



Rock Garden

Quarterly

Summer 2013

NARGS

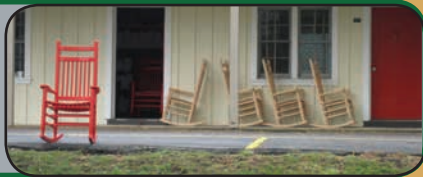
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**A VIEW OF THE
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AT 100**

*plus a
report on*

2013 NARGS Annual Meeting

and



*More details of
NARGS Awards*

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

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Front cover: *Eriogonum ovalifolium* var. *depressum* - Ginny Maffitt

digital Quarterly

DIGITAL EDITION OF THE *ROCK GARDEN QUARTERLY*
BULLETIN OF THE NORTH AMERICAN ROCK GARDEN SOCIETY

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60 pages of EXTRAS ONLINE at <www.nargs.org>



A view of the Chelsea Flower Show



Images of the Blue Ridge



Annual Meeting and more detail on NARGS Awards

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From the Editor

THE ISSUE OF the *Quarterly* that coincides with the Annual Meeting is always one that strains the format to the limit. There are so many pictures of people, plants, and places that could be included from field trips, plant sales, presentations, and general socialising. Some of these will be found in the online edition of the *Quarterly*, along with a view of the Chelsea Flower Show. At the same time there are awards to be reported (with more detail and pictures online), the annual report from our Treasurer, and a letter from our President, Peter George, which mentions among many things the fact that NARGS can benefit from every purchase (not just books) you make with Amazon.com. You pay the same, NARGS gets 6 cents on the dollar!

ONE OF THE other things that is regularly and sadly included in the *Quarterly* is the report of members' deaths. In this issue, the deaths reported include that of Larry Thomas, a significant figure in NARGS history in that he set up the Manhattan Chapter. Lola Horwitz, on behalf of the Chapter, writes: "The Manhattan Chapter mourns the loss of their founder, Lawrence B. Thomas, who died on May 7, 2013 from respiratory illness. His generous and infectious spirit touched many members of NARGS throughout North America." Every such death is a sadness. Some are known to many, some to a few, all are missed.

SO THAT JUST about uses up the space I have in the printed version of this issue. Just room left to celebrate Mike Bone's success in winning the Geoffrey Charlesworth Writing Prize for the best article in the *Quarterly* in the previous year. A panel of members from the US, Canada, plus one from overseas, selected Mike's articles on propagation under the title "Rock Gardening from Scratch." Mike was at the Annual Meeting, and I was able to present him with the Prize which came as a complete surprise to him. This is a prestigious recognition which adds Mike's name to a growing roll of notable writers.



Mike Bone, speaking to the Annual Meeting after receiving the Geoffrey Charlesworth Prize and certificate, from NARGS Editor Malcolm McGregor.



A summer of chasing wildflowers with friends

GINNY MAFFITT

Part 2
Eriogonums at Steens Mountain



Bill Hoyer at 9300 feet, about to embark on a nearly vertical descent to the wetland below

IT WAS PROBABLY obvious in the first part of this series that I am always looking forward to another plant society trip – 2012 was no exception. Having been to the NARGS Annual Meeting in Everett in March, I had a great summer planned. First was the Penstemon Society meeting in Laramie that was the central concern of the article in the last issue - next up was Steens Mountain in south-eastern Oregon.

ERIOGONUM SOCIETY MEETING, JULY 18-21, STEENS MOUNTAIN, OREGON

The Eriogonum Society embraces a genus popularly known as buckwheats even though they are not connected to wheat or other grasses. They are mostly evergreen subshrubs, although a few species are annual or deciduous. Eriogonums grow almost completely in the western United States and there are at least 330 species, so they are more numerous than the penstemon clan. Like the Penstemon Society, the Eriogonum Society has no local chapters, so is almost a “virtual” society, depending totally on the Internet for member communication. With 60+ members and growing, it is quite vibrant with a great seed exchange and website at www.eriogonum.org. The 2013 meeting will headquarter in the northwest corner of New Mexico, in Farmington, with day trips in several directions. Since the leader, Bob Pennington, has connections to the Navaho Nation, we’ll be allowed to botanize on some of their lands.

Malheur Field Station, Oregon, with jack rabbits.



About 30 folks attended the 2012 meeting in the southern reaches of Oregon. Although Steens Mountain is located in Malheur County, the closest market town is Burns, in Harney County. The latter is the largest county in the state at 10,000 square miles and likely the one with the lowest population, with 7700 people! Elevation averages 4000 feet on the high desert and the climate is either bone-chillingly cold and dry, or searingly hot and dry plus windy; precipitation is less than 10 inches a year.

This year's plan was to spend one day on Steens Mountain (9700 feet) and another one driving around the Alvord Desert, just to the east, at about 5000 feet. The group stayed at Malheur Field Station, built in 1958 to house Job Corps trainees. It is a non-profit research and education center with a dining room and meeting halls, offices, small museum and science lab. Totally surrounded by flat sagebrush country, song birds, cottontail and jack rabbits abound. Nearby is the Malheur National Wildlife Refuge, situated on huge ancient lakes and on a national migratory flyway. During fall and spring, the Canada geese can lift from the water in flights as thick as swarms of bees. It has its own museum, housing specimens of nearly all the birds seen here, local and migratory.

The members were housed in cabins or mobile homes. I opted to stay in a modernized barracks with women's and men's sides, kitchen, dining tables, and a living area in the center. Although the bedrooms

were fitted with actual hospital beds (firm but comfy), the blazing crimson sunsets, brilliantly star-lit night sky and coyote songs through the open window were wonderful. Friendly cooks provided good meals, plus ingredients for sack lunches each day. Dr. James Reveal, Professor Emeritus, University of Maryland, and an Adjunct Professor at Cornell University (better known as Dr. Eriogonum), came for the third annual meeting in a row, driving cross-country, collecting eriogonum specimens along the way for us to key out. He lectured twice and conducted a lab teaching us how to key the complicated buckwheats, using his most-recently revised key for the 330+ species spread across western America.

The meeting was conceived as a four-day experience. After check-in and lunch on Thursday, Dr. Reveal (hereafter known as Jim) had an introductory chat with us about recent findings regarding evolution,





Buckwheat workshop and seed-cleaning with John Weiser (right)

characteristics, and current status of classifications within the genus. After the evening social hour, we were handed a just-published paper by Elizabeth Kempton on her doctoral thesis on new findings in the genus using genetic research. Jim attempted to remove some of its mysteries by interpreting the handout, explaining the possible restructuring of tribes, subtribes and genera that it portends.

Friday morning had groups divided between attending a propagation workshop led by Bill Adams, of Sunscapes Nursery in Pueblo, Colorado, or Jim's introduction to identification of *Eriogonum* species using the fresh materials he had collected. Bill gave complete directions for cold stratification of most species, and many cultural tips. Although Jim had already talked us through identifying characteristics of the buckweats, the key still proved daunting to some of us.

We also had an edifying workshop on cleaning the seed of its tightly clinging chaff—no easy matter—by John Weiser of Sparks, Nevada. He demonstrated the use of shallow pans, screens, and sieves, but the main secret was to use garden gloves with rubbery palms to rub the seed heads over the screens, then to swirl them in circles to fall into the sieves (like panning for gold). Everyone wants to receive seeds in the seed exchange of course, but it has always been a time-consuming process to clean *Eriogonum* seed without John's time-saving suggestions.

There were local tours planned for the afternoon. "Local" in this open country means driving an hour north to the Burns area, which is on the northwestern edge of the Great Basin. One tour was on private land northwest of town. This area proved to have suffered from the drought being endured by the rest of the Basin and the Midwestern

states. All flowering was over on the dry hills.

The second tour, to the Sagehen site, led by Rick Hall, proved much more interesting. This was adjacent to Highway 20 about 15 miles west of Burns. As we exited from the cars, five species of eriogonums could be seen in bloom within 50 feet!

The first, found literally under my feet, was an annual species, *Eriogonum vimineum*, the broom buckwheat. It has tiny pink flowers on a wiry, narrow-leaved plant, 8–12 inches tall, so airy I almost walked upon it. Nearby we saw the round-headed buckwheat, *E. sphaerocephalum*. This has one-inch-long narrow leaves and has yellow, composite flower heads with a touch of red. I was able to purchase one from Gail Klodzinski, who owns the Rock Garden Nursery. She drove over from John Day with trays of local high-desert species. The strict buckwheat, *E. strictum* var. *anserinum*, was blooming with umbellate-cymose (three tiny branches of umbels) yellow flower heads. This species is common in the east Columbia River



Eriogonum strictum var. *anserinum*
Eriogonum umbellatum var. *ellipticum*





Steens Mountain

Gorge in northern Oregon, but there it is variety *proliferum*, with snow-white flowers in masses, 2-3 feet tall, that are held "strictly" erect. My plants were still blooming in early October. Another species there was *E. umbellatum* var. *ellipticus*, with silvery leaves and soft yellow umbellate heads.

William Cusick was an Oregon plant explorer, arriving with a wagon train in 1853 as an 11-year-old. He has many species named for him in the Northwest and we saw his buckwheat at Sagehen. *Eriogonum cusickii* has tiny, composite yellow flowers and tiny silvery-haired leaves that are evergreen. Several plants were notable for having 2 feet of exposed roots with blooming plants at the tips. With the drought and heat in mid-July, most local forbs were senescent, dried up for the year. The local shrubs are *Juniperus occidentalis*, western juniper; *Purshia tridentata*, bitterbrush; *Artemisia arbuscula*, low



sagebrush; *Artemisia tridentata*, big sagebrush; and *Ericameria nauseosa*, gray rabbitbrush, sporting a few yellow flowers.

The Steens Mountain area was the group's destination on Saturday. It is a mammoth, block uplift which rises out of the high desert, reaching 9700 feet. The east side drops almost vertically 4500 feet down to the white sands of the Alvord Desert. Even from an airliner, it is stunningly visible. We were fortunate to be led by Don Mansfield, Steens expert and author of *Flora of Steens Mountain*, from College of Idaho, in Boise. From Malheur Station we traveled south about 30 miles, skirting the edges of the still-smoldering French Glen fire for about two miles. Obviously it had only been stopped on the east side of the road by the sometimes charred cattail marshes of the wildlife refuge. Smoking trees were still being attended by forest fire fighters at several spots. The tiny

Eriogonum cusickii showing old exposed roots





Kiger Gorge with *Penstemon davidsonii* var. *praeteritis*

town of French Glen has a school population of eleven students and the popular, 100-year-old French Glen Hotel.

Turning east onto a graveled, but well-graded road, we began the 20-mile uphill climb up the west side of Steens Mountain, which is usually blessed with good snowfall above 5000 feet. At that elevation, clusters of aspen trees appear, often very gnarled from winter storms. Among the aspens at our first stop, Bill Hoyer, our youngest attendee and a botanist for a California naval base, stepped into an acre-sized pond. He retrieved floating carnivorous *Utricularia vulgaris*, showing us



Eriogonum ovalifolium var. *depressum*

the bladders, 2 mm long (about 1/16 inch), which can quickly open and trap tiny animals for later digestion.

Continuing up to the 8000 foot level, we stopped at the top of the Kiger Gorge. Over the eons, streams have carved five steep, picturesque canyons in a semicircle on the mountain from due north, to the west and due south. The northernmost, Kiger Gorge, is famous as the isolated grounds of the Kiger band of horses, reputed to be pure offspring of Spanish mustangs brought by the conquistadores and the only living survivors: you can google the Bureau of Land Management website for pictures and history.

We spent a lot of time exploring from a nice parking area and found many alpine species such as *Duggaldia hoopsii*, the tiniest variety of *Penstemon procerus*

Trifolium longipes var. *nevadense*



var. *formosus* at 3 inches tall, *Castilleja pilosa*, *Trifolium longipes*, endemic *Potentilla glandulosa* var. *shastensis*, and several buckwheat species. Here, and continuing to the summit, *Eriogonum ovalifolium* var. *depressum* forms stunning mats, one inch high, of ½-inch silver leaves, with tightly capitate balls of flowers that change from white to rose pink after pollination. We also found yellow-flowering *E. umbellatum* var. *dichromatum*, just one of the forty-one known varieties of this species.

Having lunched with a spectacular view, we continued to the highest parking area at about 9300 feet. With time running out, most folks didn't hike the final distance to the summit. My friends and I hiked nearly there, catching views of Wildhorse Lake and nearby canyons to the southwest. Mats of the incredibly-purple endemic *Penstemon davidsonii* var. *praeteritis* were blooming on steep rocky faces. It is found only here and in one mountainous area in Nevada, directly south. The wax currant, *Ribes cereum*, also forms mats, compact and just a foot tall, on these rocks. Back at the parking area, the indomitable Bill Hoyer, curious about the small wetland down the nearly vertical east face, blithely stepped down into a fissure and, followed by several others, sauntered down to explore. The grandmothers among us worried until all returned safely. The rest of the group enjoyed seeing *Eriogonum caespitosum*, here with one-inch-tall mats sometimes several feet across, with small, yellow flowerheads. It is fairly widespread; I've seen it as far east as north-central Idaho. Reluctantly, we piled into the vehicles and returned to the hot sagebrush lands of Malheur County.

Sunday would have been the day to go to the Alvord Desert, but with the flowers all senescent, we opted for a day in the Strawberry Mountains about 70 miles north of Burns, near the tiny town of Seneca, and south of John Day. With no preliminary scouting done, we wandered some back roads, then a little picnic spot was found. Finally near Seneca, a patch of blooming buckwheats were found.

Then we climbed into the wilderness area to lovely Indian Springs. The artesian springs create a stream absolutely choked with various water-loving plants in bountiful bloom. To name just a few, there were cerise *Mimulus lewisii*; purple, three-foot-tall *Delphinium trollifolium*; the white stream orchid, *Platanthera dilatata*, last seen by me in the Vedauwoo Rocks of Wyoming; plus erigerons, polemoniums, senecios, and even the water-loving brook saxifrage, *Saxifraga odontoloma*. With reluctance, I left the group and began my solitary, seven hour trip home to Sherwood in faraway northwestern Oregon.

2013 Eriogonum Society Annual Meeting – Four Corners (New Mexico, Colorado, Arizona, Utah) based out of Farmington, NM, September 19-22, optional extra day Sept 23, 2013. There's still time - join the society and come on the New Mexico fieldtrip.

Eriogonum caespitosum with a view to French Glen and the west



Primula 'Broadwell Milkmaid', a hybrid of *Primula allionii*,
flourishing in the tufa wall, April 2012





Russell's Bluff
or
A Tufa Cliff on the
Cheap

LOREN RUSSELL

ACCORDING TO THE dictionary, “bluff” may refer to a “small cliff,” or to a “deception or empty boast.” The honey-colored tufa wall that you see when you turn into my drive is a bluff in both senses. It’s certainly small and steep, but there is perhaps less tufa than meets the eye.

The story behind this feature starts with a call from Emma Elliott in the spring of 2011. Would I like to take a share in a shipment of tufa from British Columbia, Emma asked. Tufa is hard to come by in the Pacific Northwest, so of course I would! Still, I didn’t really have a good place for a tufa outcrop or crevice garden (nor much hope that such a feature would allow me, finally, to grow real alpines). So I ordered a single pallet of “trough-sized” material with the expectation that I could use it piecemeal to rehabilitate and replant my existing collection of hypertufa troughs.

A cubic meter of rock doesn’t seem like much until you handle it. It took two pickup trips to ferry my allotment home. When off-loaded in my parking area, I found that I had over sixty pieces. And, suggestively, my collection covered an area roughly similar to that of the ugly concrete retaining wall behind it. Serendipitously, I had already scheduled a road trip to the Canadian Rockies to visit the Burgess Shale sites in Yoho National Park. My route took me very close to the Rocky Mountain Tufa quarry, so I did stop to purchase a few larger chunks of tufa after I started this project. Perhaps....

I thought of European tufa walls I’d seen in print and in lectures, and, especially, I recalled Harry Jans’ famous boundary wall, clad on north and south sides with tufa blocks, and covered on both sides with mouth-watering alpines. My site, offering a northern exposure, might do for alpines, too, especially those adapted to cool, shady sites.

Reviewing Jans’ website <www.jansalpines.com>, however, I could see that I could not really replicate his method with the materials and site at hand. In particular, Jans’ tufa is blocky, and appears to be dressed sufficiently to be load-bearing when stacked, although he did use mortar to secure it to the existing masonry wall. My tufa (and most that I’ve seen in North America) was slabby and irregular – certainly not thick enough to be dressed as ashlar blocks. I could have stacked my tufa, but it would not be stable without a large batter, impossible in the space at hand. Further, in that configuration, I would need three times as much tufa to cover the wall. I could, however, “bluff” it – by laying my tufa vertically, as a veneer. But could I make this stable, and would it prove a good growing surface?

First, I had to think about a support structure for my wall. In North America, we have nothing like the curbstones – 3-meter-long granite monoliths – that Jans uses extensively in his garden (but then, he is a road engineer). End pieces of granite or marble might work, but even

such scraps are expensive, and not easily set as supports. I decided instead to build piers from standard 16 x 8 x 8 inches (40 x 20 x 20 cm) cinder blocks stacked and mortared on the existing asphalt surface and connected with a single base run of full and half blocks.

There are four piers, rising from 65 inches (160 cm) on the left to 83 inches (210 cm) on the right, following the line of the retaining wall. Used bricks were stacked between the piers and retaining wall, bringing the face of the end piers 20 inches (50 cm) from the retaining wall and the center piers 24 inches (60 cm) from the wall. The back cells of the pier blocks were reinforced with steel bar and concrete, while the front cells were filled with concrete sand with an eye to eventual planting. Drainage holes were drilled along the base of the structure and all exposed cinder block was dressed with a sand / cement mix.



Cinderblock frame dimensions: about 5m wide to 2 m high.

Cinderblocks are levelled on sand set on existing asphalt parking surface.

Central two piers are set further from existing wall, so wall is convex.

Tufa was laid vertically in each of the three bays defined by the four piers, with the bottom course resting on the base course of cinder block. Tufa pieces were selected and soaked in water, then trimmed where necessary with a handsaw, and set in a bed of modified general purpose (Type N) mortar. My formula:

Portland cement – 1 part

Hydrated lime – 1 part

Clean concrete sand – 3 parts

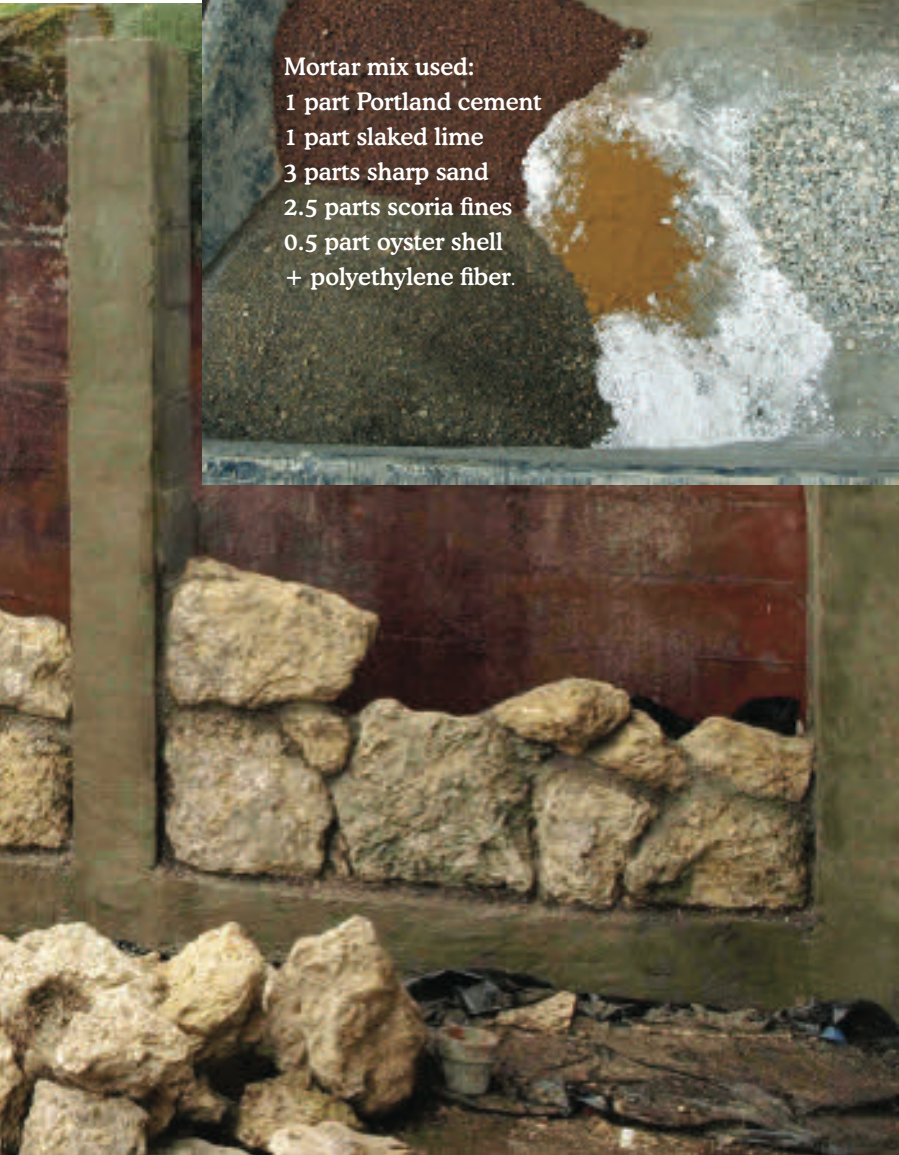
Scoria sand – 2.5 parts

Horticultural oyster shell* – 0.5 parts

* The ground oyster shell is sold as uniform, thin, 5-6 mm-wide flakes.



To this I added powdered masonry pigment and polyethylene reinforcement fiber, mixed the dry ingredients, and added about 2 parts water. Each batch gave a working time of about 10 minutes. I found that adding the horticultural oyster shell and the fibermesh stiffened the mortar and allowed me to fill larger gaps in the rock work.

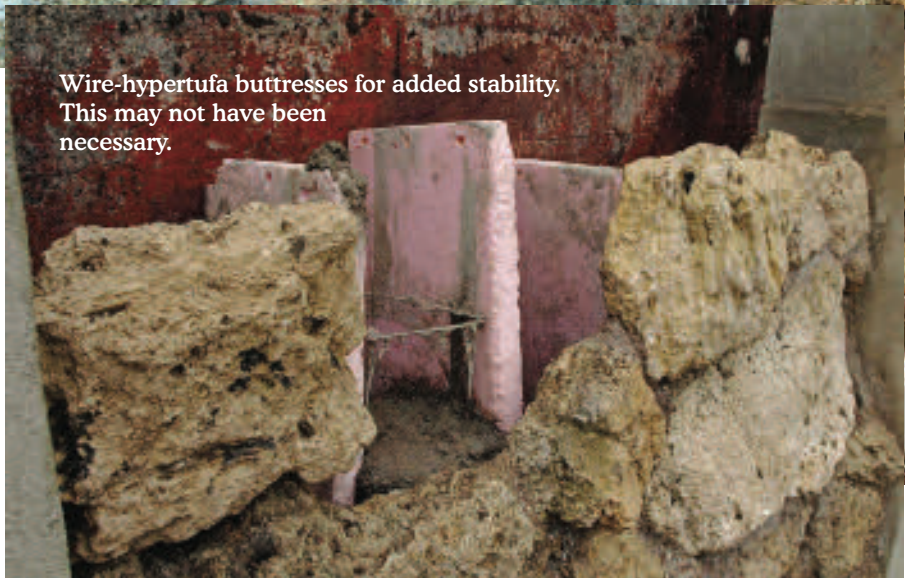
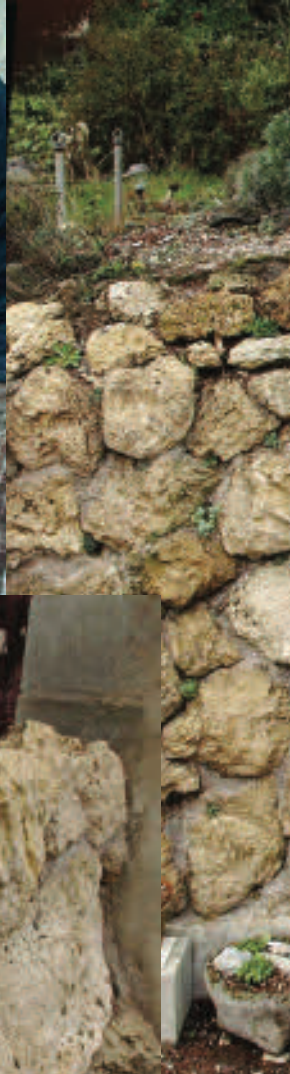


The lower courses of tufa were set vertically, after which I adopted a batter of about 10 percent backward slope. Gaps in the tufa shell were filled with small fragments of tufa and mortar, and small, otherwise unusable, pieces of tufa laminated inside thin spots.

Each course of tufa was allowed to set overnight. After about three courses of tufa were in place, I added two reinforcing buttresses of wire-reinforced hypertufa behind each of the tufa panels. The space behind




Setting small blocks of tufa in mortar with only minimal shaping of tufa. Voids are filled with mortar and fragments of tufa. Mortar is allowed to set for 24 hours before next course is set. Note: wire reinforcement will support hypertufa buttress.



Wire-hypertufa buttresses for added stability. This may not have been necessary.

the tufa shell was filled with a sand-scoria mix, with coarse rubble added near the base. At the top of the wall, a line of drip emitters were placed below the surface of the fill, and the wall was finished with two to three courses of dry-laid tufa at the top.

The wall was completed and thoroughly hydrated in mid-September 2011. I put in nearly 150 small seedlings and divisions that autumn, placing western American plants in the left panel (which receives slightly more summer sun), and alpines intolerant of direct sun in the right panel. I used a ½-inch (12 mm) bit and a 5/8-inch hand auger for the planting holes. These were concentrated along the mortar lines with



Completed wall, with first planting. You may be able to see fitting for drip system at the top. Wall is planted with mostly American plants on left panel which gets slightly more sun in summer, center and right panels are dominated by saxifrages, small primulas, and androsace. Open courses near the top have campanulas and the like.

Many elite cushion plants are now VERY hard to get in North America. I hope to get some cushion plants and some tiny daphnes as well.

I direct-seeded *Kelseya uniflora* near *Petrophytum*, since plants were not available.

I will likely direct-seed some gesneriads as well.



Saxifraga x irvingii 'Jenkinsiae' in its second spring from a single rosette cutting at planting, completely at home in the tufa wall.

the holes drilled at an angle downward to ensure rooting into the tufa. The plantlets were bare-rooted, and the holes packed with a mix of tufa "mud" (which I dredged from the container used to hydrate the tufa during construction), and scoria sand.

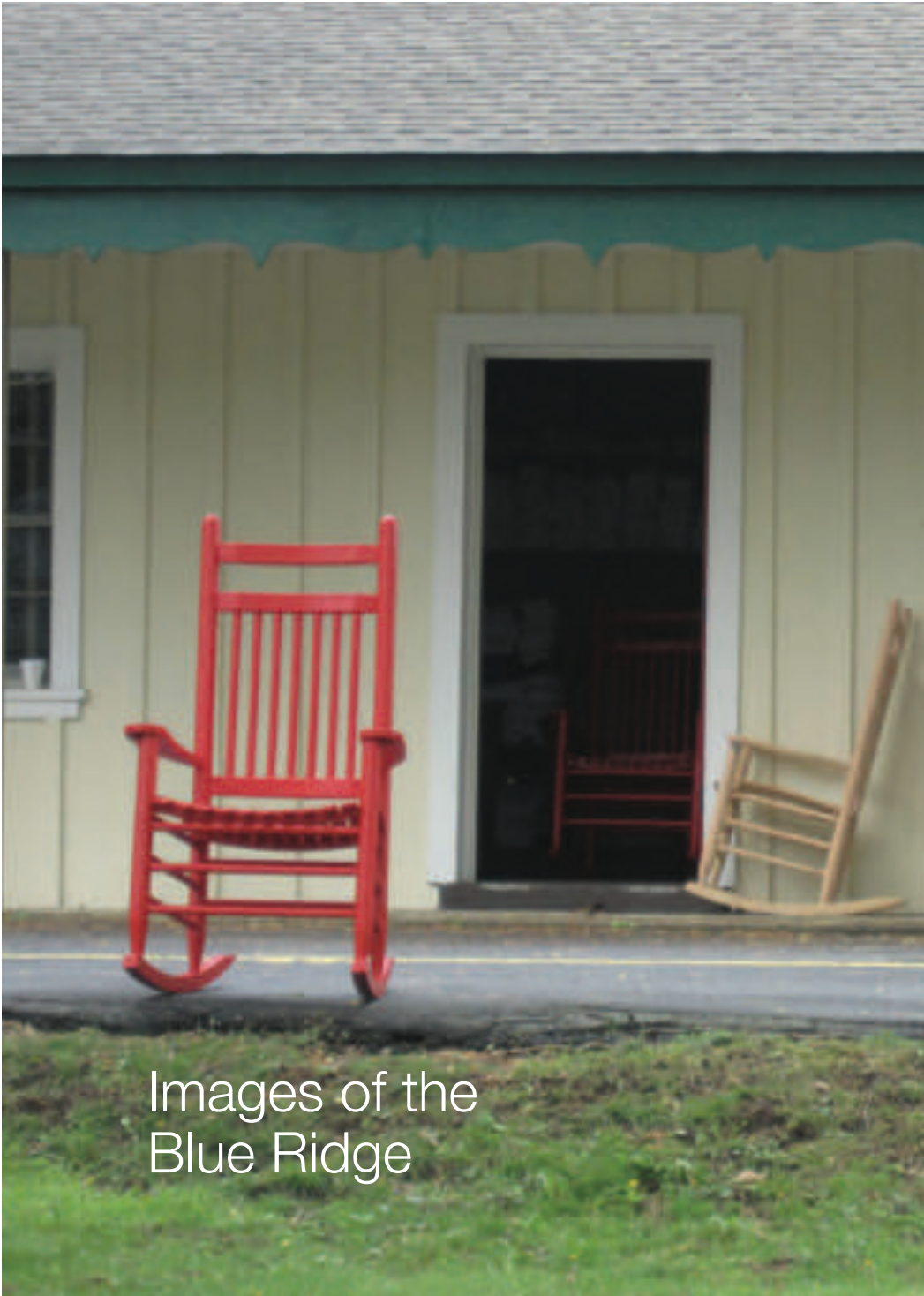
EVALUATION

After 15 months, I'm very pleased with the Bluff. The wall and its plants have withstood frost and drought, rain, sun and wind. Structurally, the wall is sound with no shifting or cracking, despite its verticality and its lack of a foundation or ties to the retaining wall. The drip irrigation and sand-scoria aquifer have functioned as planned.

Russell's Bluff is also functioning well as an alpinetum. Approximately 70 percent of the initial plants are still alive; not bad, since many of this first wave weren't fully rooted when inserted. The real successes over the first year have been encrusted and silver saxifrages, alpine primulas, especially *Primula allionii* hybrids, and a variety of small rosette and cushion plants – *Draba*, *Dianthus* and *Edraianthus*, *Silene acaulis*, *Gentiana verna*, *Haberlea*, *Ramonda*. There were losses: some are marginal in our climate: *Paraquilegia* and *Dionysia involucrata*, for instance. I was disappointed that *Saxifraga oppositifolia* and most of my *Androsace* dwindled or died, and some of my western American daisies and columbines clearly pined for sunnier sites. *Petrophytum caespitosum* is very happy, but it really needs a *Kelseya uniflora* playmate. Some of my wall plants can also be grown on the flat or in troughs, but on the wall, all are alpines plants.

I can imagine further improvements for Russell's Bluff. Where I lost otherwise suitable plants, it was due to winter wet and to uneven water supply in hot weather. I could address the first problem with a cantilevered greenhouse roof, removed during the growing season. Watering is an art, but adding a timer to the drip system would improve its performance. An additional step would be to add mist heads to the drip system that could be actuated in hot conditions. With the north aspect of my wall having full afternoon shade, its exposure to a prevailing northeast wind in hot weather, and our low relative humidity through the summer, there is a great potential "swamp cooler" effect of evaporation from the tufa face. I observed this with some astonishment when I finished the wall. During a late heat wave with afternoon temperatures near 35C (95F) I found that air temperatures near the middle and base of my wall (then fully hydrated) were 5–10C cooler than above the wall, in other words around 20–25C (68–77F). I'm surprised that this passive evaporative cooling is not discussed in standard treatments of tufa gardening – perhaps because it would be irrelevant in sunny exposures, or in regions with higher summer humidity.

Would my project translate to other gardens? I think so – particularly if one is working with a limited quantity of smallish tufa (or is simply a cheapskate). Using a porous sand "aquifer" should increase the rate at which water is replaced in hot, dry weather, and help cool both the root zone and the surrounding air through evaporation. The fully mortared face is most appropriate in a fully vertical setting, though it could be adapted in steps to any change of slope. It would be appropriate in sites lacking an existing slab, and probably essential in a frostier place than Corvallis (up-zoned to USDA 8b), to excavate a standard footing with drainage. Beyond that, my advice would be to experiment!



Images of the
Blue Ridge



NARGS Annual Meeting fieldtrips, May 2013
Photographs by Malcolm and Monica McGregor



The top of the Blue Ridge at Boulder Field Overlook is a bald. Stunted shrubs and trees survive in the thin patches and pockets of soil that accumulate and these also provide a home for plants such as *Iris verna* (above).









Lichens were many and various, both in woodlands and on the balds..





In general, flame azaleas (*Rhododendron calendulaceum*) were not in flower, so this one was suspected to be either of hybrid origin or to have been imported.

Heuchera americana with attractively variegated leaves, along with various other plants including freshly emergent poison ivy.






Uvularia grandiflora in flower on the Blue Ridge just south of Asheville, and an early morning view as the mists lift.









The Blue Ridge is famous for its waterfalls. Some of them, such as Schoolhouse Falls (below), have undercut the rocks sufficiently to make it possible to get behind the waterfall. The photograph is taken from behind Schoolhouse Falls looking out to the NARCS field-trip group.





Squirrel corn (*Dicentra canadensis*) is just one of a host of early spring woodland plants that are found along the Blue Ridge as the trees come into leaf at lower altitudes.





Corydalis sempervirens - rock harlequin





Although some field trips were wet - such as this to Panthertown - it didn't inhibit photography or plant-hunting.



A carpet of *Trillium grandiflorum* in flower
with *Podophyllum peltatum* to follow





The post-meeting extension trip provided participants with some glorious views as well as opportunities to see an extended range of flowers, including *Rhododendron catawbiense* in various shades of pink.





Higher altitudes, with the majority of the broadleaved trees still to come into leaf, provided an opportunity to find good numbers of *Trillium undulatum*, here flowering among carpets of *Galax urceolata*.









A final image of the Blue Ridge from
the Post-Conference extension trip

Photo Contest 2013

If you enjoy photographing plants, share your enthusiasm with others—and perhaps win a prize.

The NARGS Annual Photo Contest gives you an opportunity to see your photographs in the *Quarterly* – as well as getting a free year's membership for someone of your choice.

CLASSES

Class 1: ROCK GARDEN SCENE

Image of a rock garden (general view or isolated vignette). It is the photograph that is being judged rather than the garden itself and it does NOT have to be your own garden. Please identify the owners of the gardens. Hint: Frame your image carefully to exclude unattractive and unintended objects ... or move them.

Class 2: PORTRAIT OF A PLANT IN CULTIVATION

Image focused on a single plant, group of flowers, or small group of the same plant in the garden, or in a container (pot, trough or other container).

Class 3: PORTRAIT OF A PLANT IN THE WILD

Image focused on a **single plant** in its native habitat. Ideally, the entire plant should be visible, not just a flower, which is more appropriate to class 5.

Class 4: NATURAL SCENE WITH PLANTS

Image including both wild plants and their surrounding habitat and scenery. This need not be high mountain scenery. Please identify the site. Hint: This is not the same as class 3, and should not foreground a single plant specimen; the emphasis should be on the general scene. Depth of field is a strong consideration.

Class 5: CLOSE-UP

Close-up image (macro or otherwise) of **single flowers** or other plant parts.

Class 6: NORTH AMERICAN NATIVE PLANT

Image may be of any North American native plant. This may be in the wild or in cultivation.

In addition to the fame, and the gratitude of the editor, you can win a year's NARGS membership as a gift to a new member of your choice. Entries should be submitted as digital images on CD. Photographs will be archived for future publication. All published photos are credited, and copyright remains with the photographer. Entering the contest grants NARGS permission for one-time use of all images submitted.

INSTRUCTIONS for ENTRIES

Digital images may be submitted in JPG or TIF format. Other formats may cause problems. Please examine the file extension on your image files to make sure it says "jpg" or "tif." If you are not sure how to save images in these formats, refer to the instructions that came with your camera. Submit all your images on one CD, with each image file renamed with the subject and your initials (e.g., *Phlox hoodii JM.jpg*). If you are entering several classes, it is very helpful to make a separate folder for each class.

Include a text document listing your entries by class, with plant names fully spelled out and any other information you feel should appear in a caption when the photo is published. Please submit this list on paper and also put it on the CD as a ".doc" file.

Slides and prints should be accompanied by a list like that described above. If you need them back quite soon, please let us know in your cover letter. Be sure that each slide or print is clearly labeled with your name and the subject.

You may enter a maximum of ten images in each class.

**The deadline for entries is
November 1st, 2013**

PUT THE DATE ON YOUR CALENDAR NOW

ENTRIES SHOULD BE SENT TO :

**Bobby Ward, NARGS Executive Secretary,
PO Box 18604, Raleigh, NC 27619-8604.**

Judging criteria are technical quality, aesthetic appeal, adherence to parameters of the class entered, and suitability for publication. Different judges are recruited each year by the editor and remain anonymous.



Heuchera 'Canyon Pink', Santa Barbara Botanic Garden, California

Dwarf Heucheras for the Rock Gardener

MARTHA OLIVER

IN RECENT YEARS heucheras have started to penetrate the consciousness of the “ordinary” gardener with the spectacular range of new hybrid cultivars available very widely. But they have not taken an equivalent place in the rock gardener’s consciousness. Graham Nicholls, in his



massive *Alpine Plants of North America*, mentions only one of the small heucheras: *Heuchera abramsii*, and Lincoln Foster gives them equally short shrift in his book, *Rock Gardening*, mentioning only *H. racemosa*, and that is now no longer in the genus, having been moved to *Elmera*. What can possibly be the reason for these exclusions from these authoritative texts?

Foster explains that “it must be admitted that few have flowers of sufficient size or brilliance to compensate for the rather large serrate foliage and the tendency to lanky flower stalks.” This critique is characteristic of a prejudice shared by many rock gardeners with regard to flower size and plant proportions. However, it is unfair to use it to exclude the smaller heucheras because many of these do have flowers and proportions which make them great candidates for the rock garden. I can only assume that Foster, rather surprisingly, was unfamiliar with some of these choice species.

Most of the dwarf *Heuchera* species originate in the American southwest. They are not difficult to grow, at least compared with other southwestern plants. Good drainage is essential, and shelter from hot sun preferable. A trough or raised bed is best, since these are plants that are found in crevices in the wild. They tend to grow

along a crevice, unlike the eastern species, which grow down shale slopes and elongate in order to keep their crowns at soil level. Division is helpful to keep the centers from getting woody, and they are easy from seed.

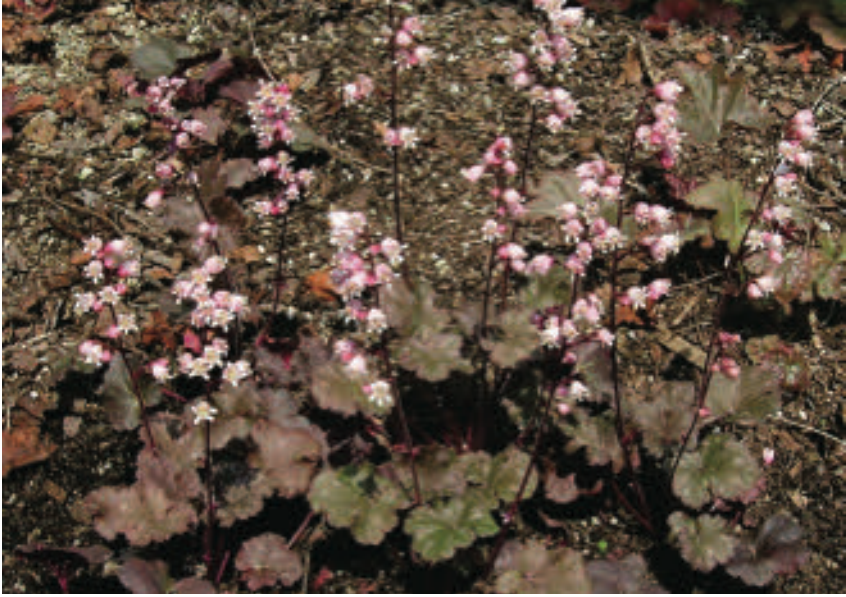
The flowers are small but enchanting, and the foliage is attractive year round, forming mats of overlapping leaves in rosettes. Among the western types are both true alpine, inhabiting rocky places above the tree line, and others found on cliffs and rocks lower down. Among the small forms which we have grown here in western Pennsylvania are *Heuchera hallii*, from the Pikes Peak region of Colorado, and *H. pulchella* from cliffs in the mountains of central New Mexico. Both of these were used as parents in the San Pico hybrids, which provided genes to the



Heuchera pulchella

Heuchera 'Petite
Pearl Fairy'





Heuchera 'Petite Marbled Burgundy'

Heuchera 'Coral Bouquet'

five small cultivars in the Petite series, of which 'Petite Pearl Fairy' is the best known. The bronze foliage was also present in 'Petite Marbled Burgundy' and 'Petite Ruby Frills'. Green and silver foliage in 'Petite Lime Sherbet' and 'Petite Pink Bouquet' contrasted with pink flowers.

Heuchera merriamii from California and Oregon, has slightly hairy leaves and small, greenish-white flowers. *Heuchera grossulariifolia* from northwestern North America has clustered white flowers on long flower stems, arching out from cliffs. *H. cylindrica* var. *alpina* is similar and is one of the parents of 'Coral Bouquet'.





Heuchera 'Petite Lime Sherbert'

Heuchera alpestris from southern California and *H. rubescens*, which has many varieties in a wide range across the West, are among the smallest of the genus. *Heuchera* 'Troy Boy', a collection of *H. rubescens* from the mountains of Nevada, is very small and attractive.

In the mountains of southern California there is a group of very pretty species, all making mats of slightly hairy foliage. All have been hardy for us here in western Pennsylvania, and they flower well among rocks in a raised bed. They have narrow, tubular flowers in open, airy panicles, and the petals project from the calyx and are recurved, producing a frilly look. *Heuchera parishii* is the least showy; 'Chiquita' is a dwarf form; *H. abramsii* has pink and white flowers; *H. elegans*, a favorite of ours, has bicolored pink and white calyces and white petals.

Heuchera hirsutissima and the selection made by Ted Kipping, 'Santa Rosa,' have sweet scented flowers. This is the only species which can offer this.

Other small montane species are more interesting than beautiful, appealing to plant collectors. *Heuchera glabra* inhabits rock crevices in the mountains from Oregon to Alaska, and *H. parvifolia* has a wide range in the Rockies, but these did not last long for us in cultivation. *Heuchera bracteata* is another Rocky Mountain species with smooth oval leaves and small green flowers.

All of these small species have leaves in delightful proportion to the height of the plant, and the flowers are charming. Perhaps they do lack "brilliance" but there is a place for the shy and modest in any design.

But brilliance is not a quality that is lacking in *Heuchera sanguinea* with its brilliant red flowers which provide hybridizers with a vital ingredient to produce more vivid flowers. *Heuchera* 'Canyon Delight' is one such hybrid and 'Canyon Pink' another, both crosses of *H. sanguinea* with *H. elegans*.

Heuchera 'Canyon Delight', Santa Barbara Botanic Garden, California



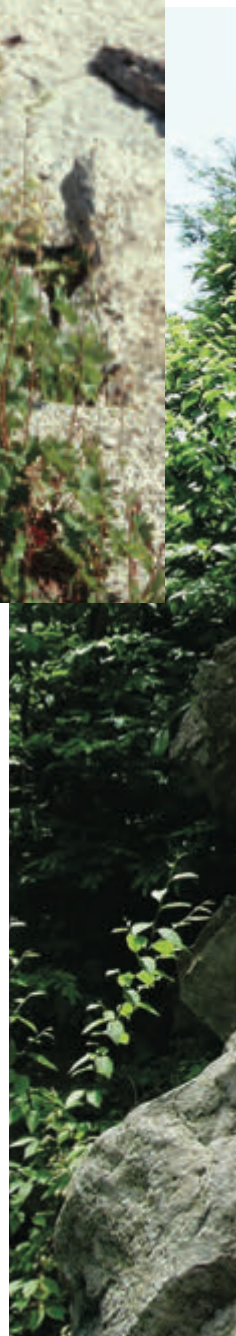


Heuchera alba (above and left),
Spruce Knob, West Virginia

Two eastern US natives which could be considered rock garden plants are *Heuchera pubescens* and *H. alba*. The former is from rocky sites in the Appalachians, from Pennsylvania to

North Carolina. and is common there, but not well known to horticulture. It is an eager grower, thriving in cracks on rocks, in deep shade in forests, and along shaly banks. The flowers are luminous green tubby bells, and can be conspicuous. At Greenland Gap, near Moorefield, West Virginia, the plant is thriving and handsome on the tumbled sandstone rocks along the road. Some plants have silver patterning on the leaves, and there are populations which have foliage which is totally white above. This characteristic is passed on to the progeny.

Heuchera alba is somewhat similar and has often been lumped together with *H. pubescens* by taxonomists who have







Heuchera 'Dark Chocolate'

not seen them growing in the wild, but anyone who has could not make this mistake. *Heuchera alba* is found only in deep, peaty pockets in fell fields of Oriskany sandstone above 4,000 feet in Virginia and West Virginia. It is very showy, with some of the larger flowers of the genus, in a wide panicle. Both of these species are very cold hardy.

The main problem with larger heucheras in the rock garden has always been the elongated stems, which made the plant more attractive without the flowers. Cutting off the flowers is not a solution, even with the undoubted attractiveness of the foliage. Breeding efforts in this area have focused exclusively on foliage colors, with the result that flowers




have been forgotten. Adding the genes of *Heuchera alba* to the mix made it possible to shorten the stems and enlarge the flowers, resulting in a more graceful plant. Recent introductions which demonstrate this characteristic are *Heuchera* 'Dark Chocolate' and *H.* 'Stainless Steel', with

dark purple leaves and bright silver leaves respectively. For the larger rock garden these offer hardiness, year-round foliage color, and flowers worth having.

Heucheras have received plenty of attention in recent years from plant breeders, and they have broken out of the realm of rock gardeners into greater public consciousness. Most of those have featured exotically colored foliage but, as can be seen here, there are some great dwarf heucheras coming alongside some of the more vigorous ones.

Heuchera 'Stainless Steel'





Spectacular screes and slopes
in southeastern Tibet
seen from the top of the Dongda La

Dongda La

A Treasure House of Alpines - 1

DIETER ZSCHUMMEL



NORTHWEST YUNNAN and parts of mountainous Sichuan have been visited by alpine plant enthusiasts rather often in the last twenty years. This is not yet true for the “Tibet Autonomous Region” or Xixang, Tibet to most of us. Southeastern Tibet is especially rich in alpine plants and it is here that, in the last few years, teams of westerners have gone in search of attractive and rarely seen plants.

In 2004, 2005, 2007 and 2009 we had the chance to travel in Tibet. We always started from Shangrila (Zhongdian) by 4-wheel drive. Three times we took the route along the Yangtze river (Jinsha Jiang in Chinese), crossed the Beima Shan and then drove along the valley of the Mekong River (Lancang Jiang in Chinese). In 2009, we chose the more easterly variant by leaving in the direction of Dechen and the Beima Shan but



following the Yangtze valley. In any case, we reached the longest national road (G318), which is the most used connection between the Sichuan capital of Chengdu and Lhasa in Tibet. On the occasions that we took the eastern way, as in 2009, we joined the the main road at Batang, Sichuan, but if we went along the Mekong valley we joined it at Markam in Tibet. From Markam (Gartok) it was about one hour's drive to Rong-me, where the road crossed the Mekong. Less spectacular than the scenery was a checkpoint where we lost a whole day in 2009 waiting five hours for a permit to drive farther and finally had to return to Markam because one stamp in our papers was missing.

There are several points of interest on the way to and on G 318, but sometimes it can be rather boring, when the narrow road carries on for a long time with very steep slopes on both sides. It may not be so boring for people who don't like to look down a precipice for hours when they have to sit in the back on the left-hand side of a car.


About 100 km west of Markam, not far from Dongda La pass and before we entered a broad valley leading to it, were two places of interest. At the first, *Saxifraga lhasana* (*Rock Garden Quarterly*, Fall 2011) was seen growing on rocks. Farther on, a rather wet meadow was dotted with pink *Primula fasciculata* and the yellow flowers of *Pedicularis longifolia* var. *tubiformis*. The pink *Pedicularis rhinanthoides* preferred places that were not so moist. But the most impressive plant – hardly

Pedicularis rhinanthoides





Salvia wardii



a dwarf alpine – was *Salvia wardii*, a perennial up to 80 cm tall with flowers of a good blue up to 5cm long, growing in places between rocks. It would be a wonderful plant for the edge of a rock garden or herbaceous border, and perhaps it could also be a good cut flower.

The road then gently went up to Dongda La pass. The elevation on the map (Reise Know How - TIBET) was 5220m, but our measurements by GPS were a little less. It was still a rather long way before we reached the highest point of the road and unfortunately we never had time enough to explore this area. Or, to be more honest, we always wanted to be as early as possible at the highest points, because in our experience, one can usually expect to find some very special plants there. Also, we never explored the base of the valley below the road, where water was running. We only recognized *Rheum alexandrae* alongside the stream. Its yellow candles were easily visible from a distance.

We stopped once when large cushions of *Thylacospermum caespitosum* appeared in the scree on the right, just at the roadside. But, in 2007 we had to stop early because we found the whole area covered with a blanket of snow. That blanket was thinner at a lower elevation where we found *Meconopsis integrifolia*, snowcapped *Arenaria polytrichoides*,

Arenaria polytrichoides



and a few plants of *Corydalis melanochlora* showing good blue flowers, sheltered from the snow under the stones of the rough scree.

As in all high mountains, we noticed that the weather had a great influence on the stage of development of the vegetation. We had been at Dongda La twice on June 11th (2004 and 2005) and twice on June 23rd (2007 and 2009) and found different plants in flower each time. Because many plants were difficult to see among the rocks and on the screes unless they were flowering, it was possible to keep making new discoveries. But let us now look at the plants which we found on the top of the pass and on both sides of it.

At the highest point of the road a few steps down to the left-hand was an area that was obviously usually moist although when we were there it had been hot and dry some time before. The ground here was decorated with yellow *Caltha scaposa* with its large flowers just above the leaves. Other members of the buttercup family here were *Oxygraphis glacialis* and a nice *Ranunculus*. Interspersed with those were lots of *Pegaeophyton scapiflorum*. Sometimes the tufts of this crucifer were so covered in flowers that the plants looked like white globes.

The genus *Primula* is well-represented in the mountains of Tibet but it is often difficult, if not impossible, to identify plants purely from photographs and, moreover, some long-used names have to be revised.

Pegaeophyton scapiflorum



By far the most common species we found on Dongda La was *Primula chionantha* subsp. *sinoplantaginea*, sometimes growing in groups of many plants in the scree. In the wettest places, sometimes growing in running water, was a nivalid *Primula* of the chionantha group, close to *P. limbata*. A third species, growing not far from this but between rocks in less moist areas, was not identified with certainty for a longer time – but now turns out to have been *Primula advena*. It is a species with light yellow hanging flowers and a rosette of rather broad leaves, about 20 cm tall.

Primula chionantha subsp. *sinoplantaginea*





Androsace yargonensis

Staying with the Primulaceae, we found only one androsace, which we think was *Androsace yargongensis*. Only in 2009 was it in full flower, when an early spring and warm weather had caused an unusually early flowering of many plants. There are different opinions about the identity of this *Androsace*. Some people have thought that it was *A. zambalensis* but we don't think that we have ever seen *A. zambalensis* during our travels in different parts of China and Tibet.

From the pass it was rather easy to walk on both sides of the road because the slope was not very steep. The right-hand side (north) was explored more extensively by us and when we chose the left-hand (south) side we didn't find any other plants.

The summit of the crest was only about 150 m higher than the road. The terrain was a mix of fine and coarse scree (sometimes with rocky outcrops) and was a habitat for plants with different requirements. The rocky material was not calcareous but seemed to be a kind of schist, the colour of the rocks varying from blue-grey to brown.

As we climbed we could feel the high elevation – we were above 5000 m. But because we were interested in the plants, we could always stop after a few steps and recover. On the other hand, you get out of breath if you have to get up and down taking photographs.

Only a few meters from the road we enjoyed the hairy cushions of *Chionocharis hookeri*. The cushions were covered with their forget-me-not flowers, on Dongda La mostly of a sky-blue. Elsewhere, we have seen it also with darker blooms, for example in the Beima Shan of Yunnan. *Chionocharis hookeri* is not a rare plant. We have almost always found it on windswept places at high elevation (in Tibet around 5000 m) growing in non-calcareous scree. It is a pity that it has not been brought into cultivation.

Fifteen years ago, when we made our first trip to China with an Alpine Garden Society group, we took cuttings of a plant on Beima Shan to show members who couldn't climb up to see it. And, though the cuttings were five days old and made the journey home, several

Chionocharis hookeri





Eritrichium sp.

of the cuttings rooted. But the young plants never made new growth, very few were alive after the first winter, and these then died. The same thing happened with seedlings from a seed collection in the autumn of 2003. Collecting the seed was troublesome work. The seeds weren't visible on the cushion. The best way to find a few was to press the cushion. Then, there sometimes appeared a grain on the surface and one had to catch it quickly because it was easily blown away by the wind.



As with Asteraceae seed, the grain (nutlet) carries a wreath of a few bristle-like hairs for better dispersal. It is somewhat incomprehensible that the key for the Boraginaceae in the *Flora of China* doesn't mention this – and also the drawing for the species shows the *Chionocharis* seed without these hairs.

The *Flora of China* (FOC) comes to mind again when we remember a nice species of *Eritrichium*. It was not possible for us to get an idea about its name using the key. There are a few cushion-forming species in the FOC, even with drawings, but none are single-flowered. In all likelihood the *Eritrichium* on Dongda La is an undescribed species and perhaps one more amenable to our gardens than its noble but reserved relative.

In finer scree and in rocks there were many more plants of interest. The Caryophyllaceae were represented by *Arenaria* and *Silene*. Besides *Arenaria polytrichoides*, we found a very dwarf species with tetramerous greenish flowers, with sepals longer than the tepals. This plant, though it did not build hard cushions, reminded us of *Minuartia cherlerioides* in the European Alps. It was filling the gaps between the rocks.

Arenaria sp.





Silene nigrescens

There were two *Silene* species both growing in crevices. Their flowers, held on stems not more than 5 cm tall, were different. The more attractive of the two seemed to be a form (or near relative) of *Silene nigrescens*. Its special effect was its swollen calyx, making the flowers look like lanterns. The other species was less interesting with little tubular, green striped, typically silene-like flowers.

The genus *Saussurea* is one which has great attractions for western visitors to the high mountains of China – partly, of course, because so many of the species seem almost impossible to grow. One species, which was easy to identify was *Saussurea aster*. It was up to 8 cm tall and the upper half of it decorated with the blue-violet flowers. The whole plant was covered in long hairs.

There were also three species of *Saussurea* that we couldn't identify, but one other that we could and was very much the image that many people think of when *Saussurea* is mentioned. *Saussurea tridactyla* grew on the rough scree. Like its other attractive relatives, this was in danger of being dug up by local people who use it for medicine, sometimes in the form of "ice tea" or "snow tea." Once, we had such a collector for an undesired companion and we had to hurry and take our photographs before a plant was eradicated. And it became somewhat difficult when the Tibetan wanted to sell the plant to us.



Saussurea aster

Saussurea sp. – one of three species that we failed to identify





Saussurea tridactyla (above and right) is just one of the many species of plant that Tibetans use for medicinal purposes; but at least it is possible to see the length of the root (above) which enables it to grow in coarse unstable scree (top right).

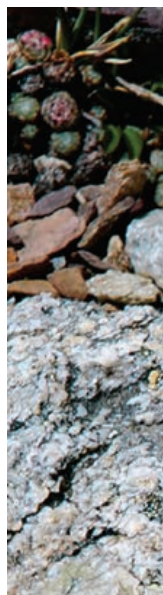
Rosi Zschummel (right) with two Tibetans, the young man at the front holding a bunch of *Saussurea tridactyla*.



On the crest and slopes of Dongda La, it was never necessary to walk far or to look for long: there were new and good alpine everywhere even if it was not immediately obvious from a distance. In 2005 we found the most attractive *Meconopsis integrifolia* we had ever seen. It was only 10 cm tall with a single flower opened wide like a satellite dish. Another species, common at these high elevations, was *Meconopsis horridula*.

Rosaceae contributed to this very high altitude flora with a dwarf form of the circumpolar *Dasiphora (Potentilla) fruticosa*. Here, this variable species was prostrate and had big flowers. It is strange that such a good form (possibly var. *pumila*) is not found in every good rock garden. Still more desirable, especially for growers who prefer cushion plants, but more difficult to cultivate, was *Potentilla biflora* (or possibly *P. articulata*). It was growing here on the crest, less often in the scree. On soil derived from weathered rocks, it made big firm cushions of about 50 cm in diameter.

Dasiphora (Potentilla) fruticosa





Meconopsis integrifolia

In Part Two, in the next issue, Dieter will return to look at some of the other wonderful plants of the Dongda La, including Saxifraga, Solmslaubachia, and Corydalis.



Malcolm
McGregor

A view of Chelsea



RHS Chelsea Flower Show at 100



The Chelsea Flower Show, simply “Chelsea” to its friends, is one of the premier events in the calendar for many gardeners both in the UK but also from much further afield.

2013 is Chelsea’s centenary, and it provided an even greater spur, if such were needed, for everyone associated with it.



Chelsea is a show that confers medals (Gold, Silver-Gilt, and Silver) on show gardens and on display stands in the Great Pavilion. Run by the Royal Horticultural Society (RHS), it has, over the years, gradually expanded its running time until now it runs for five days in late May, with a preview day when the Press do their work, judging takes place, and the Queen visits. And it is the fact that the Queen visits that also makes it part of the social calendar along with Wimbledon, the rowing at Henley (think Thomas Eakins's paintings of rowers updated with lots of champagne), the Summer Exhibition at the Royal Academy, with the ultimate stop (for the privileged few) being the Queen's Garden Party at Buckingham Palace.

On Preview day at Chelsea, celebrities are much in evidence, as are champagne and Pimms. Garden designers, sports stars, actors, and TV presenters, rub shoulders with RHS members. On later days the general public joins the mix, and there is a great breaking-down sale of many of the plants on the final afternoon. Exhausted exhibitors mingle with hyped-up purchasers making for the exit with their newly-acquired treasures. In total over 150,000 visitors are expected over the week, and there is television coverage of an hour a day on the BBC.

For the first 50 years or so Chelsea would regularly feature rock gardens among its prize-winning show gardens with leading rock-garden designers and nurseries bidding to produce the most spectacular rock falls and strata. These gardens featured displays of alpine plants from mountain regions across the world: drifts of blue poppies and candelabra primulas; glades of trilliums; rocky cliffs of gentians, edelweiss and saxifrages. Today most of the display gardens do no such thing (although some of the stands in the Great Pavilion do some of this) – conceptual spaces vie with water gardens – textures and sounds are as likely as rock, and meadow more likely than lawn. But there are still joys for the rock gardener.



W S Warmenhoven's nursery from Holland staged this exquisite display of *Amaryllis*, *Hippeastrum*, *Ornithogalum* and *Allium* and won the Diamond Jubilee Award (the premier award in the Great Pavilion) to add to its Gold medal.





Judging is the responsibility of many RHS judging panels and their individual decisions get amalgamated and collated to arrive at such awards as Best Garden in Show. This year Best Garden in Show went to a garden (above) from Fleming's Nursery from Australia, built by Philip Johnson Landscapes. This garden was also sponsored by Trailfinders (a travel company) and the Victorian State Government. And this points up the nature of the beast – this is big money gardening – raising the money at least as hard as raising the plants. These sort of gardens are either spectacular achievements, or ridiculous extravaganzas in a period of so-called austerity – not that austerity is much in evidence for the attendees at Chelsea. But while these are the pinnacles of achievement or folly, it is to the much smaller gardens that most visitors look for inspiration. Here the rock gardener finds many pleasures.



For me a number of the smaller gardens stood out – intimate garden spaces beautifully conceived and finished. The award to the Best Artisan Garden (a category for small display gardens) was given to Kazuyuki Ishihara designer of "An Alcove (Tokonoma) Garden." Japanese maples, ferns, moss, are the predominant plants framing the scaled-down tatami pavilion with green roof, standing over pools and stream.



There were a lot of attractive gardens in the Artisan Garden category, many of which would appeal to most NARGS members. Two Welsh gardens: "Un Garreg" (one Stone), and "Get Well Soon" by the National Botanic Garden of Wales, both capture aspects of their locale. Materials are sourced and used in a way that is reconizably associated with place – a principle that rock gardeners repeatedly return to.





Playfulness is another feature of these small gardens, although it often militates against the highest success; but two gardens in particular managed to overcome this problem. The WaterAid Garden carried the message of the importance of water in India with plantings of marigolds, echoed by the necklaces of orange flowers hanging above the balcony of the bamboo and grass-covered dwelling. The Garden of Magical Childhood, with teddy bears picnicking among marsh marigolds, foxgloves, bluebells and ragged robin was sponsored by the NSPCC (National Society for the Prevention of Cruelty to Children). Both delighted passersby.



Many gardens at Chelsea are beyond anything that the amateur could even contemplate. Many are beyond anything they would want. Some, however, take simple ideas and exploit them to the full. In this case it was the "First Touch Garden" (left and above) from a volunteer group supporting sick and premature babies at St George's Hospital. This Gold medal winner was planted simply with plants from many of their volunteers. Saxifrages, campanulas, camassias, and domed box bushes appeared to float above the ground, since the supporting side-walls on which it stood were mirrored. Despite knowing it was an illusion this was simple and beautiful.

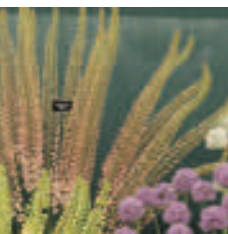




Another garden to catch my eye was the Japanese-style "The Sound of Silence" garden sponsored by Viking River Cruises. This, more a feature than a garden, was designed by Fernando Gonzalez and succeeded, where some others failed, in carrying concepts involved in its design without being burdened by them.

In other cases gardens seemed to have no link between sponsor, title, concept and actual design, but in this case, the juxtaposition of bonsai, Japanese gravel garden, and conceptualised mountain landscape, were elegantly balanced, and emphasized the value of simplicity and minimalism absent from most of my own garden with its profusion of plants.





Stand and display design range from quite conventional, through simple or eccentric charm, to Birmingham City Council's book-edged flower garden.



While most stands at Chelsea feature plants in some sort of garden setting, some transcend this self-imposed straitjacket. Most obvious in this category was that of the stand of Kent-based East Malling Research, "The Fruit of the Tree," which won a Silver-Gilt medal, the least they deserved.

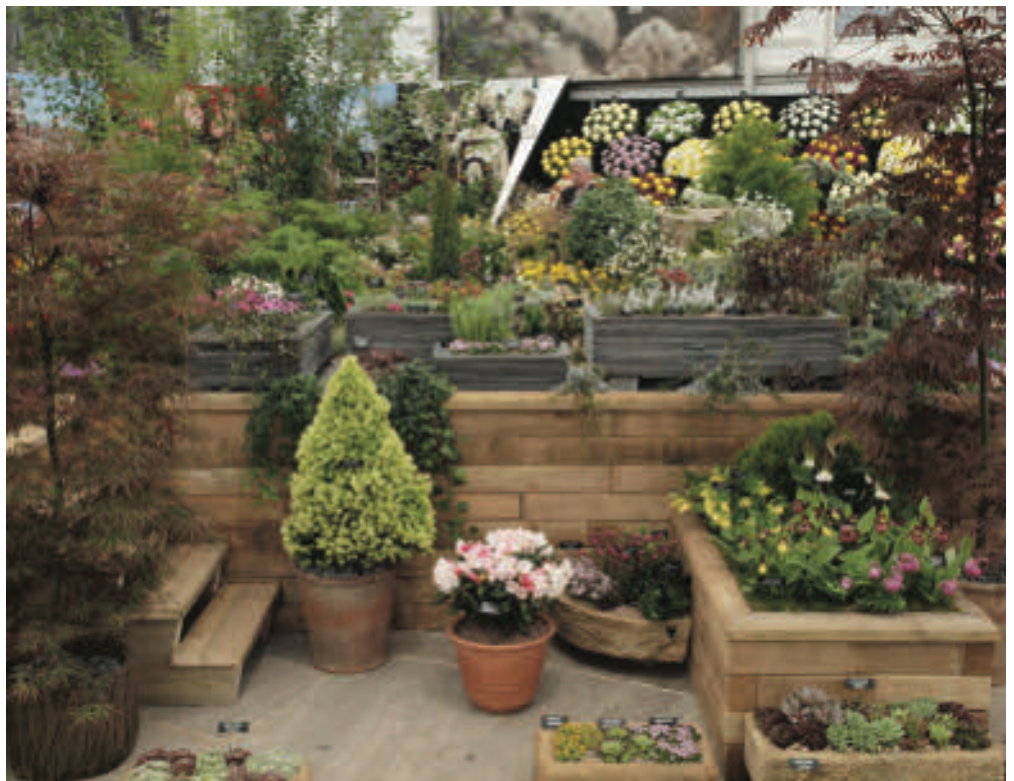
East Malling Research, in varying guises has been in existence since 1913, the year of the first Chelsea Flower Show, and its role is to provide independent research into food crops, and particularly fruit such as apples. That was the focus of their stand with this exquisite excavation of a 30-year-old apple tree dramatically revealing the extent of the normally unseen root system.



This beautiful minimalist conceit, with the individual roots supported so that the whole tree floats in air, concentrated the gaze and produced an object for contemplation that could have stood in any sculpture gallery.



Rock gardens did not feature in the show gardens, but there were stands featuring rock and alpine plants in the Great Pavilion. The Alpine Garden Society stand divided its four-sided display between rock and scree garden (top), damp garden (above right), and a display of slate-built troughs (right). Kevock Garden Nursery, with a two-sided corner stand, produced a display of plants for woodland and damp gardens with Himalayan primulas, meconopsis and glaucidium, interspersed with trilliums and silver saxifrages (top right, and above left).



It is soon obvious at big plant shows that there are some plants that are fashionable.

You can easily recognize which they are because they have stands, usually more than one, which feature nothing else. Right now it seems that traditional favorites such as roses and clematis have been supplemented by alliums, agapanthus and hostas. Heucheras are the most recent addition to this list with the spectacular range from North American and European hybridizers providing garden designers (and at some level most of us are garden designers) with a spectacular palette

Clockwise from right: *Hosta* 'Fire Island' from Bowden Hostas; heucheras as cut flowers on the Heucheraholics stand; *Agapanthus* 'Double Diamond' from Hoyland Plant Centre; and a display of heucheras on the Plantagogo stand.





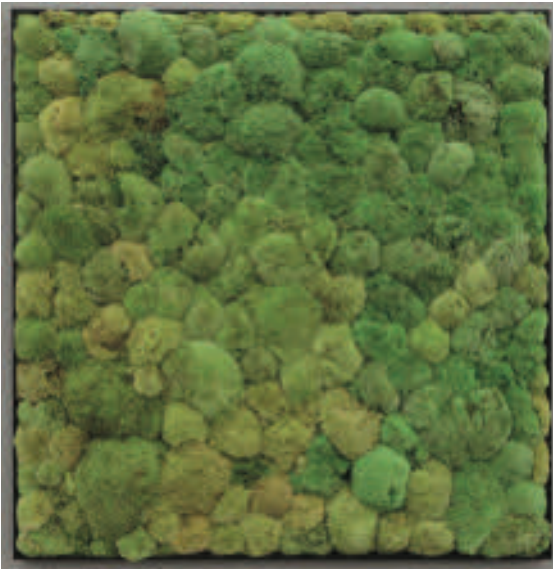
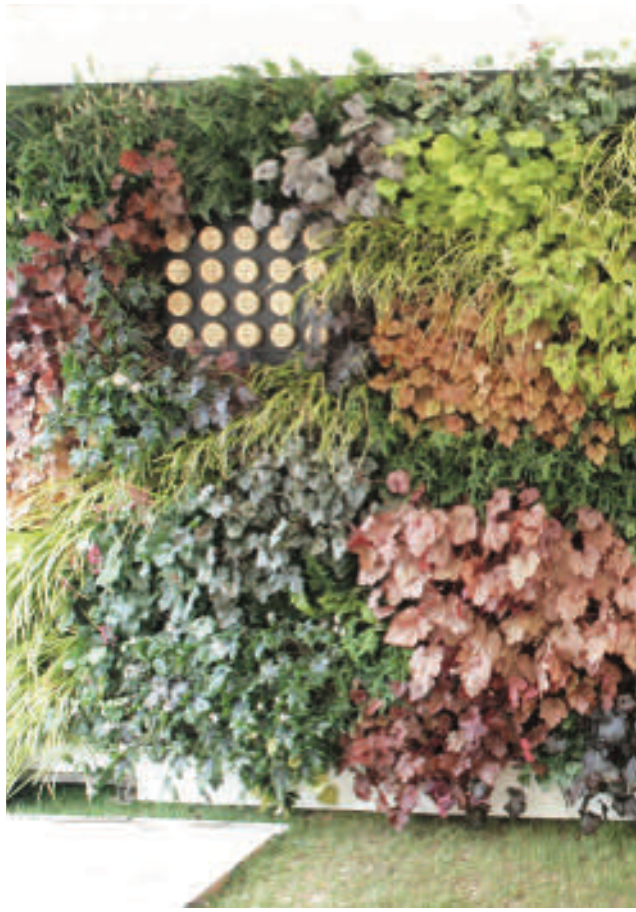


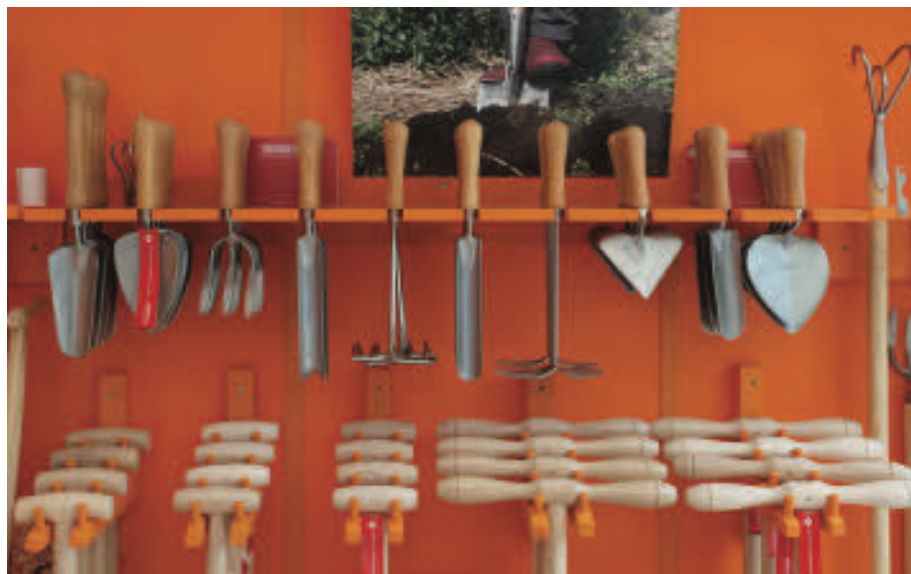


With Chelsea reaching its centenary there were plenty of exhibitors and designers looking back through time. One of my favorites was this stand of auriculas which displayed them in a magnificent auricula "theatre" with its black background highlighting the formal qualities of the staging. The copper kettles were given to winners of auricula shows in years gone by.

Although gardens are, primarily, horizontal spaces, perhaps indeed because of it, the use of vertical surfaces can be exciting.

Heucheras made a showing on a wall, an appropriate planting since many of the species grow on cliffs, but there were plenty of other vertical displays. The auricula theatre was one, but the green cushions framed and hung, a display of hand-forged stainless steel tools, and Rebecca Louise Law's hanging curtains of roses all tap into the same aesthetic.









One final picture – overlooked by pictures of past Chelsea Flower Shows, members of RHS judges (almost dwarfed by the display) at the Alpine Garden Society display stand in the Great Pavilion .



A large trough with conifers at the University of Iowa President's Residence garden

Conifers in Trough Gardens

GARY WHITTENBAUGH

IT WOULD SEEM reasonable to me that if you are going to put a conifer in a trough, you have a trough, and that it's a trough you've made yourself. What do I hear out there, you are a good NARGS member and you have never made a trough? How can this be? I am not perfect at much, but even I've made troughs and given a lot of classes on trough-making. So, if I can do it, I know you will do just fine. Just take the bull by the horns and make a trough!

When I got into trough-making there wasn't very much information on how to do it. Now, there are almost as many books on troughs out there as ones with recipes for chocolate-chip cookies. And you must not forget the internet: it also has a lot of information that might be helpful. I am not going to list the books for fear I will leave somebody out and hurt their feelings, I will just mention NARGS *Handbook on Troughs*. This is an inexpensive little handbook with a lot of good information; I have it and, I think, I have most of the other books on troughs that are out there. The main thing is not to be intimidated by how great the troughs look in the pictures in these books. Yours will be just fine and maybe better than the ones pictured. And with all the information out there I am not going into a lot of detail on trough-making, just a few things that keep coming up, or that I like.

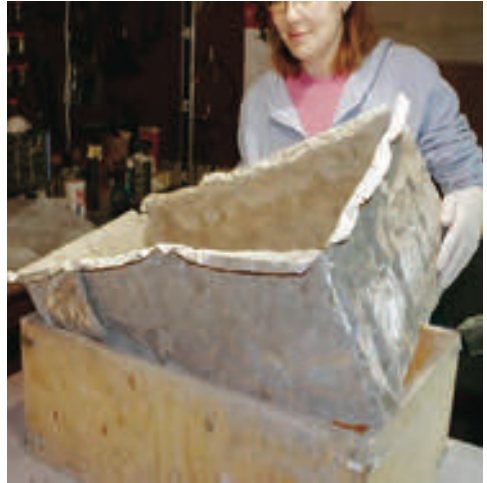
Now, this may not happen everywhere but out here in the hinterlands in Iowa, one thing keeps coming to my attention. It seem whenever I give a hands-on class a few of those attending will say “We tried this sometime ago and ours all fell apart” and, almost always, I find the problem is the same. The Big Box Store, or lumber yard, or whatever, sold them pre-mix instead of straight Portland cement. So be sure to get straight Portland cement. If it says on the bag “Just add water” it’s the wrong stuff. Don’t let them talk you into premix.

The one other thing to mention is that I like a rough exterior on my troughs. This is not easy when you are making a trough with boxes; you have to roughen the surface after it comes out of the box. One easy way is to use flashing. Get a roll of flashing, cut off the amount you will need, fold it, bend it, and in general give it a good crinkled appearance. Then line the interior of your outside box with the crinkled flashing. Make the trough, and behold the sort of surface I just love.

Now that you have your trough (I have great faith in you and I know you would not let me down so I assume you did make a trough) let’s do something daring for a change: plant the trough and put in at least one conifer.

Good grief, what’s this world coming to? Did he say a conifer in a trough, I have read a few articles on planting a trough that said not to put conifers in a trough as eventually they would take over, and all you would have left is conifers.

Now, being a conifer person, I always wondered what was bad about that, having nothing but conifers in a trough. I just assumed that would be great, and most rock garden plants like good drainage and, perhaps surprisingly, conifers do so as well, so they should make great companions.



Paula Flynn lining the outside box with crinkled flashing

Pinus flexilis witches broom seedling in a small trough



Believe it or not, people in my area have less trouble making troughs than planting them. They worry about the soil but that is simple: it just needs to drain well. What I use is $\frac{1}{3}$ pea gravel, $\frac{1}{3}$ #2 chicken grit, and $\frac{1}{3}$ top soil. This works for me, but use whatever works for you; your climate may mean you need to use a different mix. So, if you like something else that is fine. The main thing here is that it drains well. What about rocks? For the larger ones you can't go wrong with a Roundy, a Flaty, and a Pointy. Hey, I made up the words, I can make up the spelling!

After you place the larger rocks, top dress with small stuff such as pea gravel, then add some larger rocks but nowhere near as big as your main rocks. Now when you are doing this, mound up your soil mix and rocks a bit. You don't have to make it look like Pikes Peak but don't have it look like you belong to the "Flat Earth Society" either. I see way too many "Flat Earth Society" troughs.

Most people, when they use a conifer in a trough, use a dwarf. Now the American Conifer Society says that a dwarf is a conifer that grows over 1 inch a year and up to 6 inches a year. They probably won't grow that fast in a trough but still 3 or 4 inches a year is going to get big pretty fast. I have always said "I have never seen a plant that was too small or grew too slowly, but have seen many that were too big or grew too fast." So what I like to use in a trough are conifers that are classed as miniatures. The Conifer Society defines this class as growing less than an inch a year. Some as slow as $\frac{1}{4}$ to $\frac{1}{2}$ inch a year. Now, how's that for slow?

Picea glauca 'Pixie' in rectangular trough



I have a rule of thumb for rock garden plants when I use them with conifers. My rule is that, almost always, they must not be over 6 inches tall. With miniatures in a trough, I may go as far as using ones that are not over 4 inches high. By the way, I do use the smallest dwarf conifers I can find, those that grow only 1 to 2 inches a year. Occasionally I use something something bigger. Remember, I don't mind if I have a larger conifer in a trough.

What conifers to use in a trough? Well, as I said, miniature and the smaller dwarfs work the best. I could try and list names but what I list you may not find, or you may not like. My suggestion is go to American Conifer Society website <www.conifersociety.org> then click on ConiferBase. They will tell you the size if they know it. The best thing is to join the ACS and get to know the folks that have the miniature conifers. They are available in the trade but not as many as I would like. They grow slowly, and the normal growers don't like to mess with them as it takes too long to get them to a size when they can be sold.

Now that I think about it, everybody should belong to the ACS and to NARGS. If you're not a member, join today, and attend some meetings. My fears of not knowing much about anything were put to rest as I discovered there are very nice people in both societies that are more than willing to help you learn, and make you feel like you belong. Just remember, if your garden or trough looks good to you, don't worry about what others think. You're the only person you have to please.

If you don't want to make a trough, you can always plant a rock with a conifer such as *Picea abies* 'Little Gem'



The beach habitat of *Mertensia maritima* subsp. *maritima*,
Cullen, Banffshire, Moray Firth

THE HILLS WERE my working environment for many years and where I feel most comfy, but in this short article I am going to write about three coastal plants found growing in the north of Scotland - the iconic *Primula scotica*, *Silene acaulis* 'Frances', and the exceedingly rare *Mertensia maritima*. These coastal plants have many similarities to those found on the hills as they too have modified their growing habits to suit all that Mother Nature can throw at them when she is in a savage mood. The coastal areas in the article are in the northeast of Scotland, the Shetland Isles, and the north coast of Scotland.

Maggie, my wife, and I live in the county of Moray, at a latitude of about 57°N, similar to that of Gothenburg in Sweden and Alberta in Canada. The Shetland Isles are at the higher end of 60°N, just short of the Arctic Circle at about 66°N.

The first of the trio, *Mertensia maritima* subsp. *maritima*, is a wonderful little plant that, once found, remains in your memory bank, but I must refrain from waxing too lyrically.



Ower the watter tae Noufyland

a trio of plants of far northern
Scottish coasts

DAVIE SHARP



Mertensia maritima subsp. *maritima*: beach cobbles, glaucous leaves, and blue and pink flowers, Cullen Beach

It is found growing in sand and more often on shingle banks above the high water mark, which helps to camouflage its low growing habit. Once found, you soon realize how delicate the plant is. Perhaps I should briefly describe its vital statistics here. *Mertensia maritima* subsp. *maritima* is a low-growing plant, often with a sprawling habit and is easily overlooked among the shingle. Like a number of seaside plants, it has fleshy grey- or blue-green leaves which are easily broken or damaged. It is an interesting plant and is worthy of describing in a little more detail. It has a 30 cm taproot that has a twist in it, so it seems to twist itself into the ground. This taproot can be damaged readily. A number of stems emerge from the root crown and these can grow to 30–60 cm in length. The blue-green leaves are long and narrow and are covered with a waxy bloom (not unlike that of grapes). They have numerous chalk glands that are quite obvious on older leaves. The leaves have an upright habit at the crown but as they lengthen, start to run along the ground, terminating in a cluster of leaves that guard the emerging cluster of 8–10 red to pink, 4–6 mm buds that on opening burst forth like a starburst firework. The buds undergo a change in colour from red to pink to blue when fully expanded into bell shaped flowers. When pollinated, they produce a seed capsule known as a nutlet, turning black when ripe.

Mertensia maritima subsp. *maritima* is native to Britain and northern Europe but it has become very scarce in Britain. I know of only three

colonies in Scotland: locally at Cullen, on the northeast coast in the Dunbeath area, Caithness, and around on the north coast in the Castletown area, Caithness, but there will be other localities. The wide-ranging Arctic subspecies *Mertensia maritima* subsp. *tenella* is very similar in appearance. There is a third subspecies which is more luxuriant in growth, which I grew for many years in the sandy soil of my previous garden. This is *Mertensia maritima* subsp. *asiatica* Takeda which originates from the Pacific coast of Asia. Both *Mertensia maritima* and the subsp. *asiatica* are available commercially in the UK but may not be so in North America.

The second of the wee treasures is a moss campion - *Silene acaulis*. Botanically, it is a member of the order of plants known as Caryophyllales, to which the carnation family belongs. Its bright green cushions are studded with buds that erupt into protruding pale pink, sometimes to deep carmine, flowers which consist of five notched petals. The striking flowers are short-stalked, with 6–10 mm petals, standing around 2–6 cm high. Occasionally, double flowers are found. The densely tufted cushions have a strong taproot and long shoots, which have four or five small hairless green leaves at their ends. The cushion mound is made up of the remnants of dead leaves and, like the *Mertensia*, is regarded as a circumpolar high arctic plant. It is found all around the world's arctic zone, and is classed as an alpine plant even though it is found growing close to the sea here in the north of Scotland. As you travel south you only find it growing at higher altitudes. Examples of where it is found growing in Britain include the lime-rich screes or gravel on the Cairngorms plateau; on the readily accessible floor of Coire an t-Sneachda; on the damp rock of seacliffs in the northeast; and on the coastal cliffs right up to Cape Wrath, where "*the floers coorie doon amin the leaves oot o' the coorse howders.*" Further south, it can be found in the Lake District and in Snowdonia, North Wales, but only above 900 m, or there about.

However, there is a moss campion that is found only in Scotland and is thus known as a Scottish endemic. Actually, it is endemic to the magnificent rugged sea cliffs of Northmavine, Shetland Isles, which are found at the latitude of 60°N, 160 km northeast from the Scottish mainland. The Northmavine coastline is battered by the ferocity of both the Atlantic Ocean and the North Sea. It is almost severed from the mainland, making it an island in its own right if it weren't for a narrow strip of land known as Mavis Grind, which is just wide enough to support a road. This moss campion, known as *Silene acaulis* 'Frances', has distinctive yellow-green leaves. When closely looked at, they are almost succulent looking, or have a waxy cuticle, which is one of its battery of defences against the elements. It was first found growing on the exposed sea cliffs and ridges by a Mr. John Copland. The plant has pink flowers, appearing between June and August. I have heard say that the colour



Mertensia maritima on the beach at Dunbeath, Caithness (Ian Christie)



contrast is not so striking on the yellow green cushion of 'Frances' as it is on the dark green of *Silene acaulis*, but, nevertheless, it is a very intriguing cushion that would enhance any rock garden or container.

There are a variety of *Silene* suitable for rock gardens and available in many forms at garden centers in the UK. They are easy and obliging rock garden plants to grow tumbling over a rock. In captivity, 'Frances' grows happily and rapidly and soon appears to flow over the rocks, taking up the contours of its surroundings. One problem is that it is



Silene acaulis 'Frances' - one of the smaller specimens in Davie's crevice garden

enjoyed by grazing slugs and snails. Another problem is that blackbirds will often damage a plant while foraging. The plants that are growing in my garden do not flower as freely as some I have seen, but their flowing bubbling form makes up for any reluctance in flowering.

A postscript to this part of the article is that it was announced in February 2012, that Russian scientists have regenerated an ice age plant of *Silene stenophylla* after 30,000 years. They grew it from a fruit (seed) capsule stored by squirrels in the permafrost. The seed capsule was found in the banks of the Kolyma River in Siberia, at a site used by people looking for the bones of mammoths.

My final plant of the trio is the Scottish primrose, *Primula scotica*. A relative of *Primula farinosa* and *P. scandinavica*, it was first found by a Mr. Gibb of Inverness in 1819 on the high cliffs of Holborn Head, Scrabster, on the northern Caithness coastline. It may be found in slightly calcareous substrate anywhere along the north coast from northwest Sutherland and Caithness, around to Wick, and over on the Orkney Islands, in the areas of North Hill, Rousay, Stromness heaths and coast, and West Westray. The known populations all grow in stony soils, among short, sparse vegetation, managed by winter-grazing sheep and, in some cases helpful rabbits, that keep the vegetation around 2–3 cm, or shorter. Only very rarely is it found in lush vegetative ground. However, I have not found any plants where rabbit activity has been great. A clue to its habitat is its plant association with a number of maritime



Windswept habitat of *Primula scotica* at Strathy Point, Sutherland

Maggie Sharp getting close to *Primula scotica*



lime-tolerant indicator plants according to the season: *Festuca rubra*,

Thymus praecox, *Carex flacca*, *Succisa pratensis*, *Linum catharticum*, *Lotus corniculatus*, *Gentianella campestris*, *Anthyllis vulneraria*, *Prunella vulgaris*, *Galium verum* and the semi-parasitic *Euphrasia officinalis*.

Primula scotica usually has two flowering periods, May–June and July–August and is said to be biennial or a short-lived perennial. The flowering stalk (1–6 cm, sometimes taller) extends from a basal rosette of 1–5 cm, untoothed and almost stalkless leaves. The stem is topped by 1–6 violet, to red-purple, flowers, 1–2 cm in diameter, with notched petals, and a golden yellow throat with a narrow white surround. The leaves, stalk and seed head are coated with a white- to cream-coloured farina. They have the ability to self-pollinate and in fruit they can extend to a height of 12cm and more. Some populations can number upwards of 60 per square metre, so increasing the possibility of cross-pollination and thus increasing the longevity of plants, as I have found at home. I have plants from several sources. The number of plants that have survived for



Typical wild population of *Primula scotica*, Strathy Point

numerous years has increased in 2011, and I now have a pan of five-year-old plants.

Over the years I have grown *Primula scotica* using various commercially (UK) available composts, e.g. a loam-based John Innes compost, a proprietary peat base with added John Innes, straight peat composts, not forgetting germinating in a seed-formulated compost, with varying degrees of success. All the resulting plants were short-lived, be they pot-grown or in the open garden. It wasn't until I remembered being on a training exercise with RAF Kinloss Mountain Rescue Team in North Sutherland in the early 1970s that I hit upon a more successful method. During the exercise I was able to observe a number of colonies on the Kyle of Durness whilst sunbathing. The sight of the wee *Primula* remained dormant in my mind's eye until it suddenly dawned on me when thinking back to the first time I had seen it, which

had been subconsciously reinforced by many subsequent sightings.

I managed to acquire a piece of maritime turf, gave it a haircut, cutting the grass to approximately 2 cm and lay that onto a base of gritty sand in a 25 cm pan. I trimmed off the excess turf and watered the pan overhead with rain water with added dolomitic lime. I then sowed seed thinly on the surface of the turf, giving the pot a gentle knock to settle the seed amongst the blades of grass and waited for germination. In due course the seed germinated and grew on to flowering, without thinning out the germinated seedlings. Five years on, they have flowered well. The rosettes vary in width and the height of the flowering plants varies; they are certainly not uniform. The only after-care is to keep the grass short, 2–3 cm, and ensure that they are never short of water. I am in the process of trying another variation. Here, I have sown seed from another source in gritty compost. I will prick out the seedlings and put them in a pan and deep seed tray containing maritime turf with mixed vegetation. Then I will sit back and see!

A sixth flowering season is here and the May flowering has been good, but the grass is getting quite dense. A few of the *Primula* rosettes

Pan with *Primula scotica* growing in turf



have disappeared and I think I will have to pinch out some of the grass without damaging the primrose.

For the expats I will finish off with a wee verse in the language the Scottish primrose would be conversant with: the "Mither Tongue."

Tae yer left, a clear wye, ower the watter tae Noufyland, stracht aheid tae the Pole an tae yeer richt the Orkney Isles.

An' there ye are wi yer meally fulyerie an stalk, wi cheerie violetie-purple floories an wee gouden een, cooried doon amang the grasses abeen the coastal cliffs oot o' yon coorse saat win's.

Roon aboot grow auld freens like thyme and selfheal.

Yer nae too keen on heich growen girse an like the sheep tae keep it rael low.

Abeen yea see the gulls fleein' shewin' fite clouds tae the sky. Alow the cliffs the otters caper an' play in the watter.

In a' a picter tae warm yer hairt.

For those who need it, an approximate English rendering would go along these lines:

On your left the unrestricted passage to Newfoundland, and staring me in the face the North Pole and to your right the Orkney Isles.

And there you are with your farina rosette; mealy stalk topped with your many, cheery, violet-purple faces and golden eyes, huddled down demure among the grasses on the coastal cliffs out of the salt laden wind among your friends.

Watching the gulls soar and stitch the clouds to the sky, watching the otters loup [leap] and dive and play among the rocks and the rabbits and the sheep keeping your lawn trim.

Ah what a sight to console one's heart.

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ACKNOWLEDGMENTS

A. Paterson, Checking Scots text.

Primula scotica growing on the edge of the Golf Course at Durness, Sutherland, with *Euphrasia officinalis* and *Parnassia palustris*







Group of *Puya raimondii* in flower.

The unusual mass flowering of *Puya raimondii* in Huascarán National Park

GUILLERMO RIVERA

PUYA RAIMONDII (BROMELIACEAE) also known as Queen of the Andes, is an endemic bromeliad from the high Andes of Peru and Bolivia (3000-4700 meters.) It is the largest of all known bromeliads, with an inflorescence that reaches 10-12 meters. The inflorescence can carry an estimated three thousand flowers and produce over six million seeds (Cano et al., 2000; Rivera 1985.)

It was thought that *Puya raimondii* would flower when it was 150 years old. Recent estimates give a life cycle of about 40 years. In milder conditions, a single plant flowered in the University of California Botanical Garden at Berkeley only 28 years after seed germination (Lineham, 1987.) Like most bromeliads, it dies soon after flowering. It is also considered to be an endangered species (Müsch, 1997.) Several populations have been described, ranging from a few individuals to several hundreds. At present time it grows exclusively in 28 isolated populations, scattered along the Peruvian Andes, with a couple of populations in Bolivia, with no possibility of genetic exchange between these populations.

Detail of the flower spike (opposite) makes apparent the incredible profusion of individual flowers.



The presence of a photographer emphasizes the scale of the plant in flower.

I have visited 4 different populations of *Puya raimondii* in the Andes of Peru during the last 6 years. In September 2009, while conducting a botanical journey in Peru with a group of cactus/bromeliad hobbyists, we visited the Huascarán National Park in the Cordillera Blanca in the Andes of central Peru. We were incredibly fortunate to witness an extremely rare occurrence in one of these populations: more than 100 plants were in bloom at the same time! Usually we can see perhaps 5-10 plants flowering at a time so this was a remarkable occurrence.



Giant hummingbird resting on the foliage.



Puya raimondii flower spike and Giant hummingbird (above), a view of the surrounding mountains in the Huascarán National Park (opposite above), and a local woman knitting by a pile of dead flower stems collected for fuel.

The scenery was incredible with this group of magnificent plants in flower. The hummingbird activity, including particularly of the giant hummingbird (*Patagona gigas* subsp. *peruviana*), was also very intense with this large number of plants in bloom.

We will continue to visit this particular population, hoping for the same mass blooming event during subsequent trips.

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Additional information can be found on Guillermo's website <www.southamericanaturetours.com> or he can be contacted directly at <rivera@intecar.com.ar>



Reflections on the State of our Passion (from the short experience of a young rock gardener)

Kenton J. Seth

SINCE JOINING THE time-honored band of rock gardeners, I have noted a number of conversations about age and the state and health of rock gardening as a culture. There have been some desperate references to the shrinking size of rock garden clubs – large and small – and not just in the US. A recent journal from the Scottish Rock Garden Club yielded two comments in show reports about empty competitions for showing plants in "youth" classes. Mike Kintgen of Denver Botanic Gardens, when I prompted him with a question of over-grave tone, once said "I can't think about the end of horticulture!"

Now, being new to NARGS, this marvelous society, and generally new at life, I don't think that my own observations or generalizations



can possibly be wise or experienced enough to much inform colleagues who are older than I. These are they who regularly humble me deeply by generously giving me loads of their precious time and long-earned knowledge, by educating me, and patiently passing on the baton of our venerable trade. What I do think I can offer, however, if not a depth of knowledge, is a perspective as a genuinely young person (I am happy to supply my birth certificate to appropriate parties, should it come to that!) and a few thoughts from my limited point of view.

Some folks are worried: perhaps we face a rock-gardening apocalypse in

the future, where, if we do not take militant and drastic action now, (are pitchforks involved?) rock gardening as we know it will rot into the ground and be subsumed by a jungle of video-game lianas. Admittedly, I have not directly met anyone who feels this way, but I have heard rumors. Everyone else – the majority of our friends, whose real focus is the plants – has a latent levity with which they view the change and flow of time over the trade. They are not worried; they know that at worst, things live and die: plants, people, and institutions. But new ones are born or propagated.

A downturn does not mean death any more than it means birth. It really only means change. The historical Italian Renaissance occurred not in a vacuum, but after the Dark Ages. Let us not be alarmed – a noticeable change in the immediate number of club members may only be the result of a demographic hump moving through the population, perhaps related to the baby boomers.

Finding myself so warmly welcomed by the Northwestern chapter of NARGS, I had a conversation with one Mr. James Fox; a self-titled sentimentalist. He left a great impression on me as a genuine people-lover and had something wise to say. Being my first actual NARGS meeting, I observed, respectfully, that there was a lot of gray hair. He said "It's always been like that." Since he was a young man. Why? How come?

The answer can be unraveled. Let us face it; retirees have more time. Many folks came to rock gardening this way. The kids moved out, the parents retired, took up gardening (vegetables perhaps) because they wanted to put to use this outdoor area wrapped around their home, and a love of gardening evolved into a love for plants, then collecting plants, and there you have the last iteration: a group of flower enthusiasts in a public room on a Wednesday night having a ball. And of course, by that time, their hair is gray from the dust of the construction zone that is life.

There is also that element of nut-jobs; you know them – I am one of them. The kids who, finding in the spare time that happens in youth (before having kids of their own, and so on) a fine and fulfilling passion for wee plants, are rock gardeners throughout their lives. They are definitely a minority, but they are there. (I must re-state Jim's "It's always been like that" for this element, too.) In fact, I just met a gentleman last month who has effectively usurped me as "youngest" in my immediate circle of rock garden buddies; and to the profit of us all, he well surpasses me in botanical and horticultural training. We pups are the kind of folks who, having found this love early in life, keep plant nurseries and seed companies in our middle years, which carry us on until we are delivered into the venerable fold of gray heads ourselves.

Rock gardening is not going away. The very internet which gives us unprecedented access to the massive parade of pop culture, carrying innumerable websites and applications showcasing multitudinous flavors of entertainments tailored for the young mind's attention-span, also, dare

we admit it, provides a rich and ever-expanding forum that welcomes internationally spread out, and sometimes spaced-out, enthusiasts who combine in a synergetic love for plants.

But technology also has its limits. I first found NARGS online, but most of my present contact with it is through the printed page and I prefer it this way. A person (no matter how modern) who loves soil, stone, and leafy living things is not likely to forsake the eternal and sensual appeal of the ink-dressed page any time soon.

I also would never (ever) dare to say that rock gardening, as a social group, has kept itself too aloof from and unwelcome to youngsters. I treasure the countless remembered moments in which I have been made most welcome as a novice. I think so highly of the average rock gardener, I should think that our ilk, by its very nature, is a collection of folks too wise (through average age, perhaps?) or too happy growing things, to suffer from an exclusive mindset. We may also be influenced by a deep history of hospitality set by early founders of our hobby, or, yet again, there may be a destined disposition of sharing that is born from a hobby in which plants, seeds, and techniques cannot help but be shared if they are to move at all!

Addressing a particular gardening conundrum I had lately, I grabbed a stack of rock gardening tomes which happened to come out in order of age. I started by consulting my historical hero Farrer, then on through Foster, and lastly, found myself reading an internet blurb by Zdenek Zvolánek. This incidental chronology brightly illustrated something – how very, very much rock gardening has changed over the years. I was truly surprised to find that there were old techniques that are plainly held as patently wrong nowadays. I cannot help but wonder, in future, just where this art and science will go.

Given our now technologically informed and integrated ecological science as well as modern environmentalist culture, will there be a radical development in rock gardening from the conservation sector? Will a change in the number and type of people living in suburban homes (and therefore endowed with outdoor space) mean a new normal for how and where rock gardens are kept near our living spaces, and thereby precipitate a whole new need for new research?

With the internet's uncanny ability to consolidate circles of ultra-specific interests, will there be a new way that small clubs and big organizations categorize themselves? Or have the major changes occurred already while other things never change? We are continuing to settle in, metaphorically like a rock garden: the soft, living plants that come and go while ageless stones hardly change at all.

The only thing we can be sure of is that rock gardening will not be exactly the same as it is today; if we continue on in the manner that we are – it will be just a bit better.

2012 Financial Review Report

Peter George, President
North American Rock Garden Society
P.O. Box 833
Petersham, MA 01366

May 10, 2013

Dear Mr. George:

I have examined the NARGS financial records for calendar year 2012 maintained by the Treasurer, William Adams. The records include the following:

- year-end Balance Sheet and Profit and Loss Statement
- year-end account reconcilements for each of the NARGS bank accounts
- year-end reconciliation of the Investment Account
- samples of several disbursement records

After reviewing these financial records, I find that the year-end Balance Sheet and Profit and Loss Statement accurately represent the financial status of the North American Rock Garden Society as of December 31, 2012. All bank accounts and the investment account have been properly reconciled and are accurately recorded in the financial statements. The examination of a sample of disbursements found that the appropriate documentation and/or authorization was obtained to support the disbursement.

In conclusion, the review found no issues of concern.

Sincerely Yours,

Randy Tatroe
17156 E. Berry Place
Centennial, CO 80015

Treasurer's Report

INTRODUCTION AND SUMMARY

Included with this report you will find a Balance Sheet as of December 31, 2012 and a Profit & Loss Statement for year ending 12/31/2012.

As of 12/31/2012, all Bank Accounts and Investments have been recorded into our QuickBooks accounting system and all accounts have been balanced to the appropriate year end statements.

Below, I have listed those areas of Net Income and Net Expense that have a significant impact on our operations:

| NET INCOME (US\$) | <u>2012</u> | <u>2011</u> |
|---|-------------|-------------|
| Memberships | 68,368 | 75,345 |
| Donations including President's Discretionary Fund | 9,045 | 10,043 |
| Interest | 7,946 | 10,384 |
| Advertising | 2,823 | 2,496 |
| Book Service | 1,175 | 1,301 |
| Amazon.com fees | 164 | 152 |
| NET EXPENSE (US\$) | | |
| Seed Exchange | 2,321 | 1,342 |
| Speakers Tour | 8,925 | 4,571 |
| Internet Services | 26,940 | 7,437 |
| Quarterly | 54,669 | 68,354 |
| Grants/Awards | 6,862 | 7,655 |
| Administration | | |
| Executive Secretary | 16,344 | 15,099 |
| AdCom | 3,497 | 1,662 |
| Other | 2,601 | 3,939 |

The activities of NARGS in 2012 resulted in a significant loss due primarily to a significant increase in Internet Services. During 2012 we incurred the

expense of automating the Seed Exchange (\$6,000.00), the cost required to scan all of the back issues of the Rock Garden Quarterly (\$3,488.00) and the initial expenses associated with the design and programming of our new web site (\$10,390.00). The expense for the Quarterly (\$64,997.00 – adjusted for prep/printing and shipping costs for Issue 71/1 billed and paid in 2013) declined due to lower prep/printing and shipping costs. There was a significant increase in the cost of the Speakers Tour.

As far as income is concerned, investment income continues to decline as higher interest investments mature and are replaced at lower rates. This trend will continue if interest rates do not start to rise. Membership income continues to decline.

Respectfully submitted,
Bill Adams, Treasurer

BALANCE SHEET at December 31, 2012 (US \$)

ASSETS

| | | |
|----------------|------------|------------|
| CURRENT ASSETS | | 338,730.79 |
| Cash in Banks | 78,730.79 | |
| Investments | 260,000.00 | |

TOTAL ASSETS **338,730.79**

LIABILITIES & EQUITY

EQUITY

| | | |
|----------------------------------|------------|------------|
| Unrestricted (retained earnings) | | 207,509.18 |
| Restricted Funds | | 163,180.08 |
| Norman Singer Endowment Fund | 154,275.08 | |
| Robert Senior Award | 1,275.72 | |
| Carleton Worth Award Fund | 3,337.78 | |
| President's Discretionary Fund | 4,291.50 | |

NET INCOME (31,958.47)

TOTAL EQUITY 338,730.79

TOTAL LIABILITIES & EQUITY **338,730.79**

PROFIT & LOSS - January through December 2012 (US \$)

INCOME

| | | |
|------------------------------|-----------|-------------------|
| CONTRIBUTED SUPPORT | | 77,412.98 |
| Memberships | 68,368.18 | |
| Donations & Special Requests | 9,044.80 | |
| EARNED REVENUES | | 26,455.51 |
| Interest | 7,945.82 | |
| Advertising | 2,822.46 | |
| Book Services | 1,517.43 | |
| Book Royalties | 224.20 | |
| Quarterly Sales | 58.38 | |
| Seed Exchange | 12,448.93 | |
| AGM & Study Weekends | 1,438.29 | |
| TOTAL INCOME | | 103,868.49 |

EXPENSE

| | | |
|---------------------------------|-----------|-------------------|
| GRANTS, STIPENDS and AWARDS | | 6,862.37 |
| Stipends | 300.00 | |
| Grants - Singer Endowment | 4,500.00 | |
| Awards | 2,062.37 | |
| BANK FEES | | 1,039.72 |
| ADMINISTRATIVE EXPENSE | | 22,442.27 |
| AdCom | 3,497.24 | |
| Executive Secretary | 16,343.61 | |
| Accounting | 164.69 | |
| Legal & Filing Fees | 25.00 | |
| Insurance | 1,480.00 | |
| Supplies | 119.63 | |
| Telephone & Electronic Services | 332.67 | |
| Promotional Materials | 479.43 | |
| PROGRAM SERVICES | | 105,482.60 |
| Book Service | 178.82 | |
| Seed Exchange | 14,769.57 | |
| Speakers Tour | 8,925.02 | |
| Internet Services | 26,940.44 | |
| Quarterly | 54,668.75 | |
| TOTAL EXPENSE | | 135,826.96 |
| NET PROFIT (LOSS) | | -31,958.47 |

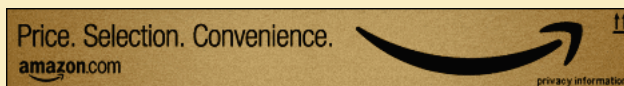
NARGS Bulletin Board

PRESIDENT'S MESSAGE

I've just returned from Asheville, North Carolina, where NARGS held its Annual General Meeting. Asheville is in the western part of the state and is situated in the South Appalachian Mountains, home to a vast number and variety of plant species, many of which are in bloom in the spring. It was a wonderful meeting, and although the weather didn't fully cooperate, a rainy-day hike in the Blue Ridge is surprisingly enjoyable, especially if everyone is getting wet with you! The programs we attended were excellent, the company was exemplary, and the vast majority of the attendees left with smiles on their faces. This meeting, organized and run by our Piedmont and the Southern Appalachian chapters, was a perfect example of the reason we have chapters. Without local expertise and the willingness of chapter members to plan and execute this kind of meeting, NARGS would be a much less interesting organization, and our meetings would also be less interesting. And less frequent, too!

We hold our business meeting at these annual get-togethers, and the reports of the Administrative Committee and the Board of Directors, which were presented at the meeting, will be available to all members shortly. I urge you to take the time to read through those reports; we're doing quite a lot of innovative things with the website, and the last few initiatives with the elections and the Quarterly have been extremely well received as well. The business of NARGS is first and foremost horticultural and botanical, but we nonetheless have to pay attention to the more mundane aspects of running an international organization, and we hope you'll pay some attention to what we do and support us when you can.

One area we will be addressing during the next few months is money. The website initiative, the Seed Exchange and the Speakers Tour have been costly, and we need to increase our income to support them. One way that I've mentioned previously, but which I need to mention over and over again, is the Amazon.com Affiliate Program. If you go to Amazon through the link on our website <nargs.org>, we receive a 6% royalty for every dollar you spend. You don't even have to even be a NARGS member, but you must go through our website! So PLEASE go to <nargs.org> and simply click on this Amazon link on the homepage (or the other Amazon links on the other pages),



and then we can start making some real money from your Amazon.com purchases. And please ask you friends and relatives who aren't NARGS members to do the same!

The major reason our income is inadequate these days is membership. After several years of declining membership, we appear to have begun to recover slowly, but that recovery will take several years to bring us back to where we were in 2007. In the interim, we need to get more rock gardeners to join our terrific organization. In North America, NARGS has 39 chapters, with a total of 2693 members. Unfortunately, only 29 percent of those chapter members belong to NARGS. So in North America, we have more than two thousand people who care enough about rock gardening to join a NARGS chapter, but for some reasons are not willing to spend \$30 to join NARGS.

Why have so few chapter members chosen to belong to NARGS? I have absolutely no idea. I have theories, but until we conduct a real survey of the chapter members, we have no basis for drawing any conclusions. Another question that is worth pondering is whether it is at all meaningful or useful to have NARGS chapters with virtually no NARGS members. We have one chapter with just two NARGS members and several with less than ten. We have chapters with memberships of over 200, fewer than 20 percent of whom are willing to join NARGS. In the next few months I'm going to try to develop a serious survey which we'll try to get to every chapter, and hopefully to every chapter member. With any kind of response we'll get some insight into the single most frustrating problem we face, and perhaps we'll find a solution to the problem. In the interim, if you have any thoughts on this issue, please feel free to contact me directly at <petergeorge@verizon.net>.

I'd like to actually write a bit about gardening – specifically, about my garden. This winter was a good one in New England, with a long-lasting snow cover and relatively moderate temperatures. As spring has arrived, I've found very few plants “missing,” which has not been the case for the past few years. I lost a few special plants that were marginally hardy, and which I knew were risky, but quite a few of last year's seedlings came through and are going to give me a chance to actually see them in bloom. I grow quite a few plants from the dryland west of the United States, and recently have been adding a lot of plants from Turkey, the Caucasus and the Altai. With care, these plants are doing well in a place that isn't really “correct” for them. But isn't that part of the appeal of our wonderful avocation? If you have a few minutes and a computer, visit our NARGS Forum, where so many of our wide-ranging plant interests are discussed and so many wonderful photographs are posted. I'm not sure that I'd be able to grow as large a variety of plants without the cultivation and germination advice I've gotten there, and we want and need more of your knowledge to help us all grow these wonderful plants. So I hope those of you who garden north of the equator have a wonderful and productive spring and summer, and those who are experiencing fall, have a long, mild and safe winter.

Finally, although arrangements are still tentative it now seems likely that our AGM next year will be in Santa Fe, New Mexico, at the beginning of September 2014. Further details will appear in the next issue of the Quarterly.

So, hopefully we'll get to meet sometime, perhaps next year in Santa Fe.

Peter George, President <petergeorge@verizon.net>

NORMAN SINGER ENDOWMENT FUND

The Committee is pleased to announce that, following the meeting of the NARGS Board of Directors in Asheville, there are two recipients of grants from the Norman Singer Endowment Fund.

The New England Wild Flower Society has an extensive collection of *Trillium* in their botanical garden, The Garden in the Woods, and wishes to apply for recognition of the collection by the American Plant Collection Consortium, a program administered by the American Public Garden Association. In order to assist with the expense of providing experts to verify the species of *Trillium* in the collection the New England Wildflower Society will receive a grant of \$2500.

The other grant goes to Susanne Nilsson of Mariannelund, Sweden. Ms Nilson has a passion for pulsatillas and to study them in their native habitat in Central Asia and Japan. After completion of the studies she will write a monograph on the species. A grant of \$2000 will go toward travel expenses for these expeditions. I understand Ms Nilsson is already learning Russian for her expedition in 2014.

Jane Grushow.

PATRONS

The following recently became NARGS Patrons

James Locklear (Nebraska)

Minnesota Chapter of NARGS

NARGS SEED EXCHANGE

It's Never too Early to Collect Seeds for the Seed Exchange!

After many years as the seed exchange director, Joyce Fingerut has stepped down. We all want to thank her, as should every NARGS member, for her untiring efforts in making our seed exchange one of the very best.

I hope everyone is having a fantastic growing season. I'm sure you're all contemplating from which plants you'll be sending in your saved seeds. Our seed exchange is only as good as the seeds we receive from you, our faithful members. Any member who sends in seeds from at least 5 different varieties of plants is entitled to 10 more selections in the main distribution. Your order will also go to the head of the line giving you a better opportunity to get those choice varieties. Directions for collecting and cleaning seeds are available online, as is the donation form. Custom forms and donation forms are also included with this issue of the Quarterly. Anyone who needs more can get them from Laura Serowicz, 15411 Woodring Street, Livonia, MI 48154-3029, USA. Email: <seedintake@mi.rr.com>

BZ Marranca, Seed Exchange Director,
9056 County Road 142, Interlaken, NY 14847
<mmm10@cornell.edu>

NARGS SPEAKERS TOUR PROGRAM 2014

Having just taken over the Speakers Tour Program after Barb Wetzel's long and successful time in the job, I'm hoping that everyone will help make the whole thing continue as successfully as it has in the past.

Requests for the 2014 Speakers Tour (with **Martin Walsh** visiting Western chapters in spring 2014, and **Mike Kintgen** visiting Eastern chapters in fall 2014) will be accepted until July 31, 2013. This will allow sufficient time to work out scheduling in time for chapters to publish their 2014 schedule. For more details see the Speakers Tour link on the NARGS homepage. For information not found on the NARGS website contact me directly. Happy gardening!

If you have any ideas about how the tour might develop in the future, please get in touch.

Harold Peachey <hlpeachey@gmail.com>

New Members

*Welcome to those who joined between February 3, 2013,
and May 10, 2013.*

Looper, Matthew, 803 D St., Marysville, CA 95901
Nancy Keep, 381 Palm Ave., Oakland, CA 94610
Hewgley, Greg, 1355 S. Steele St., Denver, CO 80210
Baumunk, Lowell, 10918 N. Sunshine Dr., Littleton, CO 80125
Gross, Carol, 24943 Ben Kelly Rd., Elbert, CO 80106
Cooper, Anthony & Allison Padraic, 8695 E. Radcliff Ave., Denver, CO 80237
Parks, Charles, 627 S. Arthur Ave., Ste. 111, Arlington Heights, IL 60005
Mann, Tom, 56 Goddard St., Athol, MA 01331
Fleming, Stephanie, Behnke Nurseries Co., POB 290, Beltsville, MD 20705
Ragsdale, Nancy & Sonny, 13903 Overton Dr., Silver Spring, MD 20904
Pollard, Albert, 6 Curtis Lake Dr., Sanford, ME 04073
Pollard, Bruce & Linda, 210 Stoneham Rd., Saginaw, MI 48638
Weiss, Colleen, 1005 Fairmount Dr., Ann Arbor, MI 481005
Anderson, Scott, 102 N. Ballas Rd., St. Louis, MO 63122
Kruckeberg-Clemans, Caroline, Grouse Springs Nursery, 35649 Mt. Highway 35,
Polson, MT 59860
Araujo, Rochelle, 911 S. Duke St., Durham, NC 27707
Cox, Kirtley, 2539 Sevier St., Durham, NC 27705
Cram, John, 175 Lakewood Dr., Asheville, NC 28803
Emmel, Thomas, 749 Powell Dr., Raleigh, NC 27606
Jimenez, Beth, 3101 Greenville Loop Rd., Wake Forest, NC 27587
Niemeyer, Dennis, 195 Macedonia Lake Dr., Saluda, NC 28773
Richards, Byron & Hazel, 31 Southridge Dr., Hendersonville, NC 28739
Walker, Karen, 517 Arbor Creek Dr., Holly Springs, NC 27505
Reid, Teresa, POB 716, Gladstone, NJ 07934
Mackenzie, Richard, 2368 Santa Barbara Dr., Santa Fe, NM 87501

Miraglia, Anthony, 119 Beach St., Massena, NY 13662
Crandall, Betty, 30 Aspen Way, Narrowsburg, NY 12764
Crumley, Nancy, 324 Seventh Ave., Brooklyn, NY 11215
Kaplan, Jack 93 Sixth Ave., Brooklyn, NY 11217
Lee, Elizabeth, 4280 Berringer Rd., Waldo, OH 43356
Currie, Arden, 1714 SW Miles St., Portland, OR 97219
Feather, Sandy, 6747 Shore Ave., Verona, PA 15147
Boardman, Dorian, 22 Woodmark Way, Wakefield, RI 02879
Glasgow, Lowrie R., 24 Lawson Way, Greenville, SC 29605
Kavanaugh, Nancy, 112 East College St., Jonesborough, TN 37659
Linkous, Carolyn, 3709 Brewer Rd., Crossville, TN 38572
Harmon, Matthew Robert, 6248 Edgemere, #807, El Paso, TX 79925
Hansen, Sue, 2110 Rampart Dr., Alexandria, VA 22308
Van Beuren, Mary Ann, POB 351, Hartlant, VT, 05048
Cherry, Geraldine, 14 Columbia Key, Bellevue, WA 98006
Stifel, Nancy A., 3418 – 48th Ave. SW, Seattle, WA 98116
McInnes, Laurie, 135 Ashley St., Roseville, NSW 2069, Australia
Jankunis, Marion, 143 Canyoncrest Point West, Lethbridge, AB T1K 5C6, Canada
Laycock, Rosemary, 9 Brennan's Branch Rd., Prospect Bay, NS B3T 2A2, Canada
Watson, John & Anita, Casilla 161, Los Andes, Chile
Campbell, Michael, 4 Tullyglass, Crescent, Shannon, Co. Clare, Ireland
Van Beek, A., G. C. Marshallstraat, 9728 WS, Groningen, Netherlands
Uhl, Mary, 8 St. Mary's Lane, Bootham, York YO30 7DE, United Kingdom

A full NARGS membership list is available to members as an electronic PDF.
For a print copy email <nargs@nc.rr.com> with "Membership List" as the subject.

Website Book of the Month

I am looking for a Volunteer to take over the Book of the Month review section on the website. Easy to do and gratifying as well. We have a few months' supply of reviews, so you can ramp up into the job. Please contact Betty Spar at <bettyannespar@gmail.com>

We have learned of the death of the following NARGS members

Elsie Latrobe Felton (Southwest Harbor, Maine)
Lawrence B. (Larry) Thomas (New York)
Paulette Zabkar (Pittsburgh, Pennsylvania)
Don Jacobs (Decatur, Georgia)

NARGS Donations Appeal

Donations between February 3 and May 10, 2013 - \$250

GENERAL FUND OR UNDESIGNATED

Calon Constructors Inc. (Colorado)

In memory of Paulette Zabkar

2013 NARGS A

Exploring the Florida

Asheville, North Caro



Meeting host David White (left). Along with colleagues Bobby Ward, Bobby Wilder, wife Carolyn, and a team from NARGS Piedmont and Southern Appalachian chapters, David deserved everyone's thanks for near-perfect organization.





Annual Meeting of the Blue Ridge Society - May 2-5, 2013

THE NARGS ANNUAL Meeting in Asheville, North Carolina, provided attendees with a profusion of field trips, great lectures, buying opportunities from a number of nurseries, and the opportunity to catch up with old friends and make new ones.

Business meetings of the Administrative Committee and Board of Directors led up to the full formal Annual Meeting of the membership for the transaction of business. This included the presentation of awards, the ratification of election results, and voting on a series of amendments to the Bylaws.

The Annual Meeting is the major opportunity for NARGS members from across the world to come together, and first-timers and old-timers alike had a great time.





James Reynolds (above), from Brevard College, provided an overview of the geology of the Blue Ridge, particularly discussing the role of plate tectonics.





Patrick McMillan from Clemson University, and host of "Expeditions" TV show, in the middle of a very lively lecture, *The Southern Blue Ridge: The Crucible of Life*, emphasizing the enormous biodiversity of the area.

Tim Spira (below), also from Clemson University, lectured on *Wildflowers of the Blue Ridge*, and was in demand to sign copies of his book, *Wildflowers and Plant Communities of the Southern Appalachians and the Piedmont*.







Biltmore House, built by George Vanderbilt, and the largest private house in America at the time, and the associated Estate were visited by most attendees. Much of the Estate and gardens involves gardening in the grand manner although individual details, such as the juxtaposition of azalea and *Dianthus*, can attract the rock gardener.



NARGS 2013 Awards

MARCEL LE PINIEC AWARD is given to a nursery person, propagator, hybridizer, or plant explorer who is currently actively engaged in extending and enriching the plant material available to rock gardeners. This award is made to **JOHN N SPAIN** for his more than 45 years of dedication and accomplishment as a plant explorer, propagator, and nurseryman. Together with his classic book, *Growing Winter Hardy Cacti in Cold/Wet Climate Conditions*, and his amazing generosity, tutorials and workshops, he has enriched the knowledge of the rock gardening community everywhere.

AWARD OF MERIT is given to persons who have made outstanding contributions to rock and alpine gardening and to NARGS. In addition, the recipients will be people of demonstrated plantsmanship and an active member of the Society.

RICHARD BARTLETT has served NARGS as president for a full term of three years, a responsibility that he undertook and committed himself to with all his heart. Dick has many other qualities and accomplishments that merit recognition by NARGS: he



Dick Bartlett speaking to the Annual Meeting after being presented with his Award of Merit at the Annual Meeting in Asheville

and his wife have created an outstanding private garden full of treasures, full of artistic touches and a wide spectrum of rock garden plants from *Lewisia tweedyi*, *Adonis vernalis*, *Lilium philadelphicum* to many American dryland plants, cacti and an abundance of high alpine cushion plants as well.

Dick established the Millstream Award during his tenure, a wonderful way to acknowledge and reward some of the great gardeners in our art who might not otherwise receive recognition.

He and Ann are indefatigable travelers, and they have participated in no end of tours sponsored by various Rock Garden Societies to South America, South Africa, much of Europe and, of course, the

United States. They have attended meetings—often several a year—of the North American Rock Garden Society, but also international conferences in the Czech Republic, New Zealand and all over Great Britain.

Dick and Ann had a joint presidency of the Rocky Mountain Chapter during one of the group's challenging periods, and they wisely steered us through some very difficult times. Although Ann was technically the Secretary, I know Richard was there to help her as she managed the membership and Secretarial duties of the American Penstemon Society for much of the last few decades.

Finally, Dick is a photographer of professional talent: he has published his pictures in many books and magazines, not to mention using them in very informative and entertaining talks. Dick is a multi-faceted, dedicated leader who has served rock gardening in many capacities for a very long time now. I can think of no one who better merits this prestigious award. *Panayoti Kelaidis.*

GRAZYNA GRAUER has served NARGS in many roles. NARGS depends almost entirely on volunteers to function. With over 2500 members worldwide, and an increasingly complex and robust presence online, we depend even more on a few people willing and able to commit huge amounts of time and effort to the organization for the simple satisfaction of knowing their work is benefiting thousands of gardeners in over 35 countries. Among those leaders of the organization, the President's job is peculiarly challenging. Grazyna, who has served NARGS in virtually every capacity over her long years of membership, culminated that service as President, and the two years she served will be viewed as among the most important and influential in the past three decades.

She began the process of modernizing and upgrading our web presence, introduced new and innovative fundraising strategies and, working with a talented group of Board members, stopped the decline in membership and began the process of reinvigorating the Chapters. And of course, she presided over the hiring of our current editor, Malcolm McGregor.

On the basis of her years of prior service alone, Grazyna deserves the Award of Merit, but when her Presidency is factored into her commitment and success, the award is, as we often say in our less formal moments, a “no-brainer.” This is an honor she deserves and which she has richly earned. *Peter George.*

LAURA SEROWICZ has been working under the title of Seed Intake Manager for the NARGS Seed Exchange since 2005, but has handled so much more than that title would imply. Apart from receiving seed donations and recording them in the seedex database (which she has organized, edited, and tweaked over the years), she also coordinates the distribution of all of those thousands of donated seeds to the 15-20 re-packaging centers around the US, sending clear instructions, supplies, encouragement... and thanks. Through her careful preparations, close attention to detail, and continuing support, she helps others to



Laura Serowicz receiving her Award of Merit from President Peter George

help NARGS. Her assembled seedlist is an eagerly-awaited document, reflecting her knowledge of current (ever-morphing) taxonomy and assiduous record-keeping.

While the online ordering system was written by our webmaster, Laura spent (and continues to spend) hours, even days, to help define, refine, and de-bug its operations and support the members who use it.

At the conclusion of the main order fulfillment, Laura then prepares the Surplus Seed list, mailing copies to all who requested it. Then she oversees and trouble-shoots yet another round of order-filling.

These responsibilities gobble innumerable hours of her time (as well as major portions of her home), from the first seed donations in early summer until the final accounting after the last order is filled in the spring... every year. She has performed these annual tasks with dedication, wide-ranging abilities, unflagging patience and uncommon grace. While I cannot imagine NARGS without a seed exchange, I also cannot imagine another member who would (could) contribute so much time, care, and capability to this core NARGS benefit. Seed-lovers or not, we all owe Laura our gratitude for helping NARGS remain a vibrant horticultural organization. *Joyce Fingerut.*

RANDY TATROE and I have been joined in service work since 1998. He has become a true friend and is a very dependable associate. Randy says he is not a gardener but he is definitely a “plant person.” He and his wife work side-by-side to maintain one of the premier home gardens in Colorado and the West. His excellent photos have been features in many newsletters and a number of books.

Randy and I have had the good fortune to have car-pooled across the Western US and have traveled to Mexico with the 2009 American Penstemon Society annual meeting. Again, his photographs of the Mexican penstemons are spectacular. We have camped on field trips to the wilds of Wyoming, Steens Mountain in Oregon, various locations in Nevada, White Pine County, Utah, and a few trips through California plant hot spots.

Randy’s association with NARGS and the Denver-based NARGS Rocky Mountain chapter (RMCNARGS) goes back to the 1980s. Randy was the NARGS Treasurer until 2012. His involvement with NARGS also includes hosting numerous circuit speakers. I dare say that between the Tatroe household and the Kelaidis household, over 90% of the NARGS speakers visiting Denver have found excellent meals, engaging conversation, and day trips to our beautiful Rocky Mountains.



Randy Tatroe with his Award of Merit

He served as Treasurer to the 2003 NARGS “Rush to the Rockies” meeting in Breckenridge. When it became apparent that the transportation company we had engaged was not meeting its obligations, he took the reins and fired the company and asked me if we could manage the transportation. We did. Also, after the meeting had ended he spent almost a year with the hotel administrators when it became apparent that there was a disjoint between what we had contracted for, and what we were charged. Randy is a great steward of funding.

In June of 2010, the Rocky Mountain Chapter hosted the NARGS annual meeting “Romancing the Rockies” in Salida which was a great success in no small measure due to Randy’s involvement as Chair of the event. We decided to rent vehicles and drive them ourselves. Once the insurance piece was finalized he struck on a great idea; have some of the attendees drive. We had drivers from California (Ted Kipping) as well as Holland and Kazakhstan. In addition to zooming around Salida to the various hotels in a collective bus pool to the event center, the drivers drove to the various field trip venues. The drivers still talk about this!

Randy has been the President of the Rocky Mountain Chapter twice. One stint was from 2001 to 2005 and another from 2008 - 2011. Randy was also the Treasurer of the local group and Vice-President in 2007. Randy has also been the perennial “head cashier” of our annual chapter Spring plant sales and has done a terrific job organizing the money flow and reporting of such during these events. Our chapter also has a members-only Fall plant sale hosted at members’ homes. Several years for the Tatroes have hosted the sale. A few years ago RMCNARGS helped package seeds for the NARGS seedex and of course he was in the trenches with other volunteers. Randy’s service has been recognized locally and nationally. In 1996 he was given the Award for Service and he was also awarded the 2005 NARGS Special Recognition Award.

Randy’s service does not stop with the rock garden societies. In 2008, a friend and I founded the Eriogonum Society. I asked Randy to be the Treasurer and he did so with great enthusiasm. Randy also pitched in several years with registration packet stuffing. Randy has been involved with the American Penstemon Society in several ways. He was the 2012 Financial Liaison for the APS annual meeting in Laramie, Wyoming, and is the current President of the society.

Randy’s career included head of the Audio-Visual department at Metropolitan State College in Denver. He leverages his vast knowledge of the topic as well as AV hardware very frequently. He arranged the AV piece for the 2012 APS Meeting and did so for several of the NARGS chapter-hosted events. Our monthly meetings usually start with him arranging the projectors. Randy is also the current Vice President, Program Chair, of the Colorado Cactus and Succulent Society in Denver. It is my great pleasure to nominate Randy. *Hugh MacMillan.*

LINC & TIMMY FOSTER MILLSTREAM GARDEN AWARD is for outstanding contributions to the North American Rock Garden Society through the creation of superior gardens. It is not meant to be a competition, but to recognize members’ great gardens across the various styles and regions of the United States and Canada. It is meant to reward the creation of private gardens. There are four categories: Container Garden, the Alpine Rock Garden, the Woodland Garden, and the Special Garden.

There are three awards for this year: EV WHITTEMORE in the “Alpine Rock Garden” category; ROBERT & AUDREY FADEN in the “Special Garden” category, and JOE & BEVERLEY FRENCH in the “Special Garden” category.





EV WHITTEMORE is given the award for creating a superior rock garden, Tall Pines, at her home in Penrose, North Carolina. Tall Pines is a garden of just over 1 acre that was featured in the Spring 2013 issue of the *Quarterly*. Ev is a phenomenal plantswoman and her gardens and gardening skills have been exemplars which NARGS celebrates with this award. She was the spearhead of the founding of the Southern Appalachian Chapter of NARGS and for three decades has used her gardens to demonstrate the art and science of rock gardening in western North Carolina and eastern Tennessee.

Ev has rarely been constrained by what would be expected. Rock garden, slopes of phloxes, greenhouses with overhead fans for difficult alpinists (difficult by anyone's standards), groups of troughs and containers, island beds for groups of special alpine plants---these have characterized her gardening over the three gardens (Fort Knox, Fort Courage, and Tall Pines) managed with supreme plantsmanship and an unceasing attention to detail.

Ev Whittemore has consistently been a leading exponent of pure American rock gardening, having to develop approaches over the years to solve problems (rather than take the solutions of others and apply them) directly connected with place and climate in the southern Appalachians. Her style and example have consistently produced gardens that have stretched the boundaries of what could be done in the mountains of western North Carolina and have led to her being a model for others from around the world. *Malcolm McGregor*.



Ev Whittemore receiving her Award from Executive Secretary Bobby Ward

A naturalistic planting in Ev Whittemore's award-winning garden of *Primula kisoana* and *Arisaema sikkokianum*

BOB & AUDREY FADEN are given the award for the gardens developed by them during more than two decades which have become a destination for dozens and dozens of aspiring and avid gardeners in the Washington, DC area. Their charming, small, private garden around their duplex in Alexandria, Virginia, has serendipitously spilled over into the adjacent, publicly accessible land belonging to the local YMCA and the City of Alexandria (Simpson Park). This means that in addition to the many occasions they've welcomed visitors into their private oasis, it's possible for anyone – at almost any time -- to visit, enjoy, and study the diverse gardens they designed, built, and maintain outside their fence.

The “Expanding Garden,” the name of Bob Faden's long-running column in the Potomac Valley Chapter's *PVC Bulletin*, chronicles the ups and downs of their burgeoning garden-making. The horticultural adventures he recounts are a boon to chapter members, who learn about new plants, the conditions they require, or the effects of the latest weather hazards. As the Fadens have expanded their gardens, their community has benefited from the partnerships they've forged with a number of local groups, including Master Gardeners (Audrey is a 1987 graduate), the City of Alexandria, the YMCA, and the Del Ray Citizens Association. Seeking this cooperation has required countless hours of their time (especially Audrey's) to get approval for new gardens, and establish plans and maintenance programs. Master Gardener volunteers help keep the demonstration gardens in Simpson Park in shape – an invaluable learning experience for many – but caretaking falls mainly to Audrey and Bob.

The Fadens have created rock gardens – one at the back of their home garden and one in Simpson Park, constructed with tufa donated by the US Botanic Garden – where they defy what we think is usually possible to grow in the heat and humidity of the mid-Atlantic, and expand the typical palette of rock garden plants. But they have designed and developed much more: fragrance, butterfly, woodland, and water-wise gardens (designed by Audrey), as well as extensive tree and shrub borders around the YMCA parking lot (designed by Bob and Audrey, with more than 200 genera of woodies at last count), providing visual screening and year-round interest. All together, they grow a wide array of plants from around the world. Many they have raised from cuttings or seed (they have become accomplished propagators and Bob has been known to rescue seedlings from the cracks of a city sidewalk), and we are thankful they share the overflow at our plant exchanges.

It should be noted that gardening is also (or has been) a vocation for these two; Bob, a research botanist at the Smithsonian's National Museum of Natural History, is an international expert on Commelinaceae (the Spiderwort family), and Audrey had a landscape design business for several years. But clearly they can't get enough; the Fadens' love of plants and gardening infuses their daily lives and makes us all the richer for it. Our chapter and the local community are fortunate they share so freely, and with such humor and delight, their experiences and expertise – through conversation, in the example of their glorious gardens, and in their community-minded spirit. *James A McKenney.*

JOE AND BEVERLY FRENCH are given this award for creating a Special Garden at their home in Flat Rock, North Carolina. This garden is one in which rocks, plants, water features, dwarf conifers, shrubs, and trees combine Japanese design elements with skilled gardening and great care and attention to detail.

The Frenches' garden is an exemplary 20-year-old garden. The house and garden sit in a quiet woodland neighborhood. Plantings of phlox, dianthus,

iris, azaleas, and dwarf conifers and other rock garden plants are brought together in a design that shows great care and enthusiasm. The overall balance of plantings around a bridge, stream, waterfall, pond, rocks, and upon a raised-garden bed adjacent to the house bring a Japanese aesthetic to this contemporary rock garden in the Southern Appalachians. The small pond -- bordered



Joe and Beverly French receiving their Award from Executive Secretary Bobby Ward

with rocks, hostas, dwarf azaleas, water iris, and native ferns – contains stepping-stones and floating ducks that “feed” among nymphaea water lilies. Surrounding the garden are white- and pink-flowering dogwoods, pruned-to-shape native cherries, hemlocks, scattered plantings of dwarf pines and Alberta spruces, and a collection of bonsai.

This is not a grand, estate garden but the sort of garden that rock gardeners could learn from and aspire to because of the garden’s balance and concentrated use of limited space. It is an unheralded, private, tucked-away garden, seen only by a few, yet showing supreme skill and expert craftsmanship. It was begun in 1990 after the Frenches retired to western North Carolina from Connecticut. They credit Ev Whittemore, a fellow member of the Southern Appalachian Chapter of NARGS, for the inspiration for their garden, while Joe served as chapter chair and the Frenches attended lectures and trough-making workshops led by Ev. This technical knowledge was added to their own desire to transform the space at their disposal in a coherent vision of a Japanese house and garden in a southern Appalachian setting. The result is a very special garden. *Bobby Ward.*

2013 NARGS Awards

NARGS AWARDS ARE MADE TO THOSE WHOM THE SOCIETY WISHES TO HONOR. THIS YEAR AWARDS WERE MADE AS FOLLOWS:

THE MARCEL LE PINIEC AWARD, given to a nursery person, propagator, hybridizer, or plant explorer who is currently actively engaged in extending and enriching the plant material available to rock gardeners, is awarded this year to **JOHN N. SPAIN** for his more than 45 years of dedication and accomplishment as a plant explorer, propagator, and nurseryman. With his classic book, *Growing Winter Hardy Cacti in Cold/Wet Climate Conditions*, and his amazing generosity, tutorials and workshops, he has enriched the knowledge of the rock gardening community everywhere.

AWARDS OF MERIT are given to those who have made outstanding contributions to rock and alpine gardening and to NARGS. In addition, the recipients will be people of demonstrated plantsmanship and an active member of the Society. This year awards were made to:

RICHARD BARTLETT has served NARGS as president for a full term of three years, a responsibility that he undertook and committed himself to with all his heart. Dick established the Millstream Award during his tenure, a wonderful way to acknowledge and reward some of the great gardeners in our art who might not otherwise receive recognition.

GRAZYNA GRAUER has served NARGS in many roles. With over 2500 members worldwide, and an increasingly complex and robust presence online, NARGS depends even more on a few people willing and able to commit huge amounts of time and effort to the organization for the simple satisfaction of knowing their work is benefiting thousands of gardeners in over 35 countries. Grazyna, who has served NARGS in virtually every capacity over her long years of membership, culminated that service as President, and the 2 years she served will be viewed as among the most important and influential in the past three decades.

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Ev Whittemore (above), and Joe and Beverley French (below) receiving their awards from Executive Secretary, Bobby Ward.

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Further details of each award and further photographs from the Annual Meeting in Asheville will be found in the online edition of the *Quarterly* on the NARGS website at <www.nargs.org>

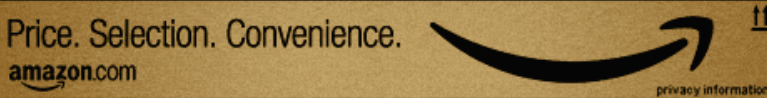




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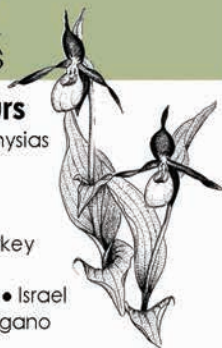
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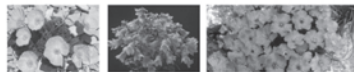
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NARGS STRUCTURE _____

The officers of the North American Rock Garden Society consist of a president, a vice-president, a recording secretary, and a treasurer. The officers are elected by the membership.

The Board of Directors of NARGS consists of the four above-named officers, the immediate past president of NARGS, nine elected directors, and the chair of each NARGS chapter. Chapter chairs are required to be NARGS members by NARGS by-laws.

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.

OFFICERS _____

| | |
|--------------------------|--|
| President | Peter George, petergeorge@verizon.net PO Box 833, Petersham, MA 01366 |
| Vice President | Harvey Wrightman, wrightman@golden.net RR#3, 1503 Napperton Dr., Kerwood, ON N0M 2B0 |
| Recording Secretary | Ben Burr, bnfburr@verizon.net PO Box 549, Bellport, NY 11713 |
| Treasurer | Bill Adams, 330 Carlile Ave., Pueblo, CO 81004-1054 |
| Director-at-Large | Betty Anne Spar, 206 Wolfe St., Alexandria, VA 22314 |
| Immediate Past President | Grazyna Grauer, Dublin, OH |

DIRECTORS OF THE BOARD _____

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| 2011–2014 | Lola Lloyd Horwitz, Brooklyn, NY Janet Novak, Philadelphia, PA Betty Spar, Alexandria, VA |
| 2012–2015 | Jan Jeddeloh, Portland, OR Matt Mattus, Worcester, MA Gwen Moore, Lakewood, CO |
| 2013–2016 | Gordon MacKay, Cowichan Bay, BC Don LaFond, Pinkney, MI James Locklear, Lincoln, NE |

MANAGERS _____

| | |
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| Executive Secretary | Bobby J. Ward (919) 781-3291 PO Box 18604, Raleigh, NC 27619-8604 nargs@nc.rr.com |
|---------------------|---|

Back cover: *Heuchera pubescens* - Martha Oliver

The cover features a photograph of a rock garden. In the foreground, several plants with large, green, lobed leaves and tall, thin stems topped with clusters of small, light-colored flowers grow from a bed of grey and tan rocks. The background is a dark, textured rock wall with some green ferns and foliage visible on the left and right sides. A large, white, stylized letter 'Q' is overlaid on the top left, with the words 'Rock Garden' and 'Quarterly' integrated into its shape.

Rock Garden

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