

Alpine Garden Club of B.C.



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Bulletin

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Alpine Garden Club of B.C. - Executive 2004

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Meetings are held the second Wednesday of each month except June, July & August, in the Floral Hall, VanDusen Botanical Garden. Doors and Library open at 7:00pm and Meetings start at 7:30pm sharp with the educational talk. Don't forget to bring a prize for the raffle, which goes a long way to paying for the hall rental.

Cover: *Low Alpine Herbfeld*, drawn by Nancy Adams, from "*New Zealand Alpine Plants*" by A.F. Mark & Nancy Adams, Reed Methuen Publishers, Auckland, New Zealand.

AGC PROGRAM

December 8th Christmas Auction! Botanical and culinary treats with all the proceeds going to our support of the CKNW Orphans' Fund. Take time now to pot up special treats for the Auction – it's worth remembering that plants are by far and away the best sellers!

January 12th 2005. Our 50th Anniversary Year! Program for this meeting to be announced.

February 9th 2005. Brian Wade is tentatively booked to speak on the UBC expedition to the mountains of Vietnam – an extremely exciting project to identify and locate new plants.

March 9th 2005. Our Members' Slide Show and 50th Anniversary Party!

NARGS meeting in St. Johns, Newfoundland - July 14 – 17, 2005.

There is a tour following the meeting from July 18 – 22.

There is a suggestion that we might look into getting a group together to attend this meeting and perhaps take advantage of a group rate for flights, etc. If you are interested, please let Moya know (604-738-6570) and we will start to check out the viability of this plan.

Program Chair: Philip MacDougall (604-580-3219) has agreed to take on this position. It is one of the cornerstones of the Club and adds greatly to our enjoyment. Please let Philip know if you have suggestions for speakers, presentations or activities you would like to see included. He is currently working on an extremely broad range of speakers and topics from around the world – so watch this space!



FROM THE EDITOR

Our Archives: We have had an excellent response to our request for past issues of the Bulletin and now have an almost complete collection apart from a few very early issues from the 1950's. Our thanks to everyone who helped with this.

Our Anniversary: 2005 is the 50th Anniversary of the foundation of the Canadian Primula & Alpine Society of British Columbia. To mark this occasion, our Winter 2005 Bulletin will be a commemorative issue with articles from founding members, some notes on the history of the Club, photos and drawings from the past, and hopefully some suggestions from our members on how they would like the Club to move forward into the future. We want to hear from everyone – by phone, email, letter, carrier pigeon or at meetings. Please think about making a contribution to the Club and to ensuring its success and growth for the next 50 years.

In particular, we have started a “Letters” section – do you have questions that one of our experts could answer? Did you have a very different experience with a plant described in one of our articles? Do you have suggestions as to how things might be done differently? Do you have compliments? Let’s hear from you!



From the President:

As my three-year term as president comes to a close I feel moved to make a few remarks, well chosen or otherwise.

It has been a pleasure and an honour to be president of our Club. Thank you to the Executive and to everyone who has been so helpful to the club and to myself during this period and thanks to everyone for your forbearance. My best wishes to the incoming Executive who, I am confident, will serve the Club well.

There are two major groups of members of the Alpine Garden Club: local members who are able to attend meetings and take part in our various activities and non-local members whose main contacts are through the Bulletin and the Seed Exchange. How can we make the Club more attractive to both groups?

Let us address the non-local membership first. Our editorial group is making a sincere effort to improve the quality of our Bulletin. There have been growing pains as one might expect but this will improve. Our editor intends to expand the Bulletin to include more items of general interest and to improve the quality and quantity of colour images. We hope for more contributions to the Bulletin from members worldwide and for your feedback. Keep watching and participating. Our Seed Exchange is, without a doubt, the major attraction to members from away. Phyllis and I will do our best to maintain the quality of the Exchange. The only way it can continue to improve is through the

participation of local and non-local members in collecting and donating excellent and well identified seed. We are going to encourage (read pester) members to become more active in collecting wild seed, particularly North American natives.

Locally we continue to try to engage interesting and informative speakers to our meetings and to provide further interest with pot shows, our library, and raffles, not to mention refreshments. Our Annual Show and semi-annual Plant Sales have, in my opinion, been excellent but attendance and participation by members could improve, particularly at the Show. Garden visits have been excellent, informative and a real pleasure but, again, not as well attended as one would expect.

I have recently been reading some Bulletins from the early years of our Club, which was then published monthly except for July and August. I am amazed by the quality of articles, by the many activities, including frequent and lengthy field trips, and by the extent of participation of members in what was then a much smaller club. Could it be that we have lost some of the exuberance of the Club's youth?

I hope that we can increase our participation in trips to the many alpine and other natural areas with which we are so greatly blessed. Gardens are great but nature does it better. We could also become more involved in conservation activities such as protection of areas on the Gulf Islands and North Shore, which are unique botanical habitats in danger of development. Our Constitution requires that we do so.

Enough of this! My very best wishes to everyone, particularly those who love alpine plants and wild places. ~ *Ian Plenderleith*



LETTER TO THE EDITOR:

Dear Editor: My husband and I are hoping to make a trip to Patagonia and coastal Chile in the northern winter of 2006. There are many tours available to that area but we are looking for one with a natural history focus or even better, a botanical one. This kind of tour seems especially hard to track down. Often educational institutions organise tours like this but they are hard to find even with extensive internet searching.

I was hoping that some members of the club would have suggestions or even experience with a tour company or an institution that provides this sort of trip.

Any hints or leads would be appreciated and because the topic may be of interest to others please send replies via the Editor of the Bulletin.

Thanks, *Marilyn Plant*



Seed Exchange woes: As I compile the seed list, I notice a shortfall in wild collected native seeds this year. Reasons? Probably several:

1) Some of our regular collectors have been unable to get out as much as usual this year for a variety of reasons; 2) It has been a difficult year weatherwise with a hot dry summer and an early wet autumn; 3) The postal problems mentioned below with seed arriving from some of our faithful US donors. We will redouble our efforts next year to collect wild native seeds, which I see as our primary value, particularly to non-local members.

There have been problems with parcels mailed in the US coming into Canada. It is not clear what the problem is – I think something to do with the US Postal Service sending all Canadian mail to only three centres in Canada now, which is causing major backups. Envelopes of seed, said to have been mailed weeks ago, have not yet arrived. Hopefully they will in time to be packaged and the donors' lists will have arrived so that they can be included on our seed list. Seed donations from elsewhere and some from the US seem to be getting through with no problems – go figure!

At this time we are presuming that the process for mailing out seed to US members is as it was last year. We have tried to obtain current information without success. Letters to the USDA (Dept. of Agriculture) have been unanswered. As a result we have no information as to the current process or whether there are any additional exclusions.

Be assured that we will do everything possible to get seed orders to members in the US and elsewhere in a timely fashion. Thank you for your patience.
~Jan & Phyllis Plenderleith



MY WAY ~ by Margaret Charlton
How an Unsuccessful Pool Turned into a Thing of Beauty – or Nearly.

Some years ago I dug out a natural depression in the hillside of our garden to make a good-sized pool. I was careful to put in a recommended liner and took great pains to make it level with no liner exposed. My design was unfortunately flawed. First I had left too little space for planting! The low side of the pond was too close to an adjacent main arterial path and the backside butted into a steep bank.



Primula mollis

This also meant that I could not pin down the liner securely. Raccoons soon learned to push down the liner to better access my fish and no amount of fixing could correct this deficiency. To complete the disaster a tree toppled over and severely speared the liner. This was the end as far as I was concerned and I left the whole mess to nature. In due course salal (*Gaultheria shallon*) covered much of this abomination.

Recently however, after major path improvements, we were able to get our rubber-tracked crawler wheelbarrow further up the hillside. This enabled us to mechanically haul large quantities of materials to the pool site, and we decided it was time to re-examine the

pool problem. It really was an unacceptable blight on the landscape. Charlie suggested a small reflecting pool and I envisaged a large planting of moisture-loving plants, particularly primulas. We would clean out the old liner, fill it for a damp garden, and set a small rigid liner someplace in the middle. Cleaning out and straightening the old liner was a major chore as an assortment of small trees had made it their home.

We did some additional piercing of the old liner, put down a layer of gravel and rock for drainage, and then filled it up with peat plus soil amender from the municipal composting facility. The new pool was then set in. The old liner does two things very successfully. It holds in moisture without keeping the soil mix too wet, and it prevents the nearby tree roots from entering the planted area.

The planting has been a great success. The primulas couldn't be happier. The first planting was planned to be *Primula rosea* but as is sometimes the case, we got a surprise from a seed exchange and had a large planting of *P. japonica rosea*, a pale pink. A group of candelabra hybrid primulas are now thriving, as is *P. florindae*, *P. mollis* and *P. saxatilis* also grown from seed. These last two are new to me and their worth will be evaluated next year when they bloom well. *P. mollis* is showing exceptionally good foliage.

A group of *Meconopsis* x Lingholm hybrids have been planted with added #3 chicken grit. Time will tell if the drainage is sufficient. A scarlet *Ourisia coccinea* has surprised me with its happiness. Will it be with us

next spring? Charlie and I once saw it growing in Argentina beside a lovely waterfall. It was stunning. How we would love to see it succeed for us. A South African Restio has thrived along with *Astelia* 'Silver Sword'. They will have greenhouse quarters over winter. Summer colour has come from a large patch of *Calceolaria mexicana* that covers itself with small yellow pouch-like flowers. This is an annual well worth growing. It is often found in our seed exchange. *Lamium* 'White Nancy' did a fine job of covering the raw edge at the front of the pool. Pool edges are a real annoyance. How does one cover the shiny black plastic? There are always gaps in the planting and these edges gleam through. I did have a brilliant thought one night about 3 a.m. when some of my best thinking is done. Why not use burlap to cover the



edges? It would do two things: give a more natural look, and provide both a clinging and a rooting medium for such plants as Corsican mint and *Ellisiophyllum pinnatum*. The next day I cut strips of burlap, tucked one of the long edges under the pool rim, and draped the other edge 2" or 3" over the rim. This looked remarkably better. The following day however was a different story. The water level had dropped 2", the burlap having functioned as a wick. The burlap has now been lifted to about an inch. This not only looks better but the wicking has proved to be an excellent way to provide the damp conditions that plants such as *Caltha* and *Lysichiton camtschatcensis* require.

All in all we have been very pleased with the results, and especially pleased by the survival of *Salix lapponum*. It had to be moved six feet when the pool beds were dug. With drastic pruning it is now looking happy again. Now we are looking forward to spring in anticipation of the surfacing of hidden treasure.

~ Margaret Charlton, North Vancouver



Pachystegia insignis from a coloured etching by Brian Poole a NZ artist working in UK – see his website at www.etchart.co.uk or at www.bestgardening.com

A HANDSOME SHRUB FROM NEW ZEALAND

~ by Ian Gillam, Vancouver

Daisies, members of the *Asteraceae*, are highly successful plants in mostly sunny habitats around the world. They are numerous both as individuals and in their variety of genera and species. In this northern half of our planet daisies are essentially herbaceous, annuals that die away after seeding, or plants that die back to the roots at the end of each season. They can vary in size from the lowly English daisy, *Bellis perennis* and native alpiners like *Erigeron aureus*, to sunflowers much taller than a man. A couple of exceptions are widespread, small shrubs growing in the drier parts of western North America including British Columbia: sagebrush,

Artemisia tridentata and its companion Rabbitbrush, *Chrysothamnus nauseosus*. The latter has small yellow daisy flowers but it requires effort to recall that sagebrush too is a daisy.

It still comes as a surprise to northerners to discover that in more southerly regions, particularly in Australasia, members of the family may develop woody stems to grow as shrubs or even small trees. One of the most striking of the woody daisies of New Zealand is surely *Pachystegia insignis* (originally described as an *Olearia*). Photographs depict it as a spreading shrub with evergreen leaves. I first saw this plant on a visit to Margaret Charlton and Charlie Sale's remarkable garden on Indian Arm, the continuation inland of Vancouver harbour. Margaret had it growing in a large wheeled planter, allowing the whole to be trundled from a patio into an enclosed growing area of the house for winter protection. This was a large but low shrub (under one meter) with deep green leaves, rather shiny and resembling a rhododendron hybrid but bearing white tufted flowers somewhere between daisies and thistles. The young leaves emerge covered with a soft white felt

contrasting with the older leaves. Over a few weeks' exposure to wind and rain this coat erodes to reveal the shiny upper surface. The lower surfaces of the leaves retain a white, wooly coat.

Tradition seems to indicate that this species only grows well from freshly collected seeds as is held to be true to some extent for many members of the *Asteraceae*. Members of the Club may have noticed that packets received from our seed exchange contain as few as four seeds if the variety is likely to germinate readily, but that it is the rule to supply many more seeds of members of the *Asteraceae* in the hope that growers will have a better chance of germination.

At the Club's meetings in the latter part of the year we often have small numbers of packets of seeds newly arrived from kind members in New Zealand. Among these at a November meeting I chanced upon a packet of *Pachystegia insignis*. These were probably harvested around the previous March and so were then up to eight months old. I sowed some of the seeds indoors the next day with little anticipation of success. Within about a week I had several seedlings up and these were grown under lights indoors until warmer weather arrived.

The single plant I have kept over the past four years, like Margaret's, spends the summer outdoors and the winter inside. Though still quite small it has produced several flower heads. (Seeds from these flowers appear rather slim and have so far failed to germinate so they may not make it into the exchange.) This is a plant for a warm and very well drained area in sun and should do well in a crevice in a rock face, a rock wall or gravelly soil, provided the winter is not too cold. I have seen -5°C suggested as *Pachystegia's* limit of cold tolerance and this may be about right. Unfortunately hardiness to -10°C is required for a plant to be reliably hardy here (and tolerance of a few degrees lower is probably desirable). However Brent Hine reports that a young plant in the UBC Alpine Garden survived last winter's brief dip to around -10°C so it would be interesting to try plants outdoors elsewhere locally.

In New Zealand the plant is found in rocky areas within a limited region of the South Island but has considerable altitudinal range. As a garden plant well known in milder areas it is likely that plants in cultivation have been grown in turn from other garden plants and may represent limited genetic variability. If kind growers in New Zealand could provide seeds from wild plants growing in colder regions, particularly from higher altitude and away from the coast, we might find a hardier strain of this handsome and unusual plant.

¹ *The leaves of this shrubby plant can be seen in the photos of the Rock Garden at Dunedin Botanic Garden on p. 84.*

Pachystegia insignis has a well recognised variety 'minor' and also varies somewhat across its range. Recent closer study tends to suggest that the current name may cover six forms (possible species?) that may be separated to some extent by morphology but further by chemotaxonomic methods. There is also evidence of natural hybrids between these groups. From the description, the currently cultivated form seems to agree with that originally described. Considerably more genetic diversity may well exist within the group, holding promise for the existence of hardier forms. (Unfortunately the variants described appear all to have slightly smaller leaves and flower heads than the classical form.) Until hardier variants appear, I can recommend the present strain for growth in slightly milder climates than ours or else in a container kept indoors over winter.

~ Ian Gillam, Vancouver



DUNEDIN BOTANIC GARDEN

Est. June 30 1863

~ Compiled by Robyn Freeth, Rock, Water, & Alpine Collection Curator, Shirley Stuart, Native Plant Collection Curator, & Clare Fraser, Information Service Officer, Dunedin Botanic Garden

Hill views from sunny lawns, over 7,000 native and exotic plant species, and a range of native birds such as bellbirds, tui and wood pigeons – just some of the delights of the 28 hectare Dunedin Botanic Garden. Strolling through the formal layout of the flat lower garden visitors can enjoy the Rose Garden, camellias, herbaceous plants and a winter garden glasshouse, complemented by the information centre, shop and café.

A bridge crosses the creek that bisects the garden, leading visitors to the Rock Garden then up the hill to the upper botanic garden. Pockets of regenerated native bush contribute to the wilderness feel. There is the renowned Rhododendron Dell, and the Geographic Collection, that display collections of plants from around the world. The Native Plant Collection gives a broad overview of New Zealand's distinctive, mostly evergreen flora, 85% of which grows only in New Zealand. Funded by the local community through rates (taxes), access to the garden is free of charge and it is open dawn till dusk each day of the year.

The Rock Garden

The immediate impression when pausing on the Lindsay Creek bridge to gaze at the Rock Garden is of its enormity. It has been devel-



oped on the steep slope rising above the creek and being 175m long and only 15m wide it disappears off into the distance. The slope faces

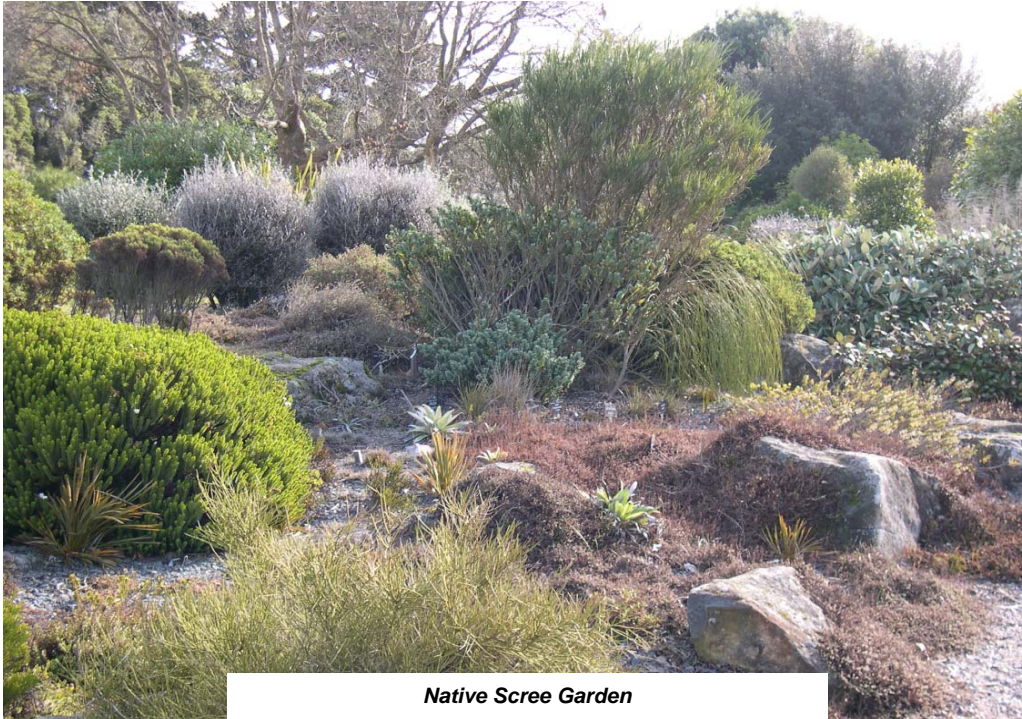


The Rock Garden from the bridge



Rock Garden with Pachystegia insignis

Native Scree Garden with Pachystegia insignis



Native Scree Garden



Dracophyllum traversii



Aciphylla Crosby-smithii

faces northwest and so receives maximum sun and breezes blowing along the creek channel. The bulk of the garden can become extremely hot and dry during summer, and mildly frosted during the winter. Being on a slope the Rock Garden has excellent drainage. The scale of the trees in the Arboretum and hill immediately behind the Rock Garden means that the occasional large plant can be used and still remain in perspective with the rest of the plantings to provide structure and shade.

Early Beginnings

The botanic garden was first established in 1863 but it was not until the appointment of David Tannock as superintendent of Garden and Reserves in 1903 that much of the garden's development began. He identified the potential of the topography of this site and soon after his appointment began development of the Rock Garden in 1904. By 1911 it had grown to 150m long and was planted with a donated collection of 150 native plant species. A description of plants flowering on the garden in 1906 included *Meconopsis napaulensis*, *Jovellana sinclairii*, *Veronica longifolia*, *Primula forbesii*, *P. frondosa*, *Cistus ladanifer*, *Heuchera sanguinea*, *Aurinia saxatilis*, *Silene alpestris*, and *Phuopsis stylosa*. Lindsay Creek which formed the lower boundary of the Rock Garden would turn into a raging torrent during heavy and sustained rainfall, causing much damage. In 1936 the creek was widened and deepened with 4m high rock walls being built on either side. Tannock tried to disguise these by planting rambling roses along the top. Over the last ten years I have been successful in getting various species to seed into the cracks and crevices of the wall to reduce its stark appearance. These include *Euphorbia*, *Aquilegia*, *Dianthus*, *Iberis*, and *Erigeron*.

Neglect and Reconstruction

The Rock Garden suffered from lack of maintenance during the war years, as labour and other resources were in short supply. In 1950 reconstruction began with the building of two terraces above the existing creek wall to reduce the steepness of the bank. This was carried out in stages until completion in 1960. It remained unchanged until 1989 when the overgrown area at the northern end of the garden was developed, almost doubling its size to cover around 2000m² of cultivated area.

Today

Since August 1993, there has been further bed development at the northern end, with a dwarf conifer cultivar collection and landscape plantings around the two stone memorial seats, (one built to recognise the contributions of David Tannock), so that they blend into the garden.

Further planned work includes more development under the large *Pinus radiata* down the northern end (it is at present an unsightly clay bank), and a continued schedule of renovating the older plantings.

The Plants

The plants in the Rock Garden are arranged in an aesthetically pleasing way with no specific theme but dependent on their growing requirements, and their physical characteristics. Smaller plants are grouped in drifts of the same species for maximum impact. Soil is modified to suit.

There are over 2000 species recorded as being planted throughout the collection, (older plantings are still being identified and recorded). These range from bulbs, herbaceous plants, shrubs and the occasional tree.

The most significant tree is a mature native horoeka, or lancewood, *Pseudopanax crassifolius*. It is quite a large tree in photos from the early 1900s, so it may be a remnant of the original native forest which once covered the hillside. Like a huge 3-D lollipop its trunk measures 1.3m in circumference, and it stands over 10m high with a 7m wide canopy. Other significant trees which provide a framework for the Rock Garden include *Podocarpus* species, mature *Pinus radiata*, *Sequoia sempervirens* and *Chamaecyparis lawsoniana*.

While trees provide structure, adding height and scale, shrubs and rocks are the backbone. Dwarf conifers are dotted throughout, tying in with the newly established conifer cultivar collection. Heaths (*Erica* and *Calluna*), small rhododendron, *Pachystegia insignis* and *P.rufa*, broom (*Cytisus* and *Genista*), and *Echium* are a few examples. Smaller shrubs include native *Helichrysum* species, Cassiope, Hebe, *Buxus*, and *Vaccinium*. To provide continuity *Helichrysum argyrophyllum*, *Lithodora diffusa* 'Heavenly Blue' and *Aurinia saxatilis* are dotted throughout the collection. *Fascicularia bicolor*, *Pulsatilla*, *Draba*, *Aquilegia*, *Libertia*, *Aciphylla*, *Scleranthus*, , *Armeria*, and *Paeonia* are a small selection of the herbaceous plants on the garden. Bulbs provide seasonal interest throughout starting with the tiny *Eranthis hyemalis* through to *Crocus*, *Cyclamen*, *Fritillaria*, and *Narcissus*, to the larger scale of *Dierama*.

The Alpine House

The Curator of the Rock Garden Collection is also responsible for managing the Alpine House and its plantings. Seven hundred species are housed in the propagation unit which are brought out for display when they are at their best. Unfortunately neither the display house nor the growing on house is ideal, and I am looking forward to the planned upgrading and expansion of these. Included in this collection are such plants as *Celmisia*, *Raoulia*, *Ranunculus*, *Draba*, *Lewisia*, *Saxifraga*,

Pleione, Oxalis, Lachenalia, Arisaema, and Narcissus. The largest collection is of Fritillaria where we have 63 different species and varieties. I hope this has whetted your appetite for the deep south. Be sure to make yourself known when, (not if!), you are down this way – we are proud of our garden and love to show it off.

New Zealand Native Plant Collection

The New Zealand Native Plant Collection is made up of approximately three hectares of cultivated borders with a further 10 hectares of native bush. The development of a comprehensive collection of New Zealand native plants at the Dunedin Botanic Garden was begun in the early 1920s. The alpine scree garden is a relatively late addition to the area. However it was not the first alpine plant garden - the original scree garden, now known as the old scree, was built in 1937. An area was excavated to a depth of about 1m then filled with rocks of various sizes, stone chips and leaf mould and eventually planted out with alpine species collected from different locations around New Zealand. This garden, however, eventually became shaded by adjacent plantings and unsuitable for the cultivation of alpine plants. Another suitable site was identified and in 1985 the first stages of development of a new alpine scree garden were begun. The site was ready for planting in 1989 and surrounding areas were developed with beds for native cultivars, divaricating² plants and other specialised collections. Plants represented in the alpine scree include Helichrysum, Celmisia, Bulbinella, Convolvulus, Muehlenbeckia and Carmichaelia to name but a few.

Another opportunity was soon recognised for displaying alpine species with the development of the wetland plant collection. This involved the formation of a shallow pond 30 – 40 cm deep and a raised mound to the side of this pond which provided an impervious base over which weed matting was spread and then a mixture of peat, fine gravel, coarse sand and partially rotted fine grade bark chips to a depth of about 15cm. This area now displays plants that inhabit the flushes, bogs and seepages of the high country where snow melt and low nutrient, acidic soils are common. Regular irrigation is essential and although it has proven a difficult area to get plants to grow successfully, a ground cover has established which seems to provide for better

² *Divaricating* refers to a habit of growth of plants where branches develop at wide angles to each other, sometimes 90° or more. Typically stems also branch frequently, resulting in an interlocking tangle. These odd plants make up about 10% of New Zealand's woody flora. Reasons for this development are unclear with three competing hypotheses proposed. Muehlenbeckia and Coprosma, mentioned in Brent Hine's article, are typically divaricate

survival of other species. Some of the plants represented here include Ranunculus, Dracophyllum, Gaultheria, Hebe, Coprosma and Acaena.

As some alpine species are more amenable to cultivation than others, both these areas of New Zealand native alpine plants are changing and developing as plants decide whether they will cope with conditions close to sea level. Most seem quite happy and are well worth a visit if you are in this part of the world.

~ Compiled by Robyn Freeth, Rock, Water, & Alpine Collection Curator, Shirley Stuart, Native Plant Collection Curator, & Clare Fraser, Information Service Officer, Dunedin Botanic Garden.

Editor's Note: We are indebted to Robyn for arranging to send us this marvellous tour of the Botanic Garden in Dunedin, New Zealand. Also to Barbara Wheeler, Collections Supervisor, who was our first contact at the Garden. There are some additional photographs which she sent which we hope to put on our website. You can "visit" the garden at www.cityofdunedin.com/city/?page=bg_about



TAKING STOCK OF THE GARDEN'S EVOLVING NATURE

by Brent Hine, Curator, The E.H. Lohbrunner Alpine Garden
[University of BC Botanical Garden & Centre for Plant Research](#)

The short-term evolution of the Australasian section of the [E.H. Lohbrunner Alpine Garden at UBCBG](#) is a constant source of enjoyment for me. In fact, due in large part to the recent local trend of milder winters, when looking closely at this time of year and taking stock of our garden surroundings, we are probably all discovering new and intriguing plant developments. However, as I walk and observe and remember in this garden, it occurs to me that something bigger and yet more deeply interesting has been developing around me. As memory serves, I recall there being heavier frosts and longer arctic outbreaks during the first few years that I worked in this garden than there have been in more recent years. I realize that I cannot be sure without checking local weather data, but that's the *seemingness* of memory, I suppose. One important fact, however is that at UBCBG, the approximate average extreme minimum temperature since 1994 has been a relatively balmy -6°C, putting the garden for the last decade comfortably within North American hardiness zone 9. From walks and discussions with the Garden's Curator of Collections, we've reached the conclusion that -10°C is a rough threshold of hardiness for many plants, in the absence of snow cover or other mulch.

Every spring, I'm amazed to see the variety of seedlings which have overwintered. Chief among these are the Hebes. Some are round-leaved, some acute, others richly purple-tinted; a few batches sprout as thick as grass. I naturally keep an eye open for any exceptional offspring from among the 60+ taxa in our collection. Even so, only about 90% of the collection flowers reliably.

Others such as *Hebe cupressoides* and *H. loganioides* do not readily bloom. I am quite soft-hearted with these multitudinous seedlings, and I transplant a few of them to a holding area, where I can observe their progressive diversity toward "the next big thing", *hebe-culturally* speaking. As for other woody plants, I was pleasantly surprised to discover that *Ozothamnus leptophyllus* (syn. *Cassinia leptophylla*)



(see photo above) is gently seeding itself. It is one of a large group of woody Asteraceae found in the southern hemisphere, from Australia to South Africa. Its bright golden-green leaves and stems light up the garden, especially during the dormant season. Previously untried here, they are adapting well after experiencing their fourth local winter.

In particular, the *Epacridaceae* family has a (mostly unjustified) blemish attached to it. Although it is often thought of as the quintessential Australasian family, these shrubby, heather-like plants are generally thought of as difficult to cultivate on the southwest B.C. coast. In spite of this, I hold that there are but two or three keys to success with at least some of them here. Our collection of *Cyathodes empetrifolia* makes a worthy example. Accessioned into the botanical

garden in 1990, it is now a meter wide and thriving. This began, obviously, by choosing a plant of hardy provenance. It was planted in a moderately sheltered site, but more than this, it was planted on a northwest-facing slope, where its needs for steady root moisture, drainage and aspect are met. I'm anticipating even greater accomplishments with others from this family. One more success story involves *Pimelea prostrata*, a creeping shrub of Thymelaeaceae. It has been cultivated here since 1972, and beautifully combines tiny aquamarine leaves with clusters of small yet bright white Daphne-like flowers. It prefers scree conditions, and also produces a few small fleshy white berries. These and other adaptable plants have created a backbone for a plant community in this garden component.

On a couple of occasions I have tried here to establish *Geranium sessiliflorum*, without much success. In spite of this, older accessions have seeded around and maintained themselves for many years without a hitch. So much for garden encouragement, it occurred to me! As well, I tried and failed to establish *Scleranthus* on a couple of occasions, yet it has somehow installed itself among a tangle of prostrate, shrubby *Muehlenbeckia axillaris*, where it yearly increases its size. Finally, about four years ago, I planted a small daisy, *Lagenophora cuneata*. Its habit allows it to run below ground and it produces modest, blush pink flowers. At first it struggled and almost disappeared, yet this year it appears to have taken off, perhaps due in part to the addition of granite mulch to the soil a couple of years ago. Two *Raoulia* species also love this mulch, and are spreading well.

My close observation of this plant community shows that it has now reached critical mass, after nearly 30 years, indicating that plants are now *happy*, to put a steward's non-scientific spin on it. They have covered the ground, and knit together in various ways so as to form a kind of organic unit, which suits the continuation of many its species. Yet, to realize that I have had some hand in this evolving process is perhaps what makes me feel good about what is being accomplished; the plants (and me) have achieved a balance, of sorts, and that's for me what makes a good garden. It won't last forever, but having become conscious of it is its own reward.

~ Brent Hine



A TOUR OF THE MOUNTAINS OF LESOTHO

Brief notes on the presentation by Charlie Sale at the October meeting

Charlie started by remarking that this was the 50th anniversary of his membership of one or another horticultural societies and apologized for bringing 187 slides although these were just a modest portion of the more than 800 he could have brought! We settled back to enjoy a colourful and fascinating display of plants and magnificent scenery from Lesotho, the landlocked, independent country surrounded by South Africa.

The variety of plants in the mountains was staggering and we were glad that Margaret was around to provide back-up in identifying some of the more unusual species. The little group traveled into Lesotho from the east, south, west and north by bus and rickety Landrover over dreadful, bumpy roads – this was not a trip for the faint-hearted. The weather was occasionally so wet that there were rivers of mud pouring downhill and changes in elevation brought continuous changes in the types of plants they saw.



Aloe polyphylla

The first ascent was to the Sani Pass. On the paths up we saw pictures of many Orchids, Watsonia, Agapanthus, Geraniums and Helichrisums which varied substantially between different locations. There was a splendid Gunnera (*Gunnera perpensa*) which is unexpected outside of South America. We enjoyed the picture of the Tutsi shepherd playing his musical instrument made of a petrol can and one string – it apparently was a horrible noise!

Dierama dracomontanum was particularly lovely and there were interesting Protea growing at 10,000ft. The view from the top of Black Mountain down a narrow gully to Sani Pass was breathtaking.

Next we saw the spectacular escarpment of Stoneberg Mountain and on to Naudes Nek where Charlie explained that the grasslands below were regularly razed by lightning strikes giving them their distinctive flora and very few trees. There were marvelous buns of Euphorbia and *Crassula setulosa* tucked tight into little clefts in the rocks. It was marvelous to see vast fields of Kniphopia growing wild and displaying ranges of colour from yellow to orange to bright red.

The next ascent was to Ben MacDhui Peak where there were shepherds on horseback. Here Charlie saw some beautiful Gladiolus and planned to photograph them on the way back – only to find them eaten by a troop of baboons!

Tiffendale, on a slope going towards the highest mountain in southern Africa, at 8,700ft is the only ski resort in Africa. There was a little village of round fieldstone huts with thatched roofs. Large plants of *Aloe polyphylla* were growing there. This plant has been hunted almost to extinction in spite of its collection being forbidden because the herbal business is huge and policing very difficult. The Callas were beautiful, and we learned that *Agave americana* is an introduction grown to make tequila. The weaver birds' nests were amazingly intricate and numerous. There was also the most beautiful blue clump of *Felicia drakensbergensis*.

Slide after beautiful slide of *Eucomis*, *Nerine bowdenii*, *Diascia tugulense*, *Guthriea capensis* – and a spectacular waterfall, a nightmarish chain ladder for the bold (foolhardy?) to climb to yet another peak and view. Charlie's talk passed in a flash and a blur of colour and enthusiasm that we could have listened to and gazed at for much longer. Thanks.



GENTIANA SAXOSA

~ by James Muir Hall, N. Vancouver

One of the New Zealand species, *Gentiana saxosa* is found on South Island and also on Stuart Island in the south of the country (the climate is the same as the U.K. only in the southern hemisphere instead of the north) where it is confined to the seashore and sand hills.

From the deep roots arise many branched stems that are prostrate, ascending at the tips and forming rosettes at the extremities. On the rosettes, the leaves measure about 40mm in length and are crowded together. They are spatulate, blunt at the tips and narrowed into a long stalk almost as long as the blade. The leaves on the flowering stalks are similar in shape but smaller and with shorter stalks. Both the rosette



leaves and those on the flowering stalks are fleshy, do not show any veins and are dark, glossy green. The flower stems measure about 150mm in height. The flowers are borne in groups of two to five with a calyx divided for about three-quarters of its length and measuring about 30% of the length of the corolla which is nearly 20mm in length and is divided for more than half its length. The flower is about 20mm across and openly bell-shaped. The lobes are linear with blunt points and are recurved at the tip. The stamens are about half the length of the corolla, the anthers are free, and the filaments are broader at the base and are attached to the corolla for about a quarter of their length. The ovary is oblong with a short, stalked style. The corolla is white with dark purple-brown veinings. The flowering season in 2004 was early September to mid-October here.

The flowers are large for the size of the plant and stand out well against the dark foliage. I have had the species for four years on the North Shore (N. Vancouver) planted in pea gravel scree in full sun with underground water. In such scree with excellent drainage and sub-surface moisture, I have had no problems with this plant. Seeds germinate quite freely and this is the best method of propagation.

My plants, although sold as *G. saxosa* are actually a subspecies and have pink, not white, flowers. Each plant has about 20 blooms which last well into the Fall.

~ Jim Muir Hall, North Vancouver



BOOK REVIEW; Tales of the Rose Tree - Ravishing Rhododendrons and Their Travels Around the World, by Jane Brown, Harper Collins, 2004.
~ by Jack Toovey

Despite what many people seem to think, there are never too many good books on rhododendrons. Jane Brown provides an exhilarating romp through the history of the rhododendron, including the main native sources world-wide and how they were first introduced to the British Isles as an elite “gentleman’s” estate plant. The author has not produced another textbook, but rather, a concise, easy to read series of well-researched, interwoven stories or “tales,” as her title suggests. These include heroic early plant hunters, jealous aristocrats, and the secret world of hybridisers. The book brings us up to the present day where urban gardeners are flooded with easily accessible plant material at the local garden shop. Early British Columbia pioneers are acknowledged, including George Fraser, Jennie Butchard, and the team of Ted and Mary Greig. There are “tales” about the [American Rhododendron Society](#) and current plant hunters (including the [Cox dynasty](#)) who are still challenged to track down the elusive genus *Rhododendron* in all its forms in the 21st Century. Some might suggest you put this book on your Christmas list, but I recommend you do not wait.

*Reprinted with thanks from the October, 2004 issue of “Indumentum”
The Journal of the [Vancouver Rhododendron Society](#)*

Membership

We are delighted to welcome the following new member:

Christine Munro, 7556 Davies Street, Burnaby, BC, V3N 3H1 604-524-0948

MEMBERSHIP SUBSCRIPTIONS: These are now due for 2005 and a renewal notice is enclosed with this bulletin. If you do not have a renewal notice, then your dues are still current.

NB: There are still some members who have not paid their dues for 2004 but who may wish to take part in the seed exchange for this year. If this applies to you, you may now pay your dues from 1st September 2004 to 31st August 2005 and still be included in the seed exchange. We very much regret that if your dues are not paid, because of the high cost of postage, we will not be able to send you seed. I look forward to hearing from anyone with a problem; please don't hesitate to call me if I can help you in any way on **604-738-6570**

~ **Moya Drummond, Membership**

Membership runs from 1st Jan to 31st Dec. or, from 1st Sept. to 31st August. Members joining after 1st Sept. may take part in the seed exchange for that year, or have their membership extended to the following year – but may take part in **only one** seed exchange in the year their membership is current. You can pay your dues by Cheque, Money Order or Credit Card. Cash is not secure in the mail and while it most often does arrive safely, we cannot be responsible for cash which is lost.

Dues: Canadian \$25, US\$20, £13, €20.

Club pins with the name & emblem (*Erythronium grandiflorum*) are available for \$6 & make great gifts!

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www.rockgardenplants.com

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Hesperocodon parvulus

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Beaver Creek website: www.rockgardenplants.com

Dutch International Rockgarden Conference of Alpine Plants

13 through 17 April 2005 - Wageningen, The Netherlands

On the occasion of the 20th anniversary of the **Dutch Alpine Garden Society** a large-scale conference will be organised at the WICC at Wageningen. This conference centre offers all the facilities one can imagine and is easy to reach by car and by public transport.

On 13, 14 and 15 April lectures will be held and an extensive plant sale will take place at the Botanical Garden of Utrecht, in which many foreign growers will take part. You can also sign up for a visit to the famous Dutch bulb fields, magnificent private gardens of almost mountainous proportions and to interesting nurseries on 16 and 17 April.

The lectures will be given by 13 well-known speakers such as:

Panayoti Kelaidis, Ron McBeath, Ian Young, Chris Grey-Wilson, John Richards, David Haselgrove, Phillip Cribb, John Birks, Vojtech Holubec, Erich Pasche, Ger van den Beuken, Marijn van den Brink and Eric Gouda.

For more information contact Bookings Manager:
Martijn Jansen: Tondensestraat 5, 6975 AB Tonden, The Netherlands

visit our Website at www.rotsplantenvereniging.nl