

Alpine Garden Club of British Columbia



Iris acutiloba subsp. *lineolata* bloomed in Paul Krystof's garden the day after the tour.

Volume 62, Number 2 Quarterly Bulletin, 2019



AGC-BC 2019

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Membership Renewals Due

If you have not already renewed your membership for 2019, please send a cheque for \$30 to Membership Secretary, Jane Byra, with your name and contact info. Cheques should be made out to the Alpine Garden Club of BC.

Or renew online using your credit card through PayPal on our website
www.agc-bc.ca/membership-renewal

AGC-BC meetings are held on the second Wednesday of each month except July and August in the Floral Hall, VanDusen Botanical Garden. Doors and Library open at 7:00 p.m. and the meetings start at 7:30 p.m.

Please bring plants for the plant draw; the proceeds of which go toward paying for the hall rental. Don't forget to bring your coffee/tea mug.

2018 AGC-BC Upcoming Events

- **May 8 - AGC-BC Meeting**
 - Claire Cockcroft: Asiatic Primulas: Clues to Growing Primulas After Seeing Them in the Wild
- **June 5 - AGC-BC Garden Tour**
 - E.H. Lohbrunner Alpine Garden, 6:00 - 7:30 pm
- **June 12 - AGC-BC Meeting**
 - Marcela Ferreyra: The Andean Range and its flowers in Patagonia

For more information, visit <http://www.agc-bc.ca/events>

Related Events

Peonies, Pelargoniums & Prized Perennials Courtyard Sale

UBC Botanical Garden – 6804 SW Marine Drive @16th Avenue

Saturday May 25, 10 am – 2 pm

Spice up your garden this spring with peonies, pelargoniums and prized perennials selected by UBC Friends of the Garden volunteers. A special assortment of pelargoniums, Itoh, tree and shrub peonies & more will help make this a successful gardening season! Beautiful living sedum arrangements and wreaths will be available and the Shop in the Garden's Garden Centre is bursting at the seams with everything you need! Bring your gardening questions to on-site Master Gardeners and Hortline experts.

For more information visit: botanicalgarden.ubc.ca/events

*Special Note: This year's sale is two weeks later than usual.

Richmond Allotment Garden Association

Richmond Allotment Garden Association is opening up our wait list for new members .

Situated just east of Hwy 99 and Steveston Highway , this eight acre site has over 100 allotments ranging in size from 750 - 1500 square feet.

Anyone interested in information or interested in adding your name to our wait list please send your contact information to BRUCE MCCONNELL at bcmccconnell444@gmail.com

From the Editor

Laura Caddy

Ah, spring. I'm so grateful for it to come, but it seems I'm always too busy to take the time to enjoy it. The first heat wave of the season is already in the forecast, and my time is spent weeding and firing up the irrigation system, when I'd rather just be admiring everything that's coming into bloom.

I do feel lucky I got to see two of the gardens on our member tour this May, and I was not disappointed! Thank you to all who opened your gardens to us, and to Ben Stormes for contributing his thoughts on the day for the Bulletin. Also a big thank you to the AGB-BC for the donation made at the last meeting to the Lohbrunner Alpine Garden. Stay tuned for the report on how it helps improve the Garden.

Speaking of garden improvements, Far Reaches Farm just installed a great new garden, which I feel lucky to have been a (very minor) part of. Read ahead for a short write up on their new feature. Also included in this issue is a great report from Andy Matheson on his time spent at Tuscon Botanical Garden. Linda Verbeek has graciously provided her insights on the genus *Corydalis*, Valerie Melanson contributed a Plant Portrait for *Calypso bulbosa* var. *occidentalis* and the Bishoffs shared their *Gentiana acaulis* in bloom. We also have a report on Panayoti Kelaidis' presentation for the club this past February. If you missed it (or just need some help remembering), you can review his slide list, as he provided it as a document and it is on the club website. While you're there, be sure to check out a couple of additions to the Links tab, as well as recent editions of the Bulletin in higher resolution. When we format the pdf to send it via email, we have to shrink it to a size that doesn't do all our wonderful contributors images justice. Now, larger files are made available for your viewing pleasure, if you so choose.

Thank you to all who contributed to the Spring Show and Sale, during the weekend and for this issue. It is greatly appreciated and I'm sorry to have missed it. Finally, the Editor's ID Challenge image can be found on the following page, with a few hints and finally the answer on the last page, right after the fabulous Garden's Rock!

Happy Spring!

Editor's ID Challenge



Too easy? Too hard? Let me know at bulletin@agc-bc.ca

AGC-BC Spring Show

Chris Byra

Thank you to Bob Tuckey for organizing the event, who at the last minute was unable to manage the show due to a family matter. Greg Van Sickle jumped in and managed the successful show. We had an excellent show of *Fritillaria*, *Narcissus*, other bulb plants, bonsai, rock garden troughs, and other perennials.

Several members approached us wondering if it would be possible to contribute plants to the show but not have them in competition. This option is already available but the plants had to be delivered on the Friday evening because judging occurred Saturday morning. In order to encourage more participation the executive will consider options that would allow plant delivery on Saturday morning. Look forward to hearing more at the next couple of meetings.



Image left: *Saxifraga* 'Allendale Frost'. Photo courtesy Jay Ackerley.

Image centre: *Pleione speciosa* f. *alba*. Photo courtesy Chris Byra.

Image right: Hybrid *Primula* category. Photo by courtesy Jay Ackerley.

AGC-BC Spring Show and Sale

Jay Ackerley

The 2019 Annual Spring Show and Sale took place on Saturday, April 6. But the “behind the scenes” work of setting up Van Dusen’s big Floral Hall for the event started the evening before. Volunteers scurried to set up tables, while show and sale participants readied their displays. In addition to the volunteers, a special thanks should go to David and Wendy Sellars, and Jason Nehring. Without their substantial contributions of plants for the Show, display tables would have been disappointingly paltry. More on that to follow.



Fritillaria category. Photo courtesy of Jay Ackerley.

Saturday’s sale can only be described as a success. A very steady flow of traffic seemed to flow through the event, from beginning to end. While the show’s total sales numbers were down slightly, sales on a per-vendor basis were up. Therefore club members who took part in the sale have to be pleased and congratulated on their success in 2019! Seed sales seemed to excel on the backs of two or three key customers who took a real interest in the vast variety of seeds available. One gentleman who bought around \$80 worth of seeds was going to take his chances trying to travel back to his native Washington State with them!



Rock garden plant raised from seed by the exhibitor category. Photo courtesy of Chris Byra.

Trillium
category. Photo
courtesy of
Chris Byra.



One area that could use improvement in 2020 is the club table. This year's club table was fairly lean insofar as rare plants, or sheer numbers of plants for sale. To that end, in April's monthly meeting, AGC-BC President Chris Byra implored membership to begin thinking and acting now in preparation for next year's show and sale. Cuttings and extra seeds can be started now to produce strong plants by fall for the sale.

Meanwhile, the show seemed to suffer from members reluctance to travel to Van Dusen on Friday night. Traffic and weather may have been a factor, but members must remember that the show cannot exist if volunteers won't show their plants!

In 2020 we encourage membership to take an active role in the show and sale!



Chamaecyparis obtusa. Photo
courtesy of Chris Byra.

AGC-BC Spring Show Winners

Collection of three pans of any rock garden plants of the same genus.

David Sellars - *Saxifraga* 'Allendale Harvest', *S.* 'Lismore Carmine', *S.* 'Polonaise'

Any native Pacific Northwest plant suitable for the rock garden.

David Sellars - *Fritillaria affinis* - **Best Native Bulb or Corm**

Any plant suitable for woodland or bog garden, except native Northwest plants and ferns.

Jason Nehring - *Chloranthus japonicus* - **Best Woodland Plant**

Rock garden plant native to Europe.

Jason Nehring - *Salix helvetica*

Rock Garden plant native to Asia.

Linda Verbeek - *Heloniopsis acutifolia*

Rock garden plant native to Africa.

Jay Akerley - *Delosperma nubigenum*

Rock garden plant native to North America

David Sellars - *Lewisiopsis tweedyi* - **Best BC Alpine**

Rock garden plant raised from seed by the exhibitor.

David Sellars - *Narcissus triandrus* var. *triandrus*

Saxifrage

David Sellars - *Saxifraga* 'Allendale Frost' - **Best Cushion, Best Alpine, Best in Show**

Lewisia

David Sellars - *Lewisia cotyledon*

Fritillaria

David Sellars - *Fritillaria graeca*

Trillium

Linda Verbeek - *Trillium rivale*

Pseudobulbous plant

Mark Demers - *Pleione speciosa* f. *alba* - **Best Bulb**

Narcissus (tie)

Jason Nehring - *Narcissus bulbocodium*

David Sellars - *Narcissus rupicola*

Cyclamen

Jason Nehring - *Cyclamen repandum*

Species Primula

Jason Nehring - *Primula minima*

Hybrid Primula

David Sellars - *Primula* 'Airwave' **Best Primula**

Any Bonsai

Pam Yokome - *Chamaecyparis obtusa* - **Best Bonsai**

Miniature Garden

Waita Klapwijk - **Best Miniature Garden**

One pan of a rock garden plant, new, rare or difficult in cultivation.

David Sellars - *Trillium petiolatum* - **Best Plant in Expert Class**

Highest Aggregate Points - David Sellars

New Crevice Garden at Far Reaches Farm

Laura Caddy

On March 22, I had the pleasure of attending a crevice garden workshop put on by Far Reaches Botanical Conservancy. Lead by experts Kenton Seth and Paul Spriggs, the day started with a presentation about the rock gardening technique. In the afternoon, we were able to get out and see the masters at work, as they demonstrated the theories explained in the morning. Kenton and Paul had already been hard at work at Far Reaches Farm the week leading up to the day long workshop, installing the new garden. For the hands on portion, Kenton explained the ins and outs of a crevice garden on a section that wasn't quite finished. Paul then led the portion on creating a crevice in a container. It was a rewarding day to be able to attend, and at the end Far Reaches Farm has a brilliant new feature that is well worth a look, if you happen to be in the Port Townsend, WA, area. As if their plant selection wasn't already enough of a reason to stop in!



Kenton Seth, left, explaining crevice construction and planting technique. Paul Spriggs, above, demonstrating how to create a crevice garden in containers. For more on that day, visit Kenton's blog at <http://kentonjseth.blogspot.com>

AGC-BC Spring Garden Tour

Ben Stormes

On Sunday, May 5th I had the pleasure of visiting two of the wonderful gardens part of the 2019 AGC-BC Member Garden Tour. The sun was shining, and a better day could not have been wished for. As someone who works in a very large garden, I always welcome a change in this, and enjoy the intimacy, attention to detail, and more personal scale of individual home gardens.

The first garden visited was that of Paul Krystof, a suburban backyard site packed absolutely to the brim with all manner of alpine treasures and woodland delights. I was immediately struck by the perfect microclimates created for many choice plants. Significant tufa rock work (and I mean SIGNIFICANT) and the steep eastern exposure slope combining to offering cool nooks and sheltered refuges in which plants seemed to be thriving. Large stature woody plants created visual screening and provided well-scaled structure, and a covered structure contained sunken pots of some very interesting plants. I was sorry to miss the *Thalictrum tuberosum* growing in a pot, with its balloon-like flower buds nearly bursting, but not quite.



Rhododendron 'Cinkeys' growing with an *Acer griseum* caught many people's eye.



The second garden visited was that of Philip MacDougall, a rural garden featuring a drastic wooded slope, natural stream, and rich lowland soils. As one might imagine, Phillip's garden contained *Epimedium* galore! Everywhere you turned you were confronted with more of these woodland beauties, some straight species and no shortage of gorgeous garden hybrids. *Epimedium wushanense* was featured heavily and was a most welcome sight. Marvellous clumps of *Podophyllum* (syn. *Dysosma* or whatever you like) selections were also common throughout the garden, and there were some plantings of *Disporum* that were just beginning to really come on. Given the steep slope, meandering stream, and quiet rural setting, one got the sense that they may truly have slipped away into some distant Chinese hillside.



Shortia soldanelloides

Reflecting on the day, I think the two gardens were very complimentary. Very different sites conditions, settings, and garden styles meant that a great many plants could be seen over the course of the day, many of these quite rare or unusual. Despite their differences, both gardens demonstrated strong inspiration from the natural environments their respective plants originate in, and an ability to use this as inspiration in making beautiful gardens.

Unfortunately, I was unable to visit Farmhouse Garden Wines or Erica Enterprises, but am sure members took full advantage of what they had to offer. Thank you to all for opening your gardens to us!



One of many *Podophyllum* growing in the woodland garden.

The Challenges of Growing in the Sonoran Desert

Andrew Matheson

Visiting the Sonoran desert for the first time is a surreal experience for the average newcomer. Saguaros (*Carnegiea gigantea*) dot the landscape, begging to be anthropomorphized. Cholla and prickly pear, somehow both cute and menacing, await you around every turn. If you're lucky enough to be there for a rain, the entire town smells like tar (and the locals love it). We have *Larrea tridentata* (creosote bush) to thank for that. What the Tucsonans call 'forests' are, to a Canadian eye, nothing but a shrubbery of *Calliandra microphylla* (fairy duster) and *Celtis pallida* (desert hackberry). But, any plant lover who has visited this desert knows of the great diversity of the landscape; that it is anything but barren. A true desert is a funny concept. In our minds they are places difficult to survive, where beings are pushed to their limits, resources are nearly non-existent, and growth is slow. Though this may be true, desert denizens wouldn't have evolved without these restrictions and cannot live without them. In this way, the desert is as life giving as a Pacific Northwest hemlock forest.

Sitting in the Arizona uplands ecotone of this desert, the Tucson Botanical Gardens (TBG) is a 5 acre garden that has a little something for everyone. Tourists can come and marvel at the bizarre columnar cacti like *Stenocereus*, *Pachycereus*, and *Lophocereus*, quiver in fear at the jumping cholla (*Cylindropuntia fulgida*), and learn about how creosote (*Larrea tridentata*) foster the establishment of other plants. Their cacti and succulent garden (more aptly their desert plant garden) is organized by region- Sonora, Baja, Mojave, Chihuahua, Africa, and South America- all with their own representative plants. Aloes, mesembs, euphorbias, cacti, and yuccas reign supreme. A personal favourite of mine is *Welwitschia mirabilis*, the ugliest plant alive, which has only two leaves and evolved to thrive off of fog in the Namib desert.



Aloiopsis rubrolineata in the African section of the desert plant garden.

On the opposite side of the garden, Tucsonans can take enjoyment by seeking shelter under a plant with broad green leaves, a rare treat for desert dwellers. This section of the garden, near the original house, is shadier and more moist due to towering *Pinus halepensis* (Aleppo pine), *Eucalyptus* spp. and native *Quercus* spp. This allows for the growth of citrus, *Cycas* spp., *Monstera* spp., and even hybrid roses (yes, they need some shade in this desert). Even an orchid house rife with tropical butterflies makes its home in this part of the garden. To boot, the garden has made a bold move and successfully grew a bed of tulips this year- which blew away many a local. This little garden has a lot of little surprises.

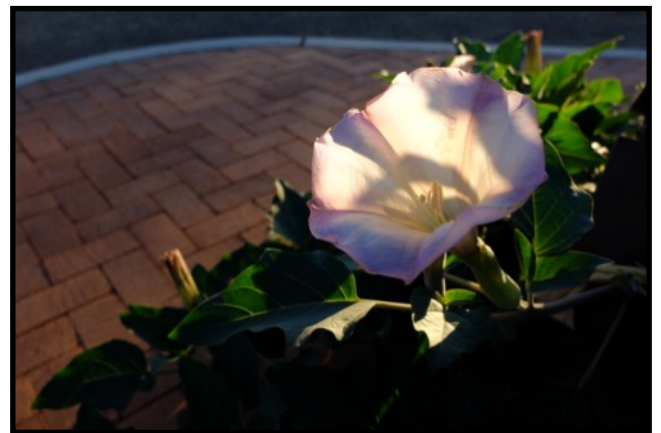


Echinocactus grosonii planted with *Agave* and *Yucca* species.

There are significant challenges to gardening in the Sonoran desert. Allow me to take you through the six seasons they seem to experience. January is a lovely time, more or less a Vancouver summer but with possible nighttime frosts. Periodic light rains and thunderstorms roll through, but days are frequently sunny and balmy. Then spring hits in March- this is the height of plant activity! Annuals are out, lots of plants are in bloom and even have

leaves (a desert luxury). As May approaches, the air is getting hotter and hotter and there hasn't been rain since early February. June is nothing but stressful, the clay soils are hydrophobic and cracked, many plants have long lost their leaves, and gardeners want to stay inside and have a cold beverage of choice. Then the monsoon hits in July and August (sometimes just July). Heavy rains from the gulf of California swoop through the desert, filling washes (annual rivers) with flood waters. Soils are bone dry, causing flash flooding. The impermeability of a city makes these times more challenging as streets flood, impeding traffic and visibility. Oh, and if you're extra lucky, the monsoon will be followed by a dust storm. After monsoons abate, the temperature rises again. September and October can be quite hot, and there may be a second dry period. Then late October and early November are "fall" where nothing really falls. December becomes nice again, with periodic light rain, possible nighttime frosts, and balmy days. It is also worth mentioning that any of the above descriptions are subject to change with heat and aridity being the only stalwart. One can guess this aridity in combination with clay soils can be a challenge. But to top it off, gardens have to plan for torrential downpours, flash floods, and regular freezes with virtually no snow cover. Phew. (Brewer et al., 27-34, 2015).

How does the TBG deal with these pressures? An obvious answer is using native plants that are adapted to the local environment. They end up being low maintenance and having fewer demands when their needs are met. Plus, they're built for the environment! For example- after rain, *Agave* spp. switch to a less efficient mode of photosynthesis (C3) from their usual (CAM) in order to increase speed of growth, and can have new visible roots within five hours. (Brewer et al., 144, 2015). Though these native plants often establish slowly, weeds are limited without water and also establish slowly. Hooray for less weeding! It is also critical to use plants together- shade has never been more important. The vast majority of plants cannot handle a full day of Tucson summer sun- even most of the native cacti. It takes years for them to adjust. Native trees are a critical piece of Tucson landscaping and the city is pushing for the planting of more to decrease energy costs.



Datura wrightii is native to Arizona.



Aloe ferox appreciates some shade in this desert environment.

Monsoons, however, can erode any garden. A poorly graded garden in Tucson can lead to flooding and rapid erosion, with overland flow essentially taking water away from a given area. Many of the street areas around the garden take water harvesting inspiration from Tucson local Brad Lancaster, an expert in water management and permaculture. Lancaster stresses the importance of grading landscapes and creating swales in ways which direct and capture rainwater, forcing infiltration. He even goes as far to [remove sections of curbs](#) allowing water to flow in from the street, if the situation permits. Once water has permeated into clay soils, they can stay moist for weeks, feeding the trees or other plants in the swale as well as cacti, succulents, and more xeric plants outside of the swale. TBG also harvests its own rainwater by directing runoff from a roof into a large cistern from which it can be used to water plants. The city of Tucson has a long way to go in the creation of permeable infrastructure, but these are great starts!

The Sonoran desert garden is an odd place, where irises go dormant in summer, plants lose their leaves whenever they feel like it, and everything benefits from afternoon shade. Despite its harshness, landscapers and gardeners are now beginning to turn to local ecosystems for gardening inspiration and water management, which begs the question: what is your garden trying to tell you?



Echinocactus grusonii and *Lophocereus schottii* at Tucson Botanic Garden

Andy Matheson is a recent graduate from UBC Botanical Garden's horticulture program who went on to intern at Summerland Ornamental Gardens and Tucson Botanic Gardens before landing a seasonal horticulturist position back at UBC's Botanical Garden. Passionate about ecology, Andy takes his gardening inspiration from nature and aspires to play with the interface of nature and horticulture, improving landscapes disturbed by humans. He has also never met an Artemisia he didn't like.

References:

Brewer, L.M., Dimmit, M.A., Wentworth Comus, P. 2015. *A Natural History of the Sonoran Desert*. Oakland: University of California Press.

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Corydalis

Linda Verbeek

Spring is always the time when I enjoy the genus *Corydalis* the most. Not that they don't flower for a good part of the year, but somehow they stand out more in the spring. The first ones to bloom for me are two species from the dry areas of Central Asia, and I grow them in pots, so I can give them the summer dry they like. They both grow from tubers. *Corydalis darwasica* is the more demure one of the two. It makes finely divided glaucous leaves, with the final leaflets all having rounded tips (I think all *Corydalis* do this), and creamy flowers with only a very small dark marking at the tip. *Corydalis popovii* is much more blatant all around – it is larger, the leaves are more coarsely divided, if just as glaucous, and the flowers are much showier. They are larger, carried in laxer racemes, and they are nearly white with a vivid deep purple tip.

After that comes the time of the tuberous woodlanders. The one I've known since I was a child is *Corydalis solida*, which grows all over the deciduous woodlands of northern and central Europe and Asia. The colour is normally a mauve purple, but variations do occur, and over many years in European gardens, it has come to vary from white through various shades of pink to raspberry red and deep purple. In my garden it is actually beaten to the line by *Corydalis paczoskii* from the Caucasus. This is otherwise not much different, only not having as many flowers in a raceme. Also blooming at this time is *Corydalis malkensis*, which comes from the Caucasus too. It is much like the previous two, but the milk-white flowers are somewhat fatter. These woodlanders will all self-sow, but at least for *Corydalis solida* it seems to be necessary to have two clones, so cross-fertilizing can occur. And maybe the proper pollinator isn't always present, as the flowers have a closed mouth like snapdragons, and it probably takes a fairly specialized pollinator to get in there. A quick search of the web seems to indicate that the pollinators are mostly bees of various kinds, and they don't usually like it too cold.



Corydalis malkensis. Photo courtesy of Ben Stormes.

Also blooming at this time is *Corydalis cheilanthifolia* which comes from Western and Central China. This is a very different plant. It does not grow from a tuber, but from a fleshy rhizome, and it makes a rosette of elongated, pinnately dissected leaves which are reminiscent of fern leaves (the Latin name compares it to a specific fern). It makes dense racemes of large, buttery yellow flowers which can reach 20 or 25 cm tall. It likes more sun than the woodlanders, and has found its niche in my garden in an area where it gets full sun all morning. It is a perennial, but, at least for me, not long lived. However, it seeds around quite readily, so there is never shortage of new plants. Mine was originally given to me by Anne Aiken, a member of our Club, a very long time ago. I had admired it in her garden, but must have misjudged where she had it growing, because for years I wondered why on earth I had bothered with it – just a few little yellow flowers in all that greenery. Not until it had sown itself in a place where it was obviously happier did it show what it could do, and I have enjoyed it ever since. It is in full glory in early April, but will continue to flower – less and less abundantly – for another month to 6 weeks. By the time it has truly given up, the summer contingent is moving in.

The dominant figure among them is *Corydalis lutea* from Europe, which is undeniably a weed, but I find the fresh foliage and the abundant little yellow trusses irresistible. It too is perennial, but it grows very fast from seed, and I usually pull out the old ones. If you go for this one, you have to resign yourself to weeding out the surplus every year. But it fills in so nicely where other plants have gone dormant – and it has a lovely fragrance. If you do pull out a flowering plant, the flowers will last for several days in a vase. There is a North American native *Corydalis* (*C. aurea*) that is supposed to be very similar to *C. lutea*, but I have never seen or grown it. Perhaps if we could get it, it wouldn't be quite so forward in its behaviour.

Corydalis lutea has a close cousin with creamy white flowers, *C. ochroleuca*. This comes from southern and eastern Europe, and looks very much like *Corydalis lutea* except for the flower colour. So far it has not been a problem in my garden. Both of these last two species have now been moved to the genus *Pseudofumaria*.

There is another one that pops up in my garden here, there and everywhere, and I would not recommend it. *Corydalis petrophila* is from from China, and it is a very lax, untidy plant which only small trusses of typical mauve flowers -

not worth the bother. More attractive is *Corydalis ophiocarpa* from the Himalayas. It has ferny leaves like *Corydalis cheilanthifolia*, but, especially when they are young, they have a most unusual colour, somewhere between grey and glaucous-green, with a wash of burgundy. The flowers grow in very long spikes, and are not spectacular, mostly creamy in colour. The seed capsules are interesting because they really contort themselves.

A similarly large plant is *Corydalis taliensis* from China which makes sizable clumps of foliage and long arching stems with rich purple flowers. As it seems to be perfectly happy in the shade, it is a nice bit of colour in the summer.

Of course the stars of the summer *Corydalis* are the blue ones. I grow only one, *Corydalis curviflora* var. *rosthornii*, also from China. This is a low-growing plant with glaucous leaves on dark red stalks, and brilliant blue flowers. It runs a little but it can also be temperamental. I think it is very important to protect the crown in winter. Anyway, so far it has survived. It goes on producing flowers for a long time.

This is only a smattering of the 470 or so species of the genus, but I hope it gives you an idea of the range. Most of them come from China or thereabouts, and many of them grow in high rocky places, and these are generally very difficult to please.

Linda Verbeek has been a member of AGC-BC since 1978, and served as Bulletin Editor in the 80's and 90's. She is a regular contributor to the Bulletin, and often brings her interesting plants to the monthly meeting pot shows.



Corydalis solida. Photo courtesy of the author.

Blooming in the Bischoff Garden

Carla Bischoff

Gentiana acaulis grows in several places in our garden. We grow it in full sun and light shade. The images are taken of a plant growing in a concrete block near a tall Rhododendron, which gives it a light alkaline environment. A low growing evergreen, it can also be grown as a pot-plant. It is native to the mountains of southern Europe.



Gentiana acaulis is only one of the dozen gentians we grow. A close relative, *Gentiana clusii*, looks very much alike, but needs more alkaline soil, so we grow it in our tufa bed."



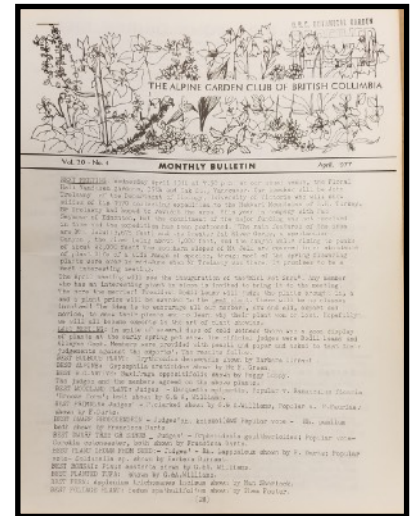
Gentiana acaulis blooming on May 3, 2019, in the Bischoff garden.

Report on February Speaker

Laura Caddy

Panayoti Kelaidis: No End of Novelty Out of Africa

Many members know our speaker from the February meeting, which is not surprising. Panayoti Kelaidis is an exceptional plantsman, very involved in the alpine plant and rock garden world, and also has a long history with our club. He has contributed to our Bulletin at least twice so far, including what was one of his first articles, focusing on *Aquilegia saximontana*, written back in 1977 when the Bulletin looked like a bulletin, and was published monthly. One of the perks of working at UBC is I have access to what I believe is almost a complete set of our publication.



AGCBC Bulletin Vol. 20, No. 4 featured an article by Panayoti.

For this presentation, he focused on alpine and rock garden plants of southern Africa. South Africa is an incredibly diverse country in almost every way, and this certainly includes its flora, as it is home to 10% of the world's flora. When we focus on alpine plants, it takes us primarily to the Drakensberg. Panayoti explained that it is an archipelago of mountains, located in the north eastern part of South Africa, and is also the location of the landlocked Kingdom of Lesotho. Within South Africa's borders, many parks exist that protect the flora of the area. One adjoins with a national park in Lesotho to form the Maloti-Drakensberg Park, which is a World Heritage Site. Even so, Panayoti expressed concern with the security of the flora in Lesotho, as there are many agricultural pressures on the environment of the small mountain Kingdom.

The Drakensberg is a hot spot for endemism. Of the 2000 species found there, many are endemic. There are few forests to speak of in this mountain range, so they don't have the stereotypical montane to subalpine to alpine regions that we may be used to. This is in part because of the occurrences of fire, but also the prevalence of mega fauna. October through March was his recommended window to visit to catch the beautiful meadows. It has a monsoonal climate, receiving an average of 1270 mm (50") of rain per year, and is more moist in summer, and drier in winter. Opposite to what we have on the "wet" coast of BC, but that doesn't mean there aren't many plant gems worth trying here.

Panayoti covered a dizzying number of plant's, and graciously provided a list of them all, which can be found on the club site under Membership/Slide Lists. Many of the plants have been introduced into the nursery industry through the Plant Select® program, a partnership between Denver Botanic Gardens and Colorado State University, which Panayoti helped form. Plants introduced through the program have the advantage of being easier to procure, while also insuring royalties are paid back to the plants country of origin.

One of the most famous Plant Select® plants he mentioned is *Delosperma* 'P001S' Fire Spinner®. I was surprised to hear that, despite what some nursery labels say, it is actually likely that this plant is new to science, and the species not described. Panayoti has championed many *Delosperma* species, starting with *D. nubigenum* in the early 80's, which is now the top groundcover in the Denver area. The Drakensberg native is found hanging off cliffs in its native range at high altitudes. *Delosperma cooperi*, also got the "Kelaidis Bump" (my term, not his...) into horticulture, which thrives on slopes and hot summers. This is certainly the case in the UBC Lohbrunner Alpine Garden, where *Delosperma cooperi* flowers for weeks, filling in the border of the southern paths of the African section.

Other members of Aizoaceae that he finds hardy in Denver are *Aloinopsis villetii*, *A. spathulata* and *Khadia alticola*. Of these three I have grown the latter two in Vancouver. *Aloinopsis spathulata* came through this last winter when grown outside, but I wouldn't say well. It is one I think I need to move to a raised bed and maybe grow in straight Sechelt sand, or perhaps a crevice. That being said, it did fabulous in the covered Cacti and Succulent House. *Khadia alticola*, on the other hand, which I picked up at Far Reaches a couple years ago, is so far doing fabulous in three different area of the garden, none of which are covered. Admittedly, this is only their second year, but they weathered the winter well, and are all blooming.



Khadia alticola growing at UBC.

Other succulents recommended during the presentation included *Aloe polyphylla*. It is the highest altitude aloe in the world, the national flower of Lesotho, and one that I would love to try. The presentation included great photos of *Euphorbia clavarioides* in the wild. It is a cushion that can get up to one metre across in nature, and is visited by baboons in the wild, as they eat their seeds! Here in Vancouver, I have found it does best when grown with overhead protection in winter. We received our plant at UBC from Roger Barlow. Unfortunately, I've not seen fruit on it, and we have found it can be difficult to grow from cuttings.



Euphorbia clavarioides growing in the Cacti and Succulent House.

Bulbs and corms were also included, such as *Brunsvigia* and *Gladiolus*. *Brunsvigia radulosa* has a large inflorescence, the size of a basketball! When dried, it looks like a tumbleweed. We have this in the bulb frame at UBC



Brunsvigia radulosa in the bulb frame at UBC.

(which is covered in winter), which I typically don't water in summer, with the exception of this plant. I have moved one bulb out into the open garden – time will tell how it does. If you do grow it, don't worry if you don't see it come up in spring. The leaves still haven't emerged from the bulb yet this year, and that seems to be normal for it.

Gladiolus flanaganii is nicknamed suicide lily, as you risk your life trying to get to it on the cliffs where it grows to collect seed. So if you get your hands on it, be extra grateful! *Gladiolus dalenii* has one of the widest distributions of the plants mentioned, as it is found growing all the way from South Africa to Ethiopia. Its flowers are variable in colour, and it does well at UBC.

I don't think a presentation on southern African plants would be complete without a couple of genera I associate so closely with that part of the world: *Protea* and *Kniphofia*. I didn't realize that there is an alpine, cushion *Protea* (*P. sulphurea*) that is pollinated by mice. Could it grow here? Maybe! *Protea dracomontanum* is another species that Panayoti thinks would be hardy, as Heronswood used to sell it.

I was happy to see *Kniphofia hirsuta* included in the slides, as it my personal favourite of the group. One of the smallest of the genus, the leaves stay low to the ground, are generally evergreen and the only ones in the group that have hairs on them. *Kniphofia caulescens* and *K. northiae*, are much bigger, and we grow the latter at UBC. It is quite interesting, though I would say best for the larger garden.



Kniphofia northiae at UBC.

Many *Helichrysum* were mentioned as there are many of them in the Drakensberg. *Helichrysum trilineatum* is a silver leaved shrub that has done well in Denver. At UBC, it has a nice compact form, but it can get up to 1m by 1m. Luckily, if that's too big for you, I find it takes hard pruning well. Panayoti recommended *Helichrysum praecurrens* be grown in similar conditions as a saxifrage, and listed it as a good candidate for a crevice. But he saved his greatest praise of the genus for *Helichrysum ecklonis*, because of its big flowers.



Helichrysum trilineatum (round, silver shrub) pictured above.

Panayoti warned that some of the genus require quite a bit of moisture, despite their silver leaves, which often means the opposite. *Helichrysum montanum* and *H. milfordiae* are included in this group, both of which are worth a try in our climate. Panayoti mentioned he has seen the later growing in Victoria. He also included *Euryops acreaus* in this cultural group (though not a *Helichrysum*, is in Asteraceae). It is an alpine shrub that naturally grows in moist areas. We have grown it at UBC since 1972, though we propagate it from cuttings every decade or so (which it takes to well).

One of the final groups of plants he covered is *Diascia*. I know this genus from my days working in Alberta in a wholesale production greenhouse that specialized in annuals, so was surprised to hear there are perennials to try that may be hardy. He highly recommended *Diascia* 'Coral Canyon', which I will certainly keep an eye out for. That, and potential new introductions, as he indicated there are many more in this genus to be explored in the Drakensberg.

Panayoti's presentation provided an extensive look at many plants from the Drakensberg region. Some tried and tested, some waiting to be. With his many trips to the area, and photos of the plants in their natural habitat, it was if nothing else inspiration to visit the Drakensberg.



Kniphofia hirsuta, with *Delosperma cooperi* (bottom left of image) at the start of their bloom period.

All photos courtesy of the author and taken at the UBC BG Lohbrunner Alpine Garden.

North American Plant Portrait

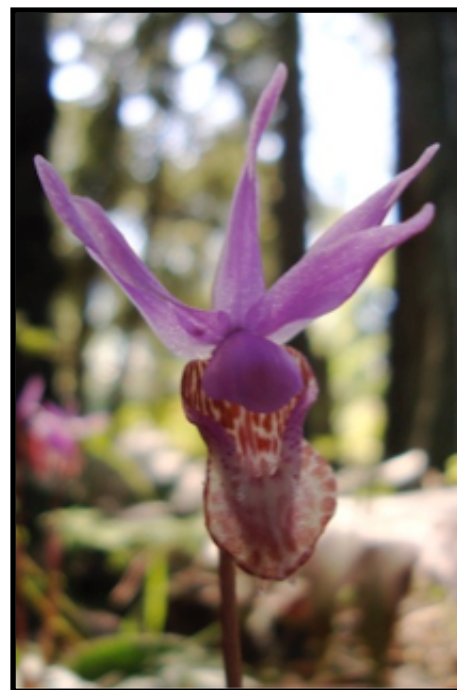
Calypso bulbosa var. *occidentalis*

Valerie Melanson

This is not an orchid I have had in cultivation, unfortunately, but my favourite native. I first met *Calypso bulbosa* in the flesh, summer of 1979, when I stumbled upon a 'swarm' of these beauties along the north side of a fallen tree trunk in open pine forest on the Douglas Lake plateau near Merritt, B.C. A group of about 25, and no camera on me, of course. Up to then I only knew them from Endangered BC Wildflower Posters that were posted here and there in campsites and info centres during that era.

Now, on researching, I see they are not endangered in BC according to E-Flora. However on the USDA website, *Calypso* in the NE USA states is listed as endangered and threatened. Obviously, the pressure of human population, hence clearance of habitat, plays a large role in threatening it.

My next encounter, in April 2013, in Parksville on Vancouver Island, was a surprise. It was in a little wooded scrap of wild land, still surviving on the edge of the city, embellished with picnic tables and nature signs and dressed up by the Rotary Club at one end with specimen rhododendrons beside the visitor information centre. I was impressed to find some individual plants (right) and one small group.



Then I saw an even smaller group, about 8 plants at The Notch, at Nanoose Bay (left).

When I decided to do this plant portrait, I thought a re-visit to the site in Parksville was in order. I really didn't expect to find any plants surviving after six years of unending development and human population growth, and considering foot traffic, dog walking, and other pressures. But, very happily, the population is still there and has grown. Some individuals were even braving the foot path, looking a bit stunted and frayed. The once small patch had grown to 50 + individuals in a swath under the trees, dappled by sunlight (right).



The species is monotypic & circumboreal. There are 4 varieties: *Calypso bulbosa* var. *bulbosa* (northern Europe & Asia), *C. bulbosa* var. *occidentalis* (Alaska, BC, Oregon & Idaho), *C. bulbosa* var. *americana* (north-east and north-central North America), and *C. bulbosa* var. *speciosa* (Japan, Korea & China).

E-Flora BC gives even more detail of the varieties. It lists the habitat as “dry to moist, mossy forests in the lowland, steppe and montane zones.”

Cribb & Bailes note that “In the wild, Calypso grows in damp places and marshes in coniferous forest, usually in wet moss and rotting leaf litter at the base of trees.” For cultivation they note: “Calypso starts into growth in the autumn and therefore needs alpine house conditions. It should be grown in a very ‘fluffy’ mix of leaf mould and crushed quartzite grit or in living sphagnum moss in a container. The plants should be kept moist in growth but should be allowed to dry out somewhat in the summer in a shaded frame.”

I hope you can find a colony near you too to admire each spring.

Resources:

Cribb, Phillip and Christopher Bailes. 1989. *Hardy Orchid: Orchids for the Garden and Frost-free Greenhouse*. London: Christopher Helm.

Vol. 62, No. 2

Gardens Rock

David Sellars

To Mulch or Not to Mulch

Everybody mulches. It's good for the soul and good for the garden. We have been using bark mulch for 30 years in most of the garden and it does a wonderful job of suppressing weeds and building a layer of organic soil over time. In the rock garden we use stone mulch and in the vegetable garden we use a mulch of composted pig manure. For *Meconopsis* we use leaf mold. But are there situations when it is best not to mulch?

In the first years of developing our garden we were pretty clueless and it took a while before we realized that mulching with mushroom manure was a bad idea for rhododendrons. There is lots of lime in it and rhodos need acidic conditions. Bark mulch is effective for rhododendrons because it not only keeps the plants moist and acidic but the roots even grow into it. We used to mulch the woodland garden every few years but as the rhododendrons grew large it became impractical. And anyway the leaf fall from the trees and rhodos creates natural mulch.

The undisturbed litter of decaying leaves and moss becomes an effective seed bed for woodlanders, particularly *Trillium*, *Erythronium*, and *Cyclamen*. In time they spread around in a random and pleasing way. We have one area that became totally covered in moss when we stopped mulching it. Now it is a glorious moss garden full of plants including *Fritillaria meleagris*, *Trillium ovatum*, and natural hybrids of *Erythronium oregonum*, and *E. revolutum*.

If we want more plants in another location, we dig up the seedlings and move them around. It is by far the easiest way to propagate these wonderful plants. I like to think that the *Trillium* seedlings are weeds that have not been suppressed by adding mulch every year. Now those are weeds that everyone can enjoy!

Gardens ROCK!



Images clockwise, starting at top left: *Trillium pusillum* with seedlings, *Erythronium* and *Trillium*, *Trillium kurabayashii* and *Cyclamen* seedlings, and *Erythronium americanum*.

Editor's ID Challenge

Do you know it? This is native to Arizona and New Mexico. It is only found in a few sites in the wild, and according to NatureServe Explorer, its conservation status is listed as Critically Imperilled in the former state, and Vulnerable in the later. Luckily, it is well established in the horticulture trade, likely from a single collection in the early 1980's, which is about how long this species has been named and known to the scientific community. A relative new-comer!



I've heard someone say they have mistaken it for a *Globularia* when it's not in flower, so small and tight the leaves are - it's such a great mat forming plant. We picked up three pots of it from Far Reaches Farm a couple years ago, and I planted them in different locations in the Alpine Garden. One in a trough (upper right picture), one out in the xeric area (no-irrigation zone) of the North American section (image below), and the third in an area that got a bit of extra water run-off, which I didn't realize until I saw how poorly it was doing (and moved it).



Erigeron scopulinus is a great addition to a dry, warm, garden nook or crevice.