicated to facilitating the recovery of cougars in as much of the East as possible. This free program is sponsored by the Loudoun Wildlife Conservancy.

THE WILDFLOWERS OF BANSHEE REEKS: A WALK — Saturday, April 16, 9:30 a.m. Lisa Williams, who recently discovered over 30 new records of plants in Loudoun County, will lead a wildflower walk at the nature preserve. The 725-acre Banshee Reeks Nature Preserve is a mosaic of different habitats and soils and is home to numerous, different wildflowers and plants, many which are both beautiful and unusual. We will meet at the Visitor Center and, for a few hours, explore some of the preserve's richer habitats.

BIRDING THE BLUE RIDGE CENTER - Saturday, April 23, 8:00 a.m. See the March 26 listing for details.

CELEBRATING SPECIAL PLACES: BIRDING LOUDOUN COUNTY — Saturday, May 14. During spring, thousands of migratory birds move through North America to their nesting territories. Some will stay and nest in our area, while others will spend only a few days here replenishing their energy before continuing a journey that may be thousands of miles long. To celebrate and highlight this natural phenomenon, International Migratory Bird Day is scheduled on May 14. To participate in International Migratory Bird Day and in recognition of the importance of healthy wildlife habitat, the Loudoun Wildlife Conservancy is sponsoring several bird walks at 8:00 a.m. and an all-day bird survey throughout Loudoun County. Some of the sites the different groups will visit are Horsepen Preserve in eastern Loudoun, Morven Park and the ANS Rust Wildlife Sanctuary in Leesburg, Banshee Reeks Nature Preserve in central Loudoun, and the Blue Ridge Center for Environmental Stewardship in northwestern Loudoun. Contact Joe Coleman at 540-554-2542 orjandkcoleman@erols.com before May 11 to participate in one of the walks or the survey and to choose a site. Please bring binoculars.

CELEBRATING LOUDOUN'S WILDLIFE: TEN YEARS OF THE LOUDOUN WILDLIFE CONSERVANCY — Sunday, May 15, 4:00 — 7:00 p.m. In celebration of the 10th Anniversary of the Loudoun Wildlife Conservancy, the annual meeting will be held at the Rust Nature Sanctuary in Leesburg. The event will include wildlife and habitat exhibits showcasing the flora and fauna of our area, a retrospective slide show of LWC programs over the years, a panel discussion on the future of flora and fauna in Loudoun, and a silent auction. Dinner will be included as part of the festivities. All LWC members are invited to attend. **To attend RSVP by May 1** — *online at www.loudounwildlife.org, or by contacting Nicole Hamilton at (540) 882-4839 or nicole@gilandnicole.com.*

BIRDING THE BLUE RIDGE CENTER — Saturday, May 28, 8:00 a.m. See the March 26 listing for details.

BIRDING BANSHEE – **Saturday**, **June 11**, **8:00** a.m. See the March 12 listing for details.

Questions about the above programs — contact Joe Coleman at 540-554-2542 or *jandkcoleman@erols.com*. For up-to-date information on our programs check our web site at www.loudounwildlife.org.

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surroundings from the perspective of wildlife. A rock wall or pile of rocks, for example, provides a welcoming spot where toads and salamanders will find a home. A pile of leaves and twigs will provide an over-wintering spot for an anglewing butterfly or other insects. An old tree will provide wood for a woodpecker to carve a nest cavity that will later be reused by owls, bluebirds, chickadees or squirrels.

Gardening for wildlife is a very broad topic. To learn more, I recommend exploring some of the many excellent books that are available on the topic. A few of my favorites include:

<u>Gardening for Wildlife</u> by Craig Tufts and Peter Lower, Rodale Press, 1995. [Describes gardening for different wildlife habitats —woodland gardens, meadow gardens, and water gardens — and provides specific information on gardening for birds, butterflies and nightlife.]

<u>Attracting Backyard Wildlife</u> by Bill Merilees, Voyageur Press, 1989. [Describes gardening for birds through the seasons as well as gardening for butterflies and bugs, reptiles, small mammals, and amphibians.]

<u>Creating Small Habitats for Wildlife in Your Garden</u> by Josie Briggs, Guild of Master Craftsman Publications, 2002. [Detailed descriptions of specific habitats and directions on how to build garden elements. As it is written for a British audience, the plant lists will not be useful.]

<u>The Wildlife Sanctuary Garden</u> by Carol Buchanan, Ten Speed Press, 1999. [Provides information on designing a wildlife sanctuary using native plants, creating a wetland/pond area, and employing benign pest control.]

<u>Birdscaping Your Garden</u> by George Adams, Rodale Press, 1998. [Provides information on habitat needs by bird species, including specific trees and shrubs preferred by each bird.]

<u>Butterfly Gardening: Creating a Butterfly Haven in Your Garden</u> by Thomas Emmel, Friedman/Fairfax Publishers, 1997. [Provides some ideas for laying out a butterfly garden as well as plant lists. It also provides a page on each of the more common butterflies and identifies the habitat, nectar, and host plants they seek.

Book Review

Noah's Garden by Sarah Stein, Houghton Mifflin Company, 1993

Noah's Garden is an amazing book that shows us the difference between conventional gardening and gardening for wildlife as a habitat steward. In her book, Sarah Stein takes us through her own discovery of the impact that she was having on her property as she "cleaned up" the tangled woods and manicured the landscaping. She shares with us her realization that, through her gardening practices over just a two-year period, she had ultimately evicted wildlife from her land because the habitat could no longer support them. She then walks us along the road she took to restoring the ecology of her own back yard and describes the rewards of having wildlife return. This book is absolutely packed with great information on being a habitat steward. Written openly and honestly, it shares the author's experiences and results. She challenges conventional practices and gives us the tools we need to make ecologically sound decisions. If I had to recommend just one book to either a new gardener or an old pro, I would recommend this book. Because it is written in the first person, reading this book feels like a conversation with an old friend.

A Word...continued from page 2

As we move through our ten-year milestone, let us reflect on our roots, recalling where we've been and the accomplishments we've made together, and look at the path forward. In 2005, just as in 1995, the flora and fauna of Loudoun need us. And, they need us now more than ever. We chose "Gardening for Wildlife" as the theme for this issue of the *Habitat Herald* because as development continues and more open space is lost, wildlife increasingly depends on our gardens, backyards and surrounding properties to survive. The more we practice protecting and restoring habitat around our own homes, the more we will understand and be able to act on behalf of the broader wildlife and habitat of Loudoun.

Margaret Meade reminded us that, "A small group of thoughtful people could change the world. Indeed, it's the only thing that ever has." And so we thank Joe, Diane and Leslie as well as all of you for starting LWC, for being that small group of concerned citizens and keeping our organization going through the years. We hope that you will join us for our annual meeting this coming May as we celebrate this milestone and look forward to another ten years of preserving and protecting habitat in Loudoun County.

Gardening for Wildlife....continued from page 9

Some guiding principles for wildlife gardening:

Plant Native: Research the plants you would like to plant ahead of time — focusing on native plants — and take a list with you to the nursery or garden shop. Include their Latin names as common names can be deceiving. Native plants are not only a better fit in meeting the needs of our wildlife, but they also grow better and require less maintenance because they were "made" for our location.

Eliminate the Use of Pesticides and Herbicides: Spraying pesticides and herbicides may seem like a quick fix, but they actually disrupt the natural balance. They poison the soils. In addition, while pesticides may appear to kill the intended target insects, they also kill other insects that may in fact be working to keep the offending insects at bay. This leads to a vicious cycle of spraying and disruption of the balance of nature. Pesticides also kill butterflies, moths, wasps, bees and other insects that are critical to the cycles of pollination, and they poison frogs and salamanders. Also, birds and other wildlife often become sick from eating insects that have been sprayed. Herbicides have similar negative effects that disrupt the balance, making us dependent on chemical companies to manage our gardens because we eliminate the natural mechanisms. Trust nature's food chain and natural predators to take care of pest populations. This is the wiser road in the long run.

Leave Piles: Wildlife love piles of leaves and brush. They provide safe havens for birds and small mammals, as well as great places for insects.



Plant with Diversity: The more diverse the plants the more diverse the wildlife that will be attracted. Mixtures of textures and colors in plantings provide greater camouflage for animals when they need to hide. On a spray of yellow flowers, a brown bird will stand out and be a prime target for a predator, but in a mix of grasses, small shrubs and varied wildflowers, the bird will blend in and feel safe.

Relax and enjoy...and let your garden be a wild place. The less manicured your garden, the more shelter, food, and nesting sites it will provide. You will be rewarded with a variety of colorful sights and sounds, buzzes and flashes, at night and during the day.

ANS Environmental Education Programs

The following classes are given by the Audubon Naturalist Society at the Rust Sanctuary in Leesburg, VA.

Please contact Tammy Schwab at tschwab@audubonnaturalist.org or (703) 669-0000

for more information or to register.

Family Programs

(For beginners of all ages)

Fees: ANS members: \$6 per child (\$4 for each additional child); nonmembers: \$9 per child (\$6 for each additional child). Please note that additional child discount is for siblings only. Adult participation required; adults do not pay fee unless otherwise noted. All programs require registration, but drop-ins are welcome!

Animal Habitats

Saturday, March 11 (10:00 - 11:30 a.m.)

Join us as we explore the many habitats at Rust. We will search for evidence of animals throughout the woods, meadow and pond and discover what these critters need to survive.

Spring Babies

Saturday, April 2 (10:00 - 11:00 p.m.)

Ages 3-5 years (with adult)

Learn about the ways that plants and animals are getting ready for winter. Whether they are going to migrate, hibernate, or resist all nature has to to prepare for the harsh conditions coming in winter. We will hike the trail, visit the pond, and spend time in the nature center.

Wild Nightlife

Friday, April 8 (7:30 - 9:00 p.m.)

Whooo's awake at night?? On this special nighthike we will search for signs and sounds of owls, opossums, bats and other nocturnal friends and discuss their adaptations for life after dark.

Spring is Here! Camp

March 21-25 (9:00 a.m. - 12:00 p.m.)

Ages 6-8 years

Budding leaves, colorful flowers, active animals ... these are just a few signs of spring! Join us as we explore the woods, meados and pond in search of the fascinating changes of the new season. Hikes, games, activities and crafts will enhance each day's exploration of our natural world. *Members:* \$83, Nonmembers: \$116.

Winter Birds

Saturday, February 26 (9:30 - 10:30 a.m.)

Birds are incredible creatures who perform amazing feats on a regular basis and are good examples of how adaptations, behavioral and physical are important to the study of any animal. We will look for birds in their natural habitats and learn some amazing facts about migration, bird nests, and bird songs.

Amateur Naturalist Series (For adults and interested teens)

Fee \$10.00 for ANS members and \$14.00 for non-members.

Nature Interpretation 101

Saturday, March 5 (9:00 a.m. - 12:00 p.m.)

Have you ever wanted to teach others about nature and didn't know where to start? Come learn about the skills and knowledge needed for nature education and interpretation. Participants will gain knowledge about how to lead nature programs for a variety of audiences like schools, scouts, and adults. We will also learn how to improve out nature observation skills and receive information on available resources.

Sketchbook Journaling for the Non-Artistically Inclined

Tuesday, April 5 (9:00 a.m. - 12:00 p.m.)

Spend three hours learning how to create a journal filled with nature! This class will show you what materials work well for sketching and how to use them, give you ideas of what to draw, help you get your journal started and show you artists books that will help you continue your learning. After the classroom, we'll either head outdoors or stay inside to sketch. This class focuses on the beginner, but if you are experienced feel free to join us and show your "stuff" and share ideas. Materials will be sent to participants before the program.

Water Quality in Big Spring Creek, Loudoun County

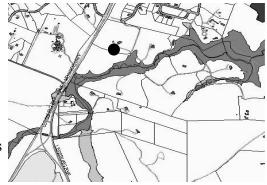
by Darrell Schwalm

Spring fed streams are favorite haunts for rainbow trout, even if the stream is on the outskirts of Leesburg, Virginia and in the middle of a residential development. And, where there are trout, there are trout fishermen and women eager to match their wits with the elusive fish. This explains why the Northern Virginia Chapter of Trout Unlimited (NVCTU) adopted Big Spring as a stream restoration project. It also explains why NVCTU asked the Loudoun Wildlife Conservancy (LWC) to monitor Big Spring on November 10, 2004 to evaluate the health of the stream now that the first phase of the restoration is complete.

LWC members Phil Daley, Darrell Schwalm, and his son Chris helped with the restoration work and did

the stream monitoring. Loudoun County Forester, Carol Evans, and Fairfax Riparian Specialist, Dr. Judy Okay, with the Virginia Department of Forestry, provided the trees and technical expertise. John Odenkirk, Virginia Department of Game and Inland Fisheries, provided expertise on fish habitat.

Big Spring is a small watershed located immediately north of Leesburg. It includes a second order stream that drains Morven Park (an equestrian center), a small portion of Leesburg, and a few farms to the west of Route 15. To the east of Route 15, it flows through the low-density residential communities of Big Spring Hamlet and Big Spring Farm subdivisions and into the Potomac River.



Big Spring Creek site map showing flood plain and stream monitoring site

Stream Restoration

In early 2002 the NVCTU signed an agreement with two landowners to restore a section of Big Spring

Creek in exchange for authorization to manage catch-and-release fly fishing for Trout Unlimited members. Their aim is to help ensure the continued survivability of the stream's population of wild rainbow trout. This effort furthers the mission of Trout Unlimited, which is to "conserve, protect and restore North America's trout and salmon fisheries and their watersheds."

The restoration plan focused on stabilizing vertical and threatened stream banks to help control erosion and reduce sedimentation. A variety of innovative bioengineering techniques were used to restore the stream in as natural a manner as possible. Natural materials, such as vegetation, root wads, oak stakes, bio-logs, cedar revetments and hay bale gabions, were used. Work on the project was completed in November 2004, after ten workdays involving 223 chapter volunteers who contributed 1,115 hours. Currently under consideration is whether to extend the restoration project downstream over the next half-mile section.



Restoration included using rock and hay bales to prevent bank erosion and using bank grading and bio-logs to promote natural vegetation growth.

Big Spring...continued from page 12

Human Impacts

Water quality (WQ) standards depend upon the designated uses of a stream. All streams in Loudoun County are designated for recreational uses, including swimming and boating, and for the support of aquatic life. Whether a stream meets WQ standards depends upon the level of human impact on the land in the watershed.

Land along Big Spring is primarily used for pasturing cows and horses and for low-density housing. As a result, there is little forest cover in the watershed. Also, a major highway intersection crosses the stream. Pollution from these land uses is primarily from non-point sources. This includes runoff from pastures used for cattle and from impervious surfaces on highways and in residential areas. The impact of storm water runoff is aggravated because of very narrow or nonexistent riparian buffers along the stream in many places.

Riparian Buffer

A riparian buffer is the 100 - 200-foot zone on each side of a stream that is vital to good stream health. The picture below shows that the riparian buffer along Big Spring is very poor due to the lack of trees and other woody vegetation along the stream bank. The poor canopy cover deprives the stream of shade to cool the water, leaf litter that is an energy source for the food chain, and woody debris that provides habitat for a diverse community of aquatic insects and fish. The stream bank also lacks roots from trees and woody shrubs that hold the soils from eroding and lacks leaf litter that filters runoff.

Habitat Rating

LWC's stream habitat assessment, using the EPA Rapid Bio-Assessment Protocol (RBP II), evaluated the

physical habitat in the stream corridor that influenced the quality of Big Spring and the aquatic insect community. The habitat rating for the stream at the NVCTU restoration site was 127 out of a possible 200 points, or 63%. This score was at the bottom of the "marginal" range (60-74%) established by EPA. Low ratings were given for bank vegetation protection, riparian zone, substrate embedment, epi-faunal substrate and available cover, and bank stability.

The assessment showed that bank erosion in Big Spring had resulted in fine sediments filling over 50% of the living spaces for insects around and between gravel and cobble giving the substrate a partial "cemented in" look. The moved grass allowed storm waters to flow into the stream without the retention and natural filtration provided by leaf litter and porous soils that exist in naturally vegetated buffers.



Upstream view of stream corridor from monitoring station

Continued on page 16

LWC Annual Meeting
May 15th 4:00 p.m. - 7:00 p.m.
Rust Sanctuary
See page 19 for details.

Central Loudoun Christmas Bird Count 2004

by Joe Coleman

One of our sector leaders described the Eighth Central Loudoun Christmas Bird Count as a "meat and potatoes" kind of day — most of us didn't find any spectacular birds, but overall we had a decent day of birding. All the birders commented on the cold, with the temperatures remaining in the 20's for most of the day and never getting above 30° F and then only for a short while. Those who were out owling in the early morning really noticed the cold as the temperature didn't get to 20° F until about 10 am. In the afternoon, when it did get up to 30°, the wind picked up and shortly thereafter the clouds returned.

In spite of the frigid temperatures and the fact that it was the day after Christmas, 66 people spent all or part of the day birding and made the count a success. While the 88 species of birds and 21,657 individual birds observed are on the low side for this count, the weather was probably the primary factor behind those numbers.

The highlights of the count were the two Long-eared Owls, a single Northern Saw-whet Owl, and a Chipping Sparrow. It had been years since any Long-eared Owls were seen on this count. In fact, last year not a single Long-eared Owl was observed on any of Virginia's Christmas Bird Counts. While common in the summer, the Chipping Sparrow is rare in Virginia in the winter, especially in Virginia's Piedmont. It was the only unusual sparrow observed on the count. An astounding 15 Ravens were seen, sometimes singly and once in a group of five. Another high count was the 90 Pileated Woodpeckers.

Because most still water was frozen, there were not a lot of waterfowl to be found. For the most part, what we did find was typical to Virginia's northern Piedmont. However, three Common Loons — a surprising miss for the count in all its previous years — were seen flying over the Goose Creek. Also, the 127 Common Mergansers (126 of which were on Beaverdam Reservoir) were a count high.

Unfortunately, a number of recent downward trends continued with both Bobwhite and Meadowlark numbers (1 of each observed). This number is even lower than in previous years. However, most of the species we observed appear to be holding their own. Some, like the birds of prey, continue to thrive, although only four Northern Harriers were seen. Also, four first-year Red-headed Woodpeckers were seen — a significant decrease from previous years. Only two of our sectors managed to find all seven of our woodpecker species.

Sadly, Bluebirds appeared to be even less common this year than last — the lowest numbers in our eight-year history. At the same time, the Northern Cardinal, White-throated Sparrows, and Dark-eyed Junco numbers were higher than ever before.

Participants:

Joseph Gantt Liam McGranaghan Darrell Schwalm Barbara Adatte Kathleen Scully Dale Ball Mary Ann Good Alex Merritt Alex Seebeck Gem Bingol Nicole Hamilton Phil Merritt Bill Seebeck Dirck Harris Linda Millington Linda Bowman Stanwyn Shetler Debbie Harrison Brian Millsap Joe Coleman (Compiler) Ron Staley Sue Heath Katie Millsap Karen Coleman Thomas Staley Anne Hocker Peter Munroe Ellie Daley Hwi Suh Sharon Kearns Sylvia Orli Phil Daley Ian Topolosky Phil Kenny Todd Day Bill Oscanyan Lad Topolosky Mary Alice Koeneke Robert Pavey Cathy Dobbins Jim Wade Glenn Koppel Sandy Pavey Kate Eldridge Marta Wagner Elizabeth Evans Mike Lamb Andy Rabin Laura Weidner Tom Raque Cliff Fairweather Spring Ligi Marcia Weidner Marc Sagan Karen Fairweather Steve Ligi Holmes Welch Cheri Schneck Robert Lyon Michael Friedman Cathy Williams Andi Martin Carl Schulz Gwen Gantt

Christmas Bird Count...continued from page 14

CBC Birds Seen:

88 Species



21,657 Individual Birds

			1 1485		
3	Common Loon	2	Herring Gull	2637	European Starling
3	Pied-bill Grebe	17	Barred Owl	10	American Pipit
16	Great Blue Heron	1	Northern Saw-whet Owl UNS	302	Rock Pigeon
128	Black Vulture	2	Long-eared Owl UNS	931	Mourning Dove
430	Turkey Vulture	19	Belted Kingfisher	2	Barn Owl
2	Snow Goose UNS	4	Red-head Woodpecker	13	Eastern Screech Owl
6157	Canada Goose	221	Red-bellied Woodpecker	8	Great Horned Owl
1	Tundra Swan	77	Yellow-bellied Woodpecker	45	Cedar Waxwing
8	Gadwall	223	Downy Woodpecker	40	Yellow-rumped Warbler
1	American Wigeon	31	Hairy Woodpecker	19	Eastern Towhee
53	American Black Duck	134	Northern Flicker	13	American Tree Sparrow
338	Mallard	90	Pileated Woodpecker	1	Chipping Sparrow UNS
49	Ring-necked Duck	3.1	Eastern Phoebe	123	Field Sparrow
0	Lesser Scaup	405	Blue Jay	5	Savannah Sparrow
17	Bufflehead	503	American Crow		Fox Sparrow
0	Common Goldeneye	27	Fish Crow	389	Song Sparrow
35	Hooded Merganser	99	Crow species	22	Swamp Sparrow
127	Common Merganser	15	Common Raven	1588	White-throated Sparrow
6	Bald Eagle	304	Carolina Chickadee	96	White-crowned Sparrow
4	Northern Harrier	194	Tufted Titmouse	2375	Dark-eyed Junco
8	Sharp-shinned Hawk	162	White-breasted Nuthatch	20	Sparrow, species
7	Cooper's Hawk	33	Brown Creeper	1247	Northern Cardinal
2	Accipter, species	125	Carolina Wren	8	Red-winged Blackbird
53	Red-shouldered Hawk	6	Winter Wren	1	Eastern Meadowlark
123	Red-tailed Hawk	35	Golden-crowned Kinglet	15	Common Grackle
17	American Kestrel	10	Ruby-crowned Kinglet	41	Brown-headed Cowbird
5	Wild Turkey	137	Eastern Bluebird	78	Blackbird, species
1	Northern Bobwhite	6	Hermit Thrush	2	Purple Finch
29	Killdeer	231	American Robin	109	House Finch
2	Wilson's Snipe	184	Northern Mockingbird	297	American Goldfinch
88	Ring-billed Gull	1	Brown Thrasher	206	House Sparrow
1	Great Black-backed Gull				

Big Spring...continued from page 13

Aquatic Insects

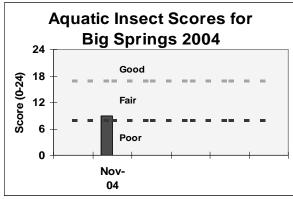
Benthic macroinvertebrates are the aquatic insects, crayfish and other crustaceans, clams and mussels, snails, and aquatic worms that live in the sediment or on the bottom substrates of streams. They include mayflies, stoneflies, caddisflies, dragonflies, beetles, and midges. These insects and other organisms are excellent indicators to assess streams because they cannot escape changes in water quality. Each organism has requirements for it to flourish which the stream must provide. By determining the number and type of organisms that live in a stream, the quality of the water and the health of the stream can be assessed.

Benthic Macro-invertebrate Rating

In rating Big Spring, aquatic insects were identified to the family level and the non-insects to the order level. Four primary metrics were used: 1.) number of taxa (i.e., different kinds); 2.) number of mayflies,

stoneflies, and caddisflies (EPT); 3.) percent dominant taxon; and 4.) the Modified Hilsenoff Biotic Index, which is based on the sensitivity of each taxon to pollution.

The most prevalent aquatic insects in Big Spring were Netspinner Caddis, Riffle Beetles, Sowbugs, Scuds, and Midge larvae — all insects moderately tolerant to pollution. The only moderately sensitive aquatic insects found were three Small Minnow Mayflies (Baetidae species) and two Casemaking Caddis. The biological condition score was 9 out of 24. This score was in the "fair" range and indicated a "moderately impaired" stream. A plot of the data is provided on the graph.



Graph 1 - Aquatic Insect Scores for Big Spring at NVCTU Restoration Site

Action Needed

Big Spring is a marginally impaired stream that is impacted by farming activities and a degraded riparian buffer. The streamside tree planting by NVCTU to help restore the riparian buffer and stream bank erosion control measures that have been installed are positive steps to protect and restore the health of Big Spring.

Additional actions needed to restore the stream include:

- 1. Continue to work with property owners to improve the riparian buffers in order to shade the stream, provide needed leaf litter as a food source, stabilize stream banks, and filter pollutants in storm water.
- 2. Work with farmers in the upstream sections to fence out cattle in order to reduce stream bank erosion and sediment in the stream.
- 3. Provide educational materials to stream-side property owners on environmentally-friendly ways to maintain and fertilize lawns, reduce storm water runoff into streams, and conserve streamside buffers.
- 4. Work with the Homeowner Associations to organize a *Friends of Big Springs* citizens group that will sponsor an Adopt a Stream Program of the Virginia Department of Conservation and Recreation.

Bluebird Trail Monitoring



The Loudoun Wildlife Conservancy, in concert with the Virginia Bluebird Society, is looking for a few additional trail volunteers to help with monitoring the bluebird trails in Loudoun County this season. Trail monitoring teams generally consist of 3-4 volunteers, each of whom takes one weekend a month to walk the trail, peek in the boxes and record the data. The season lasts from April through August and walking the trail generally takes about an hour depending on the trail. No experience is needed – just an interest in cavity nesting birds. In addition to bluebirds, we often get to see tree swallows, chickadees and titmice using the boxes. Volunteers will be provided with an orientation and training at the trail. If you are interested, please contact Nicole Hamilton, 540-882-4839 or nicole@nicoleandgil.com.

Campaign for Loudoun's Future

by Gem Bingol

From forest to field, stream to river, Loudoun Wildlife Conservancy's organizational goal is to protect and perpetuate natural habitats for the benefit of both people and wildlife. We are deeply concerned about the destructive impacts of development on habitat and wildlife. For that reason, LWC has joined the Campaign for Loudoun's Future.

The Campaign is made up of individual citizens and community-based organizations deeply concerned over the impact of 15 major development proposals Loudoun County has accepted for review. These applications propose 38,000 new houses not envisioned in the county's growth plan. When added to the 39,000 houses that have already been approved but not yet built, it would double the number of houses in Loudoun.

LWC board members participated in an Election Day petition drive to tell the Board of Supervisors to follow the existing growth plan and reject the development proposals. A total of 13,767 signatures were collected in Leesburg and eastern Loudoun County. The petition is available online, and we encourage members who have not already done so to sign on at www.loudounsfuture.org. This website also provides background information on the development proposals (also known as CPAMs), maps of the proposed developments, and a variety of other background information.

One of the applications, Creekside, not only proposes over 4,900 more homes than currently allowed, the developer has asked the county to swap Phil Bolen Park - a 405-acre, active and passive recreational facility on Sycolin Creek and approved by voter referendum - for 300 acres of land further south of Leesburg along Goose Creek. The developer talks about providing 20 ball fields, but ignores the loss of valuable natural parkland that such a swap would incur.

In order to protect our wildlife neighbors and their homes, we urge you to get involved as much as you can. In addition to signing the petition, you can request updates through the Campaign website to stay informed, write to the Board of Supervisor and Planning Commission with your opinions, and turn out for public hearings. You can make a difference if you speak out!

If you are not sure who your supervisor is, you can find out on the www.loudounsfuture.org website, and even email them directly from website links. Check it out and take a minute to speak up for those who must rely on us to protect them from overdevelopment.

It's Almost Hummer Time



It's getting close to the time to be thinking about the returning hummingbirds. They will soon be arriving hungry as usual from their long flight up from the tropics and islands. So, we had better be thinking about getting our feeders cleaned and up.

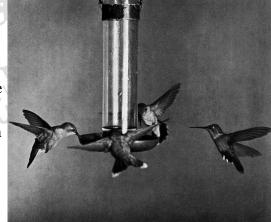
Remember, the formula for these tiny birds is 3 parts of water to 1 of sugar for the first week or so and then change to 4 to 1. The reason for the richer solution earlier is obvious. These little creatures will be tired and hungry, in fact, exhausted. Some will even fall down in your yard or by your feet as if dead, but if you pick them up gently, warm them in your hands, and give them nectar, they will take off again.

The same birds will return to the feeders where you fed them last year, but sometimes the earliest birds are just stopping off to get a snack and then head on up north, but your birds will come along soon. You folks to the southwest in West Virginia, may want to get your feeders up right away as you will get the birds first and the birds seeking feeders in Garrett County will be a bit later. Watch the weather and if it starts to freeze, take your feeders in overnight and place them out again in the morning.

We didn't have as many "hummers" last year as we usually have but we hope to get more this spring. They seem to go in cycles. Once they start the nest building process, you won't see as many for a while, but when the young start to fly, then, you'll have more at your feeders. Remember, the pretty red-breasted one, the male, does no work whatsoever, just fertilizes the female eggs, then goes on his merry way leaving the female to do all the hard work. She has to make the nest, using spider webs and lichen, placing the 1-inch in

diameter dainty nest upright on a limb, maybe only a few feet above ground or just over your head. Then, she has to brood, feed the babies and teach them to fly. You've got it— the "mommy" does all the work and good old care-free "daddy" just lives the "life of Riley." Oh yes, he stakes out feeders and makes sure the females and young don't get a chance to feed. That's why I always place two or three feeders in different spots in the yard so that the pugnacious male can't control them all.

Good luck with the hummingbirds this spring and take note when the first ones arrive. You'll be delighted with these flying flowers.



Don't Miss the LWC Annual Meeting May 15th 4:00 p.m. - 7:00 p.m. Rust Sanctuary

See page 19 for details.

Celebrating Loudoun's Wildlife: Ten Years of the Loudoun Wildlife Conservancy

Mark your calendars now to join us:

May 15th from 4:00 – 7:00 p.m. at the Rust Nature Sanctuary in Leesburg for our Annual Meeting in celebration of the 10th Anniversary of the Loudoun Wildlife Conservancy!

Kicking off this event will be a number of great wildlife and habitat exhibits showcasing the flora and fauna of our area. Live animals will be on hand as part of the exhibits, giving us the opportunity to learn about some magnificent creatures. We will also have a retrospective slide show of our programs over the years and some displays on the history of LWC. During the meeting segment of the celebration, some of our longtime members who have made significant impacts on LWC over the years will be honored. For our keynote presentation, a panel of three longtime LWC supporters and presenters of programs in our early years — John Hadidian and Jocelyn Sladen— will talk about the future of flora and fauna in Loudoun and discuss what we can do to preserve and protect them. A silent auction, featuring some wonderful items donated by local artists and artisans as well as local businesses, will take place over the course of the evening. Dinner will be included as part of the festivities; details will be forthcoming. We hope to see you at this event since this will be a celebration of you, our members, and all the support you have provided over the years. **To attend RSVP by May 1** — *online at www.loudounwildlife.org*, *or by contacting Nicole Hamilton at (540) 882-4839 or nicole@gilandnicole.com*.

YES, I	want to b	OCOD.	oe an Li	wc Member!				
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	☐ \$20 Individual*		\$75 Corporate*	☐ \$300 Family Lifetime				
	□А	dditional Donat	on \$					
	Renewing Member		ا 🗆	New Member				

Programs at a Glance

(see pages 5-7 and 12-13 for complete descriptions)

March

- 5 Vanishing Vernal Pools (L)12 Birding Banshee (L)
- 12 Bluebirds of Broadlands (L)
- 13 Macro-Invertebrate ID II (W)
- 26 Birding the Blue Ridge Center (L)
- 26 Macro-Invertebrate Review & Quiz (W)

April

- 9 Birding Banshee (L)
- 13 Eastern Cougars (L)
- 15 Macro-Invertebrate Review & Quiz (W)
- 16 Wildflowers of Banshee (L)
- 17 Macro-Invertebrate Review & Quiz (W)

April (continued)

- 23 Birding the Blue Ridge Center (L)
- 24 Monitoring Protocol Practicum (W)

May

- 14 Celebrating Special Places (L)
- 15 Celebrating Loudoun's Wildlife (L)
- 28 Birding the Blue Ridge Center (L)

June

11 Birding Banshee (L)

A = ANS L = LWC W = Water Quality

Editor's Correction

The Butterfly Count that appeared in the last issue of the Habitat Herald omitted Lily Evans from the list of participants.

I apologize for the oversight.

LM

Loudoun Wildlife Conservancy P.O. Box 2088 Purcellville, VA 20134-2088

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Annual Meeting

Annual Meeting

15th

May 7:00 p.m.

4:00-7:00 p.m.

See Page 19 for details

