

Volume 69 # 4

Bulletin of the North American Rock Garden Society



**ROCK GARDEN
QUARTERLY**

Fall 2011

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Jane McGary gardens in Portland, Oregon, and has been growing a large collection of bulbs for about 20 years. She is the previous editor of the Rock Garden Quarterly and compiled the NARGS/Timber Press books *Rock Garden Plants of North America*, *Bulbs of North America*, and *Rock Garden Design and Construction*. She is the current president of the Columbia-Willamette Chapter and the past president of the Pacific Bulb Society

Malcolm McGregor is editor of the *Rock Garden Quarterly*, gardens in East Yorkshire in northern England, and among many other things lectures in Europe and North America on gardening, plants, and the novel.

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

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ROCK GARDEN

Quarterly

BULLETIN OF THE NORTH AMERICAN ROCK GARDEN SOCIETY

Volume 69 Number 4

Fall 2011

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*The Northwestern Chapter of the
North American Rock Garden Society*

Invites you to

**The NARGS 2012 Annual Meeting
and 37th Annual Western
WINTER STUDY WEEKEND**



ROADSIDE BOTANIZING

**EAST OF THE CASCADE
MOUNTAINS**

**March 9, 10, 11
2012**

At the Everett Holiday Inn Hotel

This Study Weekend will focus on an area often overlooked: the flora of Washington and Oregon east of the Cascade Mountains. Here the habitat varies from forest to shrub-steppe, and from desert to riparian ecosystems. The Columbia River winds its way through this region, providing a broad canvas of remarkable habitats and plants.

Speakers

Our knowledgeable speakers will cover all aspects of the unique flora east of the Cascade Mountains — History, Biology, Geology and Growing and Propagation.

Ted Alway

Finding and Propagating Select Central Washington Natives

Ted Alway operates Derby Canyon Natives, producing Central Washington native plants for restoration and landscaping.

derbycanyonnatives.com

Joseph Arnett

Looking for What Might Not Be There: Rare plants in the Wenatchee Mountains

Joseph Arnett is the state rare plant botanist for the Washington Natural Heritage program. The focus of his work is to study and conserve rare plants and ecosystems.

Paige Embry

Fire, Floods, and Flora: How the geologic events of the past shape the plants of the present

Paige is a geologist turned garden coach/designer as well as an instructor of horticulture. gardeningbasicseattle.com

Gwen Moore (Kelaidis)

Seed Collecting: From Bloom to Seedpot

Gwen Moore is well-known to NARGS members as the editor of the Bulletin for 11 years as well as the former co-owner of Rocky Mountain Rare Plants. She is the author of several authoritative books on rock gardening.

Truls Jensen

Blue Skies Crying in the Rain: Eastside Plants in Westside Gardens

Truls is co-owner of Wild Ginger Farm, offering a wide variety of alpines, rock garden plants, shrubs and miniature conifers, and also native plants of central Washington and the interior.

wildgingerfarm.com

Jack Nisbet

A Remarkable Garden: David Douglas and the Attraction of Rocky Ground

Jack Nisbet is the author of several works that explore the human and natural history of the Intermountain West. He has been called "one of the Northwest's great storytellers".

jacknisbet.com

Paul Slichter

The Unique Flora Found East of the Cascade Mountains of Oregon and Washington

Paul Slichter is a biologist and photographer who has explored much of Oregon and Washington, documenting the flora and fauna through photography.

Science.halleyhosting.com/nature/nature.htm

Attractions



Plant Sales

The Pacific Northwest is well known for its excellent specialty nurseries. Enjoy shopping for hard-to-find, must-have plants offered by the many vendors at our plant sale, as well as donated plants from our chapter members.

Phytosanitary inspection will be available for visitors from outside the U.S.

Book Sales

Browse through an extensive selection of gardening books in our used book section.

Silent auction

Bid on unique and special items carefully selected to entice the most reticent shopper.

Garden Tours

Both public and private gardens will be open for your enjoyment. Tour information will be sent prior to the Winter Study Weekend for those who plan to come early or stay late to explore the area.

Demonstrations

Experts in many areas will present short demonstrations on various gardening techniques.

Plant displays

View photographs, troughs, and plants from members' collections.

Conference Site

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3105 Pine Street - Everett, Wa 98201

A full service hotel including:

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- Free wireless/wired internet
- Free parking
- Free business center

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Call toll-free at 1-866-700-1188 or direct/international at 1-425-339-2000.

Mention "NARGS" to receive our discounted room rate of \$99 per night.

The 2012 Annual Meeting will be in Everett, Washington in March. There will be lots on offer at the weekend but for those who want to make it even more of a holiday **Doris Taggart** provides a great introduction to the flowers of the Columbia River Gorge — just one of the places that would make a great extension to the Annual Meeting.



Basalt cliffs with *Lomatium columbianum*

March might sound really early to be looking for wildflowers but **spring** comes early to the **Columbia River Gorge.**



Quercus garryana

IN 1792 CAPTAIN GRAY sailing from Boston, Massachusetts rounded Cape Horn and headed north. Eventually he left the turbulent seas of the Pacific Ocean and crossed the bar of the “Great River of the West” as it was known by early explorers. He slid into its quiet waters, traveled a short distance upstream, claimed the river for the United States and named it the Columbia after his ship, the Columbia Rediviva.

The Columbia River cuts its 88-mile gorge down through the basaltic layers formed by massive lava flows. Ice sheets in Canada and Montana repeatedly formed ice dams that held back enormous volumes of water. When these broke, the water poured westward through the gorge, scouring its walls up to 3,000 to 4,000 feet deep. Today the Columbia flows through the gorge at about 100 feet above sea level, forming the border between Washington and Oregon States. It is the only lowland passage through the Cascade Mountains and in 1986 was named a National Scenic River. It is a unique botanical treasure.

March brings the first sweep of wild flowers on both sides of the gorge. On the Oregon shore it is easy to drive along the Old Scenic Highway built by skilled Italian stone masons in 1915. It runs from west to east winding through a land of waterfalls plunging down almost vertical cliffs in the temperate rain forests where precipitation can reach 100 inches a year. There are many pull-offs, and on the north-facing shady banks the endemic *Synthyris stellata* lines the road. *Dicentra cucullaria*, Dutchman’s breeches, related to the very common *D. formosa*, grows in moist areas but it is an uncommon find.

Precipitation decreases eastward to 30 inches a year in the city of Hood River in Oregon, a good base from which to explore both sides of



Tom McCall Preserve with *Lithophragma parviflora*
and *Olsynium douglasii*

the gorge as a 75-cent toll bridge gives easy access to the northern, Washington, side where *Quercus garryana* and a few *Pinus ponderosa* clothe the slopes.

At Catherine Creek *Olsynium douglasii*, formerly *Sisyrinchium douglasii*, covers the swales that are wet in springtime and totally dried out in summer. The blossoms form drifts across the green hillsides. White forms are sometimes seen; striped blossoms are a rarity. To reach Catherine Creek, cross the Hood River Bridge into Washington, turn east on Highway 14, and drive 5.8 miles to Rowland Lake where Highway 8 turns sharply left. The parking lot is 1.2 miles ahead, but drive slowly and watch for tire marks where cars have pulled off, a sure botanical

Lomatium grayii on basalt cliffs





Lomatium columbianum

sign. The low meadows are covered with *Lomatium grayii*, pungent desert parsley. Just crush the leaves.

Basaltic cliffs tower above the road and large woody taproots anchor the *Lomatium grayii* to cracks in the vertical rock faces. Explore the base of the cliffs where pink heads of *Lomatium columbianum*, an endemic, stand on sturdy stems. *Crocidium multicaule* brightens rocky ground with its brilliant yellow daisy like heads. Once at the parking lot there is a choice of easy or more strenuous hikes. Paths lead up the gently rising ground with open meadows, oak woodlands and March-blooming flowers. Drop down to the creek level and cross it at the makeshift

bridge. The trail leads below an impressive rock arch, up to power lines from where it circles back to the road. Look for flowers all the way. An easy one-mile paved path, with benches, drops towards the river and gradually returns to the parking lot. *Fritillaria pudica*, often found at timberline, is here almost at sea level, 2 to 3 inches tall, baked in the dry ground of summer. "Pudica" means bashful, describing the hanging yellow bells. Get down on your knees to enjoy its lovely scent. The blossoms turn shades of orange as they age. Even closer to the ground are clumps of *Orobancha uniflora*, the naked broomrape. The delicate flowers, shaped like snowflakes, of *Lithophragma parviflora*, the rock breaker, cover very low rocky outcrops, but it too shrivels away and becomes dormant by midsummer.

Looking across the Columbia to the Oregon side you can see the Tom McCall Preserve rising in steps to a wide parking lot with limitless views of the eastern gorge. There precipitation decreases to around 10 inches, and the gray sagebrush foliage of *Artemisia tridentata* predominates. To reach Tom McCall Preserve from Hood River, drive I-84 to Mosier exit 69, continue through town and follow Highway 30 as it twists and turns for 6.6 miles. Another native more usually growing at high elevations is *Erythronium grandiflorum*, blooming in early March under the *Quercus garryana*, and on the roadside banks. Masses of *Olsynium douglasii* can be seen, from the roadside to the



Olsynium douglasii

She Who Watches



rising ground beyond. Once at Tom McCall Preserve walk in either direction: across the road down to the vernal pools where the rare *Hydrophyllum thomsonii* has been found, or across the meadows to the base of Tom McCall Point, from where the trail does not open until later in the year. The native plants that can be seen at Catherine Creek are also found here on the north-facing side of the gorge.

Friends of the Columbia Gorge work to ensure that the wild and beautiful Columbia Gorge remains an unspoiled treasure for all to enjoy. *Wild Flowers of the Columbia River Gorge*, by Russ Jolley, is a comprehensive field guide, small enough to carry in a day pack. The volcanic peak of Mount Hood looks down from 11237 feet to the mighty river below. Tsagaglallal or “She Who Watches,” an ancient Indian petroglyph in lower Columbia Hills State Park on the Washington side, also watches at river level. Did she see the Lewis and Clark expedition as they passed on their way to the Pacific Ocean? Does she watch the salmon every year as they swim upstream to their spawning grounds?

The meaning of “She Who Watches” really is a mystery.

Make a Vacation out of the trip!



The Puget Sound basin is defined by water and mountains and contains stunning scenery and bustling cities. The Columbia River Gorge, the Vantage area and Gingko Petrified Forest east of the Cascades, Puget Sound beaches, and the San Juan Islands, all provide excellent hiking.

Train service is a convenient two blocks from the hotel, giving easy access to Seattle, Portland and Vancouver, B.C. Scenic ferry service from Seattle or Anacortes takes you to Victoria, B.C. or the San Juan Islands. From the bustling Pike Place Market to the Ballard Locks, Seattle provides gardens, museums, galleries, shopping, music, micro-breweries...

Closer to Everett there are flocks of snow geese and swans wintering in the Skagit Valley, beautiful Deception Pass State Park, wineries to tour, and outlet malls. In Everett itself, there are numerous restaurants, pubs, and shops.



Everett's Evergreen Arboretum and Gardens include a rock garden, northwest natives garden, conifer garden, woodland garden, perennial border and more.

Specialty nurseries abound. One could spend months touring nurseries here and still not exhaust the possibilities. At www.specialtynurseries.com you can find listings for a day of nursery nirvana.

Whale watching tours for gray whales begin in early March from Anacortes. See www.seattle.gov/html/visitor/whales.htm for more information.

The Everett Events Center Conference Center houses the Pilchuck Glass Collection and the Shack Art Center showcases glass blowing. The downtown sculpture walk offers a display of public art.

The Future of Flight Tour at Boeing Everett and the Museum of Flight Restoration Center at Paine Field will fascinate aviation buffs.

The nearby town of Snohomish offers antique shopping.

The Tulalip Resort Casino, also nearby, is located next to shopping outlets.

**The NW Chapter website has additional information on the
Winter Study Weekend at: www.nargsnw.org**

**Or contact Ilse Burch at:
Mail4IlseB@gmail.com
Or call 425-681-9341**

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NARGS on the Alpine Garden Trail

or

Seeking the plants that survive in "The
World's Worst Weather"

ALBERT MARTIN

New Hampshire was host to this year's Annual Meeting (reported on p.349), and after the main activities of the meeting were over an intrepid group traveled on to look at some of the plants they'd seen during presentations.

NARGS members came from all areas of North America to visit a very special place: the Alpine Garden Trail near the top of Mount Washington. For them, this trip was comparable to an intimate visit



The view from Mount Washington from above the Alpine Garden, where NARGS members spent a day exploring the high alpine flora of New England. The road is about 3500 feet below, about two-thirds of a mile.

to the authentic home of dear friends: diapensia, mountain cranberry, Labrador tea, alpine goldenrod and other alpine plants. NARGS members have heard about these plants, recognize their names and sometimes grow them in their gardens but may never have seen them in their natural surroundings. Arthur Haines, who was the guide and lecturer, is a research botanist employed by the New England Wild Flower Society, and his new work, due out in the fall, is *The Flora of New England*. This will provide updated identification keys, images, and distribution maps for New England's wild plants, including the alpine plants. At the NARGS annual meeting Arthur talked about the ways that these plants have adapted to the harsh alpine environment. The day after the end of the convention, he and some of the members of NARGS went to visit these plants in their native environment where he gave short, impromptu, in-situ lectures about what was found.

Mount Washington is near major population centers on the East Coast. It certainly has many visitors who come during the summer to the White Mountains of New Hampshire for the hiking, wilderness adventure and recreation. But Mount Washington is also known as the place of "The World's Worst Weather," a title it has justly earned. It is



NARGS members descending the Huntington Ravine Trail on the way to the Alpine Garden Trail. The best way to get to the Trail is to walk from the road that goes to the summit of Mount Washington, from the parking area at a place called "The Cow Pasture" down about 250 feet. Of course the only way back is to walk up the same 250 feet.

also one of the few places where a hike of only a few miles long (and less than a mile up) can lead to major temperature and wind changes. For example, and this is a very typical sample for the summer, on mid-afternoon of Monday, July 25th (as this article is being written), the temperature at the base of the mountain, at 2,022 feet above sea level, is 64°F. The temperature at the peak of the mountain, at 6,288 feet, is 44°F. The wind is about 20 mph, giving a wind chill factor of about 35°. For comparison, from Bangor, Maine to New York City the temperature is about 68°F with moderate winds. These are mid-summer temperatures. Winter comes early, stays long, and is very cold.

Wikipedia's entry says of the weather: "The weather of Mount Washington is also notoriously erratic. This is partly due to the convergence of several storm tracks, mainly from the South Atlantic, Gulf region and Pacific Northwest. The vertical rise of the Presidential Range, combined with its north-south orientation, makes it a significant barrier to westerly winds. Low-pressure systems are more favorable to develop along the coastline in the winter months due to the relative



Arthur Haines is talking to members of NARGS while sitting on a rock just off of the Huntington Ravine Trail with a small portion of the Alpine Garden behind him. A small patch of mountain aster is just to his left. He will introduce NARGS to the special environment of Mount Washington, talking about and demonstrating the harshness of the environment, the lack of good soil to grow in and how it affects the plant life in this arctic zone.

temperature differences between the Northeast and the Atlantic Ocean. With these factors combined, winds exceeding hurricane force occur an average of 110 days per year. From November to April, these strong winds are likely to occur during two-thirds of the days.”

To repeat, please look at the pictures above, and notice how everyone is dressed for what was a very balmy mid-June day lower down. They are wearing clothing more suitable for a mid-fall outing.

This alpine zone is unique in northern New England. Defined as the area above tree, everything in the alpine zone is exposed to this harsh, arctic-like weather. The zone starts in western Massachusetts, goes through parts of the Green Mountains of Vermont, becomes well established in New Hampshire where there are about 35 square miles of exposed areas within the White Mountains, and then extends north through Maine and Canada to the Arctic Circle.

Some of the plants that grow in the alpine zone are unique to New England; the ones that are not unique are almost always found far to the north in Greenland or Newfoundland.



Labrador tea (*Rhododendron groenlandicum*) with Mount Adams in the background. This photo was taken one day before the NARGS walk, about halfway up Mount Washington, just below the alpine zone, but not far enough down the mountain to be in actual forests. The flowers are both fuller and more numerous. The plant may be hiding in the balsam fir, but both the fir and the Labrador tea are healthy and growing vigorously.

One of those people who walked the Alpine Garden has her garden on the South Fork of Long Island, New York. As a member of NARGS, she was excited to see the actual setting of the alpine plants and surprised at how different the actual Alpine Garden is when compared to the rock gardens created by society members. She noted that the Alpine Garden is not gardened, the plants live in bunches, and there is no structure. To her the plants looked extraordinarily small. As she said, she had never seen a rhododendron plant the size of a quarter.

Another way that these plants survive is by blooming when conditions are right and going to seed as quickly as possible. NARGS members saw another example of this. At the top of the trail there



Rhododendron groenlandicum in the Alpine Garden high on Mount Washington during the NARGS walk. It is obvious that the plants in the two pictures are very different. The plant (opposite) below the alpine zone, even though high on Mount Washington, is vigorous and healthy. It has flowered. The flowers are large. The plant may be smaller than normal, but it looks good.

This plant, higher on the mountain, shows a small plant that has not yet flowered. There are few other plants around it. It is growing very close to the ground. Taken only one day and less than half a mile apart, the two plants are in very dissimilar stages of growth.

was a patch of *Loiseluria procumbens* in bloom. At the base of the trail they had all bloomed and gone to seed. The altitude difference is, perhaps, no more than 150 feet, approximately the height of a 14-story office building. That is enough to make a difference in bloom time. The plants higher up were in a slightly colder climate and needed to wait longer for a good time to bloom. The plants lower down were in a slightly warmer climate. They had bloomed, shed the flower petals and developed fruit.

For many members this trip was more than just a visit. Some of the group were able, for the first time, to see what their plants look like when growing in their native alpine setting.

Allison Bell (below) is another person who is very familiar with the Alpine Garden Trail. Her hand rests just above the cairns that mark the trail. The small green patch of vegetation bisected by her shoulders is the area above Pinnacle Gulf where Arthur Haines later conducted a very intimate discussion about specific alpine plants. The area of the alpine garden covers the area of this picture. It is not a very large area, but it is covered with all the various flowers that grow in the alpine zone of Mount Washington. Though it cannot be seen here, the Garden is on the leeward side of the mountain and is somewhat protected from the very harshest of the weather of the area.

Nothing grows any higher than the top of hiking boots. The plants here found were embedded in the vegetation. Nothing is large. The weather is harsh. As a plant, sticking your head above your neighbor's is a recipe for disaster, for being dried out by the wind and cold.



Loiseluria procumbens (right) on Mount Washington - an alpine azalea's view of the world.



Awards

AWARD OF MERIT - CHERYL PHILSTROM

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.



Cheryl Philstrom receiving the Award at her chapter meeting in Minnesota

CHERYL HAS BEEN a member of the Minnesota Chapter and NARGS since 1981. She was the editor of our "Minnesota Rock Plant Notes" for 9 years. In that time she expanded the newsletter, adding many pictures, a wide variety of articles, and special features. She was persistent in obtaining information from members to keep the newsletter of interest. Cheryl started the process of sending the newsletter to members online. This saved the chapter money by reducing the mailing cost. Cheryl not only sent out 5 issues a year of the newsletter, but also sent emails reminding us to dig plants for our plant sale, of programs,

tours, NARGS news and any other event to be noted. She attended board meetings and brought special baked treats to our meetings. She has attended NARGS regional and national meetings. Along with 13 other members from Minnesota, Cheryl attended the 2001 International Rock Garden Conference in Edinburgh, Scotland and the International Rock Garden Interim Conference in Utah.

Cheryl also belongs to the American Orchid Society, the Daylily Society of Minnesota, the Minnesota Landscape Arboretum and the Washington County Horticulture Society. She is a Master Gardener through Washington County in Minnesota.

She has managed to do all of this while working full time at Travelers Insurance and caring for her own plants. Cheryl truly deserves the Award of Merit. *Shirley Friberg.*

AWARD OF MERIT - JACQUES THOMPSON

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.

JACQUES THOMPSON IS exactly the sort of person for whom the Award of Merit is intended: he is a great plantsman, and he makes an outstanding contribution to our rock garden club.

Jacques is responsible for many members being in our group, including me, and he is always generous with plants and gardening information

Jacques shares his knowledge by giving talks and demonstrations to other garden clubs and chapters with the hopes of attracting others to join NARGS

He is one of my mentors and is an

extraordinary gardener, his garden a great example of the art of rock gardening, plants and rock seemingly inevitable in their conjunctions and their placement. Great plants in a great garden.

He is always willing to host an outing at his home and garden, host the plant sales for a weekend event, sometimes by the busload.

In the past Jacques has served as our Chapter President and Vice President and he is currently serving as Vice President again. Through donations of time, tufa, and knowledge, Jacques was an instrumental force for our very successful Eastern Winter Study Weekend.

Through his vast knowledge of gardening, generosity and willingness to share his time, knowledge, and plants, Jacques is directly responsible for a lot of the success of our chapter, and I am proud to be his friend. Congratulations Jacques! *Don LaFond.*



Jacques Thompson looking on, as host, at a tri-state summer weekend plant auction that is taking place, along with other plant sales, in his yard in Ypsilanti, Michigan

LINC & TIMMY FOSTER MILLSTREAM GARDEN AWARD - ANNE SPIEGEL

LINC & TIMMY FOSTER MILLSTREAM GARDEN AWARD is for an outstanding contribution to the North American Rock Garden Society for creating a superior private garden. This 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.



Anne Spiegel, with husband Joe and companion Ranger, momentarily resting in her spectacular rock garden.

SOME PEOPLE BUILD their gardens from the bottom up, creating raised beds, rock gardens and lawns that rise heroically but hardly above the lie of the land. Anne Spiegel did the opposite (as only a great gardener would, of course), by removing the flesh and gristle of her land and exposing the bones – giant skeletons of stone that have survived the millennia to form one of the finest gardens it has been my privilege to visit.

It would be so easy to say that Anne and her husband Joe removed soil and hauled rocks to create this idyllic spot - the reality is thousands upon thousands of hours of backbreaking toil expended to mold these

mammoth cliffs to Anne's preferred design, stairways of stone, and pristine screes laid in meticulous detail. Beautifully planted troughs, extensive crevice fields, and incredible sand beds complement the cliffs bejewelled with alpine gems of every color and persuasion.

Anne gardens in the town of LaGrange near Poughkeepsie, New York, and the folks of that area should be proud to number this amazing plantswoman as one of theirs, as indeed should all of us in NARGS, and in the world of alpine plants in general. Anne's garden is actually a State Park in miniature, a Yosemite of the East; and like such places everywhere it is a testimony to a truly inspirational naturalist, a master grower, one of the finest gardeners and people it has been my pleasure to meet. *Cliff Booker.*

GEOFFREY CHARLESWORTH AWARD - CHARLES HIPKIN

GEOFFREY CHARLESWORTH AWARD is given for the best article in the previous year's Rock Garden Quarterly.

THE WINNER OF this award for 2010 (volume 68) is Dr. Charles Hipkin, for his entertaining article in the winter issue. "The Summer Flora of the San Juan Mountains" was a wonderfully informative article about several hikes in the southern Colorado Rocky Mountains, complete with botanical references, jeep directions, and descriptions of plants in peak bloom times. The photographs that he had taken to accompany the text were beautiful, capturing the mountain panorama as well as highlighting the blossoming endemics. His article was written like a native Coloradoan, yet Charles is from Wales, and teaches plant biology in the Department of Pure and Applied Ecology at Swansea University, South Wales.

The main focus of Charles Hipkin's research has been in nitrogen metabolism of plants and microorganisms. But, as a man of many interests, his enthusiasm for botanical field work is evident..

Over the last 20 years he has developed a strong interest in alpine vegetation during which time he has traveled widely in the Central European mountains and the Rocky Mountains, Sierra Nevada and Cascade Range of North America. Each year he gives numerous lectures on the biology of mountain plants. Hilary and Charles Hipkin have contributed many flora hike descriptions of the North American mountains at <www.mountainflora.ca>.

Charles Hipkin on Hunt Mountain in the Big Horn Mountains among a field of *Eritrichium nanum*.



MARCEL LE PINIEC AWARD - ALAN BRADSHAW

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.

THERE IS NO-ONE better qualified for this award than Alan Bradshaw. Through his seed collecting and distribution business, Alplains, he has enriched the rock gardening experience of gardeners around the world by supplying them with the seed of the choicest North American alpine plants. His travels take him from the deserts of California, Texas and Arizona to the mountains of Oregon and Washington and all across the Rocky Mountains to collect seed in pristine alpine wilderness areas. He often travels thirty to forty thousand miles a year in order to find such a wide variety of native plants for the catalog, sometimes enduring six-hour bone-rattling drives up steep jeep trails followed by long hikes into the mountains, only to have to retrace his steps after collecting that rare seed. After hearing some of the stories of these expeditions and seeing photos of the areas where they are collected, one gets a new perspective on how valuable that packet of seed really is.

There is no current seed collector providing such a wide range of native alpine seeds; his current catalog lists more than 1000 rare and unusual plant species from mountain shrubs and trees to cacti and the tiniest alpine cushions. Some of the choice plants available at Alplains include *Aquilegia jonesii*, *Eritrichium aretioides*, *Eritrichium howardii*, and

Alan Bradshaw on one of his collecting trips posing with cushions of *Kelseya uniflora*



Hymenoxis lapidicola, to name a few. Alan has done this for 21 years and the rock gardening community around the world is so much richer due to his efforts. I think his motto "Dedicated to the Preservation of Wild Flora and Dissemination of the Harvest" says it all. *Ed Glover*.

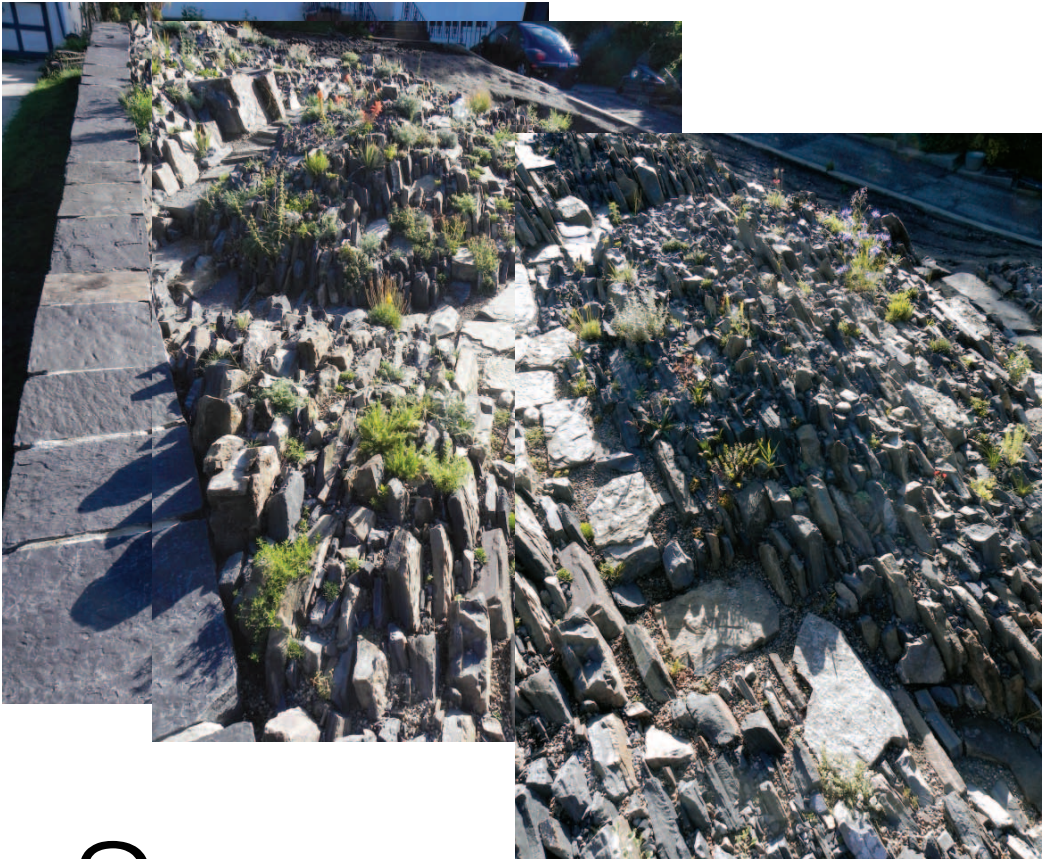
I HAVE ORDERED seed from Alplains for a number of years and have been impressed with the breadth and quality of the seeds that Alan makes available through his travels throughout the West. I did not, however, appreciate the enormity of what is entailed in seed collection until I heard Alan speak to our chapter recently. I was quite astounded at the photographs of the areas to which he travels in order to collect the seed we are all so anxious to secure from him. I was recently reminded by another member of NARGS about Alan's methods for collecting *Penstemon debilis*. He must tie himself to the trunk of a tree while he traverses on loose shale to collect the seed.

Through his catalog he has opened up a whole new world of possibilities to us. The gardens of NARGS members and those of many others around the world are richer because of Alan Bradshaw and his work as the proprietor of Alplains. He is supremely qualified for recognition as a recipient for the Marcel Le Piniec award, a recognition which is certainly long overdue. *Barb Wetzel*.

AS A PAST recipient of this award, I can vouch for Alan's immense contributions over the last few decades to the art of rock gardening. Alan has been one of the four leading collectors of seed in Western North America: his collections are second to none when it comes to selectivity and choiceness of what he gathers. Alan is responsible for introducing *Salvia pachyphylla* and *Keckiella corymbosa*, two among many of the spectacular western native plants that are firmly in cultivation thanks to his efforts. He has also collected in South America, and offers a tremendous range of plants from around the world, many of which he grows in his extensive gardens. It is fair to say that Alan is the preeminent source of rock garden plants native to North America. He has been an active member of the North American Rock Garden Society, giving outstanding presentations and hosting visitors from Europe and beyond. I believe no one better deserves the Marcel Le Piniec award than this indefatigable and scrupulous seed collector! *Panayoti Kelaidis*.

The Edgar T. Wherry Award, Marvin E. Black Award, Robert Senior Award, and Carleton Worth Award, were not awarded.

Nominations are open for next year's awards. Details can be found on p. 375.




Sun, Stone & Water

2: Siting plants in the crevice garden

STEPHANIE FERGUSON







IN THE FIRST part of “Sun, Stone, and Water” we described how our new crevice garden in the front yard was designed and built. And so it follows that this second part of the article will be about some of the plants that are now growing in it.

This south sloping garden is designed to house a range of plants from moraine dwellers to cacti. These plants are populating a series of ascending parallel ridges, structures that afford a diverse selection of microclimates. The planting strategy is to accommodate the individual requirements of a particular species largely by siting and, to a lesser extent, by adjusting the proportion of sand and gravel in the growing matrix. Generally speaking, the plants of cool, moist high altitudes are placed on the lower ridges at the bottom of the garden and on the north facing back slopes of each ridge higher up. Desert plants are placed high on the southern slopes of each of the upper ridges. It has evolved that most Chinese species grow at the bottom of the hill and most North American and Turkish plants live where it is hottest, at the very top; with South Americans and Central Asians occupying the middle regions.

The rather stark design of the new garden (no trees within it, although adjacent large elms partially shade the lower verges), almost full solar exposure from sunrise to sunset, and a standardized growing matrix without an organic component makes aspect the single most important consideration when siting a new plant. When plants are placed in full sun, careful attention to their placement becomes especially critical for their long term survival. Careful siting allows plants to survive through periods of drought or excessive rainfall. Generally speaking, badly sited plants can be maintained with attentive culture, but this is not a long term solution.

The primacy of aspect is less critical in partially shaded locations. A plant that prefers part shade will grow in the same way (in terms of height, size and number of flowers, etc.) and thrive regardless of what aspect it has been planted on. An example of this may be found in the genus *Paraquilegia*.

Paraquilegias have an undeserved reputation for intractability in cultivation. After trying numerous wild and garden collections of these plants, it may be said that they are variable in terms of vigor. Some collections, especially those from Tibet, grow very slowly indeed, while plants grown from garden collected seed can mature and bloom within a year and a half. Apparently, the inevitable process of selection that can occur in the garden is invaluable with *paraquilegias*. So, this is a genus that rewards the persistent plodder, the patient gatherer of garden seed. Growing now in the garden are seedlings descended from selections

Gentiana georgei (along with mostly Chinese plants such as *Lilium lophophorum*, *Leontopodium*, *Cyananthus*, other *Gentiana*, *Saussurea*, *Androsace*, *Saxifraga*, *Primula*, and various *Fabaceae*) situated low on a north aspect with the upper ridges draining into it.



Paraquilegia microphylla from Tibetan seed

originating in Yunnan, Tibet, and Kyrgystan—their lineage has been repeatedly recombined by the work of the bees. As these can be very long lived plants, the descendants are growing alongside their ancestors and complicating the mix even further.

Paraquilegias grow best in tight crevices in a cool location with a lot of light—bright partial shade. They will grow on any aspect in partial shade, but in full sun they must be placed in a north or east crevice. Partially shaded Paraquilegias grow more luxuriantly and their flowering is more abundant and long lasting.

In our garden *Gentiana georgei* grows in similar conditions to *Paraquilegia*. Of the many species of Chinese gentians that have been introduced from the wild recently, this one has consistently established itself easily, given a low north or east aspect in full sun. While it prefers a cool place, this species will endure some heat if not allowed to dry out. Widespread in the wild, *Gentiana georgei* grows on limestone, perhaps accounting for its success in our sandy, gravelly garden.

We can usually be confident of success establishing plants from rocky limestone and shale habitats as these closely approximate our “landscape” at home. Plants originally found on acidic substrates

Gentiana georgei (opposite) seems to suit our climate better than most other Chinese high altitude gentians.



tend to be more problematic for us, but this is not always true (there always seem to be exceptions to every rule in the culture of alpine plants). Descriptions of habitat from the field are very valuable tools that some collectors kindly share. This information can allow for a more discerning selection of suitable plants, as well as a hint as to where the selected species may be placed in the garden. In this way, *Gentiana*

georgei found its way into our garden. The flowers of this exquisite species are a light cobalt blue-violet with black stripes and they appear in August and September, when the rest of the garden looks slightly exhausted and has gone to seed.

Saxifrages reward proper siting like no other plant. If they are placed in too hot a location, they will exhibit the most startling sun damage imaginable; if they are grown in too shady an environment, their distinctive beauty is lessened—their leaves seem more sharply articulated in better light. These plants are a lesson in balance and correct siting. Most of our



Saxifraga lhasana growing hard on a north slope

saxifrages (generally these consist of kabschias and other high altitude species) are grown in full sun, but always on a north or east incline to ensure moisture at the roots. Some very heat sensitive Himalayan species must be placed on a north slope in partial shade at the bottom of the garden, in the coolest places that never dry out. The Tibetan *Saxifraga lhasana*, a *Ciliatae* section species rather than a kabschia, typically prefers a north slope in full sun. It will grow in partial shade, but its

comparatively large flowering stem (large and antler-like in relation to its rosette base) can be weakened by low light and rainy weather. It is a distinctively beautiful plant, unlike any other we've grown, especially in the contrast between its reddish stem and white flowers over a sharply drawn globular rosette. Some clones are monocarpic, while others are not.

Another distinct and rosetted Chinese plant is *Androsace bulleyana*. Although this species is monocarpic, it has become a favourite here. It blooms through June and July and the eye-burning scarlet flowers dominate the Chinese plantings at this time. This is a relatively new plant for us, finally thriving after repeated attempts and failures at establishing it in the old garden. While we prefer to plant seedlings out in the garden when they are still quite young, this species must have a well-developed root system before it is left to its own devices in a crevice garden. Generally, taprooted plants establish easily in crevice gardens at a very young age while those plants with multiple roots must possess a better developed root system before planting. *Androsace bulleyana*, having multiple roots, is intolerant of casual treatment in its youth. This species is, however, quite adaptable in terms of siting, appreciating a warm spot on any aspect.

When the new crevice garden was built, we made an attempt to create as much north-sloping territory as possible on our south-facing hill—previously there was none. This was one of the primary considerations that inspired and "drove" the design of the garden. It was here, on the north slopes of our ridges, that the very best alpine plants were to find a home. So, of course, we grew as many *Eritrichiums* in the first year of experimentation as we could!

In one year from seed, the Coloradan *Eritrichium nanum* var. *aretoides* has grown, flowered, and produced fruit. It is a plant that matures quickly and yet it can also be long lived. In our old garden, we have a ten-year-old European form of *Eritrichium nanum* that is the



The blistering red flowers of *Androsace bulleyana*.



Eritrichium nanum var. *aretioides* yearling from seed collected in Colorado.



A ten-year-old plant of *Eritrichium nanum* from a European collection.

same size, flowering and setting the same amount of seed as it has for the past seven years. It seems to have reached its maximum sustainable size—no more and no less. We have learned from our experiences in the past, that if eritrichiums are not allowed a full day of sunlight they grow leggy, develop fungal problems (even in our arid climate), and die

young. If these are grown hard, with their "fur coat" in the sun and their roots in a cool crevice, they are long lived. We are, of course, placing all our new seedlings high on north and east aspects in the new garden.

Other *Eritrichium* species growing on our north slopes include *Eritrichium villosa*, *E. kamtschaticum*, and *E. tianschanicum* (a very vigorous species). But there is one that definitely prefers more exposure—*E. howardii*, from Wyoming and Montana. This variable

Amblynotus rupestris, like most *Boraginaceae* sets abundant seed in our climate.



species will tolerate far more heat and drought than others in the genus. When kept with cacti, this plant spreads rapidly, develops a sizable mat and blooms. But if it is denied sufficient heat and grown with other *Eritrichium*, it is slow to spread and loath to flower.

A closely related plant of similar habit and cultural preference is the Mongolian *Amblynotus rupestris*. Our healthiest plants are thriving high in a southeast facing crevice. It is very variable in terms of flowering height (anywhere from five to ten centimetres) and this seems to be a function of the weather. An extended period of drought in the spring produces superbly compact cushions of this plant. Like its *Eritrichium* relatives, when happily sited it is very long lived. Our most mature *Amblynotus rupestris* has developed a dense hardened cushion of older leaves, a trait not evident in younger plants.

Yet another of the *Boraginaceae*, this one from Italy, is *Cynoglossum magellense*. This is very easy to establish and interesting at all phases of its development. It is probably growable anywhere in a crevice garden, but we have placed it low on a hot upper north slope. If it gets too large in its present location, it will be moved to a southern aspect to keep it compact. All parts of the plant are silver except for the flowers, which are the colour of a fresh sirloin steak. The height of this plant seems to vary, anywhere from ten to thirty centimetres. It begins to flower very early in the spring, the flower developing at ground level and elongating somewhat as it matures. There is a fabulously bristly and strange quality to the flowers.

Cynoglossum magellense is rarely seen in gardens.





Viola atropurpurea blooming in the new garden after a year and a half from seed.

Over the past couple of years, we have managed to germinate four species of the South American rosulate violas. These are *Viola atropurpurea*, *V. congesta*, *V. rosularis*, and *V. volcanica*. Of these we can claim some success with one species—*Viola atropurpurea* is the only one to have bloomed so far. Ever since the seedlings of this particular species began to develop their first rosettes, we have noticed a remarkable physical variability among them. This variability is becoming more obvious as the plants continue to mature after being planted out in similar locations in the garden. Some seedlings have etiolated, eventually producing offsets and resulting in multirosetted forms.

Germination Technique for Rosulate Violas

- 1 Scarify the seed using a fine grade of sandpaper.
- 2 Soak the seed for 24 hours in a solution containing GA3.
- 3 Place the seeds in moistened perlite in an unsealed ziploc bag in the refrigerator for one month. Seeds will usually germinate in the refrigerator.
- 4 Grow the resultant seedlings on as you would any xeric high alpine. Ours are grown in a cool basement under lights over winter and planted out in early spring.

The seedling that has developed the largest rosette has not etiolated. Instead, it has produced a ring of bloom at its circumference after one and a half years from seed. All of the *Viola atropurpurea* seedlings are planted along the very peak of a ridge (for maximum drainage) in deep crevices containing a healthy portion of gravel since *V. atropurpurea* has a comparatively large taproot. This ridge peak is situated midway up the hill, fully exposed to sun and heat, though not as dry as the more exposed ridges supporting cacti further up the hill.

Sited very close to the rosulate violas, enjoying similar drainage in a cooler location on the north side, is *Nototriche macleanii*. This plant originates at high

Nototriche macleanii prefers a cool habitat





altitudes in Peru. While the Andean violas are surprisingly heat tolerant, this plant is less so. It is longer lived given a cool, bright location with flawless drainage.

Another weird and wonderful plant is *Petunia patagonica*, from the South American homeland of many of the world's most fascinating shrubs. The appeal of this shrub lies in its comparatively large ochre flowers spotted with purple brown, these produced over a twisted, sticky low spreading structure. The effect is bizarrely appealing. Sadly, the flowers have never set seed, but cuttings taken in the autumn will root over winter. We have established cuttings in the new garden and these appreciate full hot sun in a high crevice. Our oldest plant has only begun to flower in the back garden after eight years (another plant for the plodder). Hopefully, the increased exposure of the front garden will encourage a more timely, reliable and fruitful bloom from the younger plants.



Petunia patagonica rewards the patient gardener.

Of the many South American shrubs that we have experimented with, the Junellias have consistently performed the best. These are the only genus whose members routinely set seed in our climate.

Adesmias, on the other hand, have been stubbornly difficult. But in the new garden, even these are beginning to gain a toehold. The Argentinian *Adesmia* cf *corymbosa* has bloomed and set seed in a high south facing crevice. This has a procumbent habit, finely filigreed grey leaves and flowers of cadmium yellow shot with scarlet striping. This may explain why it caught the attention of our bees. It seems that the

Sited at the very peak of a ridge are four *Viola atropurpurea*, up to about 8cm (3 inches) across, each developing differently after having suffered the attentions of a family of crows.



Adesmia cf. *corymbosa* is the first of its genus to flower for us.

Astragalus coccineus needs lots of sun and sharp drainage.

heat and solar exposure of the new garden suits this species and hopefully the entire genus. For there are many more *Adesmia* to try and the diversity of the form of the plants and the vibrancy of the flowers make this an irresistible group. It would be wonderful to try some of the dwarf, spiny, shrubby *Adesmia* species at some point in the future.

Also members of the *Fabaceae* (the pea family) and intolerant of our old garden are two of the North American *Astragalus*: *A. coccineus* and *A. loanus*. In the past, we found it impossible to keep



Astragalus coccineus alive through the summer, let alone the winter.

Astragalus coccineus originates in the wild on gravelly ridges from California to Arizona. It has brilliant scarlet flowers and white felted leaves and seedpods. It requires very sharp drainage in full hot sun. In the new garden, this species has grown for us through two complete seasons, setting seed after one year. We keep it with all manner of cacti, other peas like *Lupinus* and *Trifolium*, and some *Oncocyclus Iris*. It lives in the hottest, driest part of the garden. For some growers this plant goes dormant during July and August. For us, it continues to bloom periodically during the summer, gradually elongating, perhaps prevented from resting by our thunderstorms. Such is the beauty of this plant that if the weather forecast calls for a week of untimely dull wet weather, we cover this plant with a bucket to prevent rot (this, certain irises, and the rosulate violas are the only plants to receive such special treatment). It suffers without a daily dose of sunshine.

Another xeric sun worshipper is *Astragalus loanus* from Utah. This is a smaller and subtler plant than *Astragalus coccineus*. When it blooms it

is at most three centimetres in height and when it sets seed it expands to five centimetres. The fruits are comparatively enormous for such a small plant. While many *Astragalus* possess interesting seedpods, *Astragalus loanus* is uniquely a work of art, both in flower and in seed. It is a tremendously underrated plant, possibly because it requires similar conditions to *A. coccineus*. It grows for us among the smaller cacti, with no competition from other plants. The flowers



Astragalus loanus is an under appreciated treasure.



Across this part of the rock garden there are a range of cacti, and among other plants in flower are *Castilleja*, *Astragalus*, and *Onosma*. The pink inflated seedpods of *Astragalus loanus* can be seen in the left foreground.



are very long lasting (through the month of May) and the seedpods develop quickly after blooming and retain their colour (pink) and sculptural character for over a month.

These delicious American plants represent but a fraction of the vast *Fabaceae*, a fascinating family of primarily taprooted plants that were designed to grow in a crevice garden. There are so many species from this enormous family (there are nearly 20,000 species) from such a vast geographic area (they come from every climatic zone) that one or two of them are guaranteed to be blooming at any time throughout the growing season.

The magnificent pods of *Astragalus loanus*.





Iris paradoxa in the foreground is just one of the *Oncoclytus* irises that are happy in the crevice garden.



There are so many other plants that could feature here but we will end this article with a handful of plants with a far more limited distribution in the wild, the *Oncocyclus Iris*. We grow only the steppe-desert species, our winters being too severe for the true desert plants. Our climate is amenable to species from Turkey, Iran, and the Caucasus and they have managed to establish themselves well (even in our old garden) over many years (especially the Turkish species). All species are evergreen for us, only dying back over winter if there is no snow cover. A severe winter does not seem to affect growth or flowering: a long, hot summer and autumn is most beneficial for bloom in the next year.

In the new garden we have new seedlings (no divisions) sitting towards the crest of the hill in the

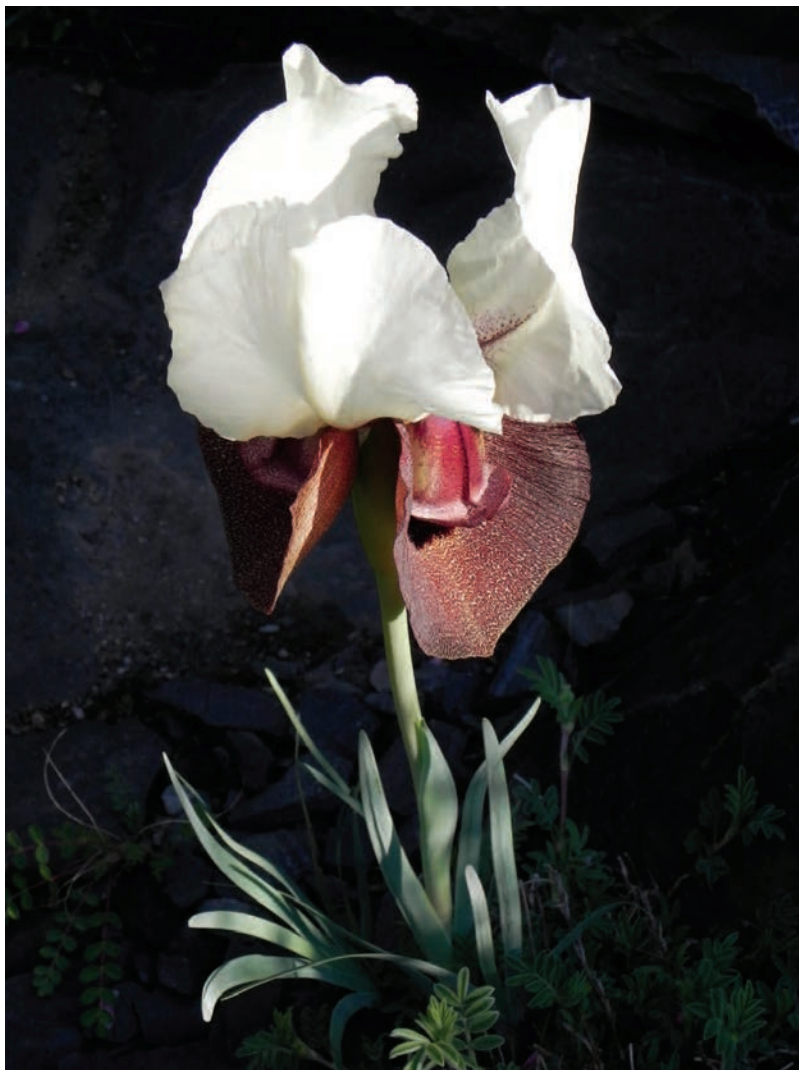
Oncocyclus Iris Germination

- 1 Store the seeds for one month in the refrigerator in moistened perlite.
- 2 Soak the seeds in a 70% solution of isopropyl alcohol to await surgery.
- 3 Remove the aril and wrinkly brown skin from the tip of the seed gently with tweezers soaked in alcohol, exposing a tiny fraction of the whitish seed underneath.
- 4 Using a razor blade, scalpel, or exacto blade (all sterilized), remove a paperthin slice off the very tip of the exposed whitish seed.
- 5 Place the seeds in fresh moistened perlite in a fresh unsealed ziploc and seeds will germinate at room temperature within one or two weeks. Cleanliness is the most important consideration with this technique.

company of various *Fabaceae* from Central Asia — *Hedysarum*, *Onobrychis*, and *Astragalus*. These are also growing with cacti, but in the long term we suspect they will need a little more water than their neighboring succulents require.

These *Iris* are certainly the most beloved plants among those that we grow and it is our highest hope to persuade them to produce seed abundantly and reliably in the new garden. In this respect, the local pollinators seem to need some extra help from us.

Iris iberica subsp. *elegantissima* growing with an *Ebenus*





Iris acutiloba subsp. *lineata* in its second year from seed in the new garden.

To date, the garden is almost half completed and most of the plants are in their second season. It has functioned well for difficult dryland plants and we are now growing species we never dreamed of trying before. It remains to be seen how the Chinese moisture-loving high alpiners will fare in the long term—especially during a prolonged drought. But in the meantime we are enjoying some success: ample reward for rather a lot of hard work.



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reviews by

ED GLOVER on PHLOX

JOHN LONSDALE on CROCUSES

JANE MCGARY on GROW BULBS

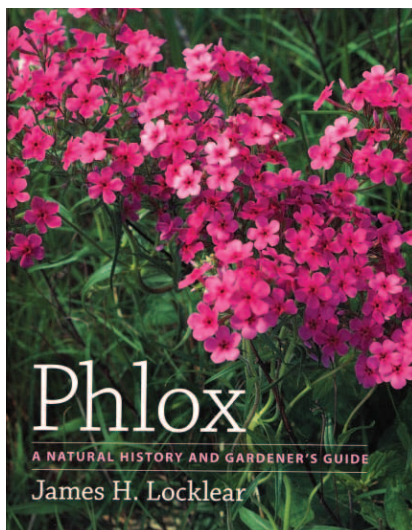
Phlox

A Natural History and Gardener's Guide

James H. Locklear

Timber Press (2011)
 ISBN 978-0-88192934-8
 Hardcover: 340 pages, 73 color photos
 9 x 7 inches. \$49.95

ROCK GARDENERS HAVE been wishing for a comprehensive book on the genus *Phlox* for a long time. *Phlox* is one of those backbone plants of the rock garden which every gardener, novice or expert, includes in their plantings. Of all uniquely North American genera it is *Phlox* which has most penetrated the gardening consciousness worldwide. However, definitive information about the genus was fragmented in journal articles, catalog descriptions, and the like. With the publication of James



Locklear's authoritative work, the wait is over; Jim signed a contract with Timber Press in the late 90's to write a book on the genus and embarked on a 10-year odyssey which resulted in this wonderful book.

The book is divided into two sections: the first section contains a botanical history of the genus, a horticultural history, and finally a botanical key to the genus. The research here is extensive and the reader comes away with a good picture of the discovery of the various species of this North American genus and how they have been distributed in gardens around the world.

The second section profiles in detail all sixty-one species. The profile for each species includes a general description, a detailed botanical description, its geographic range, the environment in which it grows including geologic features and soil types, plant communities with which it is associated, and notes on garden cultivation. There are wonderful color photos detailing both close-ups of the plants in flower and photos of their natural habitat. While most aspects of this book are extremely effective, a

listing and description of the available cultivars of *Phlox* in the nursery trade would be useful.

Usually when I read this kind of book, I linger over the introductory and historical sections and then skim through the species descriptions to find the ones in which I am most interested. I was so taken with Mr. Locklear's prose in the general descriptions of the species that I couldn't wait to turn to the next to read his vivid description of the flora, fauna, geology and human interactions that accompanied each one. I haven't had this much fun reading a botanical book since Claude Barr's *Jewels of the Plains*

NARGS members can be very proud that the Norman Singer Endowment Fund provided grants to assist in the research for this book. It is certainly a book that every rock gardener will want to have in their library. **Ed Glover.**

Crocuses

A Complete Guide to the Genus

Janis Ruksans

Timber Press (2011)

ISBN 978-1604-469106-1

Hardcover: 280 pages, 307 color photos

10³/₈ x 7³/₈ inches. \$45.00

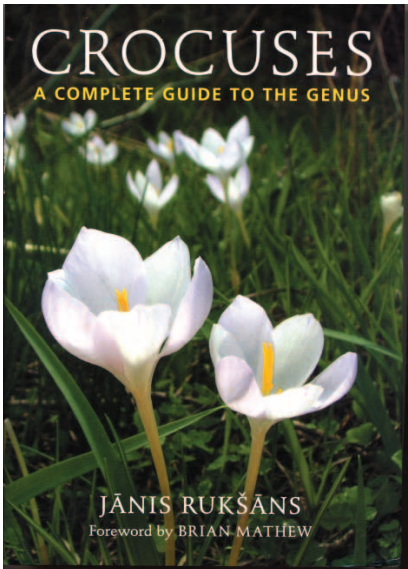
IT HAS BEEN 29 years since Brian Mathew's monograph on the genus *Crocus* was published, so this book by Janis Ruksans, one of the world's premier growers of hardy bulbs, was eagerly awaited. Mathew's book is a unique and timeless masterpiece, but while many taxa remain firmly entrenched, much has changed in the world of crocuses and it was high time

that more recent work was recognized and incorporated into the *Crocus* "big picture."

Janis has grown crocuses for many years and his interest has increased as he has been able to grow them in greenhouses in his Latvian nursery. This has enabled him to extend his considerable experience to include the less hardy species which will only

grow with protection in Latvia and much of the world outside their native habitats. He has a deserved reputation as a leading plant explorer, traveling to most of the northern hemisphere's richest bulb hotspots, including many a mere mortal would consider inaccessible.

There is no doubt that his writing comes from extensive personal experience and his style is refreshingly straightforward yet passionate; Janis has never been afraid to tell



it the way he sees it. His first book in English, *Buried Treasures*, tells of Janis's explorations and is filled with wonderful tales of his many bulb-hunting adventures that would be equally at home in a spy thriller set behind the Iron Curtain. It would have been very difficult to follow that masterpiece and I'm glad that Janis didn't try. *Crocuses* is much more down to earth but no less informative, though much of the story-telling potential was lost because of the vast number of pages needed just to cover the basic material.

The book is divided into two parts: Part 1 includes nearly 25 pages devoted to "Crocuses in My Garden," Part 2 has 160 or so pages covering "Species of Crocuses."

In Part 1 Janis discusses the cultivation of crocuses in both the open garden and in pots and raised beds in his greenhouses, and also describes growing them from seed. For cultivation purposes he usefully divides crocuses into 3 groups ranging from those that grow in habitats with hot dry summers, to those that prefer moister conditions and are rarely if ever truly dormant above or below ground. These groups are highly informative when it comes to optimally siting crocuses in the garden. The sections on cultivation contain numerous helpful tips, including the advice to plant species with different corm tunic characteristics next to each other in raised beds to avoid mixing up of stocks. Latvia's harsh winters, low light levels and high humidity are challenges that he discusses and suggests the best ways to overcome.

Having received Janis's annual bulb catalogs for at least 20 years, replete with tales of woe regarding devastating black frosts and marauding packs of giant water rats, I wasn't surprised that the first entry in his section on pests and diseases deals with his "endless battle" with rodents. Bacterial, fungal and viral diseases are well described, and Janis's keen observation of his plants and eye for detail are clear throughout the book.

Part 2 of the book details all of the currently known species of crocuses and starts with a helpful section describing the botanical characteristics of the above ground parts and corms. The type of corm tunic is essential to confirm the identity of some species, and the book does an excellent job

of describing these features for each of the species. A short section on classification follows, and Janis points out the unreliability of using flower color in identification keys. Modern molecular techniques analyzing DNA sequences impact crocus taxonomy just as much as the systematics of other taxa. It is becoming increasingly clear that two systems are likely to be needed to satisfy the disparate needs of systematists and horticulturists/gardeners. Taxonomy is a science with a large dose of subjectivity thrown in – so the dichotomy is likely to be fluid and not worth losing sleep over.

Sensibly, Janis recognizes that people who want to be able to identify crocuses in their gardens and in the wild are not likely to have immediate access to a portable laboratory replete with DNA sequencers, so he has taken the route of providing keys which aim to help those with “a sharp eye and a lot of time” to identify their treasures. Interestingly he has chosen to use a practical approach to identification based upon flowering time—autumn-blooming or spring-blooming, with further artificial sub-divisions utilizing a variety of characteristics. Thus, the autumn-blooming species are divided into those that flower without leaves and those that have them present at flowering time.

I have not been able to test any of the keys, but I can see that using them might be challenging as there are a number of inbetweenies, and also some whose leafiness varies from year to year, depending upon the weather before and at flowering time. This seems to be one of those characteristics that has both genetic and environmental determinants, but this notwithstanding, the general division is still useful as a major aid to identification.

The book is a vehicle for the formal description of several new taxa, the first one being the beautiful *Crocus speciosus* subsp. *archibaldii* from Iran which is named for the late, great Jim Archibald. Janis also describes a number of taxa as full species which are generally recognized at the subspecific level – for example *C. kotschyanus* subsp. *suworowianus* is elevated to *C. suworowianus* and *C. biflorus* subsp. *melantherus* is called *C. melantherus*. There is no doubt Janis leans firmly in favor of “splitting” and he freely admits that a major advantage of elevating subspecies to species is the fact that writing labels becomes much less time-consuming! *Crocus melantherus* exemplifies the problem with using flowering period and time of leaf formation as diagnostic characters, since a spring-flowering form has been now been added to the normal autumn-flowering version. All of the descriptions of individual species include information about cultivars, where available, and also note habitat details. There are 307 quality color photographs arranged in an order that parallels the species descriptions in the text. Unfortunately they are grouped together into two blocks and I would much prefer to see the images incorporated into the text but understand that this option is likely far more expensive.

I was looking forward to seeing how Janis would handle the spring-flowering species, especially those in the *Crocus biflorus* complex. Sticking to his overall aim of making the plants easier to identify, Janis has come up with a mixture of natural and artificial groupings which he admits are far from ideal, some keys containing species discussed in other chapters. Twenty-three sub-species of *C. biflorus* have been described and

the number seems to be increasing exponentially as this group is studied further. We seem to be caught in a vicious circle as new finds don't fit the highly detailed descriptions of existing taxa, so more new ones need to be created. Thus, new *C. biflorus* subspecies which you will encounter include *ionopharynx*, *atrospermus*, *leucostylus*, *albo-coronatus*, *yataganensis*, *caelestis*, and *munzurense* – the latter being included even though it has not been formally described. This is probably a perfect opportunity for a lumper to come along and have at them!

Janis has largely gone along with the scheme proposed by Pasche and Kerndorff which, unfortunately, is rather dependent on knowing the origins of plants in order to be able to accurately identify them. He is back on much firmer ground with the Central Asian species that he has encountered many times in the wild, and of which, in the case of *C.*

korolkowii, he has introduced many beautiful forms into cultivation.

The book is closed out by a very short chapter dedicated to "Little Known and New Crocuses," although one might argue that most of these have already been discussed, and this is followed by ones on "Hybrids," a "List of Crocuses by Growing Conditions in Cultivation," a glossary and selected bibliography.

Writing this book was never going to be easy, but Janis has succeeded again in putting together a unique volume which more than serves its purpose. It comprehensively describes the current status of all crocus species and many cultivars, and provides the reader with a wealth of information which has largely been built from his personal experiences, dedication and attention to detail. Any lover of Crocuses will need this book. Don't get too hung up on the names—they'll be changing soon anyway! **John Lonsdale.**

Grow Bulbs

A guide to the cultivation and propagation of the bulbs of South Africa and neighbouring countries

Graham Duncan

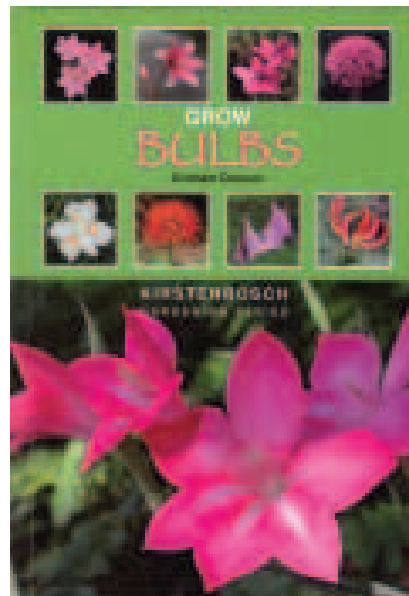
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GARDENERS IN CALIFORNIA and the warmer parts of the United Kingdom and France grow many species from



the vast bulbous flora of southern Africa, especially from the Eastern and Western Cape regions of South Africa, which variously offer both winter- and summer-rainfall climatic regimes. A few genera and species have diffused beyond these “banana belts” into the greater horticultural world, but this new edition of Graham Duncan’s useful book should entice gardeners in cool temperate regions to experiment further. Few people could have more expertise - Duncan curates the indigenous bulb collection at Kirstenbosch Botanic Garden.

Following an introduction to climate and habitats, Duncan describes the thirteen families to which the bulbs covered in the book belong. Here and in the rest of the book, the author assumes some familiarity with terminology and comfort with botanical names, but the prose is very easy to read. A chapter on cultivation briefly hits the high points and is expanded on by a section on pests and diseases at the end of the volume. Duncan clearly is addressing our kind of grower in subsections on “Maintaining a bulb collection” and “Hand pollination.” There is a good discussion of growing bulbs in containers, too.

Of high interest to growers outside mild regions is Duncan’s discussion of “Temperature and hardiness,” and the provision of hardiness ratings for every species included. He uses four categories: frost tender (plants that can withstand temperatures down to 5° C / 41° F), half hardy (down to 0° / 32°), frost hardy (down to -5° / 23°), and fully hardy (-15° / 5°). In my former garden his frost hardy plants would have survived in the bulb frames, and the fully hardy ones in the open garden; in the new garden I’d be tempted to try the former in the open once I construct some

better-drained planting beds. Looking through the species and their ratings, I find that they generally agree with my experience growing them in a winter-wet, summer-dry temperate region in a well-drained soil. In fact, some of his half hardy species (e.g., *Gladiolus tristis*) did well for me as frost hardy plants—but were not fully hardy.

The bulk of the volume is divided into descriptions of genera and selected species within each, divided into winter-growing, summer-growing, and evergreen sections. Notes on the genus include significant cultural information. The species appear to be selected for ornamental value, but I don’t know how available all of them are to gardeners; some are classified Critically Endangered in the wild, but perhaps these are well established in cultivation. Data for each species include height at flowering, flowering time in the Southern Hemisphere, distribution in nature, and a descriptive paragraph covering appearance, preferred habitat, cultivation, and ornamental uses. Most are illustrated with large (often full-page), high-quality color photos, many of which show the entire plant in its natural habitat—the most desirable sort of illustration for a book directed to the experienced plantsperson. Back matter includes lists of plants for particular garden situations, an extensive bibliography, a one-page glossary, and a good index.

This book is a desirable supplement to *The Encyclopedia of Cape Bulbs* by Manning, Goldblatt and Snijman, which covers many more species but is less helpful on cultivation. It should send many of us to seedlists and bulb catalogs searching for additions to our collections. **Jane McGary.**

Rock Gardening from Scratch

Planting containers

MALCOLM MCGREGOR

GARDENS CAN PROVIDE a contained idealization of the world outside the garden wall; the container garden provides that in its most concentrated essence. Pots, old sinks, stone troughs, or hypertufa planters can all be homes for individual specimens or for collections of plants that may be related botanically, geographically, or be color-coordinated (all pink, all blue, all yellow). Whichever of these routes you take, you will need to take care of a few key things if your planting is going to last for any length of time.

1. Soil – The planting medium you use depends mostly on what you are hoping to grow. For typical alpine plants you need a soil with lots of extra grit and sand. A mix might be at least half grit and sand, although in a very shallow container you might do better with rather less of both grit and sand.

If you are going to have a trough for dwarf rhododendrons (or other ericaceous plants) and autumn gentians, then the soil should be more acid and more moisture-retentive, maybe just peat with some added sand. Obviously if you want to grow pitcher plants and other bog plants then you want the compost to stay moist – peat soils and poor drainage are in order.

TYPICAL MIXES FOR CONTAINERS

SMALL ALPINE PLANTS

2 parts soil

2 parts grit

1 part sand

In a shallow container (4 inches deep or less) the amount of grit and sand could be halved.

FOR DWARF RHODODENDRONS AND OTHER ERICACEAE

2 parts peat

1 part grit (not limestone)

1 part sand

2. Drainage – Containers often have quite small drainage holes. If they are too small then water will not drain away sufficiently and the compost mix can stay wet and sodden, particularly in higher rainfall areas. Add grit and sand to the mix, enlarge the drainage holes (if you can). Although there is research casting doubt on its efficacy, you can put a layer of broken pots or bricks at the bottom of the container, and plants seem happy with it.

3. Scale – There are two very different approaches to planting up containers. One approach is the miniaturized landscape with dwarf shrubs or conifers representing full-size trees, rocks representing mountains, and so on (rather like the little people on the top of wedding cakes); the other is the slice of life - a tiny piece of a full-size landscape. In either approach using some rocks to add drama and height can be very effective.

4. Plants – The key thing is that the plants for a container must be fairly (or very) slow-growing. You only have a small space to work with - most dwarf conifers, for example, turn into quite big ones, just more slowly than normal ones. Use the most precious plants. Plants which are great in the rock garden (*Phlox subulata* for example) will dominate a trough. Better to have a small cushion (say *Phlox hendersonii*)

than a mat-forming plant. Dwarf cushions, dwarf bulbs, very dwarf shrubs can all have their place.

Since there is only room for a small selection of plants, think about the need to have at least some being evergreen. A trough full of dwarf bulbs will look like an empty trough for much of the year – much better if there are a couple of plants to add year-round structure.

5. Surface Mulch – Plants in containers usually benefit from having stones or rocks on the surface of the compost. This layer can be grit or can be much larger pieces of stone – either way, covering the surface in this way reduces evaporation and helps suppress weeds. Apart from any aesthetic point, larger pieces of rock (much better part-buried) provide cool damp spaces underneath them that can help plants find places to send roots.





6. Siting – Where you put your container will make a lot of difference to what you can grow successfully. It is useful if containers get shade through morning or afternoon rather than be faced with all-day sun.



SOME GOOD PLANTS FOR CONTAINERS

Androsace & Douglasia

Aquilegia

Cacti

small Campanula

(be careful - some are thugs)

Delosperma

Edraianthus

Eriogonum

Gentiana

(autumn-flowering gentians need lime-free compost)

dwarf Heuchera

Lewisia

dwarf Narcissus

small Phlox

Primula

dwarf Rhododendron

dwarf Salix

Saxifraga

Sedum & Sempervivum

Townsendia

Rocks and ink Struck into flowers

ROBIN MAGOWAN

I AM BOTH a gardener and a writer, but gardening and writing, much as they irrigate one another, do not form a single seamless pursuit. They remain, nonetheless, complementary enough for me to recognize a link between the person who sits at my desk and the one crouched on his knees in the garden.

From March until November I seem to race about my rock garden for much of each day; then, like my plants, I'm rooted at my desk in a small studio amongst snowy fields for the long sweep of winter. But the endless racing about, and the endless sitting, return in countless ways so much more than I put in. In the garden, I may be the master, but the plants hold the final verdict; or rather they do what they can do, not necessarily what I want them to do. In a poem, words exert a kindred resistance; I can bend them only so far. (Paint, in this respect, seems more pliable.) In discovering my limits as a wordsmith, I am rediscovering the limits of an art-form: not how far I can push it, but how I must proceed to achieve whatever I can. Some might call the relentless editing I do "work;" to me, it rings more like play, even mischief. Hamlet's contention that

*If all the world was playing holidays
To sport would be as tedious as work*

hardly suits the rather more invisible line I furrow. How can the invitation supplied by a well camouflaged weed, a superfluous adjective, be tedious?



I came late to dedicated gardening. Over many years I have created small domestic landscapes: a flowery crazy quilt in a backyard cottage in Berkeley when I taught at the university, a series of bogs flowing out of an ancient spring in the British Cotswolds. When I visited public gardens, I was attracted to botanical plantings featuring single specimens with prominent labels—much like those in a rock garden. As a world traveler, I responded to layouts that reflected geography, the named intricacies of a map. I learned that inclusiveness and variety trump everything else, even design.

Now to my surprise, my rock-filled New England garden has taken me over far more completely than any earlier pursuit ever achieved. Scale has

much to do with it. I am, the garden is telling me, a miniaturist. An area, so richly planted, every inch vibrant, can't help but teem with expectation. Yet it is one I can manage myself. The mountain plants, in turn, translate me to a realm different from the lowland my garden occupies—of thin air and vibrant light where everything hangs on an edge, of rock, of sky. I don't garden so much as harvest awareness. Now and then, a verbal note, maybe even a poem surfaces.

Unlike writing, gardening is a physical activity. Things happen and decisions resonate differently than they do on a page, where I can always rectify a mistake with the help in my old-fashioned way of scotch tape and a pair of scissors. Being outside, surrounded by thousands of palpable presences, and by all that the elements want to throw at me, I am engaged with an immediacy no movement of a pen across a page can duplicate.

For someone as footloose as I had been, always ready to chase down a new birdsong or a new culture, there is something calming in an activity that so literally grounds me. A garden cannot be easily picked up and dropped, or left to its own devices for more than a week. There are, to be sure, five months when the garden rests under snow, and the occasional respite, but most of a day I'm out there, ministering to the plants I have positioned.



The Canadian gardener Brian Bixley once asked whether it is possible to create a “great” garden without substantial wealth. Try as I might, I've found myself unable to grasp the lure of a “greater perfection.” Certainly a rock garden does not require voluminous space or particularly deep pockets. You can make an excellent garden on a small urban lot, or the deck of a suburban home, or the windswept terrace of a Manhattan apartment.

I'm not ready to stand on the sidewalk outside the massive iron gates of Vaux-le-Vicomte holding up a SMALL IS BEAUTIFUL placard, but Gary Snyder's idea that a poem is a “miniaturized energy system” (like a computer chip) that gains power because it is small, heightened by artifice and thus concentrated, speaks to me. An explosion in a small room carries, after all, an effect different from one in an empty field. The more jewel-like a poem or a garden becomes, the more memorable it may be and the more mysterious. In reflecting a loved one's eyes, doesn't a finger's gem open a window into her soul? I hesitate to say what makes me the slave of such tiny mistresses. I know I don't grow alpinists solely for the spectacle of their oversized blooms. I am not, after all, a pollen-seeking bee. Still, scent, color, and blossoms can combine to make me feel like something more than a weed-scouring drudge.

In a traditional cottage border, plants that have bloomed will be trimmed back and eclipsed by others making an even taller, more sumptuous declaration. Alpine plants don't have that option. They live in the exacting conditions to which they are so stunningly adapted mainly

because there they don't have to compete with bigger stronger plants. They have developed their ground-hugging dome-like contours to resist the dessicating winds. In the short growing season available to them, they need all the space, the nutrients and warmth they can garner. Transported to the rock garden, each still insists on maintaining an uncontaminated presence.

In a rock garden's restricted space such insistency means spending a choice bit of a day transplanting. To be constantly moving plants about might well be deemed a confession of failure. Shouldn't I have foreseen that a plant would outstrip its site, or that a neighbor would grow so as to eclipse it? But if you are subject to curiosity, growing names as much as plants to see what they might add to the rock garden vocabulary, it may be hard to get right that first kiss of ground. Nor am I immune to the challenge of the seemingly impossible; surely in one of my garden's micro-climates I might succeed in flowering that rare miracle? Without all my failures, would there ever be a niche available for something new? My caretaking skills may improve over time, but I still kill, reminding me of the plant explorer Josef Halda's withering indictment, "There are no difficult plants, just stupid gardeners."

While nothing matches the thrill of extracting a misplaced plant and conveying it where it can energize a bald spot, such surgery is not to be undertaken lightly. Many plants are so wedged as to be virtually irremovable. Should I succeed in extracting one, it will likely require extensive care; all the more if I am rash enough to be transplanting in the dog days of mid-summer. But that makes rain all the more of an occasion. I could, of course, be relishing the respite; a caretaker is not quite a serf. Instead the downpour sees me racing about; the faster I operate, the likelier a plant's chance of surviving this legerdemain.

Plants, nonetheless, are not words. However much I shunt them about, they carry fixed identities, whereas words assume their meaning from the contexts and soundscapes in which they are placed. I can move words, phrases, whole lines without feeling so much as a pang of remorse; they twinkle out, recycled by the worms of the subconscious. Armed with dictionary and thesaurus, I may even feel obliged to test new combinations and new locations, a process not unlike the placing of plants in a garden. I can make all sorts of other garden-like adjustments that affect visual balance, space, and clarity. What I can't alter is the patterning of sound that gives a poem its rhythmic authenticity. In a finished poem, the words need to look as if they have been rooted where they are since the first day of creation. While good art may be timeless, good gardening teaches me to celebrate the momentary in a prolonged seasonal progression.

Some gardeners regard their plants as friends, green creatures who return in spring and offer the pleasures of familiar company. I prefer to think of plants as surrogates, as different kinds of avatars (much as a poem's words might come to stand for an otherwise invisible aspect of myself). Encountering them in the mire of March as they tentatively

resurrect themselves I may find myself debating, in their voice, the quandary of emergence:

*Clothed in snowy fibers
I pursue erasure*

*Within the bounty
Frost supplies...*

*Will snow that so enfolds
Kindle us starry dead*

*To pry open the earth
And find its interred heart?*

Just as the garden liberates something in me—a more caring aspect—so writing in a naïve voice helps to sever the shackles of irony. The rooted being of creatures unable to move, who are communal and in some ways immortal, requires a non-animal mind-set. To what extent can I enter their vegetal world?

The challenge plants offer holds equally for their garden setting—how do I judge the imitation of mountain life that such a restricted space offers? A rock garden cannot possibly rival a mountain's parade of floral abundance; but how can the invitation supplied by Marlowe's "infinite riches in a little room" be anything but magical?



It is easy enough to turn a hillside into a rock garden by eradicating most of what grows and replanting it in alpine species. But the plants will require an enclosing wall to protect them from the surrounding wilderness and its weeds. In many languages gardens and walls share a common etymology, the wall is a barrier comparable to what in olden days protected a town; in Dutch to this day "tuin" denotes a garden.

In that rock or wall-surrounded sanctuary something changes in me. I become somebody different from the person I am in my day-to-day life. Insofar as I am safe I can be more open, more able to trust what a moment is conveying.

The sanctuary that walls secure for a garden holds equally for a poem. There a wall of type, distinct from the surrounding white of the page, creates a privileged arena for the poem's rhetoric, its flowers of imagery. It seems to me no accident that Iranians still call their anthologies "rose gardens," or that a poem's figures of speech should be termed "flowers of rhetoric."



Those rhetorical flowers encourage me to cite some plants of my own embedded in the poem, "Sleet in the Garden"

*Music ripens as I wake to crystal pocks on glass
Notes balance on invisible spokes.*

*Only the unseasonal keeps a pattern.
Illicit snowflakes recurrences*

*Paper the arrivals shed
Where April's alpine plant crowd*

*Smolders in trays
Awaiting rock declivities.*

*The art, one of insertion;
I bury orchestral roots.*

*Is density, destiny,
Infinite songs in a little room?*

*Only then, rooted earthstrings
Stretched taut, will the rockscape*

*Resonate, sky and wind
Struck into flowers.*

The speaker is the gardener awaking to confront the late-spring catastrophe of sleet falling over several hundred newly arrived greenhouse plants. The reader does not have to associate the "plant crowd/ smoldering in trays" with passengers stranded by bad weather at an airport to appreciate all that will need to be overcome before the vision the potted plants represent can "resonate, sky and wind/Struck into flowers."

As a poet, I don't see experience so much as I hear sounds. The internal garden of my poems is an auditory one that I plant with words, those "crystal pocks" of sleet striking the glass of my bedroom window. The challenge will be to transmute that unseasonal dissonance into the harmonic order suggested by "Notes balance on invisible spokes."

Those first staccato notes are so thin as to be barely perceptible. As the auditory consciousness takes over from wordlessness, it brings its own aerial dimension to the proceedings. By the end, even the garden earth has lifted into a higher realm of "sky and wind/ Struck into flowers."

What rocks and structural bushes are to the garden, form is to a poem. The form here adopts the Persian ghazal's aphoristic hemistichs. The ghazal comes out of a culture that prefers circles to a more linear

beginning, middle, and end. They are vehicles of mystical apprehension in which the wound that sparks the ensuing couplets is not so much probed as circled; a wound defined by what takes place on its periphery. As the poem circles its unnamable mystery—poetry, artifice, the garden—the rift in the seasonal fabric takes on the healing aspect of something we are seeing as well as hearing, “sky and wind/Struck into flowers.” A mere intimation becomes a music suggestively embodied.

In progressing from an initial staccato thinness to a fullness of resonating plants and blossoms, I am helped by the aphoristic assertion, “Only the unseasonal keeps a pattern.” That “pattern” can, of course, go anywhere, provided it develops a lyrical presence. In this, somewhat outré as it is, “orchestral” adds an element of structure, all the more if it evokes the complex root system that sustains a plant.

On the level that chiefly interests me—the harmonic—the conversion by anagram of “density” into “destiny” locks into place the subsequent vision of the garden’s May epiphany. Does a garden, or a poem, become a work of art only when its every plant, its every phoneme, resonates?

Like a musician, I’m working with a set of sensations not normally expressible in words. As the “invisible spokes” of the auditory sequence emerge, I start to infer a picture that the sounds can describe. For me, sound is inseparable from meaning. When I look at one of my poems, I don’t see words so much as dancing syllables, any of which can be substituted without altering the rhythm. The gardener dividing a primrose or a gentian with his fingers could be said to follow a similar course.

I may not be quite the master in my garden that I sometimes think I am. But I am the master of the structure. Those rocks, those two-line hemistichs, can be chipped into, drilled, submerged with soil and even done away with. Form, as James Merrill famously said, “affirms.” But to do so, the form has to be somewhat malleable. For quite a while I wrote poems in syllabics, a way of channeling oversized experience. But the need to keep counting as I hewed to a pre-determined line length could come to feel as if I had nailed myself to a Procrustean bed. The more flexible the form, the more room for surprise to cavort.

The process by which I turn those wordless crystal pocks on nighttime glass into a set of words rarely comes into being all at once. For the poem to work I need to instill a balance between a private abstract and internal soundscape and an external visual or semantic reality. This can take, as “Sleet in the Garden” did, several years to achieve. Even then, it could not have come together without the craft which I spent much of a lifetime acquiring.



I began to study the effects of form in college. Much later, teaching at Berkeley, I inherited Josephine Miles’s famous course, “The English Lyric.” Taking the title literally, I turned it into an immersion in the tradition of song and song-related poetry from “Western Wind” to the present. The

high point of the course was the miraculous 1876 sonnets of Gerard Manly Hopkins, all movement that they are, song and energy and flight:

*Glory be to God for dappled things—
For skies of couple-colour as a brinded cow;
For rose-moles all in stipple upon trout that swim;
Fresh-firecoal chestnut-falls; finches' wings;
Landscape plotted and pieced—fold, fallow, and plough
And all trades, their gear and tackle and trim.*

*All things counter, original, spare, strange
Whatever is fickle, freckled (who knows how?)
With swift, slow; sweet, sour; adazzle, dim;
He fathers-forth whose beauty is past change:
Praise him.*

Were I to post a poem over my garden, this “Pied Beauty” might do.

Much as gardeners learn their craft by visiting other people’s gardens, by reading about plants and traveling to see them in their native habitats, so I was training my ear, my sensibility, and my awareness of form to be ready when, years later, those untimely pocks of sleet would strike my bedroom window.



Not everyone is vulnerable to the claims of beauty, discredited ideal that it has become in a more democratic day and age. But as a poet and gardener I can’t help but respond to the challenge—the impossibility—of beauty. I know that every time I pick up a pen or a trowel I am contesting certain standards.

Beauty is best obliquely approached. In a work of art, form provides the distancing device that preserves beauty’s mystery. Approached head on, beauty is cheapened and may well dissolve into what many would prefer it to be, a mere aspect of reality.

The dynamic tension between artifice and reality brings its element of play, of adventure, into every decision. How far can I go? What can I get away with? How outrageous can I be? Line by line, there is always a reality scrutinizing me. In the garden, the plants share the onus of questioning the sites to which I have relegated them. In a poem the words control the musical pattering. Do I want the poetic speech of Milton, Keats, and Hopkins with its inescapable elitist assumptions, or am I writing in the more democratic spoken idiom of “cats and dogs” favored by Wordsworth, Whitman, and William Carlos Williams? But the dichotomy between beauty and reality is ultimately a false one, as every ending proves. Art is, and has to be, part of life; it helps us see the beauty of a moment’s reality.

As a modernist I am judged by my courage—how far into the forbidden I penetrate: What degree of intimacy, of selfhood, can I reveal without

ruining everything? Form solves the issue of the forbidden by means of a code. If I can't talk about beauty directly without raising all sorts of hackles, I can address it in its guise as a woman, or a poem, or a garden. If I'm a painter I can strip her nude and still preserve her by clothing her in her mysterious attributes, light, and rounded flesh. Should I want to describe the over-praised beauty of a rainbow, code might suggest that I approach it by way of science and color theory. Codes draw their power from the veil of the forbidden. Society may benefit in lifting such restrictions. But what we gain as a people in freedom is poetry's loss.

Art is famously subjective. What you call beautiful, I may call shallow, obvious, if not downright ugly. That's why a poem or a garden's right to an artistic title has to be earned. Here complexity helps. The more levels of meaning, the better a work's chances of preserving an element of mystery. As my skill and knowledge of craft grow, the more I need to find new limits with which to challenge myself. Can I make a garden using the surfaces of a collection of big rocks lifted from a limestone quarry? Or a poem out of the debris in a notebook? More essential still, can I disguise the difficulty until it appears merely the next step in a personal evolution. These are the kind of issues form encourages me to confront; resolving them, however, can be another matter.



Poems don't exist without some kind of distancing artifice, but finding that form takes time, if you write as I do with all the linear possibilities of free verse. In a complex, successional living art, like a garden, however, the editing never ceases. The garden keeps occupying what seems to be the same space, but formal properties aside, everything is in constant turmoil. The plants may be rooted, but they keep expanding, and what the gardener hasn't anticipated will require his intervention. For my own part, I welcome the play aspect that sustains the continual meddling, I know nothing so quickening as being surrounded in thousands of immediate choices that I can decide.

Poetry shares much of that same identity-enhancing bounty of choice. But the satisfactions it offers are less immediate. Unlike gardening, poetry is not what I do, but what I try to do. The challenge of making something barely possible is not always easy to countenance. I am, after all, not racing about, but perched at my desk in a shadowed room, with a few beams concentrated on a typewritten page. Sitting there, hunched over the unlikelihood of ever composing anything truly memorable, I can feel not so much alive, as excluded from all that makes a moment in the garden so much more than a mere second of time.

Both gardening and writing share the transforming possibility of exploration; an assault on the unknown we all carry within us and before which we stand normally all too mute.

Poetry involves a not dissimilar exploration, only now I'm quarrying from my recent notebook. Disparate remarks, with seemingly little relation

to one another other than that they derive from the same window, at the same set of moments between night and dawn, or from a trip several weeks long. Unlike the quarried rocks waiting on the driveway, I have no clear picture of what will emerge or how it will achieve a poetic coherency.

The process reminds me of the way an abstract expressionist works; patiently over many months or years building up his canvas until finally a unifying form tentatively emerges. Even then, the balance can be so delicately hinged that any one revision will call others into question. But just as a set of mini-mountains becomes with time a garden, so can a collection of enigmas become a poem. The combination of a subject matter emphasizing the momentary and drawn from nature in alliance with artifice can result in something quite mysterious and compelling.



It is easy enough, I suppose, to disparage arts that rely so much on revision, on the squandering of precious time that might be spent on more purposeful activity. I would argue that erasing the immediate, with its array of never-ending demands, opens a considerable tract within myself. Slowly, as I come to inhabit those internal reaches, I see that reality carries many other actors than the merely human. The gardener must humbly engage with the larger reality that extends from the weather down to the microworld of plants, bugs, fungi, and weeds below in the dirt.

Art, as Beardsley remarked, is difficult. Both poetry and gardening are arts that celebrate that difficulty. For those of my restless tendency, always ready to dash off like Voltaire's *Candide* here, there, everywhere, in pursuit of chimerical perfection, they offer a possibility of calm, and within that calm, of personal transparency. Something bigger, broader, and maybe more subtle can inhabit me. In civilizing me, writing and gardening teach the most important lesson of all—patience—how to sit long hours at a desk, or kneel sifting the garden dust in my hands.

Art that encourages constant revision cannot compete for dramatic interest with performance-based genres where lives, whole careers, hang on a razor-thin line, unable to tolerate the smallest mistake. A performer's art goes into preparing himself for the "moment of truth," where he hopes to be in a privileged mental zone, unable to fail. The more forgiving arts cultivate a longer view that allows the artist to learn from mistakes and grow. Timing—winning—is not everything. Instead the artist, waging his personal battle with time, carves out a more flexible entity complete with its own provisional rules, borders, parameters of sight and sound, scent and space, color and music, both in the garden and on the page.





NARGS in New Hampshire: a report on the 2011 NARGS Annual Meeting

JEFF HURTIG

NEW LONDON, New Hampshire is a delightful little town nestled in the beautiful Lake Sunapee Region, just south of Hanover and north of Concord in Merrimack County, near the Vermont border. The Town Common is flanked by the New London Inn and the tree-lined campus of Colby-Sawyer College, the venue for our meeting.

Many NARGS members coming to New London for the NARGS Annual stayed at the New London Inn, recently renovated but still a work in progress, and others at local motels and B&Bs. I stayed at the Inn at Pleasant Lake, a lovely inn whose owner is a gourmet cook. I do recommend it, but preferably when they're not cutting concrete for a new patio!

Our host for the meeting was the local Fells Chapter, led by Chair Thelma Hewitt. Augmented by town and garden volunteers, chapter members worked tirelessly for 4 days to ensure that the meetings, meals, garden visits and transport were all delivered. On behalf of all the attendees, I thank them for this tremendous effort.

The meeting area at Colby-Sawyer was self-contained, with an auditorium for the lectures and vendors upstairs, and the cafeteria for catered meals below. It was very easy to navigate (except, unfortunately, for a few folks who couldn't manage stairs and had to be driven half a mile to get from one floor's entrance to the other.)

As always, the heart of the meeting was our visits to wildflower sites, and gardens which displayed a full spectrum of horticultural possibilities, from wild and boundless to formal and structured.

DAY ONE

The first day included visits to the Eshqua Bog and Highberg Gardens, followed by a tour and reception at the Fells Garden Center – three wonderful and very different experiences.

The Eshqua Bog is a sanctuary owned and managed jointly with the Vermont Chapter of The Nature Conservancy. The 40-acre parcel completely surrounds and protects an 8-acre wetland that abounded in a breath-taking show of lady's slippers *Cypripedium reginae* and other wild orchids. We were fortunate to see this area at its peak, and a boardwalk through its midst made for easy access.

Cypripedium reginae in the Eshqua Bog



Patsy Highberg's Vermont garden where rockeries, specimen trees and individual gems such as *Saponaria x olivana* all have their place.



The actual highlight for me, however, was missing the entrance sign, which was followed by Peter George, Harvey and Irene Wrightman, and me, mistakenly trying to drive up a very steep one-way road though the bog. As Peter has a real problem driving in reverse, we are lucky to be alive to tell the tale. However, it is a beautiful and natural spot, well worth a visit during the June blooming period.

Ramblings of a Neophyte

Throughout my adult life, gardening has been a therapeutic refuge from both the mundane and the stressful responsibilities of everyday life. However, not until I reached my sixties did I, like Gulliver among the Lilliputians, discover the joys of the small, compact, focused and delicate. With Peter George's encouragement, I joined NARGS and dabbled around the edges, never crossing the boundary between common and botanic names. In Berkshire Chapter meetings I felt like a freshman taking PhD classes and was intimidated by the encyclopedic know-how of the long-term members. I simply bought what I liked, and managed to kill dozens and dozens of offerings over the past six or seven years.

When I retired last year I thought, what if I became a bit more disciplined and actually learned something about these specimens and their cultivation? That might be interesting. How could I do some immersion and take the next step?

I remembered that NARGS had annual meetings and study weekends. What if I attended? How would I fit in and cope with these world-class experts? Was I really taking a chance by thinking I could keep up with these folks? How will I respond when someone asks "What is that?" or "I know it's a sax but what kind of sax?" I like hands-on gardening without necessarily knowing the details, so how would I do sitting through lectures and discussions about the science of the plants?

I decided that I would go ahead and join NARGS, simply be the neophyte I am, enjoy the esthetics, keep my eyes and ears open, and learn what I could.

Experiences and Reflections...

The esthetic experiences of alpines of every different variety in carefully thought-out settings were overwhelming and did not require the PhD in horticultural science that I had feared was necessary. My friends and colleagues were gracious in responding to my many questions, and I learned a tremendous amount about the plants and their cultivation and settings. I can now begin to understand the relevance of the national organization and how it can enrich any member, from casual to serious and from neophyte to expert.

I hope that we, as individuals and as an organization, will make every effort to encourage interest in rock gardening among those whom we know and meet and make the wonderful world of alpines accessible to all. I also hope that everyone who has benefited from special NARGS events like this meeting will emphasize to local chapter members the benefits – and indeed, the imperatives – of joining and supporting the national organization. **Jeff Hurtig.**

The Highberg Garden at Indian Tree Hill, near Woodstock, Vermont, combines terrain, settings, and a tremendous variety of plants for rock gardeners. This is a dynamic garden that has evolved with great care and skill over the past 30 years. It presents an extensive collection of plants in a natural setting, giving it year-round interest, continuity of style, and an intimate appeal. The various garden areas are defined by the meandering paths and the creative use of native stone. Each place has its own unique feature – a sculpted steel archway and gates, a melodic waterfall, mossy stone benches and a carved stone fountain. We explored



alpine rockeries, a vast and wonderful woodland garden, a sunny pool area, numerous planted troughs, and an impressive planted tufa wall. The hundreds of alpines, dozens of dwarf conifers, countless bulbs, interesting ground covers, native and exotic woodland species, and unusual trees, integrated into a seamless wonderland.

In the late afternoon we visited The Fells Rock Garden at The Fells Historic Estate and Gardens. Located on Lake Sunapee, it was the summer home of the statesman Clarence Hay,



NARGS members exploring Clarence Hay's restored rock garden at The Fells

who developed it into a magnificent private rock garden and arboretum. For over 30 years, Hay maintained an extensive index card file in which he meticulously noted scientific name, cultural information, source of plant material and field observations for the 600 different species and cultivars of rock garden and alpine plants that he tended. A restoration and renovation of the rock garden has been ongoing in recent years, and it now features many of the original plants, augmented with over 600 distinct species introduced during the first two years of reconstruction. Our visit was interrupted by a shower or two, but we were able to stay dry while tasting wines and hors d'oeuvres provided for us by the Fells staff.

After these visits the day concluded with an excellent catered dinner in the Colby-Sawyer cafeteria, visits to the vendor stands – which were as varied and interesting as the gardens themselves – and a talk by Arthur Haines, a plant botanist with the New England Wildflower Society, who showed and discussed the flora of Maine and Northern New England. Arthur's enthusiastic and animated style thoroughly engaged the audience at the end of a long day.

DAY TWO

After such a good first day, the second day combined visits to the informal, formal, and in-between.

The Hewitt Garden is at the home of Thelma Hewitt, the Fells Chapter chair and organizer of this meeting. Thelma and John have taken a beautiful house with a superb location and converted the land from rather

The Hewitt garden combines small scale (such as these dwarf *Hosta* planted with a *Ramonda*) and large scale very effectively with great woodland and an extensive rock garden on the hilly location.



People are as important as gardens and plants at the Annual.

Organiser Thelma Hewitt presents David White from North Carolina with his prize from the raffle.



Left: Arthur Haines talking about the plants of Mount Washington.

Below: Board Director Lee Curtis and new NARGS President Peter George during the Awards presentations.



wild woodland into a beautiful and surprising mixture of the rare, the native and the exotic, with wide paths leading through the lushly planted woodland and in and out of Thelma's early stage rock garden. Like the Highberg Garden, this garden is evolving, and given Thelma's taste and John's willingness to clear the woods and create the paths that Thelma then plants so cleverly, this garden will be a destination for a long time to come.

After this great start we had about an hour-and-a-quarter drive to Peterborough, New Hampshire, the site of the Fry Garden, a splendid formal garden paradise, worthy of any world class estate. It consists

of more than 40 garden areas spread over 12 acres and connected by staircases and pebbled or grass walkways. Styles range from formal near the house to less-structured closer to wooded areas, with a number of water features including numerous pools and two ponds. There are over 15,000 shrubs, with repetitive use of yew, boxwood, lilac, dogwood, holly, and hydrangea. This particular garden was almost overwhelming in its breadth and its beauty, and deserved a good deal more time than we were allowed, something that could be said about every location we visited.

Some outstanding features are a 300-foot sycamore allee, a series of semicircular terraces bordered by standard Korean lilacs, an arboretum, an allée of 110 crabapples bordering a one-acre garden, and an orchard of twenty fastigiata hornbeams underplanted with European ginger.

The Barrett-Fenderson Garden was our next destination: a nationally recognized garden that features specimen trees, uncommon woody and herbaceous plants, and seasonal annuals in a variety of environments. The gardens were developed by owners G. Kristian Fenderson (garden



The Fry Garden had some more formal gardens but this was perhaps the most splendid of the views of this great garden



Two views of the Barrett-Fenderson Garden with pots on the stoop at the back of the house, drifts of candelabra primulas, and fine *Meconopsis grandis*.



designer, and author of *A Synoptic Guide to the Genus Primula*) and Alston Barrett over a period of 40 years from an abandoned farmstead.

The gardens cover several acres, serving as a laboratory for Kristian's landscape design business and showcasing their favorite plantings.

Areas of special emphasis include azaleas, rhododendrons, viburnums, magnolias, beech trees, old roses and conifers. The many specimen plantings in natural surroundings gave this garden a comfortable and homey ambience. For those of us who have never seen a blue poppy actually growing well



somewhere other than Tibet, the 40-year-old patch of *Meconopsis grandis* that Kris has been maintaining was quite a vision!

After returning to the College that evening to vendors, dinner and the NARGS Annual Meeting, we were entertained by our keynote speaker, William Cullina, who described growing some of New England's challenging alpine and woodland plants including those from bogs and peats. His latest book is *Native Plants for Your Maine Garden*.

Post-meeting garden visits were also offered to local gardens, often on a more intimate scale than some of the very grand gardens we had experienced over the previous couple of days, to Philbrick-Cricenti Bog with its network of paths and wonderful patches of pitcher plants in full bloom, and there was also a longer post-meeting trip to Mount Washington (p.300).

All in all, there was something for everyone with any kind of interest in plant life, and wonderful gems for rock gardeners.

Once again, all in attendance were and are grateful for Thelma and her Chapter members and other volunteers for a resounding success.

Addendum: I spent most of the weekend driving to the various gardens, and for one day I was accompanied by Jeff and a terrific pair of gardeners from Tennessee, Bill and Virginia Kennedy. As wonderful as the garden visits were, the company was better, and it made Friday a true joy for me. On Saturday, I had Jeff and the Wrightmans as company, while being chauffeured by one of The Fells Chapter's ubiquitous volunteers. Those of you who know Harvey and Irene know what good company they are, so I was doubly blessed to have the best possible companions for both of the days of garden visits.

There was a business meeting that preceded the actual Conference, and on Saturday evening, after dinner, we had our Annual Meeting at which we presented awards, had elections and generally attended to the business of NARGS, which thankfully didn't detract from the real point of getting together, which was and is to share the experience of rock gardening with people we only get to see on rare occasions, and with whom we share the unusual love of the kind of gardening Jeff so accurately described. **Peter George**

Photographs by Malcolm McGregor, Albert Martin and Steve Whitesell.



Building a Tufa Cliff

DAVID SELLARS

RAISED BEDS ARE widely accepted as one of the best methods of building a rock garden. They provide good drainage, allow the soil mix to be prepared from scratch and they are generally pleasing to look at, whether built as a crevice garden



Before (left) and after (above)

or a chaotic collection of rocks. Raised beds can also be constructed on steep slopes and this can be very effective for creating a dramatic rock garden.

In the winter of 2010 I decided to renovate a steep clay bank overgrown with heathers and build a cliff garden using some large pieces of tufa.

The basic design concept was to build a raised bed on a slant, superimposed on the steep clay slope. It was similar to constructing a horizontal raised bed except that stability was a major consideration to avoid a collapse. Nevertheless, I wanted a natural eroded appearance for the cliff and decided to make it look like a partially collapsing tufa cliff with one block already fallen.

A cliff constructed in a rock garden is essentially a retaining wall, and an important design principle is to provide drainage for the full height of the wall. Without good drainage the soil behind the wall could become saturated and, if it freezes in the winter, the expansion when ice is formed could push the wall over. The process is sometimes called ice-jacking. I planned to use a thick layer of coarse sand behind the rocks to make a good deep root run for the plants; this also provides good drainage behind the wall for stability.

In addition to drainage behind the wall, I try to ensure stability of a rock garden cliff by using the following strategies.

- I use mostly “blocky” rocks that are naturally stable with the largest rocks at the base of the wall. I do not use mortar as it will crack with slight movement of the cliff.
- I set the wall back at an overall angle of about 70 degrees. This is steep enough for dramatic effect, without the risk of toppling over posed by a vertical wall.
- Relatively thin rocks should not be placed near-vertical – they will eventually move outwards from the pressure behind the wall, even with a well-drained backfill. If the rock is relatively thin, I prefer to lay it horizontally.
- When placing a rock above a rock, I normally step it back to create a horizontal crevice. This creates a planting area as well as improving stability.
- I test the stability of the cliff as I build by climbing it and pulling the rocks outwards. If it is difficult to move them, the cliff will be stable in the long term. I will also be able to climb it later for planting and maintenance.

I formed the base of the wall by prying out large granite rocks from the clay slope. We are fortunate to have a variety of glacial erratics of all shapes and sizes on our property and many of the larger boulders had ended up on the clay bank. It was relatively easy to pry the boulders away from the bank and backfill with sand behind. I set the foundation rocks with a slight backwards slant for stability, propped them up temporarily with a piece of wood and filled the sand in behind as shown in the photo opposite.



Backfilling the foundation rock with coarse sand

Sliding a piece of tufa into place





Side view of the tufa cliff

I planned to place the tufa on top of the granite foundation rocks because plants in tufa like to be elevated with good air circulation. The first piece of tufa was raised into position by sliding it up a thick plank. Subsequent pieces were brought to the top of the slope using a heavy-duty dolly and then slid down the slope into place. To the left of the cliff I built a steep wall of granite boulders that were mostly light in colour to match the tufa as best as possible.

I had a large tufa slab left over, which I originally thought I could use at the top of the cliff, leaning back into the slope so it would be stable. As I looked at the slab it occurred to me that I might be able to incorporate it into an overhang. Having an overhang in the tufa cliff would provide perfect habitat below for *Kabschia saxifrages*. It is not just that the rain spoils the flowers in the early spring but they are also less floriferous in our climate in coastal British Columbia unless provided with winter rain shelter.

I ended up making two overhangs with heavy tufa blocks on top to hold the slabs in place. The overhangs are reminiscent of the Shawangunks, a towering sedimentary cliff west of Poughkeepsie in New York State. When I lived in Kingston, Ontario in the 1970s, we would drive south all Friday night and start rock climbing on the Gunks early on Saturday morning. In those days "gardening" on the cliffs was the term for removal of plants and soil to improve the handholds;

fortunately despite our diligence for clean rock, the area is still noted for its biodiversity.

For the design concept of a collapsing tufa cliff, the overhanging slabs look like the next pieces to fall but they are actually very stable.



Saxifraga 'Allendale Beau'

A year after construction, *Kabschia* saxifrages are happily flowering both above and below the overhangs. Some are in cracks between the blocks and others such as *Saxifraga* 'Allendale Beau' are planted in $\frac{5}{8}$ inch holes drilled into vertical faces in the tufa. I am busy making cuttings of more *Kabschia* saxifrages and growing *Androsace* species, such as *A. hirtella* and *A. pyrenaica*, from seed for eventual planting in the cliff.

OVERLEAF: The tufa cliff planted with young saxifrages that will grow into the cracks and form much larger cushions. A sense of scale is gained from the group of *Primula denticulata* at the front left.

Kabschia saxifrages on the cliff







Correspondence

To the Editor

Dear Malcolm

Thank you for the coverage of the 2011 International Rock Garden Conference. Bill Brown did a fine job of recalling the details of that extraordinary event. Waiting 10 years between conferences is well worth it!

I'd like to correct one item, however--a bit of embarrassment actually. The first Conference I attended was at Harrogate in 1971. (In 1961 I was concentrating on propagating a sweet lassie named Karen Annette.)

It has been a pleasant exercise recalling past Conferences--the people, places, gardens, programs and the details that made each a wonderful, inspiring and unique experience. I count myself very fortunate to have attended the past five and look forward to the 2021 event.

Marguerite Bennett

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NARGS Bulletin Board

News supplement to the Rock Garden Quarterly

From the new President

Dear NARGS Members,

During the relatively short time I've been President of NARGS, I've had an opportunity to examine the current state of our organization in some detail. I'm pleased to report that, in general, we're in pretty good shape. Our financial situation is now stable and should improve; last year we had a \$19K deficit, largely from a one-time write-off from the closing of the Book Service, but we expect to have a surplus this year. We will have some funds available for programs and membership support, but this opportunity necessarily brings with it the challenge of deciding where to direct our efforts and our money. Here are my preliminary thoughts on this subject:

1. The NARGS *Rock Garden Quarterly* is doing very well, in my opinion. Our Editor, Malcolm McGregor, has changed the format dramatically, and his success in soliciting new, fresh, and relevant material is obvious to anyone who has spent a few minutes glancing through a recent issue. I expect that Malcolm will continue to improve the *Quarterly* and that it will become the kind of publication that every NARGS member will want to read and re-read.
2. Our website is a significant improvement over its predecessor. We have an excellent Webmaster, our Forum is vibrant and growing, and other important elements are being addressed as well. However, our current online presence is not robust enough to keep up with changes in technology that we see everywhere we look today. Our Webmaster, for all of his virtues, is a very part time contractor, to whom we have given gigantic responsibilities and a tiny budget. Since the website is the portal through which all NARGS activities are going to pass, we have to address the funding issue now and establish a long-term strategic plan for how we are going to develop the site over the next two to three years. And, of course, we need to improve the site's capacity to handle sales, streaming video, Kindle downloads, and many other new technologies that are increasingly dominating our lives. I know that many of us are at least semi-Luddites (that is, we are not particularly comfortable with the increasingly ubiquitous use of technology), but the future is not "us." It's "them," by which I mean people under 40 who hopefully will join NARGS in the future and will find it to be a comfortable and interesting place for them to do what we rock gardeners do. For this to happen, we need to start the process now.

Over the next few months I'll be offering ideas about what we ought to be doing to keep the NARGS website up to date, interesting, accessible, and useful.

3. Our Chapters are reflecting the widespread diminished interest in joining organizations, as well as the burnout that many of us feel when we are asked again and again to serve on a committee, provide refreshments for a meeting, arrange housing for a speaker, bring seedlings to a sale, or simply drive an hour or more to a meeting on a hot summer day, or a cold winter day, when there are many other things we could be doing that require much less effort. Our job is to find ways to help our Chapters improve their programming, their Internet presence, their newsletters, their venues, etc., while continuing to offer enhanced benefits to Chapter members so that they will want to join NARGS. Far too many Chapter members are not NARGS members, and no amount of cajoling will get them to join. What will get them to join is value, and I intend to move aggressively to improve our benefits, so that non-members will join because they want to get the Journal, participate in our programs, share tours and expeditions with their friends, and hear world-class speakers. Today we have 38 Chapters, some very strong and active, some in virtual hibernation; we have to find ways to sustain the former and revive the latter. To achieve these goals, communication among NARGS officers, Chapter leaders, and the general membership is absolutely essential-- and we have the means to facilitate it. Let's start by visiting the Forum regularly and using it to talk to each other about any issues we feel are important. This is the only way we can really expect to make progress.

4. I mentioned "tours and expeditions," and I have asked Bill Brown to chair a committee whose charge is to create opportunities for NARGS members to have access at affordable prices to botanical trips within North America, and perhaps overseas, designed with our particular interests in mind. I expect Bill (and his committee, which also includes Tom Clark at this point) to identify a tour company willing and able to provide the kinds of tours we want, at prices we can afford, which will be available to NARGS members only. This will be a benefit of consequence, and one that I believe will result in increased membership.

This is the first of a series of columns I'm going to be writing, some to appear on the website, others in the Quarterly. Please give me feedback. I hope that my proposals get your attention, and whether you agree or disagree, please make a point of letting me know. My two years are not going to be spent quietly sitting on the sidelines and hoping for the best. I'm an activist, and I hope everyone who reads this will pitch in as much as possible. We need your energy, your creativity, and your support.

Peter F. George
NARGS President
<petergeorge@verizon.net>

NORTH AMERICAN ROCK GARDEN SOCIETY AWARDS

Many of our members' gardens are a sight to behold. Our past Annual Meeting in New London, New Hampshire, was pure beauty, lots of "aahs" and "wows". These gardeners need to be recognized for sustaining NARGS. Please consider nominating that important person in your chapter or NARGS that has an extraordinary garden or has propagated specialized plants for sales and display. And don't forget those who write those wonderful books and articles. Two awards do not require membership in NARGS. There are many gorgeous, rock gardens throughout our gardening community, yet only a trickle of nominations have been made for the new garden award. Please send me a write up and photo. Time is short this year. Our annual meeting in Washington is in March!

Below are listed the various awards. For specific details, requirements, updates and nominating procedures, consult the NARGS website under NARGS People/ Responsible People/ Awards. **Deadline for Nominations is February 5, 2012.** Questions and nominations should be sent to the current NARGS Awards Chairman:

Betty Spar at e-mail: <bettyannespar@aol.com>
postal address: 206 Wolfe Street, Alexandria VA 22314
Telephone: (703) 549-0214.

- **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.
- **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.
- **EDGAR T. WHERRY AWARD** is given to a person who has made an outstanding contribution in the dissemination of botanical and/or horticultural information about native North American plants. The recipient does not have to be a member of the Society.
- **CARLETON R. WORTH AWARD** is given to an author of distinguished writings about rock gardening and rock garden plants in a book or in magazine articles. The recipient does not have to be a member of the Society.
- **MARVIN E. BLACK AWARD** is given to a member of the Society who excels at promoting membership in NARGS; organizing study weekends, national, and international meetings. They should also be involved in such activities as planning trips to study plants and to meet other plant people. The emphasis shall be placed on a member who has helped other people to reach their potential in the plant world.
- **LINC & TIMMY FOSTER MILLSTREAM GARDEN AWARD** is for an outstanding contribution to the North American Rock Garden Society for creating a superior garden. Not meant to be a competition, but to recognize members' great gardens across the various styles and regions of the United States and Canada. 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.

Betty Spar, NARGS Awards Committee Chair
<bettyannespar@aol.com>



NARGS Seed Exchange

The first important phase of the Seed Exchange is drawing to a close: that of garnering as many donations as possible of seed of rock, alpine, and other garden-worthy plants. With a deadline of November 1 for receipt of the seeds, there is still a bit of time for NARGS members in the U.S. to send their donations. It would be great if we could have as many donors as users of the seedex. It only takes a minimum of 5 packets of different seeds to become a donor and, in return, receive 10 extra packets of seed (a 200% return!), plus priority in having your order filled in January. Give it some thought... then quickly follow up with some action.

The next thing you need to do, if your email is not already on record, is to send your email address to our Executive Secretary, Bobby Ward, at [<nargs@nc.rr.com>](mailto:nargs@nc.rr.com).

No further contact is necessary; no special password to remember. Once you are registered in this very simple way, you will be eligible to use the new Seed Exchange online ordering system when the Seedlist is posted on the website December 15, 2011.

This software will automatically recognize your email address when you type it in, and you will then be able to order and pay for the seeds electronically. The software has been designed and customized for NARGS's needs by NARGS Webmaster, Chris Klapwijk, who has already installed a system for the Alpine Garden Club of British Columbia (AGC-BC) that has been working smoothly for the past couple of years.

Clear instructions for using the new ordering and payment system will accompany the posting of the seedlist online on December 15, and help will be available for any needed clarifications. This online ordering system will ease and speed the whole process and, just as importantly, will increase the accuracy of the information reaching the volunteers who fill the orders.

But you must send your email address to Bobby Ward before you can access the online seed-ordering system. Doing so by December 15 is mandatory; doing it sooner is definitely preferable.

Ordering with a printed seedlist and order form will still be available and honored. To receive a print copy of the seedlist, contact me by Thursday, December 1st:

Joyce Fingerut
537 Taugwonk Road
Stonington, CT 06378-1805
U.S.A.
[<alpinegarden@comcast.net>](mailto:alpinegarden@comcast.net)

NARGS Meeting Stipend Awards

1. **MARI SHORT** of Northwestern Chapter used the NARGS Meeting Stipend to attend the Western Winter Study Weekend in Sidney by the Sea, British Columbia. Claire Cockcroft, Northwestern Chapter chair, specified these reasons why Mari deserved the stipend:

"I am pleased to recommend Mari Short for a NARGS meeting stipend. Mari took on the role of the treasurer of the Northwestern Chapter 2 years ago. Relatively new to NARGS, Mari has demonstrated dedication, energy, flexibility and enthusiasm as she's dealt with our chapter finances, plant sales, and many other activities. She is actively involved in the planning for 2012 Western Study Weekend that our chapter will host. For Mari to be able to attend the study weekend in British Columbia in 2011 would be icing on the cake!"

2. **GORDON MacKAY**, Cowichan Bay, British Columbia (region with no NARGS chapter) for the Annual Meeting in New London, New Hampshire.

Information on the Meeting Stipend, currently \$300, may be found on the NARGS Web site <www.nargs.org> after **logging in**, under **About Us** and then **POLICIES**.

--GRAZYNA GRAUER--
Past President, NARGS
<grazynalg@sbcglobal.net>

SPEAKERS TOUR 2013 ANNOUNCED

We are pleased to announce the names of the two individuals who will participate in the NARGS Speakers Tour for 2013.

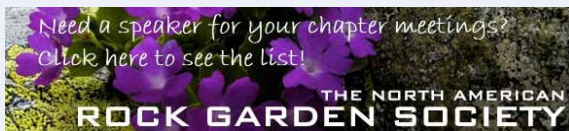
James H. Locklear (Nebraska) will present programs to western NARGS chapters in March 2013 and **J. Ian Young** (Scotland) will present programs to eastern chapters in September 2013. A complete bio of both James and Ian are on the NARGS Web site under "Speakers Tour."

The 2012 Speakers Tour was announced earlier and consists of Fritz Kummert (western chapters in March/April) and Nick Turland (eastern chapters in the fall). Fritz and Nick's bios are also listed on the NARGS Web site.

For information, contact Barbara Wetzel at <aparkplace@aol.com> or telephone 847-658-1528.

NARGS SPEAKERS LIST ON-LINE

1. Shortly, chapters will begin to plan their programs for the coming year. Please view the Speakers List site on the NARGS website (under "Speaker Tours" but you will need to login as it will not appear) and consider one of the outstanding speakers who are described there for one of your programs. You will note that there are now two additional sections to this list. The speakers also appear on the list by area of their residence and a second section now lists the speakers by their topics.



2. Are you interested in being part of the Speaker Program? Have you given talks and enjoyed doing so?

Please contact Barbara Wetzel at <aparkplace@aol.com> to secure a list of the necessary information.

NORMAN SINGER ENDOWMENT FUND

The NARGS Norman Singer Endowment Fund is accepting applications for grants to support projects that "advance the art and science of rock gardening." Areas that fit the grant criteria include publications, promotion to the general public including public rock gardens, education and preservation, and conservation. Both individuals and institutions may apply. Endowment Fund guidelines, application form, a list of previously funded projects and photos of public rock garden projects can be found on the NARGS Web site, <www.nargs.org> under "Norman Singer Endowment Fund" via the site "Wiki".

Proposals for funding to be granted during the current year must be submitted before January 14, 2012 to Bobby Ward, preferably by email <nargs@nc.rr.com>

or by mail to

Bobby Ward, NARGS Norman Singer Endowment, POB 18604, Raleigh, NC 27619-8604).

Award recipients will be announced at the Annual General Meeting in March 2012.

Thank you.

Jane Grushow

Norman Singer Endowment Fund Chair

NARGS December 2010 Donations Appeal

DONATIONS between January 28th and April 23rd, 2011

DESIGNATED

Rock Garden Quarterly \$50

GENERAL FUND or UNDESIGNATED \$1150

TOTAL as of July 31, 2011 \$6790

DONORS

James Sumner (Michigan)
Sue B. Mandeville (Oregon)
William "Bill" Brown (New York)
Jane Neville (California)

Daniel Holden Adams (New York)
Marna C. Tallman (Oregon)
Amal Moamar (Massachusetts)

Persons who joined NARGS June 1st to July 31st

Abrams, Lucy, 25 Leonard St., Stamford, CT 06906
Campbell, Joan, 804 Honey House Ln., Corvallis, MT 59828
Eisenman, Carolyn & Dave, 231 Clover Hills Dr., Rochester, NY 14618
Hagan, Nancy, 6014 Wedgwood Dr., Morrow, OH 45152
Hall, Sally, One Windmill Hill, Stow, MA 01775
Hood, Michael, 128 Snell St., Amherst, MA 01002
Levin, Albert B., 93 Pleasant St., Lexington, MA 02421
Littlefield, Bill & Gail, POB 724, Petersham, MA 01366
Manfroni, Rino, 1202 W. Lover's Ln., Arlington, TX 76013
McCammon, Helen, 76 Roberson Rd., Sequim, WA 98383
Nishikawa, Linda, 22 Quintera Ct., Ottawa, ON K1V 1K8 Canada
Rhame, Lucy, POB Q, The Plains, VA 20198 Life Member
Svec, Jaroslav, Hostaky 896/9, Myjava 90701 Slovakia
Svensson, Christina, Bjorka 313, Solleftea 88192 Sweden
Zamkoff, Irving, 915 50th St, Ct. W, Bradenton, FL 34209

We have learned of the death of the following NARGS members

John Bender, Lake Forest Park, Washington
Beatrice Lindberg, Madison, Wisconsin
Muriel Milsted, Downers Grove, Illinois

NARGS Nominations

The Nominating Committee has secured nominations to fill the three Director positions becoming vacant in 2012. These are David White (North Carolina), Paige Woodward (British Columbia) and Matt Mattus (Massachusetts), who have each agreed to their nomination.

As will be obvious we have managed to secure wide geographic representation and I want to thank the Committee for their work.

Details of the three nominees will be published in the next issue of the Quarterly

Lola Horwitz
<llhorwitz@gmail.com>
Chairperson of the Nominating Committee
August 25, 2011

Chapter Fund-Raising Activities

Shirley Friberg, Minnesota Chapter membership chair, has inquired on the ways local NARGS chapters raise funds for activities in addition to a membership fee. Shirley is aware of chapter plant sales (her chapter holds two annually). Would other chapter membership or program chairs share suggestions for funding raising or profit generating activities that are not inconsistent with the stated purpose of the chapter from a 501(c)(3) tax exempt standpoint? Please send to <nargs@nc.rr.com> and the ideas will be shared with Shirley and other chapters.

THE FOLLOWING RECENTLY BECAME NARGS LIFE MEMBERS

Lucy Thame (Virginia)

THE FOLLOWING BECAME PATRONS

Boyd Hutchison (Massachusetts)

Amal Moamar (Massachusetts)

Annual Financial Report

For the Calendar Year Ending

12/31/2010

Respectfully submitted,

Randy L. Tatroe

Treasurer

August 20, 2011

Supplement to the *Rock Garden Quarterly*, Fall 2011

Introduction and Summary

The North American Rock Garden Society, Inc. (NARGS, or the Society) is a not-for-profit organization founded in 1934 and incorporated in New Jersey in 1943 as the American Rock Garden Society. Its present name was established in 1994. The Society encourages and promotes the cultivation, conservation, and knowledge of rock garden plants. To further these objectives, it publishes the *Rock Garden Quarterly*, each year supports local Chapters that host conferences, sponsors botanical expeditions and supports the publication of books on the subject of rock gardening and rock garden plants. The Society also promotes the knowledge of rock gardening through numerous other activities, such as operating a slide library, awarding grants to projects related to its aims, and providing internships to educational institutions involved in subjects related to rock gardening. The Society promotes cultivation and conservation through its operation of a world-wide seed exchange program. Educational endeavors include a program to bring foreign experts to this country for extended lecture tours for the Society's chapters, and a Program Resource Center (now replaced by the work of the Speakers Tour Program Committee) to identify suitable and recommend speakers to chapter heads for local meetings. These activities are described on the NARGS website (www.nargs.org), along with much other information and illustrations. Financial support for these activities comes primarily from membership dues, contributions, book sales, charges for services, and interest and dividends earned on the Society's investment pool.

The investment funds consist of three restricted funds and one unrestricted

NORTH AMERICAN ROCK GARDEN SOCIETY

fund. Restricted Funds are the Norman Singer Endowment Fund, the Carleton R. Worth Award Fund, and the Robert Senior Award Fund. Unrestricted Operating Reserves principal is available for operations, and income earned from investments from this fund is used for the general purposes of the Society.

The Norman Singer Endowment Fund income is available for grants approved by the Board of Directors. The Carleton R. Worth Fund income goes for cash awards to authors of noteworthy rock garden publications. The Robert Senior Award Fund was created by the Ohio Valley Chapter in memory of Robert Senior; its income is used to finance awards for outstanding exhibits of campanulas.

The financial records of the Society are maintained on a cash basis, recognizing income when it is received and expenses when they are paid. Investments (Certificates of Deposit) are recorded at face value.

The accounts of the Seed Exchange are maintained by the NARGS Treasurer, but the Slide Library is, and the Book Service was, maintained primarily by the managers of those services, and are audited separately, as is the deposit account maintained by the Executive Secretary for membership dues and some other receipts. The accounts of the Society presented here are the consolidated results of all the Society's operations.

The Society's financial condition remains strong, with unrestricted reserves equal to about 1-1/2 times annual disbursements. Membership at the end of 2010 was 2590, down 9% from end of 2009 (2687 members).

2010 Financial Review Report

Peter George, President
North American Rock Garden Society (NARGS)
PO Box 833
Petersham MA 01366

Dear Mr. George,

I have examined the NARGS financial records maintained by the Treasurer, Randy Tatroe. The records, including the consolidated statements of NARGS and affiliated operations are complete and are being maintained in accordance with accepted accounting standards. I have examined the bank statements, deposit records, and balances for the 2010 calendar year.

In my opinion, the report of Assets and Equity accurately reflects the financial status of the North American Rock Garden Society as of December 31, 2010.

This audit does not include records maintained in the office of the Executive Secretary, Seed Exchange, Slide Library or Book Service, only the results as reported to and reviewed by the Treasurer.

Sincerely Yours,

Calvin Curtis
1620 Parfet Ct.
Lakewood CO 80232

NORTH AMERICAN ROCK GARDEN SOCIETY

Balance Sheet - December 31, 2010

ASSETS

Cash Accounts		\$81,541.66
Wachovia Membership	\$659.15	
Susquehanna - Book Service	\$1,097.48	
Wachovia - Book Service	\$250.17	
Wachovia Money Market	\$79,534.86	

Investments		
Wells Fargo Advisors - CDs	\$295,000.00	

TOTAL ASSETS \$376,541.66

EQUITY

Restricted Funds		\$154,045.37
Norman Singer Endowment	\$149,431.87	
Robert Senior Award Fund	\$1,275.72	
Carleton Worth Award Fund	\$3,337.78	

Unrestricted (retained earnings)		\$241,853.86
----------------------------------	--	--------------

Net Income (Loss)		\$(19,357.57)
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TOTAL EQUITY \$376,541.66

Comments:

1. NARGS has no liabilities
2. Investments are listed at face value
3. Life Memberships, formerly individually classified, are included in Unrestricted Category.

NORTH AMERICAN ROCK GARDEN SOCIETY

PROFIT & LOSS STATEMENT

January through December 2010

INCOME

CONTRIBUTED SUPPORT		\$84,290.00
Memberships	\$78,265.00	
Donations	\$6,025.00	
EARNED REVENUES		\$40,198.07
Interest	\$12,975.49	
Advertising	\$1,460.00	
Book Royalties	\$418.85	
Seed Exchange	\$14,701.87	
AGM and Study Weekend	\$260.00	
Book Service	\$9,896.11	
Miscellaneous	\$485.75	
TOTAL INCOME		\$124,488.07

EXPENSE

GRANTS/STIPENDS/AWARDS		\$8,233.08
Stipends	\$1,800.00	
Grants	\$6,000.00	
Awards	\$433.08	
CONTRACT FEES		\$48,875.00
Quarterly	\$18,375.00	
Book Service	\$9,750.00	
Seed Intake	\$5,000.00	
Web Master	\$3,750.00	
Executive Secretary	\$12,000.00	
BANK FEES		\$2,024.24

NORTH AMERICAN ROCK GARDEN SOCIETY

ADMINISTRATIVE EXPENSE		\$10,391.10
AdCom	\$4,646.99	
Executive Secretary	\$3,200.87	
Accounting	\$850.00	
Legal	\$25.00	
Insurance	\$1,622.00	
Postage and Shipping	\$31.24	
Miscellaneous	\$15.00	
PROGRAM SERVICES		\$74,322.22
Book Service	\$12,020.27	
Membership Publications	\$3,619.00	
Seed Exchange	\$5,992.96	
Speakers Tour	\$4,624.88	
Rock Garden Quarterly	\$44,470.57	
Miscellaneous	\$152.54	
2011 AGM *	\$3,442.00	
TOTAL EXPENSE		\$143,845.64
NET LOSS		-\$19,357.57

Comments:

* Advance to the Fells Chapter to be repaid after the 2011 AGM is completed

Comments on Programs

Study Weekends and the Annual General Meeting. The Eastern Winter Study Weekend (EWSW) was held in Massachusetts and the Western Winter Study Weekend (WWSW) was held in Oregon. The Annual General Meeting (AGM) was held in Salida CO; with all events showing positive results. The result for 2010 was a positive \$6,535 compared with a positive \$1,400 in 2008.

Norman Singer Endowment Fund received one contribution (\$100) in 2010. The endowment grants for 2010 totaled \$6,000 (\$1500 to the Iowa Arboretum to add rock and trough gardens, \$1500 to the Alleghany Chapter to refurbish rock gardens at the National Aviary and \$3000 to the NARGS Seed Exchange program to build a seed-ordering database.) The amount of the grant essentially equaled the amount of interest earned from investments of the Norman Singer Endowment funds.

North American Rock Garden Society Awards


Details of all awards are given on pages 308-313

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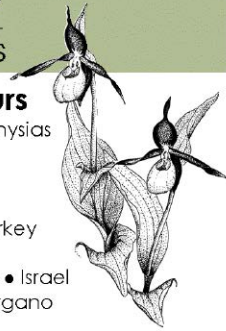
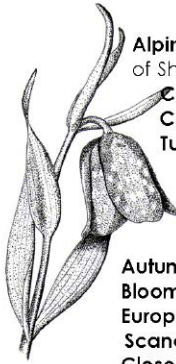
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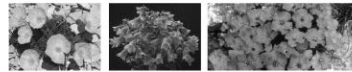
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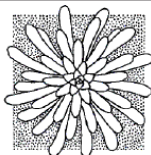
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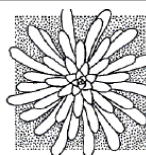
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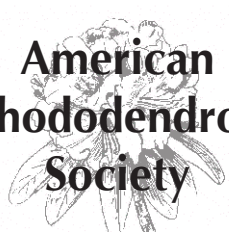
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Enjoy Nature at its finest by taking one of the 3 field trips offered as part of the weekend events. These trips include:

1. McConnell's Mills State Park - a rocky gorge created by Slippery Rock Creek includes a restored mill. Site of 2 endangered species – Laurentian Bladder Fern (*Cystopteris laurentiana*) and Harbinger of Spring (*Erigenia bulbosa*). Hiking these trails is considered light to moderate.

2. Jennings Blazing Star Prairie – a relic prairie from when Pennsylvania was all prairies over 10,000 years ago. Site of largest native stand of Blazing star gayfeather (*Liatris spicata*), large stands of native Asters and other fall blooming composites.

3. Pittsburgh Phipps Conservatory and Botanical Garden and National Aviary Rock Garden – the trip will go through areas of lovely fall forest and the tour of the

nationally renown Phipps Conservatory (second or third largest in the world depending on how space is calculated) is spectacular. The fall chrysanthemum show will be in full regalia and the tour will include visiting the newly renovated Alleghany Chapter rock garden at the National Aviary.

Also in the weekend program will be speakers, workshops, vendors, trough show, plant auction, raffle and other events.

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**NARGS 2012
WINTER STUDY WEEKEND
PITTSBURGH, PA**

Autumn in the GARDEN

*- A Time for
Thoughts -*



**October 12-14
2012**



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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 at an annual meeting.

The Board of Directors of NARGS consists of the four above-name 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	Barbara Wetzel, 20 Braeburn Lane, Barrington Hills, IL 60010
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 _____

2009–2012	Marguerite Bennett, Seattle, WA Lee Curtis, Lakewood, CO Ray Deutsch, Redwood City, CA
2010–2013	Jane Grushow, Ephrate, PA Philip MacDougall, Surrey, BC Anne Spiegel, Wappinger Falls, NY
2011–2014	Lola Lloyd Horwitz, Brooklyn, NY Janet Novak, Philadelphia, PA Betty Spar, Alexandria, VA

MANAGERS _____

Executive Secretary	Bobby J. Ward (919) 781-3291 PO Box 18604, Raleigh, NC 27619-8604 nargs@nc.rr.com
Book Service	See the NARGS website: www.nargs.org

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