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The Trillium

Piedmont Chapter
North American Rock Garden Society
Chapel Hill, Durham, Raleigh, NC
www.facebook.com/
piedmontchapterNARGS
Web site: https://
www.piedmontnargs.org

Mount St. Helens, Renewed

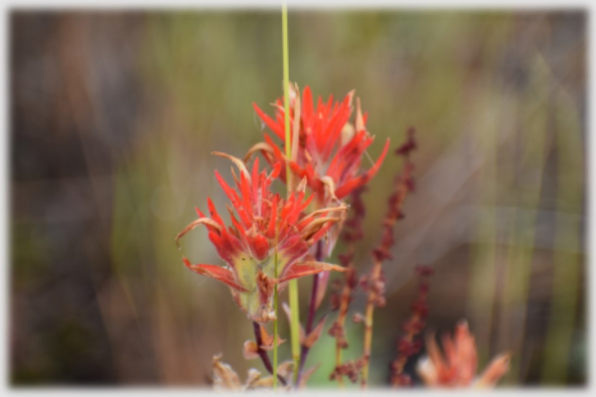
by Tim Alderton

Being only two years old when the Mount St. Helens' eruption occurred, I don't remember the actual event. Documentaries and historical recaps of the explosion on the nightly news mostly informed me about May 18, 1980 on the Cascade peak in central Washington. Hearing about the reestablishment of both flora and fauna in these areas during the late 1980s and early 1990s seemed like a miracle. It was always a place I wanted to go and experience—mostly to see the rebirth of the environment since much of the landscape had being sterilized and reset after that momentous day. In August of 2018, Chris Glenn, Cyndy Cromwell, Nancy Doubrava and I took a day to explore this Cascade peak. After 38 years, the opportunity to visit the infamous mountain gave me the chance to firsthand see how our environment recovered in what is roughly my own lifetime. Late season wildflowers viewing was the focus of the visit but a few chance sightings of wildlife also greeted us on our day at the mountain.

There was a fog and a periodic light drizzle as we drove up the Spirit Lake Highway toward Mount St. Helens. In areas outside of the Mount St. Helens National Volcanic Monument, hillsides covered in *Abies procera,* planted after the eruption by the pulp wood industry grew in a monoculture, provided verdant green cover. The North Fork Toutle River valley below, still covered in thick layers of the material from the pyroclastic flows and mud slides, grew sparse vegetation - only slowly being recolonized by herbs, shrubs, and trees. Our first stop, Mount St. Helens Forest Learning Center, provided an intermittent clouded view of the mountain ahead from the cliffside overlook. Native vegetation began colonizing the area near the center, free of the *Abies* . Ubiquitous *Daucus carota* flowered in the dry grass along the cliffs edge. Walking to the overlook presented more variety as native *Pseudotsuga menziesii*, heavily fruited *Mahonia aquifolium*, and milky white masses of *Anaphalis margaritacea* led the way to the top of the overlook. An occasional naturalized Eurasian, *Jacobaea vulgaris*, stood out of the grass, *Daucus*, and *Mahonia* with tall clusters of inch wide yellow daisies. From the overlook, a herd of elk could be seen on the floodplain below appearing as tiny dots against the dry grass. Patches of remnant forest grew along mountainsides sheltered from the cataclysmic explosion on the opposite side of the river valley visible from the overlook.

Mahonia aquifolium

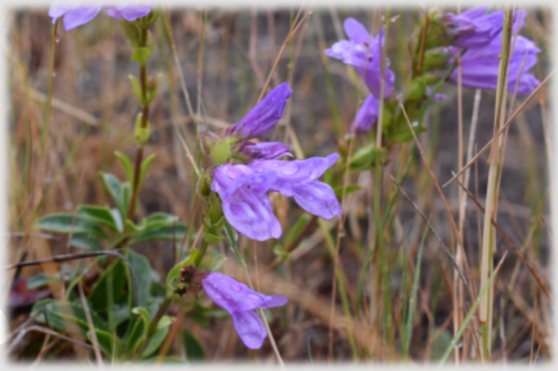
Driving on into the monument, the landscape became sparse. Grasses, brown from the dry late season, and a scattering of *Abies* and *Pseudotsuga* began populating the slopes, while *Alnus* species dominated the valleys. Loowit Viewpoint was our first stop within the monument. Starkly different from the learning center area, only low growing vegetation thinly covered the ground, but a much more diverse flora. *Castilleja miniata*, both short silver leaved *Lupinus breweri* and taller green leaved *Lupinus latifolius* topped in spikes of blue and purple, low rosettes of penstemon, sedum, and grasses grew on the gravelly soil on the



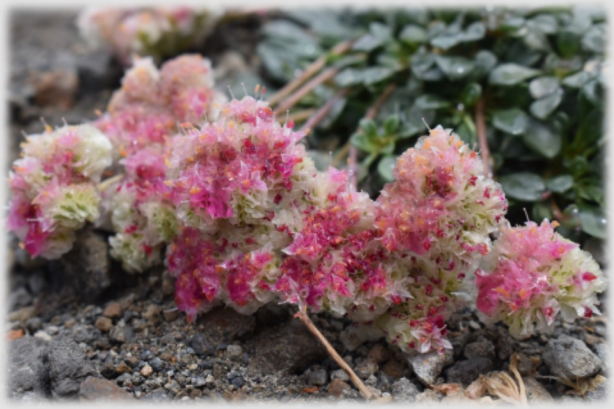
Castilleja miniata

***Lupinus brewerii* and Mount St. Helens**

low slopes near the parking area. A few weathered large stumps and logs provided hints of the forest once covering the landscape, they now sheltered *Anaphalis margaritacea* with their straw-like flowers and clumps of *Penstemon cardwellii* topped in short spikes of soft purple blossoms along with grasses and more red *Castilleja miniata*. Following a trail that crested the slope above the parking lot, the view opened onto the river and the crater partially obscured by low clouds and sheets of light rain falling in the distance. Along another trail near the viewpoint, prostrate succulent *Cistanthe umbellata* grew on the loose pumice soil. Dense clusters of creamy-white flowers aging to pink on 4" long pedicels leaned out from the rosettes of nearly flat glossy foliage. Not far from the *Cistanthe*, grew a tight clump of the ubiquitous *Rumex acetosella* with spikes of coppery flowers among aging seed heads. Inches away a sprawling slightly shorter and broader *Phacelia leptosepala* dwarfed the *Cistanthe* nearby. Scorpion-like inflorescence curved out from the relaxed growth with a few small, creamy-white flowers still showing themselves among the ripening dry brown fruit.

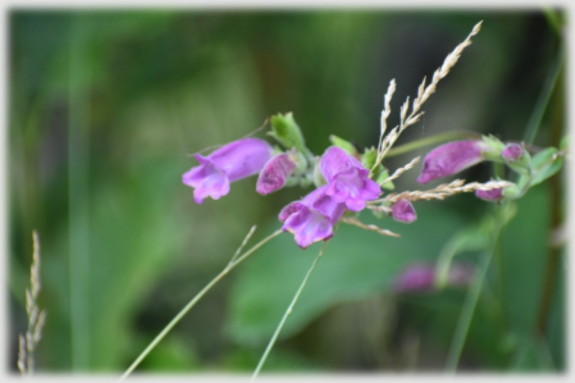


Penstemon cardwellii

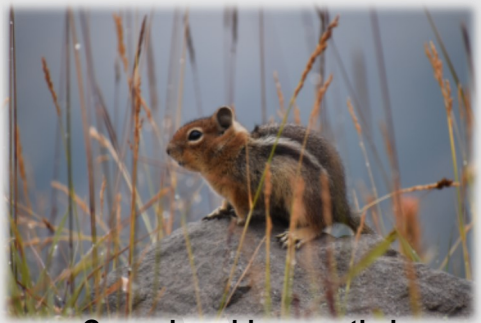


Cistanthe umbellata

After spotting the glacier near the inner cone of the Mount St. Helens making an appearance between the low clouds hanging over the mountain, we drove on to the Johnston Ridge Observatory. Near the parking lot for the observatory we found the first cotton candy pink blossoms of *Nothochelone nemerosa*, a cousin of our eastern turtleheads. The two-to-three-foot tall leaning plant grew alongside *Castilleja*, *Anaphalis*, grasses and a young colony of *Alnus*. In the same area a creeping patch of *Sedum oreganum* flushed red with the stress of the dry summer glistened with the light moisture of the misty and foggy morning. A lone clump of *Penstemon serrulatus* with lavender and pink clusters of blossoms stood among the water droplet lined threads of grasses too. Approaching the observatory overlook, barren volcanic ground was home to low mounds of non-flowering *Penstemon cardwellii* thinly punctuated with stalks of grass and a running loose grouping of prickly *Cirsium arvense* topped by soft purple brush like inflorescence. In the distance tributaries of the North Fork Toutle River could clearly be seen winding their way down the loose sediment on the slopes of Mount St. Helens. Looking to the east a sliver of water, Spirit Lake, still was visibly lined in logs blown into the lake during the eruption 38 years before. Additional floating logs migrated across the lake propelled by the wind. Greening slopes of *Psuedotsuga* and *Abies* above the lake held the next generation to replace the drowned forest below them. Before leaving the observatory overlook a *Spermophilius saturatus*, Cascade golden-mantled ground squirrel, posed for us on a stone only a few feet away.



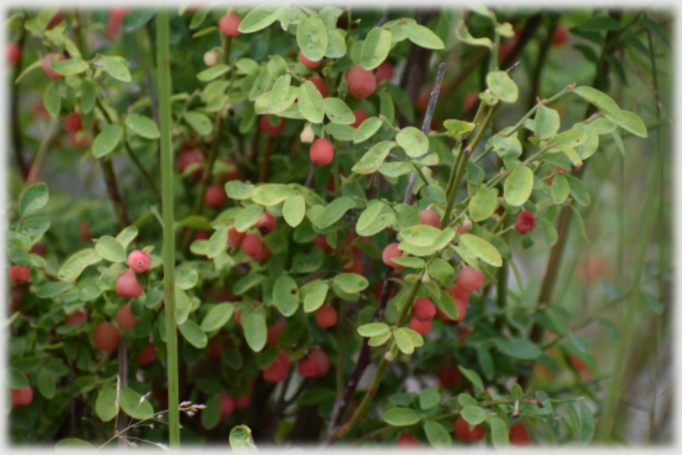
Nothchelone nemerosa



Cascade golden-mantled ground squirrel

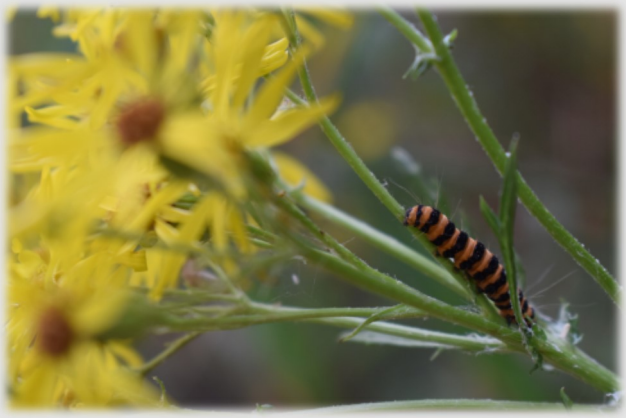
An afternoon hike on the Hummocks trail gave us a more up-close view of the flora. Mature *Alnus* forest with trees 30-40 feet tall greeted us as we began the hike. The trunks spaced out evenly giving an open forest floor where a carpet of undergrowth grew. Golden mosses and blue lichens covered the trunks contrasting the grey of the thin bark. The pink blossoms of *Nothochelone* seen at the Johnston Ridge Observatory made frequent appearances along the shaded trail. Emerging out of a glade of *Alnus* brought us to an opening close to the eroding sediment that lined the channel of the North Fork Toutle River. Yellowing grasses, silver foliaged *Lupinus* with a few stalks of purple pea shaped blooms, shrubby *Vaccinium parviflorum* hanging with pink-red fruit, and mats of dark green *Arctostaphylos uva-ursi* spotted the loose soil of the eroding slopes. Entering another glade of grey trunked *Alnus* brought us to a small shaded pond coated in a layer of fresh green *Lemna*. Grasses, more *Nothochelone*, and a few clumps of *Polystichum californicum* surrounded the bases of the trees lining the pool. Another damp shady spot contained masses of the giant hand-like leaves of *Petasites frigidus* hiding their long-spent spring inflorescences. Brakes in the canopy often contained scarlet spikes of *Castilleja miniata* growing among the grasses. White florets spiraled around spikes of *Spiranthes romanzoffiana* pushing up between the blades of grass and other forbs. The forest again opened into sunny dry conditions carpeted in parched mosses and lichens filling the gaps between the sparse stalks of grass. Young *Pseudotsuga*, *Abies*, *Alnus,* and *Tsuga heterophylla* grew scattered on the open landscape with an occasional shrubby *Holodiscus dumosus* covered in sprays of straw-colored seed heads tucked in at the base of the larger trees. Another pond emerged among the hummocks of volcanic silt. This in an open area that was encircled in wispy young *Salix*, more white *Anaphalis* sprinkled with tall stalks of hot pink *Chamerion angustifolium*, and a few more of the introduced *Jacobaea vulgaris* with the also introduced striking orange and black striped caterpillars of *Tyria jacobaeae*. Wondering through the hummocks brought us to still another pond. This one was edged in a species of *Typha* with their 6-foot-tall strappy green foliage interspersed with their distinctive dark brown club like seed heads just beginning to shed into fine cotton. On the damp bank primitive whorled stalks of *Equisetum* bridged the area to higher and dry soils where more *Anaphalis*, *Jacobaea*, *Chamerion* and grasses filled in. The small tubular soft pink flowers of *Collomia linearis* just beginning to open from their spiraled petals into stars just peaked up out of the grass.

***Alnus* forest**



Vaccinum parviflorum

Spiranthes romanzoffiana



Tyria jacobaeae* on *Jacobaea vulgaris

Our final stop of the day took us to Coldwater Lake. This lake did not exist prior to the eruption but formed because of a dam that formed from debris from the eruption closing off a valley and holding back the flow of Coldwater Creek and formed the hummocks area we just visited. The lake, edged with young forest much like what we hiked among earlier, reflected the slopes of Mount Margaret. A lone pied-billed grebe, *Podilymbus podiceps*, swam on the crystal-clear water. Both introduced rainbow trout and resident cutthroat trout that survived to repopulate the lake inhabit this new environment of Coldwater Lake. It was a perfect example of how the environment healed itself left alone after what seemed like the end of the world for this area in May 1980. This area gave us a tranquil end to our visit and brought the experience of Mount St. Helens full circle from death to rebirth. All photos by the author.

A Tribute to Donna Maroni

February 27, 1938 – October 6, 2019

by Bobby J. Ward

Donna Farolino was born in Buffalo, New York, in 1938 and attended the University of Wisconsin (Madison), where she earned undergraduate (1960), masters, and doctoral (1969) degrees in zoology. Her graduate research concerned the evolution of chromosomes and mitosis in single-celled organisms using electron microscopy. She spent a post-doctoral year at the University of Cologne, Germany, as an Alexander von Humboldt fellow in genetics.

She met her future husband, Gustavo Maroni, in 1967 while they were both in graduate school in Madison (he had just arrived from Buenos Aires), and they married in 1973. They moved permanently to Chapel Hill in 1975, he to UNC as a teacher and she to Duke University as a researcher--each in zoology. In the 1980s, Donna received a decade of grants from the National Science Foundation and the National Institutes of Health to pursue her research on the evolution of mitosis. Forty years later her research is still being cited in cell biology textbooks.

Leaving Duke in 1987, Donna worked for the North Carolina Biotechnology Center, retiring in 1995 as vice president for science programs and research grants. During her professional career, she served on advisory committees including the Bowman Gray School of Medicine, the North Carolina Bioscience Fund, and the Minority Science Improvement in instruction and biotechnology research for Alabama A &M University. She is listed in Marquis' "Who's Who" as a noteworthy biologist/ researcher.

Donna became of member of the Piedmont Chapter of the North American Rock Garden Society in 1988 and continued her membership in it and NARGS until recent years. During the 1990s, Donna took a leadership role in organizing the NARGS Seed Exchange, the first our chapter had participated in—a mammoth undertaking at the time. Her organizational skills gave our chapter confidence to take on other NARGS national activities in future years. Who can forget Donna wearing an outrageous costume, decked out as the goddess Flora at the January 1999 annual rock garden meeting that the Piedmont Chapter hosted in Durham? To over 300 attendees, she unblushingly hawked a basket of raffle tickets for prizes during the three-day event, wearing a Minnie Pearl-like straw hat. When the Piedmont Chapter hosted another annual meeting in May 2004, Donna made hypertufa troughs for banquet table centerpieces and planted them with help from a crew of volunteers. A few years later when I was presenting a lecture to members of the Wisconsin-Illinois Chapter of the North American Rock Garden Society in Madison, I spied one of Donna's troughs in my host's garden. He confirmed that he had won it in Durham at the 2004 meeting.

In retirement, Donna dedicated herself to numerous hobbies, including gardening and hypertufa trough-making. She loved cooking and cake decorating (including gingerbread-house making), and both she and Gustavo were gormands, traveling frequently to fine restaurants around the United States. They often visited Italy to soak up the culture, food, and wine there, and she took Italian lessons to improve her knowledge of Italy and opera. In 2006, when the Metropolitan Opera began live high-definition transmissions to movie theatres on Saturday afternoons, Donna and Gustavo were often seated at a local cinema, particularly if the opera was in Italian. Knowing

she was not particularly fond of German opera, I emailed her a cartoon of a washing machine repairman telling the owner not to set it on the "Ring Cycle" as it takes 15 hours and at the end it will catch on fire and flood your house; Donna'scomment to me: "I think this is the damned washer we have. It shakes so bad the whole house rattles. We hoped it would break down within months so we'd have to buy a new one, but it's been 10 years now and it just keeps on rockin' and rollin'--damned thing!"

As accomplished as she was in the laboratory and in scientific endeavors, she never took herself seriously outside the laboratory, according to Gustavo. She was the first to organize a party or a prank. With the advent of the Internet, Donna kept a mailing list of friends to whom she sent jokes, cartoons, and biting political comments. She was blunt and frank about her likes and dislikes—of food and restaurants, plants, and people, including gardeners, politicians, and Supreme Court justices.

Regarding a review in a British newspaper about an exhibit at the Royal Horticulture Society's annual spring flower show with the headline "It's not supposed to be pretty," she wrote me: "I wonder if I would dislike the Chelsea flower show as much as I disliked the Philadelphia one: hated looking at impossible 'gardens'--ones with flowers that would never appear together in nature . . . the [crowd] was another downer for me at the Philadelphia show. Better to visit real gardens."

When we planned to have dinner in Raleigh after a Saturday afternoon opera broadcast, I sent her the restaurant menu which included sweet potato ice cream; her response: "Sweet potato ice cream! I turn off. As far as I'm concerned, there is only chocolate ice cream." When the expensive Per Se restaurant in New York City received a "pending grade" (C grade) health rating in 2014, Donna wrote me, "I still wouldn't decline an invitation. We ate there once and it was a sublime $700+ experience." Donna and Gustavo did a two-day eating trip to Louisville, Kentucky. "Well worth it to try two Ed Lee restaurants," she wrote. I shared a scone recipe with Donna that I had gotten in England. She wrote, "I know you've sampled mine since I once brought them to some affair at your place [it was a February garden party to see the hellebores and cyclamens]. I remember because some Brit exclaimed over how happy she was to taste a scone that was like the ones she knew from home . . . but I'd expect my scones are richer due to the higher proportion of butter."

And when I reminded Donna of upcoming "World Naked Gardening Day" (it occurs annually on the first Saturday in May in the Northern Hemisphere) and attached an image of guys with strategically placed plants, she wrote back, "And of course, not a single phe-male in that photo! I think I'll pass anyway."

For a while, Donna used the following as her closing signature line in email messages: "Socrates said the unexamined life is not worth living, but the examined life is no bargain." [It's a Woody Allen observation from his movie, *Café Society*.]

Donna's survivors include Gustavo and a sister, Audrey. Condolences may be sent to him at: gmaroni@bio.unc.edu .

Lost Gardens, Donna Maroni

Ever since I was a child, I dreamed of the time when I could garden as my grandfather did, coaxing flowers from seeds and propagating roses under pickle-jar cloches. I had to wait until I completed graduate school to have a bit of ground I could call my own and get on with the job.

My first garden was at our 'starter' home. I planted this garden in the only sunny area we had: a four-foot by eight -foot patch of ground surrounding our mailbox. We killed the grass, and I shoe-horned all kinds of wonderful flowers into that space, from the little red Dianthus 'Rasse Nelken' with the delicious clove fragrance that I'd always associated with carnations to the majestic, velvety, deep-purple Iris sibirica 'Caesar's Brother.' A favorite neighbor couldn't resist pinching one of the Dianthus to wear in his buttonhole when he went to church on Sundays. And an unfamiliar woman who happened upon the garden as she drove through the neighborhood asked permission to paint it. Of course, I was happy to have her set up her easel in my driveway!

I lost that garden to a couple who bought our house when the little mailbox garden was at its peak of spring glory. Once they owned the garden, they paid it no attention. When I returned the next year to deliver some papers to the new owners, the mailbox garden was in full bloom as were the species tulips that lined the path to the front door. As one of the new owners opened the door, I exclaimed, "Linda, the tulips are gorgeous!" Her response:

"What tulips?" That little garden was simply left to bury itself in weeds. About a decade later, there was one pitiful Siberian iris bloom poking up through the jungle.

Our last garden was at the home we built on six acres of wooded land we had chosen for its garden potential. Eventually, we planted on three of those acres. The area that we cleared for the septic field provided a fertile, sunny area for my perennials, including plenty of those Iris sibirica I love so much. The area that had been cleared by a long-ago fire with its remnants of a tumbled-down chimney from the old homestead was where we installed a tiny pond and some benches for my husband's bonsai collection. The remaining wooded land was, of course, already a natural garden with dogwoods, wildflowers and the occasional flush of chanterelle mushrooms. There we cleared undergrowth to establish a network of paths and planted many unusual shade-loving herbaceous and woody plants. Seed exchanges, plant distributions at the JC Raulston Arboretum in Raleigh, NC, and propagation classes at the NC Museum of Natural Sciences in Raleigh were rich sources for our woodland treasures.

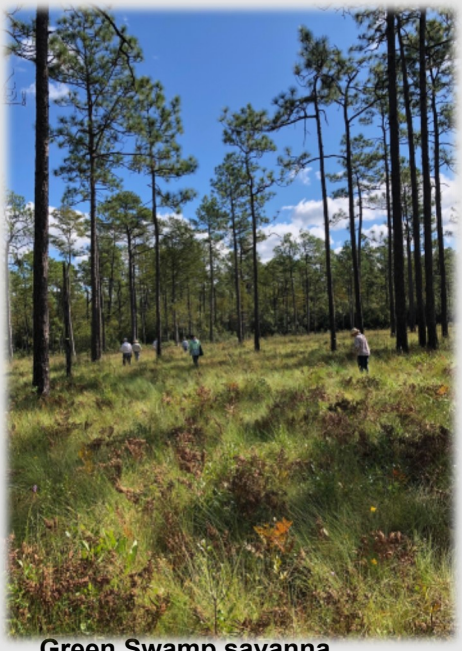
We lost our last garden when we decided it was time to move to a retirement community. The woman who bought our house and garden seemed genuinely interested as we toured the various areas of the garden with her. I promised to visit the next spring to help her learn to identify the less familiar plants. She, in turn, promised that I could then dig some of the fast-spreading primulas and Siberian iris to carry to our new home. When spring came, the garden's new owner told me she did not want me to visit. It didn't take long for us to realize that her change of heart was because she was making no effort to maintain the garden. Gradually the weeds overran our last garden, just as they did my first garden.

Sad to say, the people to whom I lost my gardens were apparently attracted by them but blissfully unaware that gardens, like children and pets, require constant love and nurturing. Today, seven years after losing that last garden, I still hope that someone with the soul of a gardener will buy the property and uncover all the treasures that must still be struggling to survive. And twenty-seven years after losing my first garden, I have given up all hope for it.

DonnaM, "Lost Gardens," *Community of Gardens*, accessed October 14, 2019, https://communityofgardens.si.edu/items/show/12118. Used by permission of Gustavo Maroni.

Green Swamp Visit

by Bobby J. Ward



Green Swamp savanna

On October 13, 2019, thirteen members of the Piedmont Chapter of the North American Rock Garden Society spent the day in North Carolina's southeastern coastal plain in Brunswick County. We went there to see one of the state's jewel natural heritage sites, the Green Swamp, an area of wet shrub bogs (pocosins), and drier longleaf pine savannas; the latter are open, park-like areas with an herbaceous understory. We spent most of the time in the dry longleaf pine savanna, an ecosystem that once covered much of the coastal plain from southeast Virginia to the Gulf Coast westward to east Texas and comprising some 130 million acres. The habitat is known ecologically as the longleaf pine, turkey oak, and wire grass community. Before the arrival of Europeans, seasonal lightning strikes ignited fires that maintained the open, grassy habitat beneath the longleaf pines. Over the eons, unique vegetation, such as terrestrial or-

Gentiana autumnalis

chids and carnivorous plants, evolved in these savannas and they became reliant on frequent fires for their existence. And native Americans learned to use fires to maintain these areas for agriculture.

Carphephorus paniculatus
Deer's tongue

The Green Swamp is named for John Green who received a land grant that included today's 16,000-acre preserve in 1770. Early on, the swamp, probably at least 200,000 acres, was heavily logged of cypress, gum, and Atlantic white cedar and the native longleaf pine became a valuable source of tar and turpentine to support the naval stores for Europeans. Much of the original longleaf pine (*Pinus palustris*) that dominated the site was replanted in recent decades with slash pine (*P. elliottii*) and loblolly pine (*P. taeda*) for pulp production by timber companies.

Dionaea muscipula
Venus' Flytrap

Local farmers grazed cattle in the slightly elevated drier savanna areas, still known as Calf and Cow islands. In the early twentieth century, drainage operations were initiated in parts of the swamp to improve access for logging and to create pine plantations. The preserve is currently owned and managed by the North Carolina Chapter of The Nature Conservancy, having acquired the land beginning in the 1970s as a donation from Federal Paper Board, a timber management company.

Sarracenia x catesbaei
(S. flava x S. purpurea)

Sarracenia purpurea
Purple pitcher plant

Sarracenia minor
Hooded pitcher plant

NARGS Piedmont Chapter Meeting

JC Raulston Arboretum

9:30 Gathering Time 10 am Program Begins

November 2, 2019 *(Rms 107 & 109 only)*

Tim Alderton

Research Technician, JC Raulston Arboretum
Raleigh, N.C.

"The Wildflowers of Mount St. Helens and Mount Rainier"

Goodies to Share

If your name begins with a letter below, we encourage you to consider bringing a goodie to share with others.

Sept	A—C	Jan	J—Me
Oct	D—Fi	Feb	Mi—P
Nov	Fi—H	March	R—T
		April	W—Z

Message from the Chair

Cyndy Cromwell

Where did fall go? As I write this, it is 100 degrees on a sweltering day in early October, and it is my dearest wish that we have all cooled off by the time you receive this issue of *The Trillium*.

We have only one more meeting for 2019, on November 2, when Tim Alderton will present a very interesting talk on *Wildflowers of Mount St. Helens and Mount Rainier.*

In the meantime, we will have had a sale of unusual bulbs and a botanizing trip to Green Swamp Nature Preserve, a precious habitat for carnivorous plants. Thanks to all of you who organized and participated in our activities this fall!

To begin 2020, on January 18 we'll be looking ahead to spring with John Lonsdale, of Edgewood Nurseries, speaking on *Woodland Treasures.*

It's not too early to begin thinking about our major fundraiser, the plant sale at JCRA's Raulston Blooms event, to be held in April. Board member Jim Hollister has agreed to head up the sale this year, but participation by all our members is so important. Now is a great time to dig and pot up those special plants customers will be looking for next spring! And check out our chapter's new Web site; thanks to Chris Glenn for helping us with it***: https://www.piedmontnargs.org/***

Piedmont NARGS Speakers
Winter and Spring 2020

January 18, 2020
John Lonsdale
Edgewood Gardens, Exton, Pennsylvania
"Woodland Treasures"

February 8, 2020
Will Hembree
Raleigh, N.C.
"From Georgia to Maine: Wildflowers of the Appalachian Trail"

March 21, 2020
Todd Boland
St. John's, Newfoundland
NARGS Traveling Speaker
"Spring Alpines of the Spanish Pyrenees"

April 18, 2020
Cyndy Cromwell, Nancy Doubrava, and David White
"NARGS Fall-Bulbs-of-Greece Tour"