

**SPRING 2019** 

Mission: To make a difference in the community in which you live through gardening education and knowledge.

#### Inside this issue:

Cover Article The effects of antidepressant microbes in soil	Pages 1
Connie's Corner A message from our MG Coordinator	Page 2
MG News Reorganizational plans of MG project teams, one of our MGs wins prestigious award	Pages 3,5
Gardening Galore New invasive plant species, fungus gnats	Pages 2,4
Garden Musings Seed sightings, tropical plants in Ohio, poem welcoming spring	Pages 5-6, 8
Gardening Destinations The Gardens on Spring Creek	Page 7
Book a review Harry's Trees by Jon Coheb	8
In/Around the Garden See what's happening in and around the garden	Pages 9
Across the Fence Megawatt Begonias, preparing for hummingbirds	Pages 10-11



COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES



# **Antidepressant Microbes In Soil: Does Dirt Make You Happy?**

source: Gardening Know How



Prozac may not be the only way to get rid of your serious blues. Soil microbes have been found to have similar effects on the brain and are without side effects and chemical dependency potential. Read on to see how dirt makes you happy.

Soil Microbes and Human Health
Did you know that there's a natural
antidepressant in soil? It's true.
Mycobacterium vaccae is the
substance under study and has
indeed been found to mirror the
effect on neurons that drugs like
Prozac provide. The bacterium is
found in soil and may stimulate
serotonin production, which makes
you relaxed and happier. Studies
were conducted on cancer patients
and they reported a better quality of
life and less stress.

Lack of serotonin has been linked to depression, anxiety, obsessive compulsive disorder and bipolar problems. The bacterium appears to be a natural antidepressant in soil and has no adverse health effects.

These antidepressant microbes in soil may be as easy to use as just playing in the dirt.

Most avid gardeners will tell you that their landscape is their "happy place" and the actual physical act of gardening is a stress reducer and mood lifter. The fact that there is some science behind it adds additional credibility to these garden addicts' claims. The presence of a soil bacteria antidepressant is not a surprise to many of us who have experienced the phenomenon ourselves.

#### **How Dirt Makes You Happy**

Antidepressant microbes in soil cause cytokine levels to rise, which results in the production of higher levels of serotonin. The bacterium was tested both by injection and ingestion on rats, and the results were increased cognitive ability, lower stress and better concentration on tasks than in a control group.

Gardeners inhale the bacteria, have topical contact with it and get it into their bloodstreams when there is a cut or other pathway for infection. The natural effects of the soil bacteria antidepressant can be felt for up to three weeks, if the experiments with rats are any indication. So get out and play in the dirt and improve your mood and your life.

## **CONNIE'S CORNER**

**Dear Master Gardener Volunteers.** 

March is almost here and we are full steam ahead into 2019 Master Gardener Training, slated to begin on March 21 at the Ag Center. We have great interest in the program and this year's training is shaping up to be AWESOME!! While the entire schedule is not yet complete, here's the highlights as of early February:

March 21
Stan Smith - Soils
Jerry Iles - Invasives

March 28
Dr. Cookie Trivett – Botany
Chris Penrose – Lawns

<u>April 11</u> Denise Ellsworth – Pollinators (pm session)

Dr. Shetlar – OSU Bug Doc (am session)

May 23 MG Presentation Day All of these sessions will be held at the Ag Center in Fairfield County. Once completed, the final schedule will be shared via email. Each of the Master Gardener Training Sessions will be three hours of Continuing Education credit if you attend the entire session.

At our February 21 MGV meeting, we focused on Master Gardener Training duties. We discussed the Master Gardener Training Mentorship program as well as Hostess duties and Lunch Crew ideas. Yes, we will need lots of help (Volunteer Give Back Hours) to accomplish eight weeks of training.

Now let's just hope that Groundhog was correct...an early spring is on the way!!

Sincerely,

Connie Smith
Master Gardener Coordinator
Smith.3204@osu.edu
740.652.7267

# Nine New Plant Species Considered for Invasive List

source: Buckeye Yard and Garden

The Ohio Invasive Plant Council (OIPC) recently released information on the assessment of nine new plant species for inclusion on their list of invasive plants. With this announcement also begins a six-month public comment period for the new additions to the list. Comments, suggestions and questions during this period should be directed to Theresa Culley, <a href="mailto:theresa.culley@uc.edu">theresa.culley@uc.edu</a>. Pictured here are the most invasive of these new species: Canadian Thistle, Poison Hemlock, Wild Parsnip and Amur Corktree. Also under review, but not considered as invasive as the others, are Common Burdock, Star-of Bethlemen, Ravenna Grass, Goutweed and Golden Raintree.

Canadian Thistle





<u>Poison</u> <u>Hemlock</u>





<u>Wild</u> Parsnip





<u>Amur</u> Corktree





## **Master Gardener Meeting—Reorganizational Plans**

by Connie Smith, Master Gardener Coordinator

Thanks to all the Master Gardener Volunteers who attended the first meeting of 2019. After a few announcements, yearly activity calendars were distributed. The group then formed project teams and each team spent 45 minutes putting together a plan and wish list of supplies and materials for 2019. Good conversation and plans and goals for the MGV projects in 2019 were recorded and reported back to the group. It was really good to watch the interaction and outcomes from the various project groups.

#### AG Center Renovation Team 2019

168 Hours recorded for work in 2018\*
<u>Team Members</u>: DJ Hoermele, Michel Byrne, Lise Ricketts, Lisa Stoklosa, Mary Ann Richards, Edna Wilson, Nancy Weidman, Connie Shields, Lisa Dominguez

<u>Plan</u>: Remove overabundance of salvia, divide perennials, add new annuals and additional perennials, and develop brochure of courtyard plants. <u>2019 Wish List</u>: Plant ID labels, sprinklers to replace soaker hoses, working wheelbarrow, and garden structure or dry stack pillar with large pot on top

#### AHA!! Children's Museum

40 Hours recorded for meetings/planning in 2018\*

Team Members: Keith Eichhorn, Barbara Velez
Barbosa, Bruce Garrett, Lisa Dominquez, Connie
Shields, Edna Wilson, Dianna Wears
Plan: Meet with AHA Director, Wendy Gregory, to firm
up what to plant and to come with types of seed
packets to give away, plant early season crops mid-tolate April, plant best of crops in mid-May or after last
frost date, and use area behind garden fence for
shrubs and native wildflowers for pollinators.
2019 Wish List: Small greenhouse for growing and
starting seeds, tool shed, tomato cages, stakes for
plants, large pots, row cover supplies, and children's
and Adults' tools and garden gloves

#### Fairgrounds Entrance Gardens

31 Hours recorded for give back hours in 2018\*

Team Members: Louise Smith, Mary Ann Richards

Plan: Remove grasses and dwarf Lilac bushes under
main sign and replace with small low growing shrubs
that will not overtake the bottom edge of the sign.

2019 Wish List: Three to five small shrubs and
annuals to color up the front of the garden bed

#### **Green Machine Gardeners**

262 Hours recorded as project work in 2018\*

<u>Team Members</u>: Jane Eberly, Patty Turner

Also, Jessica Dent from Learning Never Ends who will complete Master Gardener Training in 2019

#### Friends of Wagnalls Gardens

528 hours recorded for work in 2018\*

Team Members: Pam Jarvis, Patty Sykes, Dolly
Browning, Mary Carter, Beverly Zurhorst, Susan Lloyd,
Mary Ann Richards, Nancy Weidman, Lisa Stoklosa
Plan: Group reviewed Pam Jarvis' plan for 2019.
Would like to find more volunteer groups to assist
with garden clean-up. Considered seasonal work days
with MGV's as mentors for volunteers. Not interested
in garden tour of area gardens, more interest
generated in creating monthly activities for story time
such as, I Spy in the Garden Activity for Kids and Mini
Fairy Gardens with succulents, etc., for kids.
2019 Wish List: Plant tags, garden brochure,
brochure distribution box on grounds, and materials
for children's activities

#### Thru the Vine MGV Newsletter

80 hours were recorded as project work in 2018\*

Team Members: Lisa Stoklosa, Gina Supthin, Chuck Zurhorst, Mary Carter

2019 Wish List: Consider email subscriptions to newsletters from general public and start a Fairfield County MGV Facebook group to share gardening items of interest and MGV newsletter. Fairfield County Master Gardener FB group established: January 2019

#### Tranquility Garden

346 Hours were given back in 2018\*
Team Members: Brian and Michele Myers

#### Wesley Ridge:

31 hours were recorded as project work in 2018\* 2019 Wish List: Tall flower pots

\*The OSU Master Gardener program places a value of \$24.10 for each volunteer hour recorded. Your Volunteer Commitment of just one hour to the Master Gardener program is HUGE.

Thanks to each of you for your efforts and commitment!!

# **Fungus Gnats in House Plants**

source: University of Minnesota Extension



## HOW TO IDENTIFY FUNGUS GNATS Adult Fungus Gnats

- Small, about 1/16 inch long
- Slender, dark-colored fly with very long legs
- Not good at flying
- Usually found close to where larvae are developing

#### Larvae

- Small, worm-like insect, no more than 1/4 inch long
- Pale white almost translucent color
- Black head but no legs or other appendages
- Likes very damp conditions
- Feeds on decaying plant material, moist organic matter and fungi

#### **FUNGUS GNATS CAUSE NO DAMAGE**

- Fungus gnats do not damage houseplants and are considered only to be nuisances.
- Fungus gnats are found in houseplants that are:
  - Over-watered and might have decaying roots
  - Grown in potting soil high in organic matter such as peat
- Fungus gnats rarely feed on healthy roots.
- If you see these flies, it means that your plants might have other problems, like damping off.

## HOW TO GET RID OF FUNGUS GNATS Reduce Soil Moisture in Houseplants

- Allow the soil surface to dry between watering but do not allow plants to wilt.
- Water plants based on how heavy they feel when they're picked up.
- Water plants when leaves look dull and limp.

#### Place Traps to Check for Fungus Gnats

Place sticky paper traps in the pots to tell you which plants have fungus gnats. This method might also reduce some fungus gnats but will not get rid of them completely.

## Using Pesticides For larvae

- The only effective product for treating fungus gnat larvae in the soil is a bacterial insecticide, *Bacillus thuringiensis var. Israelensis* (known as B.t. H-14).
- This pesticide is specific to fly larvae and does not kill adult fungus gnats.
- Look for this insecticide in garden centers.

#### For adult fungus gnats

- Pesticides like pyrethrins are effective against adult fungus gnats but this is a short-term solution.
- If there are favorable conditions with high moisture, the fungus gnat larvae will keep transforming into adult flies.

CAUTION: Mention of a pesticide or use of a pesticide label is for educational purposes only. Always follow the pesticide label directions attached to the pesticide container you are using. Remember, the label is the law.



#### Layer sand on top of the soil

Placing a layer of sand on top of the soil to prevent egg laying or larvae from reaching the soil is **NOT** very effective.

#### **GARDEN MUSINGS**

## **Seed Sightings**

by Gina Sutphin, Master Gardener 2015



How many of you have specific events that are a yearly marker in the journey towards spring? I have several. My computer currently has a browser open that is counting down the Days, Hours, Minutes and Seconds until the First Day of Spring! The start of Daylight Savings is marked on my calendar with a picture of the Sun, Flowers and Butterflies. But the earliest and completely unplanned for marker that spring is coming, is always the first Annual Seed Sighting.

Each year, I'm usually wandering through a store, deep in thought, as I shop for some random item. There is usually some degree of Winter Slump to my shoulders and a Frigid Funk weaving its way through my mind. And then suddenly and without warning. I turn a corner and come face to face with Seeds! Every time this glorious event happens it feels as if the world stands still for just a moment. No matter what haze was filling my mind a moment earlier, it seems as if a fresh breeze of clarity rattles loose the cobwebs and the truth begins to filter in. That reliable truth that no matter how cold and dark the winter feels. there is always hope. Spring will always come, the snow will always melt, and new beginnings will poke their tiny heads up through the mud, no matter how deep it has become. And for a moment, I always stand still, taking in the glory of

this potential and hope. And then, standing a little taller, with a bit of the icy burden melted away, I continue on my journey and make my way to the cash register. This marker of spring cannot be added to the calendar or be counted down to on a computer screen. But instead, it always seems to find me at just the right time, exactly when it was needed and without warning.

Sometimes it happens at Walmart, Lowes or Meijer where it's expected that seeds will be a normal yearly display. But some of my favorite experiences are in the truly unexpected locations. Like in 2018 when the sighting happened during a quick stop at Drug Mart. My seed sighting this year was curtesy of Menards. Where have you had some of your favorite first seed sightings?

### **Newsletter Deadlines**

Do you have an article, garden musing, photo from an MGV project, calendar event or other idea you'd like to submit for the MGV newsletter? Articles and information are welcome at any time! Items not used in an upcoming newsletter can be saved and used in a future newsletter. Newsletters are published quarterly with the following submission deadlines:

Spring Newsletter—submit by February 1 Summer Newsletter—submit by May 1 Autumn Newsletter—submit by August 1 Winter Newsletter—submit by November 1

## Congratulations, Jackie!

☆ Our Jackie Marion was presented with the ★ Pillar of the Community Award at the Canal ★ ★ Winchester Chamber of Commerce Banquet ★ recently...proud of you and all the ways you find the time and energy to give back!!

\*\*\*\*

\*\*\*\*

 $\stackrel{\wedge}{\Rightarrow}$ 

 $\stackrel{\wedge}{\Rightarrow}$ 

 $\frac{1}{2}$ 

 $\stackrel{\wedge}{\Rightarrow}$ 

#### **GARDEN MUSINGS**

## **Tropical Ohio?**

by Bruce Garett, Master Gardener 2015



Wasting away in Margaritaville. Looking for my lost shaker of salt. SALT! SALT! SALT!

Come on. Sing along. Do Jimmy Buffet songs get you thinking of these topics like it does me? I have enjoyed several visits to tropical areas and enjoyed the flora and fauna. When I began thinking about how I

could have a little of the tropics in my own backyard, I quickly gave up on ideas for fauna. But I could replicate some of the flora, if just for the warm months.

I started years ago when I heard that a green-house near Lithopolis needed to get rid of some banana trees as they were growing so tall they were lifting the glass off of the greenhouse. The owner couldn't bring himself to throw them away and couldn't find buyers so he was giving banana trees away. I came away with several which I have set out each spring each year since. Yes, that's the downside of a tropical garden. You must dig the plants in the fall, keep them in a warm, dry, dark spot over winter, and set them out again in the spring or lose them.

I usually cut the banana trees off one to two feet above the ground, dig up the root ball and stem, and put them in a dark basement room. I have brought in trees of various sizes in pots for winter greenery and they do well in a sunny spot. One year I brought in a 12-14 foot tree that had a root ball that weighed over 50 pounds. It was quite a chore to get it into the house but it did produce some small, inedible bananas. It was fun watching this process.

My next tropical plant was giant elephant ears which I got from my parents. The leaves on this plant get up to five feet long and my wife enjoys watching them "wave" in the warm breezes of summer. These must also be cut off and dug up for winter. Note: if you like to make hypertufa, the leaves make great forms.

Over the years, I have added a red banana which doesn't get as tall as the other and a couple other types of elephant ears. This overwhelmed my small tropical garden by the gazebo so I decided to make another garden and added cannas, another contribution from my parents. I started with about six starts and ended the summer with a wheelbarrow full. Want some? Free to a good home.

My new garden is at the end of a downspout so I guess I could call it a water garden. These plants are thirsty. I also added a rock sculpture (art) and a trellis with bugle vine. Both tropical gardens are mulched heavily. Next summer I plan on adding ginger plants which I picked up in Georgia and another green/purple variegated landscaping plant I picked up in Ft. Lauderdale but can't remember the name.

Tropical gardens require little care during the summer other than making sure there is enough water for them, not a problem last year. So if you don't mind the spring and fall digging, give it a try. You'll find yourself singing Jimmy Buffet songs under your banana trees.



#### **GARDEN DESTINATIONS**

### **The Gardens on Spring Creek**

by Barbara Kochick, Master Gardener 2013



On a recent visit to family in Fort Collins, Colorado, we explored the eighteen acre site of the public/private Gardens on Spring Creek. The mission of this partnership between the City of Fort Collins and the Friends of The Gardens on Spring Creek is to enrich the lives of residents and foster environmental stewardship through horticulture.



The gardens are divided into eight areas. Of primary interest to me was the Children's Garden where my grandchildren enjoyed the scarecrows, water pumps, playhouse and colorful plants.

A large outdoor cooking demonstration area is the central feature of the Garden Of Eatin'. Here cooking shows illustrate how to prepare the vegetables and herbs surrounding the kitchen. Featured in the Rock Garden are many plants native to the unique growing conditions of Colorado.





The Community
Gardens are securely
fenced areas where
residents can grow
their own produce,
herbs and flowers.

Eco-conscience ideas for homeowners abound in the Sustainable Backyard. Drip irrigation, permeable pavers,

and a dry creek are among these ideas. A fun section here was a "scratch and sniff" wall. Their Xeriscape Parkway Strip is an amazingly varied collection of plants that can survive and thrive in the often inhospitable area between the street and the sidewalk.



A daylily area, wetlands and a turf garden make up the Demonstration Gardens. The lovely Entrance Garden is what greets visitors. Work is ongoing for the creation of a cafe, a meeting room, a butterfly house, foothills, prairie and great lawn gardens. I will be sure to visit whenever we are there to enjoy the gardens and keep up with their progress.

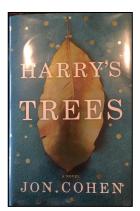




#### **BOOK A REVIEW**

## **Harry's Trees** by Jon Cohen

reviewed by Barbara Kochick, Master Gardener 2013



Harry Crane is a U.S. Forest Service analyst. This paperpushing bureaucrat spends his days at his desk longing for the woods. When misfortune strikes, grief and guilt drive him to those trees. There he meets a grieving widow and her ten-year-old fairy-tale-loving daughter. There is a library that needs saving and even a big, bad

wolf who needs taming. This is magic firmly rooted in reality. The ordinary world is extraordinary for everyone, all the time.



### In and Around the Garden—You Won't Want to Miss It!

Mark Your Calendars with these Important Dates and Upcoming Activities and Events!

#### **COMING SOON:**

March 2, 2019, 8:30 am-2:15 pm Muskingum Valley Garden Society's 16<sup>th</sup> Annual "Spring Fever" Home Gardening Symposium

The Ohio University Campus-Zanesville For Info: http://MVGardenSociety.org

#### March 7, 2019, 9 am-4:15 pm 20th Annual Central Ohio Perennial Flower School

Hollenbeck Bayley Creative Arts and Conference Center, Springfield, OH For Info:

go.osu.edu/2019perennialschoolclarkcounty

### March 16, 2019, 10 am-12 pm Fruit tree Pruning School

Hugus Fruit Farm 1960 Old Rushville Road, Rushville, OH

#### March 18, 2019, 7 pm

Basil Garden Club's Annual Guest Night

Christ United Methodist Church 700 S. Main Street, Baltimore, OH RSVP: Sharon Anderson, 740-756-7265 by 3/8

#### March 23, 2019, 8 am-4 pm Four Seasons of Gardening

Licking County, OH

For Info:

https://www.fourseasonsofgardening.com/

# April 27, 2019 1 pm-4 pm Earth Day Activity—Seed necklaces Smeck Historical Farm 7395 Basil Road, in Baltimore, OH

## May 20, 2019, 6 pm (Auction at 7 pm) Plant and Chinese Auction

Hosted by Basil Garden Club VFW, 2155 Baltimore-Reynoldsburg Rd, Baltimore, OH

For Info: Sharon Anderson, 740-756-7265

#### June 17-21,2019

International Master Gardener Conference Valley Forge/Casino Resort, Pennsylvania

#### SAVE THE DATE:

#### March 10

**Clocks Spring Forward** 

#### March 20 SPRING BEGINS!!!!

#### March 21-May 16, 2019

Master Gardener Training

Fairfield County Agriculture Center 831 College Avenue, Lancaster, OH

May 23, 2019 (time TBD) MG Presentation Day

May 27, 2019

AG Ext. office Closed for Memorial Day



#### ACROSS THE FENCE

## **Megawatt Begonias—My New Impatients**

By Edna Wilson, Master Gardener 2017



Living in Hocking Hills, I am pleased to be blessed with lots of trees and shade. One disadvantage is not having the full sun needed for most blooming flowers. I was devastated when my Impatients developed downy mildew.

Last spring, I discovered a new begonia, Megawatt Begonia interspecific. This begonia is similar to the annual bedding wax begonia but is much larger and more

attractive. It can almost be mistaken for the Angel Wing Begonia (pictured on right). The Megawatt works well for borders, containers, and mass plantings. It is easy to grow, grows quite large, and has large leaves and hearty stems to support and show off the nice size flowers. Allow space for its spread



and it may grow up to 20+ inches in height. No deadheading. Drought tolerant. As with most begonias, allow it to dry out between watering. My begonias did great even with all the rain we had last summer.

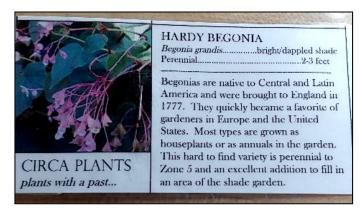
These begonias come in green and bronze leaf colors and the flowers in colors of red, rose and pink. They are great for partial shade locations.

My flowers got dappled sun and some had maybe four hours of sun. I bought the flowers from a new greenhouse in Adelphi, Ohio. They were sold in hanging baskets and also in four-inch pots at a very reasonable price. I did not check for them in other garden locations. I highly recommend the Megawatt Begonia Series.





I also reommend the **Hardy Begonia** (Begonia grandis - perennial). A couple of years ago, I saw beds of lovely pink begonias down at the Ohio River but did not realize they were perennials. Last summer, I found the Hardy Begonia plants at the Lily Festival, sold by Circa Plants. After this, I discovered that a couple of my neighbors also had them and the plants were doing well. This variety is perennial to Zone 5 and also does well in a shade garden.



#### **ACROSS THE FENCE**

## **Hummingbirds**

by Edna Wilson, Master Gardener 2017



It's not too soon to start thinking and preparing for the return of the hummingbirds in April. The male scouts will be returning by the middle of April, checking their good feeding spots from the previous summer. It is a good idea to have at least a small feeder hung and ready for them. The males return first from their Southern migration flight and

the females follow in a couple weeks. I always hang a small feeder in the same place every year, and just like clockwork, the male returns to it by April 15 almost every year.

I do feed a lot of hummingbirds. Last summer I kept track of the sugar. I had used 202 pounds from mid-April to the first of October.

A few good tips for feeding:

- Make sugar nectar with four parts water to one part sugar
- Store unused nectar in refrigerator for up to two weeks
- Keep feeders clean
- Keep fresh food in feeders
- Hang feeders in shady areas, not in full sun
- Use feeders that have red bases or tops to attract the birds

When purchasing feeders it is not necessary to buy fancy feeders. Instead, buy more practical ones that are easy to fill and clean and also have a bee guard and ant moat.



Hummingbirds will migrate back south towards the end of September to the middle of October. It is important to keep a feeder up into the end of the season until all the birds are gone. The hummers need to double their weight before migrating and need to keep feeding.



Through the Vine is a publication of the Ohio State University Extension Office in Fairfield County
Lisa Stoklosa, Fairfield Master Gardener Volunteer Editor
For more information contact:

**Connie Smith**, Master Gardener Coordinator and OSU Extension ANR Program Assistant smith.3204@osu.edu — 740.652.7267

For the latest information and news about OSU Extension in Fairfield County, including the Master Gardeners of Fairfield County, visit http://fairfield.osu.edu/



**Ohio Master Gardener Program Mission** 

We are Ohio State University Extension trained volunteers empowered to educate others with timely research-based gardening information.