



HABITAT - the arrangement of food, water, cover, and space - IS THE KEY.

In This Issue

[Native Plant Profile: Wild Columbine](#)
[Maryland Native Wildlife: Spring Peepers](#)
[Help DNR Monitor Summer Bat Colonies](#)
[Beware of Butterfly Bush](#)
[Habitat Tips: Biodegradable Planting Pots](#)
[Wild Acres in Action](#)

Forward

Welcome to the Spring issue of Habi-Chat! If you have been visiting the Wild Acres website regularly, then you might have noticed some big changes the past few months. I am excited to say that we have added a bunch of new pages on insects and their benefits as well as updated all of the old pages. In addition, several of the pages now have links to PDFs, so you can easily print the material at home as well as print out quick reference wildlife ID guides. Keep a lookout in the coming months for a new section to our website: Greening Your Landscape as well as new articles on making your backyard the best it can be for wildlife. If there is a particular topic that you would like to see on our site, then please don't hesitate to contact me to let me know! My information can be found at the bottom of this newsletter. Happy Habitats!



**Spring is just around the corner! Look for Spring beauties and buttercups blooming in rich woods near you!
Photo by Kerry Wixted**



Maryland Native Plant Profile.....Wild Columbine (*Aquila canadensis*)

Wild columbine is a native perennial plant found in the Buttercup family (Ranunculaceae) that grows in shady areas. The plant can get up to 3 feet tall, and it has alternate leaves that are divided into parts of 3. Wild columbine can be found throughout the eastern United States as well as in southern Canada.

Wild columbine flowers consist of a mixture of deep red and yellow. The yellowish-red petals are surrounded by long, red spurs that create a nodding trumpet appearance to the flower. A bundle of stamens protrudes past the petals. These flowers can range from 1-2 inches in length and bloom in late spring through early summer. After the flowers die, 5-7 pod-like containers of seeds form in their place. When mature, the pods will split and release a deluge of shiny seeds.

Columbine seeds require several months of cold stratification (cold temperatures) until they germinate. In their first year, many plants do not flower and only produce a few basal leaves which persist through the summer. Most plants flower by their second year unless stressed by heat or drought.

Wild columbine flowers are loved by many native pollinators. Both bumblebees and Ruby-throated Hummingbirds frequent the flowers as well as butterflies. Interestingly enough, wild columbine nectar has twice the sugar content of other columbines found in North America. Studies have shown that some hummingbirds follow the

blooms northward as it is one of the early blooming nectar plants for hummingbirds. Because the leaves are toxic, wild columbine is a mostly deer resistant plant. Once the seeds develop, they then provide food for buntings and finches.

Back in the day, the seeds of wild columbine were crushed and used by American Indians for headaches, fevers and as love charms. Whole seeds were also rubbed into the scalp and hair to control lice.

In addition to the wild columbine, columbine hybrids of all sorts can also be found. Some hybrids have more erect flowers while others come in shades of blue and purple.



Spring is the season for planting!
Check out the Maryland Native Plant Society website
for Native Plant Sales near you!
(<http://www.mdflora.org/plantsales.html>)

Maryland Native Wildlife Spring Peepers

Forget the groundhogs! To me, the ultimate sign of spring is the unmistakable call of the spring peeper. Spring peepers are tiny treefrogs found throughout Maryland and much of the eastern United States. These little guys only reach lengths up to 1 inch long, and many times, their high-pitched “peep” call is heard more often than they are seen.



Spring peepers vary in color, but they can be ID'ed by the X-mark on their backs.
Photo by John White

Spring peepers have a dynamic color which can change throughout the day to help them blend into their environment. They range from a light beige to a deep brown color and can be easily identified by looking for an X-mark on their back. Spring peepers have long, sticky toes with well developed toe pads to help them climb multiple surfaces. This is a characteristic seen in most species of treefrogs. Since males are responsible for calling out to the females, they have a dark brown vocal sac under their chin. When they call, the vocal sac fills with air, and when it deflates, the vocal sac looks like wrinkled skin. Females have a uniformly colored chin and throat.



Male spring peeper.
Note the vocal sac under his chin.
Photo by Kerry Wixted

In the spring, spring peepers seek out wetlands to breed and lay their eggs. Many times, these areas are temporary wetlands known as vernal pools. Their peak breeding periods take place on rainy nights in late March through April. During this time, males establish their territories which are generally about 0.5m apart. Unlike most other frog species, peepers will lay their eggs singly at the bottom of a pond or under leaves instead of large clumps. After the tadpoles hatch, they take up to 100 days until they metamorph into adult frogs.

While noticeably quieter in the non-breeding season, spring peepers still remain active. Many of the adults move away from their breeding areas and take up residence in habitats that range from moist woods to old fields. During the winter, spring peepers hibernate in small burrows or under leaf litter. Interestingly enough, spring peepers like many other frogs can withstand freezing body fluids for up to two weeks! On average, spring peepers live up to 3 years in the wild.



A calling spring peeper.
Photo by John White

You can attract these little frogs to your yard by providing water sources for them to live and breed within. Ponds with fish are not ideal frog breeding habitat as many fish eat frog eggs and tadpoles. Frogs like all other amphibians have permeable skin that can readily absorb chemicals from the environment.

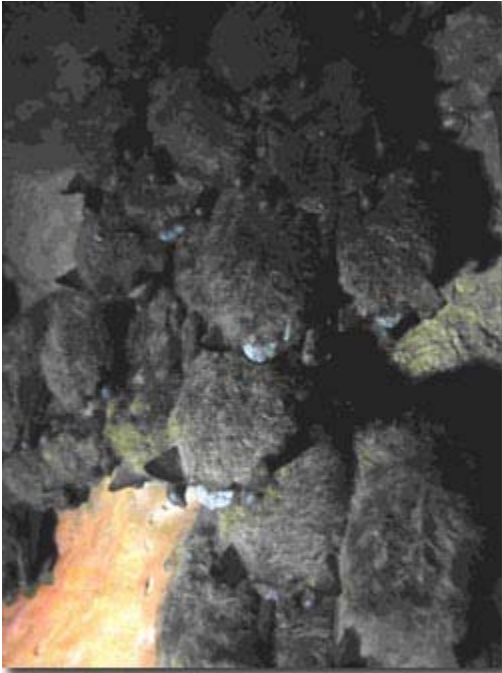
So, to encourage amphibians in your yard, discontinue the use of pesticides and lawn chemicals which can negatively affect these species. Spring peepers and other amphibians eat a variety of insects, many of which are pests, so inviting them into your yard can have multiple benefits!

To learn more about reptile and amphibian species (herps) found in Maryland, check out the [Maryland Herp pages](#). In addition, report any and all herp sightings to the [Maryland Herp Atlas](#), a statewide effort to document reptile and amphibian species across the state. The Herp Atlas is ongoing until December 2014.



Help DNR Monitor Summer Bat Colonies

By: Dana Limpert, MD DNR



Little brown bats (*M. lucifugus*) found in a Maryland cave near Cumberland showing fungal growth on their muzzles, a classic sign of WNS

By now many of you know about how devastating White Nose Syndrome (WNS) has been to bat populations in the eastern U.S. The culprit is a fungus new to science that has been aptly named *Geomyces destructans* that causes bats to use up their fat reserves well before winter is over. WNS-affected bats are often found trying to fly outside of the hibernacula in a last ditch effort to find food (insects) and water. They die shortly after because insects are typically not active in winter.

White-nose syndrome was first discovered in a cave near Albany, New York in February 2006. As of February 17, 2012, WNS has been confirmed or suspected in 18 states in the U.S. from the east to the Midwest and in 4 eastern Canadian provinces. Since 2006, biologists have reported a 90 to 100% decline in hibernating bats at affected caves. The bat species affected include little brown bat, northern long-eared bat, big brown bat, tricolored bat (formerly eastern pipistrelle), Indiana bat, and eastern small-footed bat.

WNS was first detected in Maryland in March 2010. Several dead bats and over two hundred visibly affected bats were found during a hibernacula survey in an Allegany County cave near Cumberland. Bats clearly had white fungus concentrated around the muzzle. The fungus can appear on the wings, ears, and tail membranes as well. Since that time, WNS is suspected or has been confirmed in all the counties in Maryland containing caves or mine hibernacula.

Bats are important predators of night-flying insects including many species that are pests or injurious to agriculture crops and gardens. DNR needs help in monitoring summer colonies of bats to gauge the effect WNS is having on Maryland summer bat colonies especially because bats that spend the summer in Maryland can travel from winter hibernacula in other states.

If you have a summer colony of bats that consistently roost in a bat box or outbuilding such as a barn and are interested in helping DNR bat biologists monitor your colony, please contact Dana Limpert at 410-827-8612 x. 108 for more information. The main requirements are to count the number of bats that exit the bat box or outbuilding in the early evening twice during the summer and report the results back to DNR. Your efforts will greatly help us conserve Maryland bats for future generations.

To learn more about Maryland's bat species, visit the [Discover Maryland's Bats](#) site on the DNR webpage!

Beware of Butterfly Bush

From its name to its flowers, butterfly bush seems like an appealing plant to add to your backyard wildlife habitat. However enticing, butterfly bush (*Buddleja* species) has a dark secret: it's highly invasive. Invasive species are non-native species that cause problems. Butterfly bush can easily spread from plantings to new areas and can compete with native species for resources. While some species of butterflies do enjoy butterfly bush, no native caterpillars host on this plant. Without host plants, butterflies cannot reproduce. In addition, fewer native pollinators will use butterfly bush compared to a similar native species. Therefore, butterfly bush takes up valuable space which could be occupied by species which provide all the needs for wildlife.



**Butterfly bush invading an area in Pennsylvania.
Photo by Kerrie Kyde**

Butterfly bush species are native to both China and South America. Butterfly bushes have been a popular ornamental plant for many years, but many states and countries are now listing this species as invasive. Oregon has gone so far as to ban the sale of this plant. Currently, the Maryland Department of Natural Resources has placed Chinese butterfly bush (*Buddleja davidii*) on our "Do Not Plant" list, which bans planting this species on DNR lands and planting this species for any DNR-funded projects. Butterfly bush is most invasive in dry open ground, and will colonize waste areas with well drained soil. It spreads by wind-dispersed seeds, rapidly grows and forms thickets.

Recent research published in the October 2011 issue of *BioScience* by Tiffany Knight, Kayri Havens and Pati Vitt has also shown that plants marketed as "non-invasive cultivars" of common invasive species like barberry and butterfly bush are still able to spread into natural areas. Therefore, it is best to be an informed consumer and plant native species in your yard or those which are known to not be problematic.

Some native alternatives to butterfly bush that attract and host butterflies include butterflyweed (*Asclepias tuberosa*), sweet pepperbush (*Clethra alnifolia*), Virginia sweetspire (*Itea virginica*), blazing star (*Liatris spicata*) and New York ironweed (*Vernonia noveboracensis*). By planting these species, you are providing the whole package of food, shelter and nurseries for native wildlife! Other tips on planting species to attract native pollinators can be found on our page about Hummingbirds, Butterflies and Bees.

Habitat Tips: Biodegradable Planting Pots

To green your landscape both figuratively and literally, consider making biodegradable planting pots from common household trash. Simple, pre-formed pots can be made out of cardboard egg cartons. Remove the lid to the carton and then fill the compartments up with potting soil and seeds. You can place the planted portion of the carton on top of the old lid. When you are ready to transplant the seeds, cut the compartments apart and place the individual compartments directly in the soil. The cardboard will degrade as your plants grow.

You can also make planting pots from old toilet paper rolls. These are especially good if you want to make long tubes for plants to grow in. Take a toilet paper roll and make $\frac{1}{4}$ inch wide cuts down one end of the roll. Once complete, fold the strips down to form a base to your pot.



Another easy to make planting pot can be made from newspaper or paper grocery bags. Grab sections without a color pictures and cut the paper into long strips at least 7 inches tall. Find a small container, like a jelly jar and wind each strip around the container. The jar should only be used to form the paper, and allow about 1 inch of the paper to overlap one end of the container. Once you are done rolling the paper, push the overlapping paper into the end of the container, forming a base to your roll. Pull the paper off your jar and gently roll the open portion down to form a "lip" on the pot. You can vary the size of your pots to fit your needs. For example, you can roll newspaper around 2-liter soda bottles to create pots large enough for tree seedlings. Voila!

Other Green Growing Tips for your Backyard

- Use cooked egg shells as a soil amendment. You can either crush the egg shells with a mortar and pestle or add large pieces to the soil. If your soil doesn't need the extra calcium, then consider leaving the egg shell pieces on a small plate for nesting birds. Birds require a lot of calcium to produce eggs. Be sure the egg shells have been cooked, though, to prevent the spread of salmonella.
- Use old coffee grounds to add nitrogen to your soil. Coffee grounds are an excellent source of nitrogen. Work used coffee grounds into the soil around your plants as a nutrient supplement. It is good to test your soil before and after application to ensure you have the right nutrient levels for optimal plant growth. Too much nitrogen can be bad for plants and the environment!
- Don't forget to limit your pesticide use. Pesticides often have negative effects on non-target critters.



Wild Acres in Action

Habi-chat reader, Stacy Pikulsky, and her family were treated to the sight of a Bald Eagle about to feast on a Canada Goose. This eagle was seen by the South River golf course in Anne Arundel County, Maryland. Thanks to conservation efforts, Bald Eagles once again can be found throughout Maryland. At this time, many Bald Eagles are tending to newly hatched chicks in their nests, so it is likely this eagle was grabbing food for its young. To learn a little more about Maryland's Bald Eagles, then check out the Bald Eagle page.

Thanks to Stacy for sending in her story, and feel free to send me stories about your Wild Backyard!

Bald Eagle. Photo by Stacy Pikulsky

If you enjoyed this issue of Habichat, you might want to check out our [Online Habichat Archive](#) and the [List of Habichat Articles by Topic](#).

Dates to Remember

- **3/14- 6:30pm** - Wild-scaping Your Backyard Habitat talk by Kerry Wixted, at Quiet Waters Park in Annapolis, MD
<http://www.aacounty.org/RecParks/parks/quietwaters/environmental/lectures.cfm#A>
- **3/20- 7:00pm** - Bringing Nature Home talk by author Doug Tallamy, Cheverly, MD. For more info, visit the Maryland Native Plant Society website: <http://mdflora.org/>

Acknowledgements:

- Spring beauties and buttercups photo by Kerry Wixted
- Wild columbine photos by Kerry Wixted
- Spring peeper photo by John White
- Male spring peeper photo by Kerry Wixted
- Calling spring peeper photo by John White
- Butterfly bush photo by Kerrie Kyde
- Bald Eagle by Stacy Pikulsky

We want to hear from you!

Letters, e-mail, photos, drawings. Let us know how successful you are as you create wildlife habitat on your property.

Write to Me!

Kerry Wixted
Natural Resources Biologist II
Maryland Wildlife and Heritage Service
MD Dept of Natural Resources
580 Taylor Ave., E-1
Annapolis MD 21401
phone: 410-260-8566
fax: 410-260-8596
e-mail: kwixted@dnr.state.md.us



Habichat, the newsletter for Maryland's Stewards of Backyard Wildlife, is published by the Wildlife and Heritage Service, Maryland Department of Natural Resources.

The facilities and services of the Maryland Department of Natural Resources are available to all without regard to race, color, religion, sex, sexual orientation, age, national origin, physical or mental disability. This document is available in alternative format upon request from a qualified individual with a disability.