

NORTH AMERICAN ROCK GARDEN SOCIETY

The Rock Garden

QUARTERLY

FALL 2019

Arenaria kingii
subs. *glabrescens*



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All illustrations are by the authors of articles unless otherwise stated.

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Front cover: Placing a pot in a sand plunge. Photo by Chloe Wells

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QUARTERLY

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Letters to the editor

Another way to root cuttings

(Response to *How I Root Cuttings*, RGQ 77.3)

Gloria Robinson, Shenandoan County, Virginia

I'm afraid I have a very unscientific way of rooting plants. I simply use a toothpick or stick to make a hole between bricks on the patio next to my greenhouse, stick the cutting in, and wait. The moisture between the brick works out well. If it is a dry week, I hose it down without wetting the foliage. After the plant roots, I take up the bricks, dig up my new clone, and pot it up. A stone walk works well too. Of course the bricks or stone are not laid in cement, just sand and soil. I don't bother using rooting hormones. I have had pretty good luck with lots of plants this way, including dianthus, veronica, penstemon, and easy things like that.

Plants Loved and Loathed

Margaret Charlton, North Vancouver, British Columbia

Arisaemas being a particular favorite of mine, I was keen to read Bridget Wosczyzna's article on aroids (*A is for Aroids*, RGQ 77.2). I was horrified, however, to read the recommendation of the aroid *Sauromatum giganteum*. This curse is extraordinarily difficult to eradicate from the garden and is easily the worst menace ever to settle in my vegetable garden. I have been removing seedlings for years now and still more arrive. They love my rich, manured, vegetable garden soil. I have not let a plant flower for many years now so the seed is clearly very long lived. Beware. This plant appears to be indestructible.

Next a word on *Ten Best Plants for Dry Shade* by Panayoti Kelaidis (RGQ 77.2). In spite of living in a rain forest, we have dry shade under huge Douglas firs. Under these I have planted *Trachystemon orientalis* where it thrives, climbing vigorously up a stone wall as well as being a good ground cover for a large space. I like its February flowering.

Editor's note: A garden treasure in one climate can be a horrible weed in another and completely ungrowable elsewhere. Always lean on local experiences when choosing plants for your garden.

Have a comment on one of the articles in this issue of the Quarterly or just want to share a quick thought, tip, or idea? Send a letter to the editor at gsparrowgardens@gmail.com!

From the Editor



SHORTLY AFTER I took on the role of *Quarterly* editor I was at a gardening event chatting with members of the local chapter of NARGS. We were discussing various aspects of rock gardening and the *Quarterly* and one woman said she'd love to see an article on using sand plunge beds. She knew vaguely what they were but wanted to learn more about how to build one and how they were useful for growing plants. I'd never used a sand plunge bed. Like this NARGS member, I vaguely knew what they were, but not much else. I asked around, got referred to someone who referred me to someone who referred me to Chloe Wells, who works with the extensive sand plunge beds at Wisley in the U.K., and she very generously wrote an excellent article with extensive photographs on the subject.

If you want to see something in the *Quarterly*, if you have a question you'd like answered or a technique you'd like to see explained, please ask! You can always email me at gsparrowgardens@gmail.com. The *Quarterly* belongs to you, the members of NARGS. You pay for it with your membership dues and donations so I, as editor, try my best to make the content of the *Quarterly* responsive to your needs and wants. I can't promise that I can find someone to write on every single topic you request. I've been searching, unsuccessfully, for authors on a few topics for nearly as long as I've been editor. Sometimes it will take a while to track down an author and get an article in the publication schedule, but I love hearing what you want to read on these pages, and it is very satisfying to be able to print a requested article.

In addition to responding specific article requests, I'm always trying to find ways to include articles in the *Quarterly* which push beyond what we may think of as a typical rock garden. I've been lucky enough to visit many home gardens of NARGS members, and I know that many of us have very little space for a traditional rock garden. I think the great appeal of rock gardening is that it is so flexible, it is a style that can be adapted to solve problems and allow us to make gardens where we never thought possible.

I'm very happy to feature that in this issue, with Abbie Zabar's wonderful story about her rock garden which consists of containers perched on a ledge on the roof of her New York City home. Truly, you can rock garden anywhere, and turn what seems like wasted space into a garden full of treasured plants.

In a similar vein, Karen Schellinger's article on primroses in her Minnesota garden embraces the fact that many of us garden with a great deal of shade, but that needn't stop us from collecting tiny, precious plants. NARGS members live in a wide range of climates and have different garden styles and plant loves. Hopefully, this publication will continue to reflect that diversity.

You are an important part of that, and I'm so grateful for all of the authors who take the time to write articles about their various experiences, expertise, and, yes, sometimes failures. We all have something to share, and when we all contribute to the *Quarterly*, it only makes the *Quarterly* and this society stronger. I'm particularly happy to have more letters to the editor in this issue. I hope those will keep coming. Even if you don't think you have enough to say to fill an entire article, your thoughts, ideas, and comments are very welcome.

This issue includes the first details on the upcoming Annual General Meeting in 2020. The lineup of speakers and gardens looks top notch. In this issue we have an article previewing one of the incredible gardens attendees to the AGM will have the pleasure of visiting. More information and articles will be coming in future issues, so start getting excited!

Finally, and sadly, we lost a rock gardening legend, Rex Murfitt, in August. Through his books, articles, and teaching he has helped many of us learn the skills of rock gardening. The lessons he's taught will live on in our gardens for years to come. In addition to an obituary, Betty Mackey, Rex's former publisher, also prepared an article and photo essay showing his techniques for teaching gardeners how to arrange and plant a trough. I'm honored to be able to publish one last lesson from such a talented gardener.





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Sand Plunges at RHS Wisley

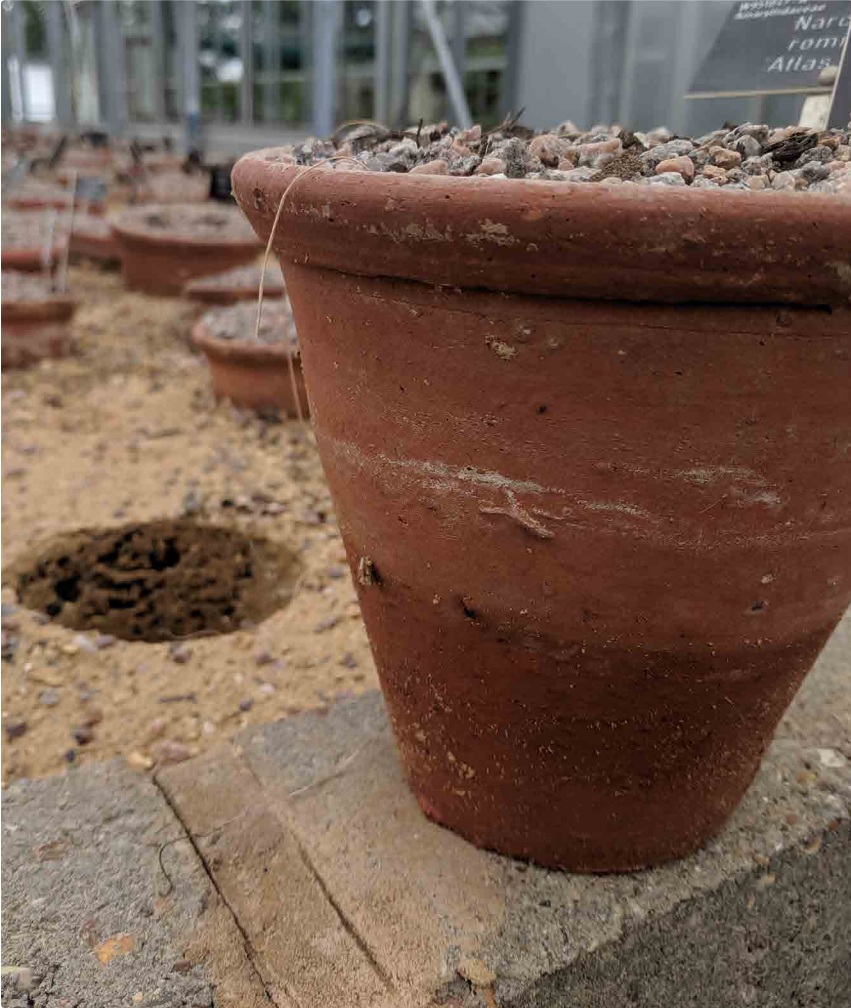
CHLOE WELLS

OUR ALPINE TEAM at RHS (Royal Horticultural Society) Garden Wisley in Surrey, United Kingdom, looks after a large Rock Garden, Landscape House and Crevice Garden, each with permanent planting schemes to maintain. But we also provide year-round color in our Display House showing off plants from the collections of 6000 pots we care for behind the scenes.

Most of these container-grown plants are in terracotta pots, which look good on display and are porous to air and water. These are plunged into raised sand beds which have been built within glasshouses so we can control ventilation and watering year-round.



Opposite: Display House at RHS Wisley.
Above: Behind the scenes, pots of dormant plants are cared for in sand plunges.



The damp lower portion of this pot indicates a perched water table, which a sand plunge helps mitigate.

In winter or dormant periods, we keep our plunges dry. Containers have a perched water table, the volume of soil which will always be moist in the bottom of any pot. The plunge mitigates this effect, acting as a kind of sponge, aiding drainage by providing a continuous movement of water down through the pot so the roots don't sit wet. The sand also buffers extreme temperatures and keeps roots from freezing.

In hot weather, the sand around the pots is kept moist, providing a cool root environment. At times when many alpiners are in a slower growth rate (between the natural spring and autumn rains, for



The sand in the plunge bed is kept moist in hot weather to keep roots cool.

example), this means we don't need to water heavily directly into the pot and risk over watering. However, the terracotta's porosity allows some water movement back into the pots, helping to prevent complete desiccation. Roots can use the water in the sand below as an extension of their compost. In a busy department with unpredictable weather, this type of buffer is essential!



Careful watering of both plants and sand plunge is required to balance the water needs of these plants in The Elliott House.

Unfortunately, the main disadvantages with sand plunges come from mistakes made when trying to balance the two advantages above. For example, if the plunge is too wet, or too shallow, plants won't drain well and there is a risk of rot. If the plunge dries out in summer it won't provide our ideal root environment and the pots dry out as quickly as if they were not plunged at all. Generally, in summer I water the plunge well twice a week and the pots once to twice weekly depending on the genera.

In our cushion house, I repot most of our plants annually. This allows me to assess any root problems that might be affecting the collection, and add any additives to the soil that might have fallen to low levels in the previous year. Additionally, leaving the pot in the sand for any number of years, unmoved, would allow the roots to



Plants must be moved or repotted regularly to prevent deep roots growing into the sand of the plunge bed.



Choose a different sand if water puddles on the surface when you irrigate.

grow too deeply into the plunge. Long, deep alpine roots often resent disturbance, and as we are growing primarily for display, we need to be able to move plants without the risk of ripping roots and losing plants even if that plant has not been displayed for a year. It does mean plants are kept smaller than if planted out, but it does save staff trying to lift very heavy pots, too.

Sand choice is very important. Coarse sand is our choice, which drains efficiently with smaller pores than most compost that your plants will be growing in. Water would not move as easily through a pot to a larger pored medium, as the adhesive tension between water particles will be stronger than the gravity pushing it downwards into the air spaces.

It's worth experimenting with sand before buying, as some fine sand can be oddly hydrophobic. Water pooling on the surface or running to the lowest level if your plunge isn't flat can lead to very uneven moisture levels. I think this is due to a higher silica content than coarse sand which is calcium carbonate based.

Although I have heard of people using ash, bark or other additives in a plunge, I would only ever use clean coarse sand, which will reduce pest, disease, and weed outbreaks. Moreover, I often find that many of the harder alpinines we grow self-seed and germinate in the plunges more readily than they do when sown into seed compost, even with the help of my loving stares! I believe this to be the result of using such a sterile medium and is a reminder of the success and popularity of sand beds. Plunges are beds for pots providing the same benefits.



Some plants self-seed and grow more enthusiastically in the sand of the plunge bed than they do in seed pots.

Basic construction advice follows, but I am especially keen to emphasize the importance of the gardener's comfort. As a lot of my time is spent plunging (see rules below), picking over, watering, seed collecting, height is a very important consideration to prevent a bad back. This also applies for the width. How far can you reach? You do not want to overstretch your back lifting heavy pots away from you.

We have two methods of building plunges. One is a raised wooden bench (I have seen some homemade ones using old doors), with sides deep enough to hold our deepest pot with at least 6 inches (15 cm) of sand below. Sufficient depth is important, as the deeper the sand, the further away the water table will be from your pot. Line the bottom with polythene or horticultural permeable liner (usually sold as landscape fabric in the U.S.) and drill drainage holes through the wood and liner. Untreated wood will rot fairly quickly, and be sure it is strong enough to hold the weight of wet sand.



Plunge bed made from wood lined with permeable landscape fabric.

By far our best sand plunges are made from four courses of cement blocks cemented together like a raised bed, half of the base filled with rubble, (as this is cheaper than filling entirely with sand) and the same sufficiently deep layer of sand on top.

When plunging your pots, some rules apply. You want to plunge to about 1 inch (3cm) from the pot's top. This ensures enough grip to lift it easily, and that water doesn't enter the pot when you damp the plunge.

Really good contact must be made between the pot and the sand. A good practice is to mound the sand slightly where it will contact the pot's hole. Push the sand down around the sides of the pot, otherwise, the sand will sink when you water and you'll be left with gaps from which no benefit can be gained. Having a level sand plunge makes life much easier and aesthetically pleasing.



Durable plunge bed made from concrete blocks.



Top: Leave the lip of the pot above the sand for easy watering and lifting.
Bottom: A smooth finish creates a beautiful display.



Group plants with similar water needs in the same plunge.

With the number and range of plants we grow, using sand plunges helps enormously to regulate watering and keep a sterile environment between the pots. Some pests, such as nematodes, will still be able to move through a collection via the water, but these are rare. In a smaller collection where there is more diversity plunged together, you may find a large plunge unsuitable for growing plants together. For example, saxifrages next to dionysias will have very different soil saturation needs. Building smaller plunges, separating areas or experimenting with tubs could be options here for very small pots, but you do need to ensure the sand is deep enough below the pots.

Finally, there is no need to plunge plants into a sand bed, unless you want to move them again soon. A plant in a pot plunged in sand is a plant restricted unnecessarily. Growing in plunges is suited to plants for display or which you move every year. It may be advantageous to permanently plunge a potted alpine if you didn't want to risk disturbing an established or delicate root system or if a plant was too large to continue moving. This is not something we have done here consciously. However, there is always an exception. A marvelous *Dianthus anatolicus*, put in the Display House long ago, has long since grown out of the bounds of its pot and maneuverability!



Plunge beds allow plants to be easily moved; but if left in place they can reach much larger sizes, like this enormous *Dianthus anatolicus* that has taken up permanent residence in the Display House.



Edgy, Ledgy Rock Gardening

ABBIE ZABAR

THE SEDUM BLOOMED a field of brilliant yellow flowers, the sempervivum spawned families of hens and chicks. The wild strawberries had no runners but took up the slack, promiscuously seeding about. Willful explorers from my potted garden defiantly rooted into crushed slag on the top of an apartment building, twenty-one stories above city sidewalks and when green roofs were not yet a thing. It was also before I joined the Manhattan Chapter of NARGS, but suddenly rock gardening looked like a game-changer.

That was over forty years ago and, incidentally, my first and last attempt at farming. I would sell teacup harvests of intensely flavored fraises des bois (*Fragaria vesca*), the size of a pinky nail, to a four-star French restaurant down the block. The pastry chef at Daniel used my mini-crops sparingly, like jewels, to decorate after-dinner tartlets.



Opposite: The rock garden on its ledge.
Above: Fraises des bois (*Fragaria vesca*) decorating tartlets. Tiny plants are like jewels in the garden, as they are in the kitchen.

Rockeries often are the jewels in a garden, creating dazzling brilliance where it is least anticipated. Or most needed. Especially to those of us who might have thought that NARGS is ignoring anyone with merely a fire escape on which to garden.

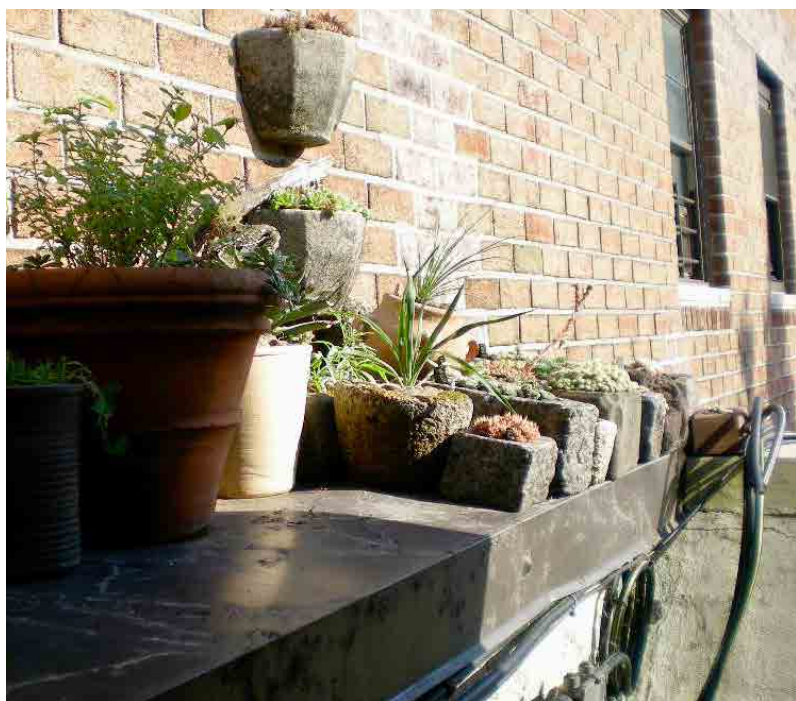
Yet what defines a rock garden? Can a rockery be planted in nothing more than a sidewalk street-tree pit? In rubble from an excavation site? Or on an aluminum ledge intended to cap off and protect a parapet wall but which had become a setting for abandoned equipment boxes, pigeon poop, and dangling cables, not to mention the ongoing drone of air conditioners? No realtor wanted to show me such an eyesore, afraid it would put the kibosh on any potential deal. Little did they suspect that problem-solving is one of the reasons why I garden.

Nevertheless, here was your typical urban rooftop. I know because I saw a city full of them when I was looking to move, but none that I could afford unless I forfeited outdoor space. Extra closets or a second bathroom (perhaps for the kitties' litter boxes, as civilized as that would have been) meant nothing. Outdoor space was non-negotiable if I was going to spend the rest of my days in this city. I was seeking a forgotten bit of underutilized real estate, plus the privilege of gardening at the top of quirky early twentieth-century architecture. I did not care if the garden circumnavigated an apartment that was no bigger than an afterthought. Besides, I had looked long enough and the light was dreamy on that Friday, July 13th.

"I will work with this" became my mantra.

The Ledge started as nothing more than a holding area, an outdoor waiting room for a growing collection of pots. Yet self-driven schemes can be fueled with a unique spirit lacking in AutoCAD designs. Moreover, as any container gardener knows, one vessel leads to another when everything is repurposed by drilling a drainage hole. I will work with what I find, anything that strikes my idiosyncratic aesthetic.

From the end of May through early August, The Ledge gets sunshine for hours. During the winter months the light quickly falls behind surrounding architecture or never clears it at all. After years of plant sale temptations, I am still discovering which shallow-rooted alpiners are at home on an unforgiving urban rooftop that is wildly windy in the winter and hot enough to fry an egg in the summer. Yes, I might have been up for the challenge, but I never would have thought that a subversive gathering of mats, cushions, and buns on an aluminum ledge could morph into one of the most engaging gardens that I ever planted.



The Ledge in the early days.

Yet my failures are memorable and discouraging. The saxifraga that Maria Galleti, an avid collector, gave me in 2011 when she was deaccessioning favorites from her nursery are down to a mere few. There was a time when they happily multiplied in various containers on The Ledge. But I took those beauties for granted and eventually the encrusted rosettes succumbed to the humidity of urban summers because I stopped paying attention. From overly zealous watering, I lost the very hardy *Opuntia fragilis* grown by another rooftop gardener. It is a spiny miniature prickly pear cactus that “even the pigeons don’t pick apart,” said Michael who had been growing this little number “in the same pot 365 days a year and never watered it.” Coming out of winter, I helplessly watched a spiky rosette of *Yucca nana* die after I had forgotten to turn the pot on its side, and the crown rotted.

Plants come and go in our lives, and as Joseph Tychonievich, editor of the *Quarterly* emailed, “I always like it when authors mention things that went wrong or refused to thrive because it is helpful for beginning gardeners to know that killing plants now and again does not mean that they are a bad gardener. Failure is part of the gardening process as it is for any art.”

So even if I can pick a mini-harvest of *fraises des bois* to dribble on warm buttered English muffins or cool mango sorbet, it was a major disappointment that I could not cultivate small-scale blueberry bushes on The Ledge. Into three gorgeous Italian Della Robbia pots, with pudgy little clay fruit and berries going around the belly, I planted a troika of *Vaccinium* ‘Jelly Bean’ because that variety was selected for containers. The bushes displayed colored leaves in almost every season and I loved pruning their dwarf globular shapes, but perhaps it was premature to name a portion of my aluminum ledge Blueberry Hill. Ultimately, I was unsuccessful in protecting my crop from the birds. As I mentioned earlier, commercial farming is not my thing.

The Ledge is twenty inches (51 cm) deep and fifty inches (1.27 m) above the quarry tile deck. Viewing a rock garden at chest height is like peeking into the Alpine House at Wave Hill when the windows are removed, an opportunity to get up close and personal with an intimate panorama that would get lost in Capability Brown landscapes. Visitors to my garden can unexpectedly focus on encrusted silver saxifraga with delicate beaded margins reminiscent of the ancient jeweler’s art of granulation; hairy *Sempervivum arachnoideum* wearing woven antimacassars in the winter, or *Jovibarba* clusters that look like cabbage roses, while mounding colonies of tiny *Orostachys* and rosettes of *Rosularia* nuzzle up to one another with self-protective congested habits of growth.

Opposite: *Fraises des bois* (*Fragaria vesca*) with a view of the New York skyline.





Orostachys coming into bloom on The Ledge.

As someone who did not want to see bare ground but had no budget, time, or desire to scrape, prime, and paint an aluminum ledge, all of my assorted containers are as tightly packed together as passengers in a subway car.

The thick-walled English terra cotta seed tray, an American carved stone match strike, a black granite mortar from China are all doing double duty on The Ledge. A pale pink terra cotta urn with handles and incised curlicues was a gift from Tony, my Italian super, when he returned from Majorca. A small squat holy water basin of weathered Cotswold stone discovered in an antique shop near Highgrove came home with me when you could still carry inexplicable cargo into the



Sempervivium fill pots on The Ledge.

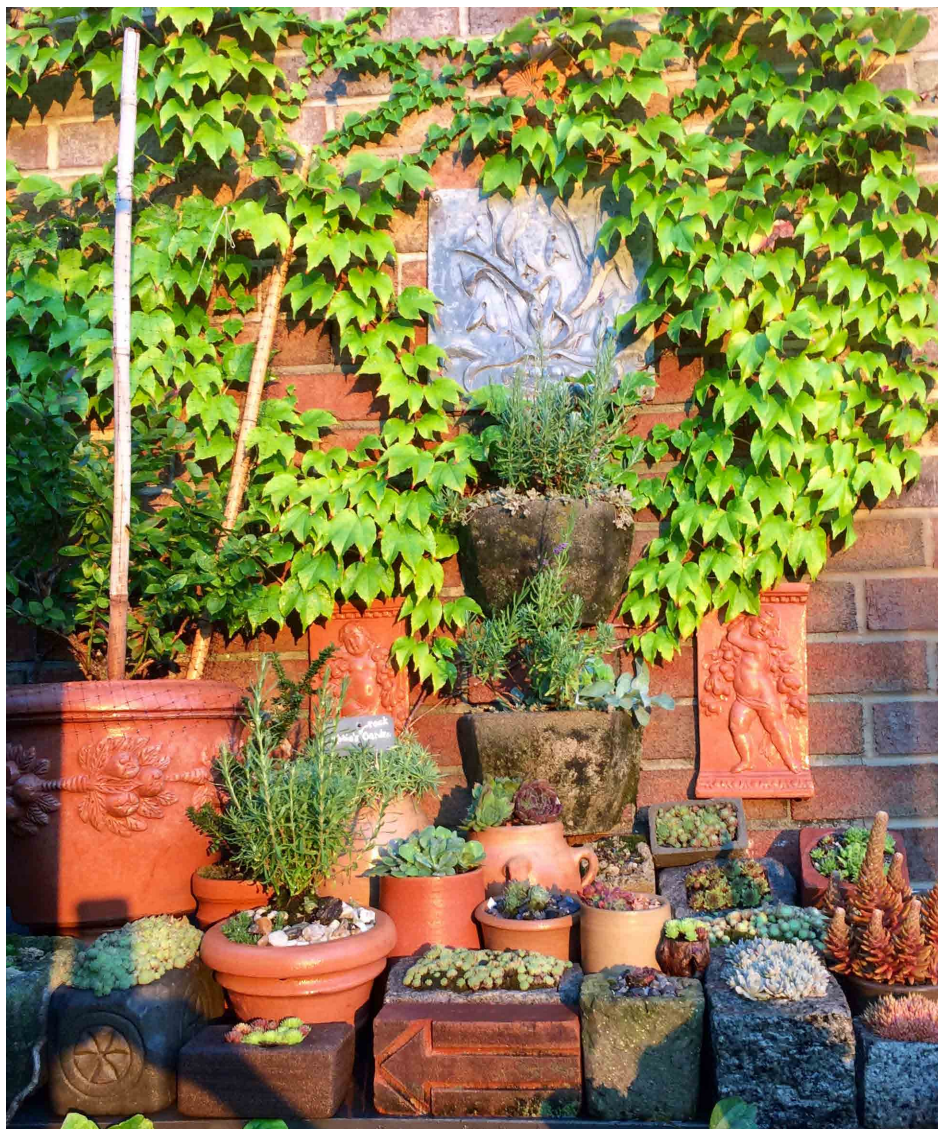
cabin of an aircraft. Matt arrived at one of my garden parties with Joe and a hypertufa trough from their Massachusetts garden, filled with the tiniest saxifraga that he and I have ever seen. Lori's hypertufa cylinder is covered with enough moss to finally make it indistinguishable from real tufa. And then there are the multitudinous chocolate-colored terra cotta vessels that my dear friend and rock garden mentor, Larry, threw on his potter's wheel. Provenance adds an inexplicable dimension to any garden.

Yet it is my troughery of NYC cobblestone that were carved out with twenty-first century diamond blade grinders and chipping guns (See *The Rock Garden Quarterly*, Vol. 63 No 4. *Up in the Air Rock Gardening*) that simulates a vision of plants living in cavities while answering my need for drystone walls. I wedge pieces of mica schist between remaining gaps in a reference to Czech crevice gardens. The sparkling metamorphic rock is also an ironic homage to Manhattan's steel and concrete skyline that is built on top of solid bedrock which, fifteen thousand years ago, was nothing more than a boulder-strewn landscape of gravel and sand.

A back-to-front pitch forces rainwater (and my watering) to easily flow from The Ledge. Shims are placed under each vessel to keep them level and prevent slippage off the steep terrain. Pots are also set on top of pots as a stabilizing technique and to move the eye up, down and around because, as the renowned decorator Albert Hadley said, "It is important to create a 'skyline' in a room, things should be at different levels and heights." One of my tallest containers, a Larry Thomas urn, is filled with an unnamed and early blooming dianthus. It is too cracked to move but seemingly lassoed together by thick entwining stems of *Parthenocissus tricuspidata* emerging from a planter down by my feet to form a backdrop. I am grateful for an unrepentant vine that climbs up and over The Ledge, snakes through my whole rockery and then clothes a characterless brick fortification with vibrant foliage equal to the height of leaf-peeping season in Vermont. The now scenic wall of Boston ivy holds my rock garden ledge together like a natural cliff face, same way the Japanese use *shakkei*, (borrowed scenery), to enlarge their landscape.

Gertrude Jekyll, the legendary English gardener of the early 20th century, might have written pronouncements like, "Good ironwork ought not to be invaded by climbing plants," or "The fine piers are cruelly overgrown with ampelopsis." But as one whose noble ancestry does not include a splendid manor house by her architect and partner, Sir Edwin Lutyens, it was a triumphant moment when I read another Gertrude edict, "In some cases, where the very plain brick piers have no stone cornices or capping of any kind, a restrained growth of climbing plants is allowable in order to cover this deficiency."

Were it not for a ledge that was crying out for help, I never would have considered planting a “rockery.” Nor other rockeries for clients who come to me with pie-in-the-sky garden ideas but are about to discover that alpine plantings can lead to the genius loci – the spirit of a setting – however humble.



Parthenocissus tricuspidata makes a green backdrop for the plants growing on The Ledge.

Minnesota Garden of Primroses and Memories

KAREN SCHELLINGER



Primula denticulata

AS OUR WINTER in Minnesota finally releases its hold in April, I wander down my woodland primrose path each day looking for signs of the garden awakening from its long slumber. Having gardened here in central Minnesota for 30 years, it still brings feelings of wonder that plants gifted by my friends years ago greet me anew each spring with the love in which they were given.

The first primulas to greet me are the hot pink, lavender, or white balls of *Primula denticulata* and the soft yellow blooms of *Primula elatior*. Both have reseeded in my former nursery area where, now, a life-sized clay statue of St. Francis of Assisi sits on granite pieces from an old cable car street. In my meadow of self-sown primroses, St. Francis's hand extends in welcome. My woodland garden has become a sort of spiritual garden in memory of my

husband Francis and St. Francis, as both loved nature. My husband loved my primroses and helped me often in my woodland garden. My garden is full of memories of friends past and present dwelling in their plants that I grow.



Polyanthus primrose from Barnhaven seed

Primula elatior is a tough plant, and I have had it for 30 years. One plant somehow came up in my lawn on the west side of the house far away from my woodland garden. That *Primula elatior* is subjected to severe winter cold (this year, two days of -38° F/-39° C) often with very little snow cover and no fall leaf protection as the leaves are all gathered from the lawn in that area. This year in my woodland, *Primula elatior* subsp. *meyeri* bloomed with delightful hanging blossoms of a soft lavender. *Primula veris* follows soon after with small hanging bell-like blooms in yellow, red or soft orange and some hose-in-hose forms. All are welcome in my garden, adding to the diversity. As Doretta Klaber said in her book *Primroses and Spring*: "Primroses cast a spell on you." I have been happily smitten with them for years, pleased that they have tolerated life in my Minnesota climate.



Primula elatior



Primula 'Vera Maud'

Primula 'Vera Maud', a juliana primrose from Barnhaven Primroses, makes a delightful small mound covered with single blooms of white, often flushed with yellow or lavender and even a pink. All of them have dark foliage. I have several juliana primroses from an Alaskan primrose friend, Marie Skonberg. I wish I could have visited her gardens as she also had quite a love of primroses. One especially beautiful primula is a Jack-in-the-green-type with bright fuchsia flowers. Alas, I no longer know the names of the primroses she gave me except for the stalked yellow flowered *Primula 'Dorothy'*. My Alaskan friend is gone now so I just refer to them as primula from Marie my Alaskan friend. They have been very hardy, unlike some of the other named juliana varieties I have tried over the years.

The next primrose to appear is *Primula vulgaris* subsp. *rubra*, with soft lavender pink flowers, which makes a slowly creeping ground cover. I have two of them side by side, one of which is the earlier blooming of the two with slightly larger leaves. Both have the same leaf, growth habit, and flower color. Which is the true one I don't know, but I enjoy them both.

Waiting their turn are the single flowered *Primula acaulis* from Barnhaven seed in colors of red, yellow, blue or white, which cover their foliage beautifully. The pink Barnhaven *Primula acaulis* has not been



Polyanthus primrose from Barnhaven seed.

hardy for me. I first received Barnhaven *acaulis* primrose seed from the American Primrose Society's seed exchange years ago, but now order most of my primrose seed directly from Barnhaven Primroses in France each year. In October I plant the primrose seed for the coming May planting and sales in my small 8 foot x 10 foot (2.5 m x 3 m) greenhouse attached to the house, which my husband built for me. The main problem I have now is whether to order just my usual 300 Barnhaven primrose seeds or more as the greenhouse will hold up to 600 primrose plants.

The story of Barnhaven has always fascinated me. During the depression, Florence Bellis, a concert pianist from Oregon unable to find work for those talented fingers, ordered primula seed from England and proceeded for years to hybridize and grow thousands of polyanthus and *acaulis* primroses, resulting in wonderful colors. Barnhaven was eventually sold, with the new owners creating even more beautiful colors. The Barnhaven polyanthus Cowichan plants don't have the

usual star eye which gives a different velvety look to their flowers. The Cowichan yellow and amethyst colors have been hardy for me but not the blue, sadly.

The gold laced polyanthus 'Beeches Strain' has large dark red blooms edged with gold and they delight me each time I see them in bloom. There is also a smaller flowered silver-laced form with black flowers edged in white and while both are smaller plants they have unusual charm. You either love them or hate them but most people exclaim when they see them as they remind one of a daisy. They have been hardy for me but maybe not as long lived as other primroses in my garden, perhaps needing division sooner. Some of my primroses I have never divided and they keep on blooming. When primroses get crowded and stop blooming it is time to divide them.

I have grown *Primula farinosa*. It is not long lived with me yet I love the daintiness of the plant. I suspect my rich soil needs to be amended with some granite chips as a friend grew them well in her sandy soil. *Primula cortusoides* and *P. polyneura* are also not long lived for me but I like them and continue to grow them each year hoping they will reseed for me.

I first received *Primula kisoana* from Florence Keller of the Minnesota NARGS chapter and it has naturalized upon the top of a sloping hill to the northwest with a soft pink cloud of color. I also grow the darker pink form which was said to come from Lincoln Foster. I have two white flowered *Primula kisoana*, both of which I received many years ago, one from Margaret Mason, a delightful English lady from Oregon, and the other from a friend in Japan. I don't see much difference in them. As with all *Primula kisoana*, you need to keep an eye on them as they do creep rather aggressively. I keep them under control by potting up the extras for sale.

I have grown *Primula auricula* from seed and have enjoyed their velvety blooms and leathery leaves. I first put them in a small rock garden years ago but then moved them to the east-facing rock garden where they seem to like the good drainage and the morning sun.

I have always been fascinated by *Primula marginata* but haven't yet found the right place for it. I have *P. marginata* 'Linda Pope' tucked into a rocky outcrop in my east-facing rock garden but it doesn't thrive like the *P. marginata* from Rice Creek Gardens did when I had planted it in a trough where it became large and happy. Alas, I tired of winterizing the trough by setting it on the ground and covering it with fall leaves and so I planted that *P. marginata* in the east-facing garden where it has dwindled. My friend Margaret Mason grew many *P. marginata* to perfection in a north-facing rock wall in Oregon, but then she grew many things to perfection.



White (top) and pink (bottom) *Primula kisoana* can spread aggressively but make nice groundcovers.



Above: A spreading mass of *Primula sieboldii*
Opposite: *Primula japonica* has seeded happily to make a large colony.

The next primroses to bloom are *Primula sieboldii* in a mixture of colors and snowflake blossoms. The plant creeps to make a groundcover, which dies down by the end of July. A heavy downpour will flatten the blooms a bit but they will rise again if not in deep shade. They are in the area surrounding my St. Francis statue and give color when the earlier primroses are through. My friends Jay and Ann Lunn of Oregon gave me many forms of this beautiful primrose that grace the meadow bed. I moved some of the deeper and lighter pinks next to a Japanese painted fern along the path and the combination is stunning, picking up the pink shades in the beautiful fern.

Next, *Primula japonica* blooms on two foot (60 cm) stalks with three to four whirls of white, red, or pink flowers. Having reseeded well they crowd out many weeds. They don't stay evergreen over the winter, disappearing below ground in the fall. Irrigation with good moisture retentive soil is best for them, but don't plant them in standing water as they need good drainage while still being moist. I had seen pictures of them naturalized along a stream bank which was beautiful so I planted a few along a rill near our creek and in another low area. All are surviving nicely with mother nature seeding them around with a caring hand.





Hylomecon japonicum, *Uvularia graniflora*, and *Trillium grandiflorum*

Primrose Companions

Primroses need companions, so from Ron Bendixen I received *Hylomecon japonicum*, a deer-proof woodlander from Japan which has bright yellow blooms and wonderful foliage when the primula start to bloom. From Al Stavos, I received *Trillium cuneatum*, *T. luteum* and three other smaller trillium which I haven't identified yet. When Al passed away his wife was kind enough to give me a bit of his ashes which I placed under the first of his trillium to bloom, so now he greets me each spring. I have met so many wonderful garden mentors over the years and they each shared their love of plants and knowledge freely. Betty Ann Addison of Rice Creek Gardens gave me the beautiful *Anemonella* 'Cameo' which graces the entrance of my woodland garden path with many soft pink double flowers. This year she generously gave me a piece of a double flowered *Trillium grandiflorum*, which I treasure.

I also received an old, very large clump of *Trillium grandiflorum* from Georgie Burt years ago. When the seedlings beneath its feet start to bloom, I transplant them to other places in my garden. Blooming at the same time is the beautiful white *Mertensia virginica* 'Ceil', which I received from Lois Ecklund, who got it from her mother-in-law Ceil, who got it from an elderly lady in Minneapolis, Minnesota. It is quite old and full of memories. Its white hanging bells are very graceful and pair nicely with a short white *Primula sieboldii* growing with it, which I also got from Lois.

The first large blue, white and pink blooms of *Hepatica x media* 'Ballard's variety', *H. transsilvanica* 'Eisvogel' and *H. transsilvanica* 'Rosea' have greeted me as early as March, but more often in April, depending on Mother Nature's fickle teasing. They are slow growing and make a ground cover rather than forming clumps as do other hepaticas. Their leaves, wonderfully large and scalloped like the fancy edged collar of a lady's blouse, are a delight all summer.



Hepaticas look beautiful in (top) and out (bottom) of bloom.

I have grown hepaticas for 18 years and treasure them. I first saw a blue flowered one in my friend Georgie Burt's garden in North Dakota, and she kindly gave me a piece. She didn't know the name of it but when we attended an International American Primrose Society gathering together in Oregon we saw it in a garden and the mystery was solved.

I purchased my white and rose flowered *Hepatica transsilvanica* from Potterton and Martin in England shortly thereafter. I bought *Hepatica x media* 'Ballard's Variety' from Bovees Nursery in Oregon having seen it there while on a tour. Pleasantly, the blue has been gently reseeding in my garden. I also have a special dark, blue-double flowered hepatica that belonged to David Vesal that he purchased at Grand Ridge Nursery years ago. Farther along the edge of the path grows a small-leaved hepatica with red flowers given to me by Ed Burkhardt. Both men were members of our Minnesota NARGS chapter.

While visiting a nursery during the 2001 International Rock Garden conference in Scotland, the owner kindly gave me a packet of mixed hepatica seed. I planted them in my garden immediately in July when I returned home. I now have a mixture of colors and foliage from that sowing and they are reseeding nicely in the garden. What a gift when one receives seeds given because of a wish to share their love of special plants with you.

For 20 years I have grown the lovely *Peltoboykinia watanabei*. It is a late rising plant from Japan which I purchased at Collector's Nursery from Diana Reeck. Creeping and seeding slowly, it has the most wonderful round eight-inch (20 cm) leaves with jagged-toothed edges and a yellow flower. Every year when my special plants appear I picture the person I got them from and so will never forget them even though the years keep going by much too fast.

The small rock garden is now my nursery bed for the blue-flowered *Jeffersonia dubia* which seems to prefer that location with high shade and a gritty soil mix rather than in the deep shade of the woodland garden. *Jeffersonia dubia* hardly bloomed and languished when I first planted it in deep shade. I love this early blooming plant with icy blue flowers and am always wishing for the white form. My friend Ron Bendixen gave me a blue-flowered *Jeffersonia dubia* with a dark eye last year and this year one with variegated leaves. I'm waiting to see them bloom, having put the dark-eyed one towards the front of the woodland garden where it will receive more light while placing the variegated one in the white mertensia and *Primula sieboldii* bed.

Growing and Loving Primroses

My love affair with primroses began thirty years ago when I first read Doretta's Klaber's book *Primroses and Spring*. I still read it every spring for inspiration. I then joined The American Primrose Society, NARGS, and several other plant societies, ordering every kind of primrose seed I could get my hands on.

I have grown primroses successfully under maples with their greedy roots over the years providing I give them sufficient moisture during the summer and 3-6-inch (7.5-15-cm) deep cover of fallen leaves for winter protection, especially during March. When the snow cover melts in March, the ground thaws a couple of inches and refreezes each night which can be deadly for the primroses. The leaf mulch keeps them dormant and their ground frozen until the weather starts to warm in April.

Primula simply love a deep bed of fall leaves decomposing and holding moisture to grow in. I used to remove all the winter cover each year in the spring until I realized the many advantages of leaving the natural cover in place. The primula will push up through the leaf cover

when it's time for them to arrive in all their glory. Juliana primroses, with their shorter growth, will need some of the leaf cover removed which is why I plant them towards the front of a bed or path.

I have gotten the best bloom and growth from my primroses with those planted where they receive some sun with consistent moisture through the summer, especially so if it is afternoon sun. Primroses planted in deep shade will bloom, but will not multiply and bloom as well as those with at least two to three hours of sunlight. I also put wood ashes and decomposing leaf mulch in each hole when planting the new primroses each spring.

I do not plant primroses in the fall. Years ago, I lost 200 plants when I planted them the end of September. There was not enough time for the young plants to get their roots settled in for the long winter nap.

It is a battle each year to get the thousands of maple tree seedlings pulled and keep the garden sprayed consistently with repellent before the deer eat the plants. The deer don't eat the primroses, thank the Lord, but they will graze on many other things. They will even munch on a helleborus flower stalk before spitting it on the ground and moving on to eat the tops of my martagon lilies from NARGS seed. I must make quite a comical picture in the garden with my backpack sprayer and cane.

I am almost 74 now, and garden with a cane and shovel. While I am not able to work in the garden all day as I used to, I pace myself realizing that if you keep moving wisely, consistently, and daily, your work will get done. Especially with some help from my friend, Mary Lou, who helps me plant one day a week for two hours during May. The Lord gave us friends and plants to enjoy and discover so we must not waste a day.




Primroses blooming around St. Francis.



Cornell Botanic Gardens

EMILY DETRICK

A photograph of a lake with a dense forest of trees in the background. The trees are in various stages of autumn, with many showing bright yellow and orange leaves, while others are still green. The sky is a clear, bright blue. The water in the foreground is calm, reflecting the colors of the trees and the sky.

CORNELL BOTANIC GARDENS, co-sponsor of the 2020 NARGS conference in Ithaca, New York, is excited to welcome NARGS members and rock garden enthusiasts from around the world. What follows is a glimpse into Cornell Botanic Gardens' rich history, renowned collections, and stunning geology to prepare you for your trip to our region.

The natural beauty of the Cornell University campus and surrounding lands is cared for and enhanced by the botanic gardens. We welcome over 70,000 visitors a year to our cultivated gardens, arboretum, and natural areas. Together these comprise one-third of the Ithaca, New York, campus and, with off-campus natural areas, a total of 3,600 acres. Established in 1925 as the Cornell Arboretum, the gardens were later renamed Cornell Plantations and, in 2016, became Cornell Botanic Gardens.

Beebe Lake with fall foliage. Photo by Robert Barker



Top: The Young Flower Garden in Spring. Photo by Jay Potter
Bottom: The Clement G. Bowers Rhododendron Collection. Photo: Cornell University.
Opposite: The Robison York Herb Garden. Photo by Jay Potter



The Cultivated Gardens

The 35-acre cultivated gardens surrounding the Nevin Welcome Center include specialty gardens of herbs, flowers, vegetables, perennials, ornamental grasses, groundcovers, and rhododendrons, among others.

In June of 1981, a rock garden was created in honor of Walter C. Heasley, Jr., a former Cornell University alumnus trustee. It features true alpine herbaceous perennials as well as dwarf and miniature perennials and conifers. The garden was originally designed to represent four alpine habitats: scree, moraine, rock outcropping, and meadow, with plants appropriate to each habitat. Interpretation focused on plant adaptations that allow alpiners to flourish in the harsh, short growing season above the tree line. However, the garden proved too small to adequately represent these very different habitats, and the plants, particularly the meadow plants, were too large for the space. Plans to expand the garden and implement a more successful meadow were thwarted. Currently, the garden displays true alpiners as well as plants of diminutive size that harmonize with and have cultural requirements similar to true alpiners.

The Heasley Rock Garden is in a transition phase. While there is currently no funding to support the continued maintenance and development of the garden, a dedicated group of local NARGS volunteers' energy and enthusiasm is driving a rejuvenation project to breathe new life into the space. This spring, thanks to the generosity of NARGS donors, we planted new acquisitions that are thriving in the hot sunny gravel of the western end, including *Astragalus angustifolius* and *Hypericum olympicum*, and dense, leafy gems that relish the cool, dry shade of chamaecyparis on the east end, such as *Epimedium grandiflorum* var. *higoense* 'Bandit' and *Hosta* 'Bill Dress's Blue.' Our next phase of rejuvenation includes propagating from the NARGS seed exchange and collaborating with our Natural Areas staff to include regional native plants adapted to rocky limestone sites.





The Natural Areas

The most beloved natural areas on and around the Cornell campus are stewarded by the Cornell Botanic Gardens. Over 40 miles (64 km) of public trails wind through the glacially carved landscape, including around Beebe Lake and the Fall Creek and Cascadilla Creek Gorges. Cascadilla Creek drops 400 feet (122 m) from campus to downtown Ithaca, carving through bedrock — shale, siltstone and sandstone — and exposing sedimentary rocks that were deposited 400 million years ago. The Mundy Wildflower Garden along Fall Creek features over 640 species of native plants and a recently restored stream bank planted with wild-collected seed from regional references sites.

In addition to maintaining these treasures for the enjoyment of the public, the Botanic Gardens protects rare and endangered native plants and collaborates with scientists in many areas of research and conservancy. For example, staff have collected and preserved nearly 7,000 seeds from 300 individual plants across four populations to help safeguard one of our region's rarest species: the American globeflower (*Trollius laxus* subsp. *laxus*). We are also protecting more than 2,000 hemlocks from hemlock woolly adelgid and are collaborating with the New York State Hemlock Initiative to study the effectiveness of using biocontrol agents.

Opposite: Waterfall in Cascadilla Gorge. Photo by Jason Koski
Above: Students working in the Mundy Wildflower Garden. Photo by Jason Koski



The Arboretum

The 100-acre F. R. Newman Arboretum is home to more than 1,000 woody plant taxa, including collections of nut trees, crabapples, maples, oaks, urban trees, and shrubs. Its rolling hills and valleys were carved by Fall Creek following the retreat of the last glaciers more than 10,000 years ago. Today, the arboretum offers a pastoral setting and panoramic views, amidst a living museum of trees, shrubs, and woodland plants. A car loop, paved footpaths, and woodland trails offer visitors a variety of opportunities for exploration and stunning vistas. In the winter, it is a popular destination for cross-country skiers.

Mission and Vision

The mission and vision are the foundation of the Botanic Gardens' work now and going forward. They grew from the input received during the strategic planning process, as well as our deep commitment to conserving the natural world and the diverse cultures it supports.



Early morning in the F. R. Newman Arboretum. Photo by Jay Potter.

Our mission is to inspire people – through cultivation, conservation, and education – to understand, appreciate, and nurture plants and the cultures they sustain. These three pillars are depicted in our logo as a weave to represent our vision: a world in which the interdependence of biological and cultural diversity is respected, sustained, and celebrated. They also serve to remind us of the interrelationships of our physical spaces: gardens, natural areas, and an arboretum. In its suggestion of a botanic flame, the logo symbolizes the energy of the people within our organization, our will to inspire, and our path to teach and honor nature’s best practices, past and present.

We look forward to sharing that vision with NARGS members who are coming from around the world for the national conference in 2020. We invite you to visit our gardens, arboretum, and natural areas to find inspiration and feed your passion.



Foresight 2020

EXPLORATION AND INSPIRATION

Foresight 2020: Exploration and Inspiration is the theme of the 2020 NARGS Annual General Meeting and Conference to be held June 18-20, hosted by the Adirondack Chapter and co-hosted by Cornell Botanic Gardens. Why this theme? Foresight, because after you attend this conference, we hope you will be armed with fresh knowledge to become a better gardener moving forward. How many times have we all said, "I wish I knew then what I know now!"

So let's explore the possibilities together, whether it's the opportunity to view alpine plants in their native habitats or salivate over cultivated beauties in public or private gardens. We'll learn from the experience of others and share successes and not-so-successful attempts. In any case, we will all seek to be inspired in 2020 to try new plants, new techniques, and new challenges in our gardens!

Packed into three days will be daytime field trips, evening talks (line-up below) optional “night owl” mini-talks, plant sales by choice vendors, door prizes, book signings, and an optional pre-conference tour to visit three exceptional private gardens in the Syracuse area.

This conference will be based on the north campus of Cornell University, voted one of the most beautiful college campuses, with its own botanic garden and arboretum a short walk away from the conference. Many of our activities will occur in the Robert Purcell Community Center including meals, plant sales, and evening talks. Dorm lodging is offered literally steps away from this building.

Speakers and Mini-Talks

- Harry Jans, well-known plant explorer extraordinaire, is still traveling and exploring the far reaches of the alpine world. He will deliver two talks, including one about his recent travels in Peru and Chile.
- Kaj Andersen, a frequent garden lecturer throughout Europe and avid traveler, will speak about Bangsbo Botanical Garden in Frederikshavn Denmark. He and his wife Minna have volunteered throughout the construction, planting, and maintenance of its crevice garden, which claims to be the world’s largest.
- Cornell Botanic Gardens horticulturists and designers will deliver presentations about their mission, collections and educational/ research components in preparation for our field trip there on Saturday.
- Night Owl Mini-Talks invite our attendees to give short presentations after the formal scheduled talks end on Thursday and Friday evenings. What would you love to share in a 5-10 minute presentation?



Troughs in Marlene Kobre's collection of container plantings.
Photo by Carol Eichler



Field Trips

Ithaca is gorgeous! So the Friday field trip will include a guided walk to explore one of our famous gorges, visits to three choice private gardens and the Adirondack Chapter's public rock garden, and a lakeside lunch on the shores of Cayuga Lake.

On Saturday, we visit the Cornell Botanic Gardens plant collections with their docents on hand to answer questions. Free time in the afternoon allow further exploration of the Gardens, or to venture to other on- or off-campus attractions including the Newman Arboretum (other suggestions will be offered as well).

Additional Activities

NARGS awards, election of officers, and annual report.

Plant sales, book sales, and signings.

Friday evening banquet and open bar.

Schedule

As we confirm the details of our itinerary, our schedule will be posted on the NARGS website (www.nargs.org) and in the forthcoming Winter 2019/20 *Quarterly*.

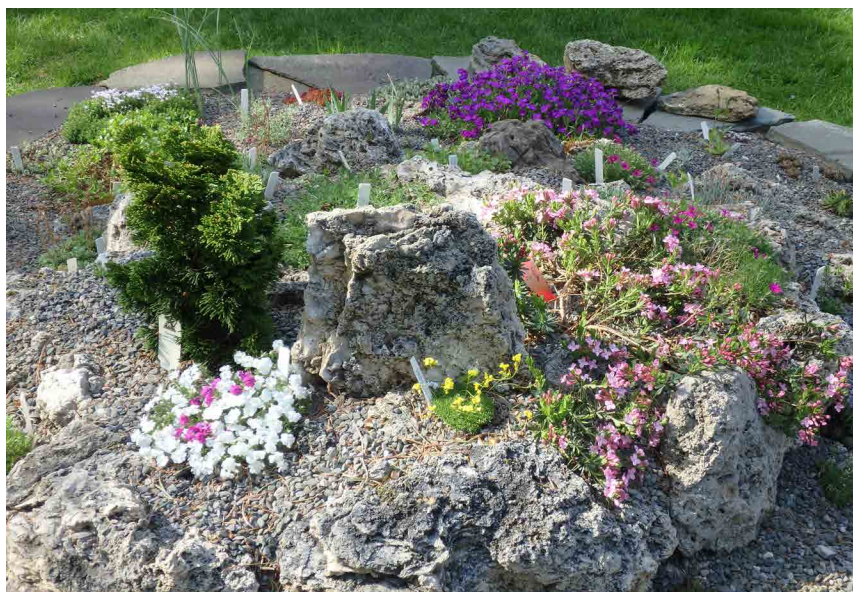
Registration

Ready to sign up? Online registration will open January 1. Check the nargs.org Home Page under Events, listed as Annual Meeting and Tours 2020, for further information and the registration link. The registration fee of \$425 payable by credit card will be due at that time. You must be a NARGS member to attend this Conference; however, you may include the \$40 membership fee with your registration

Lodging

Dormitory lodging is available nearby, literally steps away from the conference. A block of rooms is also being held until May 18 at two nearby hotels the Clarion Inn and Best Western University at a special conference rate. Both offer shuttle service to campus.

Opposite: Buttermilk Falls Gorge. Photo by Carol Eichler



Detail of Marlene Kobre's rock garden in spring bloom. Photo by Carol Eichler.

Pre-Conference Day Trip

Thursday, June 18, 8 am – 3:30 pm Syracuse Area gardens, beginning and ending at Robert Purcell Community Center.

Three too-good-to-miss private gardens were just a little too far away from Ithaca to include within the Conference time frame. So for your benefit, we have added an all-day trip prior to the official start of the Conference. Registration will open simultaneously with Conference registration on January 1, 2020.

- Minimum of 35 to make it a go; maximum of 42
- \$45 includes box lunch

Itinerary

The Dianne Bordoni garden is a self-made collector's garden, which is mature at 35 years. The focus is a choice selection of dwarf conifers interspersed with mature Japanese maples, peonies, and unusual shrubs and perennials. This is an intimate garden; the careful layering of plants and strategic garden vistas create the illusion of a much larger, tranquil park.

The Brennan/Moss garden, which they have named Pagoda Hill, is a true country garden named for the *Cornus alternifolia* that about throughout their eighteen-acre hilltop. To respect the terrain, grass and gravel paths integrate garden beds and borders. Connected to the

house is a chartreuse themed garden featuring trees, shrubs, woodland perennials, bulbs, and a small pond. A sixty-foot (18 m) pergola covered in clematis and roses and underplanted with peonies and alliums leads to a more formal perennial garden featuring hot-colored flowers. The gravel path continues to larch logs laid out in a grid pattern to grow veggies and cut flowers. Mowed paths lead to another pond featuring several willow species and many other specimen trees and shrubs.

Donna Kraft's love of gardening has evolved to reflect a passion for unique dwarf conifers and flowering shrubs. Her stone-terraced gardens include a small stream with waterfalls, a woodland area, rock garden plants in tufa beds and troughs, pendulous conifers, striking perennial plant combinations and a collection of various types of peonies. The Kraft gardens welcome you with a serene feeling enhanced by the backdrop of beautiful Crooked Lake, one of the area's kettle lakes.

Questions?

Check out our FAQ's first (posted on the NARGS website). If you have further questions contact John Gilrein, registration coordinator, at agmithaca2020@twcny.rr.com.



Kraft garden. Photo by Sharon Masters.

In Memoriam: Rex Murfitt

BETTY MACKEY

The rock gardening community and NARGS lost a good friend when Rex Murfitt died in August after a brief illness. Born in Leicester, England, in November 1926, he grew up with an interest in horticulture. During World War II, as a youth, he farmed vegetables as part of the war effort. After the war, he was based in Singapore with the British army, though he never considered himself a veteran since he had seen no action. He then returned to England to become a nurseryman.

He studied and worked at the Birch Farm Nursery in Sussex learning from classic masters of rock gardening, Walter Ingwersen and his son Will. Eventually, Rex traveled widely with Will Ingwersen, building rock gardens for clients. The techniques Murfitt learned and passed on to new generations in his articles and books go back to a time before World War I when his teachers were young learners of horticulture.

Later, he worked in large English gardens including John Spedan Lewis's Hampshire estate. Eventually, he became head gardener to Constance Spry, near Windsor, where she did floral arrangements for the Queen and also had a finishing school for young ladies. He helped develop her white garden, based on the one by her friend Vita Sackville-West at Sissinghurst Castle. Under famous rosarian Graham Stuart Thomas, he cared for Mrs. Spry's roses. His next move was to Canada (Victoria, British Columbia) with his wife, Ruth. He worked as a forester and then as a horticulturist. His first two children, Fred and Peter, were born there.

He later moved to Cold Spring on Hudson, New York, to help Frank Cabot start Stonecrop Nurseries, Inc., basing it on traditional English alpine growing methods. Stonecrop is now a public garden and can be reached at www.stonecrop.com. While he and his family lived there, his third child, Wendy, was born. Later, he and his family moved back to Victoria where he worked as a horticulturist, creating and hanging great flower baskets all over town. He also started a large rhododendron garden at the University of Victoria. Another Victoria project of his was the Crystal Gardens, a tropical plant and bird attraction.

After retirement, Rex was able to focus on his own extensive alpine house and rock garden, and his lectures, photography, and writing. He was a noted author of many articles on silver saxifrages and other topics for the NARGS *Quarterly*. He was the co-author of *Creating and Planting Garden Troughs* with Joyce Fingerut, which was published by B.

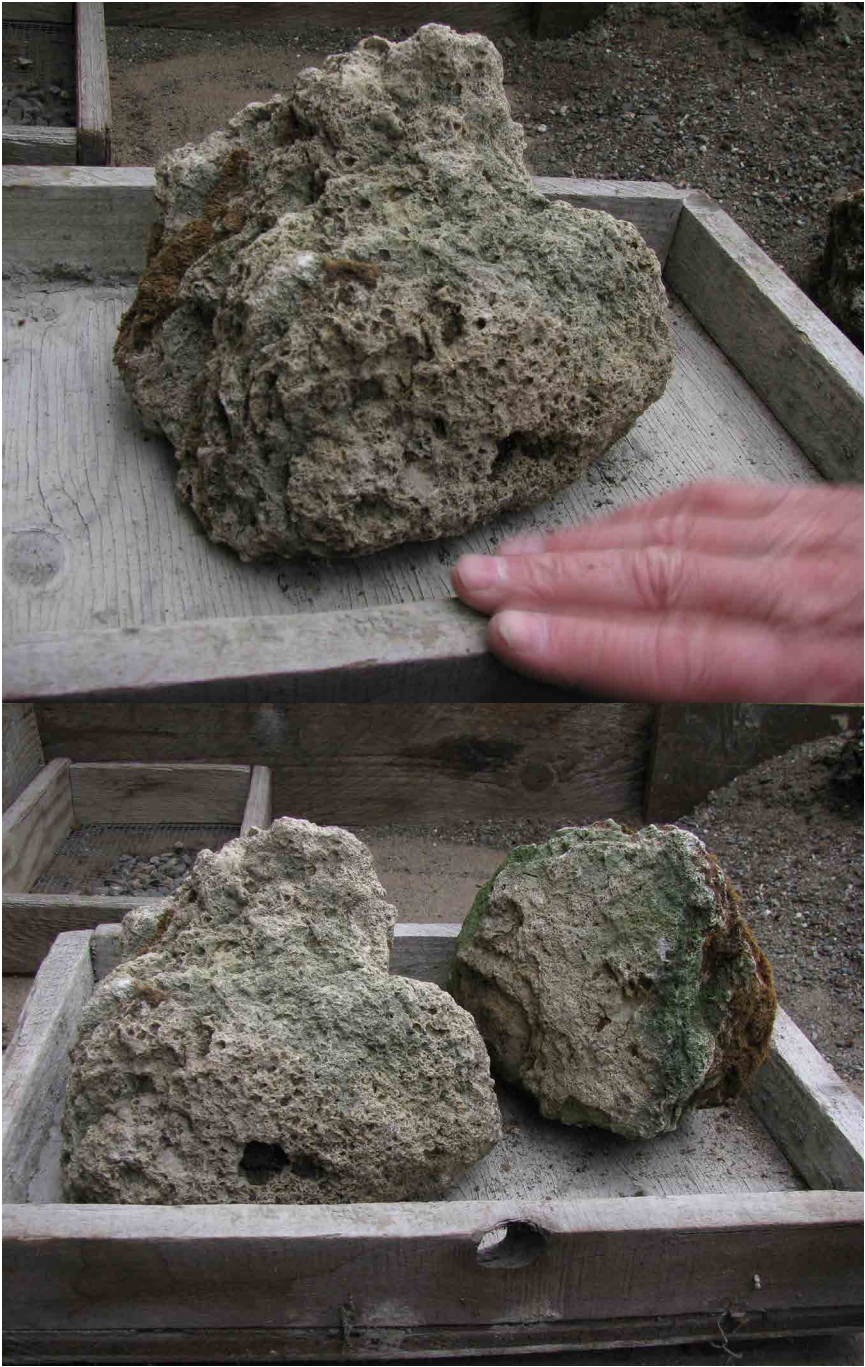


Rex Murfitt in his alpine house, April 2010. Photo by Betty Mackey.

B. Mackey Books in 1999. It was named a Book of the Year 2000 by the American Horticultural Society. In 2002, he received the Carleton Worth Award for Writing from the North American Rock Garden Society. In 2005 his book, *Creating and Planting Alpine Gardens*, was published and in 2006 he won an award for writing it from the Garden Writers Association (now called Garden Communicators International), of which he was a member.

He attended many meetings and events. He always chatted with others with wit and friendliness, whether helping them understand the finer points of rock gardening or just talking about the topics of the day. He will be sorely missed by his family, friends, and everyone who has enjoyed his writing and lectures.

Rex is survived by his daughter Wendy, his son Fred, and his grandson and great-grandchildren, all living in Canada.



Practicing positioning rocks in a small box before placing them in a trough.

Planting Troughs with Rex Murfitt

BETTY MACKEY

BACK IN 2010, I visited Rex Murfitt and he showed me his expert technique for placing rocks and plants in a trough, right in his well-stocked alpine house.

We started with an empty wooden, rectangular box in place of a trough. It measured about 18 by 15 inches (45 cm x 38cm), with low sides. He often used it to demonstrate trough planting to garden clubs. He grabbed a handsome hunk of tufa, three times the height of the box, from a handy shelf and rested it on the bottom. Then he added another, slightly smaller one. He arranged them in a harmonious manner, with shapes that related to one another but were not touching. One would put rocks in a trough the same way, touching the bottom of the trough for stability, but eventually, the lower half of the rocks would be covered with soil mix and plants. The space between the tufa pieces, he explained, would be the planting space.

Then he dipped up his all-purpose trough-planting medium. It was composed of roughly one part loamy soil, one part tiny pebbles, and two parts rough sand. He filled the box most of the way to the top with this mix, brushing it off the rocks and around the base.



Practice box prepared as it would be for planting.



He took everything out of the box and showed how a different arrangement could be made the same way. He decided on tall, narrow pieces of tufa and arranged them in parallel. Then he added soil as if readying it for planting.

Next, he looked around the alpine house and found a small round trough with a chip in it. He showed the steps again, arranging three nice little tufa “mountains” in it after brushing it off and putting a screen over the drainage hole to keep insects from crawling in. He added the soil mix around and between the tufa pieces. It was ready to plant.



Opposite: Preparing another test arrangement of rocks.
Above: Preparing the trough for the final rock arrangement.





Opposite: Tufa going into final position (top), a selection of saxifrages to place in the trough (middle) and a tree in the wrong position (bottom).
Above: A saxifrage placed at the top of the rocks in place of a tree (top) and the tree moved down to the base of the rocks (bottom).

We looked around the alpine house and there were many succulents and small evergreen trees to consider. He took a small tree and placed it between the three rocks at the very top. "This is the absolute wrong way to do it," he said. That is because, in an alpine site, a tree would hunker down below where there is protection from wind and strong sun, rather than endure maximum exposure to the elements. He took the tree out and placed small, flat saxifraga in that spot.



Top: Collecting hens and chicks from the garden to add to the trough.
Bottom: Plant with most of the soil shaken off to allow it to fit into the trough.

Then he uprooted some potted plants, shook most of the soil off the roots, and placed them in the small trough. The tree went in at the bottom of a rock, next to the lip of the trough. He felt the lack of some hens and chicks so he got some from his nearby garden and lined them up in the trough. He added some small rock pieces along with the plants.

We liked the effort, so he watered the trough and placed it in his garden, where it looked as if it had always been. It looked so easy! That is Rex's way and we will miss him so much.



The final trough finished and placed in the garden.



Bulletin Board

fall
2019

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President's Letter

Tonight, on this late July day, it is still unseasonably hot for the second day. Meteorologists are talking “record breaking.” The sun is just setting and I still don’t want to go outside. Sure, the weather is strangely warm this year and for many a year now. No cross-country skiing since the ‘90s. And I remember my dad talking about how in his youth of “real winters” he skated across the frozen lower Hudson River. That was every winter at Stony Point, New York. Big events. Imagine, it was frozen over for weeks and long enough to hold races. His tales of boats on skates--ice yachts--were fantasy for me.

A few weekends ago the Cornwall Historical Society (Connecticut) organized a retrospective about the Cathedral Pines 1989 tornado. Then last weekend, they had a walk through the forest remains. Thirty years ago, a microburst leveled thousands of white pines on the mountain slope outside Cornwall, seven minutes down the hill from Goshen, Connecticut, where I live. It took down the whole hillside of the big pines. They had been leveled once before in the 1700s but since then, they had grown back to a good size. The thought, 30 years ago, was to let Mother Nature take its course, rather than clean up the area and replant pines. But the pines did not regenerate. Before the storm, it had been a rather thick grove of pines, with hemlocks coming up beneath them. There was not a lot of genera diversity. One might very well term it a monoculture. The pines came crashing down like matchsticks, some on top of others. Roots were upended. The hillside became a logjam of felled trees.

Jump to the present: the ecology of disturbance. No pines have regrown. Rather, black birch (*Betula lenta*), ever the opportunist, has moved in and grown thickly. Evidence suggests that it gets on with the same mycorrhiza as the pines. And its contractile roots enable it to grow on unstable sites like standing at the top of the upended

pine root, the very picture of a conquering hero. Now, yes, there is a canopy again. A 30-year-old canopy of the birch with a fern understory and with a dead pine mulch two feet thick. These logs have not decayed much. A little bit of orange fungus has moved in to feast on them and some moss is growing. It is pretty static. It will be interesting to watch how long it will take fungus to devour the fodder and what moves in next, should I live that long.

Up the hill in this same forest, the younger hemlock trees are infected and dying. The borer and wooly adelgid are both there. That has been going on for some time now. Again, the birch is moving in here. Luckily, there are still a few of the big pines left up there so it is still possible to imagine pre-tornado.

Here in Goshen, Connecticut, at the top of the hill we have a slightly longer story. Here the “tornado” was the first European settlers who clear-cut for haying fields, as they did elsewhere during the beginnings of New England. Then mills sprang up along the abundant creeks and ran their courses in 18th and 19th-century history. The mills are long gone, now for more than a hundred years. So, we have a different look at Mother Nature’s handiwork when an area has been cleared. One area comes to mind is where I walk the preserve near Ivy Mountain Brook. The canals and sluiceways are still there, dotted with trees making a great canopy as the forest reclaims the land. Stone foundations are still there, though the flora is taking them apart. So, what’s the difference? It seems like people cleaning up and then tramping through the area with all their pets and livestock made the site perfect for planting when they left. Of course, the wind (Goshen is famous for wind) blew in seeds, and insects and birds helped. Yes, there are 100-plus-year-old hemlocks and pines and black birch, but the makeup of the forest is far more varied. Hardwood as well as conifers shade the understory. Most of the usual wildflower suspects, *Mitchella repens*, *Polygonatum biflorum*, *Arisaema triphyllum*, et al., are present. So, I wonder if Cathedral Pines will just take another 50 years or so to be reclaimed naturally to produce another forest. Or if it will take hundreds of years for natural cleanup. Flux rules. And maybe cleanup helps?

Our society, the North American Rock Garden Society, is full of people who love to grow rare and interesting plants. Currently, we have a world-class journal of 90 pages with stunning color photos, some full page. There are eleven dynamic articles packed with many excellent color photos. Yes, times have changed since the late 1950s (Harold Epstein’s presidency) when there were about 20-30 pages in the Bulletin with a few black and white photos and several pages of ads. The type was very small and the paragraphs closely set. In

1957, there were 726 members but they still managed to pack almost a dozen articles into a 25-page publication. In 1973, there were about 48 pages and about 2600 members. The publication was modest, but very informative with some black-and-white photos and drawings in a dozen articles. During the mid-'90s (Norman Singer's presidency), we had almost 4500 members and afforded full color issues of 80-plus pages four times yearly.

What happened? Perhaps this was the result of a membership campaign Norman started in 1983, in anticipation of the 50th anniversary for the then American Rock Garden Society? We went from 3,000 members in '83 to 4,400 by 1994. Not bad. How might we do it again? It does depend on you, in large part.

What can you do? For one, keep an open mind. And perhaps think about sowing the seeds for the next generation. Please consider giving your local library a subscription to our *Rock Garden Quarterly*. Or give one to a local agricultural school, botanical garden or arboretum, garden club, or university. Or as an upcoming holiday, anniversary, or birthday gift to a gardening family member or friend. Let's not wait for things to happen. Let's plant! See the clip and mail ad on page 345 in this issue.

Elisabeth Zander

President, North American Rock Garden Society

Email: nargspres AT gmail.com

YOU CAN HELP KEEP NARGS SOLVENT!

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Be among the 100 NARGS members willing to give \$300

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The Tours & Adventures Committee has organized three tours for 2020. They include tours to the Adirondacks and to gardens in the Hudson River Valley that will be held immediately before and after the Annual General Meeting in Ithaca, New York.

The 3-day tour of the Adirondacks on June 15-17 is currently full, but requests to be added to the wait list are still being accepted. The 3-day tour of gardens in the Hudson River Valley on June 21-23 still has space available. Additional information and registration instructions are available in the "Latest News" section of the NARGS website.

The third tour in 2020 is a tour to the northern and southern Patagonia regions of Argentina. The tour going to Northern Patagonia is currently full as is a second tour in 2021 that was added in response to the large number of NARGS members who were interested in touring this area. However, there is still space available on the tours to southern Patagonia. Additional information on the Patagonia tours is in the "Latest News" section of the NARGS website. You don't need to login to access the pages.

The committee is working on tours in 2021 and beyond. Details will be announced via the NARGS website once details have been finalized.

David White, chair

Email: dmwhite_nc@yahoo.com

NARGS Donations

Donations to NARGS between May 1 and July 31, 2019.
To support the Seed Exchange, *Rock Garden Quarterly*, the general fund, Circle of 100 Challenge, and in memory of Orpha Salsman

Allegheny Chapter (Pennsylvania)
Delaware Valley Chapter (Pennsylvania)
Mason Dixon Chapter (Maryland)
Piedmont Chapter (North Carolina)
Adams, Daniel Holden (New York)
Egerton, Graham (New York)
Fowler, Mary (Colorado)
Hoeffel, Joan Z. (New York)
King, Judith D. (Connecticut)
Krementz, "Peggy" (New Jersey)
Lewis, Mary (New Hampshire)
Maksymowicz, Lillian and Alex (Oregon)
Ramsey, Michael K. (Kansas)
Rayner, Gizelle C. (Washington)
Russ, Sarah (California)
Twining, Eloise (California)
Vanspronsen, Arie (Ontario)
West, Joan (New Mexico)

Patrons

The following recently became NARGS Patrons:

Anderson, Scott (Missouri)
Caroff, Julie (Michigan)
Du Pont, Elise (Delaware)

We have learned of the death of the following NARGS members:

Sidney Marlow, Aston Tirrold, Oxforshire, U.K.
David Nelson, Richland, Washington
Rex Murfitt, Victoria, British Columbia, Canada

A photograph of two women in blue jackets looking at plants in a greenhouse. The woman on the left has long blonde hair and is looking down at a plant. The woman on the right has short dark hair and glasses, and is also looking down at a plant. They are standing in a greenhouse with a glass and metal frame. There are various plants and flowers around them, including purple flowers in the foreground. The text is overlaid on the top half of the image.

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Call for Nominations for 2020

Election of Three Directors of the Board

The NARGS Nominating Committee announces its call for the 2020 election of three Directors of the Board. It is up to all members to consider whom they might nominate. Self-nomination is also acceptable.

Please refer to the By-Laws at <nargs.org/laws> to read a description of the duties of directors.

Directors serve for three years. Every year three new directors are elected as three directors have completed their term. Directors may be elected for two consecutive terms.

The mission of the Nominating Committee is to select candidates who want to serve, have the qualifications to serve and who fulfill as much as possible the need for geographic diversity between the continuing board members and the new members. Geographic diversity can not always be achieved.

We will accept names submitted by any current member of NARGS for these 3 positions. Nominations should include:

1. Name, chapter if applicable, email address
2. Brief biography of nominee (100 words or less, written by the nominee)
3. Picture (Shoulder-length, face shot)
4. Note of acceptance from nominee indicating a willingness to be a NARGS Director serving a three-year term.
5. Your own reason for nominating the person.

The bio and the picture will be used for publication in the *Rock Garden Quarterly* if such nominee is on the final slate or subsequently stands from the floor. All the above is for the use by the Nominating Committee.

The deadline for nominations is November 1, 2019

Nominations should be emailed to:

Bobby Ward, NARGS Executive Secretary at nargs@nc.rr.com

or

Marianne Kuchel, chair of the Nominating Committee at
mariannekuchel@yahoo.com

Election of Three Directors of the Board Timetable

Stage 1: Timetable and call for nominations are published in Fall 2019 *Quarterly*. Nominations for nominating Committee by deadline November 1, 2019.

Stage 2: Nominating committee agree on slate to be published on website December 31, 2019.

Stage 3: From the floor nominations January 31, 2020

Stage 4: Combined list of candidates to be published in Spring 2020 *Quarterly* (deadline February 1) for dispatch April 1 and on the website.

Stage 5: Election online April 20 - May 2, 2020

Stage 6: Announcement of election results by the following Board Meeting.

NARGS Needs Your Email Address

Many of you have never supplied NARGS with an email address. Having your email address helps NARGS communicate with you for membership renewals, upcoming meetings, and special announcements. And it reduces costs to NARGS by saving postage and printing costs. Remember: NARGS DOES NOT share your email address. It is used only for NARGS-related communications. Please take the time and email your address to: nargs@nc.rr.com.

If you don't have an email address or choose not to share it, let us know that, too: NARGS, POB 18604, Raleigh, NC 27619-8604 USA.

SEED EXCHANGE

The Seed Exchange is an essential part of the original NARGS purpose to encourage and promote the cultivation, conservation, and knowledge of rock garden plants. It is also a major benefit of our Society and a draw for many of our members, who consider growing from seeds to be the best way to learn about, and share, these special plants.

We thank our Donors, the backbone of any exchange, for their willingness to collect and clean seeds and to share their gardens' wealth.

There is still time to send seeds, as donations from members living in the U.S. should be mailed in time to reach Laura Serowicz by the deadline of November 1. Donations from members living in Canada and overseas should be mailed as soon as possible, certainly by October 15. If you think that your seeds might arrive just slightly past the deadline, do email your list of seeds to Laura in advance.

If you have plants whose seeds ripen late in the season, send the complete list now (including the names of the late-ripening seeds), along with the seeds that have already ripened. Then send the late-ripening seeds so that they arrive by December 1. Instructions for collecting and donating also appear on our website at <https://nargs.org/seed-donation-instructions>, along with some helpful links: <https://nargs.org/seed-exchange-helpful-links>.

All seeds should be sent to:

Laura Serowicz
15411 Woodring Street
Livonia, Michigan 48154-3029
U.S.A.
seedintake@mi.rr.com or seedintake@gmail.com

The donation instructions and forms, as well as permits and mailing labels for non-U.S. members, were included with the Spring issue of the *Rock Garden Quarterly*. If you need replacements or additional donation forms, import permit or mailing labels, contact Laura now.

This December, several chapters and individuals will carve out time from their busy holiday schedules to divide and repackage these seeds, so that they can be further shared among as many members as possible. We greatly appreciate their continuing help.

Our two distribution chapters did a splendid job this past winter and will do so again next winter, with the Watnong Chapter handling the Main Distribution, and the Wisconsin-Illinois Chapter handling the often extra-large orders for surplus seeds. Once again, we will provide the required phytosanitary certificates for Main Distribution seeds being sent to our members in Japan, but we cannot accept their additional orders in the Surplus Round.

The Seed Exchange will open for online orders on December 15. However, the seedlist will appear online for browsing a couple of days before that, so that you will have time to use the links to Google for information that will help you to edit your choices down to 25.

If you would like to receive more seeds, be sure to send in a donation: 5 or more donated packets of different seeds will net you an additional 10 in return. If you would like to receive more first choices, be sure to send in a donation: Donors receive priority in order fulfillment.

If you plan to order directly from our website, be sure that our Executive Secretary, Bobby Ward, has your current personal email address. That information is essential for the electronic ordering system to recognize you as a valid member. Contact him at nargs@nc.rr.com. For more information, see the FAQ (Frequently Asked Questions) page for instructions: <https://www.nargs.org/faq-page> .

If you prefer to place your seed order by mail, you must send a request for the print copy of the Seed List and order form by December 1 to:

Joyce Fingerut
537 Taugwonk Road
Stonington, Connecticut 06378-1805
U.S.A.
alpinegarden@comcast.net

Hoping that you and your gardens enjoy a long mellow fall –
Joyce

Joyce Fingerut, Director
NARGS Seed Exchange

New and Rejoining Members

*Welcome to all those who joined or rejoined between
May 16 and July 31, 2019.*

Andres, David, 736 W Front St, Farmersville, CA 93223-1106
Carolan, Mary, EMG Univ of Illinois Ext Lake County, 90 W Sandpiper Ln, Lake Forest, IL 60045-2911
Cooke, Emily, 360 River Rd, Lyme, NH 03768-3009
Dewyer, Rochelle, POB 225030, San Francisco, CA 94122-5030
Frazier, Michael, 10606 Wagon Trail Rd, Houston, TX 77064-7112
Gahwiler, Donna, 7903 W 88th St, Indianapolis, IN 46278-1113
Herath, Heather, 144 Catkin Dr, South Burlington, VT 05403-3002
Heycke, Christine, 556 Beckett Point Rd, Port Townsend, WA 98368-9619
Kalb, Jennifer, 110 Saint Marks Ave, Brooklyn, NY 11217-2412
Keane, Gerry, Killavoy, O'Callaghans Mills, Co Clare V94 VE2X, Ireland
Kowalczyk, Rebecca, 5009 Hanna Ln, Fuquay Varina, NC 27526-9094
Krongard, Kristin, 18 Holland Ter, Montclair, NJ 07042-3004
Lawrence, Elsa, 25 Aberdeen St, Newton, MA 02461-1801
Martenson, Janice, Native Plant Soc NM-Taos Chap, 73 Vista Linda Rd, Ranchos de Taos, NM 87557-8755
McNamara, Laura, 8118 SW 56th Ave, Gainesville, FL 32608-4403
Muto, Jennifer, POB 582, Silverthorne, CO 80498-0582
Ness, Laurie, 2253 Davison Ave, Richland, WA 99354-1993
Peabody, Elena, 41 Kosciuszko St, Apt 418, Brooklyn, NY 11205-4989
Phillips, Sandi, 22 Bramble Dr, Edinburgh, Scotland, EH4 8PB, United Kingdom
Post, Shirley, 9527 Crystal Lake Dr, Woodinville, WA 98077-9501
Priddle-Mitchell, Jonathan, 513 Main St, Ste 101, Klamath Falls, OR 97601-6057
Rogers-McKee, Abigail, 71 Baldwin Hill Rd # S, Great Barrington, MA 01230-9007
Scott, John, 55 Hertzog School Rd, Mertztown, PA 19539-9220
Sleen, Kathy, 2156 S Carr St, Wasilla, AK 99654-0533
Summer, Ann, NC Bot Gdn, 3215 Warwick Dr., Raleigh, NC 27606-1928
Thomas, Joe, 5 Caspian Way, Rehoboth Beach, DE 19971-4639
Vojt, Tim, 155 Crestview Rd, Columbus, OH 43202-2205
Warsh, Sophia, Univ. of Calif.-Berkeley Bot Gdn, 200 Centennial Dr SPC 5045, Berkeley, CA 94720-5045
Webb, Jr, Samuel C., 283 Streets Run Rd, Pittsburgh, PA 15236-2004
West, Colleen, 51505 W County Rd 15, Wellington, CO 80549-1984
Wolfe, Pamela, 1107 Barcelona Ln, Santa Fe, NM 87505-2664

NARGS Traveling Speakers Program

NARGS has always sponsored a few speakers each year to travel to chapters throughout the U.S. and Canada, including many presenters from abroad. Recently, through the generosity of an anonymous donor, NARGS has been given an endowment of \$7,000 per year for 5 years to cover travel costs for speakers. This is excellent news and will enable NARGS chapters to benefit from hearing more speakers than ever before. Information about speakers will be posted on the Traveling Speakers Program on the NARGS webpage (<https://nargs.org/speakers-tours>) as well as in this Bulletin Board, as plans are finalized. Also, check with your local chapter leaders for details.

A tour of some western and mid-west chapters took place in July 2019 with Liberto Dario, speaking on the flora of Greece. And in September, in Canada, with Geir Moen.

Fall 2019 Northeastern Tour: David Charlton (topics to be announced)

- October 5, 2019, Berkshire Chapter, West Stockbridge, MA
- October 6, 2019, Adirondack Chapter, Ithaca, NY
- October 10, 2019, Fells Chapter, NH
- October 12, 2019, Curious Gardeners, Boston, MA
- October 13, 2019, Tri-State Meeting, Bronx, NY

Spring 2020 Southeast and Mid-Atlantic Tour: Todd Boland (topics to be announced)

- Saturday, March 21, 2020, Piedmont Chapter (Raleigh)
- Sunday, March 22, 2020, Potomac Chapter (DC area)
- Monday, March 23, 2020, Four Seasons Garden Club
- Saturday, March 28, 2020, Delaware Valley Chapter (Philadelphia area)
- Sunday, March 29, 2020, Allegheny chapter (Pittsburgh area)

Northwest Chapters Tour: Cliff Booker

May 2020 Schedule to be announced

Rosemary Monahan, Chair

Email: rosemonahan@comcast.net

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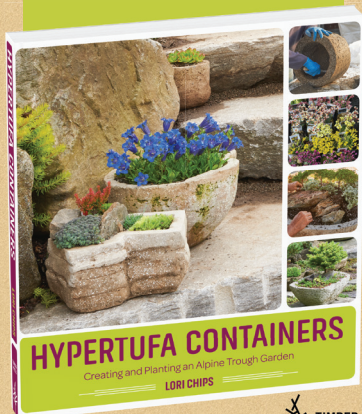
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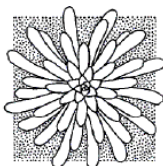
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The affairs of NARGS are administered by an Administrative Committee (called AdCom) consisting of the president, vice-president, recording secretary, treasurer, and one director-at-large, selected annually by the NARGS officers from among the nine elected directors.

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2018-2021	Mariel Tribby, Saint Louis, MO Michael Guidi, Denver, CO Judy Zatsick, Fairfax Station, VA
2019-2022	Cyndy Cromwell, Cary, NC Brendan Kenney, New York, NY Jerry Rifkin, Merion, PA

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Back cover: Oak grove in the F. R. Newman Arboretum, Jay Potter.



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