

Alpine Garden Club of British Columbia



Volume 56 No 2 **Quarterly Bulletin** Spring 2013

CONTENTS

Upcoming Events p 27

Rock On- Editor's Column p 28

The Follow-On- Grahame Ware *et al* p 32-33

Annual Pot Show and Spring Sale Reports- Bill Bischoff p 29-31

VanDusen Gardens Rock Garden Revival- Ian Plenderleith p 34-35

The Alpine Traveller: Georgia On My Mind- Brenda & Peter Wilson p 36-42

Gymnospermium Plant Profile- Linda Verbeek p 43-45

Strenbergia sicula- Zdeněk Řeháček p 46-47

Francesca Darts- Memorium- Linda Verbeek p. 48

Geof Williams- Memorium- Linda Verbeek p 48

Upcoming Events

We have a great variety of excellent speakers over the rest of 2013. The talks start at 7:30 PM. For much more information on the speakers, including photos, visit our website: <http://www.agc-bc.ca/events>

June 12, 2013 TODD BOLAND:

THE LIMESTONE BARRENS OF NEWFOUNDLAND: WHERE ALPINES MEET THE SEA

September 11, 2013 CLAIRE COCKCROFT

PARNASSOS AND THE PELOPONNESE: SPRING WILDFLOWERS OF SOUTHERN GREECE

October 9, 2013 ALAN BRADSHAW

FLORA OF THE NORTH AMERICAN WEST

November 13, 2013 PAUL SPRIGGS

THE ART OF THE CREVICE GARDEN AND CZECH INTERNATIONAL ROCK GARDEN CONFERENCE

December 13, 2013

ANNUAL CHRISTMAS POTLUCK AND RARE PLANT AUCTION

June 14-16th, Hardy Plant Society Study Weekend UBC.

"The Garden: Insight & Inspiration From The Ground Up."

Speakers include: John Massey, Andy Sturgeon, Kelly Dodson/Sue Milliken, Thomas Hobbs, etc. Workshops and plant sales- Owl & Stump, Alba Plants, Free Spirit, Far Reaches selling. For more info contact Lindsay MacPherson lmacphersonis@shaw.ca

Rock On!

It is one of those moments in one's life that inevitably causes one to take stock of things. As you're raising your glass, you're also falling into thought. I turned 65 in March and it cast me into a reflective space with thoughts that were centred on what I've done and what we, in the world of alpine and perennial horticulture, have done.

It all starts and ends with seed

Loss and opportunity...joy and mystery...these are inescapable themes as I thumb my way through the 1993 seed catalogue of Ron Ratko's Northwest Native Seed. Leafing through Ratko's second set of seed offerings, I am stunned at what he had to sell. Darn it all, why didn't I buy \$500 of seed? There is no amount of awards from NARGS or any other org that can make up for his loss as a primary seed collector. It is another sad commentary on the state of alpine horticulture that Ratko now toils in the landscaping trade to put tofu on the table. Rocky Mountain Rare Plants is another seed company that has gone the way of the Passenger Pigeon. Josef Halda was always one of my heroes. He no longer roams Central Asia, Turkey or S. Africa collecting seed treasures. And so it goes. On the other side of the coin, Vojtech Holubec continues to collect seed along with fellow Czechs Mojmir Pavelka and Josef Jurasek. They are, however, all getting long in the tooth- a common theme of this editorial. What young people will pick up the slack? Alan Bradshaw of Alplains in Colorado is another that continues to collect seed and has a number of excellent offerings. This situation of people dropping out of the seed collecting business underlines the importance of us as a collective group to collect and disseminate seed to our membership. Just the other day I collected my first seed of the year- *Ornithogalum sibthorpiatum*, a floriferous, wee treasure. Start looking to collect seed in your garden now.

Many of us are getting older and we've danced most of our big dances. We can, however, still hear the music, the Siren of alpine gardening. In our rock gardens there is now a slower waltz and that seems just fine to me. Possibly there is less of a rush in our minds and strides but the satisfaction is still as great. The AGCBC Spring sale this past April was living proof. I was positioned across from the club table and saw Andree Connel, Margaret Charlton and others talking to people, arranging plants and keeping focused on making the table looking good. I bought a few *Paeonia* species as well as a few other genera. When I got home and potted them up or planted them out, I was overjoyed at the beauty of the soil mix and the perfect compactness of the plant in the soil. What a contrast to what we find at garden centres or even most specialty nurseries. The Alpine Garden Club of BC has great people and the plants we offer or trade are living proof. I'm proud to say that not only some of the finest gardeners in the land belong to our club but some of the finest people. Yes, dreams and lives come to an end but the spirit of joy from gardening remains and is passed on to the next generation. We are very lucky to have to joy of alpine gardening in our lives. Despite the gardening work that never seems to get finished, don't forget to take time out to engage young people and children with your joy of gardening. Our gift becomes their gift. Oh and I hope you enjoy the digital edition with live links.

Annual Plant Show Report- "*An Interestingly Beautiful Event To Visit*"

by Bill Bischoff, Annual Show Chairman



Fritillaria selections at the Pot Show competition

photo David Sellars

It was an honour to be asked to help with this event although, initially, I was somewhat hesitant. However, due to the great support I received I soon felt quite comfortable in this new position. Whomever I asked for help or advice gave it without hesitation. Maureen and Richelle Renton and my wife Carla helped with the initial set-up and several other volunteers soon chipped in.

Friday evening came and although the entries were slow at first, soon plants of great quality soon came flooding in. When we finally looked over the completed presentation, it was agreed that indeed we had a fine and very picturesque display of alpiners. I was relieved and overjoyed. The next morning at 9 AM sharp, the judging of the plants began. Initially the judges were: Brent Hine, Jean Hausermann and Roger Low. They were joined shortly by Ian Plenderleith and Margaret Charlton.

During the judging, I put on the cap of a security guard to keep unsolicited visitors out of the display room, so as not to disrupt the judging process. I was surprised that the judging was conducted in such a joyful and convivial manner, not at all as I had seen at other clubs. Thank you very much to all the people involved with the judging and the photographing of all the awarded plants.

Another very important phase of the judging came in the afternoon when visitors from the broader public came to see our show. The expressions on their faces, their comments and questions showed us that we had done well. We are very grateful to all the participants for making this show what was, in the words of a visitor, "*an interestingly beautiful event to visit.*"

After almost all of the last visitors had left, the take-down took place. Again, helping hands came from everywhere. In very short order, both rooms were emptied and returned to their usual sombre atmosphere.

Again, thank you to everyone who helped out and made this show the success it was.

Trophy Awards 2013 Plant Show

Best in Show	Jason Nehring	<i>Erythronium helenae</i>
Best Cushion Plant	David Sellars	<i>Gypsophila aretioides</i>
Best Alpine Plant	David Sellars	<i>Claytonia megarhiza var nivalis</i>
Best Dwarf Shrub	Bill and Carla Bischoff	<i>Microcahrys tetragona</i>
Best Bulb or Corm	Ann and Peter Jolliffe	<i>Arisaema thunbergii</i>
Best Miniature Garden	Bill and Carla Bischoff	<i>Saxifrage plants on tufa</i>
Best Bonsai	Lawrence Wick	<i>Juniperus chinensis</i>
Best Primula	Ann and Peter Jolliffe	<i>Primula maximowiczii</i>
Best Rhododendron	Bill and Carla Bischoff	<i>R. racemosum</i> 'Rock Rose'
Best Woodland Plant	Philip MacDougal	<i>Podophyllum veitchii</i>
Best Plant from Seed	David Sellars	<i>Androsace cylindrica</i>
Best Native Bulb or Corm	Jason Nehring	<i>Trillium rivale</i>
Best Native BC Alpine Plant	David Sellars	<i>Lewisia tweedyi</i>



Lewisia tweedyi- Best Native BC Alpine

David Sellars winner and photo

A Very Brief Report on Some Plants at the Annual Pot Show

by Grahame Ware

For me, the annual pot show was a stunning *smorgasbord* of plants that clearly demonstrated the growing acumen of a number of members. Every entry was an all-star in its own right but the plant that sent me over the moon was Ann Jolliffe's *Primula maximowiczii*. It was in superb fettle and beautifully presented. It is a Nivales section species from N. China that is a strong grower and likes cool, moist acid conditions thus making it an ideal woodland/seep candidate. The colour of the winner was the best I'd seen for this species. Good work Ann. Seed for the exchange please? David Sellars *Claytonia megarhiza* var *nivalis* was another winner of the competition that stood out. It just doesn't get any better than this Wenatchee Mtns. native. It was brought up to the show moment with finesse being in flower (several flowers actually) and looking so classy as to defy description. The Bischoff's Tasmanian endemic creeping strawberry pine, *Microcahrys tetragona*, won in a cakewalk. Outstanding texture and presence. Wouldn't it be great to have more pot shows that would be an *interestingly beautiful event to visit*?

The Follow-On (An update from articles from the previous Bulletin)

Mea culpa. In the last Bulletin, I spelled *Anemone nemerosa*. This is not the correct spelling for the wood anemone. This I discovered on my own. It is one of those American linguistic strangulations that happens with increasingly and annoying regularity but it is not correct. Lionel Bacon, advises that the spelling of the specific epithet *nemerosa* is wrong. "The Latin meaning is destroyed by the use of the word *nemer-osa* as the Latin *nemus/nemoris* as originally applied refers to the plant's habitat of open woodland. Thus, the correct spelling should be *nemorosa*."

The meat of the Follow On section comes from an email from Victoria bulbaholic, Rodger Whitlock, on my article on *Anemone*. On the size of *A. caucasica*, Whitlock comments, "*I have had this since the early 1990s, when I received it via Vera Peck from one of her Czech connections. It is, like its much bigger cousin, trouble-free, and sets fairly copious seed. The thing that makes it a winner in my mind is its size: it isn't just "smaller" than A. blanda; it's much smaller- the flowers perhaps one quarter the diameter of those of A. blanda. The word "dainty" comes to mind. The size difference is enough that I wouldn't call them "similar" where their role in the garden is concerned.*"

Fair comment. Whitlock also observes that he has seen some variance between *Anemone x lipsiensis*. "*You also synonymize A. x lipsiensis and A. x seemanii. Botanically speaking, this is correct, as they are both hybrids from the same parent species, but horticulturally they are distinct, at least as sold by Thimble Farms. I don't remember which is which, but one flowers about a week earlier than the other, and has flowers slightly different in size and color.*"

This is also true. A whole range of hybrids involving *A. ranunculoides* and *A. nemorosa* exist both where ranges overlap and/or with the brush of the breeder. Depending on the provenance of either species, this is another area where the differences would start. This is a case where the term 'Seemanii Group' should be favoured over a pseudo-botanical name like *x lipsiensis* with authorship ascribed to Beck.

Whitlock continues, "*Anemone ranunculoides, one of the parents of A. x lipsiensis, you didn't mention. This has an uncommon form with somewhat smaller flowers and a lower growth habit, A. ranunculoides var. wockeana. Both are quite a bright yellow. Supposedly, there are double forms of A. ranunculoides, but though I've had this (putatively) from a couple of sources, neither has been particularly double.*"

If he hasn't already, maybe Whitlock should take a gander at Ruksans current bulb catalogue where he lists a number of *A. ranunculoides* doubles for sale- including some recent offerings of 'ORJAKU' and 'TIIT' from breeder, Taavi Tuulik. Just 30 Euros each!

Of the subspecies *wickeana*, Ruksans says this, "Flowers yellow, a smaller plant than the more widespread type subspecies, forming narrow, sharply-toothed leaves. A stock from Italy."

And further to my pointed comments regarding fresh seed, Whitlock says, "*I wouldn't put people off growing anemone from exchange seed. While absolutely fresh seed gives near 100% germination, I've had reasonable luck growing anemones from exchange seed, taking care to give it a long soak before sowing, so it is thoroughly hydrated. I rather wonder if the issue with dry anemone seed is that it goes into a very deep dormancy, during which it is prey to fungal rots.*"

Thanks for the feedback Roger.

Here is a link to some great visuals of the rarer *Anemone* <http://wildbulbs.eu/anemon.htm> It might be possible to order seed directly from the web owner at the end of summer for fresh seed. I've been in touch with the proprietor.

For the budding Anemoneholic, Holubec's recent and current seedlist was well represented by *Anemone* including *A. caucasica* from Zigana, Turkey; *A. obtusiloba* (from both the Zheduo Shan and Haizi Shan); *A. petiolusa* var *petiolusa*; and, finally, *A. villosissima* (syn *A. narcissiflora* var *villosissima*) from Sakhalin Island, RFE.



Anemone petiolusa

Revival of the Stanley Smith Rock Garden at VanDusen Gardens

by Ian Plenderleith



Rock Garden at VanDusen Botanical Garden

photo Ian Plenderleith

Good news at last! The Stanley Smith Rock Garden at VanDusen which has been in decline and in need of major renewal for a number of years (and through the tenure of several directors) is getting a major facelift. Harry Jongerden, the current Garden Director at VanDusen, along with Curator of Collections, Cynthia Sayre, and others have put words to deeds and obtained the necessary funding for the required renovation.

The rock garden was initially designed and built in 1975 by Bill Livingstone with generous support from the Stanley Smith Horticultural Trust. Later in 1984 it was renovated by Roy Forster, VanDusen's original Curator and Director. Since that time the rock garden's dwarf conifers have overgrown, invasive plants, including horsetail (*Equisetum*), have proliferated with many desirable plants having been lost. A number of good bulbs however, have persisted and continue to make a colorful Spring show. The renovation and revival of this rock garden is an important and significant event as

it occupies a prominent location not far from the garden entrance. It is roughly triangular in shape divided by a path and water feature and is about 450 square metres in size.

VanDusen has formed an Alpine Collection Advisory Committee consisting of garden staff and volunteers, including several members of the AGCBC, to assist in the planning and renovation of the new Stanley Smith rock garden. Brent Hine, UBCBG alpine curator, will lend a major hand as well. Jim Thirkell, one of the newer staff gardener at VanDusen (and a AGCBC member!), has been given responsibility for the area which includes the rock garden and trough area.

Funding for the renovation includes a \$20,000 grant from the Stanley Smith Horticultural Trust with additional funding from the VanDusen Botanical Garden Association (VDBGGA) and the Vancouver Parks Board. The contribution of the latter will be in the form of staff wages, tools and equipment. Another \$9,000 is available from the VDBGGA plant acquisition fund.

Primary work has begun with the identification of trees and shrubs to be removed with an eye to relocation. The major excavation and construction will take place in September and October with removal of soil to a depth of about two-three feet and replacement with an alpine soil/gravel mix. Relocation and reconfiguration of stonework will proceed as the design evolves. Heavy duty weed barriers will be used to discourage the return of undesirable invaders.

Between now and September will be used for planning and for location of the necessary material - planting mix, stone etc. Procurement of plants will begin shortly but the thinking is that most planting will likely take place in the spring of 2014. Plant material will be obtained from a variety of sources including nurseries, seed exchanges, donations from UBC's rock garden and the AGCBC. Word has it that UBC Botanical Garden plant collecting trips including one this year to the Siskiyou Mountains could be another source of material for the refurbished rock garden.

While the esthetic aspect of the rock garden will be a major consideration, early planting priorities will likely include features such as a display of native alpine plants and plants suited to various habitats and climatic conditions.

To accommodate the diversity of plants, new and different ways of growing alpine plants such as a crevice bed zones and raised sand beds, useful in our maritime climate, will likely be utilized. In this vein, a cold frame structure for protection of plants requiring xeric conditions is under consideration.

The current alpine trough collection will likely be relocated to the new rock garden area. Plants will be labeled and interpretative signage will be developed including how changing climatic conditions will affect alpine plants.

We will try to keep you updated as things progress.

The Alpine Traveller: Georgia On My Mind

by Brenda & Peter Wilson, Strogumber, Somerset, UK

All photos by Brenda and Peter Wilson except where noted

Ed: Brenda and Peter Wilson have been members of the AGCBC for many years. *"In 1991 we attended the International Conference at Warwick University in the UK. At the conference dinner I was seated beside Daphne Guernsey who was then AGCBC president. When she told me of your excellent seed exchange, I didn't need much persuading to become a member. She mentioned my name to Joy Curran, the membership secretary and we still correspond. Pete and I spent 5 days on Bowen Island in 2004 before a trip to Alaska and we were taken to see several members and their gardens including Linda Verbeek and Pam Frost; it was a wonderful time. We are both retired, I was a teacher and Pete was an electronics engineer; now we bird watch, garden and travel whenever possible."*

It was the description in the Green Tours brochure that started it. *'The Greater Caucasus forms a truly impressive divide between Asia and Europe, a great rampart that rises to heights much greater than the European Alps. A wild, untamed region with a breath-taking floral diversity.'* We took the plunge and opted for a holiday in May 2012 focusing on plants but the tour was much more than that as it became a wonderful mix of natural history, landscapes and culture.



On arrival in Tbilisi we were met by Shamil Shetekauri, the Professor of Botany at the university and author of Mountain Flowers and Trees of Caucasia. Shamil's son, Tolcha and his friend Valiko were part of the guiding leaders. Between them all they looked after us very well indeed. We travelled in a large Nissan 4WD which Valiko took up unbelievably rough tracks and across high alpine meadows giving us access to some superb areas.

The tour started with a day out of Tbilisi to an area of dry steppe in the south-east of the country, adjacent to the border with Azerbaijan. Near Rustavi, we searched in vain for *Iris iberica*. The next day, a Sunday, we began our journey to the Caucasus by driving through the city of Tbilisi built on the banks of the Mtkvari River, there were fine old buildings in the centre, many plane trees, a castle and several churches built on hills or river cliffs.

We were now driving to the Greater Caucasus, on the Georgian Military Highway, following the Aragvi Valley. On the hillsides in flower was *Dictamnus caucasicus* along with *Helleborus caucasicus* and red spikes of *Echium russicum*, dwarf yellow *Scutellaria orientalis* and *Cerinthe minor*. Our base was at the ski resort of Gudauri. Our journey continued to follow the Aragvi valley and after a night of storms and heavy rains, we drove up the Highway which, at this altitude, had been reduced to a muddy, rutted track down which Russian lorries slowly picked their way. A viewpoint over the impressive Gudaur Abyss distracted us briefly, then we continued for a short distance before Valiko parked on a bend, we followed him over a low bank to find ourselves faced with a sea of broad-leaved, tall *Galanthus platyphyllus* and thousands of *Fritillaria latifolia*, the huge bells a deep purple-brown.



Fritillaria latifolia photo Ori Sapir

The whole area was running with water and I was glad I'd brought my wellingtons. We spent ages there enjoying the spectacle and taking photographs before another short drive brought us to a stream edged with *Trollius patulus* and *Caltha palustris*. Primulas and a small gagea, *G. sulfurea*, bloomed amongst the bulky, emerging stems of *Veratrum lobelianum* in the wet ground.

We followed the road, in appalling condition, up to the Cross Pass at 2,379 m and here searched a wet, flat area surrounded by snowy peaks for *Primula zaliko*. One plant was found, a small, delicate umbrel of white flowers.

Later, we drove up a track along a valley off the side of the Highway and there, amongst glorious scenery, we found a wealth of plants. Two yellow primulas, *P. macrocalyx* and *P. ruprechtii* flowered with purple *Viola somchetica*; *Anemone fasciculata*, a tall plant with blooms of both pink and white, contrasted with tiny, blue *Anemone caucasica*. Our first Caucasian Marsh Orchid, *Dactylorhiza caucasica*, was found by the river. The next day we set off down the Highway from Gudauri to the Ganisa valley where we walked and drove making our way up the valley passing summer farms and hamlets until we were high on the open alpine meadows with far-reaching views to high snowy peaks above grassy passes guarded by stone watchtowers. In the valley we saw some of the large number of *Euphorbia* species which grow in Georgia, in a patch of woodland *Paris incompleta* and *Polygonatum verticillata* were in full flower among the new leaves of ferns; as well as Marsh Orchids we saw the Early Purple Orchid, *Orchis mascula pinetorum*, and the endemic *Dactylorhiza euxina* with heavily-spotted leaves.



Dactylorhiza euxina

Up on the meadows a stream was edged with primulas and calthas; *Rhododendron luteum* and *Daphne glomerata* sheltered tiny *Anemone caucasica*; the turf was studded with *Muscari szovitsianum* and a variety of gentians including *G. aquatica* and *G. cruciata* were found. Later that afternoon we visited the Aragvi valley far below Gudauri, steep mountain slopes towered above us and rock cliffs which looked like basalt columns formed the valley sides.



Anemone caucasica white form

A. caucasica blue form

The next morning we said farewell to Gela, our host at Gudauri, and drove over the Cross Pass to our next base at Kazbegi, a town of 4,000 inhabitants and the last settlement of any size before the Russian border. We were able to leave our luggage in the hotel and by 9.35 on a lovely sunny morning we were heading to the meadows and hillsides of Tsdo. Here sheets of pink and white *Anemone fasciculata* coloured the slopes; *Iris furcata*, short growing with large violet blooms, *Muscari pallens* with a spike of flowers shading from pale blue to white and *Pulsatilla violacea* in all shades from a bluish white to deep violet were found. We drove to the border post to obtain permission to visit a side valley later in the day; steep rock slopes were the home of the endemic *Silene pygmaea*, with curious brown flowers; wooded slopes higher up yielded the spent flowers of *Fritillaria orientalis*, leaves of another endemic, *Lilium georgicum*, together with *Polygonatum multiflorum* and *P. verticillata*. We were surrounded by the highest peaks of the Greater Caucasus; in front a steep valley rose to the dominant Devdoraki Glacier on the shoulder of Mt Kazbek which rises to over 5,000m. This has earned the mountain a nickname by the locals- Ice Top.

The next day we reached the hamlet of Juta with its somewhat decrepit buildings, stacks of dung drying for fuel and wooden sledges for hauling hay from the sparse fields, we were amazed to find a large hotel under construction. It was so out of keeping with its surroundings not to mention the logistics of taking building materials along the track. It seems that eco-tourism is the thinking behind the venture of a Tbilisi business man.

Another early start the next morning because this was the day we transferred to the Lesser Caucasus, to our next base in another ski-resort, Bakuriani. It was a long day of travelling as we retraced our route over the Cross Pass. The next morning dawned bright and clear, there was fresh snow on the mountains around the village and as we retraced our route down to Borjomi. Through the town we stopped by a limestone outcrop, we found the yellow bells of *Onosma caucasica* and yet more garden-worthy *Euphorbia*. At the entrance to the Borjomi-Kharagauli National Park, we presented our passes and were allowed to enter on foot. We came across *Aquilegia caucasica* with large blue and white flowers and yet more orchids including *Dactylorhiza urvilleana*, a tall marsh orchid with narrow, heavily-spotted leaves and *Neottia nidus-avis*, the Bird's Nest Orchid. This excellent site outside of the National Park and discovered by Valiko continued to produce goodies- this time the leaves of *Cyclamen colchicum*, *Cephalanthera caucasica* and *C. kotschyana*.

After an early morning search for high-altitude birds on the meadows above Bakuriani where the hillsides below us were white with *Anemone fasciculata* (Ed:= *A. narcissiflora*) and above the road they were yellow with *Primula pseudelatior*, a beautiful sight; *Orchis pallens*, in pale cream, grew alongside the similarly coloured *Pedicularis armena*. We returned to the hotel for breakfast but on the way down I saw the creamy-yellow endemic *Paeonia steveniana* in flower.



Paeonia steveniana

Later we continued up the rough, rutted road to an army checkpoint on a pass at 2,454m, our passport details were noted then we were free to cross the rather bleak and wind-swept high Javakheti Plateau where *Scilla rosenii* grew together with *Colchicum szovitsii*. The rough road dropped to the huge expanse of Tabatskuri Lake, itself at almost 2,000m, and a protected area for the water birds it attracts. The return journey should have taken about two hours but we made so many stops to botanise and take photographs that we were only just in time for dinner. One stop, for creamy-white *Rhododendron caucasicum*, also yielded blue *Corydalis alpestris* and our only bloom of *Galanthus alpinus*; I was surprised to see a couple of Hummingbird Hawk Moths in this high alpine habitat.

We had to transfer to the Western end of the Lesser Caucasus and the base at the Observatory at Abastumani to visit the Zekaris Pass. Right at 7 AM, we left for a superb day on the Zekaris Pass, at the national park office formalities were quickly completed once Valiko had woken the ranger and we set off up the incredibly rough track for the 12km journey to the summit. Stops were frequent as we drove through mixed forest, for a bank of tall Early Purple Orchids, for a wonderful display of Georgian Orchids, *Dactylorhiza flavescens*, in both red and pale yellow forms, for an Apollo butterfly and for the increasingly wide ranging views. Above the tree-line the views extended to snow-capped peaks in Turkey and the domes of the observatory telescopes on a nearer forested ridge. Here *Muscari sosnowskyi* grew with *Corydalis caucasica*, sheets of pink *Primula auriculata* and both blue and white forms of *Anemone caucasica*. Tiny Forget-me-nots, *Gentian anglosus*, *Primula algida* and *Androsace villosa* grew so prolifically we couldn't avoid stepping on them; *Daphne mezereum* and *Rhododendron caucasicum* grew down the slope, looking up the views were equally impressive. Further along the track we came across a damp area where hundreds of dark *Fritillaria latifolia* flowered with yellow *Trollius patulus*, quite a sight; a storm far to the north seemed surreal as we were under blue skies. On again to the top of the pass, at 2,182m, where further progress was halted by huge banks of snow. Here we found yellow *Gagea glacialis* growing with the even shorter *Ornithogalum schmalhauseni*. Our return journey was peppered with stops, to photograph the large red flowers of *Pedicularis wilhelmsiana*, on finding Lily of the Valley, wild raspberries and *Lilium sovitzianum*, sadly not yet in bloom. (Ed: See why "sadly" below).

The following day we had to return to Tbilisi but Valiko took us first to Vardzia near the Turkish border. Here we saw 250 caves cut into a high river cliff that also housed the royal palace at the end of the 12th C. along with a church and monastery. It is a UNESCO World heritage site. Driving through a gorge we came across many plants of *Eremurus spectabilis* in full flower. We retraced the route to Tbilisi and said farewell to Shamil. In the early hours of the next day, Tolcha and Valiko, drove us to the airport at the end of what had been an interesting and most enjoyable holiday.

Georgia is unspoilt- there are majestic mountains and plenty of plants, birds and butterflies to keep even the most discerning wildlife enthusiasts content. Then there is the amazing culture and spirit of the people. It was a most fulfilling trip.



Lilium sovitzianum

photo Ori Sapir

Profile on *Gymnospermium*
by Linda Verbeek



Gymnospermium altaicum Curtis Botanical Magazine 1833

At the February AGCBC meeting I brought in 2 pots of *Gymnospermium*. Since I didn't know much about them before I sowed them, I thought perhaps other people might also be interested if I shared a little more information.

The two species I have are *G. altaicum* and an unidentified one collected in Kazakhstan. *Gymnospermium* is a small genus (currently 11 species according to the Plant List- <http://www.theplantlist.org/browse/A/Berberidaceae/Gymnospermium/>) of tuberous plants, hailing from central Asia. It used to be included in the *Leontice* genus. The Curtis Botanical Magazine picture shown above has it as *Leontice altaica*. They are members of the Berberidaceae but the flowers don't look anything like family members, *Berberis* or *Mahonia*. Like many geophytes, it spends most of its time underground and is a snowmelt type. Thus, in late winter/early spring the stems poke out, most of them having one whorl of leaves and a cluster of flowers. They are usually yellow-flowered and so is *G. albertii*, the one most cultivated due to its larger flowers with red on the reverse. My two are quite small plants; when *G. altaicum* first shows, the red stems come up bent over, and are only a couple of cm. Now, in full bloom, they are maybe 20 cm. tall and the inflorescence has expanded into a raceme. The somewhat glaucous leaves are in a whorl of three and are divided into 3 - 5 (or 6) leaflets.

It has taken me a long time to get them to flower from seed, and not just because I generally tend to feed my plants rather skimpily. For two years I lost the flowers soon after the first hooked stems showed above the ground, and I think I finally figured out what happened. As is the case with other tuberous plants, the stems don't go up straight, but first move horizontally away from the tuber before bending up to break the soil. And, although the plant is perfectly hardy (it would have to be coming from Central Asia), the young stems must be more susceptible to frost, and pushing themselves out against the walls of the pot they must have got too cold.

So this year I put them in a warmer place after midwinter, and I was rewarded with flowers from all the tubers (2 *G. altaicum* from '07 and '08 and the unnamed species from '06). I know that *Anemone blanda* has this tuberous idiosyncrasy as well. You see it when you dig them up- it is quite surprising what comes with the tuber! I wonder whether it is a strategy to mislead animals that prey on tubers and corms, etc.? Does the average mouse have the skills of Sherlock Holmes? I doubt it!

I can't say very much about the species from Kazakhstan - it appeared to have somewhat larger flowers, but unfortunately, before it completely expanded, it was attacked by some small predator (a slug or a cutworm, I never found the culprit), and basically eliminated. I have good hope that the tuber will survive, most of the time a perennial plant doesn't risk all its reserves in one throw, and will live to see another day.

But I think it is in itself a sign that it is indeed a different plant, because neither of the *G. altaicum* was attacked at all, and they are different clones, even from different seed sources, I believe.



Gymnospermium altaicum

J. Ruksans pic courtesy SRGC Forum

According to the Pacific Bulb Society web, Mark McDonough grows *G. altaicum* in the open garden in Massachusetts and his plants are more compact than mine. (Ed: Here is a link to the pics on the PBS website: <http://www.pacificbulbsociety.org/pbswiki/index.php/Gymnospermium>) Even though my plants were outside all the time, our dark winter days probably don't provide enough light for them to stay in character. I won't risk exposing them to our excessive wet, so I won't plant them in the garden.

(Ed: Martyn Rix says that they should be kept "rather dry at all times and completely dry during the summer." [The Bulb Book, 1981 p.38]).

Gymnospermium is a neat, unusual plant that will likely get better over time.

For more visuals here is a link to a photo gallery of *Gymnospermium*- <http://www.wildbulbs.eu/gymno.htm>)

Sternbergia sicula

by Zdeněk Řeháček, Czech Highlands <http://www.zrehacek-alpines.cz>



Sternbergia sicula as shown by Zdeněk Řeháček

When I read the article 'Sicilian Sternbergia' in *Skalnicky* 4/12 (Vol.132), I realized that I've had the plant for a long time and thought that I could then share some very useful information about it. So here it is.

In 1985 I received 3 bulbs from England under the name *Sternbergia sicula* Tin.ex Guss. I knew for a long time that this name is a synonym for the more correct *S. lutea* ssp. *sicula*, but I ignored it. I believed that it is easier this way. I did think to scan the Web. The International Plant Names Index for *S. sicula* gave me the answer- namely that it is a synonym for *S. lutea*. It is not subspecies at all according to them. However, it really didn't matter despite this taxonomic fact. I knew that my *S. sicula* was somewhat different. I could see the differences from the pictures. Mine has flatter and narrower leaves with a light line at the edges and bigger and nicer flowers, in my opinion, with narrower and more acute petals.

And, possibly more important from a grower's point of view, it did not take the cold that well or appear to be very winter hardy.

From the start, I grew my bulbs in pots and only in the greenhouse, despite the fact that with the majority of my other greenhouse plants, I kept them outside from mid-Spring to the late Fall. As part of its natural cycle, it goes into dormancy early, from the beginning of May, so it exists under the soil without watering. But the problem is that it starts budding up at the end of August. To get it to flower at first was not that simple and was, in fact, quite difficult. For the first 6 years I did not see one flower, yet it was thriving well and slowly produced bulblets. One year I planted a bulblet outside under a big tree at the lower part of the garden but it was gone after the first Winter because I did not see the need to mulch.

Then I read somewhere, that it does not like yearly transplanting into fresh soil. I can honestly tell you that I did not believe this information. But this, however, was what I had been doing. I thought, 'What does a little bulb know about transplanting?' But then again, what did I have to lose?

So I resisted the temptation to transplant and BOOM! SCORE!- that next September the pot was full of gorgeous blooms- just what I'd hoped for from the Fall-flowering beauty. Since then, I only transplant and divide it every 3 years and now it just keeps blooming and blooming.

I also came to realize that it is possible to control the timing of the flowering with the start of the first watering. Overall, the watering regimen and the timing of watering is the key for this species. So, I started watering from the end of July to the 20th of August and it bloomed from September to October. What a geophyte! I have since exhibited *Sterbergia sicula* and been awarded many pot show prizes.

I've also learned another key thing about the watering regime of *Sterbergia sicula*: in the late Fall or early Winter, ***make sure that you water before the soil in the pot freezes***. By doing this, in the unheated greenhouse, it stays undamaged even in a severe Winter where the temperatures might drop to -10 C or lower.

This approach seems to set it up for strong flowering the following Spring.

-Translated/edited by Mirka Vintř and Grahame Ware February, 2013

Thanks to ZZ for bringing this piece to my attention- Ed.

Francisca Darts- More Thoughts and Reminiscences from Linda Verbeek

Margaret Charlton's *in memoriam* for Francisca Darts in the last issue of the Bulletin called up some memories for me as well. My most cherished and strongest memory of Francisca was formed by the countless times she performed for 'Show and Tell', a permanent feature of the AGCBC monthly meeting. Every month Francisca would faithfully bring in a vaseful of treasures from her own garden. These treasures very often were branches of trees and shrubs. Sometimes Francisca brought them for the flowers, sometimes for the leaves, and sometimes for the fruits (in which case she always invited anyone who wanted them to help themselves to seeds). Sometimes she would bring in a series of cultivars of a particular plant- I remember a whole range of *Hamamelis*- sometimes she was extolling the fall colours of a plant or its ornamental fruit. It seemed that she always had grown the plant from seed and she would inform us about its likes and dislikes as well as its origins. I can still see her, with her charming manner, at the front of the hall, carefully removing one item from the vase, talking about it, and putting it down on the table, before going on to the next one. Heaven only knows how much I learned over the years from Francisca's 'Show and Tell' performances.

Geoff Williams- In Memoriam by Linda Verbeek

Geoff Williams, one of our oldest Honorary Life Members, died on 21 February. Geoff and his wife Audrey joined the AGCBC in the early days, and were a large part of the life of the Club. They were both avid hikers and discovered many of the spots that the Club later explored. They botanized worldwide. Geoff and Audrey early on advocated collecting seeds rather than plants from the wild, and were a great help to the seed exchange for many years.

Geoff served as President, and later on as Editor of the Club Bulletin, with Audrey's help, which is the point at which I met them. They had a fabulous garden on a slope overlooking Indian Arm.

After Audrey fell ill, and later died, Geoff turned somewhat to other interests, of which he had many. For one thing he registered as a regular student at Simon Fraser University and obtained a BA in Humanities with a minor in Philosophy. The experience left him with new life-time friends. We saw less of him in the Club, then, but he would come to some meetings, and the sales etc. After he had a stroke, kind friends would still give him a ride now and then.

Geoff was an unobtrusive kind of person, gentle and outwardly somewhat shy, but he was very efficient and always very kind. As an example of that, when Bodil Leamy and I took over as Editor and assistant Editor, the Bulletin was still produced on a typewriter, and had to be put together *camera ready*, which meant the way it would look if you took the booklet apart in individual folio sheets. For complete novices, this was rather a bewildering process, and although Geoff and Audrey had not been editors for a number of years, they spent a whole day with us, walking us through the process. We are sad to have lost another Honorary Life member, but we are thankful for all he meant to the Club