

Rock Garden

Quarterly

Summer 2012

CONTRIBUTORS

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

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Kim Blaxland was a long-time member of the Delaware Valley Chapter. Her work on *Viola* is celebrated in this issue with articles by Kim and her husband **Chris**.

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Alan Peacock was born in London, England.. He moved to Pittsburgh in 1975, as an engineer in the coal mining division of his company. Going underground, he grew to know rock, and on retirement built a rock garden. Joining the Allegheny Chapter in 2005, he was Chair within 3 years, and is still an active member.

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Caroline de Vries is an Oberlin College Intern at Denver Botanic Gardens, where she found herself surrounded by Latin-genus-and-species names, under the apprenticeship of Panayoti Kelaidis. She has developed an infatuation with *Phlox*.

John Watson lives in Chile with his wife and working partner, **Anita Flores**. Of English birth, he has explored extensively for plants in Turkey and the southern Andes. He now devotes his time to advancing various aspects of the botany of his adopted region. Although their chief speciality is *Viola*, John and Anita also study *Tropaeolum* and *Alstroemeria* in depth.

Front cover: *Viola pedata* – Kim Blaxland

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ROCK GARDEN

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Summer 2012

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A few words from the Editor

MALCOLM MCGREGOR

IT'S BEEN A weird spring here in East Yorkshire – March was warm and very dry so that plants that flowered early went past very quickly – flowers that would normally last for days were over in hours – the beautiful, pale blue *Pulsatilla* 'Budapest' had four flowers that opened and then were over in a day. But, since the beginning of April, it's been much colder and it has rained a lot. We've had three times the usual rainfall. It has been the wettest April for a hundred years – it might be longer but they only started keeping the records round here a hundred years ago. And it's now early June and it's still raining although not as consistently.

We've been away quite a bit. In March it was to NARGS Annual Meeting in Everett in Washington – very successful, with some great gardens and speakers, supplemented for us by the opportunity to see snow geese and, in an extension of the trip to Vancouver, to see snowy owls on the foreshore at Boundary Bay. And then to Calgary where we were driven out into the wilderness in the snow, with borrowed crampons to put on, so we could walk up to look at frozen waterfalls ... another story for another time!

And then at the beginning of May, it was a trip to the Netherlands for the Saxifrage Society four-yearly International Conference. This was planned to coincide with the Dutch Rock Garden Club's annual plant sale and international lecture at Utrecht Botanic Gardens. The plant sale was magnificent with between twenty and thirty specialist rock garden nurseries from Holland, Belgium, and Denmark, selling the most irresistible range of rare plants, many at mainly tiny prices. We got a tour of the rock garden as well, with Gerard van Buiten (head gardener at the gardens and a member of the Eriogonum Society) showing us round this spectacular rock garden. The lecture was truly an international lecture with Marcia Tatroe from Denver (with husband Randy, NARGS Treasurer till last year, on projector) talking about rock gardening in and around Denver, profiling the horticultural challenges, and showing a range of rock gardens with their spectacular spring displays so unlike those of more northern latitudes.

AS MEMBERS REALIZE it has not been my general practice to write an editorial. For those who know me this might seem surprising – I'm happy to talk into the middle of the night, I enjoy writing, I have opinions – or, as others might say, I can't stop talking. Nevertheless I have generally let the *Quarterly* speak for itself without need for guidance or commentary.

No one issue of the *Quarterly* can properly represent its diversity through time; no issue can have articles on everything that it would be nice to include. Usually the main task for the editor, apart from making sure that the writing and photography is as good as it can be, is to assemble a range of articles that will between them have something for everyone. Then it's to present them at their very best, to create a structure to an issue with a rhythm of short and long, pictorial and textual, weighty and light, that feels natural. Much the same as rock gardening – getting hold of the wide range of plants you want is just the first stage, then it's about planting

them so that the contrasts and complements in textures, foliage, and flower color, and placement across the rock garden, provides well for the plant, and attracts the eye.

So this issue ranges from the spectacular phloxes of Colorado, David Douglas's explorations of the Columbia Plateau, and rock gardens in Gothenburg; to a discussion of seed germination, further thoughts on the axioms of rock gardening, and reflections on photographing alpine plants so what else Japanese cooking, rebuilding a rock garden in Pittsburgh, and reviews of books on Greek cyclamen and Eudora Welty's garden. But at its heart, this issue has a sequence of three pieces by or about Kim Blaxland and her love of violets. And it's one of Kim's photographs of *Viola pedata* on the front cover of this issue.

KIM BLAXLAND'S DEATH at the end of 2011 was announced in the last issue and although her work on violets generally, and North American violets in particular, was known to the few it had not perhaps had the attention it deserved. This issue goes some little way towards rectifying that with an appreciation by John Watson of the role that Kim had in the work on the rosulate violas of South America, and with her husband Chris's introduction to Kim's own text and photographs of one of the most attractive of all North American species: *Viola pedata*. It will immediately become apparent that Kim's work is in the finest tradition of botany: the quality of her observation shining through both her written comments and her beautiful drawings.

The photograph on page 219 of Kim at work, photographing *Viola umbraticola* in Arizona, shows the patience with which she worked, the faithful Nikon, the special tripod and camera brackets she used, but also her continued loyalty to 35 mm film as a medium. And, in a similar way, her work on her drawings using a digitizing drawing tablet demonstrates the same perfectionism. I hope to be able to publish some more of Kim's own work in the future and, as John Watson mentions, to publish further on the South American violas, about which there is still much to be told, with the naming of one in Kim's memory as part of that story.

IF KIM BLAXLAND'S photograph on the front cover points to the articles by and about her and her work, so the back cover, with its picture of the *Rock Garden Quarterly* on an iPad, points to NARGS's embrace of the new digital possibilities in publishing. The first thing to say is that this is not a replacement for the printed *Quarterly* – this is an extra. As from now NARGS members will be able to access the *Quarterly* digitally as well as still receiving their printed issues as before. This is a great opportunity for NARGS – initially the digital edition will be an exact replica of the printed edition with the added bonus that all the weblinks are live and you can click straight through to any web addresses or other links mentioned in articles or ads. But it will offer new opportunities over time – extended ranges of images, longer articles, movie clips – that will provide for all our members into the future.

So what else should I mention – NARGS 2013 election of course – for the first time all members will have the opportunity to vote even if you can't get to the Annual Meeting ... but you can read all about that elsewhere ... page 213 is a good place to start.

digital Quarterly

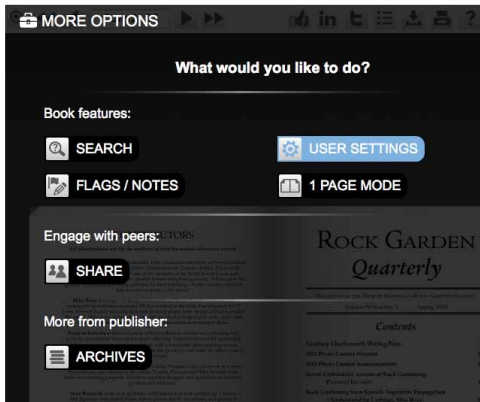
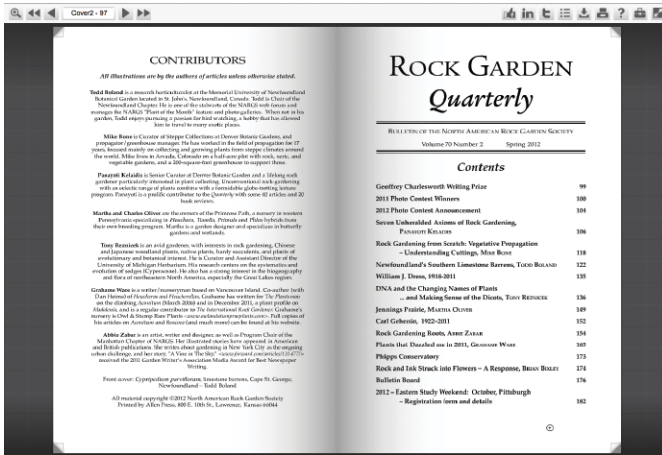
The world of publishing is undergoing the most dramatic changes since Gutenberg invented the printing press over 500 years ago. The *Rock Garden Quarterly* is now into its 70th year and for all that time it's been changing to reflect the times, and to use new printing technology as it has become available. Now it's going to be published in digital form as well as the traditional paper form – and members have access free. The digital edition will be available around the same date that members receive their mailed copy.

Try the last issue now: www.nxtbook.com/allen/roga/70-2
and this issue (from July 1): www.nxtbook.com/allen/roga/70-3

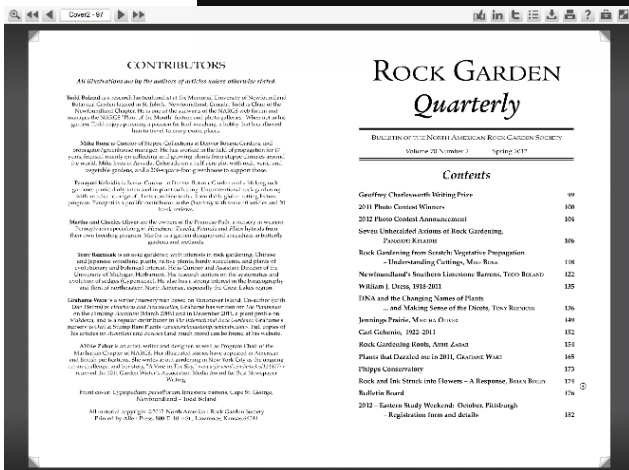
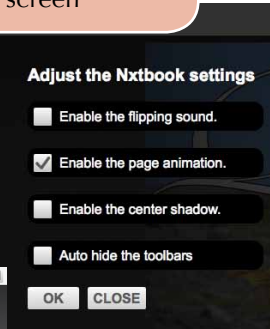
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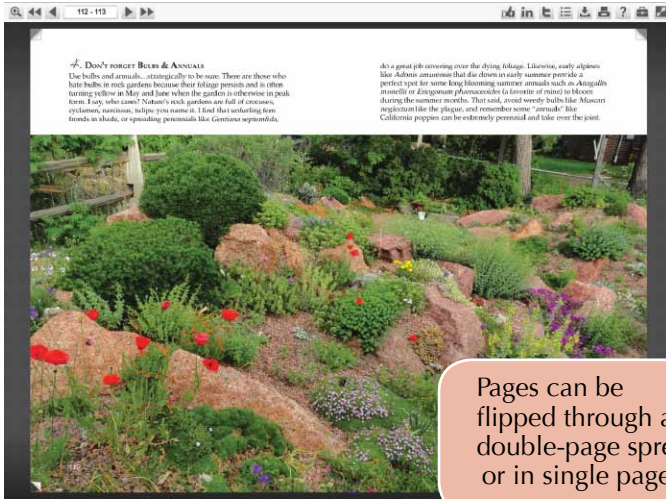
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Pages can be flipped back and forward using corners of pages

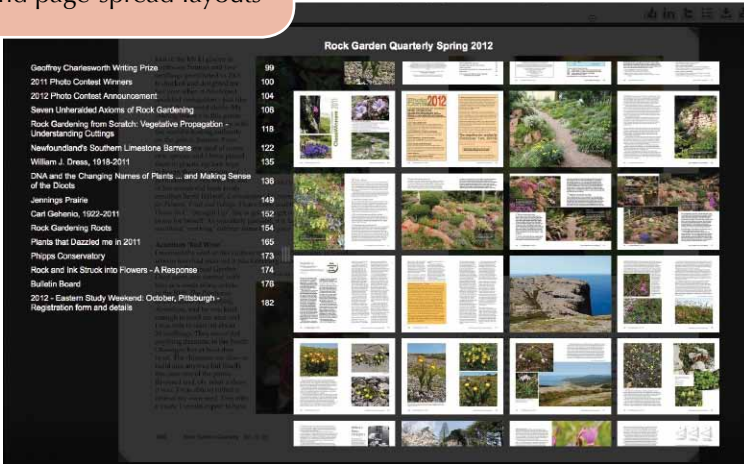


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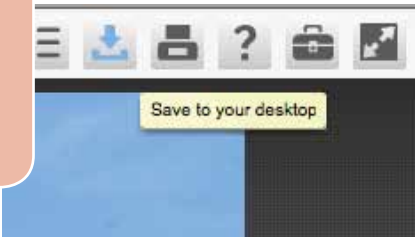




Overview of whole issue with Table of Contents and page-spread layouts



As well as being viewed online, the Quarterly can be downloaded to your own electronic device or platform - like the iPad on the back cover for example



All advertiser and internal links are live



Managing boundaries - defensible borders - is a vital element in the rock gardener's armory.

Expanding Panayoti's Axioms

MICHAEL PEDEN

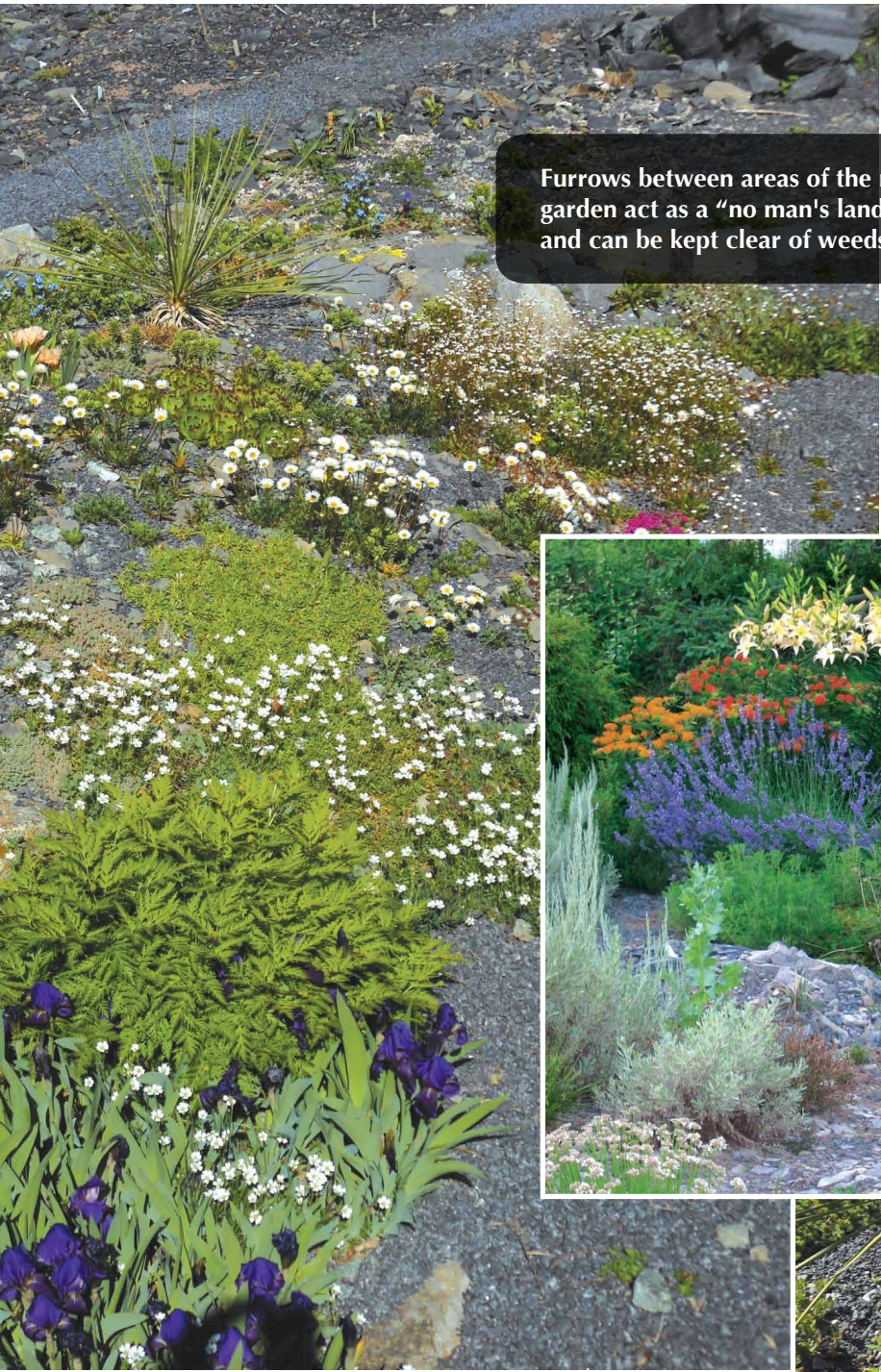
I MUCH ENJOYED Panayoti Kelaidis's article in the last issue of the *Quarterly* (Spring 2012). Being a seasoned rock gardener I can't say how many times I have lived Panayoti's unheralded axioms in my own garden; countless, likely. I'd struggle to come up with a very different set of axioms as the author suggests I might, but there is one that Panayoti may have missed due to his perspective: he has his entire garden set up in rock gardens. I applaud this aim but for many of us it's a smaller rock garden, probably in the lawn somewhere: defensible borders are required. Make well-considered use of paths, edging materials, walls, slabs, and stone mulch, to keep ramifying weeds and grasses out of the rock garden. It is easier to defend a circle against crawling weeds than it is to defend a long narrow rectangle, easier still if a building is used as a rampart.

I would like to make mention here of perhaps the least understood edging material: that 4-inch wide black plastic strip that comes in a coil. I know: cursed stuff! Now, not so fast. It really works quite well, notwithstanding that mine is the only garden where I have seen it properly installed, of course. One side usually has a double plastic ridge at the base. This seems designed to catch grass roots near the limit of where they grow in a mown lawn. The roots hold the strip in place. The very top of the strip must be set so that it is just barely above the level of the soil from which the grass is growing. Most important of all, the material must be installed vertically along its entire length. If it is leaning towards the garden, or the lawn, when all backfilling is done, it will ride up on the first frosts of winter every time, and lie recklessly strewn by the side of the garden come spring. I see this everywhere!

Install it in spring so roots can anchor it well before the frost. The roots of plants in the garden will pin down the other side of the strip. Success will be less likely if there are no roots involved; however, I've used crushed stone to effectively secure the garden side. A larger size, say #2, seems to work great. This can be topped with pea stone which is "defensible" in that it is easy to scuff weedlings if they should get

Panayoti's Seven Axioms

1. MATCH PLANT SELECTION TO SITE
2. PUT PLANTS WITH SIMILAR WATER NEEDS TOGETHER.
3. AVOID PLANTS THAT DO NOT SELF PRUNE
4. DON'T FORGET BULBS & ANNUALS
5. DO NOT DISDAIN EASY PLANTS
6. PLANT PLANTS WITH SIMILAR GROWTH RATES
7. PROPAGATE, COLLECT SEED, AND SHARE



Furrows between areas of the rock garden act as a “no man's land” and can be kept clear of weeds.

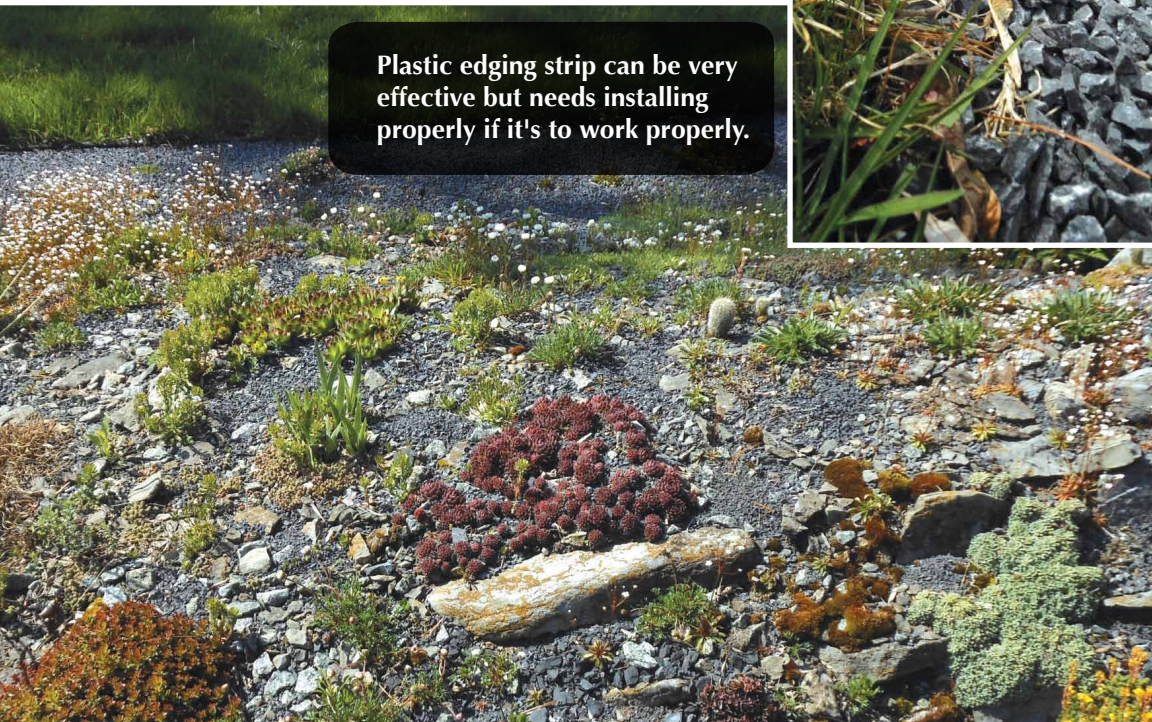


started. It isn't foolproof. *Glechoma* will still get over and it's useless if you don't mind what is going on on the garden side; but for the price, black plastic edging carefully installed is as good as, or possibly better than, most anything.

Panayoti's Axiom 6 will save gardeners a lot of headaches, but I think it is not strictly about the rate of growth. Moss phlox and *Kabschia saxifrages* might be grown together but the gardener needs be aware of the situation. Each plant needs to be kept in its special place. I've used "furrows;" little borders of plant "no man's land" to keep things like moss phlox contained for many years. New growth is removed from these areas a couple of times each year and all is well. Even *Muscari* will lie down quietly if the ripening seed heads are whipped off before they mature. In one instance I've allowed a little clump of *Crocus chrysanthus* to grow in one of the furrows. This needs no tag. The permanent furrow roughly marks its location. This system also allows for the slow rearrangement of plant clumps. I once planted some *eriogonums* too close together; but rather than risk moving them, I've hacked away at the spacing over time. One goes



Plastic edging strip can be very effective but needs installing properly if it's to work properly.



right, the other left, and in time they are happily apart! The furrow has been slowly adjusted over time giving a competitive boost to the slower of the plants. This all minimizes digging. Digging is rarely a good policy in the rockery as it can destroy roots, cause unwanted bulb dispersal, and even muddle local soil chemistry. Many authors on the subject have stated that it is best to let newly cultivated or newly created rockeries

settle in a bit before any serious planting. This does seem wise. Crevice gardening is the ultimate refinement of this stability principle.

Panayoti's Axiom 1 appears climate-related mainly but there is an important twist that he hints at with the term "modified ecosystems:" that is; if you really want to grow it, don't give up without a fight!

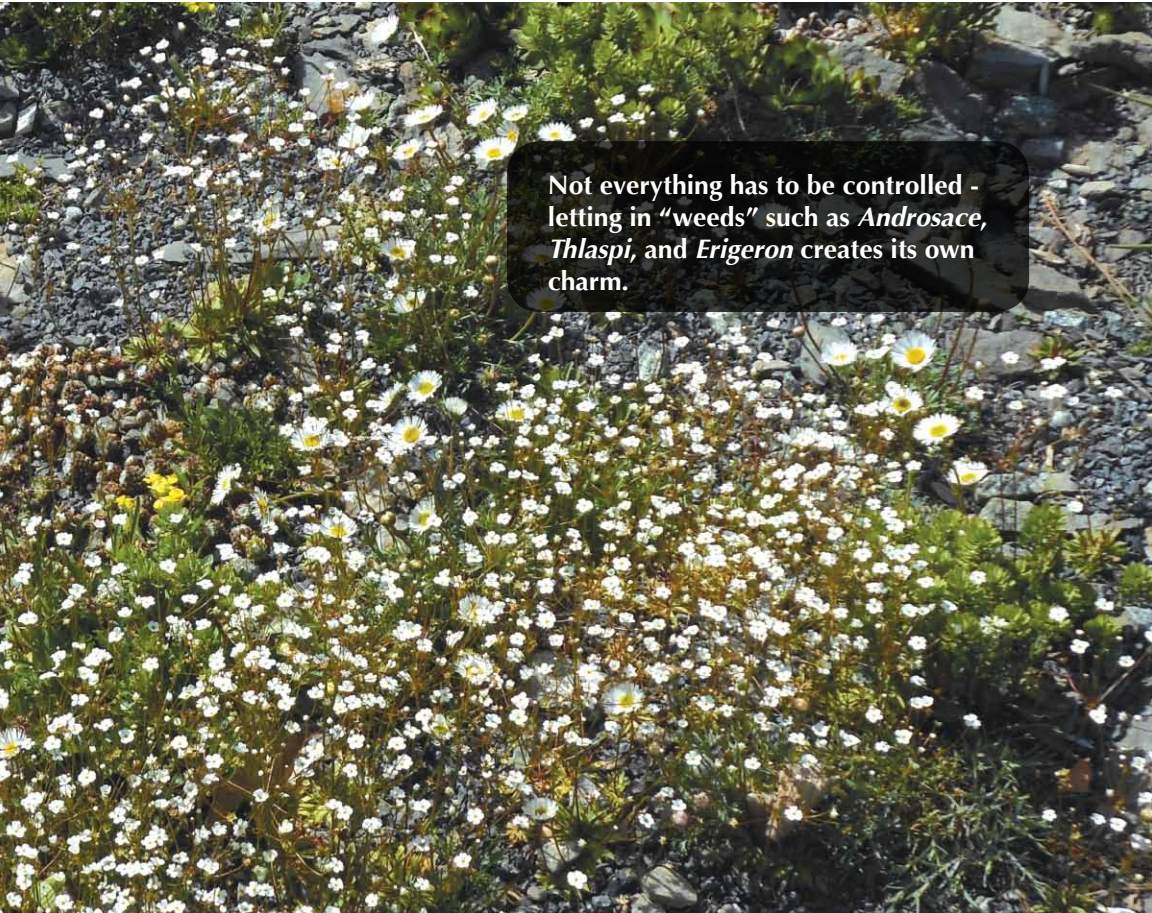


Drying foliage provides its own appeal. The *Colchicum* leaves are a dramatic counterpoint to the *Asclepias* foliage and flowers.



My soil is sandy and acid. All of the great rock plants hate it. But, as I must breathe air for my very life, I must grow Kabschias. Failure is not an option. There are deep rooted plants that will only thrive in a deep pile of limestone. I built such a thing and am now able to grow an expanded range of species. Do learn to love maples in Ohio and cacti in Reno but never give up trying to grow Kabschias! This rolls into Axiom 2. I generally agree with Panayoti's view of "pockets"— risky. Go big or go trough!

Finally: look, always look, and do learn acceptance. That drying bulb foliage might not be so bad viewed from a different perspective. As Panayoti says: "Who cares?". There's a lot of natural appeal and beauty in yellowing *Colchicum* foliage when set against blue lavender or orange *Asclepias tuberosa*. Allow foliage to dry up; enjoy the bare spot; that's where the bulbs are and will always be! Aren't rock gardens a lot about bare spots anyway? And yes, it's OK to allow the little "weeds" in. There are areas of my rock garden where most all I plant dies (the plagued "rock garden of death" syndrome). These are now up in tiny *Erigeron compositus*, annual *Androsace*, a weedy little *Thlaspi*. To some extent I've just thrown up my hands in defeat! The garden is really doing something quite "alpine" all by itself. I'm learning to just sit back and be charmed.



Not everything has to be controlled - letting in "weeds" such as *Androsace*, *Thlaspi*, and *Erigeron* creates its own charm.

Photo Contest 2012

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

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

NEW & REVISED CLASSES

Class 1: ROCK GARDEN SCENE

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

Class 2: PORTRAIT OF A PLANT IN CULTIVATION

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

Class 3: PORTRAIT OF A PLANT IN THE WILD

Image 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 4: NATURAL SCENE WITH PLANTS

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

Class 5: CLOSE-UP

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

Class 6: NORTH AMERICAN NATIVE PLANT

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

In addition to the fame and the gratitude of the editor, you can win a year's NARGS membership as a gift to a new member of your choice. Entries 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 very helpful to make a separate folder for each class.

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

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

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

**The deadline for entries is
October 1st, 2012**

PUT THE DATE ON YOUR CALENDAR NOW

ENTRIES SHOULD BE SENT TO :

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

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

Photographing Alpine Plants: A Landscape Point of View

DAVID SELLARS

On pages 206 & 207 there are the details of the 2012 Photo Contest. In 2011 David Sellars was winner of 4 of the 6 categories. Here he reflects on what lies behind his approach to plant photography and gives some tips that can help any member take better pictures.

ALPINE PLANTS ARE often splendidly situated on rock outcrops with soaring ridges above, green valleys below, and the surrounding stark beauty of the high alpine terrain. Capturing an image of such a tiny plant together with the immediate habitat and overall mountain context is challenging. In many alpine plant lectures, two photographs are shown, one of the plant and flower, and a second, from further away, demonstrating the habitat and scenery. I have even seen published images fudged using Photoshop with the plant artificially superimposed on the habitat. But in some special circumstances, it is possible to take a single image that includes a close-up of the alpine plant, and at the same time conveys the character of the plant community and mountain landscape.

Finding a flowering plant with an attractive background that can be included in an image requires continual observation, and covering a lot of ground. Only about one in a thousand plants are suitable for a photograph from a landscape point of view. Once you have found a plant with a background that will work, the next step is to set up the camera for the type of image you prefer.

My personal preference for alpine plant photographs is to have the entire image in focus whenever possible. The photograph of *Phacelia sericea* on Slate Peak in the eastern Cascades contrasts with the snowy peaks of the high Cascades in the distance which are as sharp as the flowers in the foreground.

The zone of sharpness in a photograph is called the "depth of field" and it extends in front of and behind the point where the camera is specifically focused. The size of the zone is determined by three key factors - the aperture of the lens, the focal length of the lens, and the "focus distance" which is normally the distance from the subject. I maximize the depth of field by using the smallest aperture possible and taking the photo with a wide-angle lens to reduce the focal length. In addition, I use a Sony DSC-HX1 digital compact camera (other advanced compact cameras would provide the same key features). The image sensor is very small and with the lens on maximum wide-angle the focal length is only 5 mm. This, by itself, gives much greater depth of field than the equivalent for a 35 mm camera where the equivalent wide-angle lens has a focal length of 28 mm.



The photograph above of *Phacelia sericea* in the eastern Cascades is an example of my personal preference with the mountains in the background as sharp as the flowers in the foreground.



The image of a tiny *Olsynium douglasii* shows the Columbia River in the background in reasonable but not sharp focus.

I have the camera set on “aperture priority” with the smallest possible camera F-stop of F8. With this F-stop, which is a larger aperture than would typically be used on a digital SLR, the shutter speed is fast enough in most bright light situations that I do not need a tripod. In poor light I compromise on the aperture setting rather than use a tripod.

Advanced digital compact cameras are available that are more than “point and shoot” cameras as they have an electronic viewfinder, zoom lens, and manual exposure control. In fact, they have all the advantages of a digital SLR and much less weight.

For composing an image of a small alpine I typically have the camera close to the ground, only a few inches from the plant, and use the macro setting on the camera. The electronic viewfinder is hinged so I do not have to lie flat on the ground to see the image. The plant fills most of the screen and slight adjustments in the position of the camera will have a dramatic effect on the overall composition. My camera has a movable automatic spot focus capability so I move the focus target to the most critical location on the plant. Most of the plant is then also in focus. For a very small alpine the focus distance is small so the background may not be as sharp but is clearly visible. I then take at least five images moving the camera slightly between each shot so that I have a number of different compositions to choose from.

When photographing larger alpiners, the camera is further from the plant, the focus distance is greater and the background scenery is completely in focus. With longer focus distance the depth of field extends

With a larger subject such as this *Balsamorhiza sagittata*, in the Teton Mountains in Wyoming, it is possible to get both plant and background in very crisp focus.





This close-up of *Aquilegia formosa* (in contrast with the image of *Olsynium douglasii*) has a very short focus distance but the image includes an interesting contrast with the out of focus but distinct outline of Mount Shuksan, a striking mountain in the North Cascades of Washington State.

to infinity as can be seen in the image of *Balsamorizha sagittata*.

I occasionally take an image with a plan to crop it later, particularly for images that look best in portrait dimensions. I do not do any other digital manipulation, and do not use a flash or light diffuser as I prefer natural light for photographing alpine plants.

Maximizing the depth of field is also useful when photographing masses of flowers so that as many as possible (ideally all) of the flowers are in focus. The key is to position the camera close to some flowers so that they fill the foreground, and provide detail, as shown in the image

A mass of *Erythronium montanum* photographed with some close to the camera to provide a sharp foreground.





Delphinium nudicaule set against the Rogue River

of *Erythronium montanum* in the Olympic Mountains. Sometimes an unusual background can be found to illustrate the habitat as shown in the photo of *Delphinium nudicaule* poised above the canyon of the Rogue River in Oregon.

Bringing a landscape perspective to alpine plant photography is very rewarding as the habitat setting enhances the beauty of these very special plants. Advanced compact cameras are relatively simple and lightweight and eliminate the need to carry a tripod. Of course, macro photography is something else again, and the sort of camera I use is unsuitable if you prefer to take plant portraits with the background out of focus. But you can hike longer distances and find even more plants to photograph!

But here is a warning. Once you try this method it becomes highly addictive.



NARGS

2013 ELECTION TIMETABLE

In this issue of the *Quarterly* there is a call for nominations for the 2013 election of Officers and Directors (see page 250).

This election will, for the first time, enable NARGS members to vote by email. This will open up the process so that all members have a full opportunity to participate.

Obviously, the timetable for the election has had to be modified and it is outlined below. Details of the voting process will be published in the Winter 2012/2013 *Quarterly*.

TIMETABLE

September 1, 2012 – Nominations close (details on page 250).

October 15, 2012 – Nominating Committee will post the slate of candidates recommended by them on the NARGS website. There will then be an opportunity for candidates "from the floor" to come forward. Nominations for from-the-floor candidates should be submitted with documentation (bio, picture & letter agreeing to run) to the Nominating Committee by a deadline of November 1, 2012.

The combined list (of recommended slate, and from-the floor nominations) will be published in the Winter 2012/2013 issue of the *Quarterly* (dispatched late December 2012). A detailed description of the voting process will also be published in that issue.

February 1-15, 2013 – Election.

February 22, 2013 – Announcement of Preliminary Election Results (on the website and in the Spring 2013 *Quarterly*), and if necessary, arrangements for Runoff Elections in cases where the required majority is not achieved.

Third week in March, 2013 – *Quarterly* dispatched.

April 22-29, 2013 – Runoff Election if required.

May 2, 2013 – Certification of Election Results.

Rock Gardening from Scratch

– Seeds

MIKE BONE

IN THE LAST two issues I wrote about setting up a propagation facility, about soils, water and how it moves, and why that is so important; and about vegetative propagation, focusing on the cutting. This time I'm going to write about something that is very near and dear to me – seeds.

Seeds are honestly the one aspect of horticulture that I spend the most energy on and give the most attention to. So I'm particularly pleased to share some of my thoughts and observations regarding their endless mysteries. So much influences seeds and their respective viability, from how you handle them, to the amount of precipitation, to the temperatures on a given day. Seeds are endlessly complex and wonderfully simple at the same time. They are the method of movement of plant populations. They are the time capsules of past eras. Seeds are the source of gardeners' constant wonder and bewilderment. Yet when you stop and look at the many mechanisms programmed in and on the body of seeds, they follow very logical, environmentally based, protocols.

SEED CATEGORIES

As you may remember from the previous columns, I have this need to define and categorize everything. So here are some ways that seeds can be categorized.

Firstly, they can be divided into two major groups: **orthodox** – meaning they tolerate, or require, dry storage – and **recalcitrant** – meaning they will not tolerate dry storage.

Beyond that, I like to think about the mechanisms that prevent seed from germinating as another way to group and classify them.

Dormancy typically comes in the form of either **physical** dormancy

(in the form of a thickened seed coat), or **physiological**, or a complex combination of the two. Once you understand what these mechanisms are, you can start putting together some means to overcome each of them and be much more successful in your germination endeavors.

ORTHODOX & RECALCITRANT

This is a very important distinction. Firstly, if you are buying or collecting seed, you have to know how to store it. For most propagators, long-term storage is not really a thing that you need to worry about. I know that almost as soon as I get a packet of

seed, or collect something in my garden, I will sow it right away, or give it up to some well-deserving seed exchange. It does matter, however, when you start to build your expectations on how well a particular batch will germinate for you.

RECALCITRANT SEED

There are four basic types of plants that produce recalcitrant seed: bearing nut crops, riparian species, tropical species, and spring-fruited plants. Don't forget that these are general rules, not absolutes like change, death, and taxes!

Seeds that can't handle dry storage need to be sown right away – even if they still require cold periods. If the embryo dries out inside the seed coat you can almost feel the germination percentages drop.

ORTHODOX SEED

The great advantage of orthodox seed is that it gives you time to work things out, sometimes only a little time, sometimes even decades.

Cool dry storage is a prerequisite for some plants before the germination cycle can even think about starting. Some will tolerate periods of dry storage, but still germinate much better if you start on them right away. So how about a few examples?

The first example that comes to mind are the *Quercus* species – their seeds, acorns, germinate almost as fast as they fall off the tree. The way I handle them is to float off any seed that would not be viable and put the rest in lightly moistened vermiculite for around 30 days in a refrigerator. At home it is safest in my beer fridge – you know, somewhere it will get looked at regularly – not in the vegetable crisper.

Another classic example is among

some members of the Ranunculaceae. If you get their seed into cold, moist, stratification within the first couple of days after harvesting, you are going to find that you are really doing something right. Germination is quick and easy. But, if you don't do this, germination can be very slow and very difficult. This can also often be observed in groups of alpine-loving plants. Think about it – these plants have some of the shortest growing seasons, and have to capitalize on every moment they can.

I find that if you can get many of these plants collected, cleaned and sown in less than a week, you will be very surprised at how well they germinate. If they are forced to wait too long for the right germination conditions, then they can lock themselves into complex physiological dormancies.

So here is where I find most of my fascination. This is the point where the propagator has to figure out just what you are working with – physical or physiological dormancies. There has been a lot of research devoted to just this point. Here is where all the magical tomes of guarded secrets are born. There are seed societies and preservation organizations working to crack all the secret codes and find ways to publish them. Here is one truth I have learned in my many years of study: there is no absolute. Keep good notes, and always try again.

When I try to decode germination protocols, the first place I start is in researching what natural conditions the plants are exposed to. Do they come from areas where there is a predictable fire cycle? Do they have to survive long periods of cold? How about if they are delicious treats for some foraging animal? All of these questions are relevant when making

decisions about what to do to your little seeds. If the seed is going to have to survive something in nature, then you can bet that you will have to invent some way to recreate that in your little laboratory.

PHYSICAL DORMANCY

I almost always turn to concentrated sulfuric acid when I have to overcome physical dormancy. Now fair warning here, this stuff is extremely caustic! It will burn holes in your clothes, tables, tools, skin, and just about anything else you own, including the outer coating of a seed. It also causes a poisonous gas when mixed with water. With all that said, the good part is that it is a natural byproduct of the fire cycle, it is fast, it is efficient, and you can get it at most science supply stores.

If I have never used acid on a seed before, the first step is to try to dissect the seed and see how thick is the seed coat. I will also start with a small batch of seed to test, checking some at 5, 7, 10, and 15 minute intervals until I know the seed coat has been sufficiently worn down. Each time a seed is removed from the acid, make sure to rinse it under running water for up to 5, and no less than 2, minutes. Then, let the seed air dry, and you are ready to sow.

Of course there are a bunch of other ways to get past an impermeable seed coat. I have been known to use fingernail clippers, metal files, sandpaper, fire, hydrogen peroxide, and boiling water. All of these have their place and use.

A neat way to mimic fire, is to sow the seed on top of growing medium in a clay pot, then cover with some dried grass, pine needles, or whatever dried plant material you may have. Then make sure you have a hose or watering can to hand, go outside and set the debris of dried plant material

on fire! How fun is that? Once the dried material is out, water the pot through and set in the greenhouse to germinate.

I have also been reading some interesting articles lately about hydrogen peroxide, and am becoming increasingly interested in the ease of use and the efficacy that product offers. It cleans and whitens, and helps your seed germinate. Is there really anything it can't do? I will start working on some protocols for that soon. I suggest going about it the same as you would with the acid, just not rinsing as much, or at all.

PHYSIOLOGICAL DORMANCY

Well what if our seeds are exhibiting physiological dormancy? Now what do we do? I could say give up, this germination thing is way too hard. Just kidding, I would never say that. This one is easy.

All you have to do is replace or eliminate the chemical inside the seed that is preventing germination. By far the easiest way to do this is by giving the plant an appropriate length of cold treatment. I like to sow the seed in plugs, water them in, let them drip dry, put into a plastic bag and then it is off to the refrigerator for 14, 30, 45, 60, or 120 days, depending on what species you are working with.

Depending on the size of the seed and the amount of storage that is available I will also use what are termed "strat bags." That involves putting the seed in moistened vermiculite in a plastic bag, and then leaving in the fridge until they sprout.

There are also some chemical methods of doing this which can help to speed up the process. My go-to is gibberellic acid at 500ppm for 4 hours. This seems to be a pretty effective replacement therapy for chemical germination inhibitors.



The seed you get to sow can come from all sorts of sources but it's worth reflecting how much care goes into the seed you get from seed exchanges – and with such a lot of effort going in, it's only fair to do your absolute best to get it to germinate and grown on.

Now that we are all fully versed in how to overcome dormancy, let us talk for a little about containers. In my professional life I try to use only individual plugs in plug trays. I really appreciate these for two reasons. First, I am able to quickly compartmentalize disease and save crops that would otherwise be ruined. Second, when you transplant from a small plug to a larger plug, there is virtually no transplant shock. When the roots receive no damage they don't have to re-grow or try to re-establish, they just keep growing.

In my greenhouse at home I have to judge what might be best for the plant against the value of square footage. That means that I will sprinkle a lot of seed over the top of a pot and then have to come back later and pluck out seedlings as they germinate or once the pot is too full and I start to see attrition. This method causes me the greatest percentage of loss. But again, I am only growing plants at home for my

own garden, and I don't have the same pressures for very high levels of success and perfection that I do at work at the Botanic Gardens.

No matter where you are growing seed, make sure you are starting with the best growing medium. It should be sterile, and free draining. Remember it is up to you to water and fertilize.

Growing plants from seed can easily be a very rewarding experience if you keep in mind that not every seed is viable, and know what seed dormancies are, and how to figure out if you have to overcome them. Most all new selections of plants – color breaks – come from seed. That is the basis of genetic diversity. To collect seed from special plants in your garden is a wonderful gift that you can share with your friends, family, or club. The ability for plants to move is based on seed. Now the burden of growing all of those seeds is on you and me.

Kim Blaxland and the Violets of North America

CHRIS BLAXLAND

KIM'S GOAL WAS a book on the "Violets of North America" which would bring the genus up to date, the last such work being Doretta Klaber's *Violets of the United States*, published in 1976. Other reference points are the books by Viola Brainerd Baird (1942) and her father, Ezra Brainerd (1921). The taxonomy and the technologies have advanced since those publications. Kim had concerns about their completeness and that much of the information was gathered indirectly and with a regional bias – she wanted to see these plants fresh, and in their natural habitats, rather than rely on herbarium specimens.

She wanted to provide a life-size drawing of a representative plant, with other drawings of important morphological features such as the style. For *Viola pedata* she had drawings of leaves at several stages, details of leaflets, seed pods, and flowers. Kim took many photographs of a species from which she could select those that captured the essential character of each. For example, there are 28 photographs of *Viola pedata*. Many are of single flowers, showing the considerable variation in colors.

The opening paragraph of Kim's proposed text for *Viola pedata*, which is published here directly following this introduction, suggests that she liked this one: "*Viola pedata*, endemic to North America, is one of the loveliest violets, distinctly different from all other species. Deeply divided leaves give this species its name, the divisions radiating from the center of the leaf with additional divisions at the ends of each narrow lobe. Large showy bicolored or single-colored flowers, in shades of mauve to lilac and dark purple, are produced in profusion in spring often in massed colonies that form spectacular sheets of color along roadsides." I recall it on several trips and in our Radnor garden in Pennsylvania.

Kim's collection of non-*Viola* slides is intended as a gift to NARGS Slide Library. Kim offered her 2,500 non-North American *Viola* pictures to Japanese colleagues to use as a basis for a book on violets of the world.

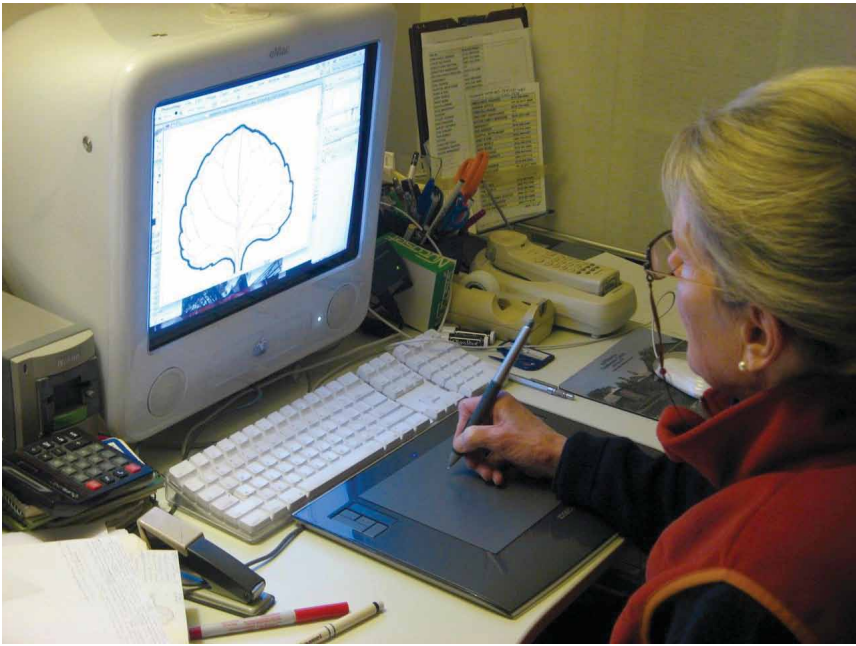
Kim photographing *Viola umbraticola* on Mount Lemmon, Arizona





Kim Blaxland at Volcán Maipo, Chile

Over almost 20 years, Kim compiled 250 pencil drawings covering 80 North American species. She had converted the drawings of 40 species to digital format for publication. As it became clear that her work would not be published as a book, she discussed making it available on a website. We are now working to have digital versions of the North American species for a website, along with relevant photographs from the 460 Kim had selected, and are in discussion with University of Pennsylvania's Morris Arboretum about hosting the site.



Kim at work with digital drawing tablet on scan of pencil drawing

Kim had completed text for about half of the North American species. I'd also like to put up the text that we have in a "wiki" approach and encourage debate about the taxonomy and about the identity of some or all of Kim's drawings. A wiki-style website makes that information available while it's current. And lets the lumpers and splitters have their say.

In that context, drawings of hybrids may be interesting material. In a more rigid list of species, those might not be included. I'm keen to get the drawings and photographs out where they can be seen and be useful. Kim didn't want them to languish in a drawer waiting for someone to publish.

Kim reported one new species, *Viola dirimliensis* Blaxland, from Turkey (Bot. J. Linn. Soc. 145, 505-509, 2004). She had special pleasure in conservation work on *Viola guadalupensis* in Texas (Am. J. Botany 98(12): 1-11, 2011) and in collaboration on species networks of Violaceae (Syst. Biol. 61(1):107-126, 2012).

Every time I look at Kim's drawings I am reminded of the enjoyment she had from the hunt to find the plants, the satisfaction in drawing them, and of her insistence that it be done properly. I'm also reminded of the people in many countries who shared her enthusiasm and helped her in this pursuit. As one of her collaborators wrote, "I don't think I can ever look at a yellow-flowered violet without thinking of her."



Viola pedata, New Jersey

Viola pedata

KIM BLAXLAND

Viola pedata L.

Viola pedata, endemic to North America, is one of the loveliest violets, distinctly different from all other species. Deeply divided leaves give this species its name, the divisions radiating from the center of the leaf with additional divisions at the ends of each narrow lobe. Large showy bicolored or single-colored flowers, in shades of mauve to lilac and dark purple, are produced in profusion in spring often in massed colonies that form spectacular sheets of color along roadsides.

The first specimen of *Viola pedata*, collected in 1688 and named by Linnaeus in 1753, had bicolored flowers. After 1789, additional names were published for the bicolored form, but when it was realized that Linnaeus' specimen was itself bicolored, the additional names became illegitimate. Both the bicolored and single-colored (concolorous) forms are now included under the species name *V. pedata* with no recognized varieties or forms of either flowers or leaves.



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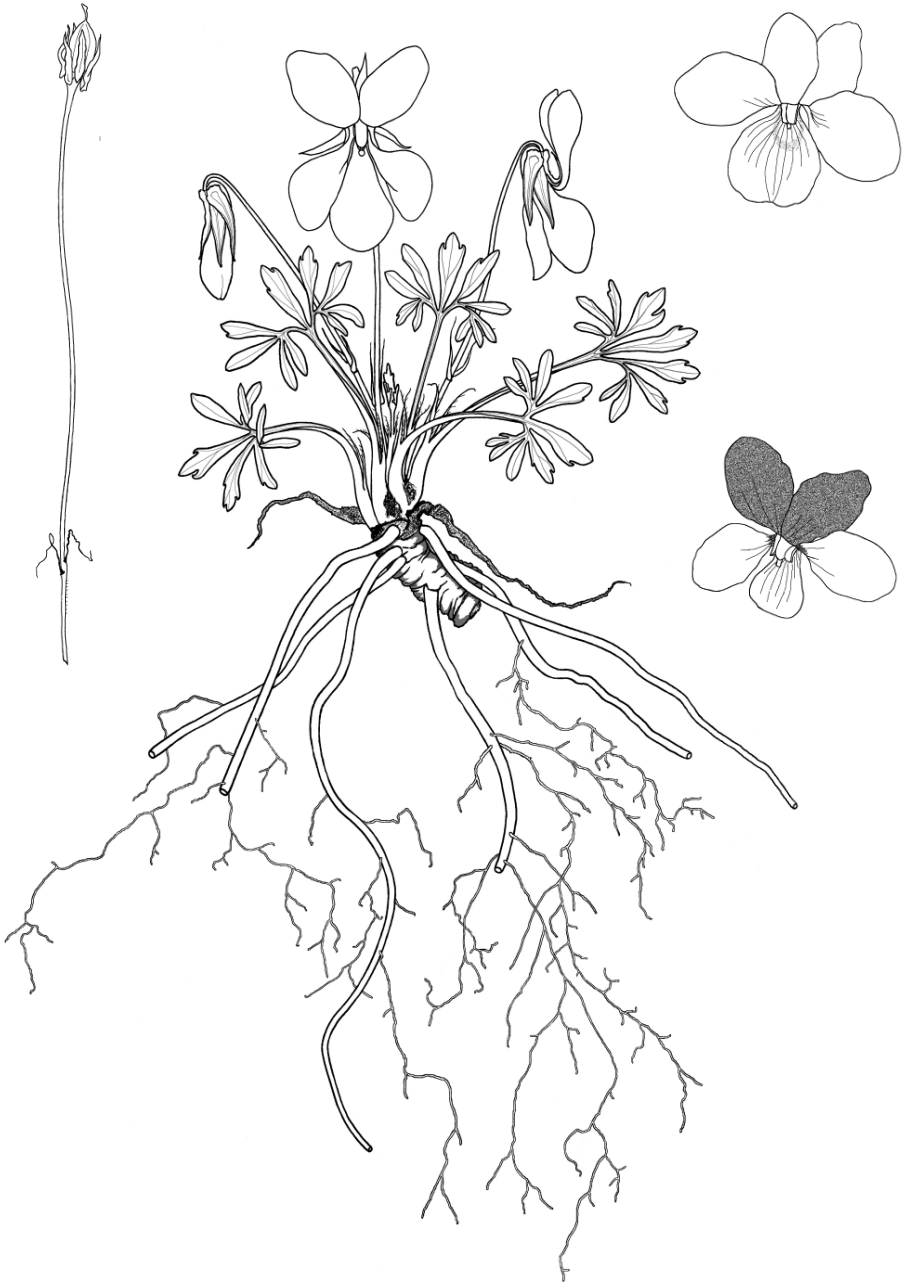
A selection of Kim Blaxland's photographs of *Viola pedata* from across its range demonstrating her determination to find and record the variations in flower shape and color.



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Viola pedata

Above: 7 leaves at flowering time.

Right: 4 leaves and 2 cross-sections of petiole.

Opposite: whole plant, two individual flowers, and seed pod.



Viola pedata is extremely variable in flower color, flower form, plant height and leaf shape. Such variation is unusual within a violet species and is discussed below. Flowers exhibit wide diversity between colonies or even between single plants.

Stemless plants arise from stout, vertical rhizomes. Branching of these rhizomes can result in multi-crowned plants. Its roots are thick with fine rootlets. Adventitious shoots can produce new plantlets from the roots if the growing crown is damaged. The stipules are adnate to the base of the petiole for half the length of the stipule, their margins being both fimbriate and ciliate.

"Pedata" does not mean "divided like a bird's foot" as is often written. The meaning of the word "pedata" in Stearn's *Botanical Latin* is "palmate, but with the lateral lobes or divisions themselves divided." However, in reality leaf shapes are highly variable in the number and width of the lobes, and the presence or absence and depth of the primary or secondary divisions. Plants often produce two types of leaves during the growing season. At flowering time glossy new leaves are small with wide leaf lobes, but leaves produced for the hot dry summer months may have much narrower, longer divisions reducing leaf surface area and hence evaporation. In the fall, the plants revert to producing small leaves with wider lobes. Fine cilia occur on the upper leaf surface on both the veins and lamina and on the margins, but the lower leaf surface is glabrous. The ciliate winged petiole margin is curled inwards. There is a prominent gland on the tip of each leaf segment or lobe, also one large gland in the axil between segments. This characteristic is also seen with *V. pedatifida* but not *V. beckwithii* both of which possess glands on the segment tips.

Large flowers measure up to four centimetres across (one and a half inches) but can be smaller. The face of the flower is flat with a shallow throat from which the style projects prominently, surrounded by orange anther extensions. On the inside of the lateral petals there are no guidelines and no hairs. Petals can be round or narrow. The two upper petals of the bicolored flower form are dark velvety black-purple, often reflexed and sometimes twisted back to back. The three lowest petals are lilac, or unusually, purple spotted or streaked, and very rarely white. Colors of the concolorous flower form range from pale blue through violet to deepest lilac, slate blue, almost white to pure white without purple guidelines, and rarely, pink. They can be with or without a central white eye and with variable patterns of veining on the lowest petal. The spur is dark purple, 1.5 mm long and 2.5 mm wide, but flat in section. Flowers have no perfume.

Unlike most other violets in North America, this species propagates only from open pollinated flowers (no cleistogamous pods). A study of *Viola pedata* by Becker and Ewart (1990) showed that cross-pollinations resulted in significantly greater quantities of seed than did self-pollinations,

indicating that a self-incompatibility system is operating in this species. The greater genetic variation resulting from a higher rate of out-breeding is responsible for the greater variation seen between individual plants. It also allows this species a greater chance of adapting to new conditions, and hence, of survival. Most violet species do not produce as many “open” or chasmogamous pods per plant, instead producing large amounts of seed from “closed” or cleistogamous pods in summer through autumn. By contrast, *V. pedata* produces openly pollinated pods over a long period from its mid-spring peak into summer; occasional flowers may still be seen with the first snows of late autumn. Because of the higher rate of cross-pollination,



A bicolor form of *Viola pedata*, photographed in 2009 in Phelps County, Missouri

V. pedata is evolving at a greater rate than those species reproducing by both chasmogamous and cleistogamous seed production. Flowers are pollinated by many vectors: insects, small flies, ants and butterflies. Seed pods are well camouflaged and, because the peduncles are weighed down by large developing pods till they lie flat on the ground, are hidden by the larger summer leaves or surrounding leaf litter. Pods are large, 1.0 cm long, glabrous, pale green-brown; seeds light to mid honey-brown, 2.4-2.5 x 1.1 mm.

Plants of *V. pedata* grow naturally in the very poorest, extremely well drained soils. They only thrive in acid locations and open sunny areas: gravel, rocky screes, sand, schist or shale barrens, where there is no topsoil, often in dry open oak-pine forest, pine barrens or plantations.



Viola pedata, photographed in 1997 in 2009 in LeFlore County, Arizona

The habitat of *V. pedata* is preserved and encouraged by road building, removal of roadside trees, removal of topsoil and competitive vegetation, exposure of deep sloping road banks, and clearing for power-line corridors. They flourish with amazing abundance along freeways or at interchanges, tolerating road salt, heavy wet plowed snow, and regular highway mowing but will not survive if sprayed for weed control. When trees revegetate an open area, *V. pedata* will die out but the seeds remain viable in the soil for many or even hundreds of years, re-appearing when the trees are cleared again.

Cultivation requirements for this species are often misunderstood. This is not a woodland plant nor will it grow in a cement trough. It will grow in deep, pure sand with no additives, no fertilizer, and no added water. Though it is very hardy in hot dry weather and with winter temperatures to at least -20°F (-30°C) it will not survive mild wet winters. *Viola pedata* is only happy where it gets a lot of sun, has very sharp drainage and is not crowded out by surrounding plants.

This species occurs in the southeastern corner of the Great Plains: in Iowa, Kansas, northeastern Texas, Oklahoma, Arkansas and Missouri, extending east to the pine and oak forests of the sandhills in eastern North and South Carolina that separate the Piedmont from the coastal plain. They are continuous through the shale barrens in the rain-shadow along the eastern slope of the Appalachian mountains, from Georgia northeast through West Virginia, Virginia and Maryland to south central and eastern Pennsylvania; and again in the sandy pine barrens of New Jersey and north into Massachusetts.

Taxonomy and Nomenclature:

Section *Nosphinium*, subsect. *Pedatae* [proposed new classification (Marcussen, 2010)].

Viola pedata L. Sp. Pl. 933. 1753.

There are strong morphological similarities with *V. beckwithii* that also has bicolored flowers, large open flat flowers, no cleistogenes, similar fibrous leaf texture, narrow leaf lobes, glands on the tips of the leaf segment, the same pattern of pubescence and similar rhizome and root systems.

Polyploidy plays a crucial role in creating diversity in plants. The base number of chromosomes in a species is represented by 'x'. *V. pedata* is a decaploid species ($2N=10x=54$), the result of ancient hybridization events between three diverse North American lineages 12-14 million years ago. The three ancestors were from the diploid yellow-flowered section *Chamaemelanium* series *Nudicaules* ($2n=2x=12$), the tetraploid white-flowered section *Plagiostigma* ($2n=4x=24$) and the tetraploid purple-flowered section *Viola* ($2n=4x=20$). Although this 10-ploid species should have $2n=56$ ($12+24+20$), one chromosome pair has been dropped, leaving the 10-ploid level of $2n=54$ (Marcussen, 2011).



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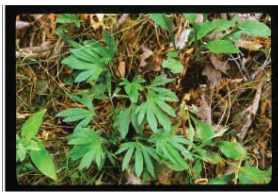
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Kim Blaxland (green shirt), Vienna International Botanical Congress, 2005 (Anita Flores)

Violas, Kim, and Us – a Celebration

JOHN WATSON

*Artes botanicae horticultrae longae,
vita brevis,
occasio praeceps.*

The practices of botany and horticulture are enduringly long,
life is short,
opportunity fleeting.

WITH HINDSIGHT, MUCH that occurs appears to have been utterly inevitable, resulting from a predestined alchemy the ancient Greeks knew as Fate, the Arabic world as Kismet. In reality, particular circumstances, not least our own personal existence and essence, can be perceived as a fragile lottery outcome. They are brought about by an infinity of mainly random and – to our perception – unrelated events stretching back endlessly, interacting sequentially to produce further events. These relevant happenings vary between the cosmic and the miniscule. Butterfly effect upon butterfly effect, as it were.

Such, for example, was the miraculous good fortune of Anita, my wife, and I getting to know Kim Blaxland. I might say our friendship could be attributed to my happening to be disposed towards an interest in plants, in particular alpinists; happening to find the genus *Viola* particularly attractive; happening to decide to hunt for plants in South America; happening to meet and marry Anita (who also happened to be interested in plants) in Chile; and happening to belong to the Alpine Garden Society. A similar series of "happenings" for Kim led eventually to our joyful triple conjunction. In terms of the true complexity of existence, that sequence is no more than a child's drawing of a stick man compared with an anatomical cutaway of the human body, but it's all we need for the purposes of this narrative.

PAVING THE WAY

I have been attracted to *Viola* in one form or another, and in one place or another, for most of my life. The first few wild encounters took place in Turkey and Lebanon during the 60s, most memorably with *Viola altaica*, *V. dichroa*, *V. gracilis*, *V. libanotica* and *V. sieheana*. By coincidence, Kim also went much later to Turkey, drawn specifically by its violas. She found, described, and published a new species for the country, *Viola dirimliensis*.

But the major early stimulus for me came in 1965, on being shown, during research for one of those Turkish explorations, B&W photos of the astonishingly different Andean violas. Without doubt the most mind-blowing was Harold Comber's 1926 photograph of *Viola coronifera* (published in Samson Clay's *The Present-day Rock Garden* and reproduced here on the next page), looking for all the world like some errant sempervivum in a fancy dress of viola flowers.

When three of us undertook our first venture in South America during 1971/72, these remarkable and exotic little violets, known popularly as rosulate violas, became our principal focal point. It was only then we discovered to our dismay how intractable they, and many other of the choicest Andean alpinists, are in cultivation!

Thanks to careful research we found a respectable number on that first run. Although seeds we collected at that early stage didn't make



VIOLA CORONIFERA
Photographed in Argentina by H. F. Comber

any mark on the practical world of horticulture – as they have at least done to a degree since – images of the plants themselves fascinated audiences at our alpine plant society illustrated talks and those reading our accounts of the journey. We also discovered that people in the academic botanical world knew nothing about them. We ourselves were even said by high and mighty botanists at Kew to be their living experts (which seemed crazy at the time).

A subsequent prolonged visit to the region with a different colleague followed in 1987/88. It was centred on Patagonia, and involved no more than occasional contact with these violas. Despite that, two key events occurred as a direct result. One led to my partnering Anita in Chile, and both were fundamental to our subsequent association with Kim. To begin with I was invited to plan a first-ever Alpine Garden Society tour of the Andes and act as guide to – and identifier of – the plants we found (which led to further such commitments over the next decade). Secondly, at roughly the same time, the AGS commissioned me to investigate and contribute the Andean element to its *Encyclopaedia of Alpines*. The latter task involved delving thoroughly into the botanical literature of the selected flora. The greater knowledge of rosulates gained from this exercise decided first me, then Anita and myself, to adopt and develop their botany. They are a large group of over 100 species distributed between Ecuador and Patagonia which had never been comprehensively investigated before. In fact nobody more than dabbled occasionally in their identities and relationships for over 60 years prior to our beginning to gather them under our wing (in the early 90s). Nor was anyone planning to do so at the time – so far as we knew. As we subsequently discovered though, a close Argentinian botanical colleague of Anita's, Riccardo Rossow, had decided independently on the same course at the same time. The three of us agreed to work co-operatively, but he died in 1995 before a joint start could be made. In the same year, 1995, we first met Kim. Kismet?

KIM BLAXLAND (1941-2011)

As was the case with others among her friends in the botanical and horticultural worlds, the venue for our meeting with Kim was a flower tour, the fourth I co-led in the Andes and Patagonia for the Alpine Garden Society. We immediately hit it off, and the discovery of our shared passion for violas set the seal on the beginning of a long and mutually valued friendship and occasional but fruitful working partnership.

Most who took part would surely agree the highlight of that tour was the long, exhausting drive up to the scenic Laguna del Maule at 2300 m (7500 feet). On arrival we found no pre-arranged camping facilities as expected. Luckily Anita was with us to interpret our situation to the couple of caretakers of an electricity company staff's mountain lodge, then temporarily unoccupied. That saved our bacon. Sufficient blankets and tins of emergency supplies were somehow dug out, a welcoming log fire was lit, and the occasion ended up as memorable rather than miserable! The flora of the gently sloping pumice hills surrounding the blue lake as seen on the following day included three violas as well as magnificent *Mimulus cupreus* populations. Most of these were typically red, but vigorous clumps of a yellow form, hitherto unknown to us



Mimulus cupreus. Laguna del Maule, Chile. January 1995. (John Watson)

all, and not to be found detailed in any publication, was a remarkable surprise. Outstanding *Oxalis adenophylla* specimens would have walked away with show competition prizes, and the sumptuous, rich



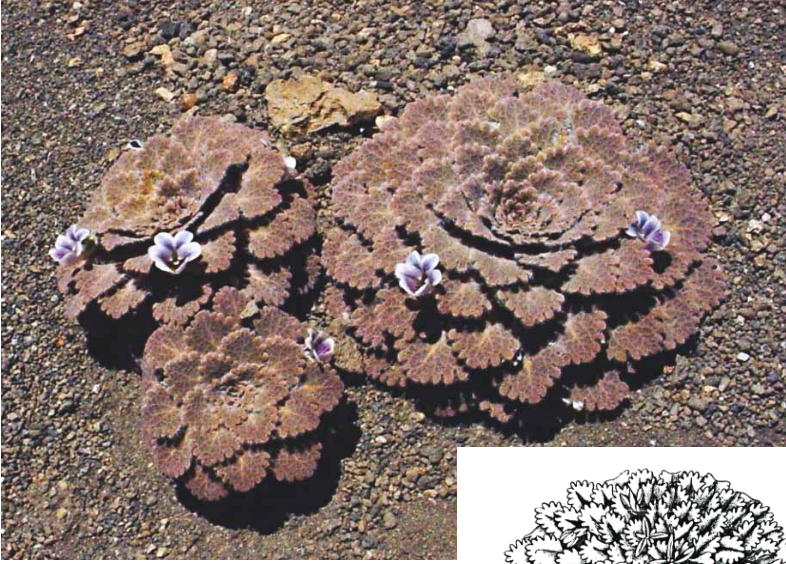
Mimulus cupreus. An unusual and uncommon yellow form with an intermediate on the left. Laguna del Maule, Chile. January 1995. (John Watson)

orange-yellow ground orchid, *Chloraea alpina* dotted a pasture of wiry bunch-grass generously. Its furrowed lip is a particularly distinctive feature.

Five years on, after regular exchanges of e-mails and another AGS tour together, Kim generously informed us of an invaluable discovery

Oxalis adenophylla. Laguna del Maule, Chile. January 1995. (John Watson)





Viola volcanica. Paso Cordoba, Neuquén, Argentina. 29 December 2002. (Anita Flores)



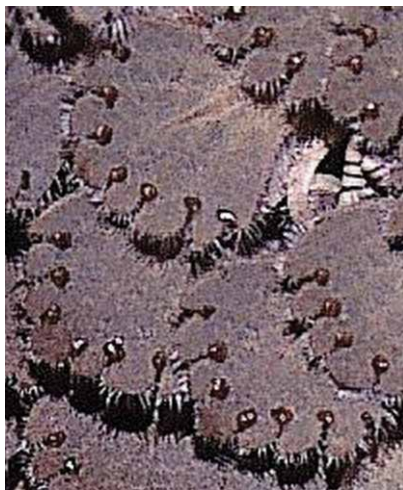
W.J. Hooker's type drawing of *V. volcanica* which enabled Kim to discover and rectify near-universal historic and current confusion with *V. congesta*

Viola volcanica foliage. Note the diagnostic lack of glands at leaf margin. Paso Cordoba, Neuquén, Argentina. 29 December 2002. (John Watson)

resulting from her meticulous studies. She found that two of the most important species in our group of violas, *Viola volcanica* and *V. congesta*, had been confused with one another historically for over 150 years, since not long after their original publication early in the 19th Century. Correcting this has been among our more significant contributions to the understanding of these plants, with Kim duly acknowledged as the source, naturally.



Viola congesta. A form of this variable species with green rosettes and violet flowers. Vilches, Maule, Chile. 16 December 2002. (Anita Flores)



Viola congesta foliage. Note glands at leaf margin. Paso Vergara, Curicó, Chile. December 1994. (John Watson)



Hooker's type drawing shows the distinct pattern of glands on the leaf undersurface and margin in *Viola congesta*

The following season saw my last time leading an Alpine Garden Society tour. Its members included Kim and husband, Chris. Although a vet by profession, Chris has enthusiastically supported Kim's obsession, and clearly enjoyed his time climbing and scrambling about with us. Regrettably, on this occasion the Society (which, incidentally, has given magnificent financial support towards our viola investigations) did not provide for Anita to accompany us, and she kicked her heels staying with friends in Patagonia until the end of the tour. So unfortunately all four of us never travelled together.

However, our co-operation and friendship with Kim had by then grown to the extent that in late 2003 she flew down to Chile and we three spent 12 days on a delightfully memorable viola hunt to Patagonia. With zilch originality but much fidelity I dubbed us 'The Dream Team'. Anita and I hoped it would be the overture to several such joint sorties down here, but sadly no further opportunity arose. Although the main objective of the circuit was to show Kim as many as possible of the violas already known to ourselves, it was then we found by pure chance the small hybrid colony which we intend to name for Kim as *Viola x blaxlandiae* in the next NARGS *Quarterly*. Until the sad news of her recent death it had been our intention to christen it after the volcano it is situated on, with Kim as joint author. Despite not being a 'proper' species, this plant, since found in greater quantities by others, is of supreme scientific importance. It represents the first definitive evidence of hybridisation of these violas, and lends strong support to the possibility of similar origin for some of their difficult and widespread complexes in the same general region. Incidentally, as a brief complementary reversal of phytogeography, we had been shown the delightful *Viola douglasii* by the late great Wayne Roderick during a lecture tour of mine down the West Coast in 1998.

Kim's growing fascination with – and study of – North American violets had led to the ambition to publish an accessible and readable monograph of them. It was to be, in effect, an update of Doretta Klaber's, but even more botanical, and also profusely expanded by Kim's own colour photos and drawings. Her easy competence for sure and accurate botanical line illustration drew my envy. A perfectionist to the core, she intended to see and include every recorded species in mainland USA and Canada, including at least one which had been added to the records since her work began.

She recounted dramatically how, when climbing a steepish cliff of stepped rock outcrops in the Southwest where a rarity grew, she had come literally face to face with a rattlesnake! So precarious was her hold, that she could do nothing to move effectively out of its range rapidly, and had to stop, retrace her steps cautiously, and sidle slowly up again at a safe distance – perspiring profusely, and trusting to luck

while in the strike zone. Fortunately the rattler wasn't looking for a fight that day and perhaps also decided against squandering good venom. Kim went on to get her photos, needless to say: tenacity was her second name. She managed to add the last viola on her list in the ultimate year of her life during a long journey with Chris to Alaska in search of it during a remission in her illness. Sadly though, she did not live to complete the book, but was frantically passing on what she had achieved towards it to her closest botanical friends in North America and Europe over the last month or so, once realizing her days were rapidly counting down. Might anyone or any organization take up or sponsor the completion of her work, we wonder?

Ambition to write the definitive 'biography' of her beloved American violets led to increasing involvement with relevant folks in the world of academic botany specializing in them. As a lateral effect of this, in 2004 Kim made her most profound positive impact on our viola studies (which is not to imply she ever made a negative one!). She put us in touch with a world *Violaceae* study group founded and run by Prof. Harvey Ballard of Ohio University. It consisted of roughly 40 specialists, the intention being to monograph the entire family, which probably amounts to around 900-1000 species (once reckoned to be 800, but revised upwards and counting). As the only world authorities on Andean rosulate violas, we were assigned to that slot. Our incorporation was auspiciously timed. The following year, 2005, as many of the group as could journeyed to Vienna for the 2005 International Botanical Congress with a view to consolidating and defining the project prior to applying for a National Science Foundation grant.

Harvey obtained funds for Anita and myself to participate. Kim was there, and also several of her colleagues, to whom we were introduced. Some of us made official presentations of our particular specialities in the field of the *Violaceae*. But a mortal blow to the high hopes of all involved followed when Harvey's application to the NSF was rejected. The group disintegrated subsequently, although Kim, her friends, and several others, have kept in touch or co-operated botanically on a piecemeal individual basis since. Over time we checked Kim's MSS and botanical terminology, while she offered us her unsparingly candid and sometimes stimulatingly conflicting opinions of our conclusions and hypotheses.

In 2008 she informed us pancreatic cancer had been diagnosed, with a usual maximum life expectancy of three years. She'd been advised though that the malignancy had not advanced, so the prognosis for full recovery after the operation was very favourable. From then on we were given news intermittently of her ups and downs as occasional asides in our *Viola*-filled e-mail exchanges. The last time we were in touch, in mid-2011, she had seemed well on top with her fight, and

wrote in buoyant mood. We were therefore stunned to learn from Chris of her end a few months later.

Kim was devoted to her family, friends and garden in the Northeast. Chris and Kim are Australian by birth and came to the States as a result of Chris's career in the pharmaceutical industry. Kim retained characteristic Oz (Australian) speech rhythms, delivered quite softly and evenly, which she embellished with restrained, knowing little chuckles, and the dry, perceptive wit characteristic of her compatriots (in younger bachelor days I spent a year of much hilarity sharing a flat with one in London). The film *Crocodile Dundee* familiarised this in one of its more blatant forms to the wider English-speaking world. Kim's sense of humour seldom if ever failed her, and could at times be a quiet riot. She was no less appreciative of, and responsive to, others' light-heartedness. She endeared herself to all who were privileged to know her at least as well as we did.

Kim, you are irreplaceable.

The World Violaceae study group, Vienna International Botanical Congress, July 2005. Kim Blaxland (front left), author John Watson and wife Anita (second and third from right), Prof. Harvey Ballard (fifth from right).





**NARGS
2013 Annual General Meeting**

**Asheville, North Carolina
May 2-5, 2013**

**Exploring the Flora
of the Blue Ridge**

www.nargs2013.org



Cooking native Japanese plants

YOKO ARAKAWA

DURING A PRESENTATION to NARGS Mason-Dixo Chapter in 2011, Malcolm McGregor talked about the fact that Inuit peoples traditionally used the leaves of various saxifrages as part of their diet. It reminded me of the use in Japan of saxifrage leaves, as well as the use of many other plants, many of which we know well in our gardens in North America and our local countryside.



This looks so tasty! This is served by a traditional Japanese inn where they usually serve dinner and breakfast – this is their one of their spring dishes for the dinner.

At the center of this plate is the broad round leaf (olive green and shiny after cooking) of *Saxifraga stolonifera* with a small foil dish of salt next to it. Behind (from left to right): young leaf of *Aralia cordata* (udo), young leaf and shoot of *Aralia elata* (tara-no-ki), flower of *Petasites japonica* (fried golden – at the back), young leaf of *Eleutherococcus sciadophylloides*, and oyster mushroom.

Saxifraga stolonifera is cultivated for use in the kitchen but people also get together and go out and collect it from the wild, then they cook together. The leaves are thick and although the taste is mild they have a nice vegetable taste.



ユキノシタのてんぷら

A wonderful dish
of saxifrage leaves,
with the
batter on only
one side of the
leaves with the
edges looking as
if the leaves were
variegated.

By leaving one side
of the leaf exposed,
the foliage both
looks nice and is
made crispy.





The popularity of this dish can be seen by typing "Yukinoshita tempura" into Google – "yukinoshita" is "saxifrage." Even, in English you get around 22,000 hits. In Japanese the same search gets around 69,000 hits.



Fukinotou – *Petasites* flower – boiled to take some bitterness out, then cooked with soy sauce, mirin, sake and sugar.

Petasites flower is our spring flavor; it is the first plant we harvest. We make tempura with the flowers in a batter of flour, egg, and water, then deep fried in oil; or we make Fuki miso (miso flavored with the flowers); or just cut them up and throw them into miso soup. The flowers are a little bit bitter and have a strong flavor. We use the stage before the flower emerges from the leaves. I sneak in and take a couple of flowers at Longwood Garden where I work (of course I get permission from the gardener) and taste spring in the USA. In Japan it is usually *Petasites japonicus* that is used but in the USA it is *Petasites japonicus* subsp. *giganteus* which is grown more commonly for its ornamental value and flowers. The stems of the leaves are also good for cooking. As you see, it can be candied like angelica stem.

Fukinip – stem of *Petasites* candied



Hatiku – cooked young shoots of *Phyllostachys nigra* var. *henonis* with young leaf of *Zanthoxylum piperitum*, which is also edible



Here in Pennsylvania, spring is earlier than in northern Japan where the winter is long and cold. The *Petasites* flower is up and I have already tasted it for this spring. I shared it with some international students and Japanese friends. It tastes a little bit bitter but I feel spring has come.

I made Fuki miso paste, tempura, and used it for miso soup topping.

Tsukushi – cooked *Equisetum arvense* flower.
Take off the scale-like leaf sheath,
boil for a short time, soak in dashi soy sauce
(flavored soy sauce), and add sesame seed
topping

Tempura with *Saxifraga stolonifera*,
Adenocaulon himalaicum, *Cryptotaenia japonica*,
Perilla frutescens var. *crispa* (shiso – red [akajiso] and green [aojiso]),
Acer palmatum, and *Dioscorea japonica* bulblets,
with a garnish of *Nandina* leaf



WEBSITES (in Japanese)

<http://www.choshiro.com/1277474051479/>
<http://tengunoyu.seesaa.net/article/96588596.html>
<http://aura-ltd.seesaa.net/article/148850535.html>
<http://ameblo.jp/venus-01/>

PHOTOGRAPHS

p.244 © tengunoyu kimuraen
pp.246/7 © Mie Prefecture Kuman Kodo Center
pp.248-251 © chosiro



I miss Japanese dishes when I am looking at these pictures.

In spring, we go to the mountains for a picnic with rice, miso, and oil. We are going for "Sansai-gari", the collection of "Sansai", the edible native plants which grow there, the "mountain vegetables" you might call them. And then on site, in the mountains, we make tempura or other dishes for lunch.

That is why I started learning the plants' names.

Now many of the plants from Japan are for ornamental purposes and we just watch rather than eat.

CALL *for* NOMINATIONS

The Nominating Committee announces its call for nominees for the 2013 election of three directors and four officers: President, Vice-President, Treasurer and Recording Secretary.

Ideally, there should be one member, or more, in each chapter who is qualified and willing to serve nationally. It is up to all members to consider whom they might nominate. Self-nomination is also acceptable.

President & Vice-President

New candidates can stand for a two-year term (2013-2015) but the serving officers, Peter George and Harvey Wrightman, can only stand for a one-year extension (2013-2014).

Treasurer

New candidates can stand for a two-year term (2013-2015) and the serving officer, Bill Adams, can stand for a two-year second term (2013-2015).

Recording Secretary

New candidates can stand for a two year-term (2013-2015) with the possibility of a further two-year term thereafter. Our present Recording Secretary, Benjamin Burr, was appointed (not elected) to fill the post vacated by Barbara Wetzel's resignation. He has not yet been elected for a first term. So he can stand for a two-year term (2013-2015) with the possibility of a further two-year term thereafter.

Directors

The directors serve for three years. Every year three new directors are elected as three directors have completed their term (in 2013 those completing their term are Jane Grushow, Philip MacDougall and Anne Spiegel). Directors can not be elected for two consecutive terms.

The current officers and directors (with the dates of their terms) are listed inside the back cover of the *Rock Garden Quarterly*.

Our mission is to select candidates for the positions of directors who want to serve, have the qualifications to serve, and who fulfill as much as possible the need for geographic diversity between the six continuing board members and the three new members.

We will accept names for all seven positions submitted by any current member of NARGS. Please provide the following information for each nominee:

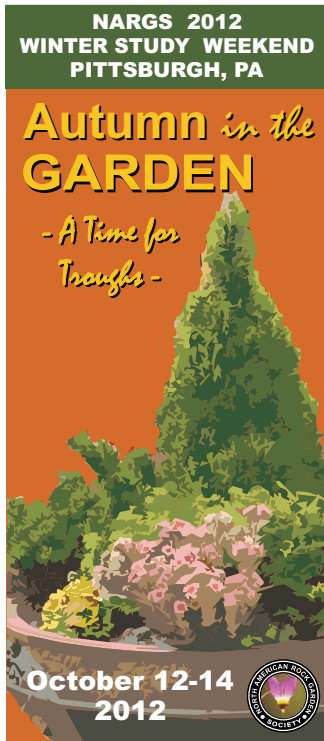
- 1) Name, chapter (if applicable), email address, and position for which each person is nominated.
- 2) Bio of nominee (100 words or less, written by nominee)
- 3) Picture
- 4) Letter of acceptance from (new) nominee indicating a willingness to be one of the above officers of NARGS (two-year term) or a NARGS Director (three-year term).
- 5) Your own reasons for nominating the person.

Note: All the above are for use by the Nominating Committee; the bio and picture will be used for publication in the *Rock Garden Quarterly* (examples can be seen on page 86 of the Winter 2011/12 issue of the *Quarterly*).

The deadline for nominations is September 1, 2012. Nominations should be submitted to Lola Horwitz, chairperson of the Nominating Committee. They can be submitted by email to <llhorwitz@gmail.com> or posted to: Lola Horwitz, 446 6th St., Brooklyn, NY 11215 USA.

Nominating Committee: Lola Horwitz (chairperson), Gail Gray, Elizabeth Houdek, Jody Payne, Lori Skulski, Mike Slater, Carmel Tysver.

This election (as announced in the President's letter in the Bulletin Board) will be an email election enabling a great widening of the opportunity for members to participate directly in the voting process. An outline timetable for the election will be found on page 213.



Carl Gehenio Memorial Trough Show

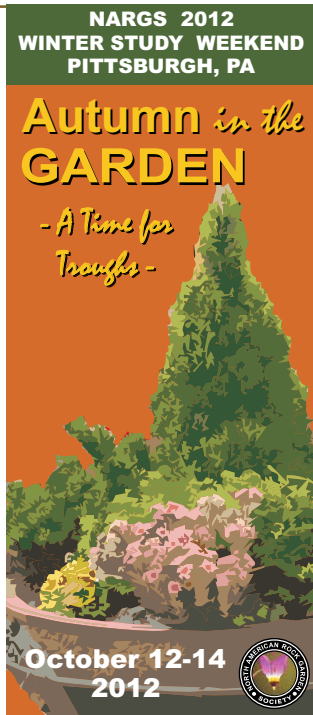
LEN LEHMAN

IT IS OUR pleasure as members of the Allegheny Chapter of the North American Rock Garden Society to announce that we will sponsor a Trough Show at the Eastern Study Weekend, October 12 – 14, 2012.

This Trough Show will honor the achievements of Carl Gehenio, one of the founders of our Chapter and an exceptional plantsman. Carl was extremely knowledgeable in growing alpine plants in troughs and under various conditions. We hope that attendees will bring troughs to the Study Weekend to make this show an outstanding part of the program.

RULES FOR THE SHOW

1. A person may exhibit as many troughs as he or she desires. However, only one prize will be given per person.
2. Troughs shall contain 3 or more species and/or cultivars.
3. Entries to the show may be entered starting at 12:00 noon on Friday, October 12, and must be in place by 10:00 a.m. Saturday, October 13.
4. The show will be closed to the public during judging, which will take place from 10:00 a.m. to 12:00 noon on Saturday.
5. Troughs must remain in place until close of the program Sunday, October 14. Please do not remove plants before this time without permission of the Study Weekend Chairman, Len Lehman, or Co-Chair Al Deurbrouck.
6. A popularity voting will take place when show opens and continue until 4:00 p.m. Saturday. Each attendee will be given one vote.
7. Prizes will be given for both the Judged Show and for the Popularity Vote.
8. JUDGED SHOW
 - 1st Carl Gehenio Memorial Plaque and a \$30.00 nursery certificate
 - 2nd \$25.00 nursery certificate
 - 3rd \$20.00 nursery certificate
- POPULARITY VOTING
 - 1st \$30.00 nursery certificate
 - 2nd \$25.00 nursery certificate
 - 3rd \$20.00 nursery certificate.
9. Prizes will be awarded at the annual banquet on Saturday night, October 13.





Fire in the Hole : Phlox across Colorado

CAROLINE DE VRIES

PHOTOGRAPHS BY PANAYOTI KELAIDIS

There is a flower – a mat of flowers really – with the ability to set mountain slopes ablaze in colorful abundance, a flower that transported English literary giant J.R.R. Tolkien to gardens of his youth “trimmed with box... filled with favourite flowers, with phlox.” Although it is probable that Tolkien was contemplating an English cottage garden featuring *Phlox paniculata* rather than a rock garden, the conflagrant genus adds the “jewel box” aesthetic strived for by almost all rock gardeners, its leaves providing the delicate lacework that cradles the vibrant five-petaled jewels.

As an intern at the Denver Botanic Gardens, I was asked by Panayoti Kelaidis to write a status report on *Phlox* grown at the Gardens. Soon afterwards I became infatuated with the fiery floret-smothered cushions. According to James Locklear’s recent book, to which I’m much indebted throughout, the name “phlox” is Greek for “flame,” the name for the genus *Phlox* coined by Linnaeus from his Latin description “floris flammeo igneque colore” which can be translated to “flowers the color of a glowing flame.” Fire in the hole!

Meet the Colorado locals: *Phlox andicola*, *P. austromontana*, *P. caryophylla*, *P. condensata*, *P. hoodii*, *P. kelseyi*, *P. longifolia*, *P. multiflora*, *P. muscoides* (syn. *P. bryoides*), and *P. pulvinata*. Rocky Mountain growers are lucky to be able conveniently to include many of these ten gorgeous local *Phlox* species in their gardens. Unfortunately, for the rest of the nation these same species that grow wild in the Rockies can require the attentive care of specially created microclimates.

Phlox andicola - plains phlox

Botanist Thomas Nuttall first described *P. andicola* while traveling by foot on what is now known as the Oregon Trail. Originally found in flowing plains’ habitats, *P. andicola* is undoubtedly the same phlox seen by the covered-wagon-traveling, petticoated pioneers in their quest of “manifest destiny.” It greets the passersby with a charmed “howdy-do,” outfitted in lavender-hinted petal bonnets. It makes a lovely groundcover in the rock garden; however, take care as their settling nature is congruent with their rhizomatous tendency to spread quickly.

Phlox hoodii

Phlox austromontana - desert phlox

White bunches in red rocks, a rattlesnake hisses in the distance -

Phlox austromontana lives with months of thirst where the heat

waves blur, forming enigmatic mirages in the foreground. The desert phlox releases bunches of white inflorescence, the white striking against the red rocks of Zion. They open lazily, the ghostly color seemingly bleached at the hands of the sun's radiation. This habitat predicts *P. austromontana's* perfect placement in xeric rock gardens. Especially exquisite are its subspecies, *jonesii* and *lutescens*, which blossom festive bright pink and yellowish, respectively.



Phlox caryophylla - Pagosa phlox

This derives its scientific name from the carnation-like clove scent the species projects. Its habitat lies on the marine Cretaceous

Phlox caryophylla



exposures of the Mancos Shale between southwest Colorado and New Mexico. Despite its carnation scent, the Pagosa phlox would not make a suitable *bouttonnière*: the species attracts considerable conservation concern. Due to its rarity there has been no known record of cultivation; wild seed and plant collection is discouraged.

Phlox condensata - bristlecone phlox

This kamfp zone survivor, sharing the zone with bristlecone pines, was

first collected by Charles Christopher Parry in 1861 on what he would later name Grays Peak in the Front Range of Colorado. Named in honor of Asa Gray, Parry's friend and botanic mentor, Grays Peak can be seen from I-70; be sure to tell your friends and family the summit's botanic history on the way home from skiing at Copper, Vail, or Breckenridge.

Phlox condensata is proof delicacies arise even in the harshest of climates; if its fantastic scent is not already whisked throughout the air, stoop down and indulge yourself - it is crucial to stop and take in what is often considered the most fragrant of all phlox.



Phlox condensata

Phlox hoodii - Hood's phlox

The curious and shadowed history of *Phlox hoodii* begins with the acquisition of the Louisiana Purchase in summer 1803. Physician and

explorer-naturalist Sir John Richardson, among others, was sent on a government-sponsored expedition to survey the newly acquired land. The crew eventually found themselves in present-day Saskatchewan, where Richardson discovered and described the first specimen: henceforth, the silver-white blossoms were "Hood's Phlox" in honor of Lieutenant Robert Hood, a junior officer who was murdered by another member of the party in a previous expedition. *Phlox hoodii*, congruent with the history of its nomenclature, slouches its silver bonnet transfixing the onlooker with its ghostly, austere air.

Phlox kelseyi - Kelsey's phlox

Living in the sort of rich wetland ecosystems favored by grizzly bears, and being taller than the other native *Phlox* species, does not make *P. kelseyi* the awkward, gangly swamp kid. Typically it makes a beautiful mat of wildflowers.



Phlox kelseyi

It was discovered and described by Francis Duncan Kelsey, a Congregational clergyman who settled in Montana and pursued botany as a hobby. Among the Colorado phloxes *Phlox kelseyi* is one that seems to be rather more amenable than many to transplantation to the East and its rich color repays the effort.

Phlox longifolia - long leaf phlox

Long leaf phlox and the western sagebrush share a playful romance; the two, over expanses of heaths, lie flirtatiously together. *Phlox longifolia*'s

bright pink inflorescence banter with *Artemisia's* silvery foliage. Her wispy long leaves brush against the pungent plateau philanderer. No doubt, Lewis and Clark on their westward expedition would have passed through one of such pink-blanketed fields. Dwarf varieties of the coy *P. longifolia* are especially attractive in rock garden settings, paired of course with *Artemisia* or *Salvia*.

Phlox multiflora - Yellowstone phlox

The Yellowstone phlox enjoys companionship; in nature it is often found as the dominant species, chattering away on the slopes of an entire hillside. Its conspicuous presence accounts for both the names of Phlox Creek in Yellowstone National Park, and Phlox Mountain in the Owl Creek Range of northwest Wyoming. These pretty little white phloxes release a sweet summer fragrance between June and August. Yellowstone Phlox was discovered and described by Professor of Botany at the University of Wyoming and founder of the Rocky Mountain Herbarium, Aven Nelson.

Phlox multiflora var. *depressa* - Routt County, Colorado,
near the summit of Gore Pass



Phlox species	Eastern Slope Native	Western Slope Native	Habitat	Height	Light	
<i>P. andicola</i>	✓		3,200 - 6,000 ft; plains, buttes, upper slopes of sandhills and escarpments	5-12 cm	full sun	
<i>P. austromontana</i>	✓	✓	2,500 - 9,000 ft; Intermountain basins, hilly piedmont, bluffs and ridges	7-30 cm	full sun - light shade	
<i>P. caryophylla</i>		✓	6,500 - 7,800 ft; mountains in flats and slopes	10-20 cm	full sun - light shade	
<i>P. condensata</i>	✓	✓	6,100 - 14,000 ft; kampf zone, high elevations on exposed slopes	2-7 cm	full sun	
<i>P. hoodii</i>	✓	✓	1,500 - 9,000 ft; plains, intermountain basins, bluff, buttes, ridges	2.5-10 cm	full sun	
<i>P. kelseyi</i>	✓		4,000 - 9,500; mountains in valleys, basins, and flats, esp. fens	7-15 cm	full sun	
<i>P. longifolia</i>	✓	✓	500 - 9,000 ft; plains, intermountain basins, dissected plateaus, hilly piedmont	5-40 or 10-100 cm	full sun	
<i>P. multiflora</i>	✓	✓	6,000 - 12,000 ft; intermountain basins, escarpments, hilly piedmont	8-20 cm	full sun	
<i>P. muscoides</i>	✓	✓	3,500 - 9,000 ft; plains, intermountain basins, escarpments, rock ledges	2-5 cm	full sun	
<i>P. pulvinata</i>	✓	✓	8,200 - 13,000 ft; high elevation, exposed scree slopes, rock ledges	2.5-7.5 cm	full sun	

	Soil	Inflorescence	Season	Friends (aka Associated Species)
	sandy, stony, or close to bedrock	1- to 5-flowered; pale lavender to white, yellowish eye	May - July	Ponderosa pine (<i>Pinus ponderosa</i>), soapweed yucca (<i>Yucca glauca</i>), various beardtongues (<i>Penstemon</i> spp.)
	dry, well-drained	1- to 5-flowered; pink or light lavender	April - June	Utah juniper (<i>Juniperus osteosperma</i>), Mexican manzanita (<i>Arctostaphylos pungens</i>), Canaan daisy (<i>Erigeron canaani</i>)
	dry, fine-textured clay loam	3- to 12-flowered, purple or pink	Mid-May - June	Pinyon pine (<i>Pinus edulis</i>), muttongrass (<i>Poa fendleriana</i>)
	dry, well-drained	1- to 2-flowered; white with a hint of lavender	July-August	Bristlecone pine (<i>Pinus longaeva</i> and <i>P. aristata</i>), pygmy fleabane (<i>Erigeron pygmaeus</i>), alpine oreoxis (<i>Oreoxis alpina</i>)
	loamy sand, clay loam, stony, near bedrock	1- to 3-flowered; pale lavender to white	April - June	Ponderosa Pine (<i>Pinus ponderosa</i>), big sagebrush (<i>Artemisia tridentata</i>), alpine bladderpod (<i>Lesquerella alpina</i>)
	alluvial, fine-textured, alkaline	1- to 5-flowered; lilac to pink, white with bluish sheen	May - July	shooting star (<i>Dodecatheon pulchellum</i>), shrubby cinquefoil (<i>Daisiphora fruticosa</i>), alkali primrose (<i>Primula alcalina</i>)
	loamy sand, clay loam, stony, near bedrock	3- to 18-flowered; purple, lilac, pink, or white	April - July	sagebush (<i>Artemisia</i> spp.), Rocky Mountain juniper (<i>Juniperus scopulorum</i>), blue grama (<i>Bouteloua gracilis</i>)
	medium - coarse texture, stony, shallow near bedrock	1- to 3-flowered; pale lavender to white	June - August	prairie bluebells (<i>Mertensia lanceolata</i>), lupines (<i>Lupinus</i> spp.), Jacob's-ladder (<i>Polemonium foliosissimum</i>)
	stony with little organic matter with bedrock at or near surface	1-flowered; white	May - June	Hooker's sandwort (<i>Arenaria hookeri</i>), wild buckwheat (<i>Eriogonum acaule</i>), stemless beardtongue (<i>Penstemon acaulis</i>)
	stony with little organic matter with bedrock at or near surface	1- to 3-flowered; pale lavender to white with bluish sheen	June - August	subalpine larch (<i>Larix lyallii</i>), old-man-of-the-mountain (<i>Tetrandeureis grandiflora</i>), skunk polemonium (<i>Polemonium viscosum</i>)





Phlox multiflora var. *depressa* - Gore Pass, Routt County, Colorado

Phlox muscoides (syn. *P. bryoides*) - Shoshone phlox

A plant of the high desert, cold alpine tundra, *Phlox muscoides* makes hunched, white-matted domes. The high altitude habitat exposed to intense solar radiation, extreme wind speeds, and bare rock allows only for the survival of the most stalwart. *Phlox muscoides*, and its cantankerous silver foliage, was first named by English botanist Thomas Nuttall in his 1834 westward expedition. Shoshone phlox is very difficult to grow except in perfect alpine or rock garden conditions. It is extremely difficult to cultivate, a characteristic long-lamented.

Phlox pulvinata - alpine phlox

This prefers to plant its roots where it can score a good view – in the highest parts of the Rockies overlooking the plains and the Pacific. She is one of the first flowers to bloom in the spring, decorating the color-starved fell-field she inhabits with bunches of delicate white-lavender cushions: vivid next to the nearby sea-green and orange lichen. Although the alpine phlox lives above the timberline, it is one of the most adaptable of the high-altitude phlox species – a benefit for the below-the-timberline dwelling rock gardeners.

Looking back at the past North American Rock Garden Society Seed Exchange lists, I was horrified to find a paucity of *Phlox*. In the 2011-2012 issue, only three cultivars of *Phlox paniculata* were offered; working backwards it is not until the 2007-2008 issue that *P. drummondii* appears to join *P. paniculata* - still by far a sparse spread. So, does this wonderful genus, one of versatility and stalwart

Phlox pulvinata



All-American beauty, appear to be so vastly underappreciated in North American gardens? Obviously at least part of this is due to the difficulties getting seed: it can defeat the attentions of the collector by dispersing its seed just as the nervous collector approaches.

James H. Locklear's book, *Phlox: A Natural History and Gardener's Guide*, is a wonderful and illustrative resource to find specific phlox species suitable for your environment and preference. Alan Bradshaw of Alplains offers many phlox seeds. Siskiyou Rare Plants Nursery sells phlox plants, as does Laporte Avenue Nursery. Some species tend to produce seeds at irregular intervals and require cold stratification for germination; subsequently, some varieties of phlox can be hard to acquire. The *Phlox* mentioned in this article are simply the Colorado sampling of the nearly seventy species of the genus, each with its unique personality and quirks. All species are native to North America with the exception of *P. sibirica*, which grows in Siberia. *Phlox* have adapted to dry, wet, sun, and shade: the environment ranges from the scree of the alpine-growing *P. pulvinata*, the shade of the woodland-loving *P. stolonifera*, to the arid charm of the desert-dwelling *P. austromontana*. Their loyalty is unparalleled. Just as seasons change from spring to summer to fall to winter, gardeners too must re-situate themselves from around the nation and the world. Although it may sound heartbreaking to leave your garden, groomed and loved over varying lengths of time, be sure to take your phloxes wherever you may migrate. No matter where you may find your new residence you will certainly find a loyal species of phlox to tickle your fancy: phloxes will follow you wherever you may go.

PLANTS/SEED SOURCES

Alplains

P.O. Box 489, Kiowa, CO 80117-0489
www.alplains.com - email: alandean7@msn.com

Siskiyou Rare Plant Nursery

2115 Talent Ave, Talent, OR 97540 (tel: 541-535-7103)
www.siskiyourareplantnursery.com

Laporte Avenue Nursery

1950 Laporte Avenue Fort Collins, CO 80521 (tel: 970-472-0017)
www.laporteavenuenursery.com - email: klehrer23@msn.com

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- Locklear, James H. *Phlox: A Natural History and Gardener's Guide*. 2011.
Farrer, Reginald John. *The English Rock Garden*, 1919.
Weber, William A. *Colorado Flora: Eastern Slope*. 1990.
Weber, William A. *Colorado Flora: Western Slope*. 1987.

Rebuilding a Rock Garden in Pittsburgh

ALAN PEACOCK

FOR THE LAST eleven years the Allegheny Chapter has been tending a rock garden located adjacent to the National Aviary in Pittsburgh. Once a month a handful of members met for convivial conversation over breakfast to gain sustenance before weeds were pulled and plants watered.

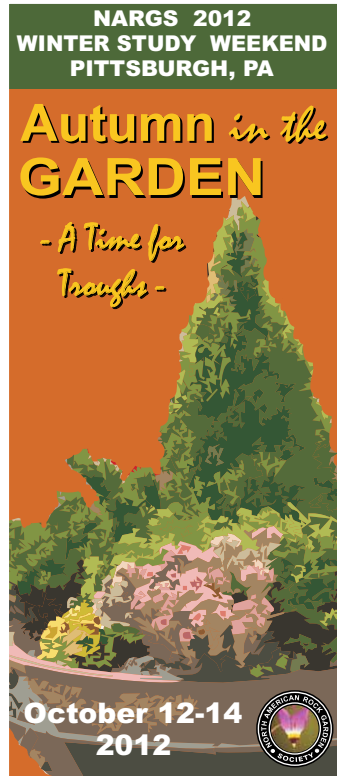
Imagine our dismay when we found out that an expansion program for the Aviary was going to obliterate our garden. No more Thursday breakfasts! The area taken up by our rock garden was needed to park the large machines being used during the excavation.

Efforts to avoid this were to no avail. And so, on an overcast damp and gloomy morning we had breakfast for one last time before going to dig up what plants we could save, for sale at our annual show, before our rocks were unceremoniously carted away.

But, as is well known, behind every cloud there's the potential for a silver lining and this was to be the case for us. We were offered a different site that was larger and better located than the previous one; a corner lot up against the perimeter fence of the Aviary and adjacent to the entrance to the parking lot.

A plan was evolved to create a new rock garden. A design was solicited that included a pathway meandering through the middle of the garden, leaving and rejoining the main path. This would allow better close up viewing of a series of beds either side of the pathway. Mostly in full sun, one area is shady that allows plant variety. A crevice garden was conceived and a stone bench for contemplation also included.

But before this design could be implemented, most of the overgrown trees and bushes crowding the area had to be removed. Only three were retained; a tall attractive spruce, a small weeping cousin and a basswood that provides the shade. Then numerous rocks, in addition





to those retrieved from the last garden, ten cubic yards of new soil and a large pile of pea gravel for mulch had to be trucked in. During the next four months the members arranged this material according to the design, but only after, of course, the obligatory sustaining breakfast had been consumed. The basic design was completed with barely enough time to plant a small quantity of bulbs including dwarf narcissus, crocus and tulip 'Lady Jane', before the onset of winter.

Then, as soon as spring was in the air we embarked on the enjoyable task of populating the new beds with plants. First in line were the



evergreen variegated boxwoods, dwarf cedar of Lebanon 'Green Cove', *Thuja* 'Rheingold' and dwarf columnar Alberta spruce. These were soon followed by various *Phlox* Emerald Series, *Gentiana*, *Asarina*, campanulas, sedums and semperivums to name a few.

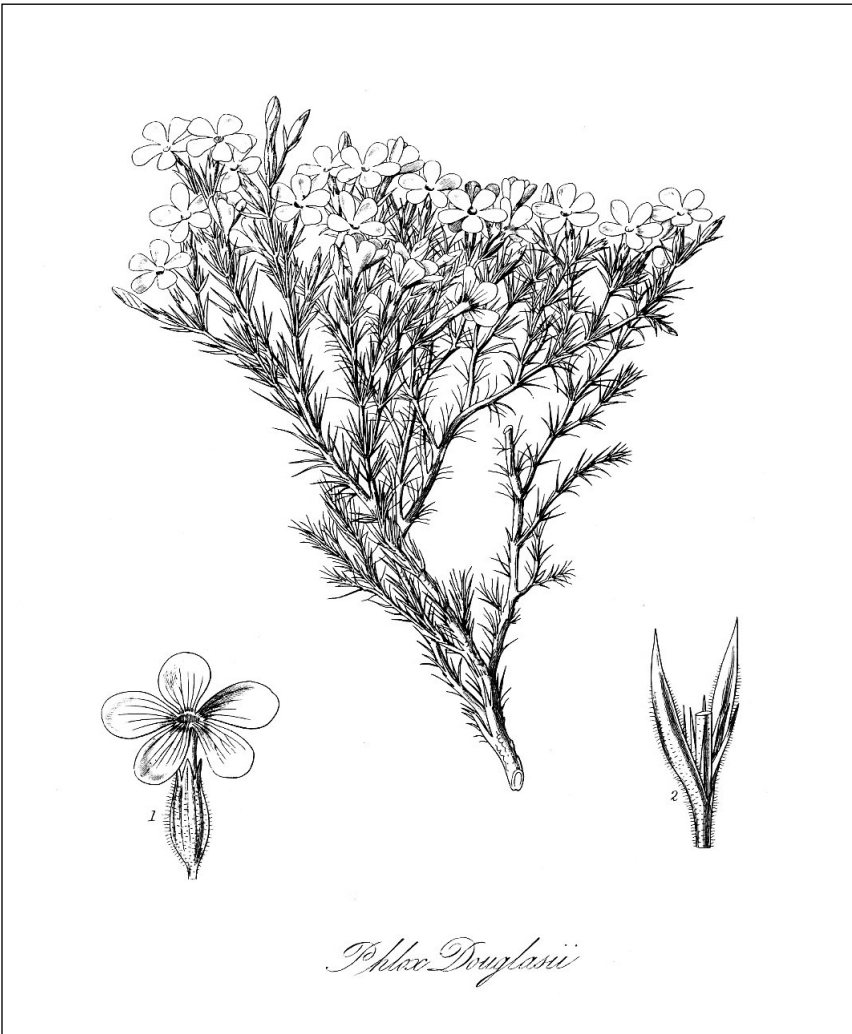
Those attending the NARGS Winter Study Weekend in Pittsburgh



will have an opportunity to see just how far the rock garden has come.

Now, with a larger area to tend, there is enough work to keep the members of our chapter occupied twice a month – what better than two breakfasts instead of one?





Phlox Douglasii

Phlox douglasii from Hooker's *Flora Borealis-Americana*, the first volume of which was published in 1829.

A Remarkable Garden

David Douglas and the Shrub-steppe of the Columbia Plateau

JACK NISBET

IN LATE JUNE of 1825, Scottish naturalist David Douglas took his first peek at the arid world of the Inland Northwest. Traveling upstream on the Columbia River with a canoe brigade of fur agents and their season's trade goods, he ventured through the Columbia Gorge and stepped ashore for the long portage between the two great rapids known as the Dalles and Celilo Falls. Like most first-time visitors, he was shocked at the scale of the massive basalt flows that hung over the Gorge, then stunned by the desiccated landscape that stretched off endlessly to the east. "Nothing but extensive plains and barren hills, with the greater part of the herbage scorched and dead by the intense heat," he wrote in his journal.

Despite such heat, the energetic Douglas picked up some wonderful plants during his hike between the rapids, including a sunny yellow blazing star (*Mentzelia laevicaulis*) that provided him with ripe seeds to ship back to England. He dug up two different kinds of evening primrose in flower that he transplanted into his turnip patch at Fort Vancouver, hoping to gather seeds from them as well. And he discovered enough mature samples of *Clarkia pulchella*, already named after explorer William Clark but not yet cultivated outside its native ground, to turn it into one of the hottest garden offerings at the 1828 summer plant sale of the Horticultural Society of London (later the Royal Horticultural Society).

Clarkia pulchella
(Elkhorn) from *Edward's Botanical Register*, 1829

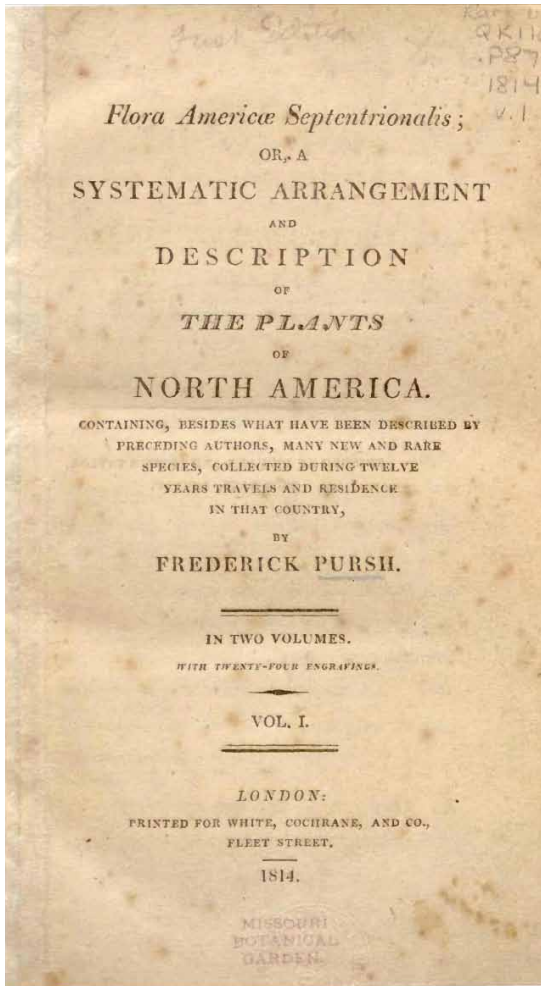


Born in 1799 in the village of Scone, Perthshire, as the son of a stonemason, Douglas's behavior at the local school gave little indication that he might be destined for anything greater than fishing, the care of abandoned birds, and rambling in the nearby hills. By the time he was 11, the boy was working summers under the head gardener at Scone Palace, and although he sometimes quarreled with the other boys employed there, soon began an apprenticeship that cycled him through all the phases of British horticulture. At age 19 he advanced to a position at another estate, Valleyfield, near Dunfermline, with a larger collection of exotic plants, and two years later landed at the Botanic Gardens of Glasgow University, just as William Jackson Hooker was appointed there as Regius Professor of Botany. Hooker, who would later become the first director of Kew Gardens, was already a famous name in British botany, and had the connections to put Douglas's energy and talent to use.

In 1823, Dr. Hooker arranged for his protégé to serve as a collector for the London-based Horticultural Society on an expedition to New York and the mid-Atlantic states. Assigned to assess new cultivars of fruit, the qualities of oak timber, and promising garden plants, Douglas traveled from Detroit to Chesapeake Bay in a whirlwind of activity. Along the way, he made sure to lay in apple and plum cultivars, orchids, pitcher plants, and saprophytes that corresponded to the specialized interests of several Horticultural Society of London board members. He returned to England with chests full of living plants and rootstock, as well as packets of viable seed.

This first outing was deemed a great success because the collector displayed both a talent for finding interesting plants, and a knack for keeping them alive. Douglas's nursery prizes included an Oregon grape that originated from one of Lewis and Clark's Pacific Northwest collections, and it was one of several cuttings that soon became British garden favorites. While in London, Douglas also penned a monograph on American oaks that not only demonstrated a thorough knowledge of earlier work compiled by André Michaux and Frederick Pursh, but also reflected his own investigations into the possibilities of the various oak species for carpentry and shipbuilding.

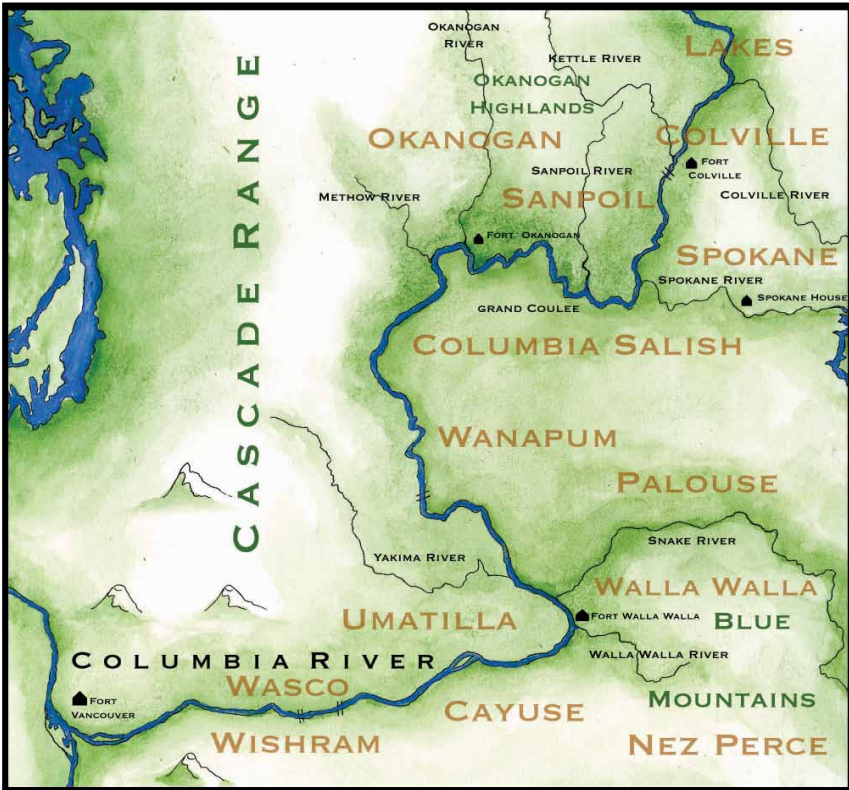
Within a few months of Douglas's return, the London Horticultural Society found him passage aboard a Hudson's Bay Company vessel bound for the Columbia River. Before shipping out in late July of 1824, Douglas researched his new collecting territory extensively. He interviewed Archibald Menzies, who had served as surgeon and naturalist on Captain Vancouver's Pacific Coast survey of the 1790s, and pored over the published accounts of the Lewis and Clark Expedition. On Douglas's voyage around Cape Horn to the Columbia, he carried along with him a copy of Pursh's *Flora Americae Septentrionalis*, which included taxonomic details of the Corps of Discovery's plant collections.



During his first year of Columbia River collecting, which spanned spring 1825 to spring 1826, Douglas was based at Fort Vancouver, across the river from modern Portland. This post served as the Hudson's Bay Company's headquarters for the entire region, and most of the clerks he met there were his exact peers—Scottish lads of modest means, second and third sons who had to move away from home in order to rise in the world. As he formed friendships and shared meals, Douglas found that Bay Company men at all levels had, according to the custom of the trade, taken tribal wives and were raising mixed-blood families. Many

of the women, including those belonging to the Plateau culture of the Interior, still followed the annual round of their extended families. These movements were based on deep knowledge of local landscapes, so that their everyday tasks often led directly to the very plants that Douglas was seeking.

In early spring of 1826, with a year's experience of the lower Columbia under his belt, Douglas rode upstream on that river with a Hudson's Bay Company agent and crew. After skirting Celilo Falls, the collector had his first real encounter with the shattered basalt landscapes of the Interior. The open plains were sprinkled with sage, antelope bitterbrush, "and other shrubs which to me were perfectly unknown and the whole herbage very different indeed from the vegetation on the coast.



Columbia Plateau tribal ranges and fur trade posts 1825–34 (Emily Nisbet)

In early April, with most of the shrub-steppe still emerging from winter, Douglas admired the yellow-blooming bitterbrush (*Purshia tridentata*), and decided that it would make a nice complement for Scotch broom in British gardens. At the mouth of the Snake River, he was encouraged to see some lupines peeking up, but saw the famed White Bluffs of Hanford Reach as “mountains of white clay, with scarcely a vestige of herbage or verdure to be seen.” Thick snow still blanketed the ground from Priest Rapids north to Fort Okanogan, so he turned his attention from flora to fauna, taking potshots at bears, wolves, foxes, badgers, and dancing leks of sharp-tailed grouse.

By the time the voyageurs pulled the canoe ashore at the mouth of the Spokane River, it was late April, and the gardener in Douglas was beginning to appreciate his surroundings. He found that the receding snow exposed “an extensive plain, with groups of pine trees, like an English lawn, and rising bluffs or little eminences clothed with small brushwood and rugged rocks sprinkled with Ferns, Mosses, and Lichens...this part of the Columbia is by far the most beautiful and

varied I have yet seen." Here he was experiencing the interplay between shrub-steppe and pine woodlands, managed through centuries by native-set fires, with spring wildflowers exploding across both habitats. After a few days of camping at the mouth of the Spokane, he admitted in a letter to William Jackson Hooker that "I can hardly sit down to write, not knowing what to gather first."

Douglas would spend the next several months collecting from this treasure trove. He returned upstream in 1827, took a two-year hiatus in Great Britain, then visited the Columbia's interior again in 1830 and 1833. During these trips he followed tribal and fur-trade guides into new habitats at a wide variety of elevations, and reinforced his reputation for getting viable bulbs and seed back to the Horticultural Society's nursery. Dozens of Douglas's gatherings were propagated, displayed in a magazine called the *Edward's Botanical Register* as hand-colored engravings, and introduced commercially to the British gardening world. He also worked with the best taxonomists of the day to identify and name dozens of new plants, as well as several mammals. With the confidence of first-hand knowledge, he added rich details of habitat and ethnography to William Jackson Hooker's *Flora Borealis-Americana*, the first volume of which appeared in 1829.

Today, the Latin titles that Douglas bestowed on the plants he named himself, and the 80 or more *douglasii* tags that his cohorts labeled to honor him, flood into view for any plant enthusiast who ambles through an eastern Washington coulee during the blooming season. Scattered among the shards of basalt grow *Phlox*, buckwheat (*Eriogonum*), grass widows (*Olsynium*), globe-mallows (*Sphaeralcea*), and dusty maidens (*Chaenactis*) associated with Douglas, each adding a perfect proportion of color and form among the rocks. It soon becomes obvious, however, that the human connections of each plant add a much deeper layer of story to these formal names.

To take one example, Douglas was waiting for veteran fur trade clerk Jaco Finlay to repair his musket at Spokane House in May 1826, when he heard about subtle differences in the taste of three different currant bushes that thrived in the area. Most likely, it was Finlay's Spokane wife Teshwintichina or one of her daughters who explained to him the essence of these nutritious fruits. On that same visit, when Douglas wrote a long paragraph describing the preparation of the "moss bread" or lichen cakes he shared with Jaco, he was touching on a much longer and more complex recipe that could only have come from Teshwintichina's family. The fact that modern members of the Spokane tribe still utilize all three currants and the black tree lichen for food provides a direct connection back to those evocative meals.

Douglas, like any gardener, had his own favorite plants. He always showed a particular fondness for the lily family, and many new

species he found on the Plateau lived for him as both prospective cultivars and essential sustenance. In his description of the beautiful sagebrush mariposa lily, *Calochortus macrocarpus*, he noted not only its remarkable flower, but also the fact that “in spring it forms an article of food of Inland Tribes, and is called in their tongue Koo-e-oop... The root is roundish, crisp, and juicy, yielding a palatable farina when boiled.” He learned to follow the fritillary (*Fritillaria pudica*) now called yellow bells, one of the first spring flowers he saw on the Plateau, around the entire calendar: “Roots eaten, both raw and roasted on embers, by the natives and are collected in July and dried in the sun for winter store.” He sampled *Allium* onions, including the one that bears his name, wherever he traveled, and Hooker illustrated Douglas’s brodiaea (*Triteleia grandiflora*) that clearly shows the delicate netting tribal women had to peel off the corm before roasting it for food.

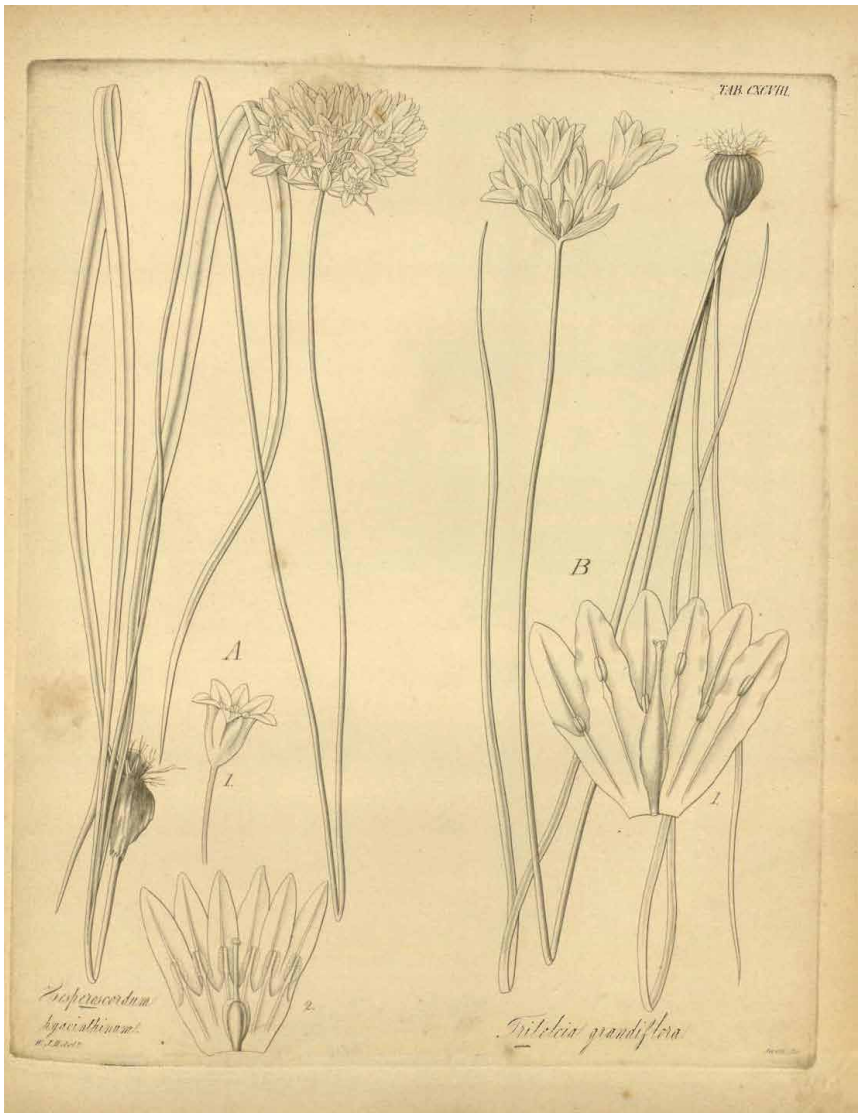
It should come as no surprise then, that the collector paid close attention to the digging and cooking of the beautiful blue camas lily (*Camassia quamash*), even as he procured seed and packed dried bulbs in sand so that it might succeed as a new flower offering for the London Horticultural Society. Douglas’s field notes include one family’s recipe for cooking camas in an earth oven, and he ended the account, as he often did, with a modest joke that included an historical reference. “Captain Lewis observes that when eaten in a large quantity they occasion bowel complaints. This I am not aware of, but assuredly they produce flatulence: when in the Indian hut I was almost blown out by strength of the wind.”

Douglas’s ethnobotany, like that of the tribes, was not confined to a single family of plants. Near Boardman, Oregon, he observed that both species of prickly pear cactus (*Opuntia polyacantha* and *O. fragilis*) were baked in earth ovens similar to the ones he had seen used for camas. He recognized the restorative powers of bitterroot: “The roots are admirably calculated for carrying on long journeys: two or three ounces a day being sufficient for a man, even while undergoing great fatigue.” Although he struggled to identify the many biscuitroots (*Lomatium*) he saw on the Plateau, he did record the gathering and consumption of the earliest shoots of the one called chocolate tips (*Lomatium dissectum*), the large edible tubers of other lomatiums, and the stimulating anise-scented seeds of still others.

Although Douglas seldom delved into the medicinal practices of native peoples (relying himself on a variety of patent medicines that included laudanum), he carefully studied the qualities of Indian hemp (*Apocynum cannabinum*) cordage, comparing it favorably to British-manufactured cotton and linens twines. He learned about the broad range of uses for beargrass in both the Coast and Plateau

Calochortus macrocarpus (Sagebrush mariposa lily)
Edward's Botanical Register, 1828

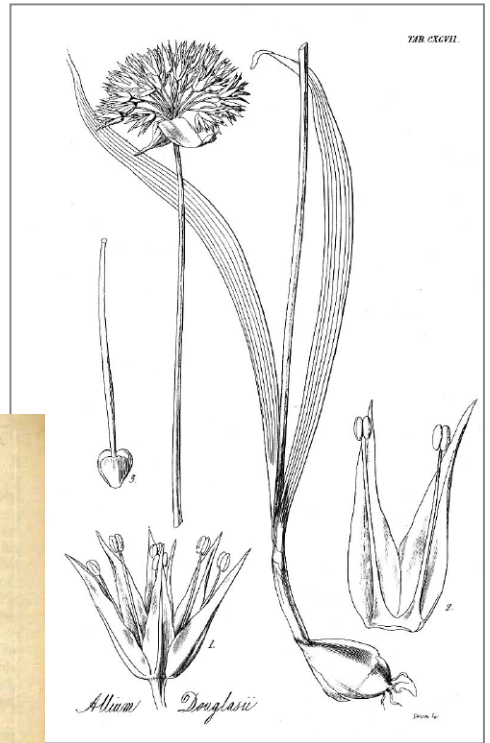




Triteleia grandiflora (Douglas's Broadiaea) engraving from Hooker's *Flora Borealis-Americana*

Allium douglasii (Hooker's *Flora Borealis-Americana*)

Camassia quamash
Curtis's *Botanical Magazine*
1813



Portrait of David Douglas from *Companion to Curtis's Botanical Magazine*, 1836



cultures, pronouncing it "one of the greatest ornaments of the western mountains, and the natives make baskets, hats, pouches, bags, bottles, mats for sleeping on, &c, of its strong foliage."

He also spent considerable time trying to figure out the origin of tribal-grown tobacco, which was tied up in a confusing knot of



Nicotiana quadrivalvis (Indian tobacco)
Edward's Botanical Register, 1827

cultivated Indian tobacco (*Nicotiana quadrivalvis*), its many variants, and the smaller shrub-steppe native called coyote tobacco (*N. attenuata*). Along the way, he recognized that the *N. quadrivalvis* is "greatly esteemed by the different tribes for smoking, and is the only vegetable which the natives of the Columbia cultivate."

On his second trip to the Northwest, from 1830-34, Douglas's two ascents of the Columbia were interspersed with trips to California and

Hawaii. During the course of these adventures, he managed to lose three years' worth of field journals and many plant specimens in a canoe accident on the upper Fraser River, then to die on the Big Island when he slipped into a cattle pit-trap already occupied by an angry bull. His untimely demise caused a great outpouring of grief from both the

natural history and fur-trade communities, and over time his meteoric career has created a mythic figure that has grown beyond the usual boundaries of the botanical field. But even without the lore, Douglas's legacy on the modern landscape extends beyond his collections that appear today in seed catalogs, native plant nurseries, and stunning rock gardens.

To many foresters, Douglas's assessment of possible sites, soil types, and exposures for growing Northwest trees like Sitka spruce marks the beginning of modern British silvaculture. Arborists recognize that seeds he brought back form the basis for several famous arboretums, including copses of Douglas-fir that rank as the tallest trees in all of Europe. Ecologists point out biogeographical aspects of Douglas's work, including the reality that some of his introductions such as salal in Scotland, fireweed across Scandinavia, and Monterey pines in New Zealand have been so successful that today they rate as noxious weeds.

With Douglas, there are always more layers to explore. The spot on the Columbia where he gathered blazing star in 1825 might be buried beneath the backup of the Dalles Dam, but *Mentzelia laevicaulis* continues to bloom in spoil pits and along gravel trails throughout the Inland Northwest. When fire ecologists try to re-learn the art of burning to open up pine or oak woodlands, they often marvel that small species he mentioned, such as esoteric broomrapes and the deervetch *Lotus micranthus*, can still spring up in profusion after a controlled fire. Coastal and Plateau people from a variety of tribes, who continue to rely on traditional plants for food and textiles, might chuckle at the childish simplicity of Douglas's recipe for the lichen cakes they bake from *Bryoria fremontia*, but they see cultural affirmation in the depth of his pioneering ethnobotany.

This is the realm where gardeners understand David Douglas best: his work can only be absorbed plant by plant, season by season, as over time species associated with him cycle through their own dynamic lives. When NARGS member David Sellars of British Columbia wrote about *Douglasia nivalis* in this magazine (*Rock Garden Quarterly*, Winter 2010/2011), he recounted the often-published story about Douglas gathering the type *Douglasia* at 14,000 feet in the Rocky Mountains. Sellars then correctly pointed out that, since the fur-trade brigade Douglas traveled with crossed Athabasca Pass (elevation: 5751 feet) in early May on top of many feet of snow, this story cannot be true—it has to rank as another entry in the large body of Douglas lore.

But Douglas did collect the plant, which today is known only from Washington state, on the east slope of the Cascade Range between the Wenatchee and Methow Rivers. Snow douglasia usually occurs in alpine situations, but occasionally can be found down to around 2000 feet of elevation. David Douglas paddled that stretch of the



Douglasia nivalis (Edward's Botanical Register, 1836)

Columbia at least six different times, but often in early spring, and he never spent more than a few hours away from shore. So where did he find his specimen?

Since we know approximately where Douglas spent most of his nights, and how far he usually walked in a day, puzzles like this allow the curious modern enthusiast to plod along after him. Vast portions of the Columbia Plateau remain lightly populated and, away from the dams and irrigation projects along the rivers, many of the habitats he saw—especially those rocky coulees and alpine wonderlands that harbor floral treasures—have changed little since he passed by. If you want to find out where Douglas gathered *Douglasia nivalis*, and share in his thrill at the emergence of a beautiful flower, in theory all you have to do is follow the collector's lead, one step at a time.





Bookshelf

reviews by

NANCY GOODWIN on
THE CYCLAMEN OF GREECE

BOBBY WARD on
EUDORA WELTY'S HOME PLACE

The Cyclamen of Greece

A Natural History and Gardener's Guide

Peter Moore & Melvyn Jope

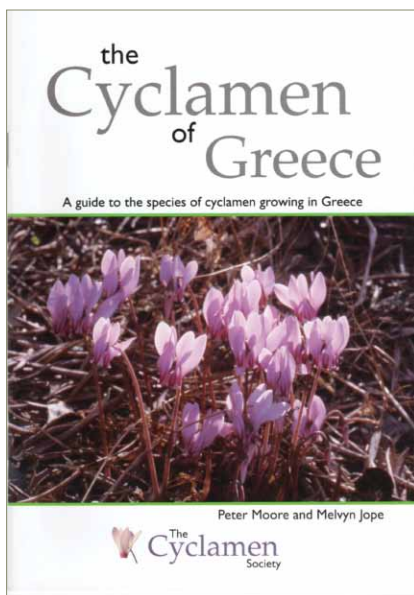
edited by Chris Clennett & Helena Wiesner with contributions by Brian Mathew & Alisdair Aird

Cyclamen Society (2011)
ISBN 978-095375263-8
Softcover: 40 pages, 73 color photos
9 x 7 inches. £4.00 + postage (details at end of review).

This little booklet is a treasure. Peter Moore established the premier cyclamen nursery, Tile Barn, and set the standard for excellence in the production and selection of superior forms of many species of this delightful genus. Tile Barn Nursery is unfortunately now closed; Peter himself says, "I closed the nursery about 6 months ago. Sadly, wonky

hips and old age caught up with me." But his knowledge, ability, and generosity have given new life to threatened plants.

Melvyn Jope, who co-authored this book with Peter Moore, has spent much time exploring the genus in the



wild and he has shared his discoveries with others who value these plants and want to see them growing in their native habitats. These two authorities describe the characteristics that distinguish the genus cyclamen, and confirm the number of species to be 23. They focus on the six different species found in Greece: four well-known species: *Cyclamen creticum*, *C. graecum*, *C. hederifolium*, and *C. persicum*, and two that most people will not yet have become familiar with: *C. confusum* and *C. rhodium*. They give the specific features of each, and describe many variations within them.

The authors give precise locations for viewing each species, although they note that, depending on weather conditions, the Greek cyclamen can come into leaf or flower any time from August through to June. They include lists of companion plants that travelers might expect to find in the wild and they also add a plea for visitors to respect their habitats.

The photographs in this booklet are superb and were taken by the authors as well as other members of the Cyclamen Society. The section on photographic techniques is extremely useful. Following a general but precise introduction to the genus we find details of each of the six Greek species.

Cyclamen graecum, *C. hederifolium*, and *C. confusum*, a recently described species, are difficult to distinguish but Moore and Jope point out and illustrate the features that separate them. *Cyclamen confusum* is appropriately named for it is most similar to *C. hederifolium*. There are variations in leaf shape and color as well as more subtle features such as the exterior and interior markings of the mouth of the flower, the shape of the tuber, and

the location of roots. They describe the habitat of each species, which is often a clue to its identity and successful growth in gardens.

They give the reasons for the recent reclassification of *Cyclamen rhodium* and its two subspecies with great clarity and excellent illustrations. This was previously a subspecies of *C. repandum* but following DNA studies has now been given separate species status. The other two species, *C. persicum* and *C. creticum*, which is the tenderest of the Greek species, are also discussed with specific details and information for growing them successfully.

After a thorough discussion of the Greek species, the authors return to advice on growing cyclamen in general. They list the hardiest and the tenderest species for growing outside as well as in greenhouse settings and give excellent suggestions for the contents of successful soil for growing cyclamen in pots as well as that for seed sowing. I have grown cyclamen for almost 50 years and I learned a lot from this booklet.

The information on CITES requirements, which have helped to curtail the over-collection and near extinction of some species, is essential for anyone hoping to import tubers. The authors' recommendation for acquiring seeds through the Cyclamen Society and other horticultural societies is an excellent one, and is the best and most responsible way to increase the supply of these plants and thereby insure their survival. The map showing the distribution of cyclamen in Greece will be a wonderful guide for those who wish to see these plants in their native habitats.

The Cyclamen Society is an example of excellence. This organization sponsored the exploration of the

genus in the wild not just in Greece but in much of the Mediterranean region, has supported scientific work in DNA studies of each species within the genus, and has done responsible collecting with approval of and supervision by appropriate governmental agencies.

I cannot recommend this booklet too highly. It is a gem. If you have any interest in the genus, and I cannot imagine anyone who doesn't, buy it, read it, look at the pictures, which are carefully selected to support the text. Tell your fellow gardeners to buy it. Don't lend it; you may never get it back! Join the Cyclamen Society and help support the important work they are doing in order to understand and to conserve this most delightful genus.

Nancy Goodwin.

Copies can be obtained directly from the Cyclamen Society Publications Officer, Richard Bailey, 5 Dower Avenue, Wallington, Surrey, United Kingdom SM6 0RG.

With the increases in UK postal costs, the post & packing inclusive costs are (payment in pounds sterling):

Cyclamen of Greece:

UK: £5.40; Europe: £7.25;

USA, Canada & rest of world £8.20

The Cyclamen Society's earlier publication *Cyclamen of Turkey* (2001) is in the same format as this new booklet and is still available:

Cyclamen of Turkey:

UK: £2.40; Europe: £4.25;

USA, Canada & rest of world £5.20

Both booklets together:

UK: £6.40; Europe: £8.70;

USA, Canada & rest of world: £10.40

One Writer's Garden

Eudora Welty's Home Place

Susan Haltom and Jane Roy Brown

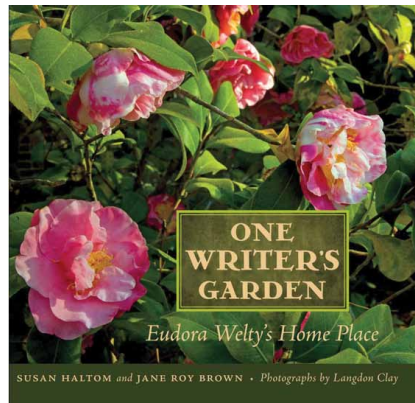
University of Mississippi (2011)

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Hardcover: 272 pages, 73 color photos
9¼ x 9¼ inches. \$35

Years ago, while attending an event at North Carolina State University's student union, I stumbled upon a touring exhibition of photos by the noted American writer, Eudora Welty. Taken while she worked for the Works Progress Administration (WPA) as a "junior publicity agent," they were starkly black and white, depicting daily life of Southern men and women during the Depression, including their houses, fields, and gardens. One I particularly recall had daylilies in it. That was my first awareness of Welty as a photographer and it gave me the first hint that she was also a gardener.

Eudora Welty (1909-2001) was born in Jackson, Mississippi, and was educated at Mississippi State



College for Women, the University of Wisconsin, and Columbia University. She was a Guggenheim Fellow and won a Pulitzer Prize in 1973 for the novel, *The Optimist's Daughter*. Jimmy Carter awarded her the Presidential Medal of Freedom for Literature in 1980. Among her writings are five novels and several dozen short stories.

Southern garden writer Elizabeth Lawrence, who lived in Raleigh and later in Charlotte, corresponded with Welty. They met in the late 1930s in Raleigh, probably through a mutual friend. Through their correspondence Lawrence became acquainted with Eudora's mother, Chestina. According to Emily Wilson's *No One Gardens Alone: A Life of Elizabeth Lawrence*, there was a closer affinity initially with Chestina, who was a "kindred spirit in the garden." That friendship began when Chestina wrote Lawrence a letter praising her on the occasion of the publication in 1942 of *A Southern Garden*. Chestina had an interest in the blooming dates of flowers, which Elizabeth also carefully noted in all her books. When Lawrence was on a lecture tour in 1944 in Mississippi, she visited Chestina and Eudora in Jackson for the first time and immediately became at ease when she entered the garden to admire Chestina's roses around the Tudor-style house. When Lawrence moved to Charlotte, Eudora visited her there, the last time in 1982 (Lawrence died in 1985).

Lawrence credits Welty for introducing her to the Mississippi Market Bulletin, which both Chestina and Eudora read. Lawrence writes in *Gardening for Love: the Market Bulletins*: "Years ago Eudora Welty told me about the ladies who sell flowers through the mail and advertise in the Mississippi Market Bulletin . . . She put my name on the mailing list." In

these bulletins, farmers advertised, free of charge, their crops, cattle, and horses—even dogs—while their wives advertised garden seed and bulbs "for pin money." "Their advertisements show the customs of the country people, their humor, and their way of speaking. Like Eudora's novels, the market bulletins are a social history of the Deep South," Lawrence wrote.

The Welty garden was Chestina's but gradually it became Eudora's as her mother spent less time in the garden during years of declining health. After Chestina died in 1966, Eudora took full charge of the garden, although, according to Susan Haltom's new book, *One Writer's Garden: Eudora Welty's Home Place* (University of Mississippi 2011), Eudora always referred to it as "my mother's garden." It included an Upper Garden and Lower Garden separated by an arbor with roses, a collection of camellias, a cut-flower garden and woodland, and numerous bulbs, annuals, and perennials such as bearded iris and daylilies.

In 1980, Welty gave the house and garden to the Mississippi Department of Archives and History (MDAH) with the right to live there until she died, directing that the house become a museum after that. In 1994, Haltom, who was working at the MDAH, visited the Welty garden, then grown up with weeds, bushes, and tangles of vines and poison ivy. She recalls Welty, frail and no longer able to care for the garden, telling her, "I cannot bear to look out the window and see what has become of my mother's garden." Haltom began a long-term effort, with volunteers and professional assistance and advice from organizations such as the Garden Conservancy, to rehabilitate the garden, and eventually "the lost garden was coming to light." The

significant period for Chestina's garden appears to have been 1925 to 1945, thus presenting Haltom and her crew with challenges on how to present the garden based on its current condition and future use. She drew upon Chestina's logs, plant lists, and notes, as well as Eudora's photographs, her papers, and writings. The garden was opened to the public in 2004 and the house in 2006; the site is now a National Historic Landmark.

Haltom says that when Eudora died in 2001, few people knew or understood that she had been a gardener and that her numerous references to flowers and plants in her writings grew from experience, learned first from her mother and then from her own hands-on, dirt-under-the-fingernails efforts. When Haltom had several opportunities to interview Eudora in her last decade, Eudora told her "I think that people have lost the working garden. We used to get down on our hands and knees. The absolute contact between the hand and the earth, the intimacy of it, that is the instinct of a gardener."

One Writer's Garden chronicles the garden—first Chestina's, then Eudora's—from its heyday to its decline and eventual rehabilitation. It is co-authored by Jane Roy Brown, a landscape historian, who focuses on historic gardens and landscapes. The book has scores of period black and white Welty family photographs, including some from Welty's WPA work, and a collection of contemporary photos by Langdon Clay (supplemented by Haltom).

In reading *One Writer's Garden*, there are many places where Eudora Welty's writings caused me to linger over a phrase and savor it. But one of Haltom's caused me to pause as

well. Haltom writes that, as Eudora watched her mother expend her grief in the garden after her father's death in 1931, "Eudora discovered the solace of gardening for herself, and a kind of joy."

For fifteen years, I have made daily use of an email program called Eudora. The software, developed in the late 1980s by Steve Dorner at the University of Illinois, pays homage to Eudora Welty's short story, "Why I Live at the P.O." In Dorner's busy life, he apparently saw a connection between Welty's "post office" and his daily e-mail fetching, naming the software "Eudora" in her honor, a reference that pleased the author. Sadly, I am being forced to give up Eudora, the e-mail software, because it, just like the post office Welty wrote about, is becoming obsolete and outdated by newer software and technological changes. Thankfully, there's nothing outdated about Eudora, the author and gardener, especially as lovingly preserved in Haltom's admirable book.

Bobby J Ward.

New book by NARGS Member - Robert L. Fincham of Coenosium Gardens, Eatonville, Washington, has written *Small Conifers for Small Gardens*, an alphabetical listing of conifers and their cultivars from *Abies concolor* 'Archer's Dwarf' to *Tsuga mertensiana* 'Elizabeth'. The 291-page book with color photos taken at gardens around the world aims to "provide new ideas about using smaller conifers in the landscape as well as provide information about which conifers are actually dwarf." Available for \$34.95 at <www.cnos.biz> or telephone 360-832-8655.

Swedish Dreams

MIKE KINTGEN

AS THE PLANE lowered in over the pale green birch and dark green conifer forest of southwestern Sweden, I realized that one of my long time dreams was happening ... I was visiting Gothenburg (Göteborg) to spend the next five days with Peter Korn and take in the horticultural attractions. For an alpine, rock garden, and bulb enthusiast, Göteborg is a must visit. Between Peter Korn's extraordinary garden, Göteborg Botanic Garden, and several other great private gardens, I would rate this corner of Sweden as the current capital of our art.

Peter has spoken to the Rocky Mountain Chapter twice, but nothing prepared me for the scale of his home garden or the rich variety of plants. Difficult high alpiners, steppe bulbs, Mediterranean sun worshippers, Himalayan woodlanders, and plants from every corner of the globe are housed in Peter's encyclopedic plant collection. It is amazing what can be done when passion is fully unleashed.

A quick tour on arriving gave me an orientation of the sales area, nursery, greenhouse, bulb houses, the woodland garden, moist boggy area, and the extensive sand beds in the rock garden areas. I would spend periods of the next five days wandering around, constantly discovering new corners and yet more rare plants.

Peter is probably best known for his work on growing alpiners in sand. This method works superbly in his climate; a small stream runs





Cushion plants such as *Arenaria alfacariense*, and *Acantholimon* flourishing in one of Peter Korn's sandbeds, with *Iris* and *Lewisia*, and with *Oxytropis* and *Astragalus* still to emerge

through the middle of the property allowing the sand and peat blocks to move cool water up through the beds creating some evaporative cooling. *Diapensia lapponica* in full bloom, *Ranunculus glacialis* and *Myostis pulvinaris* also in flower, and assorted *Cassiope*, were just a few examples of the choice plants enjoying these conditions.



Peter Korn's bulb house with wild-collected Central Asian tulips, and *Oncocyclus* irises as well as a cactus collection

Diapensia lapponica



Further up, sandbeds away from the water create superbly drained areas where a variety of more drought-loving alpine and steppe plants thrive. An entire bed given over to steppe plants from his brother's travels in Central Asia, along with dryland western North American plants, was especially inspiring. *Arenaria alfacorensis*, assorted *Acantholimon*, and additional cushions made one south-facing outcrop particularly noteworthy in another section of the rock garden.

On the north-facing slope opposite the rock garden across a shallow valley, the woodland garden grew all kinds of treasures that we can only dream about growing well in Denver with its steppe climate and alkaline soils. Woodland *Primula*, Himalayan *Corydalis*, *Glaucidium*, Himalayan *Rhododendron*, and assorted humidity- and acid-loving gems thrived alongside alkaline tolerant woodlanders like *Epimedium*, *Anemone*, and *Trillium*.



Primula maximowiczii - one of the Chinese primulas in Peter Korn's garden

The first full day was spent at Göteborg Botanic Garden with a short tour from Johan Nilson of the Alpine Division. Starting in the rock garden I spent the better part of the day in amazement. Very respectable collections of plants, from many regions of the world, call the rock garden home, with a large emphasis on European and Asian plants. It was fun to see so many Asiatic plants that I had only previously read about. Topping it off, a large waterfall spills down the cliff in one of the most naturalistic water features I have seen. Wandering into the Asiatic garden proper, giant rhododendrons, magnolias and prunus were in full bloom. Again, many plants that simply limp along in Denver's steppe climate were in their full glory.



Waterfall at the top of the rock garden in Gothenburg Botanic Garden

Passing back through the rock garden, I climbed a few of the bluffs above the rock garden to get a glimpse of the surrounding landscape and perhaps a bit of Göteborg itself. The rounded granite bluffs, with a stunted open forest of oaks, pines, birches and poplar, could have been the Upper Peninsula of Michigan where my father grew up. It was easy to see why so many immigrants from Norway, Sweden, and Finland chose the northern regions of Michigan, Wisconsin, and Minnesota – it reminded them of home.

Back down from the bluffs, I sauntered through the bamboo glen full of yet more Asiatic gems, including the bulk of the *Rhododendron* collection. Despite being at a rather high latitude, Göteborg is just mild enough to grow many of the Himalayan rhododendrons rather well, and despite the harsh winter they were in perfection. Beneath the rhododendrons grew a very nice assortment of American and Asiatic woodlanders. Assorted bamboos added texture and interest beneath the canopy of mature *Quercus* creating one of the loveliest woodland gardens I have seen. Having many of the rhododendrons in full bloom made it that much more spectacular.

Passing on down the hill through the perennial beds (a few were really “rock garden borders” planted with an assortment of staple plants for rock gardens) and on to a bed devoted to the dwarf rhododendrons from the higher reaches of the Himalayas, I was amazed

at the amount of color everywhere from the beds of bulbous *Corydalis*, assorted spring bulbs both naturalized and bedded out and assorted hybrid primulas. Göteborg knows how to welcome in spring with their beautiful displays. I think we could learn a trick or two from them here in the US – no masses of pansies and Darwin tulips. Don't get me wrong, pansies – and tulips are beautiful in municipal plantings, but in too many botanic gardens in the US they are main spring display.



Rhododendrons are one of the glories of the Botanic Garden

The majority of the day had just been an appetizer for the bulb collection and Mediterranean house. Göteborg is famous for its world class bulb collection thanks to the work of Henrik Zetterland and many others. Peter was due to pick me up in an hour and I had just arrived at the bulb house! Gawping, and snapping photos of many Central Asian geophytes, while admiring many western natives that I have grown up with, all growing to perfection, was an almost religious experience. With just half an hour left, I passed into the Mediterranean house with its tufa rocks given over to chasmophytes and other difficult plants from cliffs and crevices around the world. *Dionysia*, choice *Corydalis*, *Verbascum*, *Physoplexis comosa*, and porophyllum *Saxifraga*, were just a few of the gems causing me to gasp every few seconds.

Peter's "Nerds Saturday" is the opening day of the summer season





The tufa rock wall in Gothenburg Botanic Garden's Mediterranean House with *Verbascum* and *Corydalis* prominent among the plants in flower

for his nursery, and a day when Peter invites international speakers and puts on a buffet, so we focused on talks. Peter and his brother Stellan shared photos from western and Central Asia: stunning photography and funny stories that bring the trips to life. Stellan's photos of the steppe in Kazakhstan starting in late winter through the spring and into the summer were amazing! How fun it was to see fields of snow turn to meadows of brightly colored tulips or *Pulsatilla*. My talks covered Denver Botanic Gardens, Northern Mexico, and the western US. All in all, "Nerds Saturday" was a great day, but there were still more great plants to be seen in the flesh.

Monday was a day to revisit the Botanic Gardens, and to tour some private gardens north of Gothenburg. Focusing solely on the backup houses with Henrik and Peter blew my mind again. The alpine house, with its exhaustive collection of choice alpines from almost every corner of the world, was inspiring. Western North American, Asian, South American, European, and New Zealander, all vied for attention.

Next it was on to the backup bulb house. A stunning collection of Asiatic and western North American bulbs awaited us. It was great fun to see large collections of many genera fleshed out to truly show their full diversity: *Muscari*, *Gagea*, bulbous *Anemone*, all caught my eye as they were at their peak on this particular day. As always, it was wonderful to see many of the bulbous plants from Western North America finally getting the attention they deserved. Before we left I had a chance to pass through the house devoted almost solely to *Dionysia*. While out of flower, the array and size of buns was almost more than I could handle. I needed a moment to take it all in.

As if Peter's personal garden and the Botanic Garden were not enough, we picked up Johan Nilson and headed north to visit a private garden housing the largest collection of hardy cacti in Sweden. This was certainly a very impressive collection, but it was also artistically done, a feat that can be hard. Using tricks such as eaves of the house, and a small garden covered with a plastic roof to keep off the rain, the gardener was able to grow an impressive collection of cacti and yucca. Impressive collections of rock garden and alpine plants rounded out the garden. Other gardens we visited were also beautifully done with stunning specimens of conifers, deciduous trees, shrubs, alpines, rhododendrons, woodland perennials, as well as classic garden plants all grown to perfection.

Gothenburg made a lasting impression with its amazing collections, beautiful gardens, and enthusiastic devotees to rock gardens and





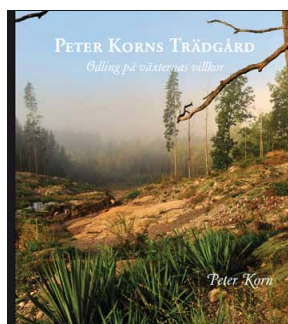
Draba collection in Gothenburg Botanic Garden's alpine house

alpines. There is much I learned which will contribute towards improving Denver Botanic Gardens collections and displays, and I'm looking forward to being able to demonstrate this in the next few years.

Peter Korn's speakers tours of NARGS chapters have given many members some introduction to his approach to gardening. Now he has published an extravagantly illustrated book, in Swedish :

PETER KORNS TRÄDGÅRD : Odling på växternas villkor

and there are plans for an English edition at some time during 2013. A review will appear in a future issue of the *Quarterly*.



Treasurer's Report

INTRODUCTION AND SUMMARY

Included with this report you will find a Balance Sheet as of December 31, 2011, and a Comparative Profit & Loss Statement for year end 12/31/2010 and 12/31/2011.

As of 12/31/2011, all Bank Account and Investment transactions have been recorded and balanced to the appropriate year end statements. Our financial records are recorded on a QuickBooks small business accounting system and, during 2011, our old version of QuickBooks was upgraded to the most current version, QuickBooks Pro 2012. Also, the Chart of Accounts was modified in order to better reflect our current operations and to make financial reports easier to understand. These changes will become effective in 2012.

Below, I have listed those areas of Net Income and Net Expense (all figures in US \$) that have a significant impact on our operations:

NET INCOME	2011	2010
Memberships	75,345	78,265
Donations including President's Discretionary Fund	10,043	6,025
Interest	10,384	12,975
Advertising	2,496	1,460
Book Service	1,301	(11,874)
NET EXPENSE		
Seed Exchange	1,342	3,709
Speakers Tour	4,571	4,625
Web/Internet	7,437	3,750
Quarterly	68,354	62,846
Grants/Awards	7,655	8,233
Administration		
Executive Secretary	15,099	15,201
AdCom	1,662	4,647
Other	3,939	4,567

The Expense analysis shows that the significant losses by the Book Service in 2010 have been eliminated and a small profit was earned in 2011. The Seed Exchange continues

to produce a loss but less than in the previous year. Our expenses associated with the Web/Internet have increased due to the programming expense required to provide on line ordering for the Seed Exchange. You also see an increase in the recorded expenses in 2011 for the Rock Garden Quarterly. However, in 2011, expenses were recorded for printing five editions of the Quarterly rather than the normal four. Therefore, after adjusting for this issue, the expenses in 2011 for the Quarterly show a slight decrease.

Respectfully submitted,
Bill Adams, Treasurer

BALANCE SHEET at December 31, 2011 (all figures in US \$)

ASSETS

Checking/Savings

Cash in Bank - Wells Fargo Membership	6,470.40
Cash in Bank - PNC Bank	64.73
Cash in Bank - Wells Fargo MM	49,304.13
TOTAL Checking/Savings	55,839.26

Other CURRENT ASSETS

Investments - Wells Fargo Advisors	315,000.00
Total Other current assets	315,000.00

TOTAL ASSETS **370,839.26**

LIABILITIES & EQUITY

EQUITY

Unrestricted (retained earnings) 215,912.71

Restricted Funds

Norman Singer Endowment Fund	
Corpus	148,431.87
Income	(530.79)
Norman Singer Endowment Fund Total	148,901.08
Robert Senior Award	1,275.72
Carleton Worth Award Fund	3,337.78
President's Discretionary Fund	
Disbursements	(558.50)
Donation	5,000.00

Restricted Funds 157,956.08

NET INCOME (3,029.53)

TOTAL LIABILITIES & EQUITY **370,839.26**

PROFIT & LOSS - January through December 2011 (US \$)

INCOME

CONTRIBUTED SUPPORT		85,946.33
Memberships	75,344.79	
Donations & Special Requests	5,601.54	
President's Discretionary Fund	5,000.00	
EARNED REVENUES		33,890.37
Interest	10,383.55	
Advertising	2,495.96	
Book Services	3,708.07	
Seed Exchange	11,269.19	
2011 AGM	5,249.00	
Miscellaneous	484.12	
TOTAL INCOME		119,836.70

EXPENSE

GRANTS, STIPENDS and AWARDS		8,213.60
Stipends	1,500.00	
Grants - Singer Endowment	6,000.00	
Awards	155.10	
Presidents Discretionary Fund	558.50	
BANK FEES		1,513.17
ADMINISTRATIVE EXPENSE		19,185.93
AdCom	1,661.68	
Executive Secretary	15,098.72	
Accounting	750.00	
Insurance	1,622.00	
Miscellaneous	53.53	
PROGRAM SERVICES		95,512.03
Book Service	2,406.61	
Seed Exchange	12,611.39	
Speakers Tour	4,571.36	
Internet Services	7,436.95	
Committees	119.44	
Quarterly	68,354.28	
Miscellaneous	12.00	
TOTAL EXPENSE		124,424.73
NET PROFIT (LOSS)		(4,558.03)

The following Balance Sheet transactions have been detailed in this Profit & Loss for comparative purposes:

NARGS

Bulletin Board

News supplement to the Rock Garden Quarterly

From the NARGS President

It's been a busy time for NARGS these past few months. We've begun an initiative to replace our current website, which is truly antiquated by current standards, with a more useful, multifunctional, high-impact website for our next decade. Ben Burr, our Recording Secretary and a member of the Manhattan Chapter of NARGS, is heading up the project, working with our Internet Committee chaired by Esther Wrightman of Ontario. We have also established an Elections Committee, chaired by Bill Adams, our Treasurer and a member of the Rocky Mountain Chapter, charged with creating a mechanism for electronic voting via the Internet so that our next election (in 2013) will be the first in which all NARGS members will be able to vote, regardless of whether they can attend the National Meeting. You'll find more details on both of these initiatives in this *Quarterly*.

By the time you read this, you'll almost certainly have had an opportunity to view the Internet version of the *Quarterly* on your computer, Kindle, iPad, or smartphone. We contracted with Allen Press of Lawrence, Kansas, the printer of our *Quarterly*, to utilize their software product, BrightCopy, to get the *Quarterly* online. This issue and the next will be available to everyone who finds our website, but after that second issue, only NARGS members will be able to view subsequent issues of the *Quarterly* online. This will create an added incentive to join NARGS, given the quality of the publication and the new access points for members to read it. Yes, the paper copies will continue, since almost all of us are quite fond of the "real thing," but over time we'll find more and more members migrating to the electronic version, which can only help us as the world transitions ever more completely into the digital age.

I've been a member of NARGS for some 15-plus years now and I've had the opportunity to meet hundreds of fellow gardeners from

all over the world, and I've exchanged emails with hundreds more. That's part of the joy of belonging. With virtually no exceptions, I've enjoyed the meetings and the email communications, and have learned more than from these people than I could possibly describe. And in all those years I've met almost no one who appeared to have a sense of entitlement, or were full of themselves, or who made me feel in any way that they thought themselves superior to me or to other rock gardeners. To the contrary – rock gardeners, almost to a person, have shown themselves to be the least class-conscious people I've ever spent any time with, worked with, or socialized with.

Nevertheless, despite what I've just said, over the past few years I've discovered that there is a feeling that the members and Chapters of the Western United States are treated as second-class citizens by the Eastern "grandees." I first heard of this in Portland, Oregon during the National Meeting in 2009, and I experienced it again during our recent National Meeting in Everett, Washington. Though not a widespread phenomenon, this is more than a relic of the past – it's a strangely vigorous feeling that noticeably colors numerous interactions. I've asked several longtime NARGS members from Western chapters about it, and each insisted that there is, in fact, Eastern prejudice against the West. Even though none of them evinced a single actual instance of such behavior, they were convinced that it is real, and that it is viewed as a serious problem by a lot of Western members.

As NARGS President this obviously concerns me, and if there are members (or Chapters for that matter) who feel that they have suffered from such behavior at any point I can only apologize on behalf of NARGS. Obviously, such a feeling is something that would concern any NARGS President. But, looking back through years of records, of awards, list of leaders, venues for meetings, I've been able to trace no evidence of any such bias, and I don't personally observe it in action. And I'll make sure that there's never any justification for any group of members (Eastern, Western, MidWest, Canadian, overseas) or any individual to feel that they're not equally treated by NARGS or anyone acting in its name.

To end on a positive note, I'd like to thank all of the people who help us to grow and flourish with their work for the Chapters, their contributions to special projects like the Seed Exchange and the Forum, and their service on our committees and as officers of NARGS. Our organization is almost entirely dependent on volunteers, and even the very few paid staffers make so little that the term volunteer is more

appropriate than employee for them as well. Our webmaster, Chris Klapwijk, put in hundreds of hours to work his magic with the website last year, and was paid a pittance for his efforts. Malcolm McGregor and Bobby Ward each perform miracles in their respective jobs, and again, the compensation they receive is almost embarrassing given the quality of their work on behalf of NARGS. And Laura Serowicz, working with Chris Klapwijk, provided us with our first online Seed Exchange, which worked as well as any of us could have hoped. So let's all thank them, whenever the opportunity arises, because without them, there really wouldn't be a NARGS.

As always, please keep in touch. I enjoy your emails and letters, and it gives me a real connection with members whose perspectives are so valuable as we try to adapt and grow.

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

LIFE MEMBERS & PATRONS

The following recently became NARGS Life Members

Sonia and Ian Taylor (United Kingdom)

The following became a NARGS Patron

Katherine Mauney (North Carolina)

NARGS Donations Appeal

DONATIONS between February 1st and April 30th, 2012

GENERAL FUND or UNDESIGNATED - \$60

DONORS

Finn Larsen (Norway)

Renee Johnson (Virginia)

Robert Gibson (Virginia)

Laurie Lange (New Mexico)

Nicholas Day (New York)

HERBERT MEDAL

The late Harry Hay, longtime NARGS member from Tadworth, Surrey, U.K., was awarded the Herbert Medal, the highest award from the International Bulb Society, for advancing the knowledge of bulbous plants. The award was presented shortly before he died at age 88.

SEED EXCHANGE REPORT

The 2011-2012 NARGS Seed Exchange concluded successfully with 751 orders filled in the main distribution and 260 orders filled during the second round (with ardent seedistas buying as many as 100 additional packets!). We received a noticeably lower amount of seed from our donors, perhaps due to extreme weather conditions around the world. Hopefully, the weather will be more temperate everywhere, and there will be a great bounty of seeds this season.

We owe grateful thanks to Laura Serowicz, our Intake Manager (who also handles so much of the Seedex processes); Joan Haas who, with help from Mark Brownlee and the volunteers of the Delaware Valley chapter, coordinated the main distribution of seeds; and BZ Marranca, who led the Adirondack chapter members in the second round of seed distribution. Thanks go, too, to the many volunteers--chapter groups and individual members--who patiently divided and repackaged the donated seed so that hundreds more could enjoy them.

An exciting feature of this year's Seedex was the initiation of the new online ordering system, created by our webmaster, Chris Klapwijk. It was used by two-thirds of the members placing an order for seeds and, since it proved to be so intuitive and easy, we expect an even higher percentage of members to use it in the future.

Thinking ahead: now is the time to begin collecting and mailing your donations of seed for the forthcoming Seedex. Laura will need to have your seeds in hand by October 31, 2012, so please send your last shipment by late September. Canadian and overseas members will need to send their seeds a month earlier to allow time for the mails to carry them and for our inspectors to check them. The necessary import permit, mailing label, and donation form are enclosed with this copy of the *Rock Garden Quarterly*. If they were somehow omitted or lost, please contact Laura immediately, and she will send you a new set:

Laura Serowicz,

15411 Woodring Street, Livonia, MI 48154-3029, USA.

<seedintake@twmi.rr.com>

Look around your lovely gardens: there are many, many plants that you could share with your fellow NARGS members (and sending seeds is a whole lot easier than digging and packing plants). A donation of only five packets from different kinds of plants will give you Donor privileges, which allow you to request an additional ten packets of seed, as well as having your order filled before non-donors (giving you a better shot at those rarer items).

The 2012-2013 Seedlist will appear on our website on December 15, 2012, and you will be able to begin ordering immediately online. Be sure that our executive secretary, Bobby Ward, has your most current email address, which is your entrée to the electronic ordering system. Contact him at: <nargs@nc.rr.com>

Naturally, we will still accept orders sent by postal mail. Any member who wishes to receive a print copy of the Seedlist and order form must send a request to me by December 1, 2012:

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

Rest assured that we do not share our address lists--print or electronic--with other organizations or companies.

Enjoy the remainder of your gardening season.

Joyce Fingerut, Director, NARGS Seed Exchange

www.NARGS.org

Updating the website

The Internet Committee has developed a prioritized list of expectations and goals for a new NARGS website. We already have a successful on-line seed exchange; a NARGS wiki; and a lively on-line forum. We want to increase the functionality of the website and make navigation more user-friendly and intuitive.

New initiatives will include: making it possible for designated users with appropriate levels of expertise to edit pages; creating an integrated membership database (don't worry - personal information will not be displayed on the website without your permission); and designing a webpage for the *Rock Garden Quarterly*.

These changes will improve content, free the web administrator, and the Executive Secretary, from trivial tasks, and generally make the site more dynamic.

NARGS has contracted with Monarch Digital to evaluate the current installation and to prepare a request for proposals that we can send to potential web developers. Daniel Dillon is guiding the evaluation for NARGS.

The Internet Committee would be grateful for your comments and suggestions.

Esther Wrightman - Chair <estherw@gto.net>
Claire Cockcroft <claire.primula@yahoo.com>
Hugh MacMillan <humanator@yahoo.com>
Benjamin Burr <bnfburr@verizon.net>

NARGS Awards

2012 Award winners

- Awards of Merit: Mike Slater
Alice Nicolson
Al Deurbrouck
- Edgar T. Wherry Award: James H. Locklear
- Linc and Timmy Foster Millstream Garden Awards:
Patricia Highberg
David and Wendy Sellars

CONGRATULATIONS TO ALL OF THESE WINNERS WHO HAVE CONTRIBUTED SO MUCH TO ROCK GARDENING IN NORTH AMERICA.

There were no nominations for the Marvin E. Black, Carleton R. Worth, and Marcel LePiniec Awards.

Call for Nominations for 2013 Awards

It's not too soon to start thinking about NARGS 2013 Award nominations. We did very well in 2012 despite very little time to get complete nomination packages due to the early Annual Meeting.

However, we now have a good ramp up for the May 2013 meeting. And more importantly, our judges have agreed to stay on for another year. Our resident artist, Lori Chips, is also designing additional certificates for us to commemorate the honors.

I would like to receive the new nominations by February 5, 2013. A listing of previous recipients of the awards are on the NARGS website.

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

MARCEL LE PINIEC AWARD is given to a nursery person, propagator, hybridizer, or plant explorer who is currently actively engaged in extending and enriching the plant material available to rock gardeners.

EDGAR T. WHERRY AWARD is given to a person who has made an outstanding contribution in the dissemination of botanical and/or horticultural information about native North American plants. The recipient does not have to be a member of the Society.

CARLETON R. WORTH AWARD is given to an author of distinguish writing about rock gardening and rock garden plants in a book or in magazine articles. The recipient does not have to be a member of the Society.

MARVIN E. BLACK AWARD is given to a member of the Society who excels at promoting membership in NARGS: organizing study weekends, national, and international meetings. The recipient should also be involved in such activities as planning trips to study plants and to meet other plant people. The emphasis shall be placed on a member who has helped other people to reach their potential in the plant world.

LINC & TIMMY FOSTER MILLSTREAM GARDEN AWARD is for an outstanding contribution to the North American Rock Garden Society: the creation of a superior garden. This is not competitive, but recognizes members' great gardens across the various styles and regions of the United States and Canada. It is intended to reward the creation of private gardens. There are four categories: Container Garden, the Alpine Rock Garden, the Woodland Garden, and the Special Garden.

Any additional questions, or concerns, please contact me directly:

Betty Spar, NARGS Awards Committee Chair

206 Wolfe Street, Alexandria VA 22314

Telephone: (703) 549-0214.

<bettyannespar@aol.com>

Wisconsin-Illinois Chapter Service Award Ann Munson

The Wisconsin-Illinois Chapter is proud to present Ann Munson with the 2011 NARGS Chapter Service Award. Ann joined the Chapter in 1997 and immediately began sharing her garden and knowledge with Chapter members. Ann has been very supportive of the activities of the Chapter, presenting programs and hosting garden tours at her home. Plant sales, trough workshops, and potluck dinners have been hosted at her lovely home and garden. In 2001-2002 Ann served as Vice-chair of the Chapter and from 2005-2007 she was Secretary. She also took on the job of coordinating our seed-packing effort for the NARGS Seed Exchange one year. Ann has been our unofficial "host" at our meetings since we started holding them at the Dane County Extension Building, including coming early to open and set up the room. This included making coffee and setting up the projector. Her cheerful and efficient service to the Chapter makes her a deserving recipient of this award.

Submitted by Ed Glover

NARGS SPEAKERS TOUR PROGRAM

2012-2013

The Speakers Tour Program is a wonderful service provided by NARGS to its members. It enables chapters, regardless of their size, to secure outstanding speakers at a very nominal cost. Fritz Kummert and Nick Turland are our speakers for 2012.

Fritz Kummert, a long time horticultural lecturer who provided extensive photographic assistance for the book, "Rock Garden Plants," arrived in the North America on March 23rd. He visited primarily western chapters where he was warmly received, and provided programs to eleven chapters. Many thanks go to all of the hosts who so warmly provided a home away from home and showed Fritz outstanding gardens and sites in their area. A special thank you goes to Fritz for taking the time away from his family and garden to make this eagerly anticipated tour.

Nick Turland, from the Missouri Botanical Garden in St. Louis, who is Co-Director of the Flora of China Project and a noted author and researcher, will tour primarily the eastern chapters in September 2012. The schedule for this tour is nearly complete and is available on the NARGS website.

Planning will begin shortly for the tour of primarily western chapters next spring (2013) of **James Locklear**, author of the beautiful new book, *Phlox, A Natural History and Gardener's Guide*. **Ian Young**, noted author, lecturer and artist from Scotland, will visit primarily eastern chapters in the fall of 2013. Planning for this tour will begin in the fall.

The speaking schedule, contact person and information for each chapter are posted on the NARGS STP site. If these speakers aren't visiting your chapter, contact another chapter where they are visiting and arrange to see our speakers there. It is a great opportunity to see these speakers and to meet and visit with other members of NARGS.

Comments and suggestions regarding the Speakers Tour Program are welcome.

Please contact Barbara Wetzel, the STP chair at <aparkplace@aol.com>

We have learned of the death of the following NARGS members

Patricia Carson, Otter Lake, Michigan
Billy N. Joyner, Flat Rock, North Carolina
Daun Kennedy, Val-des-Monts, Quebec
Flip Miller, Scotch Plains, New Jersey
Richard Rideout, Henniker, New Hampshire
Marlyn J. Sachtjen, Waunakee, Wisconsin

**WELCOME to our NEW MEMBERS
who joined between February 1st and
April 30th**

Adams, Sally, Tudor Cottage, 77 Church St., Coggeshall, Essex CO6 1UB, United Kingdom

Allison, Diane, 40076 Cummins Pl., North Vancouver, BC V7G 2E8, Canada

Anderson, Jeff, 6331 S. Southwood Dr., Centennial, CO 80121

Bloes, Cait, 99 Woodland Dr., Carmel, NY 10512

Brinkley, Caroline, 25850 75th Ave. SW, Vashon, WA 98070

Briston's Garden Center, 7454 Victor-Pittsford Rd., Victor, NY 14564

Bronsdon, Melinda, 12229 NE 64th St., Kirkland, WA 98033

Chang, Lucy, 1024 – 52nd St., Edmonton, AB T6L 1Z2, Canada

Collins, Jane D., 556 N. Piedmont St., Arlington, VA 22203

Cromwell, Cynthia, 5304 Deep Valley Run, Raleigh, NC 27606

Edwards, Carol, 827 F St. NE, Washington, DC 20002

Emmons, Mark, 981 Eleventh St., Boulder, CO 80302

Fehlman, Tim & Jackie Johnson, 1305 Chambers Dr., Colorado Springs, CO 80904

Florin, Robert R., 198-A Bergen St., Brooklyn, NY 11217

Foss, Ray, 8 Fairview Heights, Parkersburg, WV 26101

Garcia, Rossy C., 4312 Wolftrap Rd., Raleigh, NC 27616

Gawthrop, E. Roxanne, 188 Egremont Plain Rd., Great Barrington, MA 01230

Geathers, Cherry, 4153 Country Club Blvd., Cape Coral, FL 33904

Geiger, Pamela, 405 E. 54th, Apt. 11-E, New York, NY 10022

Gray, Linda, 1 Meeson Meadows, Maldon, Essex CM9 6YS, United Kingdom

Green, Helen, 25 Cardinal Dr., Hiram, OH 44234

Johnstone, Delphia, 829 Fairway Dr., North Vancouver, BC V7G 1Z5, Canada

LaConte, Linda J., 22035 SE 288th St., Black Diamond, WA 98010

Lange, Laurie, POB 541, Sandia Park, NM 87047

Lucas, Eric, POB 664, North Plains, OR 97133

Marquez, James, 1415 Grape St., Denver, CO 80220

Maxwell, Judith, 1405 Euclid Ave., Medford, OR 97504

McDowell, Brad, 1535 Speedway Rd., Verona, WI 53593

Mogensen, Lars Johan, Markedsgade 7, Hadsund, Jylland, DK-9560, Denmark

Morrow, James & Ann, 5648 Long Corner Rd., White Hall, MD 21161

Nankervis, Kenneth, 80 Armstrong Ave., Lisbon, NH 03585

Post, Dan, 254 Woodland Ave., Port Townsend, WA 98366

Ramik, Robert, 1250 Birchview Dr., Mississauga, ON L5H 3C8, Canada

Rice, Claire, 34 Specsutie Island Rd., Aberdeen Prov. Grd., MD 21005

Schueler, Lynn, 10631 31st Ave. SW, Seattle, WA 98146

Serrao, Margaret, 266 Arlington Ave., Toronto, ON M6C 2Z7, Canada

Sliter, Lizette, 92 Summit Rd., New London, NH 03257

Soden, Libbie, 27 – 91st Ave SE, Lake Stevens, WA 98258

Sternberg, Bruce, 7 Turkey Hill Rd., Ithaca, NY 14850

Thatcher, Robert, 154 Pole Creasman Rd., Asheville, NC 28806

Wiese, Peggy, 4674 E. Bails Pl., Denver, CO 80222

Winter, Scott, 1860 Rimwood Dr., Colorado Springs, CO 80918

Withrow, Ellen & Robert Noah, 14 Page Farm Rd., Lincoln, MA 01773

Mid-October is prime time for fall foliage color in Pennsylvania's deciduous forest.

Come to NARGS 2012 Eastern Winter Study Weekend

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

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

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

3. Pittsburgh Phipps Conservatory and Botanical Garden and National Aviary Rock Garden - the trip will

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

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

CONTACTS:

Len Lehman (CHAIR)
362 Vermont Ave.
Clairton, PA 15025
412-233-5902

Lclehman1@verizon.net

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

Autumn *in the* GARDEN

*- A Time for
Thoughts -*



**October 12-14
2012**



Karen Schmidt (REGISTRAR)
111 N. Benbrook Road
Butler, PA 16001
724-679-381
NARGSW2012@gmail.com

NARGS 2012 Eastern Study Weekend

hosted by NARGS Allegheny Chapter, October 12-14, 2012
Cranberry/Mars, PA.

REGISTRATION

To register for the Study Weekend, copy and fill in the form below and mail with a check to the Registrar at the address below

or

go to the website at www.nargs.org, click on Study Weekends and proceed to Eastern Study Weekend site. There will be a link to register online and pay with a credit card through PayPal.

Please make reservations directly with Sheraton Four Points Hotel, Pittsburgh North at 1-888-627-8175, 724-776-6900 and mention ROCK GARDEN SOCIETY to receive special rates. Or visit www.starwoodhotels.com/fourpoints/

TO REGISTER BY MAIL

Please print your name as you wish it to appear on your conference badge

Name #1 _____
Name #2 _____
Address _____
City, State/Province _____
Zip/Postal Code _____
Email _____ Home Telephone _____

Registration fee includes field trip or workshop, Saturday lunch and banquet, and coffee breaks.

		Name 1	Name 2
• Received before Sept 1, 2012	\$300	<input type="text"/>	<input type="text"/>
• Received after Sept. 1, 2012	\$350	<input type="text"/>	<input type="text"/>
• Optional Friday Buffet dinner	\$33	<input type="text"/>	<input type="text"/>
• Extra charge for Saturday Salmon dinner	\$6	<input type="text"/>	<input type="text"/>
• Guest cost for meals only	\$60	<input type="text"/>	<input type="text"/>

Total Enclosed

\$

Saturday Night Banquet Dinner choices:

Chicken Gregorius _____ Pasta primavera _____ Basil Cream Salmon _____

A cancellation fee of \$50 will be assessed for refunds after September 1, 2012

Please enclose check written to "Allegheny Chapter, NARGS".

Canadian residents: please send checks or money order in US dollars or with credit card at www.nargs.org

A. Field Trips (Select first and second choices for each person)

1. McConnells Mill State Park P1 _____ P2 _____
2. Jennings Blazing Star Prairie P1 _____ P2 _____
3. Phipps Conservatory & Aviary Rock Garden P1 _____ P2 _____

OR

B. Workshops P1 _____ P2 _____

By signing up for workshops, you may participate in all offered

Do you intend to show trough(s)? _____ If so, how many? _____

Mail registration forms and checks to
Karen Schmidt
111 North Benbrook Road
Butler, PA 16001
Email: NARGSW2012@gmail.com

SPEAKERS

Our Eastern Study Weekend featuring AUTUMN IN THE GARDEN has a great selection of noteworthy speakers.

Gwen Moore - The Rock Garden in Autumn - Gwen is well known to NARGS members as former editor of the Quarterly (for 11 years) and co-owner of Rocky Mountain Rare Plants.

Kathy Rienzi - Fall Blooming Native Plants - Kathy is proprietor of the Yellow Springs Native Plant Nursery

Mike Szesze - Carnivorous Plants in the Rock Garden - a different type of color - Mike is owner/propagator of Carnivorous Plants Nursery in Maryland and a retired educator.

Dr. Tom Lord - Manageable Ferns for the Rock Garden - Dr. Lord is professor of biology at Indiana University of Pennsylvania and author of the book *Ferns and Fern Allies of Pennsylvania*.

Matt Mattus - Fall Blooming Bulbs for Garden & Greenhouse - Matt is a writer and gardener from Massachusetts whose gardening columns are widely published in magazines and journals.

Gary Whittenbaugh - Crevice Gardens in a trough - the role of Dwarf Conifers - Gary is Past President of the Conifer Society

Rex Murfitt - Saxifrages in troughs - Rex is a noted author, lecturer and authority on Saxifrages. His books include *Creating and Planting Alpine Gardens* and as co-author *Creating and Planting Garden Troughs*.

Martha Oliver - Heuchera, Heucherellas and Tiarellas - bold leaf and color for the fall garden - Martha and Charles Oliver have introduced several award-winning plants of this group and operate Primrose Path nursery - a wholesale supplier of Heuchera, etc.

Workshops

Workshops will include: (1) Digital photography of Rock Garden and Alpine Plants; (2) Construction of Pop Bottle Troughs; (3) Preparing Programs using Digital Photography; and it is hoped to have further workshops including (4) Growing Orchids in Borders and in Outdoor Containers; and (5) Papercrete Troughs

Autumn in the Garden - A Time for Troughs
NARGS 2012 - Winter Study Weekend - Pittsburgh

NARGS 2012
WINTER STUDY WEEKEND
PITTSBURGH, PA

Autumn in the GARDEN

- A Time for
Troughs -





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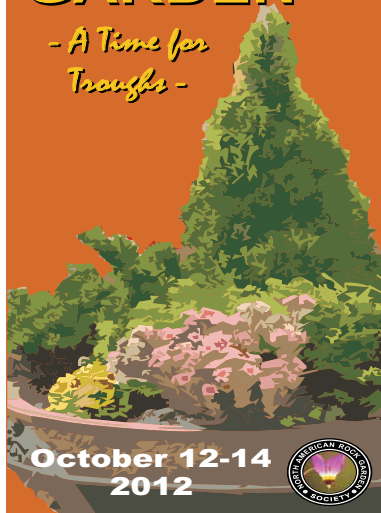
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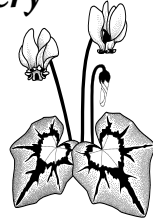
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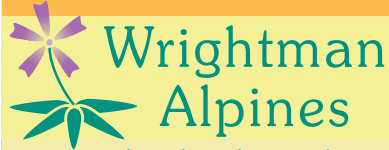
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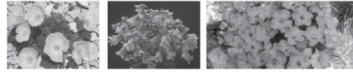
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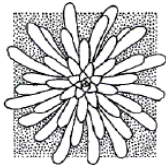
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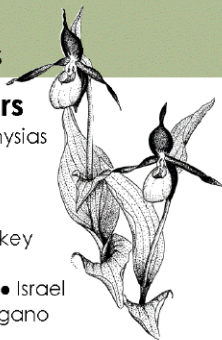
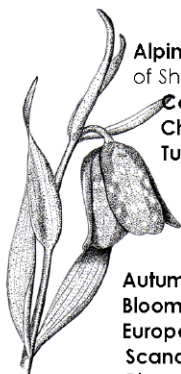
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Alaska (Anchorage & Mat-Su Valley)	Carmel Tysver - garden@pci.net
Allegheny (Pittsburgh, PA)	Albert Deurbrouck - adeurbrouck@verizon.net
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Delaware Valley (Philadelphia, PA)	Tammy Harkness - plant_nerd@msn.com
Fells (Newbury, NH)	Thelma Hewitt - Tkhewitt@aol.com
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Minnesota (Minneapolis/St. Paul, MN)	Michele Wallace - mrwallace@mwap.us
New England (Waltham/Boylston, MA)	Mike Saganich - ceruleanprism@yahoo.com
Newfoundland (St. John's, NL)	Todd Boland - todd.boland@warp.nfld.net
New Mexico (Santa Fe/Albuquerque)	Jean Warner - jean@cybercomp.net
Northwestern (Seattle, WA)	Claire Cockcroft - claire.primula@yahoo.com
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Ohio Valley (OH & surrounding states)	Chuck Gleaves - gleaves.charles@gmail.com
Ontario (Don Mills, ON)	Veronica Callinan - vcallinan@sympatico.ca
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Painted Hills (John Day, OR)	Gail Klodzinski - gailkathryn3@hotmail.com
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Potomac Valley (Alexandria, VA)	Richard "Dick" Hammerschlag - peachnfrog66@comcast.com
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Rocky Mountain (Denver, CO)	Mike Kintgen - kintgen444@hotmail.com
Shasta (Etna, CA)	Clara Church - collinus@sisqtel.net
Sierra (Sonora, CA)	Dianne Szymanski - dgszymanski@gmail.com
Siskiyou (Medford, OR)	Baldassare Mineo - italio@hotmail.com
Southern Appalachian (Asheville, NC)	Mary Lou Kemp - mlbkemp@bellsouth.net
Wasatch (Salt Lake City, UT)	Tony Stireman - tonystireman@msn.com
Watnong (Far Hills, NJ)	Ying Huang - yh2.2005@gmail.com
Western (San Francisco Bay area, CA)	Ted Kipping - tkippingsprint@earthlink.net
Wisconsin-Illinois (Madison-Chicago)	Dave Collura - jdsongraham@aol.com

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

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

OFFICERS _____

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

DIRECTORS OF THE BOARD _____

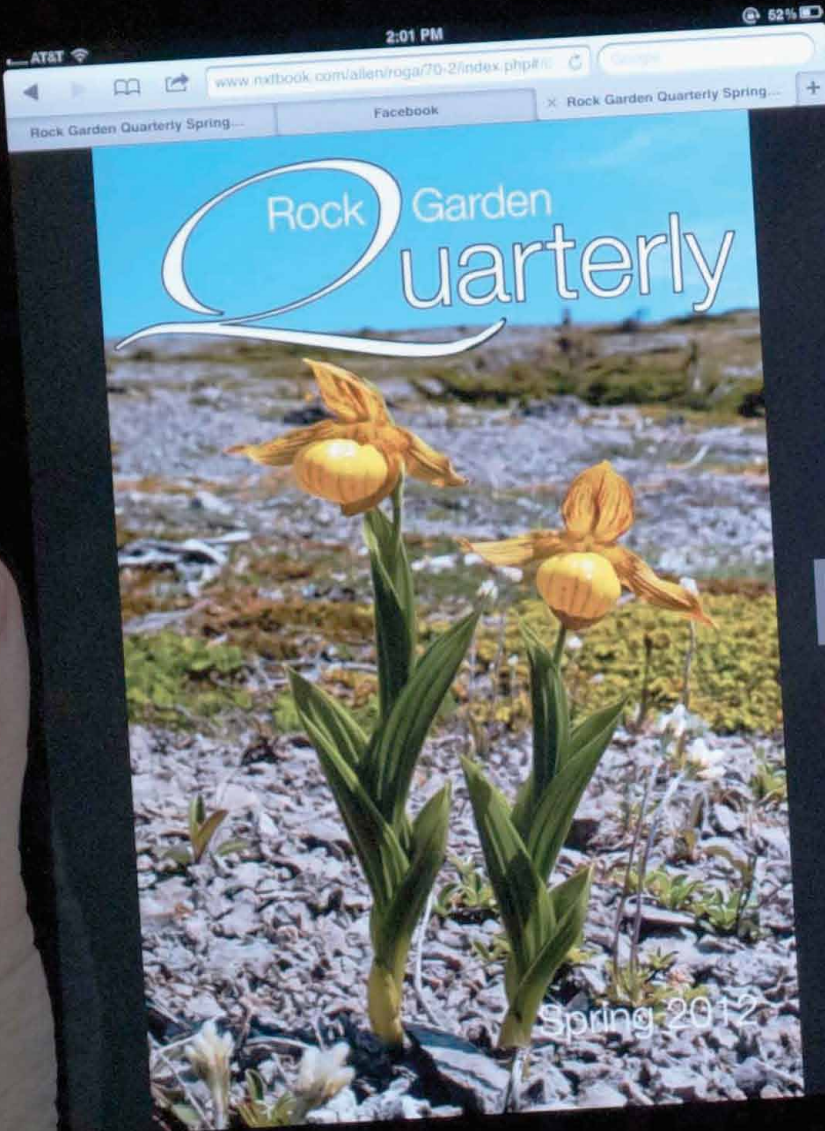
2010–2013	Jane Grushow, Ephrata, PA Philip MacDougall, Surrey, BC Anne Spiegel, Wappinger Falls, NY
2011–2014	Lola Lloyd Horwitz, Brooklyn, NY Janet Novak, Philadelphia, PA Betty Spar, Alexandria, VA
2012–2015	Jan Jeddelloh, Portland, OR Matt Mattus, Worcester, MA Gwen Moore, Lakewood, CO

MANAGERS _____

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