BY THE YARD HORTICULTURE NEWSLETTER

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The Fayette County **Extension Office will** be closed on Monday, June 20, 2022 in observance of **Juneteenth**



June is National Pollinators Month

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2022

Happy Summer everyone! This spring sure has been a slow one but now June is here, our gardens and flowers are growing, and we're excited for the warm weather. June also happens to be the National Pollinators Month, and this month we encourage you to plant flowers and build habitat supporting these important animals. Pollinators are an incredibly important resource that aren't given the credit they're due. The National Wildlife Federation claims that pollinators are responsible for 1 of every 3 bites of food that we take. Just imagine how many fruits and vegetables your garden produces that are a result of the work of a handy little bee!

Populations of many pollinators such as Monarch Butterflies and bees have been in decline. While there are many reasons for this. one of the most important is the loss of habitat that can support these insects. Habitat loss can be remedied by planting trees, shrubs, and flowers that provide necessary resources for pollinators. Additionally, by planting more pollinator habitat, we are also creating valuable habitat for other wildlife. Pollinator friendly habitat provides both shelter and food resources for many birds, toads, and other helpful garden critters.

In celebration of National Pollinators Month, we've dedicated this

issue to pollinators and selected topics that might help you get started.

As always, if you have any questions or concerns, please to not hesitate to reach out. We are always happy to help! Happy planting folks!



Cooperative Extension Service Agriculture and Natural Resources Family and Consumer Sciences

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Creating and maintaining pollinator friendly habitat

Many types of insects feed on pollen and nectar, although two types of pollinators receive the most attention: bees and butterflies. The best way to encourage bees and butterflies is to grow many different types of flowering plants that produce nectar and pollen. Consider how much lawn you maintain and whether any of it could become habitat for pollinators by adding a diverse collection of plants. Consider allowing clover, ground ivy, black medic, vetch, dandelions, and other flowering weeds to grow in your lawn, educating others about the benefit of flowering weeds, and helping change local ordinances that prohibit these "weeds" from growing in your area. Incorporate more flowering annuals, perennials including bulbs and herbs, shrubs and trees into your yard and garden so there is always something blooming throughout the season from early spring through autumn.

For natural areas of the yard and garden, or border areas, see the list of native plants below or find a region-specific list of pollinator-friendly plants, like one available at the Michigan State University Native Plants and Beneficial Insects website: www.nativeplants.msu.edu. Native plants are strongly recommended, but there are also many non-native ornamental plants that are excellent food plants for bees and butterflies. See our lists of plants that provide pollen and nectar for bees and butterflies.

There are several reasons why it is important to use the genus/species name (scientific name) when you investigate and buy your plants, trees and shrubs. Common names may be regional and could refer to a different type of flower depending upon local tradition. Also, be sure to find the exact species listed below because other species in the same genus may not be attractive to bees. Salvia, for example, is a popular annual bedding plant, but red salvia, which is a popular annual in the north central region, is not highly attractive to bees while blue salvia, Salvia farinacea, and several types of perennial salvia (Salvia nemorosa) are. Also, some cultivars of flowers may be more attractive than others.



Do you call it butterfly milkweed or butterfly weed? Both are common names. The scientific or Latin name is always Asclepias tuberosa. Photo by David Cappaert, Bugwood.org.

The way you care for your plants also impacts whether blooms are available. Think about pruning plants such as Nepeta to encourage repeat bloom and slow to deadhead those such as Hosta that won't bloom again so bees have a change to forage on their blossoms.

Source: Michigan State Extension: David Smitley, MSU Entomology; Diane Brown, Rebecca Finneran and Erwin Elsner, MSU Extension; Joy Landis, MSU IPM; Paula Shrewsbury, Univ. of MD Entomology; Daniel Herms, The Davey Tree Expert Company, Kent, OH; and Cristi L. Palmer, IR-4 Project-Rutgers - May 1, 2019

Tyson's Pollinator Picks



1.Purple Coneflower (Echinacea purpurea): Common native wildflower that has many cultivated varieties. Cultivated varieties (also known as cultivars) are recommended over the straight species for improved disease resistance and growth habit. Avoid double flowered varieties as they provide little to no resources for pollinators. The 'Pica Bella' Purple Coneflower was the top performing variety in the 2018-2020 coneflower trial at the Mt. Cuba Center

botanical garden. It was noted for being well visited by pollinators and having a compact growth habit. Not all cultivars are created equal, and some tend to disappear from the garden after a few years. The American Goldfinch loves the seeds of purple coneflower, so don't deadhead your plants if you would like to attract this lovely bird to your garden.

2.Joe Pye Weed (Eutrochium spp.): 4 species native to Kentucky. Most are tall (6-10') and best suited for moist areas or rain gardens. Joe Pye weed is a favorite among swallowtail and other large butterflies. The huge cloud-like inflorescences are also attractive to bees. Excellent statement plant for the back of a bed or to use as screening during the growing season.

3.Goldenrod (Solidago spp. and Oligoneuron spp.): Many species native to Kentucky which is fitting as the goldenrod is the official state flower of Kentucky. Goldenrods are an important pollinator resource for late in the growing season when not much else is in bloom. Contrary to popular belief Goldenrods do not cause hay fever. The pollen of goldenrods is too heavy and sticky to be moved by the wind, only an insect can carry it. The true



culprit of hay fever is Ragweed, which blooms at the same time as many goldenrods. Clump forming species are preferred in the garden as rhizomatous species like Canadian goldenrod can be extremely aggressive and take over a flower bed.

4.Ornamental/native onions (Allium spp.): 4 species native to Kentucky. Great pollinator plant for bees. Native species can be aggressive spreaders and may not be as ornamental as cultivated varieties. Allium 'Millenium' is one of the best performing ornamental varieties in the market. This variety has very uniform flower coverage and decreased fertility making it perfect for the home landscape. When planted en masse you will attract droves of bees.



5.Mountain Mint (Pycnanthemum spp.): 9 species native to Kentucky. Mountain mints are easily one of the most visited plants by pollinators when in bloom. You will often hear the plants buzzing from the amount of insect activity on the flowers. All species can be overly aggressive in the home garden. They will readily spread by root runners so plant them only if you have the space.

Tyson's Pollinator Picks (continued)

6.Spring Beauty (Claytonia virginica): petite spring ephemeral. Small star shaped flowers adorn the plant from late March to early May. This little flower is the same plant that carpets the lawn of the Henry Clay estate in early spring. It is a crucial resource for pollinators in early spring. The shallow flowers allow access to all species of bees and butterflies. This little plant is well adapted for naturalizing within lawns in the spring along with happily growing in flowerbeds. It will go dormant in the summer and die back to a small bulb buried underground.



7.Button Bush (Cephalanthus occidentalis): Medium to large sized native shrub. Perfect for wet spots but will also tolerate brief dry spells. White golf ball sized blooms in summer that are a magnet for butterflies and bumblebees. If successfully pollinated will produce an unusual ball of seeds which some species of birds will consume over the winter.

8. Seven-Sons Tree (Heptacodium miconiodes): Small tree 10-20' tall. One of the latest blooming trees that can be grown in Kentucky. Although this species is non-native it has incredible value as a late season pollinator resource. It is loved by Monarch butterflies during their fall migration. Bumble bees and other native bee species are attracted to the flowers as well. Flowers are also very fragrant with a scent reminiscent of jasmine.

9.Serviceberry (Amelanchier spp.): Handful of species native to Kentucky. The naturally occurring hybrid Amelanchier x intermedia is used more often in horticulture. Small spikes of flowers are produced in late April, followed by edible purple berries that ripen in late May-early June. The flowers are visited by many species of bees and flies, and the foliage is eaten by the caterpillar of the Red-spotted Purple butterfly.



10.Golden Alexander (Zizia aurea): Small Kentucky native species with delicate yellow flowers in the late spring. Begins flowering after many spring ephemerals have stopped flowering. As a member of the carrot family the golden alexander is a host plant for Black Swallowtail Butterflies. Very adaptable and easy to grow, does best in partial sun and average garden conditions. Can reseed to form small colonies but not too aggressive for the home garden.

Insect Spotlight: Hover, Flower or Syrphid Flies (Syrphidae)

When asked about what type of insects function as pollinators most people would correctly respond with butterflies or bees. It might be surprising to hear that there is another type of insect that plays an important role as both pollinator and pest control. This group of insects are flies...and no I am not referring to the large black houseflies that bump into your kitchen window for hours on end evading attempts at capture or smashing. I'm actually referring to the humble and quite large family of hover flies, sometimes also referred to as flower flies.

These little flies are often overlooked as pollinators. Despite this they are an important pollinator for many of our native plants and crops. Flower flies oftentimes make up a similar proportion of flower visitors as bees and are even the dominant group of pollinators in some habitats and plants. The adults of all known species feed on both the nectar and pollen of flowers and seem to prefer plants with open bowl-shaped flowers. However, little research has been performed to truly quantify the flower preferences of this family, so there is much we do not know about how to attract them to visit the garden.



Adult hoverflies feed on nectar and pollen.

– Susan Mahr, Univ. of WI - Madison

These little flies are experts of disguise with many species mimicking bees and wasps in both color and body shape. You will frequently see them darting around flowers in your garden or hovering around you trying to drink your sweat on a hot sunny day. Do not be alarmed by their flashy costumes. These little flies are harmless and cannot sting or bite. Their bee mimicry is bluff for predators who want to avoid a painful sting.

The larvae of some species of hover flies are voracious predators of aphids and other small insects. They usually go unnoticed due to their small size and green colored bodies, but it is thought that hover fly larvae are responsible for a considerable amount of aphid predation, particularly toward the end of the growing season. Because of this they are a helpful ally in the garden for pest control.



Predatory flower fly larva feeding on aphids. (Image courtesy University of Florida

Next time you are out in the garden keep a lookout for these helpful insects. What you might think is a tiny bee might be a harmless little hover fly!

Check out Lexington's Plant by Numbers website for many garden design templates utilizing natives for pollinators.

https://www.lexingtonky.gov/PlantByNumbers



Master Gardener Volunteer Training

Extension Master Gardener is a rigorous volunteer training program that prepares candidates to serve the Extension Horticulture program. We offer the program beginning in September of alternating years.

Our class meets Tuesday and Thursday mornings from 9:00 a.m. till noon for roughly 15 weeks beginning around Labor Day. In addition to class time, students are required to complete a homework assignment and quiz for each class session. Students also prepare and submit insect and tree collections outside of class time. After the classroom portion, students are required to pass a comprehensive final exam with a minimum score of 70%. Students are allowed 2 absences from class, regardless of circumstances, and the third absence equates to dismissal from the program. Students who successfully pass the classroom portion become apprentice Extension Master Gardeners for the following year while they complete 40 hours of volunteer service in assigned activities.

After completing the 40 hour volunteer requirement apprentices become fully certified Extension Master Gardener volunteers. This entire process encompasses 15-18 months. After the initial apprentice year, volunteers remain in the program by volunteering a minimum of 20 hours and earning 10 Continuing Education Units (CEU) per year.

The cost of the Fayette County Extension Master Gardener training is \$150.00 which includes textbooks and other materials. We do offer partial and full scholarships to the program in exchange for additional volunteer time. The training fee is non-refundable if a student withdraws or is dismissed from the program. Since our greatest need for volunteers coincides with our office hours we do not offer this program as an evening or weekend class. If you feel up to the challenge and would like to join the ranks of our highly skilled volunteers, please consider applying for the next Extension Master Gardener class.

Complete the paperwork and mail or drop it off at the front office at the Extension Office.

We will contact our top applicants to interview for a potential spot in this year's training in August.

Deadline to apply is: July 8, 2022

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KENTUCKY MASTER GARDENER APPLICATION

Kentucky Extension Master Gardener Please answer each question thoroughly and thoughtfully. It is our objective to offer a quality program to committed, interested individuals. PLEASE PRINT

NAME:		PHONE:			
(FIRST)	(LAST)				
ADDRESS:					
(STREET)		(CITY)	(ZIP)		
E-MAIL ADDRESS:		СНЕСИ	X IT OFTEN? Y or N		
OCCUPATION: (CURRENT	'AND/OR PREVIOU	JS):			
Indicate highest educational	level you attained:				
High School		Graduate School			
Undergraduate School		List advanced degree			
Do you have any special need	ds? If yes, please des	scribe:			
What is your interest or expe	erience in horticultui	re (gardening)?			
Why are you interested in vo	lunteering in our co	mmunity?			
Have you done volunteer wo If yes, when and what type:	rk before?Yes	_ No			
Are you able to attend all cla	ss sessions? YES	NO			
Are you willing and able to p Extension Service? Yes _		(40) hour volunteer requiremen	nt to the		
When would you be able to v	olunteer?				
Days Evenings \	Weekends Othe	ver			

I LIKE:	A Lot	A Little	Not At All
Speaking to groups			
Speaking to individuals			
Working in small groups			
Serving in volunteer organizations			
Writing newsletter articles			
Presiding at meetings			
Organizing programs/events			
Camping/recreation			
Working with community gardeners			
Record keeping/doing paper work			
Serving on committees			
Typing/computer/newsletter			
Coordinating a demonstration garden			
In a few words, please state why you would like	to become a	Kentucky Ma	ster Gardener.
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I wish to become a University of Kentuc training program. I understand that af			
participate in a forty (40) hours volunted Service to be completed in the following	er requireı	nent to the (Cooperative Extension
Gardener title and use it only in referen			
not for personal gain.			
Signature		Date	
0	_		
Return Application to:			
Master Gardener Application			
Fayette County Extension Service 1140 Harry Sykes Way			

Lexington KY 40504

Please check $\underline{\textbf{each}}$ of the following volunteer experiences according to your interest:

Goldenrod for the home garden

Goldenrods are a valuable resource for pollinators in the late summer and fall when many other plants have stopped blooming. They are an iconic group of plants in the Kentucky landscape. Dotting the roadside and fields their golden inflorescences act as a beacon for migrating monarchs, busy soldier beetles, and buzzing bees trying to store up nectar and pollen for the long winter ahead. Goldenrods are so iconic to Kentucky that they are our official state flower. Unfortunately, Goldenrods are wrongly blamed for causing hay fever and other seasonal allergies as their bloom period coincides with wind pollinated plants such as common ragweed and its related species. Rest assured that goldenrods are physically incapable of causing allergies as their pollen is too large and sticky to be dispersed by the wind. Goldenrod pollen can only be picked up and moved around by the very insects they are attracting to their flowers. Another less discussed benefit goldenrods provide is they function as food source for birds through both the insects attracted to the plants and the seeds developed in the fall. The American goldfinch is known to enjoy the seeds of goldenrods, but other members of the Finch family will also eat goldenrod seeds.

- Wrinkleleaf goldenrod (Solidago rugosa 'Fireworks'): 'Fireworks' is an improved selection of the species. Grows best in consistently moist soils. Spreads slowly by creeping rhizomes.
- Short's Goldenrod (Solidago shortii 'Solar Cascade'): Endangered species originally found on limestone bluff in Louisville KY. 'Solar Cascade' is an improved selection that does not spread as aggressively as the straight species. Extremely drought tolerant and well adapted to the limestone soils of the bluegrass.

Ragweed in bloom. Note the fern-like leaves. Credit: Joey Williamson, ©2013 HGIC, Clemson Extension

- Dwarf Goldenrod (Solidago sphacelata 'Golden Fleece'): 'Golden Fleece' is an improved selection of the species with a dwarf spreading habit. Will make a dense groundcover only growing 1-2ft tall. Great for a sunny border. Drought tolerant once established.
- Riddell's Goldenrod (Oligoneuron riddellii): Clump forming species, grows best on moist soils. Similar to Ohio goldenrod but blooms about 1 month later
- Ohio Goldenrod (Oligoneuron ohioense): Clump forming species. Loves wet heavy soils, intolerant of drying out for extended periods. Earlier bloom time than most goldenrods
- Zigzag Goldenrod (Solidago flexicaulis): One of the most shade tolerant goldenrod species. Will from a dense groundcover even in heavy shade. Great for late season color in a shade garden. Can spread quickly in favorable conditions. Not well suited for small areas.
- Upland White Goldenrod (Oligoneuron album): Dwarf clump forming species adapted to dry rocky soils. Excellent choice for rock gardens or easement plantings. Intolerant of overly wet conditions.
- Anise Scented Goldenrod (Solidago odora): Tall slowly spreading species best suited for dry sunny areas. The foliage and stems smell like anise when crushed. The leaves and dried flowers can be used to make herbal teas.



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