In this Issue:

Make sure to see EVERYPAGE in the newsletter, lots of great pictures and information included AGAIN this month!
News from Education Coordinator

From the ISU Extension and Outreach Master Gardener Newsletter
August 2020 Issue

No Hours Requirement in 2020

There will be no hours requirements for Iowa Master Gardener volunteers and interns in 2020. While many of you have found ways to volunteer while socially distanced, MG volunteers will not be required to volunteer or participate in continuing education in 2020. See the letter from Dr. John Lawrence here.

If you do decide to log hours, please sign in to the Volunteer Reporting System here.

Virtual continuing education opportunities:
Presentations from West Pottawattamie County Master Gardener: YouTube: West Pottawattamie
- Succulents
- Urban trees
- Vegetable gardening 101, and more!
Presentations from Woodbury County Master Gardener: YouTube Woodbury
- Native plants
- Seed starting
- Trees to replace ash, and more!

Many Master Gardener events are still not taking place due to COVID-19. If there are any in-person events that arise, we will add them to the calendar below.

See the full list of upcoming events here: https://www.extension.iastate.edu/mastergardener/events

Upcoming Opportunities from the University of Illinois Extension

Everyday Environment Watershed Planning: | September 10 | 1 PM
Hardscaping Basics for Patios and Retaining Walls | Tues September 15 | 1:30 p.m.

Virtual Monarch Migration Festival
Tue - Sat | Sept 8-12 | 1pm

Join in workshops to celebrate and raise awareness for the Monarch butterfly.
- Sept. 8: Learn all about tagging and releasing Monarch butterflies for scientific research and see an actual release.
- Sept. 9: Learn all about the Monarch lifecycle and see live examples.
- Sept. 10: Create your own Monarch Life Cycle artwork using uncooked pasta.
- Sept. 11: Build your own winter sowing greenhouse and grow your own milkweed seeds.
- Sept. 12: Virtual tour of a Monarch Waystation. Learn all about the plants needed to attract and sustain pollinators.
Muscatine Branching Out has released applications early for their Fall Tree Program. This year's varieties include: Aspen, Arborvitae, Birch, Crabapple, Ginkgo, Hawthorn, Oak, Tree Lilac and Weeping Willow. Deadline for pre-ordering is September 20th.

Muscatine Power and Water funds this annual event. Applications are available at the MPW drive-through window OR you can download from the Muscatine Branching Out Facebook page OR you can email MuscatineBranchingOut@gmail.com.

Orders will be filled on a first come - first served basis. Your order will be confirmed by email as soon as it is processed.
Tree Varieties and Information

**Large shade trees:**

Gingko 50 ft
- Gingko is hardy, pest-resistant and attractive large tree.
- Unusual fan shaped leaves with vivid yellow fall color.

Quaking Aspen 40 ft
- Fast growing tree with smooth, silvery gray bark.
- Bright yellow fall color.

Weeping Willow 35 ft
- Graceful, drooping form.
- Willow is fast growing and tolerant of wet sites.

Swamp White Oak 55 ft
- A native tree great for wildlife and provides deep shade.
- Highly tolerant of many sites wet to dry.

Bur Oak 75 ft
- A native, majestic tall tree with a wide canopy.
- Tolerant of many sites and great for wildlife.

River Birch 40 ft
- Beautiful, multi-colored peeling bark, with multiple stems.
- Native tree that tolerates wet soil, with yellow fall color.

**Small trees:**

Coralburst Crabapple 10 ft
- A small crabapple with a compact, round canopy.
- Ruby-red buds open to pink blossoms turning to orange fruits.

Crimson Cloud Hawthorn 20 ft
- Beautiful unique red and white blooms.
- Glossy red fruits for birds in the fall.

Summer Charm Tree Lilac 15 ft
- Showy, fragrant white plumes late spring.
- Attractive, peeling dark brown bark.

**Evergreen:**

Emerald Green Arborvitae 15 ft
- Fast growing, handsome pyramidal growth form.
- Great tree for foundation planting, attractive in all seasons.
Muscatine Master Gardener Meetings – August 2020

Board Meeting – September 8, 2020 via Webex

The Muscatine County Master Gardeners held two Webex Meetings this past month. Both were intended to have an educational tour of Discovery Garden at the State Fair Grounds.

We met on Tuesday, the 11th without the tour which was cancelled due to the derecho storm which inhibited internet service to the grounds.

Members in attendance discussed options for Fall Meetings and concluded the following:

For the Fall we should meet more frequently than previously, suggested combining the General Meeting and the Board Meeting evening with a general meeting possibly preceding the board meeting.

Suggested schedule might be September 8, October 13, November 10 and December 8.

Can promote online Master Gardener Training now.

Have an educational session as a part of the meeting…suggested topics were: Damaged Trees and tours of member gardens etc.

The original Fair Grounds Tour was rescheduled along with the board meeting and general meeting to Tuesday, August 18, 2020. The tour was held, however, the internet reception was intermittent. The tour guides did an excellent job providing commentary about the gardens.

We were invited to the Fair Grounds Discovery Garden for a personal tour by the Polk County Master Gardeners.

The Master Gardener Board will meet on Tuesday, September 8, 2020 at 6:00 pm via Webex to discuss plans for the Fall and to take up general business of the organization.

Details about Fall meetings of the General Membership will be provided after the Board Meeting on the 8th!!
Places to Go and Beautiful Things to See!! Right Here in Iowa
By Mary Wildermuth, Master Gardener

Discovery Garden – Iowa State Fair Ground
http://www.discoverygardenpcmg.org/home/links

As Master Gardeners we had the pleasure of a Webex Tour of the Discovery Garden at the Iowa State Fair Grounds led by the Polk County Master Gardeners including Dean Brand, Joyce Carle, Jean Roe, Patrick Schmitt and Kalsa Browning. The gardens are at their peak during the Iowa State Fair. We were able to reschedule our tour to the 18th of August to catch the best of the best, unfortunately our reception was not the best so we captured the essence of the gardens through glimpses and great commentary. To experience Discovery garden we suggest a day trip to the Fair Grounds. The garden is right next to the Agriculture Building and parking is free and very accessible on Monday, Tuesday or Wednesday.

If you use the included link you can see for yourself the beauty and breadth of the gardens. Thanks to Master Gardener Bill Ko- ellener for introducing us!!

The Iowa Arboretum – Madrid, Iowa
https://iowaarboretum.org/experience/

The only experience right now is a virtual one since the Arboretum is closed due to severe storm damage on the 17th.

The Iowa Arboretum is located in Madrid, Iowa in Boone County. Over 160 acres in Boone County’s Des Moines River Valley showcases hundreds of species of trees, shrubs and flowering plants in a tranquil setting. Woodland and prairie trails provide wonderful outdoor walking opportunities.

Muscatine’s own Anna Opel is recognized here by the Muscatine Garden Club who purchased an acre in her honor.

Muscatine’s Weed Park Zoo Garden
https://visitmuscatine.com/230/Weed-Park

Don’t forget our own Zoo Garden. You can use the link above or just take a little trip yourself to see the garden that our fellow Master Gardeners led by Maryrose Peterschmidt work so hard to keep beautiful.

(Gretchen I have attached the photos to go here!!)
Places to Go and Beautiful Things to See!! Right Here in Iowa
By Mary Wildermuth, Master Gardener

Iowa Gardens of the Past
https://iowagardens.com/

And if you want to read about Gardens in Iowa you might want to purchase Beth’s book!
Iowa Gardens of the Past
By Beth Cody
Hardcover, 8” x 10.75”
320 full-color glossy pages
250+ grayscale & color garden images
packed with vintage Iowa seed catalog art
$38.99 (with free shipping)

Use the link to find out more!!
Zion Lutheran Church Donation Garden

By Terri Hanson, Master Gardener

We have been taking our produce to the Jesus Mission. They use it in the meals they serve, and also put it in their food pantry to hand out to people.

Terri Hanson

Zion Lutheran donation garden
Like the year 2020, the Master Gardener donation garden at the Muscatine Church of Christ at 3603 North Mulberry will go down as an amazing one in many ways.

In the spring, with March Covid news and also with the "working from home" status of the Iowa Extension office, we weren't sure if we would be able to have an "official" garden. Plants were not available for purchase, there was only one "official donation garden" and that was at Iowa State University. We were given some plants late in the season, due to the cold spring temperatures, and we also were finally able to find some plants. We grew everything from plants, or starts.

The garden grew in abundance: tomatoes, onions, eggplant, zucchini, beets (the moles ate those!), cabbage, broccoli, and kale. Half of our garden was planted with sweet corn, but the stormy winds destroyed our already tasseled crop.

The MCSA food pantry was only working limited days and hours, and was closed temporarily for a couple weeks, so we found other sources to donate to when they weren't open. Jesus Mission, elderly, homebound folks in town we knew would appreciate it. We weighed the fresh produce as we distributed it, and have a grand total of 1000 pounds!!! It is about half of last years, but, all in all, we are pleased that we had that much to contribute! We have been blessed and thank the Iowa State Donation Garden grants for allowing us to work in the garden and give to the community in this way.
The Zoo Garden committee has begun the search to replace the audio kiosks. Efforts are being made to find a way to:

- reuse the existing speaker bases

- upgrade the kiosks to match the animal sculptures.
Pollinator Plantings for Year Round Landscape and Community Areas

By Bill Koellner, Master Gardener

Pollinator’s play an essential role in food production as well as pollinating native plants. There are more than 450 native bee species in Iowa, but pollinator populations also include butterflies, moths, beetles, and native flies. The decline of their populations, and beneficial insect populations worldwide has led to significant concern by conservation professionals, legislators, and the public. Pollinators are essential to healthy ecological systems. Planting for pollinators has additional benefits including habitat for other species, stormwater infiltration, soil microbial health, and carbon sequestration. And there are benefits for our communities, experiences with pollinators and the flowers they rely on, enrich our lives.

Native Plants Wild bees overwhelmingly prefer native plants. Research has found that native plants in home gardens help enhance wild bee populations and diversity. There are few or no blooming plants in many yards, and many plants that only provide a brief-time period. Gardeners need to plant a variety of plants will bloom during the total growing season. There is a need for nesting locations for birds and pollinators. Ground nesting and cavity nesting bees need specific conditions to survive and reproduce. Most of us would not intentionally spray bumble bees or butterflies with insecticides but may use chemicals harmful to pollinators without making a connection to the harm they cause to other creatures.

Top ten plants for native bumblebees are Virginia Bluebells (*Mertensia virginica*); Blazingstars (*Liatris species*); Wild White Indigo (*Baptisia alba*); Milkweeds (*Asclepias*); Goldenrods (*Solidago*) species; Beebalms (*Monarda*); Beardtongues or Penstemon; Red Columbine (*Aquilegia canadensis*); Asters (*Asteraceae*); Blue Giant Hyssop (*Agastache foeniculum*).

Use a wide variety of plants that bloom from early spring into late fall. Help pollinators find them by planting in clumps, rather than single plants. Include plants native to your region. Natives are adapted to your local climate, soil and native pollinators. Night-blooming flowers will support moths and bats.

Avoid modern hybrid flowers, especially those with "doubled" flowers. These plants left the pollen, nectar, and fragrance out of these blossoms while creating the "perfect" blooms.

Eliminate pesticides whenever possible. If you must use a pesticide, use the least-toxic material possible. Read labels carefully before purchasing, as many pesticides are especially dangerous for bees. Use the product properly. Spray at night when bees and other pollinators are not active.

Include larval host plants in your landscape. If you want colorful butterflies, grow plants for their caterpillars. They WILL eat them, so place them where unsightly leaf damage can be tolerated. Accept that some host plants are less than ornamental if not outright weeds. Use a butterfly guide that will help you determine the plants you need to include.

Think about creating a damp salt lick for butterflies and bees. Use a dripping hose, drip irrigation line, or place your bird bath on bare soil to create a damp area. Mix a small bit of table salt (sea salt is preferred) or wood ashes into the mud.
Pollinator Plantings for Year Round Landscape and Community Areas

By Bill Koellner, Master Gardener

Save a dead branch! Placement of dead wood, or at least an occasional dead limb, you provide essential nesting sites for native bees. You can add to nectar resources by providing a hummingbird feeder. To make artificial nectar, use four parts water to one-part table sugar. Never use artificial sweeteners, honey, or fruit juices. Place something red on the feeder. Clean your feeder with hot soapy water at least twice a week to keep it free of mold and possible diseases.

Butterflies need resources other than nectar. They are attracted to unsavory foodstuffs, such as moist animal droppings, and rotting fruits. Try putting out slices of overripe bananas, oranges and other fruits, or a sponge in a dish of lightly salted water to see which butterflies come to investigate. Sea salt provides a broader range of micronutrients than regular table salt.

Pollination is the process of moving pollen from one flower to another of the same species, which produces fertile seeds. Almost all flowering plants need to be pollinated. Some plants are pollinated by wind or water, and some are even self-pollinating. However, most flowering plants depend on bees, butterflies, and other animals for pollination.

Why would you use native plants in your garden? Pollinators have evolved with native plants, which are best adapted to the local growing season, climate, and soils. Most pollinators feed on specific plant species — hummingbirds sip nectar from long, tubular flowers, while green sweat bees prefer more open-faced flowers. Non-native plants may not provide pollinators with enough nectar or pollen or may be inedible to butterfly or moth caterpillars.

Bees are by far the most effective pollinators because they feed only on flowers. Flowers attract and reward bees for their pollination. Bees gather two kinds of foods from flowers: sugar-rich nectar to fuel their flight and protein-rich pollen to feed their young brood. Bees use their tongues to lap or lick up nectar from flowers.

Bees prefer blue, purple, white, orange, and yellow flowers, and sweet fragrances. They see ultraviolet colors that are found on the flowers of buttercup and black-eyed Susan.

Lifestyle: An individual queen starts a colony in the spring after she wakes from hibernation. She produces wax from glands in her body to make pot-like cells in which to lay her eggs and to store nectar and pollen for her brood. The young emerge in a few weeks as female worker bees. As fall arrives, most bees die, and only newly mated queens overwinter to establish new colonies.

Green Sweat Bee is a small, brilliantly colored, metallic green bees that are hard to miss in a garden. They are commonly called sweat bees because they occasionally land on people to lick up salty human sweat. Some sweat bees nest socially, but most are solitary ground-nesters.
Pollinator Plantings for Year Round Landscape and Community Areas

By Bill Koellner, Master Gardener

Seeds vs. plants

Once you have identified your plant species, you will need to decide whether to use seeds or start with small plants. While both are good options, your choice will depend on your timeline and budget. Seeds are more economical, especially for larger gardens, but will require more time. If you are using seeds, plan on dispersing them the fall or late winter ahead of your summer growing season. This gives the seeds time to germinate. Nursery-started plants cost more but will generally give you a quick return on your investment and bring pollinators into your yard during the same growing season.

What to Plant –

**Early bloom**
- Cream Wild Indigo – *Baptisia bracteata*
- Golden Alexanders – *Zizia aurea*
- Wild Geranium – *Geranium maculatum*

**Early-Mid season**
- Smooth penstemon – *Penstemon digitalis*

**Mid Season**
- Narrowleaf mountain mint – *Pycnanthemum tenuifolium*
- Pale purple coneflower – *Echinacea pallida*
- Purple prairie clover – *Dalea purpurea*
- Swamp milkweed – *Asclepias incarnata*
- Wild bergamot – *Monarda fistulosa*

**Mid-late season**
- Culver’s root – *Veronicastrum virginium*
- Field thistle – *Cirsium discolor*
- Missouri ironweed – *Vernonia missurica*
- Prairie Blazing star – *Liatris pycnostachya*
- Rattlesnake master – *Eryngium yuccifolium*
- Yellow giant hyssop – *Agastache nepetoides*

**Late season**
- Gray goldenrod – *Solidago nemoralis*
- Showy goldenrod – *Solidago speciosa*
- Smooth blue aster – *Symphyotrichum leaven*
- Wingstem – *Verbesina alternifolia*
Did you ever wonder, as you plant those little seeds in your garden, “Where do these little seeds come from”? Well, of course, they come from the seed heads from last year’s plants. But … what if no one remembered to harvest last year’s seeds?? What if our parents, or our grandparents, or their grandparents, had just ONCE (in any one year), forgotten to harvest last year’s seeds???

Well, that’s the basic principle behind Seed Savers Exchange. Members of the Exchange are privileged to share (or trade) their homegrown plant seeds with other members. So, if you forgot to harvest some seeds last year, you are not totally out of luck!

It all got started in 1975 as Diane Ott Whealy made monumental plans to preserve two heirloom plants dating from 1870. Seeds from these plants, a German tomato and a morning glory vine, had been brought to the U.S. from Bavaria by Diane’s great-grandfather over 100 years earlier. In addition to preserving these two rare plants, Diane and her husband Kent Whealy joined together with 30 other gardeners to organize their first seed swap in 1975 – the start of Seed Savers Exchange.

Seed Savers Exchange (SSE) published their first commercial seed catalog in the year 2000. They currently maintain a seed bank in an underground cold storage vault at their headquarters near Decorah, Iowa, with over 25,000 varieties of seeds in storage for safe keeping. SSE has some 13,000 members throughout the world who have participated in the exchange of over one million seed samples. Annually, SSE offers some 600 varieties of heirloom seeds for purchase by the public.

All of the seeds offered in the Exchange are open-pollinated, non-hybrid, non-patented, non-commercial, meaning that propagation of these seeds is unrestricted and they can be expected to continue to produce the same plant from seeds year after year. Also, many but not all of the seeds were grown organically. The Seed Savers Yearbook is published annually by SSE to provide a listing, description and history of Exchange members’ seeds.

A tour of the SSE Heritage Farm near Decorah should be on the bucket list for all Master Gardeners, particularly those living in Iowa. This certified organic farm consists of 890 acres comprising the “most diverse farm in the world” (per ethnobotanist Gary Paul Nabhan).
Muscatine County Extension Office
1601 Plaza Place
Muscatine, IA  52761
563-263-5701 or 800-992-0894
Iowa State University Extension programs are available to all without regard to race, color, national origin, religion, sex, age, or disability. Iowa State University and U.S. Department of Agriculture cooperating.

Current Emails and Addresses
As a reminder – keep both the Extension Office current on any changes of e-mail addresses, phone numbers, or mailing addresses. These need to be current to keep you — our members — informed.

Editorial Comments:
I enjoyed putting this together and look forward to more! If I missed anything or you don’t see something that should be in here, please let me know by emailing me at nollmanag@gmail.com or calling me 319—541-1462. Thanks! Gretchen Nollman

2020 Muscatine County Master Gardener Board
Board Members
Mary Wildermuth, Chair (2021)*
Rachel Horner Brackett, Vice Chair (2020)*
Heather Harroun, Sec/Treas (2020)
Kathy Haltmeyer (2020)
Ron Jensen (2021)
Carolyn Lemaster (2021)*
Ed Moreno (2020)
Maryrose Peterschmidt (2020)
Mary Danner (Past Chair)
Angela Weber (Intern)

( ) Year term expires as of Dec. 31
* Going off Board Dec 31, 2020 or 2021 but eligible for re-election