# **Maryland's Wild Acres**



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

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#### Foreword

Welcome to the Spring Issue of Habi-Chat! Our latest and greatest addition to the Wild Acres site is our new email feature. If you would like to receive future Habi-Chat newsletters in your Inbox, then please click on the box to the right and enter your information. In addition to Habi-Chat, I will also post information on upcoming events of interest. You will be able to unsubscribe anytime and will only receive a maximum of one email per month. We also have a new Facebook page- Maryland Natural Areas- where you can learn more about Maryland wildlife and plants as well as some of the projects that local Maryland Department of Natural Resources biologists are working on.

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!



# <u>Maryland Native Plant Profile: Violets</u> (Viola spp.)



Violets are in the Violaceae family and close to 800 species of violets can be found worldwide. Maryland is home to more than 20 different species of violets! Common violet species include the common blue violet (*Viola sororia*), marsh blue violet (*Viola cucullata*), field pansy (*Viola bicolor*), primrose-leaved violet (*Viola primulifolia*) and striped violet (*Viola striata*). These violets can be found gracing yards, gardens and natural areas across Maryland.

Most violets are perennials which form basal rosettes of kidney-shaped or roundish leaves. The leaves and flowers emerge directly from underground rhizomes. Many Maryland violets appear in early spring, producing flowers in shades of purple, white, yellow and green. Interesting enough, violets produce both showy flowers that attract pollinators such as early nectaring butterflies and bees as well as non-descript flowers that remain closed and near the ground. These two types of flowers allow violets to be both self and cross pollinated, ensuring floral progeny from one method or the other.

Once seeds have been produced, many are collected by ants which are attracted to the oily coating on the seeds. Ants will chew through the coating and discard the rest of the seed. This process moves seeds around and cuts the outer coat of the seed, giving them a greater chance of germinating. Since both the ants and the violets benefit from this process, it is known as a mutualistic relationship.

While many people may find violets to be a backyard pest, violets play an essential role in providing food for hungry fritillary butterfly caterpillars. Without violets, there would be no fritillaries. Great spangled fritillaries are excellent at sensing violets, even after the plants senesce and will lay their eggs near the root of the plants. Other fritillaries will lay their eggs in areas that favor violet growth. When the caterpillars hatch in the fall, they will immediately enter diapause and will not eat or move until the following spring when tasty violet leaves are



available once again. In addition to fritillary butterflies, violets also attract various upland gamebirds including wild turkey, bobwhite quail and mourning dove as well as small mammals. Wild turkeys have also been known to eat the leaves and fleshy roots.



Great-spangled fritillary (left) and variegated fritillary chrysalis (right) by Kerry Wixted

To attract these different wildlife species, consider planting violets in your yard. Or, better yet, transplant them from your lawn into butterfly gardens. Violets can be easily transplanted throughout the year, and often make an excellent groundcover. In the late summer, keep your eyes peeled for the detailed fritillary chrysalises.

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

# Maryland Native Wildlife: Eastern Garter Snake

(Thamnophis s. sirtalis)

To many Marylanders, the shear mention of a snake can start their skin crawling, and seeing one will send them running! One time when I was weeding my Grandmom's garden in Baltimore City, I was so excited to find a gartersnake that I went to show her it. She nearly flew screaming out of her kitchen chair at the sight of a tiny snake, no longer than 12 inches. Try as I may, Grandmom never appreciated snakes, but since I worked on her garden, they were allowed to stay!

Even as a child, I believed that the presence of snakes in an area signaled a healthier ecosystem. Another reason for my snake-induced excitement is that our 27 species of snakes in Maryland provide invaluable pest reduction services. In backyards throughout Maryland, the eastern gartersnake (sometimes mispronounced as the gardnersnake) can be a common sight.



Eastern gartersnakes are non-venomous but can be assertive if handled or agitated. Oftentimes, gartersnakes will emit a foul odor, also known as musk, if handled. Typically, eastern gartersnakes reach a length of 1.5-2 feet, though some whopping specimens have been found to be just over 4 feet long! This snake is greenish, olive, brown or black in appearance with a distinct yellow or white stripe down the center of its back. In addition to the main stripe, there may also be white to yellow stripes on either side of the center stripe, and oftentimes, there is a checkerboard pattern of blackish and green spots on their sides. These slithery serpents have keeled scales across their body which give them traction.

Eastern gartersnakes can be found in every county in Maryland in areas ranging from suburban backyards to forests, meadows, old fields, riparian areas and marshes. They are diurnal, meaning that they are most active during the day, and can usually be found hiding in vegetation or under logs.

Gartersnakes feed upon frogs, toads, salamanders, earthworms, small fish, tadpoles, bird eggs, crayfish, leeches, and other small snakes. Gartersnakes are useful garden inhabitants as they also feed upon slugs, mice and pest insects. In addition, they eat carrion, and often will get run over by cars when feeding upon roadkill.

In late March through May, eastern gartersnakes seek out mates, and form a "breeding ball" during the mating process. Unlike most snakes, eastern gartersnakes do not lay eggs, rather they give birth to over 50 live young at a time. Survival for these young snakes is rather low as hawks, skunks, raccoons, opossums, larger snakes, and bullfrogs are common predators. Red-shouldered hawks, in particular, seek out gartersnakes to feed their young.

In the winter, gartersnakes will bruminate (a form of hibernation), often with other individuals in winter dens constructed under large rocks or in abandoned mammal burrows.



To learn more about reptile and amphibian species (herps) found in Maryland, check out the <u>Maryland Herp pages</u>. In addition, report any and all amphibian and reptile sightings to the <u>Maryland Amphibian and Reptile Atlas</u>, a statewide effort to document reptile and amphibian species across the state. The Atlas is continuing through December 2014.

### Habitat Tips: Citizen Science in Your Backyard

#### Have you ever thought about turning your backyard into a science lab? No??? Well, why not?!

Now more than ever, scientists are turning to local citizens to help collect data on the world around them. You can even help collect data indoors (but it is much more fun outside- I promise!). From monitoring monarchs and flowering plants to reptile and amphibian sightings, your individual observations can easily be entered into online databases. Here is a small selection of some citizen science projects that you can conduct in your backyard.

#### Celebrate Urban Birds (http://celebrateurbanbirds.org)

Celebrate Urban Birds provides an opportunity for everyone across the country to watch birds and participate in activities focused on birds and neighborhood habitat improvement. Participants learn about 16 species of birds and then observe an area about the size of half a basketball court for 10 minutes to see if they can find any of those birds. Scientists will use data collected from participants to study these resident and migratory birds - their numbers, their behavior, their interaction with the urban habitat.

#### FrogWatch USA (http://www.aza.org/frogwatch/)

FrogWatch USA is a citizen science program in which participants report the calls of local frogs and toads. The data help scientists understand patterns of amphibian distributions and declines across the United States. FrogWatch USA information and ongoing data analysis have been used to develop practical strategies for the conservation of these important amphibians.



#### Hummingbirds at Home (http://birds.audubon.org/hummingbirds-home)

Hummingbirds at Home is a brand new citizen science initiative from Audubon. The project will help scientists understand how climate change, flowering patterns and use of feeders are impacting hummingbirds. On the Hummingbirds at Home website you can track, report on and follow the spring hummingbird migration in real time. In addition, a free mobile app makes it easy to report sightings, share photos and learn more about these remarkable birds.



#### Maryland Amphibian and Reptile Atlas (http://marylandnaturalist.org/mara/)

The Maryland Amphibian and Reptile Atlas (MARA) is a five-year, joint project of the Natural History Society of Maryland and Maryland Department of Natural Resources. The goal of the MARA project is to document the current distributions of Maryland's amphibian and reptile species. This information will help scientists identify future changes in the distribution of amphibians and reptiles in Maryland as well as promote the conservation and protection of Maryland's reptiles and amphibians.

#### Project BudBurst (http://budburst.org/)

Project BudBurst is a year round survey of plants within the United States. BudBurst participants monitor plants as the seasons change and submit ecological data based on the timing of leaf out, flowering, and fruiting of plants. Observations can be single reports on an observed plant's status or can include regular reports on the same plant. This information helps scientists understand how plants respond to changing climates.

# Project FeederWatch

# Embrace the winter. Count feeder birds for science!

#### Project FeederWatch (http://www.birds.cornell.edu/pfw/)

Project FeederWatch is a winter-long survey of birds that visit feeders at backyards, nature centers, community areas, and other locales in North America. FeederWatchers periodically count the birds they see at their feeders from November through early April and send their counts to Project FeederWatch. FeederWatch data help scientists track broadscale movements of winter bird populations and long-term trends in bird distribution and abundance.



## Backyard Wildlife Fun for Kids: BudBurst Buddies

As the shrubs and trees begin to bloom, consider recording those observations on the online citizen science campaign, Project BudBurst. Project BudBurst also has a campaign for younger citizen scientists known as <u>BudBurst Buddies</u>.

BudBurst Buddies encourages young learners to make simple observations of how plants change through the season. By following the explorations of <u>Lily and Sage</u>, children can undertake their own scientific investigation that includes making observations and reporting them online.

Budburst Buddies is designed to help young learners at an elementary learning level become aware that plants respond to changing seasons. Kids get to choose a plant they want to monitor and will then record their observations via journal pages. Kids can fill out their initial plant information right away and then are tasked with visiting their plant 3 additional times to complete their observations. Of course, there is an easy to use reference guide for parents and educators.



# **Upcoming Events**

- Wednesday March 20, 7-9:00PM. Still Life in a Vernal Pool. Program designed for folks interested in sketching natural objects. Maryland Naturalist Center in Baltimore. \$3 for members and \$7 for non-members.
   (http://www.meetup.com/marylandnature/events/107646332/)
- Friday March 22, 7:30-9:00PM. Nature Adventure Series Talk on Bluebirds by Katharine Patterson. Maryland Naturalist Center in Baltimore. \$5 for members and \$10 for non-members. (<a href="http://www.meetup.com/marylandnature/events/106434882/">http://www.meetup.com/marylandnature/events/106434882/</a>)
- Saturday March 23, 10-4:00PM. Rain Gardens as Outdoor Classrooms. Environmental Concern in St. Michael's, MD. \$40/person. Please register in advance. For more information and to register, then go here: <a href="http://www.wetland.org/education\_schedule.htm">http://www.wetland.org/education\_schedule.htm</a>
- Saturday April 6, 10-12:00PM- Rain barrel workshop. Environmental Concern in St. Michael's, MD. \$15 for workshop only or \$55 for workshop and barrel. Please register in advance. For more information and to register, then go here: http://www.wetland.org/education\_schedule.htm
- Saturday April 13, 10-11:30 AM- Cool Things About Box Turtles by Sandy Barnett. See and experience how scientists use special detection equipment to follow and study the life of box turtles in the wild, and meet live adult turtles up close and personal. The morning will end with a walk to nearby areas where box turtles might call home. Free. Howard County Conservancy (http://www.hcconservancy.org/upcoming-events.html)
- Sunday April 14, 3:00-4:00 PM- Marvelous Mammals of Anne Arundel County by Kerry Wixted. Learn about mammals that
  used to roam in Maryland as well as mammals still found in the area. Free. Carrie Weedon Science Center in Galesville, MD.
  <a href="http://www.carrieweedon.org/speakers.htm">http://www.carrieweedon.org/speakers.htm</a>
- Monday, April 15, 7:30 PM "Bringing Nature Home" by: Doug Tallamy, Professor University of Delaware. This talk will be held at the Oregon Ridge Lodge. Admission fee: \$10 (Members \$5). Advance tickets may be purchased at the Nature Center: Tuesday through Sunday from 9-5. Tickets will also be sold at the door. Call 410-887-1815 for questions or information.
- Saturday April 20, 8-1:00pm- Earth Day at Howard County Conservancy. Join a bird walk with the Howard County Bird Club, help remove invasive and plant trees, and participate in nature crafts. Free. (<a href="http://www.hcconservancy.org/upcoming-events.html">http://www.hcconservancy.org/upcoming-events.html</a>)

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.

#### **Acknowledgements:**

- Common blue violet photo courtesy of Wikimedia Commons
- All other photos by Kerry Wixted



## 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!

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