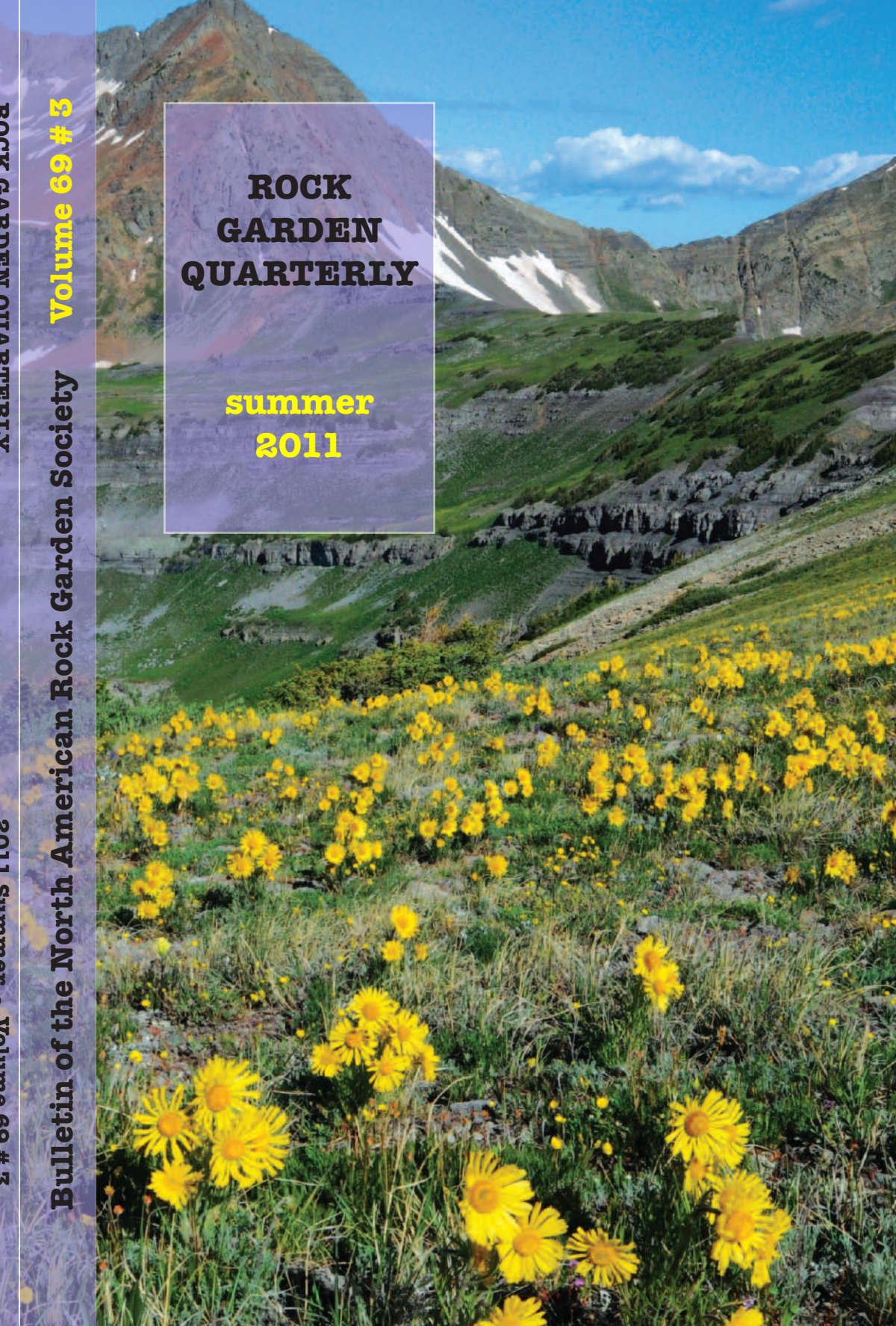

ROCK GARDEN QUARTERLY

summer 2011

Bulletin of the North American Rock Garden Society Volume 69 # 3

ROCK GARDEN QUARTERLY Volume 69 # 3 summer 2011

CONTRIBUTORS

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Lori Chips is currently Alpine Manager at Oliver Nurseries. She is a member of the Berkshire Chapter and many of her articles have appeared in their newsletter. She is always trying to find new ways to please alpine plants at sea-level in New England. Lori's article "Anatomy of a Cushion Plant" appeared in the Fall 2010 issue of the *Quarterly* and her illustrations were featured on the covers throughout 1999.

Bill Brown gardens on Long Island, New York, where apart from his own garden he maintains those of a number of clients. Bill travels widely on plant trips and to conferences.

Marilyn Farr is a linguist who has been fascinated by plants ever since childhood. Since taking early retirement from teaching in Higher Education she spends her time filling in gaps in her education, which includes trips to places of botanical interest and indulging her passion for the history of art and design including that of gardens. She also enthusiastically cultivates a large suburban garden in Oxford, England.

Stephanie Ferguson is an artist who gardens in Calgary, Alberta. Her husband **David** is an architect who loves to dig and move large stones. Together, they continue to try to create a suitable environment for high altitude plants; in particular ones that they grow from seed.

Betty Mackey is an independent garden book publisher who owns and runs B. B. Mackey Books (*www.mackeybooks.com*) in Wayne, Pennsylvania. She edited and published *Creating and Planting Garden Troughs*, by Joyce Fingerut & Rex Murfitt. Until recently, Betty was Chair of the Delaware Valley Chapter of NARGS. Betty gives demonstrations and workshops on troughs.

Lada Malek gardens in the "pretend"mountain environment of continental Canada (spoiled by wet autumns, influenced by Lake Superior) with unusual plants which are low maintenance and don't require too much babysitting. This leaves time to get away and photograph plants in their native mountain habitats. Lada's work also involves plants and the function of their archenemies – the fungi.

Mark McDonough lives and gardens in Massachusetts. NARGS member since 1975, he is a long time member of NARGS New England Chapter, and currently NARGS Forum Lead Moderator & co-Administrator, and Alpine-L List-Owner. He is, however, best known as The Onion Man, specializing in the genus *Allium* for over 40 years, and contributing author for *Bulbs of North America*. Mark's plant passions expand beyond *Allium*; he is currently involved with hybridizing *Epimedium* and *Jeffersonia*.

David Sellars is a photographer, writer and lecturer on alpine gardening and is developing an extensive rock and woodland garden in coastal British Columbia, Canada. He is an avid mountain hiker and maintains the website *www.mountainflora.ca*.

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

Front cover: *Rydbergia grandiflora*, Crested Butte, Colorado (detail) - Yoko Arakawa

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Contents

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While some people are getting up close and personal with the flowers in this class of North American alpines, Martin Walsh (standing left) from Dublin, Johan Nilson (center) from Sweden, and Michael Kammerlander (right)) from Germany discuss the array on show.

Alpines without Frontiers:

People & plants meet up in Nottingham – April 14-17

Bill Brown

ONCE EVERY TEN years the Alpine Garden Society (AGS) and the Scottish Rock Garden Club (SRGC) host an International Rock Garden Conference – they alternate between England and Scotland where the previous one had been held in Edinburgh in 2001. This was the eighth such conference and was held in Nottingham in the English Midlands. This is the second time a meeting was held in Nottingham, the first being in 1981.

Although Maid Marion and Robin Hood were conspicuously absent (they must have had a previous engagement at nearby Sherwood Forest), with over 300 attendees from at least 15 countries the Conference was truly international in scope. The speakers represented 10 different countries (albeit, considering Scotland and Wales as different countries from England will be construed by many as politically incorrect).

HIVE OF ACTIVITY

Much was happening in the conference center. There were book sales, seed sales, sales of AGS and SRGC merchandise, and great plant sales although with no provision for phyto-sanitary certification most North Americans decided that they just had to give these a miss – a plea to all conference organizers should be that such an opportunity should be provided.

The display that was most impressive was the photo exhibit. Physically it stretched from one end of the Conference Centre to the other; pictures of plants, places and people were beautifully captured. The high level of the digital photography with all its superlatives has at last convinced me to do away with my Kodak Brownie.

The other great event of the Conference and the one where we came closest to actual plants was at the Plant Show, where many hundreds of exquisitely grown and presented plants were arrayed and judged. It is almost impossible to do justice to the spectacular array except to say that I think we could have all happily spent far longer than was available to us perusing extraordinarily well-grown plants.

The accommodations at the University of Nottingham were clean and comfortable although a bit too Spartan for yours truly, but I put on my stiff upper lip and carried on. Meals were taken variously at the two separate accommodation blocks and at the Conference Centre where there was a more formal Banquet on the last night. At the completion of the evening meals it was off to the Conference Centre

Robert Rolfe (England) in typical pose, with George Sevastopolou (Ireland)

for more lectures. Some considered the walk to the Conference Centre a stroll, although some elderly participants might have recategorized it as at least a hike. But whatever the sentiments, the lecture was "the thing."

LECTURES ALL THE WAY

The level of expertise and enthusiasm was remarkable and tryingto make sense of such a spectacular program of lectures is difficult but three main themes emerged: people, plants, and places.

Two speakers concentrated on people as much as plants, with Henrik Zetterlund giving a lecture dedicated to, and about, his great friend Jim Archibald (who would

Todd Boland (Newfoundland) busy photographing plants on the showbench

BLACK & WHITE : No room for more than a couple of the plants that were on the showbench — *Primula euprepes* (above) with extraordinary black flowers has only recently come into cultivation. *Androsace vandellii* (below) has long been in cultivation and is easy from seed but few specimens get much better than this.

have been delighted and honored by the work that had clearly gone into this memorial lecture) and the plants with which he was associated. In a similar vein, although with a much wider purview, Brian Matthew looked at those responsible for finding or describing so many of the bulbs we either grow or desire, from 18th and 19th century figures such as William Herbert, George Maw and Regel through to much more recent ones including Elmer Applegate and those such as Marion Ownbey, Per Wendelbo, and William Stern.

Then there were those who focused on a particular group of plants: John Richards introduced us to a wealth of new Himalayan primulas; Michael Kammerlander showed us a spectacular array of Juno irises; Martin Sheader concentrated on the violas of the southern Andes. Also very firmly in the "plants" category was Robert Rolfe – one of the all-time plant enthusiasts with encyclopedic knowledge and memory.

Geographic surveys of different floras were well covered. Discussion of Asian plants took pride of place: Harry Jans took us overland from Yunnan to Tibet; Martin Walsh showed some of the high alpine flowers of Bhutan which we are never likely to see in cultivation; Vojtech Holubec took us to the Tien Shan, "The Celestial Mountains" [and announced that the Czech Rock Garden Club would be staging its own 8-day conference in May 2013 - more details when we have them, *Ed*] and Toshio Yoshida provided a very focused look at endemism among Sino-Himalayan plants. Turning to other parts of the world, David Haselgrove gave us a great survey of alpine plants from around the Southern Hemisphere through South America, South Africa, Australia and New Zealand.

John Grimshaw showed and discussed the alpine plants of East Africa and the giantism in such genera as *Lobelia* and *Dendrosenecio*; Todd Boland represented North America with an intriguing introduction to the plants of Newfoundland and the north-eastern Appalachians. Highlight speaker after the banquet was Roy Lancaster, who spoke about his life as a plantsman finding the plants that he, and we, love. And as a farewell, retiring AGS editor Chistopher (Kit) Grey-Wilson gave a tour-de-force circling of the globe from his lifetime of finding and photographing plants.

Some speakers managed to transcend such categories, however. Gardening was not at the forefront of most lectures but it was for some: Ian Young talked about his own love of plants and about the challenges he faces in growing alpines and bulbs; Keith Wiley changed the scale from normal backgarden to the spectacular with his naturalistic planting at his Wildside garden. And in a challenge to many, John Good spoke about the nature of the pressures on plants in a world of pollution, climate change, and collection from the wild.

The AGS has compiled a special edition of their journal *The Alpine Gardene*r of the proceedings of the Conference. If you are a member of the AGS you will receive it in the post. As a member of the AGS and

a delegate at the conference, I have two copies. Let me know and I will lend one to you to be passed on ad infinitum.

THE REAL PLEASURE

I love these sorts of events and they can become quite addictive - one of our NARGS members at the conference was Marguerite Bennett of Seattle, Washington, who has been attending these meetings since 1961. Marguerite has assured me that she was a wee lassie at her first such conference.

The theme of the conference was "Alpines without Borders" which was taken from a quote by Sir Frederick Moore who said "Plants have no borders." Unfortunately people do, although at events such as this their enthusiasms transcend them.

Because, in the past, 10 years has seemed too long between these meetings, NARGS has held Interim Conferences – the first was in 1976 in Seattle, the last in 2006 in Snowbird, Colorado. Let's hope that NARGS is willing and able to continue in this way in the future.

Conferences like these energize your plant passions, rekindle past friendships, and give the opportunity to make new friends. The late E.B. Anderson in his book *Seven Gardens* was asked if he would rather have fewer plants or fewer friends and energetically states, "I would rather have fewer plants," and, if I have to choose, I heartily concur.

PHOTOS by Todd Boland (plants) and Malcolm McGregor (people).

MORE CAMERAS TO THE FORE

Top: Harry Jans (left) from the Netherlands and Josef Lemmens from Belgium

Above: NARGS Director Marguerite Bennett from Seattle and Manhattan Chapter Chair Michael Riley

Below: Vojtech Holubec (left) from the Czech Republic with Todd Boland, Newfoundland Chapter Chair

Correspondence about *Douglasia nivalis* & David Douglas

In the Winter 2010/2011 issue of the Quarterly, David Sellars wrote about the mystery involved in David Douglas's discovery of Douglasia nivalis *(pictured right, photo David Sellars).*

From Lada Malek

More on the Douglasia nivalis mystery.

A beautiful plant indeed! It does seem strange, though, that an explorer of Douglas's calibre, working in Canada at the very end of the golden era of geographic exploration, would make an error of the magnitude suggested in the wonderful article by David Sellars. Surely a more likely explanation for the lack of observation of this plant in the Canadian Rockies is that no-one has looked in the right locations at the right time of year since Douglas's travels.

I have spent many Summer seasons in the Canadian Rockies over the years, and can safely say that no one with amateur, let alone professional, interest in alpine botany has been in the right spot at the right time. The high alpine ridges at the suggested 9,000 feet are likely freed of snow in late May/early June — a time during which, as David Douglas himself points out, the mid-elevations are still filled with 1–2 meters of old heavy snow. This deep snowcover discourages much mountain travel on foot (even with snowshoes) and the ski season is well over, partly because many of the approach roads are snowless and muddy tracks. The only high ridges regularly visited in the Rockies at that time of year may be in the vicinity of Mt. Assiniboine. The proprietor of the Assiniboine Lodge guides trips to nearby ridges and reports interesting plants such as Arctic poppies in bloom during early Spring.

Helicopter access has made a mockery of the heroic efforts that early explorers such as David Douglas went to in order to access remote places, such as the high alpine ridges. It may take a botanist with immense perseverance, or deep pockets, to investigate these spots in the Rockies during the difficult, but likely very beautiful, season. I am aware of surveys of the high alpine flora of British Columbia (BC) by staff of the Royal BC Museum in Victoria, in the 1980s. These were conducted with the occasional use of a helicopter, but likely during July and August. *Douglasia nivalis* would be in bloom too

early and harder to notice later in the season. The BC surveys also focused on Western and central parts of the province's mountains. To complicate matters, the Canadian National Park Service controls motorized access in the Eastern reaches of BC — the part of the world visited by David Douglas. For various reasons, professional research into the botany of the Rockies' national parks was discouraged by the Park Service, and to be fair, the profession of botany has not paid much attention either, moving away from a focus on species abundance and taxonomy, particularly in "economically unproductive" areas such as high mountains. Some alpine plant research is taking place southwest of Calgary on Plateau Mountain by University of Calgary researchers; but again, access there is limited to a later part of the alpine growing season.

A quick check of the University of British Coumbia, and University of Calgary herbaria databases confirms that *Douglasia nivalis* has not been deposited there, even by exchange with botanists from Washington State, and in the University of Alberta herbarium there is a specimen (not yet entered in its database); but this is from the plant's normal range, not from the Canadian Rockies. It may require the dedication of a new generation of botanical enthusiasts, or renewed professional interest in alpine botany of the Canadian Rockies, to (re-)discover what plant treasures may be blooming on the high ridges at this "wrong" time of year. It may be worthwhile to organize a modern-day early-season expedition to explore the high ridges of the Western Rockies, Purcell and Selkirk Mountains. These and other ranges linking the currently known sites of Douglasia occurrence and the original site reported by Douglas at 52°N and 118°W may harbour much of interest to botany and the rock gardening community.

Lada Malek,
Thunder Bay, ON

From David Sellars

Dear Lada:

Thank you for your interesting comments. I think they are worth publishing in the NARGS *Quarterly* as the issue is of importance to those who are intrigued by the distribution of alpine flora. An expedition to try and find *Douglasia nivalis* in the Canadian Rockies would be a fascinating endeavour. However, if it is there I would have expected it to have been found by now, even when not in flower, as the foliage is quite distinctive.

With respect to your comments, I do not think my conclusion is a reflection on the calibre of David Douglas. I believe the error occurred because of a miscommunication and misinterpretation by Lindley. I have found a reference dating from 1968 in *Phytologia* where the same observation of an error in locality and date was made by Bernard Boivin of the University of Laval. It can be found here in Volume 17 #2 of *Phytologia* on Page 72:

www.biodiversitylibrary.org/item/46703#page/82/mode/1up

Flora of the Prairie Provinces - A Handbook to the Flora of the Provinces of Manitoba, Saskatchewan And Alberta, Bernard Boivin, Herbier Louis-Marie, Université Laval and Department of Agriculture, Ottawa

Here is the quote:

"Part of the journal kept by Douglas was published in the Comp. Bot. Mag. vol. 2 of 1836. We learn from it that in the spring of 1827 Douglas went up the Columbia to the junction of Canot-Toume river. On April 28 he left the Columbia to strike east. On May 1st he climbs Mount Brown (alt. 9156 ft.) to which he assigns an altitude of 16–17000 ft. By May 3rd he has crossed the height of land and he is now going down the Athabaska. There is no suggestion of Douglasia among the plants mentioned in his journal for these few days.

Considering that Douglasia nivalis has never been collected again in the Rockies either of Canada or of the U.S.A., and despite the circumstancially detailed report by Lindley, we are of the opinion that as long as Lindley's report remains unconfirmed, we must assume an error of locality and date and that the type of Douglasia must have been collected within the state of Washington where Douglas was collecting in 1826 and where the plant has been collected repeatedly since."

This comment was made over 40 years ago and the plant has still not been found in the Rockies.

Regards

David Sellars
Surrey, BC

From Lada Malek

Dear David:

Thank you for your further clarification. It does seems likely that a communication error took place between Douglas and Lindley, as you point out in your article. I hope my additional comments and possible alternative interpretation were not taken as a criticism. My intention is to provoke the community interested in alpine flora into possibly investigating the issue of early flowering alpines in the Rockies further. I am not sure about the situation in Colorado Rockies and up to the Alberta border, but the early flowering alpine flora in Canada has been sadly neglected. Which is the point I want to make, with the hope that either individually, or as a group, NARGS members may get interested in the issue.

As I am nearing retirement (in 4 years) from a biology teaching career (I started as a plant physiologist), I wonder if I will have the energy to pursue this issue further, as a retirement hobby. I was fascinated by the flowers on high alpine ridges in Alaska in May (thanks to a NARGS conference), and realized that I and likely most botanizing visitors to the Rockies have been missing this type of flora by reaching high elevations only in July and August. I suspect that even climbers (some possibly with botanical knowledge?) don't bother slogging through heavy melting snow in May and June, since this time is not really considered as the more challenging "Winter" climbing.

In any case, your article has piqued my interest enough, that I may, health permitting, try to re-trace Douglas' steps, at least up to the ridge from Kinbasket Lake (which did not exist in his day). I hope my wife and long-suffering companion on mountain trips will be supporting this notion and also take part. Another nearby location which may be more reachable is the ridge at the

Kicking Horse Ski Resort above Golden, but they may shut down too early. Some lobbying by NARGS may be helpful in starting up the lift just for "us" in late May or early June. The Jumbo Pass area of the Selkirks will mercifully likely stay inaccessible in this way, since the proposed glacier skiing resort will not likely be approved by the province. Beyond that there is the helicopter and possibly a wealthy supporter of such foolhardy undertakings…

Lada

From David Sellars

Lada:

We have a similar issue with flowering on high alpine ridges in the Coast Mountains. For example, in the Coast Mountains of BC, *Saxifraga oppositifolia* flowers on rock faces at high elevations - around 6500 feet, before the snow has melted on the access routes. Fortunately the foliage is very distinctive (and much tighter than the European populations), so that we at least can find the plant in July. Funnily enough, the only time I have seen *Saxifraga oppositifolia* in flower in the Western Cordillera was in the Canadian Rockies on Wilcox Pass opposite the Columbia Icefield. See

http://www.mountainflora.ca/Site/Wilcox_Saxifraga_oppositifolia.html

I think it would be a fascinating trip to retrace the York Factory Express route over the Canadian Rockies through Athabasca Pass.

A film is being considered: "Finding David Douglas"

http://www.ochcom.org/index_files/David%20Douglas.pdf

Douglas climbed Mount Brown from Athabasca Pass and you could find the location from the link below. Mount Brown would be the logical place to start looking for *Douglasia nivalis*.

http://www.peakfinder.com/peakfinder.asp?PeakName=Mount+Brown

There was quite a controversy over the Douglas estimate of the height of Mount Brown which was though to be the highest in the Rockies. Norman Collie finally resolved the issue. This quote is from the link above:

The search for Douglas's huge peaks was finally brought to a close, not in the mountains of Canada, but in a library in England when Collie carefully read Douglas's original journals and noticed that he had claimed to have climbed Mount Brown in a single afternoon*"If David Douglas climbed a 17,000 foot peak alone on a May afternoon,"* he wrote, *when the snow must have been pretty deep on the ground, all one can say is that he must have been an uncommonly active person... For nearly seventy years they have been masquerading in every map as the highest peaks in the Canadian Rocky Mountains; they must now retire from that position, and Mts. Forbes, Columbia, Bryce, and Alberta will, in future, reign in their stead."*

Good luck with your explorations!

Regards

David

Rock Gardening from Scratch: Beyond hypertufa - mudcrete for troughs and planters

Betty Mackey

AFTER TEACHING WORKSHOPS on papercrete I heard about mudcrete, a cement-based compound similar to hypertufa but not as hard. Mudcrete seems as if it is a cross between concrete and the world's worst hardpan soil. It is light brown, friendly to moss, and will gently weather when left outdoors through the seasons. Certain tough plants can root themselves directly into it. It will last for many years, is easy to make, and has a natural look to it.

MUDCRETE

My recipe is a mix of Portland cement, sand or perlite, peat, and very bad clay garden soil plus small pebbles. It makes a planter that is excellent for certain plants such as sempervivum, aloe, stonecrop, and dianthus that require excellent drainage, a limey or sweet pH, and a lean, gritty soil. It can take 15 cups of mudcrete mix to make a middle sized project – more than you might expect.

Mudcrete is slower to cure than hypertufa and may take a week, especially for small projects. You can use the same mixing and building method as in the the first papercrete project in the last issue of the *Quarterly*, but make the walls at least two inches thick to get the insulation offered by this material. It is possible to make the mudcrete pot or trough and plant it the same day if you select forgiving and alkaline-loving plants. Simply leave or carve a planting pocket and fill it with cactus or trough potting medium and the plants. For a workshop, this is perfect because everyone can make a project on top of a carrying board and take it home to cure immediately afterward. Protection from rain is needed and the plants need light and a bit of water. After two weeks the hardened project can be placed in the garden where it will continue to cure, and grow.

As it cures, mudcrete expands

Mudcrete Proportions

2 parts Portland Cement, preferably Type I

2 parts peat

1 part sand or perlite

1 part soil or soil with small pebbles or grit

a pinch of shredded paper - the fibers help reinforce the project as it cures - any shreds that show will soon wear off.

slightly, as does any kind of concrete. Use a form that comes apart or use a disposable form. I often use disposable nursery pots or other plastic containers as forms, or build rectangular forms from strips of polystyrene foam pinned together with nails and firmly strapped with duct tape. After seven or so days, when your trough is semi-cured and sturdy, scrape off the rough edges with an ice scraper, chisel, or other tool and brush or work the surface for a smooth and natural surface.

You can also make mudcrete from mortar mix that is often sold at hardware stores in small sacks weighing about 30 pounds. Directions on the bag will say just add water, but usually you can safely add one part of mud and stones to every five parts of mix. This depends, so test a small project.

If it doesn't harden after a week, only add half the above proportion of mud and stones next time.

Do not work in temperatures above about 85°F – high heat impedes curing.

Almost any form can be used as a mold for a small trough or planter.

Supplies & Suggestions

A reminder

outdoor or airy workplace

a source of water

waterproof mixing container such as a carryall tub or wheelbarrow

dust mask

rubber dishwashing gloves

drop cloths or plastic sheeting

measuring container – a cup, can, or bucket

scissors and tape

nails for testing thickness of trough walls

mold or form for the trough

trowel or small shovel for mixing

large wooden or other strong board for carrying the project on

an outdoor place to dump rinse water during cleanup

TIP
I avoid free-form ovoid shapes because mine bore an unfortunate resemblance to elephant dung sprouting sempervivums.

This small rectangular planter has been planted with a rich red *Sempervivum* and a variegated *Sedum*.

Work going on at one of Betty's mudcrete workshops. Participants at this workshop at Brookside Gardens, Maryland, each made and planted a project and took it home at the end.

A fluted square plastic pot used as a mold provides an elegant neo-classical planter for an *Aloe*.

PROJECT: MAKE AND PLANT
A RECTANGULAR PLANTING BLOCK WITH PLANTING POCKETS

You will make your mudcrete planting block portable by working on top of a carrying board. Using rectangular pieces of foam insulation board, construct a form for your project by nailing and taping them together. Good proportions are 10 inches long, 8 inches wide, and 6 inches high. Do not make the sides too tall because the mixture tends to "flow" downward. Your block can be larger. Set the form on the carrying board. Or, use rectangular pieces of foam to push the mound of mudcrete into a blocky shape on top of the carrying board. Put on the sturdy rubber gloves and dust mask and then pour the dry ingredients into the mixing container. Break up lumps of concrete and peat moss. Distribute the dry ingredients evenly. Do not add water until the finished form is in place.

Moisten the dry ingredients cautiously, making a stiff dough that holds its shape without dripping or crumbling. Add more water or dry mix if necessary. Have extra ingredients handy for successive batches. Pack mudcrete for a bottom layer across the inside of the form, and then work upward. Include some stones if you like. Pack it densely. Planting pockets can be made on top and also on the sides. You can fill the whole box solidly and then carve out a planting pocket or pockets, or make them as you work, or make walls like any trough.

To create a side planting hole, either remove one side of the foam form to carve a pocket into the mudcrete, or cut a planting hole through the form. Cutting through the form instead of removing it preserves the shape more accurately.

You can cure and finish the project and plant later or plant it while wet if you've selected some lime loving sedums and succulents. You can build your trough to accommodate the plants you have in mind and set them in place with more or less planting medium depending on how much is included on their roots when you take them out of the pot.

Photo Contest 2011

If you enjoy photographing plants, why not share your enthusiasm with others—and perhaps win a prize? In addition to the fame and the gratitude of the editor, you can win a year's NARGS membership as a gift to a new member of your choice. Entries may be submitted as digital images on CD, or as slides or as prints. Slides and prints will be returned after the contest or after publication; digitals will be archived for future publication. All published photos are credited, and copyright remains with the photographer. Entering the contest grants NARGS permission for one-time use of all images submitted.

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

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

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

JUDGING CRITERIA include technical quality, aesthetic appeal, adherence to the class entered, and suitability for publication. Different judges are recruited each year by the editor and remain anonymous.

GENERAL HINTS. Images that are out of focus in the foreground are rarely competitive. Watch out for overexposure resulting from the high reflectivity of white flowers. Avoid images that include distracting objects (labels, lawn furniture and so on). When photographing a low-growing plant, take it from a side angle; images looking straight down can be disconcerting because one is never sure which side is up.

Class 1: Portrait of a plant in the wild. Image focuses on a single plant in its native habitat. Ideally, the entire plant should be visible, not just a flower, which is more appropriate to class 5.

Class 2: Natural scene with plants. Image includes both wild plants and their surrounding habitat and scenery. Please identify the site. Hint: This is not the same as class 1, and should not foreground a single plant specimen; the emphasis should be on the general scene. Depth of field is a consideration.

Class 3: Portrait of a plant in cultivation. Image focuses on a single plant or small group of the same plant in the garden. Ideally, the entire plant should be visible. Images of a single flower are best entered in Class 5.

Class 4: Rock garden scene. Image of a rock garden (general view or isolated vignette). Please identify the owners of the gardens. Hint: Frame your image carefully to exclude unattractive objects.

Class 5: Macro photograph. Close-up images of single flowers or other plant parts. Judged primarily on technical quality.

Class 6. Plant in container. Images of single or multiple plants in pots, troughs, or other containers. Hint: The container must be at least partly visible; if it is not, the photo belongs in class 3.

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

The deadline for entries is October 1, 2011.

send entries to

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

Photo Contest 2011

Stephanie & David's first project – a sheltered formal rock garden in the back garden.

In spring and summer (left), it is a restful haven. In winter (below) the structure, shapes, and volumes of the garden are emphasised.

Calm and contained, it is home to a great range of alpines and has eventually become something like an extremely large trough stuffed with plants. But it still didn't allow them to grow many of the species they wanted.

That was going to need something more radical.

Sun, Stone & Water:
Creating a "machine" to grow high altitude plants.

Stephanie Ferguson
with schematic drawings by David Ferguson

OUR GARDEN IS in Calgary, Canada. Situated on the eastern slopes of the Rocky Mountains at 1079 meters (3500 feet), we experience extremely variable weather patterns. Ours is a high-altitude steppe-desert climate with abundant sunshine, low relative humidity, and cool summer evenings often punctuated with violent thunderstorms. The growing season is short and the winters are long. Warming relief in winter occurs sporadically in the form of "Chinook" winds, but that can eliminate

precious snow cover within a day. Such a climate is best suited to steppe-desert plants and certainly the plants of Central Asia have survived emigration to Canada easily.

In 1997, my husband David and I designed and constructed a formal rock garden. It was carved out of the hillside behind our house on a south sloping lot in central Calgary. At the time we knew nothing of rock plants; our only experience was with epiphytic orchids in the humid bathroom of our old apartment-home. Growing orchids is a lesson about roots and their relationship with air and water. This education was initially lost when we began to grow rock plants. We filled the beds of the formal garden with as many species as caught our eye. It eventually became something like an extremely large trough.

The structure and composition of the crevice plantings reflected the itinerant efforts of various seed collectors from around the world. When Anita Flores and John Watson offered seed from Argentina and Chile, we built raised sand-crevice beds to house the diverse Verbenaceae, Solanaceae, and Asteraceae they collected. And as Chinese gentians, saxifrages, and primulas became available (largely from the Czechs), we customized soil mixes and arranged stone to suit them. The garden gradually filled in this serendipitous way, collection year by collection year. Given Calgary's climate, its dryness and altitude,

we were able to establish many plants in this haphazard fashion. But a range of specialized plants from high desert and cold scree/moraine environments remained ungrowable – waldheimias, saussureas, Himalayan saxifragas, rosulate violas, and chesneyas to name a few. These plants were relatively straightforward to germinate and grow on in pots, but they languished and died when placed in the garden. The same was true of certain cacti – especially the sclerocacti, reputed to be cold hardy. The fabulous scarlet peas, *Astragalus coccineus* and *Anarthrophyllum desideratum*, remained the stuff of fantasy. After years of a very specific kind of failure, we instinctively believed that the problem was structural. The lessons we had learned from growing orchids had not been applied effectively to high altitude plants. These required more solar exposure, sharper drainage, and a leaner growing mix than our back garden afforded them. It was as if we needed to make a better "machine" to grow alpines and high altitude desert plants.

In 2007, we travelled to the Czech Republic to attend the Prague Rock Garden Club's first international rock garden conference. We saw a range of crevice gardens, each as strongly individual as the person that built it. If these gardens possessed a common characteristic, it was "courage" – courage to use stone imaginatively and vertically (as in a plantable classical Chinese garden), courage to use stone in abundant quantity and detail (as in nature), and courage to put *Eritrichium nanum* in the tiniest of crevices, thereby ensuring perfect drainage. We returned

Inspiration lying an hour's drive to the west (photograph Lori Skulski)

from Bohemia completely inspired and looked at our untouched front yard (a south-sloping wasteland of quack grass) with a mixture of hope and horror.

Travel, and the perspective it provided, also caused us to look with fresh eyes at our local landforms. The Rocky Mountains lie one hour's drive to the west of Calgary. The approach to them is foreshadowed by a series of dramatic ridges – sedimentary outcroppings that thrust sharply, diagonally up through the surrounding grassy foothills. These smaller hogback ridges are a familiar sight at any approach to the Rockies from Calgary. For years we had admired these ridges without ever thinking to use their structure as a basis for designing a rock garden. But now we were armed with Czech courage.

A FORMAL FRAMEWORK

Our front yard was a long and narrow lawn facing SSW. It sloped sharply downhill, offering a descending view away from the house. Its size was such that we decided to build a front crevice garden in two phases. The first phase involved the construction of a structural retaining wall to support and contain approximately 100m^2 of crevice garden. This structural wall (one meter high, thirty meters long) was built along the western and southern verges of the long and narrow lot. It was faced with the same stone as that used within the crevice garden itself. We went to the expense and effort of creating such a wall for good

The sunnier, more exposed front yard with "phase one" indicated.

reasons. Raising the level of planting along the perimeter of our property allowed a perspective view of the garden from the house and from most places within the garden-to-be. The retaining wall also served to increase and control the drainage on an already sharply drained site. It provided lateral support for the planned crevice beds, allowing a more dramatic topography. And finally, in the same way that a picture frame contains and offsets a painting, the wall provided a formal framework for the garden.

SUBSURFACE LAYERING

The crevice garden was founded on two subsurface layers - an impermeable drainage plane and a more absorptive volume above. Two distinct materials were used in two different ways. The base layer

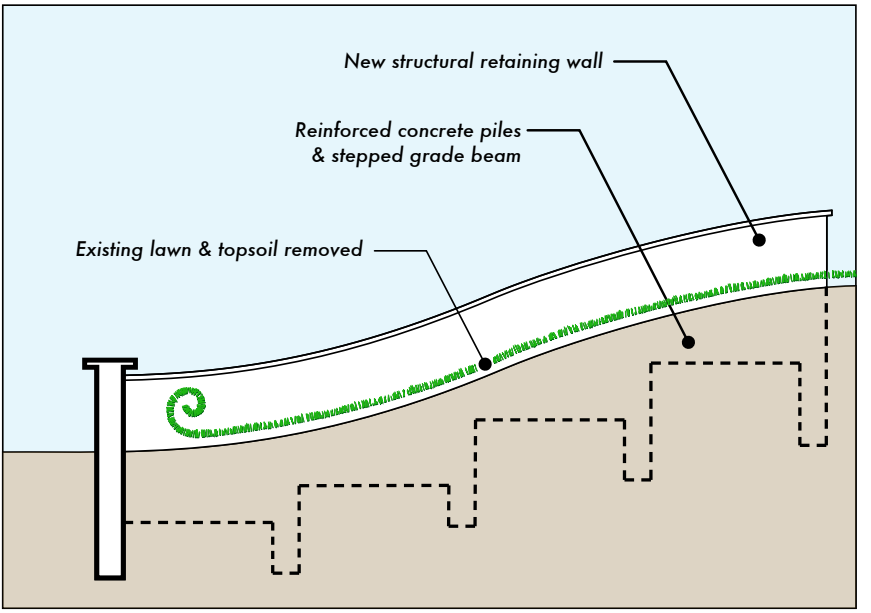
Above: With the concrete-pouring truck in the driveway (and neighbors considering removal) Stephanie (far left - black top) and David (top left - red top) make last-minute adjustments to wooden forms for the retaining wall.

Right (from top) 1. Pouring concrete to the foundation of the retaining wall

2. Fluffy clay soil about to be compacted

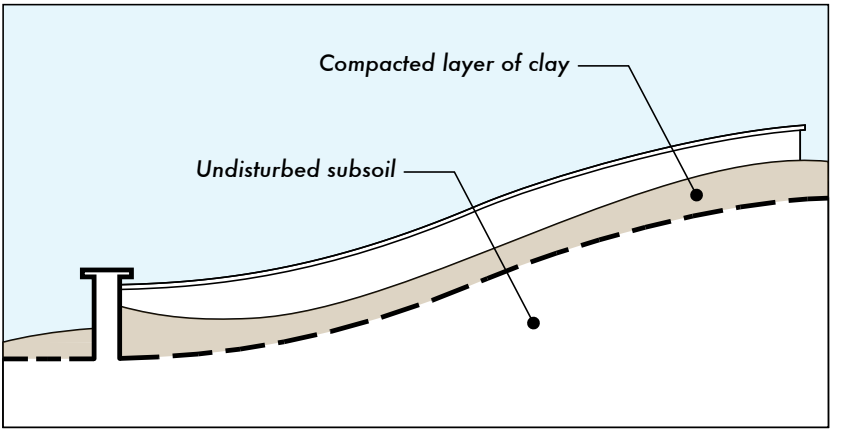
3. Bobcat maestro Tom grading and compacting clay drainage layer

4. The silty soil was sculpted during dry weather and during wet weather the wall was faced with stone



Lawn gone and a structural support for the garden built.

of compacted clay was used to drain the entire garden and to prevent water from collecting against the retaining walls. This was topped with a layer of soil composed primarily of silt. The soil layer served both to sculpt the topography and direct the flow of water within the garden. We considered this subsurface preparation critical to the success of the project.



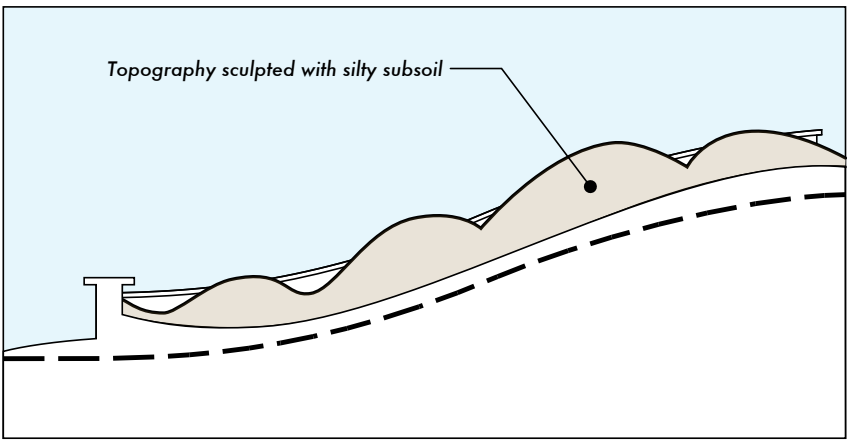
A subsurface drainage bowl of compacted, impermeable clay was added and shaped to direct water away from the retaining walls.

A COMPACTED CLAY DRAINAGE BOWL

Once the reinforced concrete walls had cured for three weeks we were finally able to begin the real work of the garden. The existing lawn and all the topsoil were removed. Several dump truck loads of hardpan clay were imported to the site and the material distributed by a skilled Bobcat operator. The clay was banked up against our retaining walls and a drainage bowl created by carefully grading the clay away from all points along the wall to a single escape point at the bottom of the garden, well clear of the bottom wall. The weight of the Bobcat was used to thoroughly compact the clay and create an impermeable surface. Such is the physical nature of clay (it is composed of flattened particles or "plates") that once compacted it becomes so hard that a sharpened shovel cannot be driven into it. The clay drainage bowl was designed to serve two purposes. It ensured that water did not collect against the walls and topple it after a sequence of freeze-thaw (expansion and contraction) cycles. And the bowl guaranteed that all points within the garden would drain to the same place regardless of the shape of any topographical structures placed on top of it.

A TOPOGRAPHY SHAPED WITH SILTY SOIL

The topography of the crevice garden was realized using a soil composed mainly of silt, and to a much lesser extent, of sand and clay. This was locally abundant, the kind of subsoil that results from the excavation of the foundation of a home (or, in our case, a "sewer upgrade"). This was the material we chose to provide the bulk of the structure – it was inexpensive, relatively lightweight (when dry) and easily finessed and compacted by hand.



The silty layer was used to create the ridges and to channel water.

The component particles of silt are round and constructing with it is something akin to building with marbles. Silt soils are very fertile and they are easy to sculpt if they are kept on the dry side. But if uncontained silt is saturated, it is prone to rapid erosion. It must be covered with a protective crust to absorb the impact of precipitation and prevent surface runoff from channelling. Silty soils need to be enclosed within a membrane – a surface crust of stony composition.

A PLANTING MATRIX OF STONE, SAND, AND GRAVEL

Our hope was to create a garden that would stand the test of time. With that in mind we chose to use sand and gravel in our planting mix. Because organic soil components proved unsatisfactory in our previous garden, they were not considered. A structurally stable matrix of stone, sand and gravel served to hold plants in position and to allow the free flow of water and oxygen to the roots. Nutritional requirements were provided by the underlying silt- this being structurally stable, if enclosed. We believed that if the plants were properly positioned within the matrix and within the garden proper, their roots would eventually find the nutritious underlayer of silt.

We used a planting mix composed of one half 1-4mm sharp sand and one half 10mm crushed gravel. For steppe-desert plants we increased the percentage of gravel and for alpine snowmelt plants we increased the percentage of sand.

The stone chosen for the garden was very similar to that seen on our beloved hogback ridges. It is a compacted siltstone/ sandstone, locally termed Rundle Rock – after Mount Rundle, near Banff, where it was first quarried. This is a very durable stone, characterized by its variable combinations of mineral deposits, ripple structures, and occasional fossils. When the stone was delivered, it was sorted so that stone of similar character was grouped together. Whitish stones, heavily encrusted with quartz, were reserved for high altitude plants. The blackest stones were kept for cacti – as these need to "ripen" before winter in our climate.

ARRANGING THE MATRIX TO CLAD THE TOPOGRAPHY

Working with stone is a very personal art form. It is often an exercise in prioritization. While there were certain aesthetic considerations to be made, our primary interest was in keeping difficult plants alive in the garden. "Whatever works" was our motto. With this in mind, the largest flat face of each stone was oriented due south and each was made to recline into the hill at an angle.

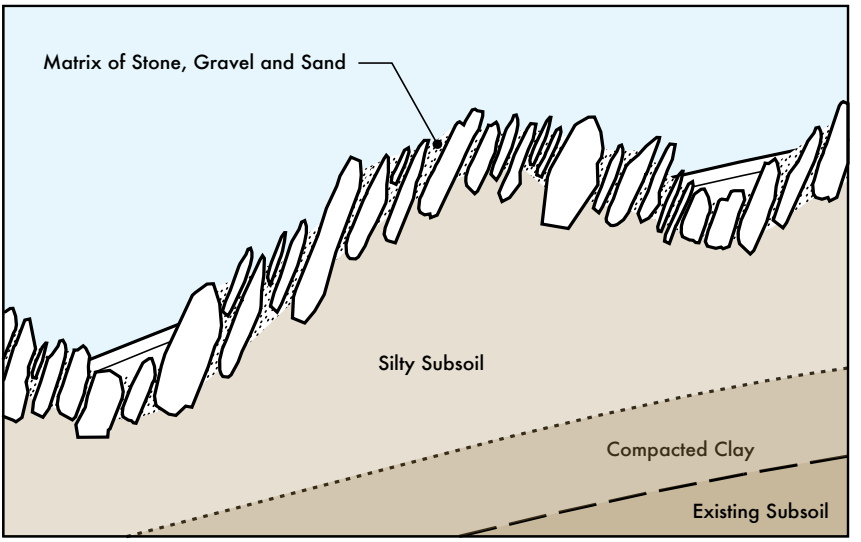
This "angle of repose" was very important. It allowed the planting mix to freeze and thaw (and consequently to expand and contract) between the flat rocks without causing them to be pushed past the

vertical plane and then tipped downhill. In our cold climate, if stones are placed vertically within a crevice construction on a steep slope, they will eventually collapse after repeated freeze-thaw cycles. If the stones are allowed to recline into the hill, the force of gravity prevails and the structure will hold.

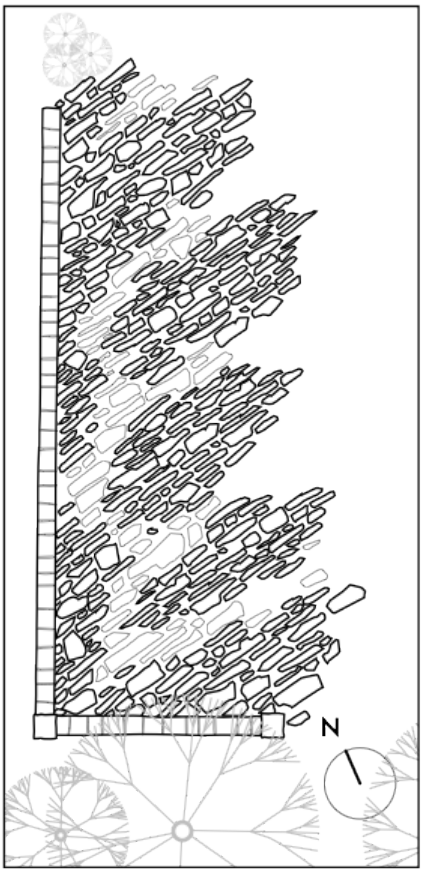
The stones were separated and held in place by the sand and gravel planting mix. The stones were placed closely together- about 2cm apart or less. The planting mix was watered in; this locked each stone in place. We used stones of all sizes and shapes. Most rocks had a center of gravity that became obvious once they were lifted. The stones were placed "heavy bottom down" always. This resulted in a rather pointy surface texture, but it was necessary for stability. The stones were 90% buried by the planting mix. This insured as deep a crevice course as possible.

The largest rocks were reserved to buttress the base of the downhill slope of each crevice ridge. These stones served to stabilize each ridge by preserving the arrangement of stones placed uphill from them.

The surface of the planting matrix was finished with smaller stones/ slates and scree material. The slates were incorporated into the structure of the larger stones and served to slow and direct the flow of surface runoff. The more detailed the rockwork, the more effective the use of water. The objective was to slow water at the surface so that it was directed downwards to the subsurface hardpan and then allowed to escape. Scree material acted like a mulch, protecting the planting mix and reducing evaporation during periods of drought.



The structure and composition of the stony matrix, showing the "angle of repose" of the rocks.



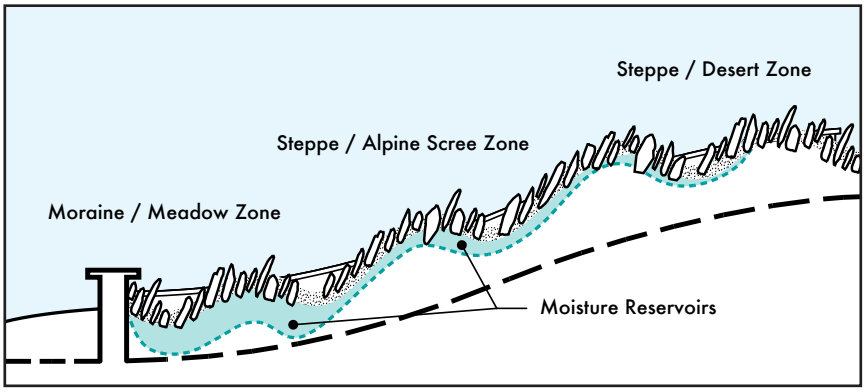
The orientation of the ridges, showing the layout of the paths and drainage corridors.

A SEQUENCE OF SCULPTED RIDGES

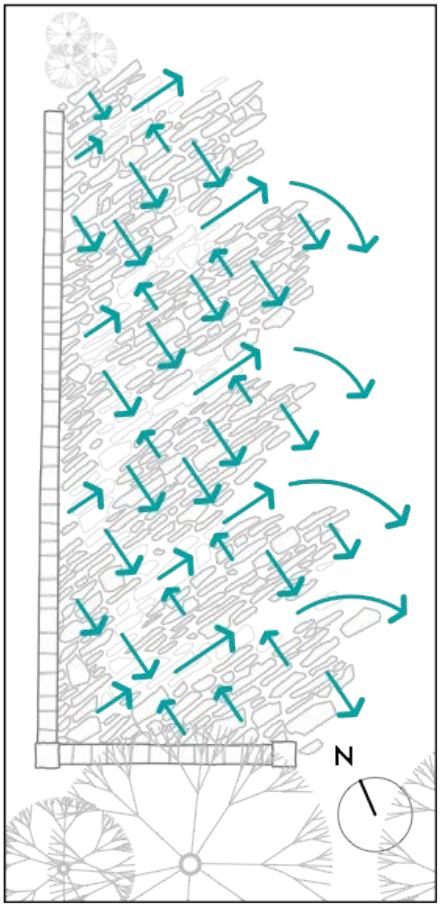
We decided upon a sequence of parallel ridges to cover the entire surface of the garden. The ridges ran from east to west. Using this orientation, we were able to maintain the overall area of plantable south exposure and essentially create a previously nonexistent north exposure. The deeper the corrugation of the series of ridges, the more spaces for planting were created. The corrugations were quite muscular, as steep as the silty soil would allow.

Low areas between the ridges were made into paths and drainage corridors. All paths drained away from the walls.

Generally, deep V ditches were used at the top of the hill to shed water quickly. And wide U ditches were dug towards the bottom of the hill, these allowing water to drain more slowly. The V ditches (or arroyos) ensured



Water is selectively shed and trapped, allowing different kinds of plants to survive. Each stone was almost entirely buried, leaving only the very tips visible



Development of the channelling and the drainage network was rather more trial and error than precise planning.

Higher paths draining into the north sides of successive ridges, creating wet areas.

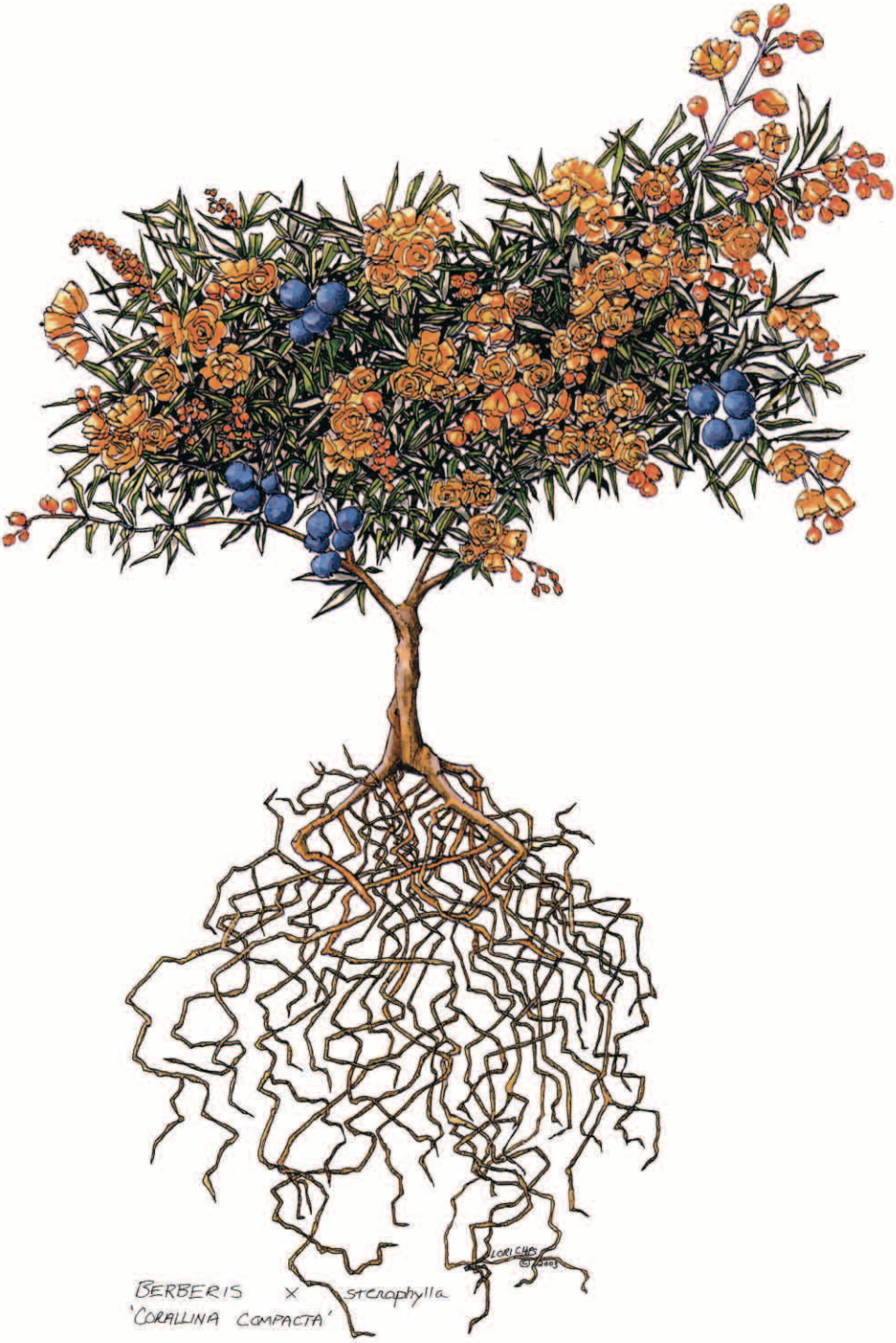
that the underlying soil of the highest beds never liquefied. And the lower beds, fed by U ditches, were always moist.

The arroyos of the upper ridges always drained against the long north side of each lower ridge. This pattern of drainage created areas in full sun with sharp drainage that never dried out - the most desirable of circumstances when growing high alpine plants. And the slow draining ditches of the cooler lower beds were used to make boggy, streamside, or moraine conditions, depending on the topography.

The channeling and control of the drainage network was something we were not able to preplan. It evolved as the ridges were developed over a period of time, through many a rainstorm. When it rained, we watched how the water traveled and where it might be dammed and where it might be shed. It was a process of trial and error.

Once the water was accounted for and the rough stonework in place, the ridges were ready for planting. The quick work was over and the time-consuming work of placing the plants and detailing the stonework was about to begin…

In the next issue Stephanie writes about the plants and the planting of this spectacular crevice garden.


BERBERIS × stenophylla
'CORALLINA COMPACTA'

Making Portraits of Plants

Lori Chips

A favorite writer of mine, Eleanor Perenyi wrote: "A writer who gardens is sooner or later going to write a book about the subject." It follows, then, that if a gardener also paints, eventually she will paint the plants she grows.

Now, if a person gardens and writes and paints; can we logically assume that she will eventually write about painting plants? Well, here goes.

Loving plants and attempting to illustrate them too is like serving two masters at one time. To care for plants and make them thrive one must be nurturing. Everything is subservient to the needs, the calendar, the priorities of the plants. But consider this: if you want to paint or draw the plants, of course you want a thriving and blooming plant as a subject. It is at just this juncture that things get tricky. When you are gardening like a mad person in the spring you barely have time to stop and admire the Adonis, let alone paint it. Add to that the fact that an artist wants a couple of peak-condition blossoms to work with, and it is always preferable to handle color under true daylight. But we all know there are barely enough hours in a gardener's day to begin with.

There is another somewhat ignoble factor I find difficult to contend with. It is simply hard to switch gears between gardening and drawing. One's focus is growth, not line quality; setting up sprinklers, not mixing watercolors; digging and mulching, not shading and pointillating a page. However big the attitudinal shift may be, as I get older, the physical one can be as big. One's arms, hands, back, even eyesight has been accustomed to outdoor work. Outdoors one is looking at a much bigger picture. A hand that has spent the day moving rocks does not want to draw the fine details of a reticulated leaf.

By now I'm sure, you know where this is leading. Thank god for photographs! And yes, of course, it's true; I have done many illustrations this way and it has saved the day. Purists will tell you

CONVALLARIA majalis
LILY-of-the-VALLEY

FOR MY MOTHER, Adelle

it is a travesty (but I bet none of them are gardeners). I concede that there really is a certain something that artwork has when it is drawn from life. But life doesn't always allow us the luxury of being a purist. I take notes, of course, to accompany the image I will draw, so I don't forget the little things. Differences in shading, colors, textures. It helps immeasurably to shoot photos from many angles. Naturally, I always want to know: How many petals are there? Is the leaf divided and how? Is it shiny or matt? So besides taking a prime angle to use for the portrait of the plant, other, oblique, sometimes partial pictures are useful too. These will tell me: How is the pedicel attached? Do the leaves or petals recurve? Do the veins read as pale or dark, or not at all? Are stamens exerted? How much? Can and should I exaggerate this? Because let's face it, every scrap of artwork seizes, as its birthright, a little thing called "Artistic License." As the person holding the paintbrush one might as well accept, even welcome that.

How a leaf or flower is held by its stem just may be the most important thing to get right. In its fragile hovering, explosive thrust, the smug sessile contentment of a bloom: that is where the portrait's spirit lives. The whole personality is there. It can help to get the shadows right, nail the colors on the button; but an *Arisaema* must say *Arisaema* or all is wasted.

People have asked me in the past to name one important thing, one important secret of drawing plants. The answer (for me) is deceptively simple: I always try to draw what I see. To do this, one needs to learn how to see. I'm pretty sure this learning process and its fruits are different for everybody who picks up a pencil. The first step is: trust your eyes.

One day years ago when my father was still alive, we had a conversation about exactly this. He was a working artist, had gone to Pratt, had worked on Madison Avenue, but also painted and sculpted under the aegis of his own Muse. I had been struggling with a series of forward facing tongues of leaves. He said to me "Look at my hand." He was sitting across the table from me and extended his palm, like a policeman would do to indicate: "Stop." His arm was straight and his hand covered part of his face. He said "Draw my head and hand." So I did. I drew his hand with his face partly behind it proportionate to the size my brain knew them to be. This was a rookie mistake. Given that his hand was just inches from my nose and his face an arm's-length away, his hand should have loomed much larger than his head. He sketched the proportions correctly for me. It was an "Aha!" moment. He said "Draw what you see. Not what you know is there."

This phrase of my Dad's should have been accompanied by a drumroll. It is one of the most important things I ever heard. In many

ways a person could live their life by it, plugging in other nouns and verbs. On the practical side, while sketching, it simply means that however large (or small) you know a plant part to be is irrelevant to the final image. The triangle of an unfolding leaf that licks towards you is always going to be larger than what is behind it. If you can't see the calyx, don't put it in. Of course you are free to lend prominence to whatever you like; that is what art is. Do you want something brighter, warmer, shinier or more muted? All these valid choices inform what the final piece will be. Have you ever looked at Michelangelo's David? He has one arm that is distinctly bigger than the other. This was no accident. It helps tell the story.

Although botanical illustration has a rich scientific history, it is so much more than the reporting of science. There is quite an historical precedent for certain "garnishes" added to botanical art. Creatures from the insect Phylum make frequent appearances, notably on some pretty famous paintings. Just look at the roses of Redouté or some of his peers. Another sumptuous garnish is the perfect pellucid droplet of water. I have always failed at producing that droplet. I know I could scare up an artist who could teach me the technique. What stops me is a clear little voice in my heart that reminds me: this was the kind of thing my father was so good at. He would have sat down with me, pushed the supper dishes or coffee cups to the side, pulled over the paper, watercolors and brush and, with a stroke or two or three imparted the swift magical skill to me. So I somehow don't seek it out. As if my not knowing, and being certain how gleefully Dad would have taught me creates a bond between us right now. And who knows? Maybe one day while I am painting a polished green leaf, his wisdom will make its presence felt. Perhaps the liquid image will begin to travel from some memory or other resource; a gathering of tiny drops to form a bigger one; until it collects enough substance and momentum to roll from the image in my mind through my arm, my hand, along the brush handle, through the sable hairs and onto the page. There. The perfect drop.

Nowadays we depend upon the morphology of the plant's flower to categorize or identify the plant. Actually, I should say: up until very shortly ago this was true. At the present moment in taxonomic history, things are in a general state of upheaval. (By the sheer numbers of name changes it may seem like this is always true. However, now it is really true.) Scientists (in all sciences, I learned, from a herpetologist I spoke to) have decided to divide and group their subjects via DNA. This is leading to huge numbers of reclassifications, the joining of strange bedfellows, as well as the sundering of comfortable ones. (I am not a scientist, but my herpetologist friend told me they could not keep


LORI CHIPS
©2005
Soldanella hungarica

up with the changes from one week to the next, and he fears for the stability of these sciences).

At any rate, in the world of botanical drawing at least, the flower has had a good run. It has reined supreme as a diagnostic for quite a while. (I would hazard a guess that, in art at least, the double helix of DNA will never match it). Thus, you will see much importance placed on depicting blossoms and their parts for a big chunk of botanical illustration history. If, however, you look at much older scientific botanicals you will see plenty of detail devoted to the entire plant, including the roots. That's because back then, even the roots' morphology carried weight and importance in identifying the plant. I have personally seen, and occasionally with great trepidation touched some rare old illustrations. I have looked at old botanicals whose beauty has just about broken my heart. I was lucky enough as a student at NYBG to have limited access to "The Stacks," that part of the library that was not open to the public. It was like entering the casbah, or falling, with Alice, through the looking glass. I was accompanied by the librarian, who was small in stature, and said that one of her goals in life was to someday work where the books weren't bigger than she was. Some of the volumes she handled had a four or five foot wingspan. It is worth noting that these books were protected by a chemical system. If smoke or fire was detected an alarm would sound. Water could not be used here. We mammals would have, literally, only a minute or two to escape down several flights before flame suppressing poison gas would permeate the rooms. Perhaps that fact contributed to my heightened awareness as I stood in awe of the art.

One of the reasons I love to look at old prints is because I have a deep love of the illustration of roots. Perhaps part of why I do is because of my "real" job is as a propagator of alpines at a nursery. If your plants have not produced lush, full, healthy roots then you have failed your plants and your customers. Add to that a soft spot for manuscript illumination and you can begin to understand my preoccupation. But mostly I think that a picture of a plant looks grounded, balanced and living when portrayed with its roots. This sort of drawing has a name. It's called "Herbarium Illustration." Dried specimens in an herbarium include all parts. The plant is not supposed to look as if it was in its natural habitat.

If the library at NYBG was like accompanying Alice, then the Herbarium was like sailing with Sinbad, or Jason and the Argonauts. Herbarium sheets bear samples of plants from all over the world and in many cases from a long time ago. These specimens are pinned or taped to acid-free paper in very specific ways. Seedheads, flowers,


LORI CHIBA
1998
ORIGANUM rotundifolium 'KENT BEAUTY'

stalks, leaves, roots, all often found their place on these sheets. They are preserved in climate-controlled environments; they are perishable. I remember being handed a sheet to look at, and, to tell the truth, I do not remember what plant it was. I think the name of the collector erased my brain. What I had in my hand had been collected in the South Seas. The name at the bottom was Captain Cook.

However one chooses to define a drawing, it will always have a life of its own. What the artist sees, what the artist may have as an image in his mind, and the final piece of art will be three different things. Eventually, I realized that this was exactly as it should be.

This brings me full circle to the challenges involved when serving two masters. The problem arises when you attempt to paint the whole plant. (I have, occasionally, done drawings of just the flowers, their stems and leaves. This is not my favorite way to do a portrait, it is a different discipline. The finished product screams: "I am a bouquet!") The problem, as I see it, is that on one hand I want to be a good plant caretaker. On the other hand, I want to draw the roots (and the crown, and any underground parts, and how they attach). Back in the beginning I used to dig a plant, wash the roots clean and place it in a clear vase or jar or water. I would then scurry as fast as I could, as though the Wicked Witch of the West's hourglass was running out, with precious life trickling away. Which is exactly what was happening. A full-grown plant in full bloom with washed off roots in a glass of water is not happy. The artist/gardener is stressed too and is not happy. So what resulted, as often as not, was a rushed drawing, an upset artist/gardener and a dead plant. This, clearly, is not a good way to live.

My current procedure starts the same through the washing of the roots. Then I place the entire plant on black or white paper, take a bunch of different photos and quickly replant the plant. This is even less stressful if you are starting with a potted plant. I often do this in early spring before flowers arrive, and then shoot the flower photos later on. Then, come winter, the rested up hand of the gardener can pick up the pencil and the paints, and, armed with the photographs in front of her, the artist can go to work.

I usually decide upon a source angle of the light. I often choose the light source to be above (naturally) from the left, shining down to the right. I make myself laugh when I get to detailing the roots. You see, I put shadows on them. What this means is: if the plant was alive and thriving in space, with no soil whatsoever around the roots, and given that the sun would be shining from the upper left, then the shadow on each root would be here, on the lower right. I would not call this realism so much as a little deranged. But it works artistically and that is, after all, what counts.

A wide white page, to the artist, can be deafening in its blankness. Touching the pencil down to the paper is a leap of faith. Continuing to move that pencil to form lines and shapes, is sometimes an act of courage, or an act of will. The comforting part is that it is a pencil, and what comes next may involve erasures: to correct the profile of a line, the arc of a petal. Sometimes there is the elegant illusion that one is carving a perfect shape, that the pencil is a different kind of tool, cutting deep curves. There will be false starts, reworking an outline, brushing crumbs of pink rubber off the page. But there is a point when the quality of a leaf, a flower, the whole plant asserts itself firmly under my hands and insist on its spirit. It is either a big effort, or it is supremely effortless. Or it is both, at different points along the way.

Ultimately, making a portrait of a plant is more than the sum of all its parts. The soul of the genus must reside inside the image somehow. I can't tell anybody how to do that. One thing I can say is that it helps if you happen to love plants. The other thing I can say is: I agree with my Dad. It is important to learn to really see. Then, if you have the heart for it, you can begin to invite what you are looking at onto the page.

Focusing on Flowers

Yoko Arakawa

MOUNTAIN HIKING IS FUN. *It's so exciting to see such spectacular mountain landscapes full of beautiful flowers. My heart races when I discover those precious, tiny alpine flowers. I'm compelled to share their beauty with my friends by taking pictures to show them. Photography is my avocation.*

Of course, some areas are easier to access by car and this makes it possible to use heavy tripods and the long lenses of many professional photographers, but I'm not happy carrying heavy equipment when I want to ascend and discover the alpines on foot. I try to carry the lightest equipment possible.

I carry an SLR (single-lens reflex) camera. I used to carry a Canon Rebel XS but now it's a Nikon D-300 with an inexpensive wide zoom lens (18-55mm) which is lighter, and a 55mm macro lens. I add an auto extension tube (Nikon PK-13, 27.5mm) for close-ups. I also take a 22-inch diameter collapsible refractor set that includes a translucent refractor. Unfortunately, the wind can be an impediment but they also make a nice backpack cushion. Sometimes I carry miniature tripods. But I like to keep on the move and don't want to take the time to set them up; the photos here were all taken hand-held.

Three of these pictures were taken on a trip to Colorado last year, the fourth on a trip the previous year to the French Alps.

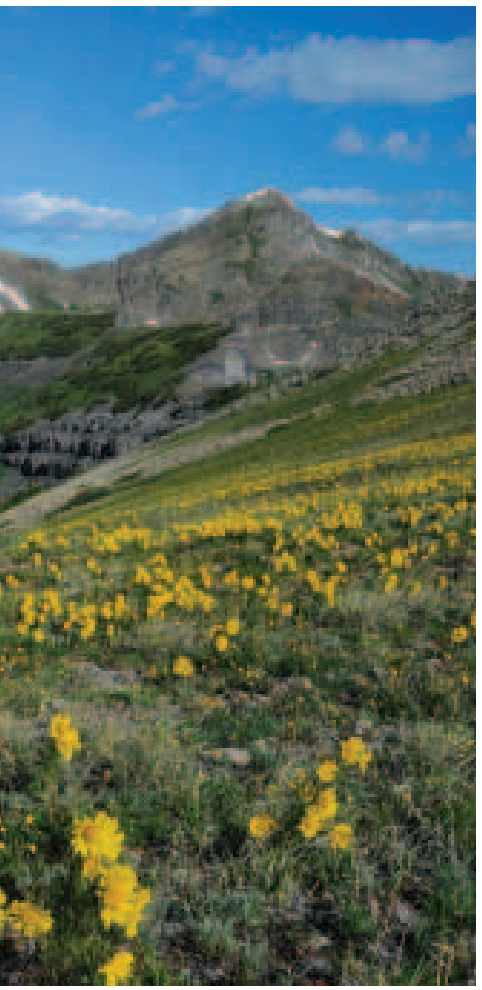
Claytonia megarhiza

This picture was taken at Straight Creek in Summit County, Colorado. The elevation is about 12,000 feet. I found only one plant during my 2010 visit because many were still hidden under the snow. I used the Nikon PK-13 extension tube with 55mm macro lens for a close-up. This combination gave me a 1:1 macro image. The curved, red-edged, succulent-like leaf caught my eye. One flower was just nicely nesting in there saying, "look at me!" with a smile.

After I determined the "gesture" of the plant, I could not move my eye to decide on the composition. If I shaded the plant with my body, the flower turned gray, so I moved to get the sun. But that was too much contrast. So, I tried to underset the flash. It made the petal shine and gave the flower buds more intense color. To make the petals white, I overexposed the image.

NIKON D300		July 12, 2010 1:31 pm	
Tv (Shutter Speed)	1/100	Av (Aperture)	f16.0
Exposure Compensation	+0.667	ISO Speed	200 ASA
Image Size	4288x2848	File Size (jpg)	4649 KB
Flash	On	Color Space	sRGB

NIKON D300		July 14, 2010 11:40 am	
Tv (Shutter Speed)	1/160	Av (Aperture Value)	f14.0
Exposure Compensation	–0.333333	ISO Speed	320 ASA
Image Size	4288x2848	Flash	Off
Color Space	sRGB	File Size	8873 KB



Rydbergia grandiflora

My friend and I were hiking on the Scarp Ridge Trail in Crested Butte, Colorado. That is where the Wildflower Festival is held. When we got to the ridge (11,700 feet), we saw a wide sweep of *Rydbergia grandiflora* blooming. We took some pictures and moved on. The flowers continued for miles and miles. What a beautiful alpine meadow!

I've never seen such a large display of *Rydbergia*. Just like sunflowers, they all face in one direction. One side of the mountain was backlit like a yellow lantern. On the other side, all the flowers were facing us and sweeping down to the valley. It was amazing to see so many flowers together like that. In the distance, the mountains were still capped with snow. I had to take another picture of such a breathtaking scene! For good landscape photos, the subject should blend in nicely with the composition. You can't manipulate the mountains, the rocks, the rivers the way you can manipulate the close-up of a flower with a macro lens. I followed the line of the terrain's curves which directs the eye from left to right, connecting the mountains in the background. This achieves movement. I used the zoom lens at its widest angle (18mm) to take in as many flowers as possible in the foreground. To keep both flowers and mountain in sharp focus, I set the aperture high (f14). Because the yellow flower can easily wash out, I used 1/3 of a stop underexposure, but still enough to keep the snow white.

When I am taking photos at a high altitude, I use the polarizer filter. The UV rays are very high and it is very difficult to correct the exposure. The polarizer helps solve that. It makes the sky nice and blue and adds clarity to small features in the distance.

Ranunculus adoneus

Near Harman Lake (11,900 feet) at Harman Gulch in Summit County, Colorado, there was a great patch of newly-emerged *Ranunculus adoneus* flowers next to the snow.

The bright yellow flowers of a *Ranunculus* always catch my eye and I wanted to capture their beauty and was very pleased when I found a nice pair of flowers.

I mounted a 55 mm macro lens and focused just on those two flowers. It did not work well at first because when I looked down on them, the sunlight made the flowers seem flat. So, for a better sense of their shape, I moved the camera to the same level as the blossoms and captured the one flower with the other behind it. That created shadows and made them more three-dimensional. I opened up the aperture to f5.6 for a shallow depth of field. That kept the rear flower soft, and downplayed any other background distractions. The dark shadow caused a very strong contrast with the bright yellow flower.

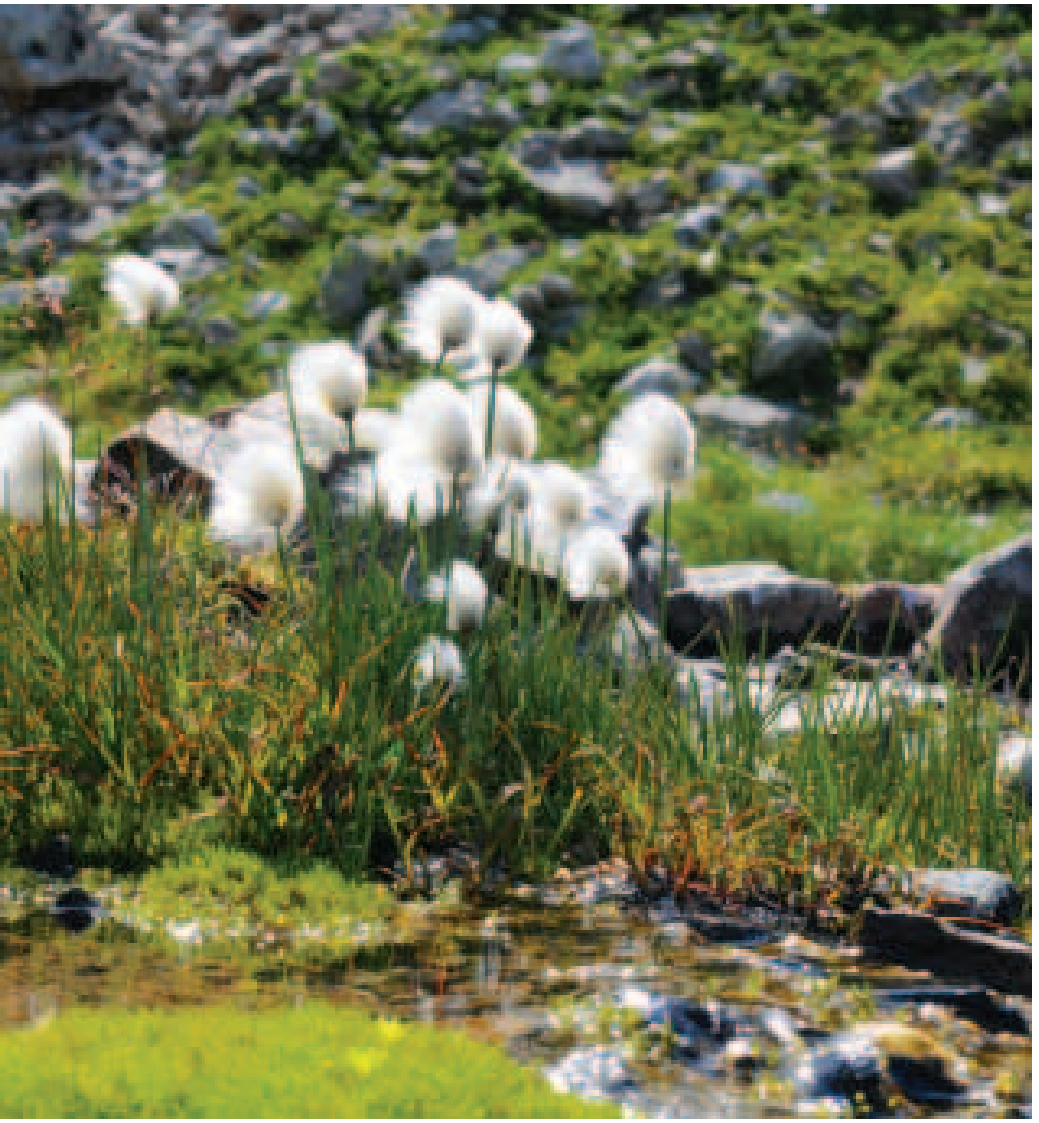
Yellow flowers are a challenge. They can easily be over-exposed or washed out. Exposure compensation was set 2/3 underexposure. I focused on the front side of the stamen of the foreground flower. The slope was muddy making it difficult to stand so I had to shoot quickly. There was no chance to take a second shot.

NIKON D300		July 15, 2010 12:11 pm	
Tv (Shutter Speed)	1/4000	Av (Aperture Value)	f5.6
Exposure Compensation	–0.6667	ISO Speed	320 ASA
Image Size	2848x4288	JPEG File Size	5696 KB
Flash	OFF	Color Space	sRGB

ERIOPHORUM SCHEUCHZERI

This picture was taken near Col de Lautaret in the southern French Alps. With some other hikers, I stopped for a short break to enjoy the spectacular view of the glacier. The cotton balls were nicely back-lit seeming like glass. And the fine, white fiber was softly moving in one direction. You could feel the softness without even touching them; the common name is white cotton grass. To photograph them I hunched down on their level. Looking through the 55mm lens was the right choice for singling out this shot. A wide-angle lens would have included too much. The reddish leaf tips of the *Carex* offered a nice touch, like an impressionist painting. To make the cotton heads a true white, I overexposed by 2/3 of a stop. I smiled as I pushed the shutter. I didn't give much thought to the rocks at the time but they offered a nice addition to the picture.

CANON Rebel xs		July 31, 2009 4:37 pm	
Tv (Shutter Speed)	1/80	Av (Aperture)	f16.0
Exposure Compensation	+0.6667	ISO Speed	200 ASA
Image Size	4288x2848	JPEG File Size	6724 Kb
Flash	Off	Color Space	sRGB



Although I love taking photographs to capture the magic of the place, and the flowers, and the moment, my vacations in the mountains aren't just for taking photos. I love the hiking and communing with nature.

I can't wait for my next trip above the tree-line to enjoy Mother Nature's tiniest gems.

for the love of Onions

Mark McDonough

In Part One of "For the Love of Onions" in the last issue of the Quarterly, *Mark McDonough* looked at species and selections that were available and should be part of every rock garden.

In Part Two, he turns to those that may not be available but which can only whet the appetite of any plantsperson.

GROWING ALLIUMS IS like munching potato chips, or for closer alliance with our topic, fried onion rings; it is hard to eat just one without yearning for more savory delights. Exploring the embodiment of alliaceous diversity reveals a spectrum of plants to suit differing interests and cultivation challenges, from true culinary sorts (*Allium cepa*, *A. porrum*, *A. sativum*), easy herb garden mainstays such as chives (*A. schoenoprasum*) and garlic chives (*A. tuberosum*), the walloping giant "cricket-ball onions" for outlandish late spring floral display (*A. giganteum* et al.), modest meadow plants, prairie plants and unassuming wildflowers, sparkling mountain manifestations of every type and nuance, precise alpine miniatures, rare endemics, improbable desert species and odd otherworldly incarnations, inconspicuous weeds, a few naughty invasives, swamp growers, woodland plants, perennial garden types, ephemeral spring bloomers, summer party-goers, autumn holdouts, and a few winter surprises. There is much to consider with

Allium karataviense subsp. *henrikii*

this genus, a large enough palette of possibilities to amuse any horticultural inclination.

With so many species at hand, one doesn't have to delve too deep to find pleasing oniony characters to add to the garden; gardens of most any sort. And we've seen, too, that exploring even common pedestrian species such as nodding onion (*Allium cernuum*) and prairie onion (*A. stellatum*), there is depth to the story to maintain long term interest,

a story that rightfully should be embraced. But we are rock gardeners at heart, not a complacent lot I'm afraid, often submitting to plant lust and coveting the rare, unseen, unobtainable, and ungrowable for no particular good reason, except perhaps for the mere challenge of acquisition. I have patiently waited decades for the chance to grow a few species that fired my imagination when parsing through rare old floras and botanical journals detailing plants in far flung corners of the world; sometimes the covetous fantasy more rewarding than the actual experience when the opportunity arrives. It rings true that anticipation is often the best part of our gardening preoccupation.

This second part of "For the Love of Onions" caters to these primal desires, to explore species that are hard to find or near impossible to track down; a few completely new to science and thus currently unavailable. Yet, increasingly, there is hope of acquiring the rare types, by networking among specialty growers and subscribing to seed and bulb lists of intrepid plant explorers, and keeping a close eye on wild collected seed in the various society seed exchanges. Don't pass up those "*Allium* sp." often seen in seed lists, a rare treasure could be hiding behind an anonymous moniker. What follows is a random selection of hard-to-find *Allium* species, a few that I managed to possess through the years, others still on my ponderous desiderata list. Each has some special garlicky persona illustrating just how prepossessing these ornamental onions can be.

11. *Allium ellisii* and ***A. karataviense*** —*Melanocrommyum-Acanthoprasum* types

Many *Allium* species can remain elusive or absent in cultivation, not because of any insurmountable challenge to their cultivation, but by virtue of their growth cycle in xeric climates, emerging from aestivation only briefly to flower and set seed, then retreat into dormancy and rest underground for the remainder of the year. Such species optimally require 5-6 years to reach flowering size, longer for fully mature flowering plants. Numerous Central Asian species in sections *Melanocrommyum* and *Acanthoprasum*, and a majority of western American species, fall into this challenging category.

An example is *Allium ellisii*, a lovely species akin to the familiar and accessible *A. karataviense*. I grew my plant from seed under a different name; each year the flush of spring growth would grow a little larger, then finally after six years it flowered, worth the wait in my opinion. The plant label disappeared early on (crows pulled them out), but it has been tentatively identified as *A. ellisii*. Several broad gray leaves furnish a fine backdrop to the globe of starry silvery-violet flowers, accented with purple stamens and furrowed purple ovaries. It is one of those species that possesses inimitable charm, spurring desire to try

Allium ellisii

Allium karataviense subsp. *henrikii* and two other clones of the species

more *Allium* species. And more there are, with a number of these dwarf *Melanocrommyum* and *Acanthoprasum* onions becoming available to grace sunny rock gardens; expensively as bulbs, from a few specialty bulb sources, or less expensively as seed, again from specialty seed sources, although you'll need a large dose of patience to see results from seed. Look for any of the following species from reputable sources: *A. akaka*, *A. alexeianum* (sometimes spelled *alexejanum*), *A. brachyscapum*, *A. derderianum*, *A. haemanthoides*, *A. mirum*, *A. nevskianum*, *A. shelkovnikovi*; there are many others. Special mention goes to the familiar *Allium karataviense*, but in newer color forms available commercially such as the lovely white cultivar 'Ivory Queen', and a recently described subspecies, *A. karataviense* subsp. *henrikii*, notable on account of its enormous flower heads of dark metallic red, a remarkable manifestation. I received bulbs of this plant in 2001 from Antoine Hoog under the apparently provisional name of 'Red Globe', preceding the 2007 publication of it as the new subspecies combination *A. karataviense* subsp. *henrikii*. The genus is full of such surprises.

12. *Allium shevockii* (Spanish needle onion) and ***A. sharsmithiae*** (Sharsmith's onion)

After forty years, even I can still get surprised, or even shocked, seeing photos of unusual alliums for the first time, none more so than with the Spanish needle onion, *Allium shevockii*, a highly restricted endemic of

Allium shevockii (photograph Nhu Nguyen)

just one county in Southern California. It grows at high elevation, in rocky habitats in the southern Sierra Nevada. This one is a mindbender, a dwarf plant with large blousy globes of intensely red flowers, the recurved outer tepals glossy and reflective, in brilliant contrast to the light chartreuse central eye of each flower. This startling species has been successfully cultivated at a botanic garden in San Francisco, so there is hope that one day it will make its way into some level of sustainable cultivation.

Allium sharsmithiae (photograph Nhu Nguyen)

Another remarkable rare California onion is *Allium sharsmithiae*, a dwarf species restricted to a narrow range on mountains on or near Mount Hamilton in California's Diablo Range, growing only on dry "serpentine clay soil on talus slopes." Structurally, the species resembles any number of western America species, but the deep black-purple to dark red-purple color of the flowers stands out as unmistakably unique.

13. ***Allium hamedanense*** – new species R. Fritsch (2008)
As rock gardeners we're intrinsically interested in wild mountain plants. We might assume that most floras are well known, understood, and documented by now. Occasionally we come across publication of a new species, or some finite taxonomic revisions and restructuring get expressed, as the science of taxonomy is forever changing, albeit moving relatively slowly. However, there are areas where botanical exploration is active and taxonomic understanding accelerated. For example, we've witnessed explosive growth in the number of *Epimedium* species in the past two decades, resulting from dedicated research and exploration of the vast mountainous areas of China, significantly due to the efforts of our own Massachusetts treasure, Darrell Probst. So, too, are there champions of the genus *Allium*, such as Dr. Reinhard M. Fritsch, Professor, Institute of Plant Genetics & Crop Plant Resources, Gatersleben, Germany, who spent considerable years studying the flora of Iran and neighboring regions, with a wealth of

Allium hamedanense (photograph Dr. Reinhard Fritsch)

contributions and published works on the genus *Allium* to his credit.

In a 2008 publication entitled "New Taxa and other contributions to the Taxonomy of Allium L. (Alliaceae) in Iran" by R.M. Fritsch and M. Abbasi, twelve new species are described along with two new subspecies. It is fascinating to witness the results of such academic endeavors, new and exciting species emerging from the floristic milieu. One such new species is the dramatic *A. hamedanense*, an *Acanthoprasum* onion, the type plant from Hamedan, northwest Iran. It has one or two broad glaucous tulip-like leaves, nestling a hemisphere of deep cranberry red flowers, a striking onion if ever there was. With the enlightenment that such species exist, eventually they might become available in horticultural commerce, or at least among specialist growers and their seed lists.

14. ***Allium bisotunense*** – new species R. Fritsch (2008)
Another new species from Iran described in the same 2008 publication is *Allium bisotunense*, from near Bisotun, Iran, only known from the type location. It is akin to the *Allium colchicifolium* alliance but, to help conjure an image, just imagine *A. karataviense* with thick, broad, silver-blue foliage, heavily furrowed with zigzag longitudinal ridges, crowned with nearly stemless broad inflorescences of spiky white blooms and small blackish red central ovaries; simply fantastic. The photograph

Allium bisotunense (photograph Dr. Reinhard Fritsch)

shows a cultivated plant photographed at the Iranian Research Institute of Plant Protection, Tehran, Iran. Let's hope that many more of these fabulous dwarf onions make their way into cultivation one day.

15. ***Allium chrysanthum***

With the advent of the internet, a wealth of botanical information now exists online. Many state, national, and governmental agencies maintain information-rich web sites that document flora interactively in ways not possible just a decade or two ago. A few major botanical floras are now online, although much more needs to be done in this arena. And we must not forget about plant information and galleries hosted by special interest plant societies such as our very own North American Rock Garden Society <*http://www.nargs.org*>, and yes, there are alliums there! While the revamped site is still young, it is already an exceptional resource with extensive photo galleries and a plant information wiki, both of which members can contribute to, and a real-time online discussion forum—a rock gardening place to be.

One must-visit destination is the photo galleries of plantsman Harry Jans of the Netherlands, where one can lose hours ogling magnificent alpines from around the world, <*www.jansalpines.com*>. It is here that I came across a Chinese *Allium* that I had only read about but never seen a photo of: *Allium chrsyanthum*.

Allium chrysanthum looks to be a a beautiful species — shown in this exquisite photograph growing at 4400m (14,500 feet) on the Bei Ma Shan, Yunnan, China (photograph Harry Jans)

Reading plant species descriptions in floras is so dry and clinical that it is difficult to visualize what a plant might actually look like, the plant in reality might be a drab weed or a consummate alpine gem, it can be so hard to tell. When I stumbled across a photo of *Allium chrysanthum* on Harry Jans' site, I nearly fell out of my chair (seatbelts should be required gear for armchair botanizing), as this is truly a gem, a huddled relative of chives with ample golden yellow globes of bloom. To see it is to want it.

Thankfully, there are still intrepid plantspeople scouring the world's mountains and alpine zones, chronicling their botanical fantasy excursions on the web, making it possible for us lazier types to study plants from around the world while in our pajamas slumped back in a padded comfy chair, performing armchair botanizing.

16. ***Allium atrosanguineum***

Moving on to another chive relative growing in high alpine meadows, bogs, and streamsides throughout much of Asia, is the polymorphic *Allium atrosanguineum*. This is plump species with near black red-purple flowers emerging from baggy blue-black spathes, a bizarrely wondrous creation. This species has bedeviled taxonomists for decades, shifting among several species, but now tentatively settled down as described in the *Flora of China*, with three varieties separated by flower color and geographic distribution. The dark red-purple form is var. *atrosanguineum*, forms with whitish yellow to pink flowers on a yellow base are var. *fedschenkoanum*, and the most enticing form with lustrous brass yellow to copper red flowers is var. *tibeticum*.

Alpine plant adventurer and guide, Kurt Vickery, shares his photograph of a high alpine meadow in Kazakhstan, the scene sprinkled with pink *Primula algida*, delightful trumpets of miniature *Tulipa heterophylla*, punctuated with black-purple pokers of *Allium atrosanguineum* var. *atrosanguineum*, the baggy dark spathes hanging on like dropped trousers, the inflated gray sword-like leaves swirling about off-kilter adding to this onion's amusing disposition. None of these moisture-loving chive and leek entities should be difficult in cultivation, although the challenge

Allium atrosanguineum in a Kazakhstan meadow with *Primula algida* and *Tulipa heterophylla* (photograph Kurt Vickery)

with the more dwarf-growing types is to keep them in character; we anxiously await their availability.

17. ***Allium nanodes***

Another exciting *Allium* photo discovery was made on the SRGC (Scottish Rock Garden Society) Forum, a highly active online plant

Allium nanodes photographed in Sichuan, China (photograph Oron Peri)

Forum, cousin to our own NARGS (North American Rock Garden Society) Forum. Popular and informational are those topics where forumists post photos of their botanical excursions and holidays, depicting freshly seen plants in the wild. I came across one such topic posted by Middle Eastern plant guru, Oron Peri from Israel, on plants seen on a trip to Yunnan and Sichuan provinces in China. There was a photo of an unidentified *Allium* taken at alpine heights in Sichuan, two broad basal leaves strikingly edged in red-purple, with a plump central flower bud in evidence. I recognized the plant immediately as the nearly mythical *Allium nanodes*, a distinctive species of high elevation screes and gravelly slopes from 3300-5200 meters in southwest Sichuan to northwest Yunnan. While it does a fair imitation of a dwarf central Asian section *Melanocrommyum* onion, it is in fact related to the petioled hosta-leaved Chinese species such as *A. prattii*, *A. ovalifolium*, and *A. listera*, descriptions of which follow later in this article. The near-stemless flowers of *A. nanodes* are white, edged or tinged reddish. It remains on my decades-long wish-list.

Allium hierochuntinum a charming blue onion from the hot deserts of Israel, and northern Jordan, where these photographs were taken.

(photograph Oron Peri)

18. ***Allium hierochuntinum***
Continuing our meander, coming down from the highest alpine peaks of China and moving on to the hot Negev desert of Israel, parts of which are below sea level, comes a most charming little blue onion, *Allium hierochuntinum*, a spring bloomer. Once again I am delighted to come across beautiful photos of such rarities and the environment in which they grow natively, by participating on the SRGC and NARGS fora. Oron Peri, proclaimed Middle East correspondent to the SRGC

Forum, frequently dazzles forumists with exquisite plants and scenery from Israel and nearby territories, including posting fascinating alliums from the Middle East that are rarely seen or discussed.

This tiny drumstick onion belongs to Section *Allium*, a large group of species best known by poster child onion *Allium sphaerocephalon*, the group typified by slender stems topped with tight knobs of bloom, indeed reminiscent of slender drumsticks. *Allium hierochuntinum* is a delicate sprite typically less than a foot tall, or a smidgen taller, with spotty distribution in arid areas of Israel, Syria and Jordan. I've not had luck growing this species the couple of times that I've tried it from seed, maybe it is only suitable for greenhouse or pot culture where temperature and moisture levels can be managed. The species is similar, and related, to *A. scabriflorum*, another of the rarefied blue-flowered onions, this one from Turkey and possibly more tractable in cultivation, as it occasionally appears in cultivation.

It requires mention, that the taxonomy of this species presents an interesting conundrum, with authorities in agreement that the earlier name of *Allium ascalonicum* Linnaeus (1756) takes precedence, thus placing *A. hierochuntinum* into synonymy. The problem is that for centuries the name *A. ascalonicum* has been uniformly applied to shallots, a loosely defined term referring to multiple bunching forms of *Allium cepa* and possibly other species. To avoid being correct yet having meaning lost in the compelling prevalence of *A. ascalonicum* denoting shallots, I hereby stick with *A. hierochuntinum*. Brian Mathew in his 1996 monograph "A Review of Allium section Allium" describes this situation well, and also maintains the more romantic name.

19. ***Allium listera*** – also ***A. ovalifolium***, ***A. prattii***, ***A. funkiifolium***, ***A. victorialis***

Some alliums can surprise by donning unique guises challenging conventional notions about what alliums should look like. One such novel diversion is a small group of Chinese onions with broad hosta-like foliage tapering to narrow leaf petioles. In fact, the rare *Allium funckiifolium* is named for its resemblance to *Funckia* (or *Funkia*), the old name for *Hosta*. An intriguing member of this group is *Allium listera*, at the top of my list for most whimsical foray into the realm of oniondom. I grow several clones collected in China by *Epimedium*-master Darrell Probst. I have it planted amongst a bed of miniature and small leaf hostas, enjoying the same shade and soil conditions as hosta, the perfect ploy to fool visiting garden friends when quizzing them about the identity of my feigned mystery plant.

The flowers are a study in understatement, yet quite prepossessing nonetheless. In July firm slender stems arch upwards topped with frilly drumstick balls of narrow-petaled white florets resembling propellers,

Allium prattii with Primula florindae and Salvia cf. *wardii* at 4550m (15000 feet) on the Demo La, Rawu, Tibet (Xizang), China (photograph Harry Jans)

Allium listera - the flowers (above) with white petals, green ovaries, and delicately pink pedicels and the foliage (below) more like a *Hosta* than a typical *Allium*.

Allium prattii (right) with richly colored flowers

Allium victorialis (below and bottom) in flower and showing the foliage with the leaves looking like those of *Convallaria*

Allium victorialis

each with a central green ovary, held distally from the globe's radial point by equally spaced pink pedicels. Very slow growing, only increasing from two bulbs to four in six years of cultivation in my garden. Seed is formed annually, although only one seed germinated in my trials thus far, requiring two years to sprout.

Other related species that are occasionally available include *Allium prattii*, with tapered blade-shaped leaves and pink to dark red flowers; *A. ovalifolium* with white or pinkish flowers and beginning to circulate in European horticultural circles; and the more popularly grown *A. victorialis*, a species that does a fair impression of lily-of-the-valley (*Convallaria*), with its leathery dark green ovate foliage, until the large creamy yellowish-white flower balls appear. All are good species for woodland conditions, or even in wet conditions with *A. victorialis*. The latter species is widely available and easily grown from seed, found native to much of the Northern hemisphere.

20. ***Allium glandulosum*** – Mexico

One of the last alliums to flower in my garden, and a unique one at that, is the distinctive fall-blooming Mexican *Allium glandulosum*. I grow a couple of clones, one from Kew, the other from the late Thad Howard of southwestern USA bulb fame, his bulbs of *A. glandulosum* collected in San Luis Potosi, Mexico, growing in high altitude meadows in wet soil conditions. The bulbs have been growing outdoors here since 1999, so winter hardiness is not an issue. Thad was intensely interested in *Allium* taxonomy and based upon decades of travels and

Allium glandulosum

collecting, offered up strong opinions about southwestern and Mexican *Allium* taxonomy considerably different than what Marion Ownbey published near the end of his illustrious career. Thad felt that the deep red *A. glandulosum* of central Mexico was a different species than the pale white, pink-tinged plants bearing the same name from collections in Arizona and New Mexico. This is substantiated in the recent online *Flora of North America*, mentioned under the species *Allium rhizomatum* with which it was previously confused. Regardless, this is a fun and rewarding allium to grow.

This species has red leaf bases, narrow upright foliage and, in September to October, diffuse umbels of a few widely spaced starry red flowers, opening from dusky dark purple buds. The flat-open flowers

are true red, with a shiny metallic sheen, not conspicuous in the garden, but satisfying upon close inspection. When happy, plants can increase slowly by knobby underground stolons. In addition to American *Allium* species that extend into Mexico, there are approximately a dozen endemic Mexican species that have been described; several of those tried, such as white-flowered *A. mannii*, have also proven hardy.

Forty years ago I met my first ornamental onion among the perennial fields of a nearby nursery. Admiring rows of low grassy foliage mounds covered with pendant red-purple flowers, I had no idea what it was and had to ask the proprietor. I couldn't believe my eyes and ears when told it was a flowering onion, its name *Allium cyathophorum* var. *farreri*; who knew such things as pretty flowering onions existed. Four decades later, I feel like the same wide-eyed teenager when I come upon such wonders as *Allium shevockii*, or when meeting a familiar old friend like *A. sikkimense* but in such splendid alliaceous embodiment to make one's head reel. I look forward to forty more years of exploring oniony delights, and hope that you too can find pleasure in growing at least a few.

Longue vie aux oignons!

Allium shevockii (photograph Nhu Nguyen)

ALLIUM RESOURCES

PLANTS/BULB SOURCES:

Pacific Rim Native Plant Nursery (Paige Woodward)
PO Box 413, Chilliwack, BC V2P 6J7 CANADA
website <http://www.hillkeep.ca/>
email <plants@hillkeep.ca>
telephone (604) 792 9279
Lots of choice alliums, has several Mark McDonough named forms of *Allium flavum* subsp. *tauricum*. Taking orders but not shipping until 2012.

Plant Delights Nursery (Tony Avent)
9241 Sauls Road, Raleigh, NC 27603 USA
website <http://www.plantdelights.com/Allium/products/40/>
email <office@plantdelights.com>
telephone(919) 772-4794
Small selection of alliums, including several Mark McDonough named hybrids.

Odyssey Bulbs (Russell Stafford)
PO Box 382, South Lancaster, MA 01561 USA
website <http://www.odysseybulbs.com/index.html>
email <mail@odysseybulbs.com>
telephone (800) 517-5152
Good selection of bulbous *Allium* species, some very choice ones.

Janis Ruksans Bulb Nursery
P.O. STALBE, LV-4151 Cesis distr., Latvia
email janis.bulb@hawk.lv
telephone +371 - 29-41-84-40, 641-00-326
Fantastic assortment of rare *Allium* species, rather expensive.

ALLIUM SEED SOURCES

Dr. Vlastimil Pilous
Jiraskova St. 396,543 71 Hostinné, CZECH REPUBLIC
email: vlpilous@seznam.cz

Kurt Vickery
Monocot Specialist, Hillview, Shipham Lane, Winscombe,
Somerset BS25 1JU, ENGLAND
email: kurt@kvphoto.demon.co.uk

ACKNOWLEDGEMENTS

Particular thanks are due to all the photographers (Harry Jans, Nhu Nguyen, Oron Peri, Dr. Reinhard Fritsch, and Kurt Vickery) who were so generous in granting the author permission to use their photographs of some amazing onions.

While the planthunters scour the mountains of the world for rarities that may one day grace a rock garden, many more of us welcome being part of a more predictable and less challenging tour. The mountains of Europe are an obvious destination for plant-obsessed visitors from around the world but while some are well-known, others are visited by far fewer people. At the end of May last year, Marilyn Farr was part of a group visiting one such group of mountains in northern Spain.

Tudes in the early morning

Ten days in the Picos de Europa

MARILYN FARR

AN OWL CALLED, a dog barked and was answered by others, there was the dull clang of cowbells, all of it knitted together by the rhythmic drone of the insects. The sounds of the night left us in no doubt that we had left the city behind. The previous day many of us had enjoyed the dubious pleasures of a low-budget flight from London to Santander on the north

coast of Spain, and had then, in several hire cars, driven west on a fast road parallel with the coast before turning south, up the valley of the Deva and then through the drama of the prodigious cliffs of the long, winding Hermida Gorge which marked our entry into a more slowly-paced world.

When we woke, the sun was lighting up the last patches of snow on the mountains, whose plants we had come to seek. We were in Tudes, a working hamlet of some thirty people, high on the mountainside above the little town of Potes in the area known as Liébana south-east of the highest peaks of the Picos. This was to be our home for the next ten days, staying in a small complex of self-catering apartments created from several old village buildings. "We" were a group of about twenty Alpine Garden Society members: some alpine experts; some less knowledgeable but keen to learn; some accommodating spouses, tolerant of their partners' plant obsessions and looking forward to enjoying the mountains; and two Royal Horticultural Society professionals on bursaries. Orchestrating events was leader, Christopher (Kit) Grey-Wilson, whose *Alpine Flowers of Britain and Europe* was to be our bible.

The Picos de Europa are one of the most westerly of all the European mountain groups and are rumored to have gained their current name from sailors returning from the Americas sighting these mountains as they arrived back to the ports of northern Spain such as Bilbao and Santander. Although not a massive group (some 30 miles east to west and 15 miles north to south), they form a limestone massif that can be driven into but not through with the western and eastern halves split from one another by a mile-deep gorge. You need to drive around the periphery before penetrating inwards (very like the Olympic Mountains of Washington State). The highest peak is 2648 m (8600 feet)

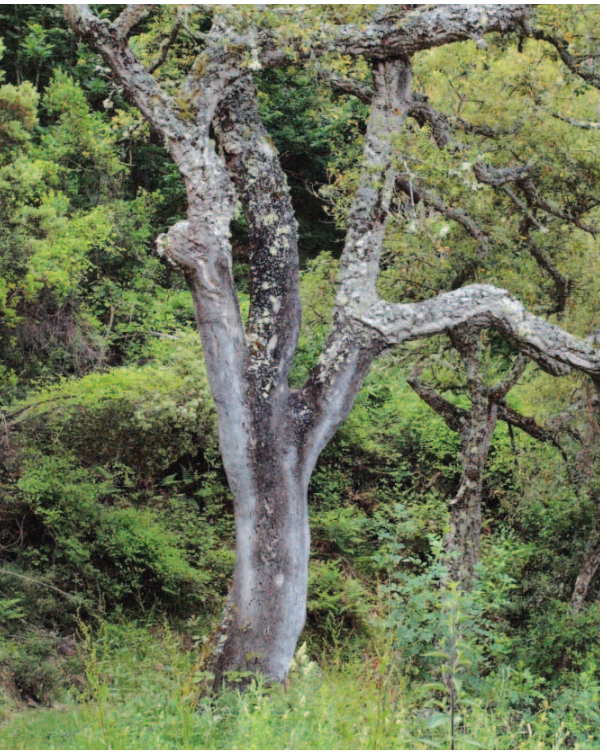
Orchids in the meadows: tongue orchid *Serapias lingua* (above) and pink butterfly orchid *Orchis papilionacea* (below)[McG]

high and there is still a small population brown bears and wolves (a cause for celebration in Europe). The flora has links to that of the Pyrenees to the east but it also has a small range of intriguing endemic plants.

The plant-hunting started not on the high mountain slopes, but in the hay meadows below our village and we were soon exclaiming over such treasures as *Malva moschata*, *Orchis papilionacea*, *Serapias lingua*, *Geranium pyrenaicum* and *Echium plantagineum*, among many others. A walk later in the day revealed further meadowland delights, including *Orchis ustulata, Dactylorhiza elata* and more butterfly orchids: these were the star players that drew our eyes. *Leopoldia* (*Muscari*) *comosum, Polygala nicaeensis* in both blue and pink forms, and *Allium roseum* formed the supporting cast, and the meadows were everywhere shot through with a chorus of *Rhinanthus minor* and *Anthyllis vulneraria.* Behind a tiny chapel amongst abandoned farm buildings was a single example of the lizard orchid, *Himantoglossum hircinum*, in bud, although later in the week we would find a few others in flower.

These slopes also boast the northernmost example of cork-oak forest, indicative of the mix of alpine and Mediterranean plants to be found in the Picos. The trunks of the cork oaks (*Quercus suber*) showed clear evidence of the way the cork layer is harvested in long sheets. Mixed in with the cork oak were many examples of the strawberry tree, *Arbutus unedo*, its fruits as yet tight green spheres.

Cork oak with its trunk showing where the bark has been harvested



It was not only the meadows that were full of colour. The rocky slopes alongside the trail were equally bright and varied. Here with scattered clumps of *Lavandula stoechas* were the huge, deep pink flowers of the heath *Daboecia cantabrica*, the yellow masses of *Genista occidentalis*, and the intense blue of *Lithospermum diffusum*. Their brilliance was tempered by the white flowers of *Cistus salviifolius* and *Arenaria boisseri*. Also present here were examples of the intriguing narrow-leaved Cantabrian endemic wallflower, *Erysimum durieai*.

Erysimum duriaei

Narcissus triandrus [McG]

Our introduction to the flora of higher elevations began the following day when we headed south-west towards the Puerto de San Glorio. Already, as we began the zigzag climb up to the pass we had stopped to investigate our first daffodil, *Narcissus triandrus*, then just before the top, was a vast meadow, yellow with the largest of the wild daffodils, *N. nobilis*. People piled out of cars and in seconds were on their stomachs amongst the plants, eyes to their viewfinders. With a mass of daffodils in the foreground, rocky cliffs in one direction and wide views towards distant peaks in the other, here, surely, was the place to get that elusive, prize-winning shot for the next photographic competition in the category *An alpine plant*

Puerto de San Glorio with its meadows of *Narcissus nobilis* and not a soul in sight …

in a natural landscape. And not a moment too soon! When we came this way again a few days later the flowers were withering and the glory had passed for another year.

But there was so much else. There was hardly room to place a foot without stepping on *Scilla verna, Saxifraga granulata* or any one of a dozen other plants. The orchid specialists amongst us quickly fell on *Dactylorhiza majalis, D. sambucina, Orchis mascula,* and a vanilla orchid, *Nigritella gabsiana*, while others set off in pursuit of *Fritillaria pyrenaica* subsp. *boisseri,* the search for which brought "needles" and "haystacks" to mind, but we were eventually rewarded with the sight of a couple of modest, brownish, but exquisitely marked flowers. The site was also distinguished by the presence of three species of lousewort: deep pink *Pedicularis sylvatica*; *P. verticillata*, also deep pink and growing in the boggy areas around a stream, doing its best to look like an orchid; and the distinguished, taller, pale yellow *P. foliosa*. The stream was also home to stands of *Trollius europaeus* and to the royal purple flowers of *Pinguicula grandiflora*, a plant we were to see in huge numbers in a variety of wet locations. In shady spots were drifts of *Viola cornuta* and on drier slopes two euphorbias, bold clumps of *Euphorbia hyberna* and wide patches of small-flowered *E. polygalifolia*.

From the top of the pass, at about 1600 metres (5200 feet), we followed a trail downhill which gave us wide views over mountains and valleys. The slopes here were notable for the large stands of *Veratrum album* and

… because we were good about sticking together while everyone got their photograph

Gentiana lutea. But we had to imagine how they would look in flower in a few weeks' time. For the moment they were large, tight, ridged buds, distinguishable from each other only by their different greens, pushing up through earth that had only recently lost its snow cover. The green theme was maintained by the muted flowers of *Helleborus viridis* subsp. *occidentalis* and *Daphne laureola* subsp. *phillippi*. Our lunchtime picnic that day was taken in the shade of an endemic birch, *Betula celtiberica*, its new leaves still a soft yellow-green.

Reaching even higher slopes entailed the use of the Fuente De cable car, reputedly the longest single-span cable car in the world, its upper station at 1834 metres (5960 feet) at the head of the Deva valley. We visited twice: on one of the days we followed the trail on down all the way to the cars, on the other we spent much more time on the high bare rocky slopes.

From the upper station we emerged into a world of grey limestone, white patches of snow, and a series of small, uncannily blue snow-melt lakes. Here we were truly in alpine territory. Most of the snow had only just melted, but the bare rock and sparse patches of grass were dotted with some of the commoner jewels of these high mountains, such as *Androsace villosa, Draba aizoides, D. dedeana, Linaria alpina* subsp. *filicaulis* and *Gentiana verna*, demonstrating how quickly flowers emerge once the snow has gone.

But as the group scattered across the rocks, other plants came to light. Soon we encountered our third daffodil, *Narcissus asturiensis*, one of the

High limestone habitats above Fuente De {McG}

smallest of the genus and a Cantabrian endemic. A trumpet gentian was later confirmed as *Gentiana occidentalis*, to be replaced lower down by *G. angustifolia.* For the saxifrage enthusiast among us there were more treasures: *Saxifraga conifera,* a tiny mossy saxifrage, could be found on the ledges; and, on the bare cliffs, the beautiful yellow-flowered *Saxifraga felineri*, a very rare narrow endemic, only recognized as separate from the Pyrenean *S. aretioides* in 1997, despite its very obvious differences.

On the day we walked down back to the valley, we found a whole range of new plants: *Hepatica* growing in the protection of *Daphne laureola*; large drifts of *Gentiana angustifolia* in the turf, with its intensely blue trumpets spotted internally with a rich green. Further down, growing tight on the rock faces, were *Erinus alpinus*, *Chaenorhinum origanifolium* and *Globularia nudicaulis*.

Dairy cattle play a large part in the agricultural economy of the Picos, and transhumance, the seasonal migration of animals from winter quarters in the valley to the mountains, is still practised. The first sign that we were approaching our destination, the village of Espinama, came when we reached the stone barns that are the cattle's winter quarters. We had already come across large numbers of animals higher up where they had recently arrived in their summer pastures. From here it was still a long, steep walk down to the village. The trail took us past meadows and open woodland where *Asphodelus albus* was flowering in profusion. Here we also found *Hyacinthoides non-scriptus*, the English bluebell, one of a number of species this part of Spain shares with the British Isles, and especially with their Celtic fringe. Our Fuente De walk was the longest

of our trip, and the plants mentioned can only hint at the excellence of the day's plant-hunting. There was certainly plenty to talk about at Kit's usual early-evening de-briefing, where plant identities were discussed and photos examined, before it was time for beer and a wonderful spread of local dishes in the Tudes bar.

Another very productive day took us beyond Puerto de San Glorio up a valley to the Puerto de Pandetrabe and the remote settlement of Santa Marina de Valdeon. Frequent roadside sightings made for a very slow car journey; we leap-frogged each other up the valley road, one car already stopping at the next floral delight before the last car had left the previous one. Roadside rock faces covered in cushions of white saxifrages, *Saxifraga continentalis, S. granulata* and *S. pentadactylis,* were among the first things to catch our eye. Geological interest was provided by the short but spectacular gorge of conglomerate rock we passed through just before the junction for Pandetrabe. Then there was a meadow that was pink with a mass of *Armeria alliacea*, interspersed with *Ornithogalum umbellatum*. Moments later we hardly knew which side of the road to look at first. On the left, a meadow full of many species we had already become familiar with, such as *Narcissus nobilis*, *Orchis ustulata* and *Pedicularis verticillata,* ran down to a river fringed with a large stand of *Trollius europeus* and a few *Geum rivale*. On the right, *G. montanum*, and *Centaurea montana*, a profusion of perfect blue-purple blooms on short, upright stems, so unlike the lax plants of soft, lowland gardens. Higher up, another rock face bore grey-leaved clumps of *Erodium glandulosum*.

Narcissus asturiensis [McG]

Chaenorhinum origanifolium

From the pass there was a view down onto the picturesque red roofs of Santa Marina, a view which belied the actual state of the village when

we reached it. Like so many of the Picos villages, economic conditions and the hardships of mountain life have led to many houses being abandoned, though some are being lovingly restored and once again boast the wooden balconies with turned balustrades or wickerwork fronts that are typical of the area. Santa Marina is particularly notable for the traditional grain stores called *horreas* built of massive oak timbers and raised up on mushroom-shaped legs to keep out animal pests. These structures now enjoy legal protection.

On other excursions to villages near Tudes we enjoyed further mountain meadows and yet more new species amongst the many by-now familiar ones. These visits also yielded sightings of woodland edge plants which make excellent garden perennials such as the white and green form of *Astrantia major* and the tall, deep pink *Linaria triornithophora*, its whorls of three or four flowers supposed to look like perching birds. Alongside the road up to Cucayo were stands of another valuable perennial, deep blue *Aquilegia vulgaris*, as well as the lavender blue biennial, *Campanula patula*, an endangered plant in the UK but common in some parts of Europe.

Our last visit was to Mogrovejo with the village overlooked by some stone tower houses. Here we watched hay being bound into large round bales for winter fodder. All week, the first week of June, we had seen the colourful meadows being replaced by shaved, dull green areas on the mountainsides. They had had their moment of glory for this year. But in the higher reaches of the mountains the show would continue, to delight other plant-hunters for some weeks yet.

A group of stone barns - typical of the Picos

Photographs by the author except those marked [McG] that are by Malcolm McGregor.

NARGS Bulletin Board

News supplement to the Rock Garden Quarterly

From the President

Dear NARGS Members,

Spring is in the air, as I am drafting this communication, and it definitely feels like a time of new beginnings.

Incidentally, that new beginnings spirit will turn into a leitmotif of sorts in NARGS this year. And so, the "NARGS Membership Benefit Think Tank", about which I told you in my previous letter (Winter 2010-2011 issue), came up with a list of great, affordable ideas which was distributed to a broad spectrum of the NARGS membership. I asked Chapter Chairs to run these ideas by their members, to see what's important to them and what else would they want to add. This enlarged list ultimately will be discussed, and possible voted on, at the June 16 Board meeting in New Hampshire.

Some of the Think Tank's suggestions have already been implemented. They are the "Plant and Seed Swap" feature for one-to-one exchanges which you will find on NARGS website Discussion Forum, and also website-based "Recommended Rock Garden Plants by Region" continually appearing on wiki. (I do want to thank all the list authors, current and future, for their participation in this project, as well as Hannah Berkowitz and Jeremy Franceschi for the many hours of formatting the lists.) Continuing the new benefits recount, the former Slide Library is starting to morph into modern media. Recently, Tony Reznicek (MI) created the first PowerPoint presentation on Ev Whittemore's western North Carolina garden to be used by chapters for their programs. More of these PowerPoint presentations are coming in the future.

Tony Reznicek, as it happens, was a member of the Think Tank and I'd like to give kudos to the entire team: Jane McGary, Chair (OR), Erica Schumacher (NY), Judy Wall (Ontario), Bobby Ward (NC) and, of course, Tony (MI). My gratitude goes to all of you for the most conscientious approach to your task. Thank you!

Increasing membership is a popular topic in NARGS, and several chapters have good news on that front. A few of them participated in the initiative spearheaded by Malcolm McGregor, our Editor, who proposed that we print some extra copies

LATE NEWS

ON JUNE 18TH at the Annual Meeting in New London, NH, there were elections for Officers and for three new Directors. Full details of the Annual will be in the next issue but the results of those elections are reflected in the listings inside the back cover.

of the Rock Garden Quarterly and make them available to Chapter Chairs for recruitment of new NARGS members. So far, these chapters took advantage of this opportunity and recruited new members: Piedmont (David White), Potomac Valley (Betty Anne Spar), Rocky Mountain (Mike Kintgen), Wisconsin - Illinois (Ed Glover), Northwestern (Claire Cockcroft), Allegheny (Al Deurbrouck) and Painted Hills (Gail Klodzinski). The most successful were those chapters which subsidized part of national membership fee, something that, for example, Genesee Valley, has been doing for a while. Genesee Valley (Betsy Knapp, Chair) recruited a few new NARGS members just recently.

Many thanks to all the Chapter Chairs and chapter members who actively sought new members for the organization; it is much appreciated. If you are interested in receiving extra copies of the Quarterly for recruitment purposes, please contact the Executive Secretary, Bobby Ward at <nargs@nc.rr.com>.

Nothing spells NEW BEGINNINGS as much as changing of the guard. This is my last missive to you as part of my tenure as NARGS President, and the tenure of many of the other members of the Administrative Committee ends this June at the New Hampshire Annual Meeting. Many thanks to the AdCom members: Barbara, Maria, Lee, and Randy, for serving with me, and to many of the NARGS of,ficers, managers and "civilians" who supported me in my duties. Finally, a special thank to two guys who were there to help when legal counsel was needed: my husband Myron and Robert Wetzel.

Please volunteer for NARGS - this is the only way this organization can keep improving!

Grazyna Grauer
NARGS President <grazynalg@sbcglobal.net>

Speakers Needed for NARGS Chapters

NARGS chapter Program Chairs are looking for speakers for their chapter meetings. Many of you have given talks at the eastern or western study weekends or annual meetings, to your chapter, and to other interested groups on a variety of subjects.

Are you available to speak to NARGS chapters?

If so, send an email to me **Barbara Wetzel at <aparkplace@aol.com>** with your name, city/state where you reside, your contact information, the topics on which you are able to provide programs, where you have given them in the past, and your contact person (program chair or chapter chair, etc.). This list will be posted on the NARGS web site for our chapters to utilize. If you would like to be part of this list, but don't want to have your information posted on our web site, I would be happy to provide your information confidentially to chapters as requested with your approval.

NARGS Seed Exchange 1

This year's Seed Exchange was successful in sharing 38,260 packets of seed among 773 members, in two rounds of distribution. We have many, many people to thank, whose hard work contributed to that level of success:

- First, there were all the wonderful members who collected and donated seed, to make it all possible.

- Our Intake Manager, Laura Serowicz, received the thousands of donated seeds, entered them into the database and organized the Seed List, distributed them to 18 work centers for re-packaging, and responded to the endless questions/problems/glitches as the seedex process moved forward.

- Joan Haas, and members of the Delaware Valley Chapter (and of Joan's extended family) handled the main distribution this year, completing 773 orders and shipping 21,675 packets of seed to members in the U.S., Canada, and countries around the world.

- BZ Marranca once again organized the volunteers of the Adirondack Chapter who handled the second round of requests, which resulted in an additional 274 orders, with a total of 16,585 packets, going to those really ardent seed-sowers among us. And then capped it off by sending hundreds of packets of seed to the 35 chapters that requested them.

Think of all the new plants that will now grace our gardens, thanks to their work!

NARGS Seed Exchange 2

The most important part of the next seed exchange (2011-2012) is here, now! Enclosed with this issue are the Donation Form and Instructions, and without your kind and generous donations of seed, there will be no seedex. Please wander your gardens with an eye to what you can share with your fellow members: make a list, check it twice . . . and keep a lookout for the ripe seeds, before the ants or rot can get them. Please clean the seeds the best you can; package, and then list them on the Donation Form and send them to Laura Serowicz (whose address is on the Donation Form) by November 1st.

NARGS Seed Exchange 3

The 2011-2012 Seed Exchange will see a new electronic ordering system in place, designed by Chris Klapwijk. This will simplify and speed the process for members who send seed orders, as well as assure greater accuracy and legibility for those who will fill the orders. There will be no special

registration to use the online system: simply sign in by typing your email address, and then begin choosing seeds.

However, you MUST send your current email address to our Executive Secretary, Bobby Ward at <nargs@nc.rr.com> so that the system will recognize you as being eligible to use online ordering. You can send Bobby your email at any time, from now until seed ordering begins in December. (Please be assured that we do not share our address lists - print or electronic - with other organizations or companies).

When the 2011-2012 Seed List goes online on December 15 (Mark your calendars!), there will be clear instructions for using this new system, as well as alternative ways to use and mail a printed order form.

Of course, we will still be printing the Seed List and sending copies to those who request it by Thursday, December 1st, by contacting:

Joyce Fingerut
537 Taugwonk Road
Stonington, CT 06378-1805
USA
<alpinegarden@comcast.net>

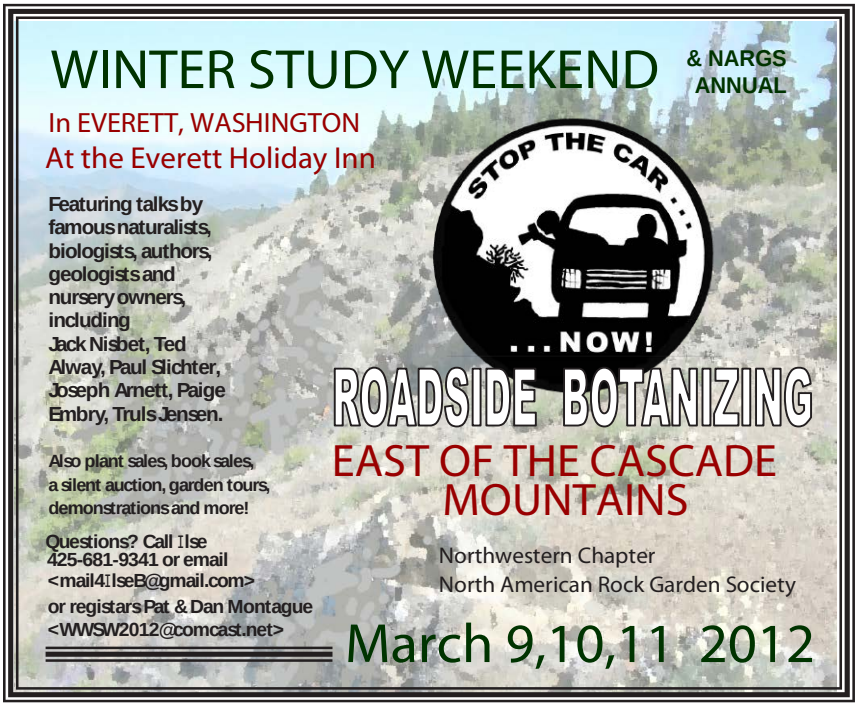
Speakers Tour Program 2011 & 2012

This year is an exciting one for the NARGS Speakers Tour Program. Alan Bradshaw completed a tour of primarily western chapters in April, bringing along with him seeds from his Alplains catalogue. Later in the year, John Grimshaw of Galanthus fame from England will tour some of the eastern chapters in September.

Looking further ahead, there are two outstanding speakers scheduled to provide programs in 2012. A tour of eleven, primarily western chapters, is being organized for the spring of 2012 with Fritz Kummert from Austria. Following this, in the fall of 2012, Nick Turland from St. Louis will tour the eastern chapters. Organization of this tour will begin next month.

Members are encouraged to look at the STP site on the NARGS website to view updated information on speakers and the topics they will offer for programs. You will also see the schedules for each speaker, the topic selected by each chapter, and the contact person for each chapter. If a speaker is not visiting your chapter, contact another chapter where our speakers are visiting and arrange to see our speaker there.

Comments and suggestions regarding the Speakers Tour Program are welcome. Please contact the chairperson, Barbara Wetzel <aparkplace@aol.com>.



The following recently became NARGS Life Members

Lyn Damisch (Illinois)
Maribea (BZ) Marranca (New York)
Colette Menasian (Groton, NY)

The following became Patrons

Pat Howell (Maryland)
Kirstin Norgaard Pedersen (Denmark)

NARGS December 2010 Donations Appeal

DONATIONS between January 28th and April 23rd, 2011

DESIGNATED	
In memory of Pat Bender (General Fund)	$50
In honor of Grazyna Grauer (General Fund)	100
Seed Exchange program	20
GENERAL FUND or UNDESIGNATED	80
TOTAL as of 23 April 2011	$5590

DONORS

Andy Crimes (United Kingdom)
Barbara Dussler (Germany)
Richard G. Turner, Jr. (California)
Pat & Dan Montague (Washington)
Robert Gibson (Virginia)
Peggy Krementz (New Jersey)
Joyce Hemingson (Connecticut)
Georg Adam (Germany)

Persons who joined NARGS February 1st to May 31st

Mitchell, Kerry, 661 Comleroy Rd., Kurrajong, NSW 2758, Australia
Knoblauch, Cathy, Box 1861, Whitecourt, AB T7S 1P6, Canada
Schier, Faith, POB 16, Meeting Creek, AB T0B 2Z0, Canada
Horachek, Yaro, 92 Bearspaw Acres, Calgary, AB T3R 1H7, Canada
Levesque, Nancy, 3923 Vardell Rd. NW, Calgary, AB T3A 0C3, Canada
Zubrowski, Stanley, Box 38, Prairie River, SK S0E 1J0, Canada
Larsen, Finn, O Frostsv. 3, 7031 Trondheim, Norway
Kubala, Tomasz, ul. Dabrowskiego 165, 60-594 Poznan, Poland
Andersson, Birgitta, Vik Vastergarden 1, Torestorp 51193, Sweden
Turkmen, Funda, P.K. 4 Saricakaya, Eskisehir 26870, Turkey
Royal Horticulture Society-Wisley, RHS Garden, Wisley, Surrey GU23 6QB, United Kingdom
Moylan, James, POB 6853, Auburn, CA 95604
Demott, KJ, 10668 E. Inspiration Dr., Parker, CO 80138
Stephenson, Bob & Patricia, 2920 S. Grant St., Englewood, CO 80113
Davidson, Duane, 13691 W. 54th Ave., Arvada, CO 80002
Gibson, Edie & Roy, 3243 W. Pikes Peak Ave., Colorado Springs, CO 80904
Griffin, Patricia A., 3198 S. Delaware St., Englewood, CO 80110
Schroeder, Catherine, 1014 Fuller Rd., Colorado Springs, CO 80920
Seieroe, Julianne, 2514 Pine St., Boulder, CO 80302
Simon, Betty, Gateway Antiques Center, 95 Gem Dr., Rossville, GA 30741
Miller, David, 61 Laconwood Dr., Timberlane, Springfield, IL 62712
Ross, Rachel, 123 Nourse Rd., Bolton, MA 01740
Walker, Corinne, 152 Old County Rd., Lancaster, MA 01523
Hill, Pamela, 15 Whittemore St., Concord, MA 01742
Sullivan, Erin A., 16 Ware St., Apt. 21, Cambridge, MA 02138
Lander, Linette A., 1105 Lancaster Rd., Takoma Park, MD 20912

Horschak, Jay, 50 South Gouldsboro Rd., Gouldsboro, ME 04607
Schneider, Karen L., 728 Lund Ave. NE, Spring Lake Park, MN 55432
Amerson, Bryon, 609 South 3rd Ave., Bozeman, MT 59715
Fennel, Dottie H., Gardens in the Wood, POB 22, Crumpler, NC 28617
Biddix, Carolyn, 325 Regency Rd., Salisbury, NC 28147
Haire, Jenny, 1212 Wishaw Court, Cary, NC 27511
Doubrava, Nancy, 5629 Pine Dr., Raleigh, NC 27606
Bashaw, Kathryn, 85 High Point Rd., Newbury, NH 03225
Lavoie, Gail, POB 66, South Acworth, NH 03607
Sander, Nancy, 1215 Fifth Ave. PH, New York, NY 10029
Lincks, Joseph, 3 Richard Rd., Mahopac, NY 10541
Farage, Stefan, 5639 Netherland Ave., Apt. 3-D, Bronx, NY 10471
Azif, Linda, 39 Concord Rd., Ardsley, NY 10502
Young, Joanne, 14 Sidney Place, Brooklyn, NY 11201
Herrmann, Joan, POB 172, Prospect, NY 13435
Vanderstouw, Meg, 61 Hitchcock Lane, Rochester, NY 14625
Hursh, Larry, 58 Azalea Rd., Rochester, NY 14620
Malta, Kathleen, 912 Summetville Dr., Webster, NY 14580
Hagerman, Eric, 918 Murray St., Medford, OR 97501
Marshall, Danielle, Timber Press, 133 SW 2nd Ave., Ste. 450, Portland, OR 97204
Carter, Steve, Carter's Greenhouses & Nursery, 5154 Waymire Rd., Dallas, OR 97338
Bucek, Milena, 197 Egg Hill Rd., Spring Mills, PA 16875
Sweetman, Pat E., 2595 Rehmeyer's Hollow Rd., Stewartstown, PA 17363
Herald, Robert, 10 Ogden Ave., Swarthmore, PA 19081
Burkhart, Jeannine W., 6408 Westmister Rd., Knoxville, TN 37919
Andrews, Kathy, 9434 Dutch Hollow Rd., Rixeyville, VA 22737
Smith, Margaret, 2318 River Rd., Guilford, VT 05301
Lyke, Mark & Joanie, 24821 – 12th Ave. S., Des Moines, 98198
Jackson, Alice, W. 6515 Schmidt Rd., Johnson Creek, WI 53038
LaFlash, Jane, 211 S. Fair Oaks Ave., Maidson, WI 53704
Voss, Shari, 2505 – 7th St., Monroe, WI 53566
Wilson, Donna, 1034 Carriage Dr., Sun Prairie, WI 53590
Jones, Tanya, 4902 Wilmslow Rd., Baltimore, MD 21210
Meier, Karl M., 11877 Neal Lane, Redding, CA 96003
Schleifer, Liane Amy, 3612 Prestwick Dr., Tucker, GA 30084
Humphries, Terry, 10800 Coombs Rd. East, Barneveld, NY 13304
Wasp, Daniel, 21 Beverley Dr., Cody, WY 82414
Bard, Patricia J. , 2610 Devonshire Rd., Ann Arbor, MI 48104 J
Baird, Janet, 147 Finney Rd., Glenmoore, PA 19343
Scarola, Carolyn S., 359 Los Cerros Dr., Greenbrae, CA 949
Lewis, Emily, 172 Forest St., Sherborn, MA 01770
Schupf, Sara, 122 Nash Rd., North Salem, NY 10560
Zimmerman , Patricia, POBox 10, Brookside, NJ
Sedivy, Aaron, & Hurst, Cassandra, 4445 Iran St., Denver, CO 80249
Campbell, Joan, 804 Honey House Lane, Corvallis, MT 59828

We have learned of the death of NARGS member
Pauline N. Clausen, Rockford, Illinois

NARGS Membership Benefits

1. Fellowship - the opportunity to belong to an international association of individuals with an abiding love of gardening and the study of rare and unusual plants, thus creating a forum for sharing ideas with others for creative and successful ways to grow them.

2. The Rock Garden Quarterly – a high quality journal for novice and expert, targeted at rock gardeners, but of broader interest and rich in color photos. Particular attention is given to the different needs of rock gardeners across the diverse geographical regions of North America. Included are notices of meetings and special events, book reviews, as well as many nursery advertisements.

3. Seed Exchange – an annual selection of seeds, rich in rarities, donated by members worldwide, many of which are rarely obtainable elsewhere. In addition to the initial distribution, members may order surplus seeds, with leftover seeds sent to local chapters. Ephemeral seed is also now available with new storage methods.

4. Plant and Seed Swap - one-to-one exchange through the website discussion forum (last category on the forum).

5. Website – an on-line source of information featuring a rock garden encyclopedia, lists of recommended rock garden plants by region, image galleries, a discussion forum for the exchange of ideas on growing and finding plants, plus links to members' websites, nurseries, book sales and so much more. A members-only area contains the Rock Garden Quarterly cumulative index.

6. Facebook – NARGS is represented on Facebook, a must for the modern young gardener!

7. "Beginners Handbook" (and seeds from the Seed Exchange)– sent to all new North American members.

8. National meetings – highly entertaining and educational twice-yearly conferences sponsored by Chapters, one in the West and one in the East. These meetings have outstanding speakers and visitors from all over the world, workshops, and often opportunities to hike in alpine areas, and visit public and private gardens. There are usually also sales of rare and desirable plants, and most especially they are a chance to discuss plants and gardens with other keen gardeners.

9. Local Chapters – thirty-eight NARGS affiliated chapters are active in North America. Chapter events include lectures, garden visits, field trips, demonstrations, and plant sales. Besides a wealth of information, these friendly gatherings also offer a source for unusual plants plus the opportunity to be inspired by other gardeners in your region.

10. NARGS Speakers Tour – internationally known speakers brought to all chapters. This provides local chapters the opportunity to hear and visit with outstanding plantspeople from around the world presenting talks and workshops.

11. Book Service – links to nearly 200 gardening books on Amazon, in-house sales of NARGS publications, (books and past issues of the Rock Garden Quarterly), monthly book reviews, "Book of the Month" and a list of recommended rock gardening books (in Wiki Rock Gardening Encyclopedia), all on NARGS website.

12. Membership Directory – A membership directory is distributed to members, which not only has an alphabetical list of members, but a list of members by state or country along with their address, email, etc., along with a note of member's gardens that are available upon request for visits by other members.

NARGS CHAPTERS (meeting place/area) & CHAIRPERSONS

Adirondack (Ithaca, NY)	Billie Jean Isbell - bji1@cornell.edu
Alaska (Anchorage & Mat-Su Valley)	Carmel Tysver - garden@gci.net
Allegheny (Pittsburgh, PA)	Alan Peacock - alanpeacock@comcast.net
Berkshire (Stockbridge, MA)	Erica Schumacher - ejnovick@yahoo.com
Calgary Rock & Alpine Garden Society (Calgary, AB)	Cathy Kurio - cakurio@shaw.ca
Columbia-Willamette (Portland, OR)	Jane McGary - janemcgary@earthlink.net
Connecticut (New Haven, CT)	Virginia Gingras - ginnygingras@netzero.net
Delaware Valley (Philadelphia, PA)	Tammy Harkness - plant_nerd@msn.com
Emerald (Eugene, OR)	Tanya Harvey - Tanya@westerncascades.com
Fells (Newbury, NH)	Thelma Hewitt - Tkhewitt@aol.com
Gateway (St. Louis, MO)	Bruce Buehrig - buehrig31@aol.com
Genesee Valley (Rochester, NY)	Betsy Knapp - eeknapp@rochester.rr.com
Great Lakes (Southern MI)	John Serowicz - skeptic@twmi.rr.com
Hudson Valley (Westchester Co, NY)	Don Dembowski - dondembowski@optonline.net
Long Island (Oyster Bay, NY)	Donald Ohl - donohl@yahoo.com
Manhattan (New York, NY)	Michael A. Riley - ManhattanNARGS@verizon.net
Mason-Dixon (Norrisville, MD)	Richard Arnold - r.arnold4@verizon.net
Minnesota (Minneapolis/St. Paul, MN)	Meredith Schurr - meredithis@comcast.net
New England (Waltham/Boylston, MA)	Mike Saganich - ceruleanprism@yahoo.com
Newfoundland (St. John's, NL)	Todd Boland - todd.boland@warp.nfld.net
Northwestern (Seattle, WA)	Claire Cockcroft - claire.primula@yahoo.com
Nova Scotia (Halifax & Truro, NS)	Darwin Carr - dcarr@nsac.ca
Ohio Valley (OH and surrounding states)	Chuck Gleaves - gleaves.charles@gmail.com
Ontario (Don Mills, ON)	Virginia Hildebrandt - vhildebrandt@sentex.ca
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Painted Hills (John Day, OR)	Gail Klodzinski - gailkathryn3@hotmail.com
Piedmont (Raleigh, NC)	David White - dmwhite_nc@yahoo.com
Potomac Valley (Alexandria, VA)	Betty Anne Spar - bettyannespar@aol.com
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Western (San Francisco Bay area, CA)	Ted Kipping - tkippingsprint@earthlink.net
Wisconsin-Illinois (Madison-Chicago)	Ed Glover - glover@oncology.wisc.edu

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

Back cover: Part of the rock garden in Stephanie & David Ferguson's back garden.

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