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PINELLAS MASTER GARDENER MAGAZINE

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Editorial Changes

Beginning with this issue of The Dirt, Susan Ladwig and Ellen Mahany will serve as co-editors. Also many thanks to Paula MacDonald who created our new graphics.

Our goal is to maintain the high standards set by Dianne Fecteau, who served as the capable editor of numerous issues of this Master Gardener quarterly. Without her help we would not have been successful in editing our first issue. We are grateful to all of you currently sharing your knowledge and look forward to your future contributions. We also encourage first-time contributors to submit articles and pictures. Please see the last page of this issue for complete information about submissions.

School Gardens Positively Impact Child Nutrition

By: Tammy Ayotte, Master Gardener Volunteer – UF IFAS Pinellas County Nutrition Ed Specialist/Farm to School Coordinator – Pinellas County Schools

School gardens afford a wide variety of benefits for students, both through academics and school garden clubs. As a school nutrition specialist, I manage the Pinellas County School System's School Garden Initiative through the Food and Nutrition Department. My primary focus is to teach students where their nutrition comes from.

In the United States we now have multiple generations raised on convenient fast foods. That is not to imply only the concept of restaurant drive-throughs. Walk through any grocery store—







even ones that cater to organics and whole food—and you will find a huge selection of processed, ready-to-heat-and-eat options in most food categories.



Attractive, freshly- grown produce appeals to students with healthy appetites, willing to consume what they have created. Photo by Tammy Ayotte, Pinellas County Schools Food and Nutrition Team

As students engage in gardening, their relationship with the soil sows much more than fresh vegetables. It produces a harvest of excitement and openness to trying new foods —even those "icky" vegetables. I have seen PreK students try radishes that they have grown themselves without batting an eye.

While having fun, students learn the importance of good nutrition, the first of several important benefits. Gardening with other students, instructors and volunteers leads to a social-psychological consequence of being introduced to the natural world within community collaboration. Students learn that they can be self-sustaining. They establish a basic appreciation for the earth.

Digging in the dirt and watching nature do its thing become enjoyable life lessons and a pathway to a healthier lifelong relationship with food.







This student proudly displays the beautiful kale he grew in his school garden. Photo by Tammy Ayotte

[Editor's Note: Tammy is the Nutrition Ed. Specialist/Farm to School Coordinator for the Pinellas County School System. If you are interested in becoming a school garden volunteer, check the volunteer opportunities in the weekly e-mails sent by Theresa Badurek, Master Gardener Coordinator.]

High-Tech Vegetable Gardening

By Jay Gould, Master Gardener Volunteer Trainee

In the last issue of *The Dirt*, I explained how vegetable gardeners can use word processing software to create a high-tech journal to store vegetable garden history. Using this information can avoid future crop failures and create future harvest successes.

Another helpful high-tech garden tool is Excel. For example, its spreadsheets can provide answers to pesky questions that sometimes fail the memory, as this first spreadsheet illustrates.









Vegetab	le Garden History -	see Production	n file for harv	est amounts	==>	Gardening -	Vegetable\Pr	oduction	ı.xlsx		
_		today io:	5/19/2021		de	ates					
		today is:	3/19/2021		ua	iles					
ID 💌	Description	Plant. Seasor	Location 🕞	Styrofoam Tra-	Cups/Pots/cel	Ground 🕞	First Harv. 🖃	Days t≎	Last Harv. 🗹	Harv. Da	comments
V48	Beans, Bush Blue L	2018 - 2019	Bed 20,21			12/7/2018	2/25/2019	80			
V44	Beans, Bush Blue I	2017 - 2018	Bed 3	÷		10/9/2017	11/30/2017	52			
V69	Beans, Bush Blue L	2019 - 2020	bed 1			8/22/2019	10/21/2019	60	1/19/2020	90	
V69	Beans, Bush Blue I	2020 - 2021	bed 22, 23			8/9/2020	10/14/2020		10/14/2020	0	nematodes
V69	Beans, Bush Blue L	2019 - 2020	bed 3			12/8/2019	2/6/2020		3/15/2020	38	
V69	Beans, Bush Blue L	2020 - 2021	bed 7, 8			10/15/2020	12/14/2020		1/30/2021	47	
V69	Beans, Bush Blue I	2020 - 2021	bed 7, 8			12/14/2020	3/2/2021				
V12	beans, Cherokee w	2013 - 2014	Bed 12			11/24/2013			2/22/2014		didn't really
V12	beans, Cherokee w	2011 -2012	Bed 12			11/25/2011					
V12	beans, Cherokee w	2015 - 2016	Bed 2			9/16/2015	11/3/2015	48	12/10/2015	37	very prolific/
V12	beans, Cherokee w	2012 - 2013	Bed 2			11/2/2012	1/1/2013	60			
V12	beans, Cherokee w	2020 - 2021	Bed 22, 23	В		8/9/2020	10/14/2020	66	10/14/2020		nematodes
V12	beans, Cherokee w	2019 - 2020	bed 3			12/8/2019	2/6/2020	60	3/15/2020		
V12	beans, Cherokee w	2017 - 2018	Bed 3			10/9/2017	11/26/2017	48	2/8/2018	74	
V12	beans, Cherokee w	2016 - 2017	Bed 4			11/13/2016	1/17/2017	65			
V12	beans, Cherokee w	2015 - 2016	Bed 4			1/2/2016	3/11/2016	69			

I began the headings with an ID number for each plant variety. Then, I added columns for the descriptive name, the planting season, the planting location, dates of planting and harvesting, and the specific failure or success of each planting.

This information is invaluable for vegetable gardeners. For instance, don't you want to know how long you must wait before you harvest your first beet or enjoy a broccoli crop? Tell Excel to subtract the cell with the planting date from the cell with the harvest date. Voila, you have your time to harvest! In contrast to Word, Excel has capabilities that zip the answer before you finish entering the date. Excel translates all dates into a long string of numbers and then performs whatever math the user directs it to do.

But the magical powers of the spreadsheet are much more profound. Explore the "sort & filter" functions and you will be able to answer a dozen critical gardening questions.

For example, if you want to ensure that you are practicing crop rotation in your beds, you don't want to repeat the same plant family the next planting season. Sort your table on "location A to Z," and you'll see everything grown in each location. But you really want to see a list with the most recent planting on the top followed by the second most recent and so forth. This requires a "custom sort," another choice in the "sort & filter" menu. Here's what you'll get.

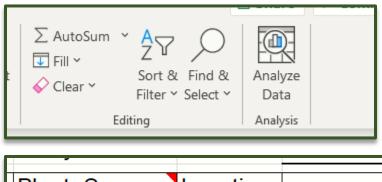
		today is.	***************************************		ue	iles					
ID 🔻	Description	Plant. Season,	Location.	Styrofoam Tra-	Cups/Pots/cel	Ground	First Harv.	Days t≎	Last Harv. 星	Harv. Da	comments
V85	beans, soybean	2020 - 2020	bed 1			3/18/2020					total failure, no
V83	peas, Cowpeas	2020 - 2020	bed 1			3/16/2020	5/27/2020	72	7/14/2020		great success
V69	Beans, Bush Blue L	2019 - 2020	bed 1			8/22/2019	10/21/2019	60	1/19/2020	90	
V62	beans, golden wax i	2019 - 2020	Bed 1			8/22/2019	11/11/2019	81	1/19/2020		
V3	tomato, Gardeners	2019 - 2020	bed 1			1/24/2020	4/13/2020	80	5/31/2020	48	tremendous yie
V30	pepper ,Calif. Wond	2018 - 2019	Bed 1		10/7/2018	11/14/2018	3/4/2019	148	7/1/2019		
	pepper, Chinese Gi	2018 - 2019	Bed 1			12/2/2018					Tracy gift, scie
V8	pepper, sweet bana	2018 - 2019	Bed 1		10/7/2018	11/14/2018	3/11/2019	155	7/1/2019		
V46	Cabbage, Early Gol	2017 - 2018	Bed 1	8/10/2017	8/18/2017	9/3/2017	11/13/2017	95			
V47	Cauliflower, Early S	2017 - 2018	Bed 1	8/10/2017	8/18/2017	9/3/2017	12/21/2017	133	2/14/2018	55	very successfu
V2	Watermelon, Jubile	2016 Summer	Bed 1		3/3/2016	3/24/2016	6/9/2016	98	6/18/2016	9	Tropical Storm
V3	tomato, Gardeners	2016 - 2017	Bed 1	11/13/2016		12/23/2016	4/10/2017	148	4/17/2017		diseased
V4	tomato, Super swee	2016 - 2017	Bed 1		8/2/2016	9/6/2016	11/11/2016	101	12/10/2016		
V30	pepper ,Calif. Wond	2015 - 2016	Bed 1		9/3/2015	10/4/2015	11/17/2015	75			container
V9	tomato, Juliet hybrid	2015 - 2016	Bed 1	8/5/2015		9/9/2015 [©]	11/16/2015	103	2/17/2016	93	
V1	Watermelon, Sugar	2014 Summer	Bed 1	NA	NA	6/6/2014	8/7/2014	62	10/4/2014	58	very good
V-7		2011 2015		11/0/0011	11/01/0011	10/0/0011			E4404004E		

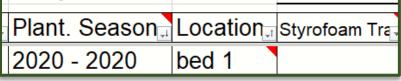






So much detailed information becomes essential in crop rotation. No detail is too small for Excel to record. For instance, with the cursor on the column heading line, select the Filter choice. A little drop- down arrows appear next to each column heading., as illustrated here.





Now you can "filter" your table to show only information for that one type of carrot.

ID ₅	Description	Plant.	Season	Location_	ra Cups/Pots/cel	Ground	First Harv.	Days t _҈	Last Harv.	Harv. Da	comments
V55	carrot, Danvers 120	2019	2020	Bed 11,12		9/26/2019	Failed to ger	minate			
V55	carrot, Danvers 120	2019	2020	Bed 11,12		10/20/2019	1/17/2020	89	6/27/2020	251	
V55	carrot, Danvers 120	2020	- 2021	Bed 13,14		8/9/2020	12/11/2020	124			
V55	carrot, Danvers 12	2018	- 2019	Bed 18,19		2/14/2019	6/11/2019	117	8/11/2019	178	
V55	carrot, Danvers 120	2018	- 2019	Bed 2		10/6/2018	1/6/2019	92			poor germinati
V55	carrot, Danvers 120	2018	- 2019	Bed 2		11/13/2018	2/15/2019	94	6/6/2019	205	
V55	carrot, Danvers 120	2017	- 2018	Bed 3		10/9/2017	12/20/2017	72	4/21/2018	194	directly seeded

Would you have guessed that carrots can be harvested for over 200 days!

The next table illustrates how far in advance to start tomato seeds before transplanting into a bed.

ID .	Description	Plant.	Season	Location	Styrofoam Tra-	Cups/Pots/cel'-	Ground	First Harv.	Days t≎	Last Harv.	Harv. D	commen
V56	tomato, Better Boy	2017	- 2018	Bed 13,14	4	9/24/2017	10/16/2017					removed
V56	tomato, Better Boy	2020	- 2021	bed 2		8/16/2020	9/8/2020	2/1/2021	169	4/1/2021		
V56	tomato, Better Boy	2019	- 2020	bed 3			2/4/2020					
	tomato, Better Boy			Butterfly (gd	9/24/2017	10/20/2017					frost dar
V56	tomato, Better Boy	2018	- 2019	container	s	8/7/2018	9/3/2018					
	tomato, Better Boy			Pot front	yd	9/24/2017	10/20/2017	2/2/2018	131			incredibl
V56	tomato, Better Boy	2019	- 2020			8/10/2019				5/11/2020		

How many questions can your tables answer? As many questions as you can ask. In this way, Excel, like Word, allows gardeners to keep records leading to better harvests. Becoming skilled in using Excel can bring about a high- tech revolution to your vegetable garden.









It's All Latin to Me

By Rebecca Heppner, Master Gardener Volunteer Trainee

Note: underlined text links to more information.

As a Master Gardener Volunteer Trainee, I'm trying to learn the <u>scientific names</u> of plants. I used to call them Latin names, but it turns out some of them are ancient Greek. Really, for purposes of this task it's all Latin to me.

And some are just people's names that have been Latinized, like *elliotti*, the species of Elliott's lovegrass (*Eragrostis elliotti*) and Slash pine (*Pinus elliotti*), which both honor Stephen Elliott, a nineteenth century botanist from South Carolina. Most people agree that we shouldn't stress over the correct pronunciation of these scientific terms but spelling apparently counts. The species *elliotii*, with only one *t*, honors a completely different scientist. My knowledge of ancient Greek is no better than my Latin. (Why was I so lazy in high school?)



There are <u>391,000 species of plants in the world, 4,700 in Florida</u>—so where do we even start? I decided to start in my own back yard.

After reading fellow Master Gardener Volunteer Trainee <u>Jay Gould's blogposts about his amazing digital plant organization system</u>, I knew I needed to start keeping an inventory of my plants. So, I made myself a simple Excel spreadsheet and started typing in the common names and looking up the scientific ones in the <u>Florida Plant Atlas.</u> Turns out, I have 83 individual species in my little St. Petersburg garden.

Diversity is good, right? Maybe it is good for nature but not for a memory exercise, at least not at my age. To narrow down my task, I decided to focus first on the Florida natives. I selected and planted almost all of those myself. That should help, right? And there are "only" 40, or just under half of my plants.

Now, how to memorize all these Latin words that are meaningless to me? I could go the old-fashioned route, the one that got me through the GRE exam, and make flashcards. But my memory doesn't work the same way it did back then. What would work better than endless repetition, I thought, is to know what the words mean. Surely, these are not just random Latin (or Greek) words.

I didn't think a basic Latin/English dictionary would be of much use, so I Googled my dilemma and found a fun source online. The website Dave's Garden has what it calls a <u>Botanary</u> (Botany Dictionary, get it?) where you can look up individual names. So I looked all 40 of mine up, genus first, then species, and added that information to my inventory.

Some of the names are still meaningless to me; I may yet need a few flashcards. But others are starting to make sense. As I visit the plants in my yard and call them by their scientific names, those meanings are little by little working their way into my brain. Here are a few of the more common ones:









Beautyberry (<u>Callicarpa americana</u>): I've heard it called American Beautyberry, so the *Americana* part is easy. *Callicarpa* means "beautiful seeded" which describes this plant perfectly, with its beautiful berries that hold beautiful seeds.



Beauty Berry (Callicarpa americana) Photo by Univ. of Florida

Muhly Grass (<u>Muhlenbergia capillaris</u>): <u>Muhlenbergia</u> honors a nineteenth century American botanist named Muhlenberg. That's pretty easy to remember. <u>Capillaris</u> means "hair-like." The blooms on this plant do look a bit like hair, and capillary is a word I know, so this one is not so hard, either.



Muhly Grass (Mullenbergis capillaris) Photo by Univ. of Florida







Leavenworth's Tickseed (<u>Coreopsis</u> leavenworthii): You probably know <u>Coreopsis</u> as our state wildflower, but did you know it is from the Greek word *koris*, which means bug or gnat (or tick, perhaps)? *Koris* joins another Greek word, "opsis," meaning resemblance. The *leavenworthii*, of course, honors yet another 19th century botanist, this one named, you guessed it, Leavenworth.



Leavenworth's Tickseed (Coreopsis leavenworthii) Photo by Univ. of Florida

So—three down, out of my 40 natives, out of my 83 plants, out of the 4,700 species in Florida. As I continue to learn more, I'm happy to share my memory tricks, and I encourage you to add to your own vocabu-botan-ary and share with the rest of us.



Elliot's Love Grass (Eragrostis elliotti) Photo by Wendy Wilbur







Benefits of a Residential Tree Program

By Kaitlin Hammersley, Master Gardener Volunteer

As a resident of the Crescent Lake neighborhood in St. Petersburg, I recently participated in a residential tree planting program that resulted in eight new trees being planted in residents' yards. I'm sharing the program details with fellow Master Gardeners who may be interested in starting a tree planting program in their own neighborhoods!

The program's purposes are to mitigate the loss of trees and to increase the health and diversity of our urban tree canopy. Ensuring the sustainability of our neighborhood's tree canopy is important, given the environmental benefits of improved air quality, energy conservation, climate moderation, flood control, stormwater mitigation, wildlife habitat, reduction of noise levels, and the reduction of the urban heat island effect.

We worked with city and county experts to develop the CLNA Residential Tree Program Tree List, which includes tree species suitable for a range of site conditions and a diverse ecosystem. We further researched trees to ensure we chose the right low-maintenance, native plant for the right place. We learned that trees thrive best in larger spaces and close groups or groves to create greater stability during wind and rain events through interlocking root systems.

We partnered with Wilcox Nursery for our inaugural event. First, residents submitted tree request forms to the Neighborhood Association. Then, we sent the list to Wilcox, which made arrangements with participants individually to collect payment and coordinate delivery and/or planting. This year participants paid out- of- pocket. In the future, we may explore grantfunding to subsidize tree costs.

Here is detailed information to develop this program in your neighborhood.

Tree planting planning and preparation:

- Evaluate site requirement. https://hort.ifas.ufl.edu/woody/site-evaluation.shtml
- Locate underground utilities. Call 811 (free service) 3 weeks before planting.
- Review trees listed at Wilcox Nursery. (www.wilcoxnursery.com.)

Tree establishment and ongoing care:

- Plant according to UF/IFAS recommendations.
 https://www.arborday.org/trees/planting/documents/containerized.pdf and https://edis.ifas.ufl.edu/pdffiles/EP/ep31400.pdf
- Water daily for 1 month, every other day for 3 months, and 1-2 times a week for a year.
- Mulch to 2-3" depth around the planted tree.
- Maintain tree health by mulching, pruning, and hiring the correct tree professionals.
 https://gardeningsolutions.ifas.ufl.edu/care/pruning/pruning-and-maintaining-trees.html

Troubleshooting after planting: Contact UF/IFAS Extension Agents at (727) 582-2110, gardenhelp@pinellascounty.org or hort@pinellascounty.org.









Any county Master Gardener can develop the same neighborhood-based program to improve the tree canopies so important to our environment. For more information contact Theresa Badurek, Master Gardener Coordinator.



Tree Huggers: Residents of the Crescent Lake Neighborhood show off a newly planted tree. Photo by Kaitlin Hammersley

Pleasing the Pollinators

By Ellen Mahany, Master Gardener Volunteer

Now, in the midst of pollinator season, bees, butterflies, flies, wasps, moths, and beetles can enjoy a wide selection of nectar plants among the trees, shrubs, perennials, vines, and ground covers. These insects flit from one flower to another and one plant to another, like guests sampling appetizers at a cocktail party. Pictured here are some of the more visible bees and butterflies seeking nectar from some of the more popular pollinator plants in my garden. Photos by Ellen Mahany.







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My native evergreen Firebush
 (Hamelia patens) attracts the widest
 variety of insect pollinators. This large
 shrub promises ample space and
 nectar for all. Adaptable to various
 conditions, it blooms best in full sun
 but offers more attractive foliage in the
 shade. This monarch (Danaus
 plexxipus) chooses a spot high above
 the ground for a swift taste.



2. An uncommon garden visitor, a Horace's duskywing skipper (*Erynnis Horatius*), joins a crowd of honeybees on a large native wild coffee bush (*Psychotria nervosa*). Birds pick off insects to feed to their babies, and later in the season eat the red berries. This beauty pops up in various places and transplants easily.



3. A honeybee (Apis mellifera) and an Eastern Carpenter Bee (Xylocopa virginica ssp.) focus on the pinklavender blooms of the lovely native teabush (Melochia tomentose), another bee magnate attracting several species. It also appeals to butterflies, including my colony of Polydamus Swallowtails (Battus polydamus) This sun lover grows to 12 to 14 feet but can be trimmed to a smaller size.







4. An Eastern Tiger Swallowtail (Papilio glaucus) adds beauty to the exotic Java glory bowerbush (Clerodendrum speciosissmum), an aggressive but controllable plant. The Polydamus Swallowtail (Battus polydamas) is another frequent visitor. (I have larva plants for both butterfly species.)



5. Later in the season the native Bee Balm or Horsemint (Monarda punctata) develops layered lavender and white blooms irresistible to bees, as seen here in a closeup of a sweat bee (Genus Halictus). This deciduous plant grows quickly in sun to partial shade.



6. An unidentified bee (Epifamily Anthophila) is one of several smaller insects favoring the native Tickseed Coreopsis (Coreopsis leavenworthii), a composite with easily accessible nectar. This year-round bloomer needs sun and moderate moisture.



Pollinators not only surround us with beauty. As Master Gardeners know, they are also responsible for thirty-five percent of our food supply. The least we can do is feed them.









Submit Your Articles and Pictures to The Dirt

The Dirt is published January, April, June, and October for master gardeners by master gardeners. The deadline for the next issue is **October 7**. If you would like to submit an article or photo feature, see the following guidelines:

- Articles should be 250 to 300 words.
- The topic can be anything you would like to share to educate your fellow gardeners.
- You many send pictures, poetry, or garden-related articles.
- Submit only Word documents, not PDF, so that edits are possible.
- Send photos as attachments and include proper attribution.
- Send submissions to Susan Ladwig at ladwig.susan@gmail.com

Editors: Susan Ladwig and Ellen Mahany

Graphics: Paula MacDonald

Advisor: Theresa Badurek, Master Gardener Coordinator and Urban Horticulture Extension

Agent. The advisor reviews and approves all submissions prior to publication.



Senna (Senna Mexicana var. chapmanii) with Orange-Barred caterpillar (Phoebis philea). Photo by Ellen Mahany

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