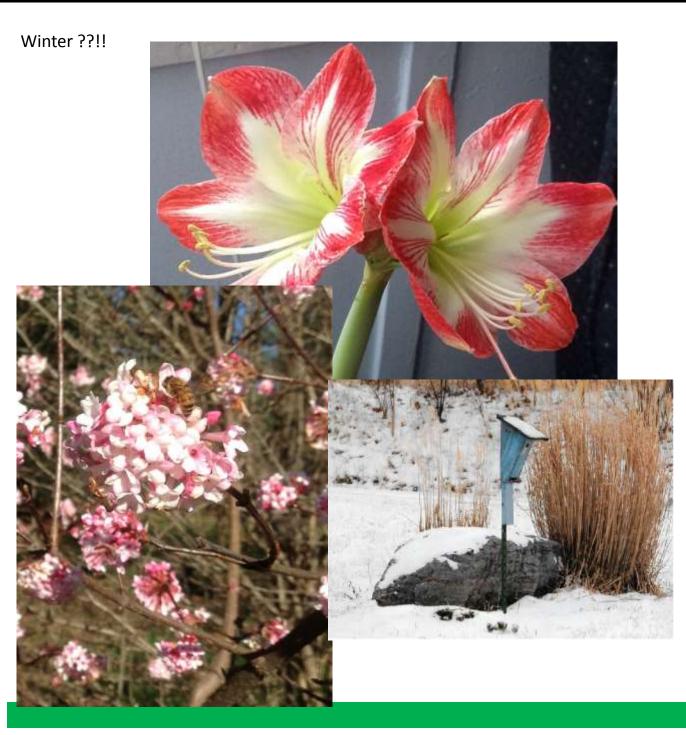


New River Valley Master Gardener Association

January 2016



Travels with and without Charles

One, maybe odd thing on my bucket list has always been to see the other natural lake in Virginia; that being Lake Drummond. So over December we were in the area, and got there!

Lake Drummond is in a National Wildlife Refuge in the middle of the Great Dismal Swamp area of Virginia. Dismal swamp is so big that it extends down into NC too (disguised as a state park). To be able to drive to Lake Drummond you have to start on the Suffolk side of things and head back east.

Large, "real" swamps grow some pretty interesting trees and plants, esp. for us mountain ridge and valley types. Common was American holly, five types of greenbriers (!), and one area on the edge was planted Longleaf pine. White cedar was hard to find, and we missed the 800 year old bald cypress. We also saw a lot of mistletoe growing in trees. Mistletoe seed germinates in the tree crotch; eventually attaches to it's host plant with a haustoria and probably ceases photosynthesis at that point. Seeds probably get there via bird droppings. A fair bit of the swamp is wooded, but as you approach the lake you drive through an area that had burned not terribly long ago. Here there was no arboreal vegetation left. Interestingly they allow deer

and bear hunting about
The 8 mile gravel road
edge of the lake. Lake
ages about three feet
is almost black in color,
tremely low (4.5 range)
3,100 acres in area.
made ditch feeding the
made ditch draining the
which are very straight.
doubtedly a result of
some terra firma to con-



four days a year. in ends at the Drummond averdeep, the water the pH is exand covers some There is a man lake, and a man far side; both of The ditch is undredging out struct a raised

surface to drive on. The ditch leading into the lake contained two weirs. In spite of the ditches, sources state that the lake has 'no visible water source'. Believe you me, things are flat.

From a historic point of view, slaves, starting as soon as they were dragged to this part of the country, tried to improve their lot in life by escaping and living in Dismal Swamp. Not much is know about these "Maroon" residents but the park is making some efforts to locate areas where they lived. One of the information signs commented on one of the North-South ditches in the park was dug by slave labor for the timber companies who were wanting to cut there late 1700's

Charles declined to go swimming even though the air temperature was some 70F. (We did have a very warm December—remember??)

Charles was NOT welcome on the second leg of this trip to the Norfolk Botanic Garden although they do have one "dog day" per year in the spring.

This botanic garden is some 140 acres located immediately beside the Norfolk Airport (that makes it easy to find on most maps) and almost totally surrounded by various bodies of water, except for the airport.. They

offer boat tours during the summer and the land has two navigable canals running through it.

As botanic gardens go, this one is definitely worth the trip, even in late December. It is large enough that you might consider the open air 20 minute tram ride to get your bearings. When we were there it was early camellia season (supposedly they were late blooming due to the warm weather). Also blooming were remnants of roses, the fall blooming azaleas, paper whites, and more

than a few confused spring trees and shrubs. As is always the case with such a winter

visit, take the time to walk around the mature trees and enjoy their bark and branch structure. I saw my first Kentucky Coffee Tree there. Our tram driver did an excellent job although he did mention prickly pear cactus-pad TREES. The back of the tram was heard giggling; maybe they do grow to tree-size down in the tropics.

Camellias are pretty amusing to us zone 5-6 types in the variation of the flowers in petal size, double-single, and shape of the reproductive organs which can play a very important part of the blossoms' looks. The stamens often form very large yellow rings in the center of the flower. Blossoms often fall off the shrub still fairly intact which still makes me do a

double take seeing blossoms scattered on the ground like

that. What I have never (yet) discovered is a fragrant one, but I will keep sniffing. I did see a couple of camellias with slightly varigated leaves. The camellia garden is very near the visitors center; making it a short walk out to see them in less friendly weather.

The garden does have a fairly small tropical (green) house with a few bonsai and a couple of fragrant orchids. Nothing much too unusual inside, but how can you complain about trucking through a greenhouse in the end of December?

What really caught my fancy here was not the camellias but two groups of sculptures out in the garden (s)

The above was part of eleven sculptures of famous artists done by Moses Ezekiel . Ezekiel was the first Jewish cadet to attend VMI; graduated from there after the civil war and moved





Mr. Crawford is at the bottom of what they call the Statuary Row which are eleven marble seven foot statues of various artists. The "row" was being worked on when we were there.

The second sculpture group is a collection of very realistic bronze wildlife sculptures done by David Turner tucked in-between the (shrub) holly garden. He also did an eagle sculpture after the lady eagle in residence was killed by collision with an airplane.

My favorite sculpture (and no photo) are the three rarely mentioned, aluminum, very large, modern "workers" on top of the berm between the garden and the airport. These three are putting out a lot of sweat and effort.

Other things to see are the green roof, (growing nicely on a modestly steep slope), children's garden, conifer garden (many dwarfs), Virginia native plant garden, and lots of others. And if you go during the holiday season, they string up an evening light show and you are invited to drive through the park and admire their efforts.

Greening the Earth

Dr. Stephen Scheckler, Biology Professor Emeritus at Virginia Tech, gave a lecture, *Greening the Earth, 500 Million Years of Progress*, to the New River Chapter, Virginia Native Plant Society, on 4 October. He described the earliest land plants, how plants evolved, and how they changed terrestrial environments.

Today's world is green, but it hasn't always been that way. In the Cambrian and Ordovician Periods, 500-420 million years ago, land looked like today's Arctic tundra, bare and erodible. Early sediments have fossils of tissue sheets and spores that dispersed as tetrads (groups of four), which had the advantage of having both sexes present for reproduction. The first true land plants appeared in the Devonian Period. They had simple organization, as shown by petrified rhizomes in ancient peat, which show internal structures. Devonian plants became bigger, had more primary productivity, allowing trophic development as they provided food for animals.

By the mid-Devonian, there were "trees" up to two feet tall. Secondary growth allows plants to become both taller and wider. Larger progymnosperms such as *Archaeopteris* were up to 1 meter in diameter at the roots. They grew leafy branches, which were shed, and the litter supplied food to aquatic ecosystems. Fossil beds on Ellesmere Island contain many freshwater fish fossils and traces of fish activity. *Tiktaalik*, the earliest known fish fossil with legs, was found in these rock beds. It shows the origins of elbow and other joints, but has a finned tail. Early tetrapods are associated with leaf litter in springs.

There were five species of *Archaeopteris*, and they were worldwide. As land became heavily vegetated, plants affected the climate. Trees remove carbon dioxide from the atmosphere, and their roots precipitate calcium carbonate. Removal of carbon dioxide from the atmosphere lowered the earth's temperature by 5° Celsius by the end of the Devonian Period. As carbon dioxide decreased in the atmosphere, oxygen increased. Charcoal fragments, the earliest evidence of fire, show that atmospheric oxygen had reached 13%, the minimum needed to sustain combustion. (At 23%, organic material spontaneously combusts.)

Why did trees evolve so rapidly? It's advantageous to be a tree—the higher the elevation from which spores are dispersed, the farther they'll travel. When seeds evolved, floras began to vary from region to region, because seeds don't disperse as far as spores do. They tend to disperse by water, not by air, and so the plants take root in places where sediment has been deposited. In seed plants, female spores are retained in their sporangia, and an integument captures male spores, which are pollen.

The earliest seed plants weren't like any modern seed plants. They had fernlike leaves. The first conifers had appeared by the Carboniferous Period. Early amphibian footprints can be seen in the Bluefield Formation, near Glen Lyn. Few herbivores were present at this time. Plants were widespread, but they are low-quality food.

The earliest flowering plants, which had an axis and fruits but no flower parts such as petals, appeared about 130 million years ago.

Submitted by Hazel Beeler

<u>Unapproved</u> Minutes NRVMGA Board Meeting, Thursday January 7, 2016 VT Greenhouse Classroom, 6:00 PM

Meeting was called to order by President Erica Jones at 6pm. In attendance: Erica Jones, Sharon Eifried, Kelli Scott, Wendy Silverman, Steve Hale, Sara Smiley, Gwen Ewing. Not present: Evelyn Melia.

TREASURER REPORT: Sharon Eifried reviewed and explained Treasurer's Report January 2016.

Income between 15 Oct and 31 Dec 2015 was 533.00.

Operating Expenses between 15 Oct and 31 Dec 2015 is 18.41.

Scholarship funds awarded; none.

Grants awarded \$3772.00

ST-9 form files on 1/5/2016 to VA Dept of Taxation for quarter ending 12/31/2015.

the Present balance: Operating Funds \$1730.54

Scholarship funds \$227.00 Grant Funds \$3,289.44

total \$5246.98

Sample Budget for 2016 presented to be reviewed and voted on in February 2016. Board voted approval to budget \$100.00 for a plant clinic box/kit for Pulaski county.

MINUTES from November 2015 provided by Beth Kirby and approved with one correction in the Treasurer Report first sentence should read; There was no income for October.

OLD BUSINESS:

BYLAW: Kelli Scott reports there has been 1 meeting on bylaws, and she is typing in the corrections in real time and the committee discusses each sentence, each section and corrections are in a different color. The Bylaws committee will meet several more times, Next meeting on Bylaws is January 13, 2016 at Government Center multipurpose room. The Bylaws will then be presented to the board for review and further edits and then present the bylaw changes to the association members. Kelli expects the bylaws changed and approved by the end of the year.

MG Coordinator; Kelli Scott reports she will be interviewing and hopes to have a new MG coordinator by February.

NEW BUSINESS:

Plant Sale needed for Grant program; Erica will ask Beth if she will chair the Plant Sale for 2016.

Diane Blount, Beth Kirby, and Gwen Douglas noted fundraising - "plant sale" committee on membership form.

Speakers; Tentative general education meetings proposed by Wendy, Next general meeting will be 1/28/2016 at "Head House" classroom, VT Hahn garden munchies, finger food. social with educational hours. Kelli and Wendy on Plant clinics, and Hazel Beeler on geology and gardeners.

February general meeting is usually a social to meet and greet for the new trainees. Feb 25, 2016 @ 6pm, govt center or Hahn; tentative plans if class forms or not.

but MG Training for 2016 has only 4 applicants, needs at least 10 applications to make the class. 20 are usually in the training class. Applicant deadline to apply was moved to January 22, 2016. Day classes, Tuesday -Thursday, classes will be held 1-4 pm, at Hahn pavilion, we need to talk up the program.

Grapevine January 2016

January 2016 Minutes, continued

March - Beth Umberger - Invasive Nursery plants - Wendy will contact Beth.

April - Eric Day - New Pests. May - Graduation potluck, (plant sale) possible field trips,

MG College, is being revamped; will start on Saturday, more details coming on driving the van only 6 hours not 56 hours, not listed as a sponsor, no educational content.

Some discussion on the MG association members and the list of non association members.

Future Board meetings will be held the 1st Thursday of each month, 6 pm, Head House, classroom, VT Hahn garden. NEXT meeting 2/4/2016.

Wendy will research new shirt/apron/jacket with our MGA logo.

The meeting was adjourned at 8pm.

Respectfully submitted Gwen Ewing, Secretary

UPCOMING DATES

1/28 January general meeting, social 6:30 pm at "Hahn Greenhouse Classroom".

1/29-30 Va Biological Farming Conference Smith Mt Lake.

2/4 February NRV MGA Board meeting Greenhouse classroom on Washington St 6:30 pm

3/5 A celebration of Native Plants - (VMI) Lexington—\$90

3/5-6 Organic orchards conference—Blacksburg (!) \$150-180 for two days. See gladeroadgrowing.com

Spy Report on a Southern MG Group

OK folks. I got to go to Greensboro and the Guilford County (extension office) building on the east side of town. Well, the MG folks have really really been doing fun stuff here. The grounds obviously used to be a farm and still have some barns (one has a livestock show pavilion in it). But in the back there is a really nice demonstration garden with a water feature, a sunny part, a shade garden, two bog gardens, paths, fenced potting area (down here in the tropics I suspect perennials survive the

winter easily in pots sitting on top of the ground), piles of composting mulch, a gargantuan pile of homemade potting mix, and about the biggest fenced garden with multitudes of raised beds I've seen. Inside the lobby is a 4 foot wide Christmas cactus; and the local MGers are trying to get folks to grow veggies by seed by offering 3" pots of potting mix and lettuce seed with instructions on growing the lettuce.



Garden for Good in 2016 - Plant Herbs to Support Pollinators

By Sarah Smiley, MG 2014

As you look through those seed catalogs, planning your 2016 planting, consider including herbs in your gardens. There are many reasons to plant herbs – not only can you use them to improve your diet, many are drought tolerant, grow very well in poor soil, require little care, some are perennials, rarely require pesticides, very wide variety (so you'll always find interesting plants), and they are excellent sources of food for many pollinators. "One garden alone can't save the bees, birds and butter-flies, but if each of us plants just a few herbs pollinators love, what a difference we could make." - *Rhonda Fleming Hayes*

Many herbs produce flowers that are irresistible to pollinating insects, as well as a wide variety of wildlife species including native bee species, honey bees, butterflies, and hummingbirds. Herbs will also bring desirable caterpillars that are juvenile pollinators. Be sure to identify the caterpillars in your garden before you consider the need to eliminate them – and plant extra herbs to allow for their consumption (I always plant several extra Dill and Parsley as butterfly larvae love them).

As a bee keeper, I have learned that including herbs in my gardens and general landscaping (many herbs can be used as groundcover) helps to improve the biodiversity on my farm. Many gardens are developed as display gardens growing voluptuous flowers that are not very beneficial to pollinators. The pollinators are forgotten! Pollinators are keystone species, a large number of other species depends upon them for their existence, such as humans, as one of every three bites of our food is made possible by pollination.

Pollinators are also considered an indicator species, with their well-being connected intimately with the bigger picture of overall environmental health. You, hopefully, have been hearing that pollinators are in danger and are in decline. In response to the public (and bee keepers) concern about this continued decline, the Virginia Department of Agriculture and Consumer Services (VDACS) announced on January 3, 2016, the meeting schedule for the Agency's State Managed Pollinator Protection Plan. VDACS will hold seven meetings around the Commonwealth to provide stakeholders an opportunity to provide input on the development of the plan. (If you are interested in learning more about this, email: PollinatorProtection@vdacs.virginia.gov to receive the meeting schedule or provide comments).

There are several issues contributing to the decline of honey bees, bumble bees, and others; chief among them is a lack of biodiversity. Just as a person cannot/should not live off of only one food source, pollinators also need many sources for nectar and pollen. Herbs are an excellent source of these; with no pesticides, and beneficial resources for a variety of pollinators.

And to help your pollinators even more, please consider creating a watering station out of a shallow bowl or saucer with clean water (add some rocks or floating corks that act as safe perches for them to drink from) in your garden. A source of clean water is very important for keeping pollinators healthy.

Here is a list to assist with your seed ordering:

Herbs That Attract Butterflies:

•Thyme	•Mint/Catmint	•Parsley	•Dill
•Chives	•Marjoram	•Yarrow	•Echinacea

Garden For Good, con't Herbs That Attract Bees:

•Basil	•Lemon balm	•Lavender	Anise hyssop
•Mint	•Germander	•Sage	•Hyssop
•Borage	•Savory	Chamomile	•Rosemary
•Dill	•Betony	•Lamb's ears	•Thyme
Dandelion	Oregano		

Herbs That Attract Hummingbirds – Yes, hummingbirds are pollinators, too! Tubular blossoms are a main draw for them. Plant herbs such as:

•Bee balm	•Lavender	•Hyssop	•Rosemary
•Mint	Catnip	•Comfrey	•Mallow
Pineapple sage	•Globe Thistle		

I planted pineapple sage last year and I was amazed not only how fast it grow (bushy shrub) but how beautiful it was. The leaves were variegated (white stripes on bright green leaves), it bloomed red, tubular flowers and its leaves did smell a bit like pineapple. It was surrounded by hummingbirds throughout the day.



Notice, one plant that is common in all three lists is mint. Mint is often maligned by people who fuss about how aggressive it is. Yes, mint is aggressive and I have embraced this trait by using it as ground cover on banks that I do not want to mow and on rocky ground where nothing else will grow. I also use the plant for erosion control on steep shale banks. You can control it by planting it in containers. In late spring and summer, the blossoms are filled with butterflies, bees and humming birds. I also use the mint leaves in teas, salads, and desserts.

This listing of herbs is in no way exhaustive. Ones included here are easy to find, easy to grow and are plants that gardeners may already have some familiarity.

Above is pineapple sage. Rumored to be hardy to 7B maybe; alas.

Here are some links with more information if you'd like additional reading about more herbs that you could add to your gardens:

http://www.mofga.org/Publications/MaineOrganicFarmerGardener/Winter20052006/Pollinators/tabid/1110/Default.aspx http://www.motherearthliving.com/gardening/attract-pollinators-to-your-garden.aspx

http://nativepollinator.com/

In 2016, consider making a resolution to plant a few herbs in your garden. Gardening is great on so many levels, let's add one more and garden for the good of the pollinators.

The training class schedule for 2016 is not cast in stone, but last I heard the classes start in March 1st 2016 and will be held Tuesdays and Thursday 1-4pm "on the Tech campus". Tell your buddies if you know of anyone willing to put in the 50 volunteer hours needed to fulfill the obligation. Extension has been struggling with the problem of people who want to take the class, but really do not intend to fulfill their volunteer obligation. Last I heard in early January Kelli only has four people signed up. She needs more than that to hold the classes!!! Spread the word!

The coordinator job will hopefully be filled by the end of February.

The board is planning on having a plant sale again to fund the grants program. At this time the community grants have been awarded for the 2016 season but we need to raise funds for grants for next year, and the in-house "mini" grants.

The web site HAS been moved. New address is: www.nrvmga.org. Anyone interested in setting up a (connected?) blog page please contact current web mistress Erica (Jones).

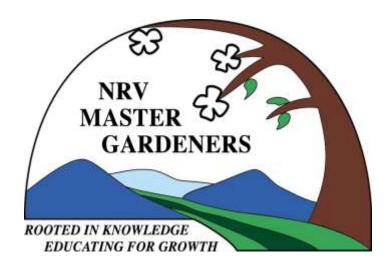
2016 Grants-\$3672 Total!!!

Here is a list of this year's grants that have been awarded.

- 1. Floyd County High School, 721 Baker St, Floyd To purchase rootstock, pots, soil, wax and plant stakes to establish nursery tree area for agriculture students to propagate, care for, and sell trees and nursery stock—\$670
- 2. Indian Valley Elementary School 4130 Indian Valley Rd Willis For blueberry bushes, fencing and mulch to start "Food Forest" at school including educational emphasis on planting, growth, care and life cycle of plants as well as crop sharing \$430
- 3. Pulaski 4-H Programs, various Pulaski County Elementary Schools- Purchase of bedding plants and potting mix for gardening programs at three elementary schools, community garden, and workshops \$600
- 4. Islamic Society of NRV, 1284 N. Main Street, Blacksburg Materials for raised garden beds, compost bin, and rain barrel connector to establish community garden as part of an effort to teach gardening and positive environmental practices to a diverse international population \$500
- 5. SO Fresh, Dublin Middle School, 650 Giles Ave Dublin . Supplies to create an indoor educational gardening module allowing students to grow produce while learning and executing good agricultural concepts \$580
- 6. MarketKids, Price House 107 Wharton St, and Farmer's Market, Blacksburg. Purchase potting soil, compost and starter plants for gardening and marketing program for 6-12 year olds; funds for print materials, T-shirts and pizza party also requested\$100.
- 7. Floyd WIC Garden, Health Department, 815 E. Main St Floyd. Drip irrigation system for Floyd WIC garden; Table and chairs, paint, and decorative baskets for Christiansburg Farmacy garden \$200
- 8. Pulaski Grow, 3163 Greenbriar Road Draper. Purchase supplies for youth in an ongoing summer training program to build five raised beds and a small water garden where planting and care of vegetables and herbs will be taught \$392
- 9. Pulaski YMCA Gardens 615 Oakhurst Ave, Pulaski. Plants, soil, compost, and supplies for children's gardens and classroom activities at the Child Development Center \$300

In past years we have appointed MG liaisons to give advice, help, supervise and report back to the club. Currently Donna Fern (head if the grants committee) is trying to establish some carryover liaisons from last year. If any openings come up, we will let you know. Some of these projects can be good for folks with fixed schedules. Donna's eMail is vafern3@gmail.com

New River Valley Master Gardeners Association



The New River Valley Master Gardener Association is a nonprofit organization working in conjunction with the Montgomery County Virginia Cooperative Extension Office to bring horticultural education and enjoyment to people in the New River Valley.

As Master Gardeners we are committed to learning about gardening and communicating our knowledge of gardening to others. We direct our efforts to creating and maintaining an awareness of the need for intelligent stewardship of the environment.

Share your know-how and enthusiasm for gardening in the *Grapevine*!

All NRVMGA members are welcome to contribute articles and other materials for publication in the *Grapevine*. We welcome project highlights, photos, book reviews, gardening tips, event announcements, stories on garden visits, how-tos, favorite recipes, and other garden-related items for publication in the *Grapevine*. And, remember, time spent researching and writing articles counts toward your Service Activity hours and/or education.

We need a Grapevine editor. Please consider doing this! We don't bite!

Webmaster and List serve Administrator

Erica Jones emjones@vt.edu



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