Eau Claire Area Master Gardener News



May 2022

Plants of South Africa and Their (Distant) Wisconsin Relatives by Jael Wolf

On April 18th, Dr. Nora Mitchell gave a Zoom presentation about her doctoral dissertation work on plants of South Africa. South Africa presents a wide variety of succulent plant species and, for this reason, is considered a hotspot. Dr. Mitchell's work focused on the highly diverse biome of the Cape Floristic Region of South Africa and how environmental factors influence the development of the plants of the genus Protea (iconic plant of this region).



Picture 1. *Protea spp.* In the Cape Floristic Region of South Africa

Biodiversity and biodiversity hotspots

Biodiversity not only refers to the number of species in a location but also the genetic diversity within species, how they function, and the ecosystem that they form. Biodiversity is important because diverse communities support ecosystem functioning, such as clean water and air and healthy soils. Biodiversity also provides other human-centric needs like food, medicine, materials, etc. Additionally, biodiversity has intrinsic importance, which means that we should value biodiversity not only for how it can serve human needs but also for the value of the existence of these organisms in themselves.

Biodiversity hotspots are unique places labeled for conservation priority because they have lots of species. They also present high levels of endemism, which means that the organisms living in these places cannot be found anywhere else in the world. Finally, these places are at risk of human impact. Usually, these places present a "Mediterranean climate" but can be found anywhere.

South Africa is considered a hot spot, usually for succulents. However, in the same way that South Africa is diverse in succulents, it is likewise very diverse in human diversity. For example, the earliest human fossils were found in South Africa. Nowadays, the country

officially recognizes 11 languages and five racial/ethnic categories.

Cape Floristic Region of South Africa

This region is located near the southern tip of South Africa. It presents more than nine thousand plant species, from which 70% are endemic. It is also characterized by a gradient of climates from cooler to hotter, to wetter to dryer. Large mountain regions create a unique topography in the area; the Atlantic and Indian oceans bring different currents. Here, an informal economy based on the wild harvesting of plant material exists. There are 129 species used for medical purposes, 96 for cut flowers, and many others for fiber, among other purposes.

Iconic plant Lineage of South Africa: Protea

The country presents about 115 species of the *Protea* genus. The most common species is king protea (*Protea cynaroides*). This

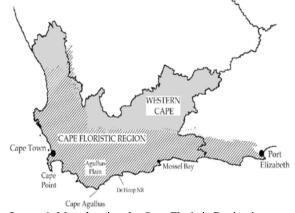


Image 1. Map showing the Cape Floristic Region in relation to the Western Cape Province, South Africa.

species is distinctive because it has the largest flower head in the genus. It is also the national flower of South Africa, and it is an important symbol of its culture. In the same way that they vary in their growth from (shrubs, short shrubs or small trees), they also present different leaf shapes and sizes. 60% of the species in the world can be found in the Cape Floristic Region. (continued on page 6)

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Local Master Gardener News

Changing e-mail? Moving?

If you do, please remember to notify the ECAMG and the newsletter editor of your new e-mail address and/or mailing address so you don't miss any Eau Claire Area Master Gardener happenings!



Email your new information to Carol Cox at c7w6c2200@charter.net or notify her by snail mail at 1908 Hogeboom Ave., Eau Claire, WI 54701 (or call her at 715-783-0016 - cell).



Bulletin Board Postings Stories and Opportunities!!!



ECAMGA Board

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Note:

The ECAMGVA Board minutes may be accessed at https://www.eauclaireareamastergardener.org.

Meet A Master Gardener – Rita Gundry...

Raised with 15 siblings on a dairy farm in southern Wisconsin, gardening wasn't an option, but a necessity. Our large vegetable garden was flanked by a wooded area, a jelly-maker's paradise, abundant in blackcaps, blackberries, wild grapes and wild plums. This upbringing laid the groundwork for my adult years. I completed the Master Gardener course in 2011 and the online Level II in 2012. Seasoning my gardening hobby with conservation efforts for the eastern bluebird, native bats, monarch butterflies and mason bees, keeps me involved from March to October.

I was employed for 35 years in the medical field. Since retiring, I have been working on a special gardening legacy

project....propagating a white rose bush which grew on our home farm since the 1920's. Consulting with Dr. David Zlesak, a 40+ year veteran of rose research at UW-River Falls, we have identified this rose as Rose Alba Semi-plena. Each spring, I look for 2-year-old shoots surrounding the established roses at our old farm site.

To date, I have successfully propagated twenty-five rose bushes which are shared with family members. In addition to the many home sites in Wisconsin, this rose happily flourishes in Minnesota, Michigan, Nebraska, Texas and Alaska.



Photo by Rebecka Gundry



ECAMGVA 2022 Calendar

Watch for emails regarding location of meeting and/or Zoom link

May 25: Irvin Park Wildflower Sanctuary Tour

May 22: Plant Sale with Hosta Society and EC Garden Club

June 20: Guided Tour of the Forest Street Shared Garden with Mari Jackson

July: Learn about landscaping

August: Outdoor education

September 9: Visit BCR Butterfly

garden

October 7: Deadline for Photo Contest

October: TBA
November: TBA

December 16: Annual Holiday Party

Its weird being the same age as old people!
- annonymous

Spread the word on how to Become a Master Gardener

For many of us, it has been years since we received our Master Gardening Certification and a lot has changed with online courses. Currently the best option to becoming a Master Gardener is to enroll in the statewide online course called <u>Growing and Caring for Plants in Wisconsin: Foundations in Gardening</u>, which is offered in the fall. Once folks finish that course, interested individuals can continue on to become a certified Master Gardener by enrolling and successfully completing the <u>Onboarding course</u>, which is only available January 1 through March 15, annually. After completing the Onboarding class, folks are ready to begin volunteering and join any area master gardening association, if they choose.

With all the changes to the Master Gardening Program, it has been hard to reach out to the general public and inform any potential future gardeners of the process. The following website is a great resource to pass on to any future gardeners: https://mastergardener.extension.wisc.edu/get-started/. This website summarizes the process and allows the potential MG to register so they are notified of upcoming classes. The ECMGA also suggests that existing master gardeners register at this site so they are aware of when Master Gardening classes are offered for the general public. The best way to grow our membership is to recruit new master gardeners, so let others know and spread the word about how to become a Master Gardener.









Events



CLASSES/WORKSHOPS

Giant Pumpkin Growing 101

May 14, 2022 at 10:00 a.m. and at 11:00 a.m

Want to learn to grow Giant Pumpkins?! Our very own Ben Polzin will be presenting the Giant Pumpkin Growing 101. In this class, he will go over the basics of giant pumpkin growing for those interested in this hobby, setting you up for a successful growing season. \$5 registration fee covers the cost of a potted starter pumpkin. To register go to our website or call 715-833-1234.



Down To Earth Garden Center

6025 Arndt Ln Eau Claire, WI 54701 715-833-1234 www.downtoearthgardencenter.com



Thrillers, Fillers & Spillers Workshop

Schedule a time <u>with up to 6 people</u> to create porch pots that are sure to dazzle! Learn the basics of how to design and plant annual containers using three types of plants that perform different functions but work in harmony to create luscious porch pots. Plan a fun outing for your family or a group of friends!

Workshop appointments will be scheduled at the top of the hour, and groups of up to 6 can be scheduled together.

- Go to our website or call 715-833-1234 to register. At the time of online registration, a booking fee of \$10 per person will be charged. Collected fees will then be deducted from the cost of your Porch Pot. You will receive an email to set up a time for your workshop. Class times will be awarded on a first come, first served basis. There is no charge for workshop, you pay only for what you plant that day.





HAVE YOU GOT IT CALENDERED?

10:30 am. Wednesday, May 25, 2022 Native Wildflower Sanctuary Tour

(Near the duck pond at Irvine Park in Chippewa Falls. Parking available next to the Wildflower Sanctuary Counts as 1 hour of Continuing Education)



Ginger Weirman, Chairman of the Wildflower Sanctuary will provide us with a tour



and information about the sanctuary. This is a project of the Lake Wissota Garden Club. May is a time when a variety of wildflower are blooming. As the Sanctuary is mostly under trees, a light rain does not stop or delay our tour. The motto is stay home if it is lightening or raining sideways.

There are picnic shelters located nearby for a picnic lunch or we can check out Leinie Lodge. More details to come after registration.

REGISTRATION: Please email Andy Heren at Andy.Heren@co.eau-claire.wi.us by May 19th if you plan to attend so that there will be enough docents to conduct the tour.



S1 County Road K, Fall Creek, WI 54742 Beavercreekreserve.org Phone: (715) 877-2212

Warbler Wednesday Hike

Wise Nature Center Wednesday, May 4 & Wednesday, May 11 7:00-8:00 am



Come out and hike around Beaver Creek with our avian technician Tully as he shows you all the amazing birds that can be found out at Beaver Creek during the spring.

Cost: \$3 for members, \$5 for non-members

Register by Monday, May 2 for the May 4 event - Register now! and by May 9 for the May 11 event. Register by Monday, May 9 for the May 11 event. Register now!

Backyard Butterfly Buffet

Date: Wednesday, May 4 Time: 3:30-4:30 pm

Have you ever wondered how to attract butterflies to your yard,



2. Register now!

Who Is That Singing?

Tuesday, May 3 & Tuesday May 10 9:00-10:00 am - FREE *This is a virtual program



Come spend the morning with Beaver Creek Reserve and learn about bird songs. This weekly talk will highlight a handful of common birds you are likely to hear this time of year in your own neighborhood. During this one-hour presentation we will introduce you to birding by ear. We will discuss the basics of why birds sing, listen to a handful of bird calls and share some hints to learning and remembering those songs.

Register by May 2 for May 3 session! Register now!

Register by May 9 for the May 10th session!

Register now!

Adult Phenology Hike

Wednesday, May 4 Wise Nature Center 9:30-11:00 am



Join Naturalist Jim Schwiebert for a hike to document the seasonal changes and flowers blooming along the Reserve's trails. The hikes will last an hour to an hour and a half. This program is geared for adults 50 and older. Hikers should expect about a mile long hike with uneven terrain and stairs to negotiate. Come join the fun! Register by Tuesday, May 3. Register now!

"I can't change the direction of the wind, but I can adjust my sails to always reach my destination."

-Jimmy Dean/Good Morning America



Bits & Pieces

OPPORTUNITY KNOCKS – EARN VOLUNTEER HOURS!

Master Gardeners! Looking for way to get some volunteer hours this year? Why not join us at the Saturday Farmers Market at Phoenix Park at the Ask a Master Gardener table? We usually have about 4-6 people. There is no pressure put on one person to answer a question. If we aren't sure of the answer, we get contact information and get back to them later. The Farmer's Market is a really exciting environment to be in on a Saturday morning. We also have so much fun sitting and visiting with each other.

We are starting a week earlier this year, May 21 (The day before the big plant sale). We get there at 8:00 and leave at noon. We are in a different place each week, so look for our table with the green tablecloth and white banner across the front.

If you have any questions, please contact Andy Heren at Rcktnut007@aol.com or 715-379-8623. Give it a try!

Plants of South Africa continued from page 1...



Picture 2. King protea (*Protea cynaroides*). Photo by Nora Mitchell.



Picture 4. Malachite sunbird (*Nectarinia famosa*) sitting on *Protea spp*.

A feature of protea is that it presents speciation by pollinators. Some of its common pollinators are sugar birds, fuzzy sugar beetles, cape sun birds, and little rodents.

Proteas and their relatives present various economic uses. They are highly valued in the cut flower industry.

Proteas present inflorescences, which means they have many flowers with petal-like bracts (modified leaves) in one prominent structure. Each of these flowers will become a small fruit when pollinated.



Picture 3. Dry Protea spp. In a flower arrangement

Fruits will produce one or more seeds, sometimes with a wing or a tail-like structure.

A feature of protea pollination is that the anthers deposit pollen onto a modified style tip (called the pollen presenter). Flowers usually remain closed until triggered by a visiting bird, mammal, or insect, when they snap open, releasing the style which rubs pollen onto the visitor. If no visitors arrive, flowers may open during the day's heat. Pollen falls off the pollen presenter after a few hours of exposure to air.

Protea plant traits as a response to their environment

Plant traits indicate how plants function, and they can be measured relatively easily. For example, plants that grow fast usually present thin and floppy leaves, while plants that grow slowly have tough and leathery leaves. Research shows that plant traits and climate might have evolved together. Dr. Mitchell's studies conclude that proteas present lower growing strategies in drier areas (areas that receive less rainfall) and often show larger organs, like leaves or flowers, in places with higher temperatures.

South African Relatives in Wisconsin

Proteas have distant relatives that can be found in Wisconsin. In Proteales, we see the water lotus/yellow lotus (Nelumbo spp). This plant also presents flowers with complicated flower heads and fruits. Also, the sycamore tree (Platanus occidentalis) with spiky fruits are shown in clusters.



Picture 5. Water lotus/yellow lotus (*Nelumbo spp*) in the left, and sycamore tree (*Platanus occidentalis*) in the right.

About Dr. Mitchell

Dr. Mitchell is a UWEC Assistant
Professor of Biology. She teaches plant
biology, evolution, and research methods.
Her current research interests is the
hybridization in wild sunflowers in
Texas. Her Ph.D. research studied the
South African genus Protea: the
phylogenetic history and the role of the
environment shaping functional trait
evolution of these plants

"Expert Advice is a great comfort, even when it's wrong."
- Ellen Currie in New York Times





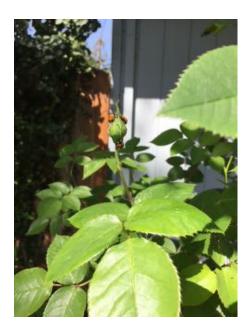
Moonflower or Datura is a large plant with greyish green leaves. The colors range from the most common white to pinkish and purplish shades and even one that is yellow. It is an interesting plant to grow with the seed pods being rather prickly and containing quantities of seed. Below is a picture of the seedpod (above picture by Dana Cox; seedpod picture from

https://hort.extension.wisc.edu/artic les/datura/website where you can find out more information about



Lady Bug To The Rescue:





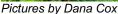
My sister, Kathy, lives in Sonoma, California. She sent me the photo of all the aphids on her rose plant and one ladybug coming up the base of the bud to attack them. The second photo is the ladybug and two others, and they've eaten almost every aphid!!! Give those ladybugs a chance to devour the aphids before you start spraying them with an assortment of chemicals. Submitted by Sally Anderson. Pictures by her sister, Kathy.





Some interesting plants to consider this spring – all are perennial or biannial and hardy in our zone. Top left is a combo of Russian Sage, Rudbeckia and Silver Sage. Above right is Sweet Autumn Clematis (listed as Zone 5 but have successfully grown it in our area). Below, left is the Weeping Norway Spruce which makes a delightful focal point in the garden and bottom right is the Woodland Poppy which is a delightful shade plant.









It is always amazing how some people can find opportunity where others see junk and loss. At left an old tree stump (and some talent at carving) is turned into a garden sculpture. The first picture to the right was labeled "Mini herb garden" and you can see the moss/lichen growth. It would also look great with some bird houses on the top. And then there is the old enamelware coffee pot upcycled to a birdhouse. One never knows what might be used for "garden art."





Unless otherwise noted, articles for this newsletter are submitted and/or written by ECAMGA members or the newsletter editor, Carol W. Cox. Unless otherwise noted, graphics are from clipart. Newsletter layout by Carol W. Cox



For more Eau Claire County UW Cooperative Extension information go to our website: www.uwex.edu/ces/cty/eauclaire Phone: 715-839-4712

Fax: 715-839-6277 M-F 8AM-5PM



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