

MSU IN BLOOM

MSU HORTICULTURE GARDEN NEWS



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FROM THE DIRECTOR'S DESK

BY KRISTIN GETTER, DIRECTOR OF THE MSU HORTICULTURE GARDENS

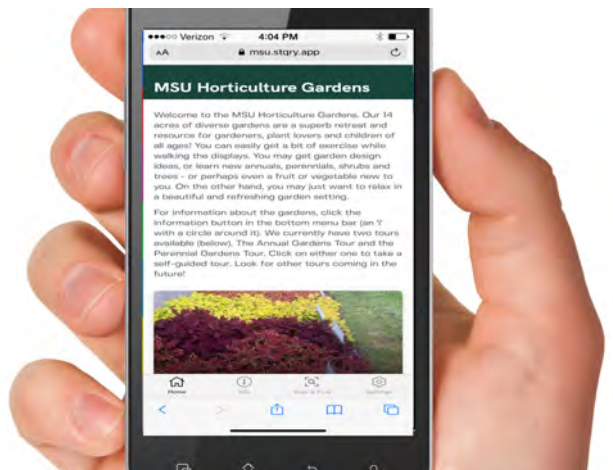
Getting Back to Normal

We are thrilled that summer is here, and all of our annuals are planted (pictured below). We are also thrilled that we are starting to feel a little bit more 'normal' in the Gardens too. Facemasks are now no longer required indoors or outdoors on campus and fully vaccinated visitors/employees do not have to wear masks inside campus, regardless of vaccination status. Our wedding rentals have been able to happen this late spring and summer, with some restrictions, and those restrictions are finally lifted.

Our "shop online, pickup curbside" spring plant sale is behind us now. We thank all of you who participated. This is our largest single-event fundraiser and was very successful. See page 4 for more information.

New Self-Guided Tour App

Our latest project is a self-guided tour web app that allows visitors to take a tour of the Gardens on their mobile phone. It is still in a testing phase, but you are free to try it out while visiting the Gardens or even from home. The web app can be found by going to your cell phone browser and typing in the following address: msu.stqry.app (yes, the 'story' is spelled 'stqry' with a Q). There is no 'www' in front of this web address.



We currently have two tours loaded (the Annual Gardens and the Perennial Gardens) but are looking to add more tours and more stops within each tour this summer. There is also a lot of great information about our Gardens if you click the information button.



MEET OUR SUMMER CREW!

BY AMY MCCAUSEY, WEDDING, EVENT & PROGRAM COORDINATOR

Many of you know that we are a teaching gardens and greenhouses and have a passion for passing on our love of flowers to students. This year, we are fortunate to have 11 students working in the Gardens (see photo below). They have each shared a little about themselves with us!

Adrianna is from Grand Haven, MI is majoring in Elementary Education. She is expecting to graduate in 2023. This is her first year with the Gardens. She loves her grandmother's garden and her favorite flowers are trillium and lamb's ear.

Rylee is majoring in Integrative Biology with a minor in Horticulture and is expecting to graduate in 2022. She is from Grand Rapids, MI and this is her first year with the Gardens. She likes sunflowers and the Frederik Meijer Garden.

Rachel is a Horticulture major from New Boston, MI, expecting to graduate in spring 2022. This is her first year with the Gardens and favors the MSU Annual Trial Garden and lantana is her favorite flower.

Hannah is from Sturgis, MI, and is majoring in Agriculture Education with expected graduation in May 2022. She loves working in the Gardens (this is her first year), but her favorite is her own garden.

Cole is from Brighton, MI, majoring in Experience Architecture and expecting to graduate in 2022. This is Cole's third year with the Gardens, his favorite area is the Arboretum and he hydrangeas.

Sarah is the only non-Michigander from Cincinnati, OH majoring in Linguistics and Sociology expecting to graduate in 2022. This is her first year working for us. Her favorite garden is her grandmother's and she likes Orchids.

Jared is majoring in Horticulture and is expecting to graduate in Spring 2022. Jared is from Grand Rapids, MI, and is with the Gardens for the first time this year. He enjoys our Japanese Garden in the Arboretum.

Savannah is majoring in Horticulture with expected graduation in Spring 2023. She is from Detroit, MI, and this is her first year with the Gardens. She likes dianthus and our Children's Garden and in her free time she likes cooking.



Our crew: (left to right): Daedre McGrath-Trial Garden Manager, Adrianna, Rylee, Dan Bulkowski-Greenhouse Manager, Rachel, Hannah, Cole, Ben, Mackenzie, Hannah, Sarah, Jared, and Savannah (not pictured).



Morgan is a student that works directly with me, mainly on weddings and events. Morgan has an amazing ability to plan events and has been an amazing help to me as we have ramped up the weddings and events in the Gardens this year! She has put in many long hours to ensure our clients have an amazing Spartan Experience! She is also the go-to person for her family events.

Morgan will graduate in December 2021 with a major in Sustainable Parks, Recreation & Tourism and a minor in Environmental & Sustainable Studies, with a focus on Hospitality Business. She hopes to move to the Grand Rapids area and be a wedding planner at a facility in the Grand Rapids area. She is planning her own wedding for October 2022.

SPRING PLANT SALE.....THAT'S A WRAP!

BY AMY MCCAUSEY, WEDDING, EVENT & PROGRAM COORDINATOR

Our 2021 Spring Plant Sale was a huge success despite being virtual. With the new platform for this sale, we were happy with the results and heard some positive feedback about the ease of shopping, the information available for each plant, and the looks of the store. We are happy with the results, but hope to get back to in-person sales this Fall.

I thought a few statistics would be fun to share!

- The largest order: \$613.02 (142 items)
- The largest number of orders: 4 (2 people placed 4 orders under the same name!)
- The first order was placed at 3:24 AM
- We had a total of 619 orders
- We gave \$1,663.06 in discounts
- We had 56 new Garden Memberships purchased between April 1 through May 6 (some of you may be just getting your membership packets!)



Photo from a past in-person plant sale

LEAF-STYLES OF THE RICH & FAMOUS

Why are certain types of flowers and veggies so expensive?

By Daedre McGrath, Trial Garden Manager

Plants are either propagated from seeds or vegetatively (by rooting cuttings).

Vegetatively-propagated plants are generally more expensive than seed-grown varieties due to the extra labor involved in harvesting the cuttings, overnight shipping from their country of origin (most are grown in tropical areas), and labor cost to unpackage and stick the cuttings into media (mostly still done by hand).

Both seed-grown and vegetatively-propagated plants come in two flavors: 1) Open-pollinated/non-hybrid varieties, and 2) Hybrid varieties created by cross-pollination. Hybrid varieties usually have added perks (like disease-resistance or larger fruit or flowers), but generally require human-intervention to create, making them more expensive to produce. Many hybrid varieties are perpetuated through vegetative propagation (which is more expensive to carry out) to ensure the genetics are identical from one plant to the next.



Big Spenders

Here are some of the most expensive types of annual flower seeds

New Guinea Impatiens \$0.14./seed

Ornamental Pepper \$0.25/seed

Ornamental Millet \$0.28/seed

Angelonia \$0.28/seed

Canna \$0.69/seed

Petunia \$0.28-0.69/seed

Osteospermum \$0.69/seed

Fuseables (a multi-variety pellet)
\$0.69/seed

Some annuals are almost always vegetatively-propagated these days, such as sweet potato vine, verbena, lantana, scaevola, calibrachoa, and many petunias.

Canna and New Guinea impatiens used to be produced entirely through vegetative propagation, but in the last few years, seed-grown varieties have become available, making them much cheaper to produce!

How do you grow a seedless watermelon?

Seedless watermelons are incredibly popular in the United States, making up 92% of watermelon sales. Watermelons have 22 chromosomes (this is called the diploid number). When you cross a diploid watermelon with a 44 chromosome watermelon (called a tetraploid, created through mutation) the resulting fruit will have seeds that are triploid (having 33 chromosomes). Watermelons grown from triploid seeds are sterile and will not form viable seeds. The process of creating the tetraploid seed is expensive, which is why seedless watermelon seed is so expensive.



WATERMELON \$EED\$

Check out the prices on these different types of watermelon!

Personal-size, open-pollinated, with seeds:

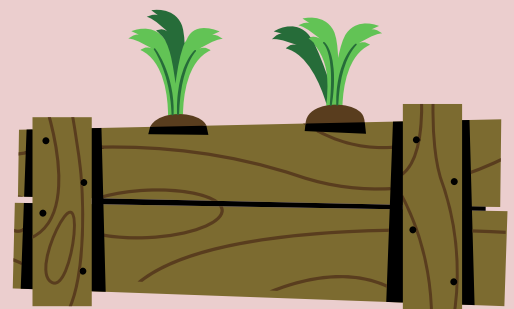
Sugar Baby, \$0.16/seed

Personal-size, hybrid, with seeds:

Mini Love \$0.56/seed

Personal-size, hybrid, seedless:

Ocelot \$0.62/seed



BALL FOUNTAIN VAULT REPAIRS

BY DAN BULKOWSKI, GREENHOUSE AND GARDEN MANAGER

So it happens from time to time that repairs are needed in the Gardens. Our infrastructure has reached the age where parts and structures fail and need to be fixed. Such was the case for the vault, or pit, of our ball fountain. Our ball fountain is not really a fountain in the technical sense, it doesn't send water shooting into the air. But, it does use water to lift and rotate the 1500lb solid granite ball in the rose garden. To accomplish that feat, pumps and lots of plumbing are used and they are located in a vault just to the west of the ball. The vault is actually a concrete septic tank with the top cut off that we buried into the ground. One of the walls cracked a few years ago and slowly was pushing in. It got to the point that at any moment it would collapse in. MSU masons were contacted and they said they could build us a new wall. We (okay so really a student) dug out the soil from the exterior side of the failing wall. Then the masons came in, cut out the old wall and removed it, and rebuilt it with concrete blocks. The new wall can be seen with the white waterproofing they applied. Fortunately for me, they were able to enlarge the vault width by 1", which doesn't sound like a lot, but with all of the mechanicals in the vault, and maybe me gaining the Covid 15 pounds, the extra room is very welcome. On to the next repair...



The Ball Fountain



In the pit

Butterflies in the Garden Goes Virtual in 2021



The very popular Butterflies in the Garden program was back this year but in a slightly different format. Instead of thousands of students coming to the Curiosity Classroom and Butterfly Lab, this spring we brought the classroom and lab to them via live streaming. Over 40 classrooms from around Michigan and Ohio experienced butterflies in their classrooms or homes a new way. Each field trip started with a lesson in the classroom about the butterfly life cycle and anatomy. We then took a close up look at butterflies under the digital microscopes. After these explorations in the butterfly lab it was time for students to see butterflies in our Indoor 4-H Children's Garden Flight House. As we walked down the vine, we talked to the students about what we would look for in the garden and reminded them of butterfly etiquette.



Buckeye butterfly on lantana



Malachite butterfly on petunia

As we entered the Indoor 4-H Children's Garden we took the classes to the chrysalis cage to see butterflies emerging and to learn about metamorphosis. We then hunted for caterpillars and butterfly eggs. Each field trip got to see at least a dozen different types of butterflies flying and on flowers. Many classes saw the butterflies' proboscis pushing into flowers, and a few even got to see our resident tree frog. The field trips concluded with a time for question and answers. Each classroom had lots of questions with some of my favorites being; "What is a butterfly's favorite color?" and "Where do butterflies sleep?". Although this year's butterfly program looked much different than it has in the past, it was wonderful to be able to share the garden and butterflies in a new way. If you would like to experience a virtual butterfly field trip, check out our pre-recorded field trip video on YouTube at: <https://youtu.be/Nkg3mDfiGN8>.