



The Trillium

Botanical Exploration in our Own Backyards: Rare and unusual native plants from the Southeastern United States By Zachary Hill

If you were to poll the American gardening public, most would think that to find new and interesting plants for cultivation in our gardens, you would probably need to leave the country and head off to some foreign land to find cool new plants. While this is true, and I have seen some amazing plants on my travels through Mexico and Latin America which do belong in gardens, this isn't the case all of the time. You can go out into your own backyards, adjacent woodlots, natural areas nearby and find interesting plants, possibly even new ones which might turn out to be an undescribed species, right here in the Southeastern US.

I grew up in the central Piedmont of NC, surrounded by woods and fields ripe for a young person to explore. If they had the yearning to do so, which I certainly did, much to my parent's chagrin. Some of my first memories of plants are seeing *Iris cristata* in the mountains of Virginia, which I saw with my grandfather at about 7 or 8 years old, while we were out looking for garnets that particular day. The encounter that cemented me into becoming a botanist was the spring of 1996, when I was wandering through the woods at my grand-



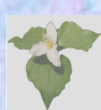
Trillium cuneatum



Aesculus sylvatica

parents' house and encountered Little Sweet Betsy, *Trillium cuneatum*, and what I at the time thought was an immature seedling which stained my hands when I picked them, which turned out to be Bloodroot, *Sanguinaria canadensis*. Now I know I shouldn't have picked the Trillium, but this was what really got me into field botany and growing plants as well. This species was the most common species of Trillium growing in the area, and I would eventually find these growing in the woods across the street from the house I grew up in and in the woods down by the creek in the back of the neighborhood where I really wasn't supposed to be going, but that didn't stop me.

In the early Spring of last year, I went to the Upstate of South Carolina with Tony Avent and Dr. Patrick McMillan, to do a short botanizing trip to see some neat habitats that Patrick was familiar with from his tenure at Clemson. In several of the sites we visited, the Painted Buckeye *Aesculus sylvatica* looked very different



Shortia galacifolia

from the forms I grew up with in the central Piedmont, which are a dull greenish-yellow in flower. It turns out that in Upstate SC, the migrating Ruby-throated Hummingbirds have over the eons, in their migrations from north to south, have unwittingly carried a few grains of pollen with them from the Red Buckeyes, *Aesculus pavia*, growing on the Atlantic Coastal Plain, where they just so happen to bloom on time for the Hummingbirds northerly migration and pollinated the *A. sylvatica*, not enough to create a true hybrid but enough to turn the material in Pickens County almost as red as Red Buckeyes on the coast. These plants are genetically almost completely *A. sylvatica*, but they have a few genes which cause them to bloom red, which has been selected for far longer than we have been around the Carolinas. Another neat trait they have is that they bloom quite small and maintain a compact habit.

Another amazing plant Patrick was able to show me for the first time in the wild was Oconee-bells, *Shortia galacifolia*. Having

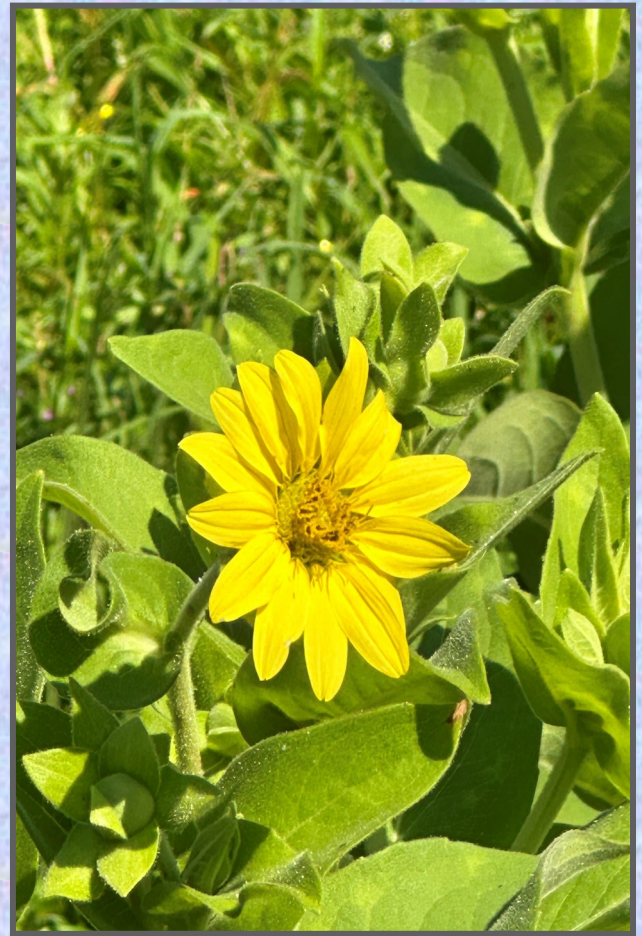
heard we were in the area, another botanical

genius, Adam Black from the Bartlett Arboretum in Charlotte, NC joined us in the field on a cold, extremely wet trek through the woods. Even though Oconee-bells is very limited in its distribution and was first collected in 1787 and described by Asa Gray in 1839 but was lost for after discovery until it was found in Marion NC in 1877, and not found in SC at the site we visited until 1888. In the steep ravines and Creekside habitat where it occurs in, it is far from uncommon and it is almost impossible to walk without stepping all over it. We were unfortunately just a few weeks too late to see it in bloom, but it was breathtaking being immersed in the habitat! Not only were we surrounded by towering trees and amazing plants, but the flats along the creek were also filled with foundations from a pre-Cherokee settlement, already abandoned by the time European settlers arrived in the Upstate.

In August 2013, I went on a short botanizing trip to Alabama, meeting up with Hayes Jackson of Longleaf Botanical Garden and Extension Agent and longtime plant friend to see what the summer flora was like in Alabama. One of the places I wanted to see is a hotspot for endemism and truly unique habitats are the Dolomitic Glades of Bibb County, Alabama. We stopped in Kathy Stiles Freeland Glades Preserve, home to *Dalea cababa*, *Castilleja kraliana*, hundreds of seed ticks to be discovered at lunch later, and several plants we grow at Juniper Level Botanic Garden, *Silphium glutinosum* and *Spigelia alabamensis*. All of these plants are limited to the high pH and droughty conditions these rocky outcrops provide. Interestingly enough, these species perform equally as well in our garden here in Raleigh. Alabama Pinkroot, *Spigelia alabamensis* is an amazing rock garden plant which blooms nearly nonstop in our scree garden here.



We have planted the Sticky Rosinweed, *Silphium glutinosum* in several locations here in the garden, and it seems to prefer the creekbank in the ruderal areas where it tops out a bit over 3 feet, similar to how I saw it along the Little Cahaba River at the Bibb County Glades. When grown in richer soil with lots of moisture, it tends to grow larger and has shown a tendency to flop, not so when grown without extra moisture. Also on this trip, I would collect cuttings of what Hayes thought was Georgia Calamint, *Clinopodium georgianum*, only to end up running the half mile back to the car on the high mountain ridge while evading a fast approaching and very electrically charged thunderstorm. When we grew these cuttings after we arrived back to Raleigh, we noticed something odd. It turned out this plant was a new species unknown to science, known only from the Talladega Mountain of Eastern Alabama, and nowhere else on Earth. All specimens of this in the past had mistakenly been called *Clinopodium georgianum* I had the honor to be included in the 2020 publication of the Talladega Calamint, *Clinopodium talladeganum*.



Silphium glutinosum



Rhododendron vaseyi

One of my favorite spots in the North Carolina highlands is along the Blue Ridge Parkway south of Asheville, from Graveyard Fields to Devil's Courthouse. In May, the roadsides above 4500 feet elevation are almost completely covered in varying shades of pink, from the many Pinkshell Azaleas *Rhododendron vaseyi* blooming among the Fraser Firs, *Abies fraseri*. This species is entirely endemic to North Carolina, specifically around the Asheville area, almost always above 4500 ft, with another population around Grandfather Mountain in the Northwestern part of the state. This also grows with *Parnassia grandifolia*, Bigleaf Grass-of-Parnassus and Michaux's Saxifrage, *Micranthes petiolaris* var. *petiolaris*, which cling to the hanging bogs which are perpetually dripping water coming down the mountains.

A fantastic spot Patrick took us to on July 4th, 2022 was the grassy meadows at the top of Doughton Park, in Alleghany County. This particular site is loaded with more variations in color of



Asclepias tuberosa

Butterfly Weed, *Asclepias tuberosa* than anywhere else I have ever seen, and in more numbers than you could imagine. From shades of bright yellow to mid-oranges and into reddish orange hues, the mountaintop is lit up with them. Also showing unopened buds are the tens of thousands of Mountain Blazing Stars, *Liatris spicata*, promising an unbelievable show to come in late July and August. We also came across a nice roadside population of Fireweed, *Chamaenerion angustifolium* (formerly *Epilobium angustifolium*) which is very uncommon in the high mountains of North Carolina but has a range that is circumboreal.

Closer to home here in the Raleigh area, is one of the cutest of all of the pedicellate Trilliums, *Trillium pusillum* var. 4, the Carolina Least Trillium. While currently listed within the species *Trillium pusillum* complex, this taxa has been under study to be published as a new taxa eventually. It can be found in low wet woods in Wake, Johnston, and Nash Counties, where it grows on small hummocks of micro-topographic changes within these seasonally flooded woodlands. This form differs from most of the other pusillum complex with a barely visible peduncle holding its flower above its leaves, almost looking like a member of the sessile subgenus *Sessilium*. For years,

this plant was mistakenly called *Trillium pusillum* var. *pusillum*, a much larger plant than this, which does grow in similar habitats but much lower in elevation on the outer coastal plain of the Carolinas. In the spring of 2004, on another very wet day of botanizing, Susan Farmer of Tennessee visited a thought-to-be extinct population in Wake County that morning, and myself, Donna Wright and Alice Zawadski visited it in the afternoon. Upon actually looking for the plants, we both found them to be quite alive and doing well, despite the thought that beaver activity downstream had flooded them to their detriment. They actually were the sessile form and not the pedicellate form of this *Trillium*.



***Trillium pusillum* var. 4**



Another amazing wildflower which used to occur in the now extinct Method Bog off Method Rd, near what is now the JC Raulston Arboretum was the Pine lily, *Lilium catesbyi*. I have seen this species throughout the coastal plain of the Carolinas, usually at high speeds as we drive past a few random roadside powerline savanna remnants. In Pender County, it is fairly common in Longleaf savannas just inland from Topsail Island. It isn't unusual to find this growing alongside other pretty fall blooming plants like *Liatris resinosa*, Savanna Blazing Star, and another of Mark Catesby's namesakes, *Gentiana catesbyi*. Pine lily also grows with carnivores like Butterworts, Sundews, Venus-Flytraps and several species of American Pitcher Plants. This plant and so many others which share its habitat are declining because of mismanagement of fire, altering drainage patterns within the savannas and habitat loss.

One of the things we really like to do at Juniper Level Botanic Garden is ex-situ conservation of rare plants. One such plant we got on a trip to see Bob McCartney, one of the founders of Woodlanders Nursery in Aiken, South Carolina. Bob has an amazing collection of Florida Scrub Mint species planted in the longleaf woods on his property. One of them is *Dicerandra christmannii*, Garrett's Mint, an endemic species of Scrub-mint known only from a 6 by 3-kilometer area of the Lake Wales Ridge in Highlands County, Florida.



Dicerandra christmannii

which were shared with us from other ex-situ minded plants-people from around the world as well.



Lilium catesbyi

This really cool looking native wildflower blooms for several months in the fall, attracting tons of bumblebees and other native pollinators. Another plant I met through Patrick McMillan in Fall 2022, *Dicerandra odoratissima*, Harper's Scrub-balm which is the only species of *Dicerandra* which barely enters into the Carolinas in a small spot in Jasper County, SC, where it thrives in dry Longleaf Pine Sandridge. This late flowering mint is an annual, only sprouting up in midsummer, for a show-stopping flower show from late September until frost. Not only is it pretty in flower, but the plant also smells like a really interesting combination of spicy mint mixed with very strong cinnamon.

These are a few of the rare and unusual plants which I have encountered on my botanical explorations of the Southeastern United States and some of the unusual plants we grow at Juniper Level Botanic Gardens, both from collections we have made and from plants

which were shared with us from other ex-situ minded plants-



The DeKay's Brown Snake: Friend, not Foe

By Tracy Thomasson, Extension Master Gardener Volunteer and Horticulturalist

Snakes often get a bad rap especially in suburban settings where oftentimes folks assume all snakes are venomous and dangerous. If your neighborhood message forums look like mine, the warmer months are full of pictures of all sorts of brown-colored snakes attached to messages declaring that a copperhead has been spotted! Watch out! There are many species of snakes in central NC that are some shade of brown and many of them are, in fact, harmless to humans.

The tiniest of the brown snakes, and my personal favorite, is the DeKay's brown snake (*Storeria dekayi*). A full grown DeKay's brown snake is usually no more than 12 inches long with juveniles being even smaller. These little cuties like to hang out in leaf litter, under logs, and around rocks. They just want to remain relatively hidden while they live their lives eating slugs, snails, and earthworms. I typically find them when raking leaves or mulching around my stacked-rock walls.

Because of their coloring and size the DeKay's brown snake can be mis-identified as a baby copperhead and killed by overzealous homeowners. While juvenile copperheads can be quite dangerous, a DeKay's brown snake can't even really bite a human with their tiny little mouths. The two species are actually quite easy to tell apart with a little practice. Copperheads have rather distinct 'Hersey-kiss' markings, a triangular-shaped head, and the juveniles have bright yellow-green tips on their tails. The DeKay's brown snake has two lines down its spine punctuated with spots and a smaller head that is oblong, not wide.

If you happen to come across one of these timid little snakes while gardening, I suggest taking a few pictures (if it sticks around long enough) and sending it on its merry way to continue combating the slug and snail population. They are doing your garden a service and will



Photo credit: Tracy Thomasson

Juvenile DeKay's brown snake compared to my gardening glove



Juvenile copperhead

Photo credit: Eric Stine



Photo credit: Tracy Thomasson

Adult Dekay's brown snake



bring no harm to you or your pets. I look forward to joining you all for your January meeting where I will talk a bit more about some of my favorite garden critters and the ones to watch out for.

A Quest for *Calceolaria uniflora* Travels in Southern Patagonia - 2022

by James A. Jahnke

For many, the mention of Patagonia brings up visions of a trek to a distant place, one difficult to reach through trial and effort at the end of the Americas. The 2021 North American Rock Garden Society (NARGS) Patagonia tour seemed to be an opportunity to get close with the trip's southern extension to El Calafate, a town whose name was taken from the Spanish for the barberry, *Berberis microphylla*, also called *ko-ónek*, by the native Tehueleche peoples. But the 2021 trip was not to be due to the exigencies of Covid, and hence, the trip's cancellation. This was perhaps a sign that the end of the Americas may indeed be a difficult place to reach. When the 2022 trip was announced, signing up for both the northern Patagonian tour and the tour's southern extension was immediate. Although 12 days of the tour were devoted to travels in the Neuquén province of northern Patagonia and only four to the southern part, time on a NARGS trip tends to expand to surprise one's expectations; a phenomenon that we hoped would occur on our journey to the south.

Having traveled previously in South America, but not to Argentina, our visions of the country were far from what we imagined. The city of Buenos Aires, and ski town of Bariloche and San Martín were as sophisticated as any in Europe. The flowers were as new to us and as wonderful as any of the orchids of Peru or Ecuador. The pleasures of northern Patagonia have already been described by Panayoti Kelaidis in the winter 2023 issue of the NARGS quarterly. In this trip, likewise led by Marcela Ferreyra, we were introduced to the full range of violace, nassauvia, azorella, and calceolaria unique to the Argentinian steppes. However, we had not seen *Calceolaria uniflora* in northern Patagonia. The flower is a showy perennial prominently displayed on the cover of Marcella's book, *Flores de Alta Montaña de los Andes Patagónicos*, and is found in and south of the southern province of Santa Cruz, towards which we were headed.

Day 1 — Getting There

At the end of our tour of northern Patagonia, we left the town of Chos Malal, and pressed on towards the town of Neuquén where we would catch the flight to El Calafate. Although this took the better part of a day, we did have time to thoroughly photograph an exceptional shrub, *Hyalis argentea*, covered with delicate pink flowers. Traveling further across the dusty landscape we had a sighting of rheas, running along the roadside

In the Neuquén province, fossils have been found of a 122 foot long, 77-ton titanosaur, the Patagotitan mayorum, believed to be the largest sauropod that ever lived. Casts of its remains are exhibited in both the Chicago Field Museum and the New York American Museum of Natural History. Coming closer to the city of Neuquén (of Neuquén province) we spotted a *Neuquénsaurus*, a thirty foot long, four-ton sau-



ropod (in sculpture form). But our plans were not to look at fossil bones, but to spend the night in Neuquén and take a flight out the next morning to El Calafate.

Once settled in Neuquén, we proceeded to celebrate the end of our Northern Patagonian journey with a party. The party took on a greater dimension, when our attention was drawn to the quarter finals between Argentina and the Netherlands in the World Cup soccer tournament. It was a memorable evening, celebrating Argentina's win with the excited crowd in the hotel lobby. The next morning proceeded routinely enough, with the transfer to the airport, with enough time for tea and coffee before boarding the plane to El Calafate. We would be flying alongside the Argentinian cordillera to travel the furthest south that most of us have ever been.

But it was not to be. The flight was cancelled due to a communications problem at the airport in El Calafate. Now, southern Patagonia took on its mantle of being a difficult place to reach. We were consigned to being trapped in an airport – our quest seemed doomed. Marcella and David White (our NARGS coordinator), tirelessly spent the rest of the day trying to rebook everyone's flights. It was evening by the time negotiations with the airline were resolved, resulting in a few tickets found available to fly back to Buenos Aires and fly out the next morning to El Calafate but with the remainder requiring a stay overnight in Neuquén and flying out the next morning, first north to Cordoba, then to Bariloche, and then to El Calafate. Shuttling into cabs, we were taken to a hotel, but realized after some confusion, not the hotel booked by the airline. We finally arrived at the right place, but with little time left to eat – it was a bad day. As an upside, in the morning, we found adjacent to the hotel, plantings of the national tree of Argentina *Erythrina crista-galli* – in full bloom with their deep red flowers. Birds were nesting in the trees, portending a better day to come. It was sunny, and we were going to Southern Patagonia – a day late, but we were going.

The trip down to the south was long, having to double back from Cordoba, but it was nice to get a second view of Bariloche and Lake Nahuel Huapi after we had explored the area on the ground. The Argentinian cordillera viewed from the right side of the plane passed snow-covered volcanoes and mountains, reaching down to Los Glaciers National Park. By this time, it was late in the late afternoon. The sky became an interplay between clouds and light, with clouds periodically allowing shafts of light to strike the ground below. If one squinted, you could see the landscapes channeled in the woodcuts of Rockwell Kent. We landed; rushed to check in at the hotel to be on time for our dinner reservations, with the final rays of the sun peaking under the clouds to highlight the flamingos in ponds along our way.

Dinner again became an event because we were celebrating the birthday of Kiamara Ludwig, one of our foremost botanizers. Celebrating in the other half of the restaurant, was an exuberant group of adventurers who had just completed the *Patagonian Rat Race*, a nine-day challenge of hiking, running, cycling, and kayaking over 230 miles of terrain. With toasts all around, it was again, a memorable evening.

Day 2 — Perito Moreno Glacier

The next day was devoted to visiting the third largest glacier in the world, named after the scientist Perito Moreno, the John Muir of Argentina who helped determine borders between Chile and Argentina in addition to establishing Nahuel Huapi National Park. On the way to the glacier, we passed a pond with sedately swimming black-necked swans and upland geese.



Black-necked swans (*Cygnus melancoryphus*)

We first stopped to see a mature stand of *Nothofagus betuloides* (Magellan's Beech). Some were decorated with *Misodendrum punctulata*, a parasitic plant common to the nothofagus. Another parasitic plant, *Aecidium magellanicum*, (Calafate rust) commonly growing on the *Berberis mycrophylla*, looked distinctly floral, and had its own attraction in its orange and red leaves.



Nothofagus betuloides

In the understory were found *Calceolaria crenatiflora*, but not *Calceolaria uniflora*. A crested caracara



Misodendrum punctulata

provided an additional touch to the stop.

Continuing to the top of the glacier, we passed landscapes again worthy of Rockwell Kent — snow-topped mountain peaks, rising above the approaching mass of

glacier white sheltered under the brooding sky. The approach was spectacular, beginning what was to be an awesome day. The glacier covers an area of 100 square miles in both Argentina and Lago Argentina. It extends for a distance over three miles to a height of 250 ft. at its face on Lago Argentina. It is the third largest glacier in the world and has remained generally stable, not yet succumbing to the warming environment. A short hike through a woods leads to an elevated boardwalk that provides a walking circuit across from the glacier's southern and eastern flanks, giving



9 *Aecidium magellanicum*



Calceolaria crenatiflora



every opportunity to document the massive structure. Blocks of ice periodically calving from the glacier walls provided added excitement while strolling along the walk



Perito Moreno Glacier

It was difficult to tear oneself away from this view. But remembering that there still might be flowers to be found, turning about to look at the floor of the woods behind, one could see wonderful displays of the terrestrial orchids, *Codonorchis lessonii*, as well as patches of *Gavilea lutea* and *Chlorea magellanica*.



Gavilea lutea

Following lunch, our next destination was the town of El Chaltén, a center for the serious hiker seeking to climb the reaches of the mountain,



***Codonorchis lessonii* (Palonita, dog orchid)**

known as Chaltén to the native Tehuelche. (later named Mount FitzRoy after Robert FitzRoy, captain of the HMS Beagle). Travelling along the dusty steppe, we could see guanacos in the distance, the males looking particularly regal standing on the hilltops, looking in the distance, on guard.

On the way to El Chaltén, we stopped at La Leona, an inn built in 1894, which has played host to bank robbers (Butch Cassidy and the Sundance Kid), bandits, mountain climbers, and botanizers alike. Perito Moreno was said to have been attacked by a cougar at the spot in 1877. We felt no such



Guanaco (*Lama guanicoe*)

danger, but did find a taste of the fierce Patagonian wind as we searched the nearby riverbank for wildflowers struggling to survive in the dust.

Pressing on to highway 40, the Route 66 of Argentina, on which we had also travelled in the northern part of our tour, the weather began to turn from sunny to brooding. Dark clouds, were forming, with intermittent shafts of sunlight highlighting the mountains as we made our way up to El Chaltén.



A Patagonian sunset

Nearing the town, we had hoped to get a view of the “smoking mountain,” but the overcast and light rain would have us wait. The Tehuelche believed that their cultural hero, Elal, carried by Kokn, the swan, was the first to summit Chaltén to contemplate the beautiful country before him, a goal continued today by the fit and hardy from all over the world.

Day 3 - El Chaltén and Surrounds

The next morning, a choice was offered to either hike the Loma del Piliégue Tubado trail above the tree line along the mountain or to instead, botanize along the Rio de las Vueltas, with the promise of seeing *Calceolaria uniflora*. Because *Calceolaria uniflora* is also called Darwin’s slippers, maiden slippers, or virgin slippers, the flower must have something going for it, so the choice was obvious. Those of our party who had already seen the plant on Cerro Huilliche, went on the mountain hike; the rest of us began our quest to find *Calceolaria uniflora*.



Canyon Rio de las Vueltas

Our first stop was 6 kilometers outside of town to view a canyon cut into the steppe by the Rio de las Vueltas. The morning had promise. The sun was shining, but the Patagonian wind was blowing, making it difficult to photograph flowers that have trouble stay still. Plants low to the ground or found behind sheltering rocks such as *Azorella monanatha*, *Quinchamalium chilense*, *Azorella prolifera*, *Alstromeria patagonica*, and *Escallonia alpina*



Quinchamalium chilense



Azorella monanatha

were among the hardy plants challenging us to take photographs while being at the wind's mercy.



Alstromeria patagonica

The walk continued, looking down on the ground to

see interesting bits of form and color, but then, coming to the end of the trail, one is suddenly confronted with a gash in the earth divided by a boiling river. This was the Cañón Río de las Vueltas – the view was spectacular, particularly when it was so unexpected.

If this was not enough, by just turning around, we could now see that Chaltén was beginning to reveal itself. The last clouds were wisping about its top to eventually disappear, exposing the massif. Just this view was worth the trip. However, our quest to see *Calceolaria uniflora* had still not been fulfilled, so we headed back through the town, going north to botanize along the Río de las Vueltas, in search of the flower.



Cañón Río de las Vueltas



Chaltén

Rio de las Vueltas

Just a few miles from town, we stopped along the Rio del las Vueltas, searching for *Calceolaria uniflora*. The area was rich in both plants that we saw before and some unique to the area. The rushing river provided a pleasant backdrop to finding stands of *Acaena magellanica* and the yellow flowers, *Nardophyllum bryodes* and *Senecio tricuspida-tus*.

[photos on next page]



Rio de las Vueltas with *Acaena magellanica*



Nardophyllum bryodes

amongst leaves of shale, which formed natural crevice gardens. It was a perfect place for lunch; protected from the wind, warmed by the sun, with surroundings which could not be equaled by the finest restaurant. After lunch, we hiked up the trail, still searching for the calceolaria, without success. After an hour or so. It was time to go and we headed back to the bus, disappointed. The driver was ready to leave, but on a last count, it was realized someone was missing. This was at first of some concern, until looking back to the trail, we saw Helen Redding running excitedly to ex-



Senecio etricuspidatus

claim that she had found it! With innate instinct she had looked past the brush that everyone else had passed to see in a small cove, not just one, but



Calceolaria uniflora

hundreds of *Calceolaria uniflora* in full bloom! At their peak, they were crisp, clean, and bright, offering everyone multiple opportunities to take their perfect photograph.



The flowers are striking, almost like a terrestrial orchid, having yellow body with red lip and white landing pad, each seeming to have their own personality waving in the breeze.

The beauty and tranquility of the glade was hard to leave; especially moving was seeing Marcella sitting at the top of the wooded hillside, at one with the flowers, having succeeded in introducing them to our group.

Chorrillo del Salto waterfall

A short trip back on the road led us to the waterfall Chorrillo del Salto. A pleasant trail down to the falls was lined with stands of the green and white terrestrial orchid, *Chloraea magellanica* the petals having their characteristic mosaic pattern.

The level path extends for about a half a mile through native forest of mature *Nothofagus antarctica* (Nire) and *Nothofagus pumilia* (lenga) trees. The 20-meter-high waterfall is fed by the snowmelt of Chaltén, which runs into the Río de las Vueltas. In contrast to the stationary flowers and mountains viewed during the day, the falls provided a peasant bookend to the rushing Río de las Vueltas that we had seen in the morning.

Returning to El Chaltén, we went off to eat at a restaurant, which appropriately for the area displayed wanted poster for Butch Cassidy to the tune of 500 million dollars (Argentine) or \$625,000 U.S. For our last evening in Patagonia, we partook as our farewell dinner, a traditional Argentinian parrillada, with platters of grilled barbecued meats, reminding us again of the passions of others in this friendly and inviting country.



Chloraea magellanica

Day 4 - Balcones de El Calafate Estancia Huiliche

The next morning, we were pleasantly surprised to find that we did not have to go directly to the airport, but had time to see Balcones de El Calafate on the private land of the Estancia Huiliche overlooks the



town of El Calafate and Lago Argentino. Before our flight in the early afternoon. We drove to the gate of the estancia and transferred to a four-wheel drive vehicle to traverse the hilly terrain.



The steppe was particularly rich in wildflowers. At our first stop, stepping from our van next to a boggy area, we saw immediately *Samola spathulatus* rising on tall stems from the wet. The small pink flowers sparkled like little jewels in the early light.



Samola spathulatus



Polygala darwinii

Further on, the *Polygala darwinii* was special, bringing up memories of finding the delicate pink fringed *Polygala paucifolia* in the great Smoky Mountains in North Carolina

On the drier parts of the steppe, an old friend again, *Azorella monantha*, with its delicate, pale-yellow stars decorating the plastic-like cushion. Also, in the dry, sandy soil were *Phacelia secunda*, with their spidery stems in bouquets of quarter-inch white cups.



Azorella monantha



Geranium sessiliflorum

The area was rich in plants. *Acaena ovalifolia*, *Geranium sessiliflorum*, and *Oxalis loricata* were also identified. To be complete, the sought-after *Calceolaria uniflora* was there, but the plants looked dry and dusty compared to those seen in the glade the day before. Time was running out and we had to leave, but one last surprise was in store. A herd of horses came running across



the steppe, being either frisky in the late morning or hurrying to better pastures. They were, of course, not wild, but they looked free and beautiful in their movement

So, this was the last stop on our journey to Southern Patagonia. We saw sights and plants that we may have known of, but also others of which we had no idea. The experiences were great and it was a brief, but satisfying adventure. However, adventures are relative – to put it in perspective, on the way to the balconies, we again stopped at La Leona. The inn-restaurant-saloon was closed that early morning, but we did notice someone camping close to the inn. Curious, we talked to the elderly gentleman who was checking his morning e-mails while warming himself in the early morning sun. Having completed his quest of reaching Ushuaia, the southernmost city in Tierra del Fuego, he was returning to his home in Mexico. He was looking to a few more months of travel on his motor scooter to get there. We wished him well, being envious of his much greater adventure.

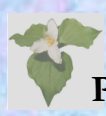
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2. Wildflower Identification Website. patagoniawildflowers.org.
3. Ferreyra, M., Ezcurra, C. and Clayton S. 2020. *Flores de Alta Montaña d los Andes Patagónicos - Segunde edición*. ISBN 978-987-86-7809-2.
4. Baleta, M. E. 2008. *Tebuelche Life & Legends*. ISBN 978-987-43-1409-3.
5. Lothrop, S.K. 1928. *The Indians of Tierra del Fuego*. Museum of the American Indian Heye Foundation. Contributions from the Museum of the American Indian Heye Foundation Volume X Lancaster Press, Lancaster, PA.
6. Kent, R. 1924. *Voyaging Southward from the Strait of Magellan*. G. Putnam's Sons. New York,

Coming Soon... Tim Alderton on Northern Patagonia

Here are some highlights of the flora of Northern Patagonia. From dry steppes, mesic forest and mountains of the central Andes, experience some of the flora growing in this area of great extremes. Elevation and water vary over a short distance providing habitat for a diverse range of rarely seen species in a relatively small area. A sampling:





Piedmont NARGS Speakers/Events Fall 2023/Winter 2024

February 10, 2024

Tim Alderton: “NARGS-Sponsored Argentine Patagonia Trip, December, 2023

Plus 15-minute talk by **Jim Jahnke** on “NARGS Extension Trip to Southern Patagonia, 2022”

March 16, 2024

Paul Spriggs (NARGS Traveling Speaker): “A Grand Tour: Experiencing the Rock Gardens of the Czech Republic”

April 20, 2024

Scott Zona: “Turning Rocks into a Rock Garden”

Plus 15-minute talk by **Cyndy Cromwell:** “NARGS Nova Scotia Annual Meeting, June 2023”

Membership Form

Piedmont Chapter—NARGS

Membership year is from July 1 to June 30

Membership Options: Individual: \$15
Circle one. Household: \$20

Name: _____

Second person name: _____

Street _____

City: _____ **State:** _____ **Zip:** _____

Phone: _____ **Email:** _____

Make Check payable to: **Piedmont Chapter, NARGS**

Mail to : Cyndy Cromwell, 5304 Deep Valley Run,
Raleigh, 27606

Visit <https://www.piedmontnargs.org/> to learn more about the Piedmont Chapter

Members of North Carolina’s Piedmont Chapter of the North American Rock Garden Society



Photos by Sandy Harwood

...packing seeds for the 2023 – 2024 Seed Exchange.

Seed ordering began December 15 and is open until January 31. Web site is www.nargs.org.

Click on “Seeds” in the upper right part of the home page.

You must be a NARGS member to order seeds. #NARGSRocks



NARGS Piedmont Chapter Meeting
McSwain Center at the Raulston Arboretum

10:00 a.m.
January 20, 2024

Zachary Hill
“Unusual Native Plants of the U. S. Southeast”

Plus 15-minute talk by
Tracy Thomasson
“Critters in the Garden: the Good and the Bad”

Goodies to Share

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



| | |
|----------|------------|
| Sept A-C | Feb M-P |
| Oct D-F | March R-S |
| Nov G-H | April T-Y |
| Jan J-L | May Picnic |

BOARD OF DIRECTORS

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Chair’s Corner

by Sandy Harwood

Welcome to 2024, a leap year with an 'extra' day to plan and plant. I look forward to the coming months when we will be taken on deeper dives into unusual plants, critters, Patagonia, the Czech Republic, Nova Scotia and more. Thankful is my word for this issue and for the year.

- ◇ Thanks and appreciation for the legacy, time and continuing support by members of the Piedmont Chapter.
- ◇ Thank you to those who invite others to join and get involved.
- ◇ Special thanks to Bobby Ward and our members for the high quality programs we enjoy.
- ◇ Thank you to those who volunteered and packaged approximately 100,000 seeds (200 genus/species) in early December. Amelia, Beth, Bobby, Gail, Jim, Juliette, Laura, Marian, Richard, Sandi and Wayne— thank you.
- ◇ Thankful for gardens and gardeners that provide us with an escape, solace, focus, inspiration, joy and peace.

See you soon,
 Sandy

Hold the Dates: NARGS Virtual Study Days

January 13, 2024
 Host: Todd Boland

The Undervalued Ranunculaceae:

Hepatica, Anemone, Ranunculus, Clematis
 Speakers: John Massey, Todd Boland, Cliff Booker, and Deborah Hardwick

February 10, 2024

What’s New in Rock Gardening

Host: Paul Spriggs
 Speakers: Adam Black, Paul Spriggs, Elisabeth & Rod Zander and Tony Avent



EUREKA!

2024 Winter Study Extended Weekend

Friday, March 8 – Monday, March 11

Check-in at hotel Thursday evening, March 7

Cosponsors: Western Chapter of the North American Rock Garden Society | Regional Parks Botanic Garden



HOTEL ACCOMMODATIONS:

Waterfront Hotel at Jack London Square in Oakland. Buses will depart from the hotel each morning. **Reserved rooms will be available through Wednesday, February 7.**

REGISTRATION FOR THIS EVENT INCLUDES:

3 dinners, 4 lunches, 3 continental breakfasts, 4 days of bus tours to 4 public gardens, 2 natural areas, and private gardens!

SPEAKERS:

- Karel du Toit, Detective Captain; leads Springbok Stock Theft and Endangered Species Unit, South African Police Service, Northern Cape Province; leads tours of South Africa, Namibia, and Lesotho via Pillansii Tours
- Adam Harrower, Senior Botanical Horticulturist; curates the conservatory and xerophytic plant collections at Kirstenbosch National Botanical Gardens, South African National Biodiversity Institute, South Africa
- Emily Griffoul, Conservation Scientist, Betty Ford Alpine Garden, Vail, Colorado
- Sean Hogan, owner of Cistus Design Nursery on Sauvie Island northwest of Portland, Oregon

Total number of all registrants limited to 100. First come, first served!

Registration fee: \$850.00

Limited number of reduced rate student registrations available on a first come first served basis. Must have valid student identification; please inquire.



ABOVE: Rock/crevice garden and troughs, Gardens of Lake Merritt, Oakland. *Penstemon davidsonii*.
UPPER LEFT: Crevice garden, Regional Parks Botanic Garden, Berkeley Hills. *Dudleya cymosa*.



REGISTRATION OPENS
NOON WED JAN 3 2024

Event web page coming
in December via
nativeplants.org & nargs.org

