Dormant Gardens
As many of you may know, garden work can be done even when it is dormant. This past fall, after our Gardens went dormant, we replaced some major signages. The Annual Garden (pictured right) and Perennial Garden signs were both updated to reflect MSU’s brand image. We feel it has a sleek, modern look to it and visitors will recognize the MSU colors. Much of our signage is aging and more work needs to be done in this regard, but this is a great start.

Ramping up
During this bitterly cold portion of the winter though, we do a lot of planning for the rest of the year. We are planning garden designs and garden projects that we want to accomplish in 2022, but also planning for our programming and events. For instance, we will have our Volunteer Kickoff on Tuesday, March 8. If you are interested in volunteering with us, see page 4 of this newsletter. We also are planning a Curious Gardener series for this spring which will consist of afternoon workshops in each of February, March, and April. See page 3 for more information. And of course, our spring plant sale is in the works for Saturday, May 14. Remember to purchase your 2022 Garden Membership to get into the plant sale early AND get a discount on plant purchases (see page 8 for more details). And finally, we are bringing back Garden Day this year! It will be slightly reimagined, offered in September instead of August, but with the same basic format as before. We are super excited to welcome back Art Cameron to be our keynote speaker. For more information about Garden Day, see page 16.

Potential New Programming
Another idea we are considering is to host musicians in our Gardens during the summer months as a once-per-month free public event. To bring in MSU musicians costs about $800 per event. If you are interested in sponsoring such an event, please reach out to me at getterk@msu.edu. We need to secure the musicians by March 15th.
Curious Gardener Series

Macramé Plant Hanger
Create your own hanging planter with macramé cord. All supplies, including a container and plant, are included!
Wednesday, February 16, 2022
3:00pm-5:00pm
Cost: $20 for Members
$25 for non-Members
Parking not included
Maximum Enrollment: 24

Register for Curious Gardener at shopmsugardens.com

Fabulous Glass Garden Flowers
Spring is almost here, so celebrate the changing season by creating a beautiful work of glass garden art. Join Daedre McGrath, Trial Garden Manager, and learn how to design one-of-a-kind glass flowers from upcycled materials. You will select from a wide variety of repurposed glassware to create two unique three-layered flowers and customize them with glass paint.
Thursday, March 10, 2022
3:00pm-5:00pm
Cost: $35 for Members
$40 for non-Members
Parking not included
Maximum Enrollment: 24

Spring Floral Design
Join us in creating a spring floral design using both store bought flowers and items from our gardens. Workshop includes all materials and each participant will take home their own unique floral design.
Wednesday, April 13th, 2022
2:00pm-4:00pm
Cost: $40 members
$45 non-members
Parking not included
Maximum Enrollment: 20

Volunteer Kick-off
Spring Plant Sale
Garden Day
Houseplant & Succulent Sale

March 8
May 14
September 17
November 5
Are you craving gardening with friends? Do you love getting your hands dirty while smiling, laughing, and sharing gardening successes and woes? Are you searching for an avenue to fine-tune your gardening skills? Look no further than our very own MSU Horticulture Gardens! We have volunteer opportunities that fit all your needs – from our Tuesday garden workdays, docent opportunities, and helping with our events and plant sales – we have got you covered!

There’s a special sort of feeling when you spend a morning outdoors gardening with a group of fun, friendly, knowledgeable people. This feeling is sweet, inspiring, encouraging, and powerful. Gardening with friends helps make the workload lighter and reminds you of how much you can truly accomplish when the community comes together. Our volunteers make all of this happen, and more! Come be a part of making the gardens the best they can be, while making lifelong friends along the way. Become a volunteer!

If you’re interested or know others who may be interested, please email Bethany Troy at troybeth@msu.edu for more information.
Volunteer Kick-Off

Tuesday, March 8th at 9 AM

Located in the Conservatory of the Plant and Soil Sciences Building

Face coverings must be worn by everyone indoors at MSU and at this event.
What’s Getting Fixed (not neutered) in the Greenhouses

By Dan Bulkowski, Greenhouse Manager

We are asked quite often as to what we might be doing in the greenhouses this time of year. Well, we just don’t sit around and read comic books (some folks like to think so). A lot goes into planning and prepping for the upcoming season: evaluating what worked last year, designing, ordering seeds and plants, cleaning, organizing, and fixing the equipment are just a few of the tasks we do in between comic book orders. Recently we tackled replacing tires on some of our wheelbarrows. Not with pneumatic inflatable tires that can go flat over time, but with solid-core rubber tires. They never go flat. Now I know you’re thinking that those are expensive. Yes, they are. $36.07 each for the 10 we just ordered. But the Gardens owns almost 20 wheelbarrows, and some are the double-wheeled variety. With students mostly using them, there is a high probability that inflatable tires will go flat. And yes they did, when I first started 23 years ago. We were constantly putting new tubes in tires from sticks and thorns mysteriously ran over. The manager 23 years ago, Doug Badgero, started to convert the tires over to solid rubber tires. BRILLIANT! No more constantly checking tire pressures and replacing popped tire tubes. $36.07 divided by at least a 20-year life span, is cheap. So, this winter we picked the worst of the tires that needed replacing and made it happen. That’s just one thing that was on our to-do list this winter. We definitely keep busy this time of year inside the greenhouses. Now back to taking our plastic pot inventory. Well, maybe after I see what Spiderman is up to…

20-year old solid-core rubber tire

New solid-core rubber tires
If you’re reading this newsletter, you probably love gardening. Or at least love to visit gardens. And you aren’t alone. Ancient people loved gardens too. The Egyptians probably didn’t invent gardening, but some of the world’s oldest documentation of gardens can be found in ancient Egyptian relics. We know a lot about their lifestyle and society because of their preserved writings and temple/tomb inscriptions. In fact, about 2,000 species of flowering and aromatic plants have been found in these tombs.

There were many types of gardens in their society, including temple gardens, funerary gardens outside of tombs, and royal palace gardens. The wealthy citizens often had formal gardens too. Many of the gardens were useful – containing plants they could either eat or use for medicine, fiber, or perfume.

For instance, in a 1900 BCE tomb (pictured top right) we see Egyptians irrigating and harvesting a vegetable garden. The two leftmost gardeners are carrying pots to irrigate the crop while the other gardener ties onions into bundles. Archeological evidence shows that common vegetable crops included garlic, onion, lettuce, and cucumber.

Fruits were also very popular in the Egyptian garden. The date palm, fig, grape, pomegranate, olive, and even apple were all grown before 332 BC. Shown middle-right are grapes being collected from an arbor (ca. 1500 BCE). But ornamental plants were also grown for their beauty and adornment. Many paintings show Egyptian women smelling flowers or wearing floral collars (pictured bottom right, ca. 1350 BCE). Common flowers were lotus (water lily), poppy, safflower, and Oriental larkspur to name just a few. Herbs, spices, aromatic, and medicinal plants were also grown and included coriander, cumin, dill, fennel, mint, mustard, rosemary, and thyme.
Water features were also very common in gardens, like that pictured bottom left from the Tomb of Nebamun (ca. 1350 BCE). Here a rectangular pond depicts an abundance of fish along with ducks and lotus, all surrounded by date palms and fruit trees. And for the wealthy, these gardens could be quite elaborate and have multiple pond features. Pictured bottom right is a garden plan for Amenhotep, an Egyptian high official (ca. 1350 BCE). The plan included a square plot of land surrounded by ornate walls, their home shaded by trees, multiple water features, a vineyard in the middle, and numerous other trees, shrubs, and flowers.

So the next time you are gardening or enjoying a garden, you can walk like….er, garden like an Egyptian.

Photos: British Museum, EA37983 (left); Berrall, JS, 1966. The Garden: An Illustrated History (right).

MEMBERSHIP HAS ITS BENEFITS

BY AMY MCCAUSEY, WEDDING & EVENT COORDINATOR

Do you love to travel? Do you love to learn? Do you just love plants? A Garden Membership has many benefits! We are offering many garden programs in 2022. Watch our website for more information (www.hrt.msu.edu/our_gardens). Curious Gardener sessions are now available (www.hrt.msu.edu/cg). Our Spring Plant Sale will be held in May 2022, where members will receive 10% off plant sale purchases. You can also use your membership at 200+ American Horticulture Society reciprocal gardens across the country! You can renew or join online here: www.hrt.msu.edu/join. If you need a brochure mailed to you, please contact me at hgardens@msu.edu or 517-353-0443.
Designing Our 2022 Annual Garden Displays

By Daedre McGrath, Trial Garden Manager

I recently finished planning out our annual garden displays for the 2022 season and wanted to share a few highlights you can expect to see this summer. Typically, there is a certain color palette that I generally adhere to for the season, but this year, I have planned a little bit of everything, literally!

Last year, near the fountain in the annual garden, my student employees planted four identical beds, but limited themselves to a single color-family for each bed. Their challenge was that they could only use leftovers from the spring plant sale, so they mixed all the white flowers together in one bed, and the yellow/orange flowers in another, etc. Not only were these some of the best-looking student-designed beds I've ever had, but they inspired me to do something similar. This year, I have planned an all-white bed for our main wedding ceremony area. In addition, I will be planting a rainbow bed around the entire perimeter of the sunken garden (the fountain is in the center). As you progress around this bed, the colors will shift through white, yellow, orange, red, pink, purple, blue, green, and finally black. I have considered doing this before, but it is quite an undertaking. This bed normally requires about 1,500 plants and I normally limit myself (for sanity's sake) to a repeating pattern of approximately 5 varieties. This year, I currently plan to use at least 76 varieties (about 7 to 10 in each color family, see Photo 1) and will probably pick up a few more here and there as the opportunity arises. Luckily, almost everything planned for the rainbow bed is already being grown for use either in another area of the gardens or for the spring plant sale (or at least that's what I keep telling myself when I start hyperventilating).

Another area I'm really excited about is two brand new beds in the northwest corner of the annual gardens. Last summer, I arrived to work one morning to find that some very prominent shrubs had been removed overnight (we're told it was for safety reasons). Surprise! I now have two sizeable bare areas that I hope to eventually use as trial beds. However, I would like to plant the area in display plants for at least the first year or two until we get the area developed better.
My plan this year is to do a cottage-style garden in all antique colors (Photo 2), like peach, cream, rose, and chocolate (Photo 3). I am incorporating many varieties that I want to experiment with on a small scale before using them on a larger scale elsewhere in the garden. I went a little nuts here too and currently have 42 varieties planned for this area (and I’ve only ever grown about 5 of them before). On the list are 7 varieties of Nicotiana (flowering tobacco, a favorite of mine), including an oddball open-faced variety I stumbled upon called Peach Screamer that inspired this entire design. The hope is that even if some of these untested varieties end up performing poorly, the cottage garden-style planting will hide any major gaps.

Hopefully you can get out this summer and check out these designs as well as all the other amazing gardens we have planned!
**What is a Redbud?**  
*Cercis canadensis*, AKA Eastern Redbud, is a small, deciduous, native, understory tree. Typically growing 20-30' tall, Redbuds grow in an upright rounded form, often multi-trunked, and with a canopy spread wider than it is tall. The leaves are a unique heart shape, green, and 3-5" across that change to pale yellow in the fall. Seeds are produced inside bean-like pods that turn brown in summer and can remain on the tree into winter.

A member of the plant family Fabaceae, AKA the “Pea” or “Legume” family, the lavender-pink pea-shaped flowers are what Redbuds are best known for. Flowering in the spring before the foliage emerges barren branches explode with colorful blooms. The floral show put on by our friend of the forest is a truly spectacular sight!

In the wild, this happy little native tree inhabits the eastern and central parts of the United States, from New York to Florida and from Texas to Michigan. In Michigan, I have seen them growing in the forest, the woodland margin, and out in open fields and meadows. Their adaptability is a major factor in their wide geographic distribution and given the circumstances; they are not necessarily fussy about much.
**Redbuds in the Landscape and Garden**

Apart from the natural areas, Redbuds have found another environment in which they can thrive; man-made ones. As a landscape or garden tree, Redbuds have many ornamental qualities that are welcomed and appreciated and, for this showy native tree, its popularity is well deserved.

Redbuds don't really have an “off” season. They are attractive year-round and always have something to offer. It starts in spring when the beautiful pink flowers bloom on bare branches, a familiar and anticipated site. The flowers are followed by those bold, heart-shaped leaves that remain all summer long before turning varying shades of yellow in the fall. After leaf drop the branching structure is revealed, the zig-zag growth of the stems along with the fine texture of the gracefully upswept branches can be appreciated. The darker-colored bark looks great against the white of winter snow and serves as a great stage for the spring flowers living just beneath the bark's surface.

It is not just looks that have propelled Redbuds into the spotlight, they are also popular because they are versatile and can be used in a variety of landscape situations. Redbuds are shade tolerant and adaptable to different soil conditions like high or low pH, and varying moisture (except extremely wet or dry). It’s not bothered by clay soil if it drains, and deer tend to avoid it as well.

Redbuds are also tolerant to Juglone, the chemical produced by Black Walnut trees, *Juglans nigra*. Released by the roots, this chemical can stunt and kill sensitive plants growing within their root zone. The best solution is to avoid sensitive plants and choose tolerant ones and their cultivars. Since they are not bothered by this chemical warfare, Redbuds have an advantage over some of the other flowering trees like Crabapples (*Malus* sp. & cultivars) and Magnolias (*Magnolia* sp. & cultivars), for landscape use. My small backyard is affected by a large Black Walnut tree growing in my neighbor’s yard. As a plant enthusiast, it was pretty disheartening to realize I could not have my own Magnolia, among other things, in my backyard gardens. Thankfully, Redbuds are still an option, and I planted one in my backyard, and it is flourishing!

**Today’s Redbuds**

Most Redbuds in gardens and landscapes are not the same Redbuds living in the wild, they are cultivars. A cultivar is short for “cultivated variety.” Simply put, cultivars are different varieties that have been selected and/or bred by humans for desirable characteristics. Another admirable thing about Redbuds is that even though there are many cultivars available today, the straight species Eastern Redbud (*Cercis canadensis*) is still widely used. Usually, the straight species of any landscape tree experiences a decline in planting once more ornamental cultivars become available because the new kids on the block are deemed “better” suited for landscape use. However, in my experience in the nursery world, we sold just as many “normal” straight species Redbuds as we did cultivars. So, if you are looking for classic native beauty, it’s out there.
Cultivars
There are numerous Redbud cultivars available today, and each one has unique qualities when compared to the straight species. The main characteristics I use when discussing Redbud cultivars are Flower, Foliage, and Form.

- **Flower** pertains to the flower color, usually varying shades of pink or white.
- **Foliage** refers mainly to the color of the leaves. Cultivars can be green-leafed, purple-leafed, yellow leafed, along with some variegated and multicolor ones too.
- **Form** is the shape the tree grows into based on its growing habit; for Redbuds I tend to informally place them into two groups, the uprights, and the weepers.

Upright growing cultivars
These cultivars grow more like the straight species. Their branches grow up and out. The mature height can vary from the full size typical of the species to a dwarf that stays significantly smaller. Below are some of my favorites.

- **‘Forest Pansy’** - A Beautiful red-purple leaf cultivar. Flowers give way to vibrant red-purple new leaves that fade towards green as the heat cranks up in summer, as is typical of most purple-leafed landscape trees. Flowers are more rose-purple and the tree grows similar in size to the species.
- **‘Hearts of Gold’** – A vigorous, striking yellow leaf cultivar. Leaves fade to green during summer but regular watering during drought can help them stay yellow longer. One of my favorites for a small, yellow-leafed specimen tree. Growing typical Redbud size, maybe a little smaller. Flowers are a similar color to the species.
• ‘Rising Sun’ – Similar to ‘Hearts of Gold’ but with vibrant golden orange new growth that fades to yellow then green. Plants I saw had all three colors on the same tree in September. This unique look made these easily recognizable in the nursery amongst others.

• ‘Royal White’ – Classic Redbud look with stunning white flowers instead of pink. Green leaves. Grows to the size and shape of the straight species.

• ‘Appalachian Red’ – Stunningly colorful cultivar with flowers that are more vibrant and saturated in color than the species. More neon-pink/magenta than red. Regardless, this cultivar is a true showstopper in spring and has been described as “Electric” when planted next to the straight species. Typical size of the species. Green leaves.

Weepers
These are dramatic cultivars with branches that grow downward from the trunk to create a contorted, pendulous, fountain effect. They have dense cascading branches that give the tree a dome shape as they descend. Each one is unique based on how it has been grown in the nursery and pruned in the garden or landscape. With age, these trees become one-of-a-kind specimens and their leafless silhouettes range from graceful to downright spooky. Since many things can be done to influence a Weeping Redbuds shape by pruning, I focus more on the differences in leaf color or flower color rather than their form.

• ‘Lavender Twist’ - A green-leafed weeper with rosy lavender-pink flowers. A heavy bloomer and vigorous grower. I have a young ‘Lavender Twist’ and I am excited to see it grow into something like this!

• ‘Ruby Falls’ - Gorgeous red-purple-leafed weeping cultivar. A wonderful way to add the drama of a weeping red-leafed tree to a garden with bonus spring blooms!

• ‘Vanilla Twist’ – Traditional weeping growth habit with pure white flowers. Green foliage.
• ‘Golden Falls’ - Bright golden yellow leaves, lavender-pink flowers. The first yellow leafed weeping Redbud is a newer introduction that is sure to stun.

As you can see, Redbuds have made quite a journey. This small flowering tree started in the forests of North America and now, can also be found in gardens around the world. Thanks to their versatility, adaptability, and beauty, Redbuds have solidified themselves into modern horticulture. With so many choices available today there is a Redbud for every garden. Whether the classic straight species or one of its ornamental cultivars, there is no going wrong with a Redbud. Try one and see for yourself what makes them a star.
Garden Day Reimagined

Saturday, September 17, 2022
Stay tuned for more information this summer!
Craving gardening with friends?

Come volunteer with us!

The MSU Horticulture Gardens is a 14-acre space located on MSU’s south campus. Our knowledgeable and hard-working staff love engaging with our volunteers, and rely heavily on them to keep our space beautiful for all members of the community to enjoy. Garden maintenance, events, and plant sales are just a few things volunteers help us with. Become a part of our volunteer team today!

FOR FURTHER INFORMATION ON VOLUNTEERING, PLEASE CONTACT BETHANY TROY AT TROYBETH@MSU.EDU