



NORTH AMERICAN ROCK GARDEN SOCIETY

The Rock Garden

QUARTERLY

SPRING 2015

CONTRIBUTORS

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

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Joyce Fingerut has known Alexandra Berkutenko, online, since 1994. She finally met her in person when, in 1996, she organized Dr. Berkutenko's Speakers Tour of ten NARGS's chapters. They remained in touch, and Joyce has proofread some of Alexandra's works for publication. It is a great pity that her final project, *An Atlas of Seeds of the Plants of Northern Asia*, will not see completion.

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John Mitchell is alpine supervisor at the Royal Botanic Garden Edinburgh where he has worked for the last 32 years. He has traveled on numerous expeditions, led tours, and in the last 5 years been tasked with exploring Central Asia and the Russian Altai. A well-known international speaker, John is also vice-chairman of the Joint Rock Plant Committee and convenor of both the Meconopsis Group and his local Scottish Rock Garden Club group.

Alan Oatway is an enthusiastic gardener who lives in the English Lake District. He indulges his interest in rock gardening at home and at Holehird Gardens, Windermere, home of the Lakeland Horticultural Society. A member of the Alpine Garden Society and Scottish Rock Garden Club, he is Show Secretary of the Kendal Show run jointly by the two societies each March. His favorite activity is to be in the mountains, finding and photographing alpine flowers.

Marcia and Randy Tatroe have gardened for nearly 30 years in Centennial, Colorado, on the high plains southeast of Denver where she grows any plant that can be coaxed into surviving the fickle climate and he moves rocks, digs holes, and builds mounds as instructed. Awarded Habitat Hero status in 2015 as an outstanding wildlife habitat by Audubon Rockies, anything that flies, crawls, slithers or climbs into their garden is welcome – or at least tolerated.

Front cover: *Oxalis erythrorhiza* – Ger van den Beuken

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The Rock Garden
QUARTERLY

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From the Editor

MOST OF THE last issue of the *Quarterly* was dedicated to articles about the Great Lakes region as a precursor to the Annual General Meeting taking place in May. In this issue there are details of those standing for the various vacancies on NARGS Board of Directors, and how to vote for them, and President Matt Mattus raises some questions (p.176) that need discussing at the meeting.

But most of this issue is much more far-flung, with articles on Afghanistan and Bhutan, on South American *Oxalis*, on troughs for the rock garden in Colorado, and memories of Jim Reveal and Alexandra Berkutenko; contributors from North America are joined by ones from Scotland, England, and Holland. And that variety encapsulates much of the fascination I have with rock gardening: it's not just about plants, it's about people and places as well. Both the Asian destinations are almost mythical places with some plants we can only dream of, and yet like so many other such places they also provide us with plants that we can aspire to grow. The memories of Dr Berkutenko make the obscure saxifrages, species allied to *Saxifraga bronchialis*, that I grew from seed on her seedlist that much more precious. Now I mustn't lose them. Similarly for anyone interested in the plants of the American West, eriogonums play a part and Jim Reveal's role in supporting the establishment of the Eriogonum Society is one that should never be overlooked. His expertise can be glimpsed in his monumental article "*Eriogonum* in the Garden" which was published in the *Quarterly* vol. 65 no. 2 (pp. 106–165) and can be found online on the NARGS website. Societies such as the Eriogonum Society and the Penstemon Society are invaluable: bringing dedicated specialists, amateur or professional, together to share their enthusiasms and knowledge, and making available plants that would otherwise be impossible to get hold of, or that we would lack information about.

So what else is new at this end? For various reasons I was a bit late sowing the seed this year. So will the seed of *Eranthis pinnatifida* germinate - seed of Ranunculaceae can be so difficult if not fresh? What about *Iris zenaidae*? Or *Castilleja rhexifolia* which I have sown with seed of *Artemisia* and *Townsendia* all together? The joy of sowing seed is that you never really know what will appear. Having been looking at some of last year's pots, I have just found a seedling, only the one so far at the end of February, of *Crocus paschei*. And you never know what you'll find. It is always intriguing.

Apart from all that I'm sorting through my pots of saxifrages and trying to ID those whose labels have writing that has faded beyond legibility. If they flower then I will probably manage and they can have a fresh label. And at the same time I can go round and check all those others so that I don't yet again have the same problem next year!



NARGS 2015 BACK TO ALPINES

YOU CAN STILL REGISTER for the 2015 Annual General Meeting May 7–10 in Ann Arbor, Michigan, at Weber's Inn.

See the NARGS website <www.nargs.org/ann-arbor-agm> or the Great Lakes special issue of the *Quarterly*, 73#1, winter 2014/15, for full details.

The three-days will be filled with:

Garden Tours – We will have two days of bus tours to selected gardens and natural areas

Programs – We will have three evening speakers plus workshops at the gardens visited on the bus tours.

Vendors – We have a large sales area with classic and choice rock garden plants, Great Lakes region native plants suitable for rock gardens, companion plants, orchids, books, and tufa.

If you would like to pre-order a larger quantity of tufa, please contact Michael Greanya <mfg10@comcast.net>.

For further information about the meeting, and questions, contact: Susan Reznicek <reznicek@umich.edu> or phone (734) 996-0692

NARGS 2015 - BACK TO ALPINES

DETAILED PROGRAM

Thursday, May 7, 2015

8:30 - 10:00 AM	NARGS AdCom Meeting
10:00 AM - Noon	Chapter Chairs Meeting - A Strategic Plan for NARGS
Noon - 1:30 PM	Lunch <i>On your own</i>
1:00 - 5:00 PM	NARGS Board Meeting
2:00 - 6:30 PM	Registration Table Open
4:00 - 5:30 PM	Sales Area & Silent Auction open
4:00 - 5:30 PM	Dinner <i>On your own</i>
5:30 - 6:30 PM	Evening Reception (hors d'oeuvres, cash bar)
6:30 PM	Door Prizes & Auction
7:00 PM	Opening Remarks and Introductions
7.30 PM	Speaker: Tony Reznicek <i>The Michigan Landscape and Gardening in It</i>
8:30 - 11:00 PM	Sales Area & Silent Auction open

Friday, May 8, 2015

7.00 - 8:15 AM	Registration Table Open
7:00 - 8:30 AM	Breakfast
8:30 AM - 3:30 PM	Bus tours of local gardens and natural areas
4:00 - 5:30 PM	Sales Area & Silent Auction open
5:30 - 6:30 PM	Evening Reception (hors d'oeuvres, cash bar)
6:30 PM	Door Prizes & Auction
7:00 PM	Dinner
8:00 PM	Speaker: Ger van den Beuken <i>Growing High Alpines at Sea Level or Below</i>
9:00 PM	Speaker: Ger van den Beuken <i>Argentina and Chile in 50 minutes</i>
10:00 - 11:00 PM	Sales Area & Silent Auction open

Saturday, May 9, 2015

7:00 - 8:30 AM	Breakfast
8:30 AM - 3:30 PM	Bus tours of local gardens and natural areas
4:00 - 5:30 PM	Sales Area open
5:30 - 6:30 PM	Evening Reception (hors d'oeuvres, cash bar)
6:30 PM	Door Prizes & Auction & Silent Auction Winners
7:00 PM	Dinner
8:00 PM	Annual Membership Business Meeting and Awards Presentation
8:30 - 9:30 PM	Speaker: Malcom McGregor <i>Rock Gardening — or What's a Heaven For</i>
9:30 - 11:00 PM	Sales area open

Sunday, May 10, 2015

10:00 AM - 5:00 PM	On your own - Open Garden Tours, Nursery visits, etc.
12:30 PM	Departure of Post-Conference Trip

Registration can be completed online on NARGS website <www.nargs.org>

On the Frontline of Botany: in Afghanistan

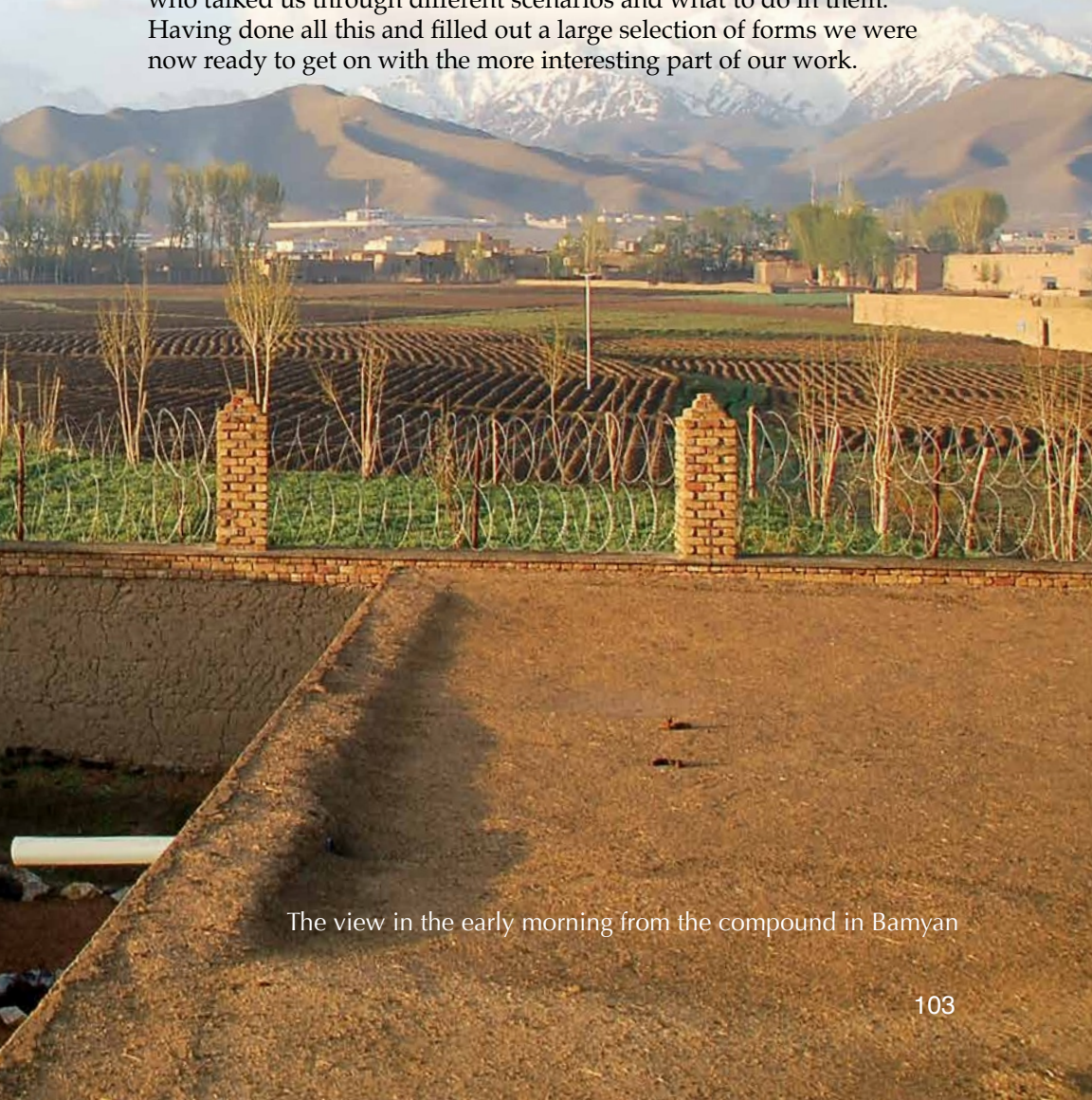
JOHN MITCHELL

IN 2011, TONY MILLAR asked me whether I would like to take part in a trip to Afghanistan. Tony is Director of Central Middle Eastern Plants at the Royal Botanic Garden Edinburgh, where I work as Alpine Supervisor, and the plan was that we would do some teaching of Afghan students in field botany. Afghanistan! Since I first saw pictures of the country, when I was a boy, it was somewhere I'd wanted to go, so without a second thought I said yes.



The next stage was going to be the more difficult: telling my family and, in particular, my wife who thinks I am mad anyway. She came round to the idea after I had spent a bit of time explaining (with the odd small white lie about what we were going to be doing and how safe it would be). My father, who taught me horticulture and has travelled as I now do, could see the attraction but had slight worries while the rest of the family thought I was completely off my trolley. So, having managed to convince my family that everything would be fine, Tony and I started planning the trip.

Unsurprisingly, the Royal Botanic Garden took our safety extremely seriously. One of the requirements, and one that was obviously worthwhile, was that we were to go on an awareness-training course run by an ex-member of the SAS, the British Army's elite Special Air Service, who talked us through different scenarios and what to do in them. Having done all this and filled out a large selection of forms we were now ready to get on with the more interesting part of our work.



The view in the early morning from the compound in Bamyan

As you can imagine getting permission to enter Afghanistan is very hard but we were also teaming up with United Nations Environmental Programme (UNEP). This meant we would be looked after by the UN and this was what made life easier to get permissions and made the RBGE look more favourably on what we were aiming to achieve. In the meantime, one of our many tasks was listing what we would need to take with us for the training of 24 students. The list was rather long: GPSs, blotters for pressing plants, cameras, tripods, flashlights, to mention a few things, and all this had to be collected together.

After about six months of hard work we had received all the paperwork which would allow us to progress. My flight out to Dubai was fairly normal as I went out on my own; Tony had travelled earlier in the week as he had some work to carry out and had taken most of the equipment. We met up in the hotel in Dubai and the next day we were heading off to Afghanistan. Our departure was from a different terminal and is the one that is used for all of Central Asia. It was very interesting watching all the different nationalities and it seemed surprisingly busy with westerners, but after an announcement it all clicked, all these people were soldiers on R&R and were heading back to barracks. Once they had departed there was only a handful of westerners left. After having to pay copious amounts of money for overweight baggage we were finally on our way.

On arrival in Kabul airport we were segregated from the locals and then we had to fill out what felt like hundreds of forms stating why we were here, what we were going to be doing, how long we would be staying, and so on. Once this was completed and once they had realised we were working in partnership with the UN we were taken out of the airport and told to wait in an empty car park till our vehicle came to pick us up. Having never experienced a war zone before, it was very strange seeing Apache helicopters circling overhead and military personnel walking about armed to the gunnels. It was certainly a relief to see our UN car enter the car park and it was also nice to see a friendly face.

Once we had packed the vehicle with all our luggage, we set off to the compound where we would be staying. The drive took us through Kabul. Quite scary for the first time as all you can feel is that everyone is watching you. We drove through areas that looked prosperous with fresh vegetables for sale and a butcher's shop full of meat. In Kabul there are areas where it is safe to stay and these are patrolled by the Afghanistan army and are called the "ring of steel." There is also an area called the green zone where all westerners are housed and this is supposed to be the safest area to stay apart from the huge UN compound which must be a mile square. But our wee compound was near where Andrew, our contact from UNEP, was living. From the



Greengrocer's shop in Kabul

outside it looked like nothing: armed guards, sand bags, and CCTV, were the only things that we could see. We entered the compound and were met by more armed security who greeted us and then it opened out into this amazing courtyard with potted plants and fountains. It was quite surreal. Settled, we had meetings to attend with government officials for rural affairs who were very keen to meet Tony and thought what the RBGE were attempting to do was an excellent opportunity for young Afghanistan students to partake of. After this we were taken to Kabul University and again Tony had been here before, teaching some students but only allowed to work in the university campus, which was quite large, and only when he had a private guard with him. Not ideal when you are trying to teach. In addition some students from Kabul University had been involved in a correspondence course run from Edinburgh and these students were excellent.

We were taken to the herbarium which had been restored through money from America. During the conflicts the herbarium was in disarray and one of the lecturers at the university had taken all the herbarium sheets back to his house to safeguard them. When the conflict had passed they were returned to the herbarium. The state of

the herbarium was then pretty poor but with the cash injection they have managed, with help from botanists from America and Edinburgh, to bring it back to its former glory and they have even started to digitise the sheets.

Next day we had time to sort through all our kit and pack for the flight to Bamyan. The only way you can get to Bamyan is by flying, and for the flight you also need to get permission from the UN as there are only a few flights per week and the plane only flies when the conditions are good as you fly just above the tops of the mountains. Then the descent into Bamyan is quite hairy. And then you land on a gravel airstrip. We were just about to leave the compound in Kabul when we got the call that we were in lockdown as the army had found several unexploded car bombs. It meant we were not allowed to leave the compound which felt a wee bit scary. Once the situation had resolved itself, after 3 days going stir crazy, we got the go-ahead for our flight.

Bamyan is a small town set in the Hindu Kush mountains. It was a destination in the 1960s and '70s for free-minded people to go and relax. It was also a skiing area and probably best known for the famous stone Buddhas, subsequently blown up by the Taliban. The town is one long main street with tea houses set back from the road and it was a pleasure to be able to spend a morning, walking about looking at shops, and also getting supplies for our trip with the students. In the evening we started to put together our herbarium presses with newspapers and

One of the empty niches where the giant statues of the Buddha were blown up



cardboard and made sure all the GPSs and cameras were working as in the morning we were going to be meeting the students and start our trek in the Hindu Kush.

It was an early start as we drove up to Bamyan University where we were to meet 18 student from this campus while another 6 had flown up from Kabul University. As this was the first time anything like this had taken place, ground rules and security were at the forefront of proceedings. To help with communication and security, we had 4 people from Conservation Organisation for Afghanistan Mountain Areas (COAM), which is based in Bamyan, and 2 senior members from UNEP to help us. After a short session in the classroom, which included PowerPoint presentations of what our objectives were, we all jumped into 3 minibuses and were taken to the start of our trek in the Topchi Bosh Kusta. Lunch was handed out and we all sat down eating when there was a loud rumble and a herd of about a hundred goats and sheep came down from the pass. This was not a sight we wanted to see, herds of sheep and goats tend to eat a lot of vegetaion, but we set off up to our pass.

We had hired donkeys from the village to take our luggage up, and walking down from the pass other donkeys were bring cut *Artemisia* which would be used for burning. It was a slightly disturbing sight as, if this *Artemisia* steppe is destroyed, the likelihood of erosion on the hillside and the chance of washout is increased. Nevertheless at last we were going to be looking for plants.

A load of *Artemisia*





Dionysia tapetodes

Gagea meadow



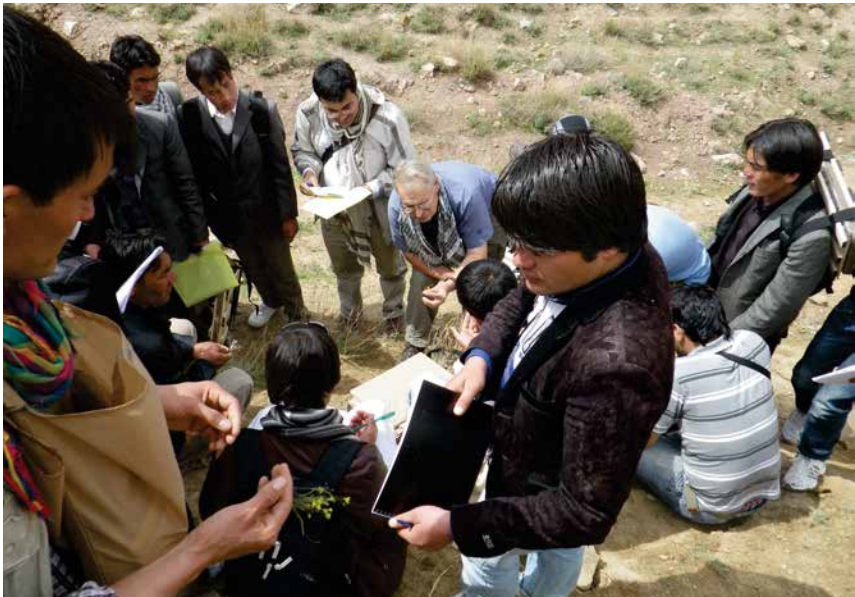
As we slowly walked up the valley, we came to a ridge where I could see yellow patches. When we got closer it was great to find our first plant. And what a plant: *Dionysia tapetodes* with some plants quite small but one huge, it was at least 3 meters wide by 2 meters deep. What a spectacular sight! Farther on we were slightly disappointed as there were not many other plants in flower apart from, in the snow melt, a meadow of a *Gagea* sp., which lifted the spirit.

We were told that the walk in total would take about 4 hours but in this time we had not even reached the top of the pass and it was starting to get a bit wet and cold. The students had been told they were going on a trek but they all turned up in their Sunday best – not ideal for the weather.

Once we had reached the summit we began the walk towards the village but, as the sun was setting and we were still walking, the student were getting slightly disheartened, and Tony and I were getting slightly worried about being lost on the mountain with all these students. A decision was made to send one of the team on, to go and get locals to come and guide us down, as we only had 6 flashlights. After another 6 hours we turned up weary, hungry, but all intact. We were very relieved that we had made it to the camp.

The locals had given up their homes for the group to sleep and we were split into groups, the older generation in one room, and all the students and younger staff in another house. And, once we were all fed, the morale was lifted.

Working on plant identification, Topchi Bosh Kusta



The start of a new day meant we could actually look round the village we were staying in and take in the surroundings. The area we were staying in was Ahangaran Valley and this was the first time anything like this had happened there: some of the local children had not even seen westerners and this was quite humbling experience.

The students were split up into groups and on this first day we were going to teach them how to take herbarium specimens, digital photography, and the use of GPS. Each group was given certain tasks: for the GPS, for example, they had to prove that they could work out reference points and coordinates and altitude. For herbarium work, they had to make five collections and do all the collection notes to accompany them. Lastly, they had to use digital photography, which involved taking pictures of the plant and cataloguing and referencing them with the herbarium sheet.

We spent three days in the village and by the end of the stint the students were getting very confident with their tasks. The idea was to traverse the mountain range but going by our earlier exploits, and the students being slightly weary after the walk, it was decided to hire taxis to take us to our last destination. So, after having said our huge thanks

Primula auriculata



to the villagers for their help and support we headed off.

The journey took us down a very fertile valley where the dominant tree is poplar. This is planted as it grows extremely quickly and can be used for building materials and also firewood. We did not have much time for botanising on the way down but we did manage to stop and found *Primula auriculata* growing by the streams, and up on the loose stony screes *Rheum altaicum* which the locals dig up to eat the stems. Usually you find a pile of leaves on the ground so this was nice



Allium akaka



Foladi valley, Bourghasan

Evening with the two laptops





Students still working after the power was switched off

to see a plant untouched. Growing beside it were plants of the unusual *Allium akaka* with its large single leaf.

After a 5-hour drive we arrived at our destination: Foladi Valley in Bourghasan region. We were staying in a local community hall and the idea was to stay here 3 nights and explore around a lake up in the mountains, but our local guide told us that since the season was late there was still a large amount of snow on the mountains. He was worried about avalanches so we decided that it was not worth trying to reach this area.

The students were again tasked with different objectives. They were still building up their portfolios of herbarium sheets and digital skills but this time we were looking at mapping areas. This involved describing habitats, very useful as some areas that you map can change very quickly through overgrazing, rockfall, or even cultivation. So having a reference is very important.

We also taught them to use drawings as if you don't have cameras this is a good way to show change. One other important part of field work is keeping very good records, so again students were told to make fieldnotes and input them into data sheets. You may be able to imagine that having so many groups all wanting to use two laptops was quite demanding. To add into the mix all power was off by 7 pm and as you can see by the pictures is was quite a struggle for the students to achieve all they needed.



Students from Bamyan preparing specimens for pressing
The whole group with author (back row 3rd from right) and Tony Millar (back row 5th from right)





Iris porphyrochrysa

This area was one where we knew that a certain iris grew so we started looking for the plants and came across lots of leaves. Then just round the corner of the hill we spotted the only plant in flower. This was the Juno iris, *Iris porphyrochrysa*, a stunning plant with the distinctive glaucous leaves with a white edge, and the lovely brown-turning-to-orange corolla. It would have been great to have seen them all in flower but just seeing one was worth the trip.

The course was coming to an end and I think all the students enjoyed their time with us. In our minds, the thought was that if we had managed to enthuse 4 or 5 new students about the world of botany and conservation then all the time and effort we had given the course was





At the end of the road a panorama of the Koh-E-Baba with Andrew Scanlon, Country Programme Manager for UNEP (left), main contact for John and Tony, and assistant



Hesperis cf. persica

worth it. In giving these young people a chance to improve their future careers we had achieved what we had set out to do.

Once we had handed out the certificates to the students, Tony and I had 3 days to go and explore. Our first excursion was back up to the Hindu Kush and we were going to check out a different valley. We were taken up in the official UN car and went up through some of the most stunning scenery, with the colour of the mountains all in shades of brown, grey and red. The road itself could barely be classed as a road but when we reached our destination it was well worth it. This is spectacular country.

The first plant we saw was a striking crucifer, a *Hesperis*, close to *H. persica*, that looked amazing with its large green leaves coming out of the brown sand and a spike of purple flowers. This small area was the only place we saw this particular plant. Further up the mountain we spotted the dainty *Tulipa clusiana* forma *diniaie* with leaves green above and tinged with a lovely red underneath, and sulphur-yellow flower on



Tulipa clusiana subsp. *diniaie*

Tulipa buhseana



red stems. We also found *T. buhseana* with white petals and a yellow eye but this was not a common species.

Our last visit was not as simple as we had expected. We were heading off to Band-e-Amir National Park and this was the first national park to be established in this region in 2009. Our colleagues from Bamyan could not come with us so they had to arrange a taxi for us and tell the driver where we were going as we could not communicate because of the language barrier. This made stopping where we wanted a somewhat haphazard process. For our driver the important part was getting to where he had been told to take us, waiting for us when we were out and about, and then bringing us back to the UN compound.

However, when we arrived in Band-e-Amir it looked like a moonscape in which not much would grow but as we were driving by we noticed thousands of *Eremurus* ready to burst into flower, and then when you drop down into the valley you come across stunning blue limestone lakes with tufa waterfalls.

We drove further into the valley and came across cliffs which on inspection proved quite fruitful. Growing at the base of the cliffs in partial shade *Anemone tschernaewii* was just starting to flower. This species is quite common through Central Asia but was nice to find. It normally likes to grow with its roots in damp soil. In a fissure in

Band-e-Amir





Anemone tschernaewii
Dionysia cf. *denticulata*





Primula capitellata

the rocks we were excited to find a *Dionysia* which was close to *D. denticulata*. They were only small plants, and these were the only plants we found, but this is the known type-locality for this species. As we walked further up the side-valley the heat was getting unbearable: plants have to contend with extremely hot conditions during the day and get very cold at night so when we came across what looked like a dry stream I was very surprised to see *Primula capitellata* growing. I had

seen pictures of this species growing by lakes so was very surprised to see the plant growing in these conditions. It was quite a large colony with 100 plants then nothing else as far as the eye could see. It is a very bonnie wee species with quite a thick leaf that is slightly farinose on the underside.

On our way back to the taxi which, thankfully, we could still see in the distance, we took a slight detour and went up on top of the cliffs and to my surprise we found *Androsace villosa* which was the last plant I would expect to find growing here. As you can see from the picture the soil is thick clay which gets very wet when it rains then goes like concrete when dry. But was a very nice plant to end what was a great day out before we headed back to the compound.

Our next day was used to collate all the material which we had collected with the students and photograph all the herbarium sheets. We said our goodbyes and then we were then taken to Bamyán airport for our flight back to Kabul. The next few days were spent speaking with dignitaries and people from UNEP and doing a brief catch-up on how we could improve on certain areas of the course before we flew back to Dubai for one day's rest and then back to the UK.

We are still waiting to go back to Afghanistan, but as the area is going through more change we have not yet been able to return but look forward to the day when we can. It is a beautiful and a magical place.

Androsace villosa



Photo Contest 2015

**Deadline for entries
extended to April 30.
Still time but only just.**

Class 1: THE ROCK GARDEN IN WINTER - NEW CLASS

This new class can feature an individual vignette or a more general picture - it doesn't have to be your own garden but please identify the owner. Hint: Frame your image carefully to exclude unattractive and unintended objects ... or move them!

Class 2: PORTRAIT OF A PLANT IN CULTIVATION

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

Class 3: PORTRAIT OF A PLANT IN THE WILD

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

Class 4: NATURAL SCENE WITH PLANTS

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

Class 5: CLOSE-UP

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

Class 6: NORTH AMERICAN NATIVE PLANT

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

Instructions for Entries

Digital images may be submitted in JPG or TIF format. Other formats may cause problems. Submit all your images on one CD or memory stick, with each image file renamed (if possible) 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 or memory stick as a ".doc", ".docx" or ".pages" file.

You may enter a maximum of ten images in each class but you are free to enter as few as you want. If you just have one perfect picture do send it in.

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.

**Deadline for entries
extended to April 30.
Still time but only just.**



Some South American Oxalis

GER VAN DEN BEUKEN

Oxalis erythrorhiza - Cerro Cathedral



THE GENUS OXALIS is the largest within the family Oxalidaceae. The genus is spread worldwide with species being found in every continent except Antarctica. The species diversity is particularly high in tropical Brazil and South Africa.

However, the species that are discussed in this article are mainly from the southern part of Argentina and Chile in the provinces of Santa Cruz, Chubut, Rio Negro, Neuquén and Mendoza, often summarized as Patagonia. This is a fantastic area with a huge variety of plants, which has left a great impression on me over the years.

The climate in the province of Santa Cruz in the far south is rather changeable. Especially in spring, when most plants awaken from their winter rest, temperatures are still relatively low, mainly 12C–15C (54F–59F), with rain or occasionally intermittent snow showers with almost continuous strong winds that can sometimes stir to violent storms.

During the winter months, from May to October, there is a lot of snow. This type of weather is clearly reflected in the vegetation that at low elevations of about 200 meters (650 feet) can be compared to the high alpine zone farther north. This rather unpleasant climate is caused by the temporary absence of the higher mountain ranges of the Andes.

Climate conditions change further to the north, where the Argentinian side of the mountains is mostly shielded by the Andes, and everything on the east side is quieter weatherwise, and also warmer and drier. In the provinces of Neuquén and Mendoza, spring and summer temperatures rise to more than 30C (86F), which particularly benefits the famous wine regions of Mendoza. The immense areas of pampas east of the Andes are very dry and empty with the only significant economic activity being based around large flocks of sheep and goats. Livestock owners can lead a solitary existence in their far-scattered estancias.



OXALIS LACINIATA

This is the southernmost common species of South American *Oxalis* with its range being predominantly in the southern province of Santa Cruz. The habitat for this species is distinguished mainly by the soils having relatively low humus, but rich and moist, typically on grassy and sandy slopes from as low as 200 m (650 ft).

The flowers are single and flower variation is extremely diverse from almost white to a beautiful dark blue colour. About the hardiness of this species there are quite a few disagreements. My own experience is of growing it in an alpine house, or at least in a place where the plants are protected from extreme cold. Depending on climate situation some growers have positive experiences with the cultivation in the open rockery.

Vegetative propagation is easy since it has scaly rhizomes which can easily be divided. This is best done in the fall when everything is settling in for a winter rest.

The best soil mix is one of peat with a fair proportion of basalt grit or at least of grit with a low pH value. It is of essential importance that drainage is perfect.



Oxalis laciniata in cultivation (above)
and in the wild (below)





Oxalis laciniata ex Finn Haugli

During the winter this species is no beauty at all, with nothing to see, but in the spring everything changes quickly with the emergence of the very attractive foliage and later the exuberant bloom.

We found the exceedingly beautiful subspecies *Oxalis laciniata* ssp. *pubescens*, which is not in cultivation, on the Passo Roballos at about 2200 m (7200 ft) altitude on a scree slope, a completely different environment to that in which we otherwise found the typical species.

Oxalis laciniata subsp. *pubescens*





Oxalis adenophylla - typical form in the wild, very like the typical garden form

OXALIS ADENOPHYLLA

Although this has a very wide distribution from Santa Cruz in the south to the province of Mendoza far to the north, it is only common on lava-like, sandy and stony soil, sometimes up to more than 3000 m (9800 ft) above sea level.

It can form cushions more than 50 cm (18 in.) across with the flowers usually one to a stem, occasionally two. The flowering time is relatively late in the spring through to mid-summer.

Oxalis adenophylla collected Volcan Batea Mahuida





Oxalis adenophylla - a very rich colored form

Cultivation of this species is quite easy. The winter hardiness is good, so a place in a light stony site (with low pH) is perfect.

There are not many forms of *Oxalis adenophylla* in cultivation. Almost always you see the same plants offered in garden centers or from breeders. To get something special in your collection, you'll have to rely on specialized growers of these plants, although gradually these more varied forms, like those of *O. laciniata* are spreading around.

Sometimes there is a possibility of collecting seeds from a plant. To collect seeds however you need to have some experience. The problem is that once the seeds are ready for harvesting, they are catapulted spontaneously from their capsule. So you have to be very alert but it is always exciting and interesting to see what the results are growing from seed.

Oxalis enneaphylla

Given that this the next most common species in cultivation after *O. adenophylla*, it is remarkable that it occurs only in the province of Santa Cruz, with Passo Roballos in northern Santa Cruz as its northern limit. In the south you will find this species, like *O. laciniata*, growing with other plants, but also on the most sandy and stony places. This variety of habitats, from wet grasslands to extremely dry and stony soils, helps explain the ease with which this magnificent species can be cultivated.



Oxalis enneaphylla

Growth is like *O. laciniata* with tuberous rhizomes and is easy to propagate by division. The flower color ranges from pale pink to intense dark purple and the flowers can be up to 3 cm (1.25 in.). Unfortunately most plants in cultivation are not the most dramatic. In the open garden it is on its best on a neutral to acidic stony place. Flowering is to be expected from April to June.

Oxalis enneaphylla 'Annette'





Oxalis nahuelhuapensis

OXALIS NAHUELHUAPENSIS

A common species in the provinces of Chubut and Neuquén at altitudes of 1,000–2,200 m (3300–6600 ft), this species grows in fine volcanic sand. With deep yellow flowers from a rhizomatous, loose green cushion, it is a species which has been grown in the past, sometimes from seeds. I have not yet had any experience growing this species nor with *O. compacta*, a plant occurring in the same places but easily identified with its compact growth with the green leaves changing to pale brown.

Oxalis compacta



OXALIS CHACHAHUENSIS

Little is known about this species. In 2012 we encountered this oddity in a single place in Mendoza. The location for this truly magnificent species was between coarse rocks which was extremely unusual among the species we observed.

Oxalis chachahuensis





Oxalis squamata

OXALIS SQUAMATA

This mat-forming species occurs from Neuquén northwards into Mendoza. The dry pampas is the ideal place where this species feels happy in dry volcanic sand. It is a striking species with its beautiful red-purple flowers. This plant does not seem to grow in large numbers in its natural habitat which surprised me: in cultivation it is a species perhaps best avoided since it can aggressively self-seed and expand massively.

OXALIS ERYTHORHIZA

In this survey of species, this is very much one of the most difficult to cultivate. It often grows in the most extreme places, for instance at 2400 m (7870 ft) on the rocky cliffs of the Cerro Cathedral in the Bariloche region. The hard cushions grow on those places where wind and rain have their impact on the plants. During other expeditions we found this species in other places, but not with the perfection as those on the Cerro Cathedral (see p. 125).

The single sulfur-yellow flowers are stemless. This species grows from a rhizome but it is only possible to propagate from cuttings rather than by division. The problem in cultivation is to keep this species in optimal form. I'm growing a plant here in the greenhouse that can not be recognized from its original form. It has very loose growth and no



Oxalis erythrorhiza

flowers or sign of them until now. The biggest reason is probably the lack of ultra-violet light. We must probably accept that our climate is not suitable to grow plants such as these to perfection. Winter hardiness is no problem, but too many cloudy days and our warm summers make everything seem hopeless. If you see these plants in nature in such perfect shape, you always hope to be able emulate it, but that is something that often ends in complete disillusion. If you do have the possibility of getting a plant, the best advice seems to be to use a stony substrate and to give it the most light possible and a sheltered place. Also repotting every year is a must.

OXALIS LORICATA

This is a rare species which we found just a few times in the province of Santa Cruz during all the expeditions we made over the years. To find this species you need to explore screes of mainly coarse debris. The highest altitude where we found this plant is about 2200 m (7200 ft). It's very interesting to see how such a plant is able to maintain itself in such extreme places.

With the culture of *O. loricata*, I have to confess I am not so fortunate. Currently there are three forms in my alpine house. One flowered in 2013. The other two are still alive, but show little progress. It seems to



Oxalis loricata in the wild (above)
and one form in cultivation (below)

me that *O. loricata* is a species which certainly deserves and requires more attention in the future.

The final conclusion of this article is, that the South American species from this genus deserve more attention from the alpine gardener than they have always had in the past. While species such as *Oxalis erythrorhiza* and *O. loricata* are plants that need a lot of care and are just for the more experienced



grower, many of the others discussed are so beautiful and really worth the effort to build a big collection. *Oxalis adenophylla* and *O. enneaphylla* are well established, even if not in very many forms, but with the aid of specialist nursery owners it is worth every effort to try to get hold of more forms of them and of forms of *O. laciniata*.



Oxalis adenophylla in its mountain home

Ger van den Beuken will be one of the speakers in May at the Annual Meeting in Ann Arbor.



Sempervivums in birdbath

Containers in the Rock Garden: Troughs and Their Alternatives

MARCIA TATROE

FOR OVER A hundred years, the trough has been the container of choice for rock gardens. The gold standard is the genuine article made of stone and rescued from a farmyard or an old village square. Vintage stone sinks (like the one my mother couldn't wait to replace with stainless steel in her ranch kitchen in the 1970s) have also traditionally been used as rock garden planters. As antique troughs and sinks have become scarce, reproductions are occasionally available. Like the originals, they are often too heavy and too expensive to be practical for most gardeners. A lucky few can point to their venerable troughs with great pride, the rest of us can only hope for a trough inheritance – and look for alternatives.

Trough with *Penstemon linarioides* and cacti, Gwen Moore's garden



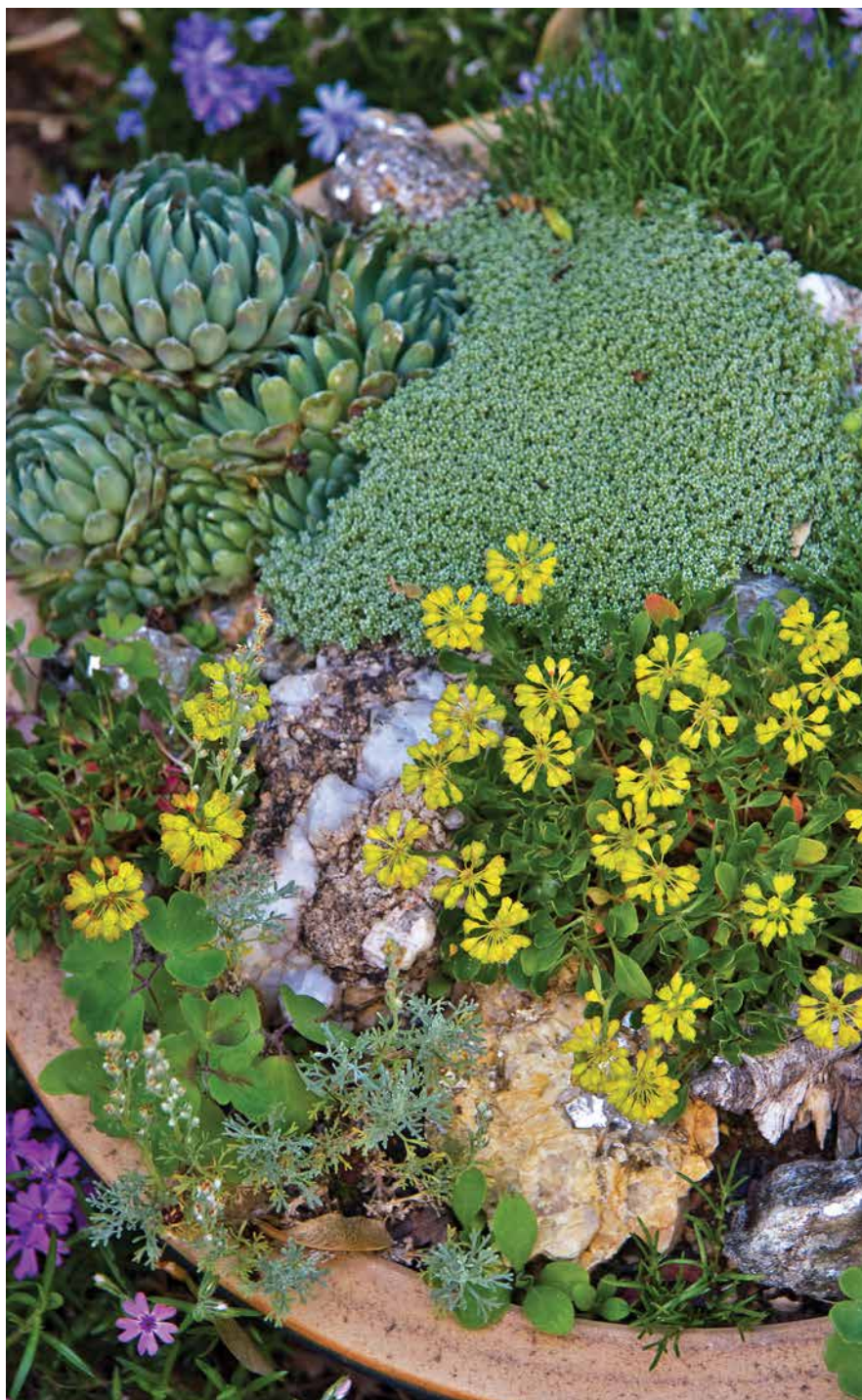
Whatever their genesis, troughs are ideal for displaying tiny plants that otherwise would be swallowed up and smothered – both figuratively and literally – by larger, more vigorous companions. Elevating these treasures above ground level also positions them at a height more convenient for viewing as well as for easier care and maintenance.

In a trough the gardener has control over every nuance of plant culture. The soil mix can be matched to the inhabitants' needs in regards to drainage, texture, and pH. (Some plants won't tolerate your garden's soil no matter how you amend it.) When light conditions change (as is inevitable as gardens mature) all but the heaviest troughs can be moved to a more suitable location. Customized watering, whether adding more or excluding too much, is not overly burdensome in such a small space. Each winter I relocate several pots of hardy cacti to positions under eaves to keep them dry. Gardeners in wet-winter climates like Portland and Seattle utilize panes of glass or Plexiglas on legs to cover troughs of moisture-sensitive alpiners. Gardeners with squirrel and rabbit problems prevent nibbling by covering their troughs with wire cages. Where sub-zero temperatures are routine, it's a simple matter to cover a trough with a frost blanket or evergreen boughs, either all winter or for the duration of the polar vortex.

Troughs can be quite beautiful. Santa Fe photographer Charles Mann likens them to jewelers' cases filled with precious gems, each arrangement unique, depending on the gardener's tastes and whims. Trough gardens generally contain a collection of plants from diverse regions but from similar habitats. Because they tend to come from harsh environments, these plants share physical characteristics (low to the ground in compact mats, buns, or mounds) that make them visually compatible even if actually from origins as far removed as the steppes of Central Asia and the Great Basin of western America. Combined within the frame of a trough the result can be quite satisfying. Encouraging one or two individuals to spill down the sides, as well as injecting tiny trees, pieces of driftwood and ornamental mineral specimens, help effect a naturalistic and harmonious composition.

There is no limit to what imaginative rock gardeners can do with a trough, the only immutable being that plants with like cultural needs (as to water, sunlight and soil) are grouped together and their needs met collectively. Troughs featuring diminutive crevice gardens are currently in vogue. Native plant purists can follow the example of Gwen Moore who, when commissioned to design a trough garden at Denver Botanic Gardens in 2001, collected seeds and rocks from various Colorado habitats to recreate natural landscapes in miniature. A trough is also ideal for displaying dwarf shrubs or a collection of small cacti, and though not my taste, a fairy garden in a trough might inspire a child

Ceramic bowl with *Sempervivum* and dwarf *Eriogonum*



to a lifelong interest in rock gardening. One trough can stand alone or several may be displayed in a grouping. Whatever the presentation, the trough is so iconic to rock gardens worldwide that it has become emblematic of the serious rock gardener.

I like to think of myself as a serious rock gardener. But, sadly, until quite recently I'd never had much luck with troughs. The first two I tried were table decorations awarded as door prizes. They were quite small and made from hypertufa. Generally undamaged by freeze and thaw cycles, hypertufa is perfectly suited to a climate like mine where winter temperatures routinely fall well below zero degrees Fahrenheit.

Colorado rock gardeners, like gardeners everywhere, also appreciate hypertufa because it is relatively lightweight, easy to work with and porous enough that it's nearly impossible to overwater if using a fast-draining medium. Where too much moisture is the issue this is all well and good. With fifteen inches of precipitation (in a good year!) and atmospheric humidity that frequently measures at less than 10%, too much moisture isn't usually a consideration in my garden. Because hypertufa dries out so readily, most Colorado rock gardeners water their troughs daily, regardless of the size of the trough or the type of flora it contains. I don't have automatic irrigation. Dragging a hose out every day is downright impractical so I use a watering can. The trouble was, if I forgot to water for even one sweltering day in summer, whatever I had interred in these small troughs – no matter how xeric – withered and died. The soil volume of these really small troughs undoubtedly exacerbated the problem.

I eventually lost interest and decided troughs were not for me. It wasn't until a few years ago that I reconsidered. A monster of a chokecherry on the west side of the house sucks every bit of moisture out of the soil for tens of feet in every direction making it impossible to grow much of anything at its feet (seriously, not even ajuga will grow here). With a garden tour imminent that June, I yet again replanted a bare patch some ten feet by ten feet beneath the chokecherry with "dry shade" recommendations and vowed to be more vigilant with irrigation. One of our sons agreed to come over and water the new bed while my husband Randy and I attended a study weekend a couple of weeks before the tour date. We arrived home to find the entire planting dead. Our son swore he'd watered as instructed – the greedy chokecherry had won again.

A few years previous to this latest failure, I had dropped a half-whisky barrel into a dry spot on the other side of the chokecherry and filled it with shade-loving annuals. With no tree roots to steal the water, these had done well. (Unfortunately whiskey barrels in contact with soil rot rather quickly and when I removed the barrel a few years later I discovered that the chokecherry's roots had grown up through the

Grouping of bird bath, blue ceramic bowl and *tinaja*



drainage holes!) Still, container gardening might be the one and only way to thwart the chokecherry's demand to be an only child. (If this tree didn't provide shade to the entire west side of my home in summer I would remove it.)

For some time I'd been admiring large stone troughs called *tinajas* at a local garden center but just couldn't imagine where one would fit in our small garden. It was at that point that I realized there was enough bare ground beneath the chokecherry to accommodate a small fleet of these things. I could afford only one at the time, but a large one would go a long way toward filling the void and diverting attention from the sad state of affairs I'd returned home to.

According to Wikipedia, *tinaja* (pronounced tee-nah'-hah) is a term originating in the American Southwest for water-holding potholes in bedrock that occur below waterfalls, carved out by spring runoff or seepage, or created by sand and gravel scouring rock in intermittent streambeds. Merriam-Webster's first definition for *tinaja* is a large earthenware jug that holds water. With roots in Castilian Spanish for vessel or tank, *tinaja* has morphed into a moniker for stone troughs from Chihuahua, Mexico. These come in all different shapes and sizes and are widely sold in Colorado nurseries as planters and basins for fountains. Hand-hewn from volcanic ash, *tinajas* are purportedly porous enough that water will drain through the stone. (I had my doubts so for added

Tinaja planted with silver saxifrages and European primulas



Opposite: Two blue pots in April



insurance, before we set ours into the garden, Randy drilled several holes in the bottom using a masonry bit.) According to importer Big Bend Stone of Terlingua, Texas, *tinajas* provide good insulation to protect plants in winter as well as evaporative cooling in summer. I don't know about that, but mine have developed colonies of mosses and lichens on the exterior as promised.

Fortunately, Charles Mann was visiting us the week before the garden tour because installing our *tinaja* was definitely a two-guy project. Randy and Charles took down a section of the split rail fence that borders the side yard. They then drove our truck into the field adjoining our property, backed up to the garden and dropped the 200-pound *tinaja* over the flattened chain link fencing that lines the split rail, onto a bale of peat moss (while I stood on the fencing pleading with them to be careful lest they break my treasure. Charles retorted that in his opinion the soft rock would deteriorate quickly in any case).

After they muscled the *tinaja* into position, I filled it with a common denominator trough-soil mix of $\frac{1}{3}$ gravel, $\frac{1}{3}$ coarse sand, and $\frac{1}{3}$ sandy garden loam, planted a selection of shade-loving rock garden fare and mulched between the plants with stone chips. I then camouflaged the area around the *tinaja* with flat sandstone paving stones much the same shade of beige as the trough. Bare earth gone, garden tour disaster averted. And as a bonus, beyond simply filling dead air, the *tinaja* was a perfect fit aesthetically.


For several years prior to the *tinaja's* addition I'd been attempting to change the character of this particular area, the goal to make it more naturalistic, less English border. An overhaul of the 70-foot-long walk that transects this garden transformed the meandering path into a dry streambed with boulders along the edge. Formal borders on either side no longer made sense. Nor did level ground. This is a heavily shaded garden and a rocky streambed running through a level "forest" was just plain counterintuitive. I was sitting in a boulder field while Randy hiked St. Mary's Glacier west of Denver when this epiphany struck. In the shaded spruce and bristlecone pine woods beyond the

Tinajas in the author's side yard







A top-down view of a lush garden in a pot. The scene is filled with a variety of plants. In the foreground, there are several large purple daisies with bright yellow centers. To their right, numerous small, purple, bell-shaped flowers are scattered throughout the green foliage. In the upper left corner, there are white daisies with yellow centers. The plants are growing densely together, with some taller green leaves visible on the right side. The ground is covered with brown mulch and some grey rocks. The overall appearance is that of a well-maintained and vibrant container garden.

A complete garden in a pot: *Dianthus*, *Delosperma*,
Eriogonum, *Penstemon*, and an "Aster" that was
banished when it got too big

snowfield's edge, wildflowers and understory shrubs were tucked up against boulders in ground that was anything but flat. Here was nature's model. Since that summer, I've been gradually adding boulders. To form contours, every time I bring in another boulder I add soil around the base, sculpting the beds into slight hills and swales. I did the same with the *tinaja*.

As I could afford them I've added two *tinajas* to the side yard garden and three more to other parts of the garden – all “worked into” the garden as if they were freestanding boulders. While truly beautiful, *tinajas* have not been the panacea I'd hoped. They have not cracked in Colorado's sub-zero winters as Charles predicted, but the porous rock is no more water-retentive than hypertufa. The free-draining trough soil mix undoubtedly increases the number of drought-killed plants. Watering more frequently would help but I've already proven that my good intentions don't readily translate into action. A few plants have put up with the extreme dry shade conditions, but not many. Only *Juniperus horizontalis* 'Mother Lode', *Primula marginata* and *P. allionii* selections, several tortured silver saxifrages, *Heuchera pulchella*, *Gentiana verna*, *Silene zawaskii*, and various sedums and sempervivums have persisted for more than a season or two. If I wanted to grow a wider selection of trough plants I needed to look for other options.

I'm not the first gardener to make a planter out of a broken birdbath – a solution that effectively creates a raised trough. My birdbath was terracotta and had shattered when an early freeze expanded the ice in the basin before I'd remembered to store it away in the garage for the winter. A wide terracotta bowl would have restored the piece to its original purpose but I decided it might be more prudent to look for a replacement that could stay outside all year. Frost resistant terracotta bowls are quite pricey so after a couple of months of shopping I settled instead on a 16-inch terracotta saucer, the kind that catches water beneath a large pot. After Randy drilled holes in the bottom of the saucer I filled the saucer with a cactus soil mix consisting mostly of crushed volcanic rock (Crump's Greenhouse Cactus and Succulent Potting Mix) mounding the medium 2-3 inches higher in the center for greater depth.

Stuffed with various sempervivums and a couple of small sedums, I set the bowl back on the stand in a microclimate that provides full sun in the morning and shade the rest of the day. For mulch I decorated the surface with fist-sized pumice rocks and round, beige hydroponic “marbles.” The bowl is watered twice a week, which is sufficient to prevent the sempervivums drying out excessively. (In other climates it might be nearly impossible to kill sempervivums, but I've managed to do away with more than a few through drought and neglect.) To mitigate

Lewisia cotyledon in *tinaja*





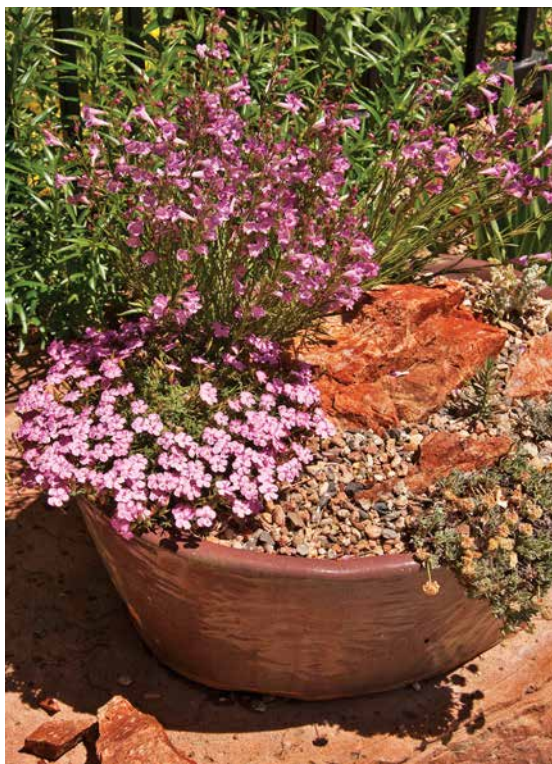
frost damage, I lift the saucer off the stand and sit it on an adjacent paving stone from October through April. Except when occasionally dumped over by raccoons (mothballs scattered in the mulch discourages them), this birdbath garden has been a real success.

Although somewhat porous, terracotta doesn't appear to dry out as quickly as hypertufa, especially in this partly shaded site. On the down side, even when sold as "frost proof," terracotta eventually shatters in winter. However the birdbath experiment did start me wondering what other container prospects might be possible—and more durable.

I'm not at all certain where the inspiration to use ceramic pots as troughs came to me from. Horticulturist Dan Johnson has been growing opuntias in large ceramic pots in the Roads Water-Smart Border at Denver Botanic Gardens for more than a decade. These are the dense, heavy, made-in-Asia glazed pots sold at every home improvement center. I'd been using a similar low and wide bowl-shaped version for annual flowers and so already owned a few when I decided to try them with rock garden plants. The pots were not labeled frost resistant and had never been left outside over winter so trial and error was my only option. An oversized ceramic porch pot I had filled with perennials a couple of years before this had lasted only two seasons outside before the glaze began to slough off. A very pricy Vietnamese strawberry pot disintegrated after only one freeze. (Oddly enough, the pots that have best withstood both wide swings of temperature and sub-zero freezes are also from tropical Vietnam and Indonesia.)

After our fall member's plant sale in late summer of 2009 I crossed my fingers and filled two 6-inch tall and 18-inch wide stoneware bowls with

Dianthus haematocalyx and *Penstemon laricifolius*
in ceramic trough, Bill Adams's garden



$\frac{1}{3}$ peat-based potting medium, $\frac{1}{3}$ garden loam, and $\frac{1}{3}$ coarse sand and placed them against and below a low rock wall on the east side of my house. In went silver-leaved *Tetranneuris acaulis* subsp. *caespitosa* from Pike's Peak, *Townsendia* 'Jeane's Purple', and several drabas and small eriogonums. I vowed to water these no less frequently than two or three times a week. (Their location only a short distance from a faucet has been a big help.) Lo and behold, after two seasons most of the plants were not only still alive, but were actually thriving. Plus the pots were absolutely intact with no chipping, cracks or flaking. Emboldened, I looked for more of these bowls, at least 15 inches across, arbitrarily reasoning that any smaller wouldn't hold a large enough volume of soil or provide surface space for a variety of plants. The pots are glazed stoneware (mostly of beige rather than red clay) and heavy for their size. Rapped with knuckles the sound is more like a bell than a thud.

I've furnished four more bowls with Western dryland tundra plants, feeling that these will tolerate my forgetful watering regimen better than alpiners. Whatever their native origins, all seem to prefer partial shade. At least in Colorado, where solar radiation and ultraviolet light are much stronger than at lower elevation, morning sun and afternoon shade gives most plants enough sunlight to bloom well while providing a respite from the hottest part of the day.

Suddenly I could grow things I craved but that had heretofore refused to have anything to do with me. Dwarf alpine and dryland

Ceramic bowl with *Tetranneuris acaulis*, cacti, *Draba*, *Townsendia*, and dwarf *Eriogonum*



penstemons such as *Penstemon davidsonii* 'Microphyllus', *P. paysoniorum*, and *P. californicus* have persevered for many years in ceramic bowls, covering themselves with flowers for weeks on end. So, too, previously difficult (for me anyway) *Townsendia eximia* and *Eriogonum kennedyi* prosper in these ceramic "troughs." Significant drought and extreme heat in 2012 followed by an arctic freeze in April 2013 and then major flooding later in the year took a toll but even so more plants survived than perished.

In the last couple of years I've come full circle to again try my hand at hypertufa troughs. Every year at our chapter's spring plant sale some extraordinary works of hypertufa art show up—I'm crazy about garden art and could not long resist. The first hypertufa piece I succumbed to was a small bowl dyed celadon, its sides embellished with a line of buff rock just below the rim. Colorado artist David Jessup of Green Collar Guy Design assured me that his creation would tolerate any amount of frost but not wanting to risk it I gave this pot a tender cactus and keep it indoors over winter. At the annual NARGS meeting in Salida in 2010 there appeared another gorgeous creation by the same artist, a cone-shaped container one foot tall and as wide, of mottled green and raw ochre hypertufa molded using pieces of rough bark. Never planted because the inside of the pot is every bit as attractive as the exterior, it has stood empty on my patio without weather damage through four winters. Another local artist experimenting with nontraditional shapes for troughs was responsible for the first real trough I was brave enough to undertake. It is 15 inches square with the corners cut off on the diagonal and has been happy home to *Sempervivum ciliosum* subsp. *borisii*, *Erigeron compositus* 'Red Desert' and *Draba norvegica*. Since then, I've brought home several other hypertufa troughs of various shapes, sizes and colors.

There have always been a few imaginative rock gardeners who break with tradition to display rock garden plants in containers other than stone or hypertufa troughs. Terra cotta chimney pipes used as planters are not at all uncommon.

Resourceful gardeners make do with unlikely materials, some of the most ingenious Ottawa's Lynda and John Soper's troughs made from recycled Styrofoam medical-supply shipping containers. Bill Adams of Sunscapes has in his Pueblo garden a couple of large hand built ceramic containers made by potter and rock gardener Gwen Moore, while Gwen has more than a dozen such planted containers at her Lakewood home. In Holland old ceramic drainage pipes stand in for troughs. Amenable sempervivums show up in old boots, high heels, buckets, cinder blocks, logs and all manner of objects that will hold a bit of soil.

More ornamental than practical, my original two tiny troughs are similarly planted with sempervivums, the only plant that can endure in such a small space. While I still don't have a genuine antique stone

trough, my rock gardens now feature all sorts of other interesting containers—with new ones arriving every season.

Large *tinaja* and copper birdbath



Photographs by Marcia and Randy Tatroe.

Alexandra Berkutenko

JOYCE FINGERUT

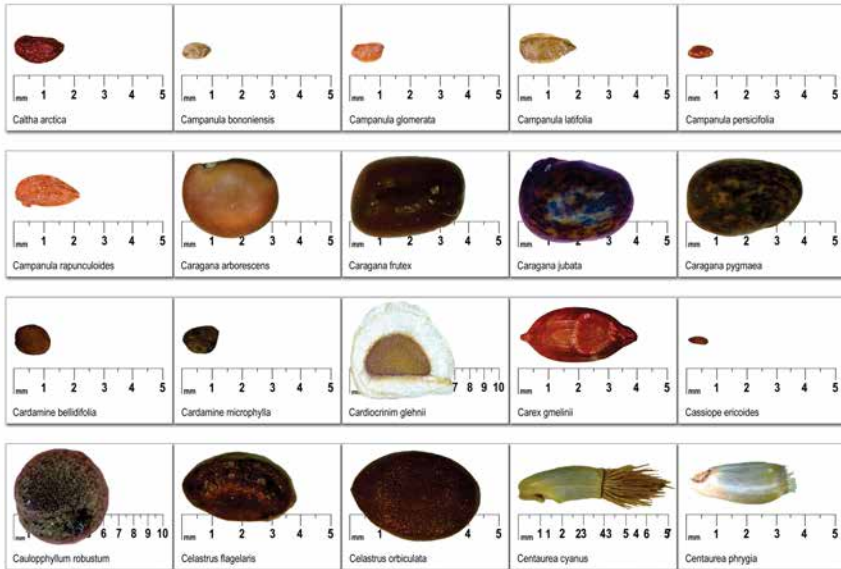
THE PASSING OF Dr. Alexandra Naumovna Berkutenko in September 2014 represents a loss for many botanists, horticulturists, and gardeners around the world. Although she lived and worked in the far outpost city of Magadan, in Far Eastern Siberia, as Professor at the Institute of Biological Problems of the North, Far-Eastern Branch of Russian Academy of Sciences, Alexandra's reach extended to Europe, the United Kingdom, North America... and probably to the southern hemisphere, as well. Her annual seed list, containing wild-collected seeds from different areas of Siberia, was well subscribed, even into 2014.



When she visited Canada and the United States, in the fall of 1996 on a NARGS Speakers Tour, members of ten chapters enjoyed her programs about the flora of her region, and the warm good humor of her presentations.

Her extensive publications covered ethnobotany, dendrology, and

A sample page from Dr. Berkutenko's
Atlas of Seeds of the Plants of Northern Asia



the many specific ecologies of the Russian Far East. Her latest book, *They Bloom on Kamchatka Volcanoes*, was reviewed in the Spring 2013 issue of the *Rock Garden Quarterly*. Through her illness, and up till her untimely death on September 29, 2014, Alexandra was working on a pictorial *Atlas of Seeds of the Plants of Northern Asia*, which contained high-quality photos of a thousand taxa.

An example of Alexandra Berkutenko's style and a flavor of her personality and history as a botanist can be found in her memorial to her mentor A. K. Skvortsov <skvortsovia.uran.ru/2013/1104.pdf>

Her publication list is over 130 items long and even in the midst of her scientific rigor there are glimpses of a woman with a mischievous quality. An example is in her scientific paper intriguingly titled "Detective story about one Linnean species of Cruciferae," available at <www.landesmuseum.at/pdf_frei_remote/LBB_0027_2_1115-1122.pdf>.

James L. Reveal

HUGH MACMILLAN

IT STARTED QUICKLY. Bob McFarlane and I had just formed the Eriogonum Society in 2009. We called Jim acknowledging that we knew he had a busy schedule, but would he consider being the "Godfather" of the fledgling society. There was not a bit of hesitation. He offered his whole portfolio of images, the online key, and authored five extensive newsletter articles in quick succession which we posted on the Eriogonum Society website. We were on our way. Next we described to Jim how the organization operated, specifically focused on the annual meetings. Jim gave us a list of five sites he thought would be of worth. And so it was to be Reno for our inaugural meeting, based at the University of Nevada in Reno. Such was Jim's operating procedure: full on.

Being a member of several plant-focused organizations, I had an idea of what plant societies looked like. I soon found that this one would be different. The first day of the annual meetings was dedicated to an extensive practicum, led by Jim, on *Eriogonum* identification, morphology, and taxonomy. The next couple of days we went to the field and practiced our new found skills. Jim was kind and patient but directed us to hone the skill of keen observation.

So often we would witness Jim's zest for life and his passion for this favorite genus. Perhaps the finest teacher many of us had encountered, we looked forward each year to his "pollination dance" as we called it. His arms crossed upon his chest would unfurl in demonstration of



Jim Reveal (white hat) at the Eriogonum Society meeting, California, 2011
photo: Loraine Yeatts

the stamen unfurling and rising like some offering to the universe, a great smile upon his face as he explained the process, then the arms came down and folded again, then rise again, signifying the second day offering of the remaining stamen. It was truly a dervish dance that culminated with a gleam in Jim's eyes.

Then he might spend the next session plying us with descriptions of the various degrees of hairiness from floccose to hirsute. There would be discussions of stipes and petioles and such. We would fly through the key he would supply each year, sometimes a thousand pages in length. Each edition would have considerable changes from the previous years, testament to his continued examination of the genus.

It was the norm that he would appear at the meetings with large white bags of specimens he collected on his way to the venue. These specimens would be the stuff of practice; we would group in twos and threes and attempt the identification. Jim walked the room, guiding us through our attempts and showing us where we went wrong when we were hopelessly lost down some rabbit hole of a bad choice of identification. Jim was always the cheerleader, applauding our efforts.

Jim was equally at home in the field. We gathered around, lens in one hand, and specimen in the other, and listened in awe as the intricacies were explained in minute detail, not only of the structure, but also the

theories of why such existed. Many times we sat around at lunch break, listening to stories about the adventures of those botanists who came before him and the herculean efforts they made to document the flora of young America. There was a realization that those days were passing quickly and that his generation were the last of the greats. The story of Douglas and his stumbling through life and tragic end was one that mesmerized us at a McGee Creek picnic area as we sat in the presence of the Sierra Nevada range, visualizing days of yore. The man could spin a story. Jim penned a wonderful book, *Gentle Conquest, The Botanical Discovery of North Americas with illustrations from the Library of Congress* which is a must read for those interested in the early explorations. It received the Outstanding Academic Book Award from the Association of College and Research Libraries in 2009.

So it was that Jim's format shaped the society. Another homage to Jim would be the number of professional members of various federal, state, and local agencies who became members and attended the meetings. The admiration and respect was infectious as we all clamored to hear pearls of wisdom as he spoke about changes in botany and the evolution of plant identification. Several of these organizations offered educational credits simply for attending the lectures.

Of course, one cannot overlook his eagerness to explore. In 2008, at a meeting of the Penstemon Society in Ely, Nevada, a few of us mentioned that we had seen a glorious hill on the way to Nevada from Colorado where at least four species of *Eriogonum* were to be found in close proximity to each other. This conversation was near the crest of Sacramento Pass outside of Great Basin National Park. Off we went, forty miles to the east, in caravan! Upon arrival we explored the area. Jim grabbed samples of each of the species, holding each aloft for us to see the diagnostic approach to keying the various species, and held forth with stories of the discovery of a few. There were stories on that trip of his explorations with his friend and fellow field companion, Noel Holmgren, as they explored much of the West.

Other than stories of Jim's approachability, one must certainly raise a toast to one of the finest scholars in this and the previous century. He published over 530 titles of scientific papers and books. Dr. Reveal was also a recipient of the Edgar T. Wherry Award from NARGS in 2009. Jim was also a major contributor to the *Intermountain Flora*. More about Professor Reveal's formidable academic achievements can be found at www.nbh.psla.umd.edu/collection/reveal.html.

We owe Jim a huge debt of gratitude for his many contributions and also to his willingness to speak at various chapters and NARGS functions.

Here's to Jim Reveal, a combination of story teller, scholar, kind soul, teacher, and plantsman.



Taksang Monastery
- the Tiger's Nest

A Glimpse of Bhutan

ALAN OATWAY

THERE'S NO DOUBT about it – Bhutan is very different. I'll begin by trying to set the scene.

It is a small country, about half the size of Indiana, about 200 miles from west to east, and 100 miles from south to north. In that latter direction, it rises from a low point below 100 m above sea level to a little over 7,500 m. That makes it pretty steep! The southern border is on about the same latitude as Laredo, Texas; the climate is tropical, yet the northern border is clearly a hostile mountain environment. Almost three quarters of the land is forest, and a mere 2.5% is cultivated.

Bhutan is sparsely populated, and although much of the terrain is uninhabitable, even the small capital city, Thimphu, feels very empty and quiet. The central road junction is easily controlled by a uniformed policeman, a role that has been re-instated following a brief experiment with a set of traffic lights. The population preferred the human touch, and in a country where politics are guided by the principle of Gross National Happiness, their preference was duly noted and acted upon. Western politicians please note!

So Bhutan has no traffic lights whatsoever – nor for that matter does it have a single ATM! Furthering the sense of extraordinary, I could tell you that it is illegal to sell tobacco in Bhutan, that the national sport is archery, that men wear a skirt to work, and that television has only been permitted since 1999. The national dish is chili – no, not as in a seasoning, but as a plate of chilies! Rice is a major crop, but even that is red.

The people are actively religious, with some 75% being Bhuddist and the remainder mostly Hindu. In practising their religion, they will try to visit pilgrimage sites if they can, and we too made our journey to Taktsang Monastery, as part of our acclimatisation program. This monastery (also known as the “Tiger’s Nest”) is something every visitor should aim to see. It can only be reached by a steep climb of a couple of hours, but the spectacular setting and the distinctive interior amply repay the effort. The monastery is not old, but has been restored as faithfully as possible following a serious fire. The site is old, however, and is supposed to be the location where the guru landed his tiger when flying in to bring Bhuddism to Bhutan.

My visit to this singular country was as part of group organised by the Alpine Garden Society, so I should also write something of the plants that we saw. And did we see some plants! Being a mountain and flower lover rather than a botanist, I won't attempt a detailed report but



Main road junction in Thimpu (above) and the national sport (below)

I will give you a look at some of my favourites. We did see some 800 species, so you may well be glad of this approach!

Before leaving the tree-line below, the stars of the show must be the cyripediums. But for our knowledgeable local guide, we would have walked past the first, the dainty and diminutive *Cyripedium elegans*, but there was no way we would miss either the relatively common *C. himalaicum* or the much less common *C. tibeticum*.

As we got higher, we began to see plants more typically associated with the word "alpine." Primulas there were in quantity,





Cypripedium himalaicum

Cypripedium elegans

Cypripedium tibeticum



from the tiny to the substantial. In the latter category, *Primula hopeana*, similar to *P. alpicola*, was abundant wherever there was ample moisture, and in places it stained the hillsides yellow, and was visible from a considerable distance and *P. tibetica* grew nearby, at the opposite end



Primula tenella

Primula calderiana subsp. *calderiana*





Meconopsis bhutanica

of the size spectrum. Higher up, pride of place was taken for me by *Primula calderiana* subsp. *calderiana*, which was never common but made a spectacular clump when found. On steep earth banks, moistened by the monsoon rains but perfectly drained, was the beautiful powder-blue *P. tenella* (formerly *P. rebecca*, named for a Bhutanese naturalist).

The third genus that must be shown is *Meconopsis*, and we saw seven species in total. At relatively low altitudes, *M. primulina* displayed





Chionocharis hookeri
Eriophyton wallichii

typical blue flowers, but on unexpectedly short stems around 30 cm (12 in.) tall. Many before me have rhapsodised about *M. bella* – indeed, it is not so named for nothing. It was found growing in a variety of habitats, less of a crevice dweller than expected. Its real charm, standing up to such a hostile environment while being so delicate of scale and form, was beyond doubt. Higher up, growing in some inhospitably rocky terrain, *M. bhutanica* displayed sumptuous blooms some 12 cm (5 in.) across – such a shame it is monocarpic and very tricky to grow to flowering size!



There were, of course, lilies (including *Notholirion*), saxifrages and potentillas, *Pedicularis* and *Corydalis*, and so many others. But I will conclude with a look at just a few of the high alpiners, with specialist adaptation on display. I have

Rheum nobile

chosen four that epitomise the unusual plants that can be seen by braving the monsoon season at 5000 m (16,500 ft.) above sea level. Yes, it was wet at times and you may even notice the raindrops on several of the photographs! But it never rained all day, and the temperature was never very cold, and the joy of the flowers completely dominated the weather.

Chionocharis hookeri is a tight hairy cushion found on high screes. The forget-me-not flowers are an exquisite blue. The giant Himalayan rhubarb, *Rheum nobile*, was in similar terrain. Its bracts insulate the flowers within, causing an improvement in the temperature of about 5C (9F), obviously of benefit for earlier pollination.

Saussurea gossypiphora performs a similar trick, cocooning its flowers in a cottonwool-like substance, while *Eriophyton wallichii* has the furriest leaves.

It isn't cheap to visit Bhutan, but it is such a distinctive place, with such unspoiled wilderness country, that I will try to go again. Go if you can!

Saussurea gossypiphora



NARGS 2015 Election Nominations and Voting Procedures

The publication of the combined list of candidates on the following pages in this issue of the Quarterly precedes the online election (April 15-30) prior to the AGM in Ann arbor on May 9. The following candidates are standing for election:

CANDIDATES

Recording Secretary Elizabeth Zander

Treasurer Dave Brastow
 Richard Lane

Board of Directors James Dronenburg
 Mike Kintgen
 Anna Leggatt
 Jody Payne
 Michael Riley

On the following pages you will find pictures and biographies of all those who have been nominated as Officers and Board members for the 2015 election.

The election will take place April 15-30, 2015 and all active members may vote by logging on to <www.associationvoting.com/nargs> or by using the link provided under "2015 Election" on the NARGS website <www.nargs.org>.

If you do not have access to a computer, contact Bobby Ward at
PO Box 18604, Raleigh, NC 27619-8604, USA
and a mail-in ballot will be sent to you.

The votes will be tallied by <www.associationvoting.com> and the preliminary results will be announced on the NARGS website in early May, certified at the AdCom meeting on May 7 in Ann Arbor, MI, and published in the Summer 2015 *Quarterly*.

CANDIDATE for RECORDING SECRETARY

ELIZABETH ZANDER

While editing the BNARGS (Berkshire Chapter) Newsletter during the 1990s, I also ran the NARGS Seed Exchange (1994-96). When no chapter would take on the entire job, I organized a three-way split.

Twice I volunteered on committees for hosting national meetings, designing and printing all hard copy materials for the Winter Study Weekend.

After serving a term as Chapter Chair, I became Berkshire Chapter Program Chair, arranging speakers not only for my own chapter but other local ones. Currently I also serve as Treasurer.

A dirt gardener and avid photographer, I garden in northern Connecticut. Weekdays, I program relational databases.

Elisabeth is a member of the Berkshire Chapter.



CANDIDATES for TREASURER

There are 2 candidates for one post



DAVE BRASTOW

As you can see, I enjoy getting out to meet plants in the wild and I also greatly enjoy raising plants from seed (perhaps a little too much!). However, as treasurer, it is accounting and decision-making experience that are most important. As an analyst and

programmer, I have dealt with scientific data as well as procurement and budgeting.

I am willing to spend the time and do the work to help make sure that we'll overcome NARGS current problems. Since 2009, I've participated in most board meetings, as a member, observer, and committee chair. I feel strongly that I can help NARGS ensure a secure future for itself.

Dave is a member of Northwestern Chapter, and has recently joined Columbia-Willamette Chapter.



RICHARD LANE

Richard H. Lane is currently with McGladrey LLP and is owner of Lane Financial Services in Raleigh, North Carolina. Richard specializes in internal audit and individual income tax consulting. He has over 30 years of internal auditing experience in the financial services industry.

Richard is a Distinguished Faculty Member of The Institute of Internal Auditors.

He is a Certified Internal Auditor, a Certified Financial Services Auditor, a Certified Public Accountant, a Chartered Bank Auditor, and a Certified Information Systems Auditor.

He and his wife, Amelia, are members of the Piedmont Chapter of NARGS and the Friends of the JC Raulston Arboretum in Raleigh, North Carolina.

CANDIDATES for BOARD of DIRECTORS
There are 5 candidates for 3 vacancies

JAMES DRONENBURG - Current President, Potomac Valley Chapter; member Mason-Dixon Chapter. Vendor Coordinator, 2009 Eastern Winter Study Weekend. Coordinator, Four Seasons Garden Club of DC, and brought the club from moribund to a dynamic, growing organization. Initiated joint activity between PVC and Mason-Dixon chapters, and put together consortiums with them, other clubs, and the National Arboretum to get national level speakers.



We have a 60 foot-long rock garden berm plus 190 feet of drystone walls in a 1.2 acre collector's garden (go to <www.danielweil.com> and see the gallery "Our Place"). Accountant by day, and a part time "resident expert" at a DC nursery, for 20+ years.

ANNA LEGGATT - Anna lectures in Horticulture and Conservation, with photographs of wildflowers from every Continent. She has a B.Sc. in Botany, and diplomas in Nature Interpretation and Horticulture.



A former NARGS director, she proposed the student membership rate. She also served on publication and nominating committees. Plant portraits, a book revue, an Iran visit and Arctic photos have been published in the *Quarterly*. She has been active in ORG&HPS as chair, editing and writing in the Journal and Handbook, starting raffles, the Ephemeral seed exchange and now runs regular auctions and the Members' Showcase. For Anna, membership in NARGS is very important, and she feels local clubs should provide more members.

MIKE KINTGEN - Mike is Curator of Alpine Collections at Denver Botanic Gardens overseeing eight gardens including the Rock Alpine Garden, and South African Plaza. Mike has worked full time at DBG since 2004, but had volunteered there since the mid-1990s. In 2012 he finished a two year project to have DBG's collection of alpiners recognized in the North American Plant Collection Consortium through the American Public Gardens Association. He has been a NARGS member since 1993 (age 12) and is a former president of the Rocky Mountain Chapter. Travel opportunities have allowed him to observe alpiners in Alaska, Hawaii, Argentina, Morocco, Spain, the Alps, and throughout the American West.





JODY PAYNE - Jody is former curator of the Rock and Native Plant Gardens at the New York Botanical Garden. She graduated from NYBG's School of Professional Horticulture in 2001.

A horticultural generalist with a background in design, Jody exposed T.H. Everett's original stonework and replanted with 1,000 herbaceous plants, 20,000 bulbs, and 150 new genera annually and began the restoration of the Garden's water feature.

Jody has lectured widely, including at several chapters of NARGS, and is a certified continuing education instructor.

In 2014, Jody moved to Maine, where a rocky coast, enough to inspire any rock gardener, surrounds her.



MICHAEL RILEY - Michael Riley has been on the NARGS Board of Directors as Chairman of the Manhattan Chapter of NARGS for seven years. He has served on the Book Service Committee, the Search Committee for Editor of the Rock Garden Quarterly and Investment Committee. He was President of The Gesneriad Society (formerly AGGS), Business Manager, Finance Chairman and serves on several other committees. He is semi-retired from a career of Marketing, Management, Finance and was previously Vice President of the Horticultural Society of New


York and Director of The New York Flower Show. He shares his interests with his partner Francisco Correa and they grow plants wherever possible.

Voting online for all posts will take place April 15-30.

Login to <www.associationvoting.com/nargs>.

You will be asked to login with your last name and email address.

Select "Proceed to Ballot." You will be presented with the ballot and instructions. Further details are available on the NARGS website <www.nargs.org>.

NORTH AMERICAN ROCK GARDEN SOCIETY		
	<i>The Rock Garden</i> QUARTERLY	<i>spring</i> 2015
		volume 73 2
NARGS Bulletin Board		

From the President

This is it, fellow members: I am dedicating this letter to the future of NARGS and the question that happens to be “the elephant in the room:” Should NARGS require that every chapter member pay dues to the parent society?

I would really like to explore both sides of this issue, before I even begin to suggest ways to either resolve it, or let it alone. Certainly, the AdCom (including me) could just raise the cost of dues for all paying members (though I am not a fan of that proposal); or, we could be creative and explore other propositions that we have been tossing around: such as a lower membership fee, a tiered model, or even no membership fee at all.

I have heard from a number of chapter members, many of whom share a similar concern, generally stated: Why should I pay a membership fee to NARGS? What do I receive for it?

In return, and in order to understand the mindsets of our members, I would ask: Why are you a member of NARGS?

If it is because you love being a part of a greater organization, then you are a bit like me. I have tried to understand why some feel that they receive nothing from the national NARGS organization.

And, yes, I get it: your local chapter offers camaraderie, a place where you can chat with like-minded people, meet friends, share plants, talk about all that we find curious and interesting in the plant world, and listen to a knowledgeable speaker passionately describe adventures in the Himalaya. It’s like a university and social club mixed up into one - plus coffee and pastry. We all know too well that there are few such places, despite the new world of emails and websites.

But what is added from the national level? For the national dues, you receive a rather beautiful quarterly journal and the ability to participate

in a world-class seed exchange. You may also decide to attend a national meeting; but is that about it?

Well, consider the national programs that benefit chapters directly, like the Speakers Tours, which brings world-class speakers to all chapters; or the many packets of free seeds that all chapters receive at the end of each Seed Exchange. In addition, every new member of NARGS in your area is informed about your chapter.

Perhaps NARGS is in the throes of a fatal disease - one that is also afflicting many organizations. Our problem today is compounded by the availability of information through the internet and other sources. How many of us prefer to begin with a Google search for a genus or species before pulling out copies of the *Quarterly* or books? The internet has become the go-to portal for information.

As NARGS moves forward, it appears to be dragging along a membership that is questioning the value of the collective group. Many see their local chapter as the heart and soul of the organization, and others may not even care about alpine or rock garden plants (I understand that, too: I am a bulb enthusiast).

We are currently in a slow decline in membership numbers: losing long-time members as they age and no longer garden, without recruiting enough new members to replace them. The usual alternatives to decreasing membership and shrinking capital are raising dues or fundraising campaigns, and neither would be popular or palatable. Either something creative needs to be done to change the national organization, or this decline in members could mean it might eventually be dissolved.

NARGS cannot demand that each of you pay for something you don't want. Do you want NARGS to be here ten years from now? If so, you can help by speaking with non-NARGS members of your chapters so that they understand the value that NARGS national can bring to the chapter... and to their lives as gardeners.

What do you feel will make NARGS the type of organization to which all local members will feel it worthwhile to pay dues? Where can we spend our now-limited budget to tempt local members to join national? If the touring speakers and the free seeds do not appeal to chapter members, what could replace them that would be more engaging?

Matt Mattus
President

New Members

*Welcome to all those who joined between
November 4, 2014, and January 30, 2015.*

Abrams, Trish, 806 Belmont Rd., Butler, PA 16001
Amitore, Teresa, POB 126, Cornwall, PA 17016-0126
Anderson, Lois Ann, 4834 Marathon Dr., Madison, WI 52705-4830
Arnold, David, 114 Evergreen Ave., Lynbrook, NY 11563
Arvilommi, Nicola, Nuppukja 9 H 15, 00790 Helsinki, Finland
Atkins, Lynne, 914 Napier Rd., RD 10, Palmerston North 4470,
New Zealand
Bauer, Bill, 14067 Ridge Point Ct., Savage, MN 55378
Bayha, Carla, 1601 Cherokee Rd., Ann Arbor, MI 48104
Beasley, Angelia G., 8319 Wycombe Ln., Raleigh, NC 27615
Beaulieu, John, 90 Doran Rd., Midhurst, ON L0L1X0 Canada
Buchen, Mary, 223 E. 2nd St., New York, NY 10009-8086
Carter, Kermit, Flowers by the Sea, POB 89, Elk, CA 95432
Clark, Mary, 616 Park St., Anoka, MN 55303
Culotta, Salvatore, 34260 Repass Tr., St. Ignatius, MT 59865
Dahlstrom, Konrad, 378 Lighting Creek, Clark Fork, ID 83811
Dariotis, Eleftherios, Gedeon 6, 19002 Peania, Greece
Diller, Roberta, 644 N. Pike Rd., Cabot, PA 16023
Dimperio, Peggy, 1876 Graham Blvd., Pittsburgh, PA 15235
Dodge, Michael, Vermont Willow Nursery, 1943 Ridge Rd. North,
Fairfield, VT 05455-5631
Doyle, Li, 4345 SW Arnold St., Portland, OR 97219
Duke, Julie, 29 Alexander St., Alexandria, VA 22314-3872
Frey, Karen, 2 Bridgers Pass Ct., St. Peters, MO 63376
Futa, Benjamin, Fernwood Botanical Garden, 13988 Range Line Rd.,
Niles, MI 49120
Gates, Linda, 7880 Ernst Rd., Manchester, MI 48158
Gibson, Donna, 2021 Ellis Hollow Rd., Ithaca, NY 14850
Gibson, Michael M., 13608 S. Shawdee Rd. SE, Huntsville, AL 35803
Gogas, Pat, POB 1097, Soulsbyville, CA 95372
Gordon, John, POB 383, Narooma, NSW 2546, Australia
Grenier, Pauline, Grenier Gardens, 18 North Verrill Rd., Minot, ME 04258
Grenier, Richard, 819 Center Minot Hill Rd., Minot, ME 04258
Gross, Paula, UNC-Charlotte Botanical Gardens, McMillan Greenhouse,
9201 University City Blvd., Charlotte, NC 28223
Guillet, David, 12204 Cascade Caverns Tr., Austin, TX 78739
Handrahan, William, POB 511, Fryeburg, ME 04037
Hewlett, Mary, 1806 Hanover Rd., Ann Arbor, MI 48103
Holby, Laird, 12 Sandtown Rd., Medford, NJ 08055
Holmgren, Ann-Christine, Falks Backe 3, SE-14640 Tullinge, Sweden

Karpinski, Nikki, 22600 Meadow Ln., Sonora, CA 95370
Knowlton, Win, Baldwin Hill Gardens, 629 East 6th St., # 2, New York,
NY 10009
Kobre, Marlene, 1103 Hanshaw Rd., Ithaca, NY 14850
Kuklis, Wanda, POB 103, Powell Butte, OR 97753-0103
Kyhl, Kimberly, POB 1172, Columbia, CA 95310
Lorenz, Valerie, 1704 Chalk Rd., Wake Forest, NC 27587
Lutz, Shirley H., 2932 Magnolia St., Longview, WA 98632-3547
Marrs, Robert, 1381 Elmhurst Dr. NE, Cedar Rapids, IA 52402
Matlock, Sarah, 29 Pine Mill Dr., Center Tuftonboro, NH 03816
Maw, Keith, 2925 – 232nd St. SW, Brier, WA 98036
Morel, David R., 60 Wyckoff Ave., Wyckoff, NJ 07481-3102
Morris, Caroline, 1347 W. Parkhill Dr., Boise, ID 83702-1350
Norris, Peter, 19 Blueberry Ridge Ln., Chilmark, MA 02535
Olson, Connie, 13682 W. Virginia Dr., Lakewood, CO 80228
Partridge, Terence, 1210 Massachusetts Ave. NW, Apt. 1202, Washington,
DC 20005
Piekarczyk, Nancy, 14561 Twist Rd., Jamestown, CA 95327
Pykkonen, Kevin, 5655 Aurora Pl., Boulder, CO 80303
Quiggle, Lisa, 15770 Graves Rd., Pinckney, MI 48169
Reynolds, Charlotte, 15 Bluebird Ct., Hove St., Hove BN3 2TU,
United Kingdom
Riehl, Patricia, 2107 – 12th Ave. East, Seattle, WA 98102
Rohsler, Eric, 40 Meeker Ave., Allendale, NJ 07401
Salstrom, Kenneth N., 70 Washington Blvd., Mt. Vernon, NY 10550
Sandecki, Annamarie, 141 Murray Hill Blvd., New Providence, NJ 07974
Sanderson, Amy, 7611 – 119 St. NW, Edmonton, AB T6G 1W4 Canada
Settevendemie, Kathleen, Blackfoot Native Plants, POB 761, Bonner,
MT 59823
Simon, Sandy, 3991 Utopia, Clarklake, MI 49234
Simpson, Dave, Smith-Gilbert Gardens, 2382 Pine Mountain Rd.,
Kennesaw, GA 30152
Snyder, Bill, 1026 Kasper Rd., Moscow, ID 83843
Steindorsson, Bjorgvin, Sjonarhol, V/Horgarbraut, 603 Akureyri, Iceland
Stokes, Margaret, POB 292, Leongatha, Vic. 3953, Australia
Tapper, Barb, 3935 Walden Ln., Wayzata, MN 55391-3541
Thompson, Daniel, 473 Oslo Hollow, South Shore, KY 41175
Trainer, Maria, 521 Chartrand St., Russell, ON K4R 1G1 Canada
Ucciferri, Antimo, 2117 – 79th St., Brooklyn, NY 11214

Life Members

The following recently became a NARGS Life member:

Bruce Pollard, Saginaw, Michigan

Chapter Award for Service Adirondack Chapter

Craig Cramer

In every organization there always seems to be one “go to” person who makes the rest of us wonder what we’d do without him or her. For the Adirondack Chapter that person is Craig Cramer, and we would like to recognize him by presenting him with a Chapter Service Award.

As a new member of our Chapter more years ago than I can pinpoint, we recruited him to become editor of our newsletter, the Green Dragon. Not only did he serve in that position for several years, he revamped our website where each issue of the newsletter is posted. While he has relinquished the editorship, he continues to serve as our webmaster. For these tasks alone he would be worthy of the Chapter Service Award but his service to our Chapter doesn’t end there.

Craig is the first person to arrive at our meetings--opening up the room (after first reserving the space), hauling in our multiple boxes of supplies including the portable lending library (which he stores in his office), and often proceeding to set up the room. At the conclusion of our meetings he completes the task he began by hauling everything back to his office for storage until the next meeting.

Craig is also our in-house expert for all things technical which means he coordinates with our program speakers to make sure the audio-visual portion of the presentations (that is, PowerPoint, slides, etc.) work. For anyone who has had this responsibility, you can appreciate that this is no simple task.

What’s remarkable is that Craig does all this work for the Chapter--much of it behind-the-scenes of the casual observer--reliably, seamlessly, and cheerfully. We think it’s about time to say thank you Craig! This Chapter Service Award is just our small way of recognizing how much we appreciate all that he does, and continues to do, for the Adirondack Chapter.

For Craig helping others is in his blood; it’s a lifestyle choice. This past year he was presented with one of two Unsung Hero Awards from Cornell University’s College of Agriculture and Life Sciences, where he works as a communication specialist. In the presentation they expressed much the same sentiment as our Chapter: “he does whatever it takes....” We couldn’t have said it any better. Craig is certainly our Unsung Hero. Again, we thank you, Craig.

--Carol Eichler, Adirondack Chapter

NARGS Donations

Donations between November 4, 2014 and January 30, 2015 : \$5,730.
Designated for the general fund, *Rock Garden Quarterly*, speaker's tour, seed exchange, and in memory of Larry Thomas, Boyd Kline, and Morris West.

Adams, William (Colorado)

Amitrone, Teresa (Pennsylvania)

Apgar, Patricia K. (New Jersey)

Bartholomew, Gail (Newfoundland and Labrador, Canada)

Bennion, Frank (Shropshire, United Kingdom)

Browne, Gioia T. (Rhode Island)

Doyle, Li (Oregon)

Goldman, Doris (Pennsylvania)

Grushow, Jane (Pennsylvania)

Gryboski, Maryanne (Connecticut)

Hansen, Robin (Oregon)

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Suhr, Henriette G. (New York)

Swanberg, Joan (Indiana)

Ward, Bobby (North Carolina)

Whitesell, Steve (New York)

Wolford, Rose E. (Maryland)

Yokome, Pamela (British Columbia, Canada)

and anonymous donations from New York and North Carolina.

SEED EXCHANGE

As this notice goes to the Editor in late January, the main distribution of the seed exchange is reaching a successful conclusion. The wonderful volunteers of the Piedmont Chapter, with Bobby Wilder's capable coordination, swiftly handled the piles of early orders and are comfortably managing the succession of later orders as they arrive.

We expect no less of our Rocky Mountain Chapter's operations during the second round of seed orders. After the many wonderful, complex national meetings they've produced, this should be a piece of cake.

To both of these chapters, we offer our warmest thanks!

We would have never reached this stage of distribution without our many loyal Donors. We understand the time and effort they put into collecting and cleaning their seeds, and we want them to know how much they are appreciated. Without seeds, there simply is no seedex.

And we hope that all those who benefit from these donations will also consider adding their own contributions this year. All it takes is a donation of five packets of different seeds to receive Donor status. The return on this modest contribution will be the receipt of an additional ten packets of seeds, as well as priority in filling your seed order — which, in turn, will give you a better chance at receiving your first choices. Not to mention the satisfaction of helping to support this vital NARGS activity.

Thanks go to all the volunteers, working within chapter groups or with friends and family, who repackaged the seed and divided the donations into many packets to be shared among many members.

Laura Serowicz's capable hand can be seen in every facet of the seedex. She receives and records seed donations, stays on top of the ceaseless changes in taxonomy, organizes and oversees the repackaging, watches over the electronic orders as they are entered on our website, and generally makes the whole thing happen... from beginning to end. Did I mention that Laura also is a staunch Donor... as well as repackaging the more ephemeral seeds into individual packets of moist perlite to enhance their viability? Yes, she does that, too.

Thanks go, too, to our NARGS website administrator, Daniel Dillon, for his responsive and continuing work on the glitches and snafus of the online ordering system, and Błażej Owczarczyk of Zielonka, Poland, whose work last season helped to greatly improve the operation of this program.

We are all looking forward to a gardening season that will surely be more brilliant than the last. We hope that we can also look forward to hearing from more of you during the seed donation season, too. You will receive more information about that in the Summer issue of the *Rock Garden Quarterly*.

May your gardens flourish.
Joyce Fingerut, Director
NARGS Seed Exchange

Patrons

The following recently became NARGS patrons:

HILARY CLAYTON, FAR HILLS, NEW JERSEY
RADFORD MACFARLANE (WILMINGTON, DELAWARE)
TERESA AMITRONE (CORNWALL, PENNSYLVANIA)
LAURA GREGG (BRYN MAWR, PENNSYLVANIA)

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

Charles Bailey, Armstrong, British Columbia, Canada

Some of you have never supplied NARGS with an email address. Would you provide it for an occasional message from NARGS? We do not share email addresses and it helps us keep in touch with you.

Please email <nargs@nc.rr.com>

Special Note

There will be no grants given for the Norman Singer Endowment nor Travel Stipends awarded during 2015.



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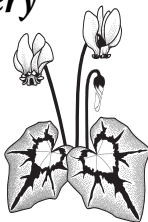
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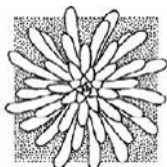


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NARGS STRUCTURE _____

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

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

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

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Back cover: Student in Afghanistan preparing plant specimens - John Mitchell



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