Purple and Deadly

By Gary Bebeau

What do you call a plant that makes its own fertilizer? We say they are carnivorous. Most of these species exist in bogs and other moist areas where soils are acidic and deficient in nitrogen or phosphorous. The Sarraceniaceae family consists of three genera: Sarracenia, with 12 species; Darlingtonia, with one species; and Heliamphora, with some 23 species. These plants modify leaves into insect traps called ‘pitchers.’ We have only one species in Minnesota, the purple pitcher plant, Sarracenia purpurea var. purpurea.

Eloise Butler explained how the plant functions: “A fly seldom escapes from one of these leaf traps when she visits it for a sip of water. For, if she succeeds in crawling up the inner slippery surface, she will encounter a margin of stiff, downward pointing hairs that will hinder further progress. As the insects decay, they are absorbed. In this way the plants obtain the nitrogenous food... necessary for all plants... But what is novel about the insectivorous plants is that they capture living insects. They can thereby get a living from poorer soil and with feebler roots than can other plants. The flower also has a striking appearance. The calyx is dark red purple. The fiddle-shaped petals of rich wine color are folded over a genuine umbrella - the stigma of the pistil, which not only serves the usual purpose of pollination, but also keeps the pollen and nectar dry - an umbrella in use long before man thought of making one.”

The infrequent bog trotter may be excused for not noticing the purple pitcher plant during the summer, fall, winter and early spring as the pitchers rise no more than six to eight inches from the bog level. It is only in late spring when they flower that they make quite a display. The remainder of the year just the ground hugging leaves remain. These over-winter, resuming their purpose in the spring. As the leaves mature, they display an assortment of mottled colors.

The purple pitcher plant has pitchers somewhat ‘S’ shaped, widest just above the middle, with the opening of the pitcher round to oval with a hood that partially covers it. Rainwater collects in the pitcher, with the fine downward pointing hairs around the upper part of the pitcher. The nectaries (an organ or part of a plant that secretes nectar) inside the pitcher attract the insects, but the larger ones such as bees, butterflies and moths can feed without being trapped.

The purple pitcher plant was never found in the current boundaries of the Wildflower Garden but was abundant just west in what is now called the Quaking Bog. When the Garden was officially created in 1907, the pitcher plant was the first species transplanted into the new Garden. Eloise planted them in 22 of her 26 years as Curator. Her successor, Martha Crone, transplanted many in 12 years of her 26-year tenure. The frequency of replanting is an indication that they do not like being moved and survival rates are poor for transplants.

Gary Bebeau is Friends Treasurer, Memorials Chair and Website Coordinator.

1 Eloise Butler published this in an article in the Minneapolis Sunday Tribune, June 18, 1911.

2 More details of this history and information and photos of the plant can be found in the plant index on The Friends of the Wild Flower Garden website. https://www.friendsofthewildflowergarden.org/
Dear Friends,

Our Garden, our little piece of earth, seems like such a small place, insignificant in comparison to the lands that are used to feed the world, or lands considered important enough to fight over and even make the ultimate sacrifice to preserve. And yet in each of our lives, the Garden, a little space of natural beauty, looms large in significance because of what it does for our intellect and our spirit. This is a reminder that even smaller natural spaces are worth preserving through our individual acts. This paradox reminds us that even small acts of support and generosity in our daily lives can and do make profound differences in the world.

It is a small act, but an important one, that the Friends of the Eloise Butler Wild Flower Garden schedule an annual meeting of members. Unfortunately, very few members (except the Board) have been attending in recent years. At annual meetings, members elect the Board and are updated on financial matters and other reports about activities of the Friends. Our notice of the 2019 annual members’ meeting appears in this edition of the Fringed Gentian. Please seriously consider attending in order to become a more active supporter of the Garden!

Sincerely, Kathleen Connelly

Call for Nominations: 
Friends’ President & Membership Chair

Any dues-paying member may submit nominations to the President or Membership Chair for the Board of Directors of the Wild Flower Garden, Inc. To nominate someone please provide your name, phone number, email address, the name of the nominee, their phone number, email address, and a statement of why you think the nominee would be a good addition to the Friends’ board. Board President nominations must be received by May 1, 2019. Membership Chair nominations must be received by May 13, 2019. You may nominate yourself. Candidates must be dues-paying members by May 20, 2019. Nominations maybe emailed to gardenfriends@earthlink.net or to Friends of the Wild Flower Garden, Attn: Nominating Committee, PO Box 3793, Minneapolis, MN 55403-0793.

Nominees will be contacted and asked to provide a statement of interest, and meet with the president to discuss the position. Commitment includes 4 board meetings annually, service on a committee or other leadership role within the Friends. We are especially seeking in candidates committed to diversity, inclusion and equity.

OFFICERS AND DIRECTORS

This year’s annual member meeting will also feature an important vote on amendments to the Articles of the Friends of the Wild Flower Garden, Inc. You can view a PDF of the proposed changes to the Articles on the Friends’ website. One amendment adds language intended to support the Friends’ application for exemption from Minnesota taxes. We are already a 501 (c)(3) organization for federal income tax purposes, but a separate application is required for the State of Minnesota status. Another amendment will make it possible for a quorum of the Board to change the Articles, without requiring a vote of the members, when the need arises.

Friends members are encouraged to provide your input. You are welcome to send me your thoughts, questions, and suggestions. Please write to the attention of Kathy Connelly, info@friendsofeloisebutler.org.

Sincerely, Kathleen Connelly

Hunting the Aurora Borealis
By Colin Bartol

We in Minnesota are privileged to live in one of the best places in the world to see the aurora borealis, one of nature’s most spectacular events. Yet, many of us still have not seen it. Fortunately it is becoming easier and easier to see, so we can give you some helpful information about how to do it.

The aurora borealis, or northern lights, occurs when the solar winds from the sun deliver to Earth electrons and protons which are absorbed by our upper atmosphere. The displays are actually very predictable based upon the activity of the sun. The disturbance of the Earth’s magnetic field is measured on the 0-9 Kp index, with the higher numbers denoting a higher likelihood of a display being visible.

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The return of spring is such a heartening part of our four season cycle. It feels like a genuine miracle, to have the warming earth re-awaken the vibrancy of our sensory awareness. Especially those senses that can almost go dormant in the winter, like one’s sense of smell. Until a whiff of damp earth reminds a woodland walker how much they longed for a mossy moment in the thawing sprawl of a spring forest. In the pauses afforded by those moments of re-awakening, for me, the inhale of spring restores and the exhale carries along an acknowledgement that the sensory stillness of another winter is in retreat. What a visceral experience to live in a land where so much change occurs at this time of year. What a gift to have such a vibrant and familiar place to re-awaken one’s senses as the Wildflower Garden.

In addition to the return of spring, we have much to celebrate here at the Wildflower Garden. Remarkably and with great joy, phase two of the Eloise Butler Wildflower Garden boardwalk project has been completed, with an additional 327’ of elevated boardwalk installed. This includes a 40’ long tapered gathering space with a slender 20’ long curved bench. This design allows for the free-flowing movement of visitors while providing space for birding and the study and enjoyment of the wetland garden. Now fully complete, the boardwalk totals over 600’ in length and meanders elegantly through the heart of the historic Wildflower Garden.

A grand opening ceremony will take place on Friday, April 26, 2016 from 2 to 4 pm with the ribbon cutting at 3 pm.

This project was made possible through a collaborative effort between the Friends of the Wild Flower Garden (Friends) and the Minneapolis Park & Recreation Board (MPRB). Working together for over seven years from inception to completion, this project has exemplified how the Friends and the MPRB work together to bring out the very best at the Wildflower Garden. The generous Friends’ project donations totaled over $142,000 for phases one and two of the project—financially supporting more than 50% of the design, construction and installation costs to bring this project to completion. Several Friends board members were closely involved with this project along with numerous contractors and MPRB staff members. The amount of effort, creativity and ingenuity to envision the boardwalk and the dedication and perseverance to bring it to fruition over these past many years is largely awe-inspiring, and honestly, a tad astounding.

With deep and sincere gratitude, thank you to the Friends, project funders, project cheerleaders, designers, contractors, and MPRB staff everyone who has supported these efforts. All of whom were essential to completing the Wildflower Garden’s award-winning boardwalk.

Friends’ members, your monetary gifts large and small towards the project are genuinely appreciated and held with great esteem by the Minneapolis Park & Recreation Board. Without your contributions, this project would not have been made possible. Thank you and enjoy this beautiful addition to the Wildflower Garden that we all cherish.

And happy spring! ☀️

Susan Wilkins is the Garden’s Curator. Her column appears courtesy of the Minneapolis Park & Recreation Board.
Published in 2009, this volume was the first and largest collection of African American nature poetry ever published; 180 poems by 93 poets. The poems are as dense and lush as the Virginia forest that motivated poet Camille T. Dungy to immerse herself in nature and assemble the anthology. They are also meditative, piercing and written in multiple forms: formal stanzas, traditional haiku, contemporary, experimental, rich with inner rhymes and rhythms.

This collection expands the common boundaries that contain nature for many of us. Here nature does not exist solely outside urban areas, nor even outside houses. Images of dappled sunlight on paths and water, birds, bees, wasps, and mosquitos, the sun, moon and stars draw you to join the poet, in awe of a delicate flower, as in “The Night Blooming Cereus” by Robert Hughes and Rita Dove’s “Evening Primrose.”

In “Noctiflora,” Marilyn Nelson relates, “hand in hand, we entered the light-spattered morning dark woods. Where he pointed was only a white flower until I saw him seeing it.”

Dungy researched the complicated history of a tree with sprawling branches and roots extending through concrete foundation. Through its fascinating story she became fully engaged in the complicated relationship of African Americans with nature – the inseparable imprint of a shared history that includes forests that delight and protect, but are also thick with threat, terror, and death. Dungy explores the deep conflict of black history “that includes the both emancipation oaks and the hanging trees.”

In an introductory reminiscence to Cycle Four: Pests, People Too, is called “Boll Weevils, Coyotes and the Color of Nuisance.” Here, C.S. Giscombe examines revelatory variations in the tales of Brer Rabbit and Brer Bear. Four relatively long poems follow: the heartrending “Miscarriage in October with Ladybugs” by Amber Flora Thomas, “Man Reading in Bed by a Window with Bugs” Gregory Pardlo, “Pest” Major Jackson, “Ambition II: Mosquito in Mist” Tim Seibles, then a perfectly placed haiku by Richard Wright.

The final cycle Comes Always Spring, is full of tender and haunting poems and even phrases, as in “Fearless” by Tim Seibles:

surely i am able to write poems
celebrating grass and how the blue
in the sky can flow green or red
and the waters lean against the
chesapeake shore like a familiar
poems about nature and landscape
surely but whenever i begin
“the trees wave their knotted branches
and . . .” why
is there under that poem always
an other poem?
--- Lucille Clifton

This brilliant harvest of poetry is organized into ten cycles highlighting themes to “help the reader reconceptualize the boundaries for environmentally minded reading.” Each cycle is introduced by a prose piece as powerful as the poems. Themes include observation, farming and factory work, animals, and memory.

Within the whole there is an ebb and flow, like the pass of a shuttle back and forth on a loom, producing a richly textured tapestry salvaged from overlapping generations. These threads of history are held together with the pain and promise of nature, nurturing and bearing witness.

A broader understanding of this country and its poetry eludes us if we fail to recognize varied use of landscape, animal life, ecological perspectives, and the politics of black poets. Spanning four centuries, and more numerous generations, Black Nature holds vivid and moving poetry, resonant with history and insight. And, while the anthology illuminates black experience of nature, it also deftly draws us away from stereotype, toward truth.

Emily Anderson is a recent copyeditor for The Fringed Gentian.
By now just about everyone interested in nature knows that the Monarch butterfly population has been decreasing dramatically. A recent estimate places them down by about 86%.

Rather than just mourning the loss of this beautiful creature, a few things can be done to help them survive.

1. **PLANT MILKWEED**, the food their caterpillars eat. The Common Milkweed (Asclepias syriaca) grows easily from plants or seeds, depending on how green your thumb is. If your thumb is very green, google “free milkweed seeds,” and, if they haven’t run out, you can do your good deed for free, and even share the sprouted plants with friends. For less green thumbs like mine, already-started plants are available for purchase. There are other local Milkweeds that are a bit less attractive to Monarchs, but, if your garden is better suited to a different species, try the bright orange Butterfly Weed (A. tuberosa) if your garden tends to be dry, or plant the fragrant Swamp Milkweed (A. incarnata) for damp or woody areas. Swamp Weed can also be found with the Rose Milkweed name.

2. **PLANT SOME OF MONARCH’S FAVORITE NECTAR PLANTS** like Meadow Blazing Star (Liatris ligulstylis), Stiff Goldenrod (Solidago rigida), or the new Oligoneuron rigidum rigidum, in addition to Anise Hyssop (Agastache foeniculum).

3. **PERSUADE YOUR FRIENDS** to include some of these same plantings in their gardens. The plants mentioned above are available from many nurseries including the local Prairie Moon.

Some Monarch enthusiasts may prefer a more hands on approach for saving Monarchs. If you come across tiny white eggs on the underside of Milkweed leaves or baby caterpillars crawling around on the leaves, pick the top part of the plant along with any eggs or baby caterpillars to bring inside and put this stem in water. It’s a good idea to put some paper towels under the container, so the caterpillar droppings don’t harm the surface underneath. If you bring in Monarch caterpillars or the eggs hatch inside, you are preventing them from becoming bird, insect, or spider food before they can transform into butterflies.

You might be surprised that birds are listed among Monarch caterpillar predators because you may have seen evidence in publications which indicate birds won’t eat these caterpillars because they taste bad. Well, that’s almost correct. In fact, the young caterpillars haven’t eaten enough milkweed to have acquired the bitter taste, so birds are perfectly happy to eat them up to a moderately large caterpillar size. Birds actually are not the only Monarch predators; Ladybird Beetles and Yellow Jacket Hornets as well as various spiders like to munch on these striped caterpillars. By bringing Monarch eggs and small caterpillars into safety inside, you are providing a safe environment for caterpillars who will eventually go into the transitional pupal stage.

Once the Monarch caterpillars reach their full size in about 9 to 14 days, you may soon find them hanging in a kind of J shape. Within 10 to 15 minutes the change begins as each little being encases itself inside a chrysalis. If you are not there to witness this transformation live, you can check out this video on YouTube http://youtu.be/b4WYor6UMtU.

Once the clear chrysalis has formed and transformation has begun, gold spots can be seen forming. All the butterflies in the same family with Monarchs emerge with some kind of metallic-like spots, yet no one seems to have identified what function they serve, but apparently they provide some kind of evolutionary advantage for the adult butterflies. The developing Monarch inside the chrysalis gradually changes coloring to yellow and orange pigments with the metallic sheen coming from the microscopic structure of the dots.

It’s a good idea to put the hanging chrysalis outside once it stops looking green and the orange and black butterfly colors show through. If it does emerge inside, know that it takes some time for the wings to dry and extend properly for flight, so you can still get it outside in time for it to fly away. Just hope these butterflies make it to the famous Mexican Monarch wintering spots on oyamel fir trees in the Michoacán and Mexico states, so this miraculous cycle can begin again.

Diana Thottungal is a retired Garden naturalist.
Aurora Borealis

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In the past you would have to look at a number of sites to know if the aurora would be visible, but new technology makes it much easier. There are apps like the Aurora app that do all of the work for you. When the Kp index registers over 7, there is a good chance that the aurora borealis will be visible. The calculations are done for your current location, and the alerts will give you notifications during the day if an event is likely that night and includes the likely time for viewing.

To prepare for aurora hunting you need to do some preparation. You will need to find a location to do your observation that does not have much ambient light and has a good northern viewing area. For people who live close to Eloise Butler, the Sherburne Wildlife Refuge is about an hour north of our garden and fulfills the requirements. If you can do some scouting beforehand in the daylight, that should ensure you are well oriented when the time is right. Using a red head light and a red filter on your smartphone screen will help your eyes adjust to the low light conditions and be able to see the aurora better.

Contrary to popular belief, there is no season for seeing the aurora as it depends on solar conditions. Because darkness makes observation easier, the winter does not require you to stay up as late to get a good view.

People travel all over the world to see an aurora borealis, but we are fortunate to live where it is relatively easy to spot them. Take advantage of our convenient location as Minnesotans and use the technology now available to make it easier than ever to witness one of Nature’s greatest light shows. ❀

Colin Bartol is editor of The Fringed Gentian.

Invasive Team Prepares for 2019

By Kari Christianson

Last fall, the Friends Invasive Plants Action Group (FIPAG) continued working in the Maple Glen just across the path south of the garden gate. Every season I am honored to work with this group and amazed at what we are able to accomplish. Ridding the Maple Glen of invasive species has presented us with challenges, including the scale of the project. It takes multiple years to clear areas of invasives, and the Maple Glen is large. We need to prevent erosion on the steep hillside especially on the north facing slope with its paucity of vegetation. We need to protect the existing native plants and provide space for them to thrive. We need to protect the vernal pool at the bottom of glen so that it can continue to support its wetland plants and creatures.

In addition to erosion control, we have been experimenting with other plantings to replace the bare areas. We were excited to see that the Pennsylvania sedge we planted last spring on the north facing slope was still healthy in the fall. We also seeded several test plots with native woodland grasses and flowers before the first snowfall and now eagerly await spring seedlings.

We also continue to remove garlic mustard in the volunteer service areas and have cleared wide swaths of this invasive, allowing a diversity of woodland flowers to thrive – trillium, violet, geranium, anemone, bellwort, and more. Though it seems we have made headway on garlic mustard, we still remain vigilant. One garlic mustard plant left to mature will produce between 500 and 1,000 seeds – so it is best to uproot the plant before it has the opportunity to overtake an area. As we worked, we also removed infestations of dame’s rocket and burdock, which are prone to spread quickly if left unchecked.

As I write this, the temperature is -28 degrees Fahrenheit; but I have not forgotten what spring looks like. It is pure pleasure to be out under the woods transform.

Kari Christianson is co-leader of the Friends Invasive Plant Action Group. To reach FIPAG, email invasives@friendsofeloisebutler.org

Entrance gate to the garden. Many mustard pulls start to the right of the gate.

photo: Kari Ramstrom

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Invasive buckthorn re-sprouts prodigiously – often producing 5-20 suckers from a hewn trunk, so simply cutting the trees down is not enough. The most effective removal method is to uproot the entire tree by hand, spade, or weed wrench, leaving no trunk or large root fragments behind. We were lucky to have relatively moist soil during our work sessions last fall, making the pulling easier. This pulling method is not feasible when the tree is larger, however, or on a steep slope where uprooting the tree would cause erosion issues. As we worked the slopes, the largest buckthorns were cut, leaving the root balls in place to hold the soil, and the outer rim of the stumps were treated by park staff to prevent re-sprouting. (Volunteers never use herbicides and are not present when they are applied.) Additionally, as the area will take multiple years to clear of invasives, we lopped off and removed some of the female buckthorns, their crowns thick with berries, about five feet from the ground to slow the dispersion of seed. These females will re-sprout from the base and trunks next season, but will be less likely to create seed, and because they are cut higher, will have enough trunk left to provide a good hold for pulling in the fall. Through this combination of methods, the buckthorn has steadily lost dominance in the Maple Glen.

In addition to

...
Memorials & Donations ~ October 2018 through January 2019

GIFTS RECEIVED in support of our programs from:

Michael Anderson                  Meleah Maynard                  Rare Plant Group, Mary Stanley  
Kathleen Connelly                 Peter Michaud                    Helen Stoerzinger                 
Maria Eggemeyer                   Diane Newberry                   Joanne Von Blon                    
Meg Forney                        Mary Jane Pappas                 Nancy Ward                        
Elizabeth Kreibich                Music for Parks                  Pam Weiner & Jim Wittenberg

MEMORIALS RECEIVED

for Bennett L. Busselman from Gary & Nancy Busselman;
for Natalie Titrington Quinn

Memorials and donations to the Friends are tax deductible and constitute an important part of keeping the Garden a special place for generations of people to enjoy. In 2019 undesignated donations will be used for the Student Transportation Grant Program and for new shrubs and trees for the Garden. Project update information is on The Friends web site. An acknowledgment of donation will be provided to all donors.

Note on Memorials: Please give a name and address for the person honored, or their family, so that we can acknowledge to them that a memorial has been received. Memorials and donations should be sent to Friends of the Wild Flower Garden, P.O. Box 3793, Minneapolis, MN 55403. Checks are payable to Friends of the Wild Flower Garden, or donate on our website site, www.friendsofthewildflowergarden.org

Membership Form

Memberships can be ordered online at www.friendsofthewildflowergarden.org or mailed with a check payable to:
Friends of the Wild Flower Garden Membership
P.O. Box 3793
Minneapolis, MN 55403-0793

Please specify if the membership is a gift.
Each membership is tax deductible to the extent allowed by law.

Donations and Memorials Form

Donations of gifts or memorials may be made at www.friendsofthewildflowergarden.org or mailed with a check payable to:
Friends of the Wild Flower Garden
P.O. Box 3793
Minneapolis, MN 55403-0793

Thank you for helping to sustain the
Eloise Butler Wildflower Garden and
Bird Sanctuary.
All gifts are tax deductible.
Friends of the Wild Flower Garden, Inc. is a 501(c)(3) Minnesota nonprofit corporation, formed in 1952. Its purpose is to educate by enhancing Garden visitors’ appreciation and understanding of Minnesota’s native plants and natural environments and to offer assistance for the Garden in the form of funding and other support.

The Fringed Gentian™ is published for members and supporters of the Friends.

For changes to your mailing address or email address, please contact Membership Chair Jayne Funk at members@friendsofeloisebutler.org or Friends of the Wild Flower Garden, Membership, P.O. Box 3793, Minneapolis, MN 55403-0793.

The Fringed Gentian Staff
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Denise Sterling, copyeditor
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