The Svalbard Global Seed Vault
by Barbara Kochick, Master Gardener 2013

The Svalbard Global Seed Vault is carved into the hillside in Svalbard, Norway. It is 650 miles from the North Pole, lacks tectonic activity and has permafrost. The ten year old vault is the largest collection of food seeds in the world. It is the ultimate backup to the 1,750 seed banks currently scattered over the world. This unique bank was established to enable food to be grown in the wake of a man made or natural disaster. The United Nations had commissioned a study on the viability of seed storage. A plan of action came out of this study which led to the founding of the vault.

A group of scientists and researchers has collected seeds from all over the world. It now holds close to one million seed varieties. This includes almost two hundred thousand types of rice and fifty thousand types of beans. There are thirty-two types of potatoes from Ireland and several samples of chili peppers from the US. The capacity exists for the storage of millions more.

Inside the vault about 500 seeds per variety are enclosed in three-ply foil packages, identified by country, and stored in sealed containers. Low humidity and a cold temperature help keep them viable. Local coal provides the power to the additional refrigeration units.

Although global catastrophe is the most dramatic potential use of the vault it is frequently accessed for more common events. Seeds are lost due to mismanagement, accident, funding cuts, equipment failure and natural disasters. War and civil strife also have a history of destroying entire gene banks. The Svalbard Global Seed Vault stands as a safety-net for 13,000 years of agricultural history.

Resources:
www.seedvault.no
www.croptrust.org
tour.croptrust.org
Dear Master Gardener Volunteers...

This is probably a good time for a little true confession on my part. A few years ago, I found myself just going through the motions of going to work and getting my daily tasks accomplished. I would look at my calendar and think, OK ...just let me make it through this week or get through the next Farm Meeting or big MGV event and then I will have a little breathing room. Sound familiar?

Fast forward to the Spring of 2019 ...MGV training is planned. In February, the informational meeting was completed for individuals interested in becoming Master Gardener Volunteers. Then people kept asking about the program, wanting to join and we began our training in March with one of the largest classes we have ever trained. Was it hard making sure all of the i’s were dotted and the t’s crossed? You bet!! Was I a little nervous? Absolutely!! Do I still have work to do to continue to orient the new class ...YES!! But for the first time in a few years, I quit counting the weeks until training was done, tried to be a student of the new MGV teaching manual and really listened to our instructors. I now often find myself looking at the new MGV training manual to assist with a news column or add a fun fact to a radio show or more importantly to share something fun with other MGV’s or even trying something new at home!!

My point for this crazy column is to encourage each of you to simply enjoy each other, our project work and learning times together. Just think about our weeks of training together and the work many of you have already completed this spring. Please see the next page for descriptions and photos of ongoing projects.

The bottom line is ...I am proud of all of the things we have accomplished, from training new interns to project “team” work. Maybe I am a little proud of me too. I learned to “let go” and I have been able to watch each of you shine a little brighter, too. Thank you for all of your dedication to the Master Gardener Program!!

Sincerely,

Connie Smith
Master Gardener Coordinator
Smith.3204@osu.edu
740-652-7267

Connie’s Corner

Congratulations to the 2019 Master Gardener Class

It was a great eight weeks of training!! Presentations were AWESOME!! Thank you to all of the hostesses, mentors, lunch coordinators and MGV’s who came early to help with set-up!! Thank you so much for all of the assistance and goodies you brought to share!! APPRECIATE EACH OF YOU!!
Spring Project Work
by Connie Smith, Master Gardiner Coordinator

At Wagnalls, the garden beds have been adopted and cleaned and mulch has been spread. Pam Jarvis and crew continue to reach into the community for assistance from Scout groups and Football Team members. What an impact you can make on those young folks. Ann Brocker and her “Corny” friends put together session one of a great series on the many uses of Corn for the homeschool group at Wagnalls.

The Ag Center Team spent several months meeting and researching plants for the Ag Center 2019 planting. I am really impressed they have chosen to learn more about the plants they were planting, remove some invasive messes, tidy up the courtyard planting and better yet, make a change!! I have no doubt it will be stunning!!

The Sherman House Gardeners have met, completed spring clean-up and have plans for a busy summer of garden activities. The Kitchen Garden is pictured here.

And our newsletter editor, Lisa, keeps all of your articles organized and ready for the next edition of Thru the Vine.

BOOK A REVIEW
by Barbara Kochick, Master Gardener 2013

The $64 Tomato: How One Man Nearly Lost His Sanity, Spent a Fortune and Endured Existential Crisis in the Quest for a Perfect Garden
By William Alexander

You can’t put a price tag on the value of homegrown produce; or can you? I think many of us have been there and will relate to the hilarious adventures of Mr. Alexander. He dreams of being a gentleman farmer with a garden and a small orchard but nature interferes with his plans. He finds himself in life-and-death battles with webworms, deer, weeds and a groundhog named Superchuck! This is backyard gardening as an extreme sport. He includes recipes for his staggeringly expensive, beloved Brandywines. The way he waxes poetic about them may encourage you to include a few in this year’s garden.
Wagnalls: Spring 2019
furnished by Pam Jarvis, Master Gardener 2005

Wagnalls 2019 Work Schedule

June 4: 8:30-10:30am  
June 12: 8:30-10:30am  
June 20: 8:30-10:30am  
June 25: 8:30-10:30am  
July 2: 8:30-10:30am  
July 11: 8:30-10:30am  
July 16: 8:30-10:30am  
July 25: 8:30-10:30am  
Aug. 1: 8:30-10:30am  
Aug. 8: 8:30-10:30am  
Sept. 3: 8:30-10am  
Sept. 12: 8:30-10:30am

- Community help dates will be set up once the new school year starts.
- All dates are weather permitting.
- Friday, September 13, 6:30pm: Dinner Party at the Jarvis home! Everyone welcome to come celebrate. No need to bring anything, but RSVP for yourself and spouse/significant other.
Gardening is the Pleasant Work We Do, but it Can Be a Pain!
by Debra Smith, Master Gardener 2019

Before gardening, do 15 minutes of warm up such as walking while swinging your arms or dancing to your favorite Beatles song! This is so important because it increases muscle and tendon flexibility.

After the 15 minute warm up, you may want to do a few of the following exercises.

**FINGER EXERCISES**

**Exercise #1 – Claw Stretch**
Goal: To improve the range of motion of your fingers. Start with your hand in front of you, palm towards you. Touch each finger joint base by bending your fingertips down, almost like you are making a claw. Do this exercise four times with each hand.

**Exercise #2 – Pinch Strengthener**
Goal: To help strengthen your thumb muscles and fingers. This will help you with practical everyday things such as opening packages or turning your keys. Grab some putty or a ball between the tips your thumb and fingers. Hold it for 30-60 seconds and repeat this in both hands 10-15 times. *If you have a damaged thumb joint, it is not recommended that you do this exercise.*

**Exercise #3 – Finger Lift**
Goal: To increase the flexibility and range of motion in your fingers. Start by placing your hand palm down, flat, on any surface. A table is a good starting point. Lift one finger off the surface gently, and lower it again. Do this with each of your fingers and repeat upwards of 12 times with each hand.

**Exercise #4 – Finger Stretch**
Goal: To improve the range of motion in your hands and help with pain relief. Start by placing your hand palm down, flat, on any surface. Without actually forcing your joint, straighten your fingers against the surface as flat as you can then repeat. Do this exercise four times with each hand.

**Exercise #5 – Make A Fist**
This is a good warmup exercise for most people. You should stop if you feel pain. Make a fist and wrap the thumb across the fingers. Spread your fingers open wide. Do this exercise with each hand four times.

**BACK EXERCISE**
Stand up, your feet about hip width apart, and place your hands on top of your pelvis. Keep your knees straight as you gently bend back as far as possible. Return to the starting position and repeat six times, trying to extend slightly farther back each time.

**HIPS AND KNEES**
Stand in front of a chair with your feet hip-width apart. Keep your knees over your feet. Slowly lower your buns toward the chair without actually sitting down. Be sure to tighten your abdominals to help support your back. Keep your knees over your ankles and place your weight in your heels during the full range of motion. Placing your arms out in front of you may help your balance. Straighten your body upright and repeat.

**GARDEN HELPERS**
Adaptive garden tools are available. Peta sells Easi-Grip tools for about $40 and Easi-Grip long reach tools which allow the gardener to be seated for about $143. (Both sets are pictured here.)

**USING GLOVES**
Remember that when you wear gloves and are gripping a tool, you are generating up to 30% more force and that can lead to joint pain after a day in the garden. You may want to remove your glove when you are using shears or trimmers.
Your grandchildren are busy playing soccer. Your son is away on a business trip. Your daughter is at garden club after a hard day as a part time accountant downtown and you are looking out the window at a beautiful sunny day and not a cloud in the sky. But wait. There are so many weeds and the pruning isn’t finished yet. When was the last time you watered or fertilized? Oh, the pain in your right foot and that stabbing pain in your lower back. How on earth will the yard work ever get done? There’s no one nearby to help.

Old folks just aren’t as strong or mobile as they used to be in spite of their good intentions. It is more and more difficult to bend over or lift heavy objects or even kneel and pull a weed or transplant those flowers that you started from bulbs earlier in the spring.

If you still want a traditional garden, keep it simple and minimal. The vegetables and flowers that you decide not to grow can always be bought at the farmer’s market or nursery. If you do decide to garden, be sure to add plenty of organic mulch to reduce weed growth and help feed the garden. It also saves watering. In open spaces in the garden where the plants aren’t growing, use pebbles or river rock as a top dressing. Far less weeding and digging.

Why not grow annuals or perennials as potted plants. This will save a lot of digging and bending over to plant and care for them. You can even grow tomatoes, peppers and other vegetables in pots if you stake them well and not overwater them. If you insist on getting your hands dirty, there are numerous perennials and flowering shrubs that you can keep in your garden for year after year with little care or back breaking maintenance. Low maintenance gardens are perfect for old folks. You get to enjoy their beauty with less digging, bending and watering. If you grow in pots, try to keep them on a bench or table where they can be easily maintained and you can enjoy their flowering beauty or their bounty if they are vegetables.

Once your son and grandchildren have some free time, ask them to build you a few bench style raised garden beds. Using treated lumber and having sufficient height in the frame for about six to ten inches of soil will create a perfect vegetable garden that requires no bending or stretching.

Do gardening a little at a time so you don’t get too tired or endure too much discomfort or pain. A half hour in the morning and a half hour in the evening is far less stressful than an hour all at once. A wheeled rolling stool can be a big help, too, as is a stand up weeder that can pull a weed, roots and all, without bending. They’re both available at most garden stores.

There’s something about gardening that gives us great joy and fulfillment. The fresh air, the feel of soil in our hands and planting, nurturing and eventual cutting of the flowers or harvesting of the vegetables bring us great joy and satisfaction. So, don’t wait for your grandchildren to come over to help after the soccer game or your son to come home from his business trip or your daughter to call to see if she can help after her garden club meeting. Just pour a glass of iced tea, put on your garden gloves and enjoy your beautiful potted plants and raised beds and all that nature has given you.
ACROSS THE FENCE

Native Plant Habitat
by Melinda Lee Adkins, Master Gardener

A few years ago, I installed a rain garden with Native plants. To attract Monarch butterflies I planted Milkweed and Goldenrod. Why did I choose those two plants? Monarchs only lay their eggs on Milkweed. When the larva hatches it will feed on the Milkweed plant. It takes about a month for the Monarch to go through the stages from egg, to larva (caterpillar), to pupa (chrysalis), to butterfly. When the Monarch is an adult butterfly it will then feed on the Goldenrod plant. I waited patiently for Monarchs to visit my garden. Last summer, I was picking tomatoes and I noticed a Monarch caterpillar. A week later I was washing dishes and I looked out the window to see two Monarch butterflies in my garden. I grabbed my phone and ran outside to get pictures of my visitors. My garden has become a lush habitat attracting praying mantis, grasshoppers, crickets, birds, squirrels, raccoons and other small wildlife. I am thrilled that my Native Plant Habitat is providing food for the Monarch butterfly and a home to so many creatures.

Bev’s Baked Beans
provided by Chuck Zurhorst, Master Gardener 2019

At the Master Gardener Intern Training Meeting on Thursday, April 24th, many people asked Bev Zurhorst for her baked bean casserole recipe which follows:

**Bev’s Baked Bean Melody**

You can make these beans in a crock pot or bake in the oven.

- 1 pound lean hamburger
- 8 or more slices of bacon
- 16 to 28 oz. baked beans with liquid
- 1-16 oz. can of kidney beans, rinsed
- 1-16 oz. can of baby butter beans, rinsed
- 1-16 oz. can of navy beans, rinsed
- 1 small onion, diced
- 1 clove garlic, diced
- 1/2 cup ketchup
- 1/2 cup brown sugar
- 1/4 cup molasses and/or maple syrup
- 1 tbsp cider vinegar (or white vinegar)
- 1 tsp salt
- 1 tsp dry mustard

(Double the above ingredients from ketchup down if you want the recipe to have more liquid.)

Cook bacon in pan, clean pan with paper towel and brown hamburger in the same pan with garlic and onions. Chop up bacon. After browning is done, put bacon, hamburger, onion and garlic in crock pot or casserole dish. Combine ketchup, brown sugar, maple syrup, vinegar, salt and dry mustard. Add all beans to crock pot with meat and fold in liquid ingredients.

If using crock pot, cook 3 to 4 hours on low heat or bake in casserole dish in 350 degree oven for 1 ½ hours. Feeds 6 to 8.

Enjoy!
Many people find the sound of tinkling, splashing water relaxing. What better way than to combine a water feature with your love of gardening? This is the continuation of the water garden story from last year.

I have been a water gardener for over 30 years. You can start out small and expand to a larger sized water garden as I have, or you can stay small. My first water garden was in a half whiskey barrel.

After moving into our “dream home”, we decided to incorporate a large ornamental pond in the hillside of the walkout basement adjacent to a deck. An area approximately 6 feet wide by 14 feet long and 30 inches deep was excavated after a wood timber retaining wall was constructed on 2 sides. The third and fourth walls of the pond were the house and the hillside, respectively.

“Shelves” 8-12 inches wide were cut along the top edges of the pond, about 12” below the top edge, in order to sit marginal water plants on. Shelves are basically a shallow step at the edge of the pond. Next, the entire pond was lined with black EPDM liner (Ethylene Propylene Diene Monomer), which is a flexible, moldable liner and is fish safe.

Stones and rocks found on the property and secured from a quarry were placed around the top edge of the pond to hold the liner in place and give it a finished look. Since the back side of the pond was the hillside, steps were cut into the dirt and filled with rocks. In the center, a rectangular piece of EPDM liner was put in place from the top of the hillside and overlapping into the pond below in a channel-like depression cut into the hill.

A large pump was placed in a clean garbage can at the bottom of the pond and enough water was added to cover the pump. The flexible hose attached to the pump was run along the side of the channel and secured at the top of the new-waterfall so that the water would run down and return to the pond (garbage can at the moment). A trial and error ensued as far as placing rocks in the channel of the waterfall so that they looked as natural as possible and did not impede the running water. The hardest part was placing the large stone at the bottom of the waterfall where the water terminated into the pond so that it had a pleasing look and sound.

Pumps are sold in various sizes – be sure that the size you buy will have enough power to lift the water to the height of the waterfall. There are usually charts on the back of the pump packaging, or you can look online. Don’t buy one too large, as you will have trouble reducing the water flow so that it doesn’t overshoot the pond and drain it or wash out the sides of the waterfall. Buy one too small and you may not even get a trickle of water down the waterfall.

Finally, the pond was filled with water, marginal plants were placed on some of the pond shelves in the shallow water, and the water lilies were placed on stacked bricks in the bottom of the pond. Water plants are generally potted in heavy clay soil. Some of my plants are potted in gravel. I have experimented with leaf litter (gets foul and will float) and sand (gets into the pump and ruins it). Do not use potting soil, as it will float. Goldfish were added as mosquito control and to watch. Frogs came from the surrounding area and joined the fun. And all was well in the pond until.....
It is April. Oh, how can it only be April. It was a long cold winter and the weather is still so chilly and damp. I just want to get out of the house and see some greenery. But where can I go? A short day trip to the Krohn Conservatory.

I arrived in Cincinnati before noon on a chilly, sunny day. The conservatory is operated by the Cincinnati Parks and is located in Eden Park. As I drove through the park toward the conservatory, I saw a lovely ornate gazebo near walking paths and a pond. I continued up the hillside to the conservatory and it was a beautiful view. I entered the conservatory and picked up a brochure and map. The Krohn Conservatory’s permanent collection includes: The Tropical House, Bonsai Collection, Desert Garden, Orchid Display, Palm House and the Floral Display. I was very fortunate to have visited during one of the conservatory’s special events, “The Butterflies of Ecuador.” This event is taking place from March 23rd to June 16th.

I wandered through the conservatory taking pictures and enjoying all the beautiful plants. My favorite collection was the Palm House with the 20-foot-high waterfall, stream with goldfish and the palm trees. The butterfly room was colorful, fragrant and full of action as the butterflies darted among the flowers. I was a little nervous in the desert garden. Excited school children were dashing around and that is one room in which you don’t want to stumble and end up in the garden. The cacti, agaves, yuccas, and succulents were huge. The pathways throughout the conservatory are narrow and not designed for large crowds. As school groups filled the conservatory, I wrapped up my visit.

I left the conservatory and ended my day having dinner at the Montgomery Inn and Boathouse at 925 Riverside Drive, Cincinnati, Ohio. Great food and great service.

For directions and to view the menu. Go to the Montgomery Inn and Boathouse: http://www.montgomeryinn.com/

**BOOK A REVIEW**

by Debbie Wren, Master Gardener 2005

*The Monarch, Saving Our Most Loved Butterfly* by Kylee Baumle

This book is very informative, loaded with great pictures and the author is from Ohio. I highly recommend this book. It was a great read for a cold and snowy day. I thought it might be of interest to other master gardeners.
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:**

June 11, 2019 at 6:30pm:
Local Foods Farm Tour Series 2019
Bluegreen Gardens
60 Hamburg Rd., Lancaster, OH
See flyer on next page for more info

June 12, 2019 at 7pm:
Seventh Annual Master Gardener Volunteer Founders Celebration
Topic: How to enhance home landscapes and green spaces as pollinator habitats
Trinity Lutheran Church
135 East Mound Street, Circleville, OH

July 16, 2019 at 6:30pm:
Local Foods Farm Tour Series 2019
Harrison Farm
5278 Berger Rd., Groveport, OH
See flyer on next page for more info

August 27, 2019 at 6:30pm:
Local Foods Farm Tour Series 2019
Paige’s Produce
7975 Cinc-Zanesville Rd. (St. Rt. 22), Amanda, OH
See flyer on next page for more info

**SAVE THE DATE:**

Wagnalls Work Days
June 4, 12, 20, 25: 8:30-10:30am
July 2, 11, 16, 25: 8:30-10:30am
August 1, 8: 8:30-10:30am
September 3: 8:30-10am
September 12: 8:30-10:30am

July 4, 2019: Ag Ext. Office closed for holiday
Sept. 2, 2019: Ag Ext. Office closed for holiday

December 12, 2019
MGV Holiday Gathering
Fairfield County Agriculture Center
831 College Avenue, Lancaster, OH

April 18, 2020
Dig Into Gardening
Baltimore, OH
Local Foods Farm Tour Series 2019
On-farm educational programs highlighting local producers in Fairfield County

Bluegreen Gardens
Tuesday, June 11, 2019
6:30 p.m.
Bluegreen Gardens is a boutique flower farm and floral design studio operated by Mike Zawislak and Elizabeth Fox Zawislak. Using a combination of their individual special strengths and talents, they work to bring joy to people through the sharing of their flowers.
60 Hamburg Rd., Lancaster, OH 43130
www.bluegreengardensflowers.com

Harrison Farm
Tuesday, July 16, 2019
6:30 p.m.
Harrison Farm is the home and passion of Katherine Harrison. Her goal is to honor the lessons of her grandparents and mother to find opportunities to share the value of farming with the community. This is a youth friendly location.
5278 Berger Rd, Groveport, OH 43125
www.harrisonfarm13.com

Paige’s Produce
Tuesday, August 27, 2019
6:30 p.m.
Paige’s Produce is a local family-operated farm, owned by Brian and Kelly Helser since 1999. They carefully plant, harvest, wash and pack quality produce right on the farm.
7975 Cinc-Zanesville Rd. (St. Rt. 22), Amanda, OH 43102
www.paigesproduce.com

To register, call 740.652.7260 or email Jerry Iles—iles.9@osu.edu