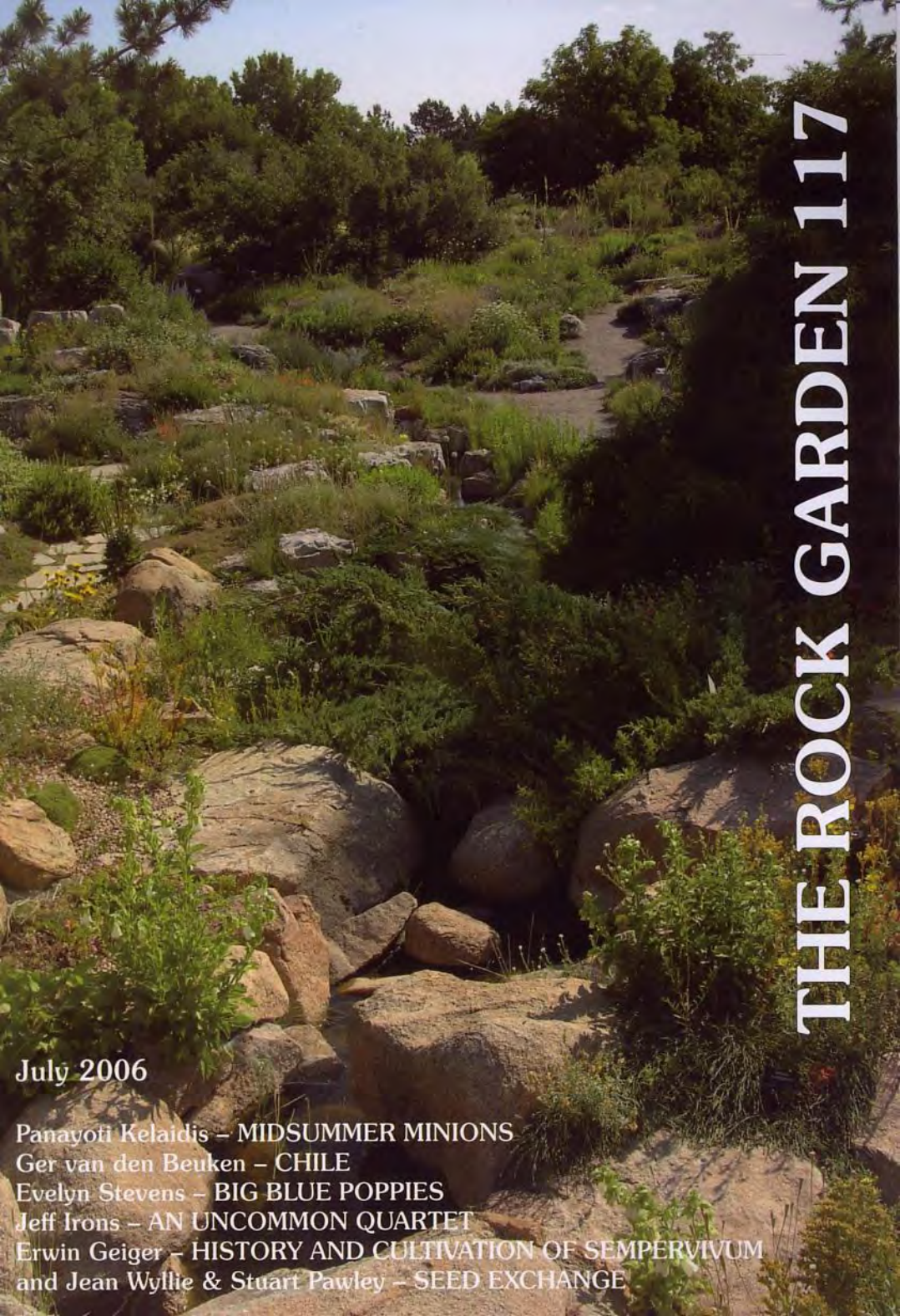

THE ROCK GARDEN 117

July 2006

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Ger van den Beuken – CHILE
Evelyn Stevens – BIG BLUE POPPIES
Jeff Irons – AN UNCOMMON QUARTET
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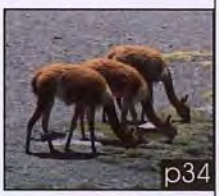
The ROCK GARDEN

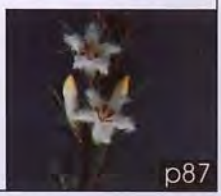
The Journal of the
Scottish Rock Garden Club

July 2006

Number 117

COVER: The Rock Garden in Denver Botanic Gardens in mid-July (Photo Malcolm McGregor)





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The Editor welcomes articles, photographs and illustrations on any aspects of alpine and rock garden plants and their cultivation. Articles, if submitted in manuscript, should be double spaced but it is hoped that authors will submit material on disk, either in Microsoft Word or some compatible software.

Malcolm McGregor can still be contacted on *mmcg@mmcg.karoo.co.uk*

The deadlines for contributions are 1 November for the January issue and 1 April for the July issue. These dates also apply for material for the Yearbook & Show Schedules.

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From the Editor

IT WAS EXTREMELY SATISFYING to have had such a positive reaction from so many members who have written and emailed to say how much the CD was appreciated. Indeed it would be hard to have conceived of anything which could have elicited a more positive response. But there were still a couple of things which people queried.

One was very simple. Some members complained that they had only got 99 journals rather than 113 on the CD. Those who have found this problem are using a Windows-based PC with Windows 98 as their operating system. This lists files in alphabetic order rather than numeric value order. This means that after 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 the next number in the list is 100 then 101, 102, 103 . . . 109, then 11, 110, 111, 112, 113 then 12 and so on. Later versions of Windows changed this approach to listing so that there is normal numerical listing with 100 after 99 and so on. So for those who have not found these files on their CD they are listed between 10 and 12. No other problems were communicated except for the sometimes plaintive desire for an index. This has now been addressed by Glassford Sprunt and this new index which will be a full index of every issue to date will be available for download on the website at www.srgc.org.uk.

Of this cumulative index, Glassford writes *"It has been through a long gestation period. It started as a personal project, born of the dislike of having to look through three part Indices when any information was sought. It has weathered spells of enthusiasm for the project and spells when the whole project seemed too daunting.*

In addition to the problems of searching three volumes of Index, there was also the problem of the Volume numbering. I know that there has been a Classical theme to Scottish education and so, it has been obligatory to use Roman numerals and, where possible snippets of Latin. It soon became clear that the Indices had lost considerable value during the type setting process in that there was often numeral transfer, e.g. :- 'XVIII 87' easily became 'XVII 187' and so the reference became a total nonsense. An easy mistake to make when type-setting and a difficult one to spot when proof-reading. So the first essential was to get rid of the Roman numerals.

The hard copy Indices were scanned into the computer and sorted alphabetically to get a list of the plant names. The Roman numerals were changed to Arabic ones. Each issue of the Journal was checked page by page and the entry confirmed or amended. This took the whole of one winter.

Each Editor seemed to have his own method of indicating plant pictures positions in the Journals and the end result of this was a muddle and considerable difficulty in finding the picture. I hope that this will be less inscrutable than before.

A slightly longer version of these comments will be found with the Cumulative Index. Although it may be a few weeks before this Index is on the website it *will* be appearing there (it may already be there by the time you receive this journal but it is not yet there as I write at the end of May). But if you don't find it, keep logging back in ... it will be appearing.

So what else is new – as members will have realised I am relinquishing the editorial chair after this issue and I am delighted to say that we have found someone who is happy to take over and who has now been nominated. Anton Edwards <*antonedwards@aol.com*> lives in Caputh, north of Perth (his full address is Duguid's Wark, Manse Road, Caputh, Perthshire PH1 4JH) and he will be taking THE ROCK GARDEN on from here. It's always exciting when someone new takes over and I am certain that members (and particularly those who contribute to this journal) will be as supportive of him as they have been of me. It has been enormous fun editing this journal and I'm still enjoying it – so it's a good time to stop before it becomes a burden. Every new Editor brings new ideas and their own personality to the job, the journal, like a garden, is always a work in progress, and I'm sure the journal is in good hands.

As for me . . . the picture opposite gives you some clue – more gardening ..... but also travelling and definitely more writing . . . and when I can, more painting (*Iris ensata* above, painted last year) . . .

So, without going through a list that sounds like Gwyneth Paltrow's list at the Oscars, all that's left is to thank everyone who has helped throughout my time as Editor. I will mention just one person individually and that is Paul Oldridge, the studio technician at Wyke Printers, who has worked with me on the last 8 issues and who has learnt what even my sometimes obscure instructions mean, brought the ideas and layouts into actuality, and who has made the whole project so much more enjoyable.

CROSLAND PRIZE for the best article in the Journal . . . have your say!

Since its inception the Crosland Prize has been awarded by the Aberdeen Group (sometimes in conjunction with another group) to the best article in THE ROCK GARDEN. This year the Aberdeen group is inviting all Members to nominate the article they think is the best from the two journals published this year in January 2006 and July 2006 (THE ROCK GARDEN 116 & 117). Votes should be sent by email to info@srgc.org.uk marking the subject as Crosland Prize), or by post to the Aberdeen Group, 63, Craigton Road, Aberdeen, AB15 7UL, UK as soon as possible but to be received not later than August 15th, 2006.

Midsummer minions

Panayoti Kelaidis

1 - *Dianthus petraeus* ssp. *noeanus* in the author's garden in Denver, Colorado

OF COURSE rock gardens are spectacular in spring. Your neighbors stop by to "ooh" and "aah", the postman lingers a few extra moments and you feel as though, yes, perhaps you are quite the gardener. The magic extends into early summer when there are a few dwarf brooms blooming, a few campanulas and mints, and you begin to think yes, you are, perhaps, even a bit of a genius – or at the very least an unacknowledged horticultural wizard. But then the long dog days of July and August stretch out ahead interminably and the rock garden is suddenly not so showy. Meanwhile, that doofus down the street has marigolds and pelargoniums and no end of noisy annuals clanging away like a visual brass band. Autumn arrives with relief as the gentians, and cyclamen, and other autumn bulbs, rush in to save the day. Winter brings the rock garden another season of triumph. Of course the sculpted rock garden is infinitely more sophisticated and satisfying than dull borders trimmed back to the nubbins. But if there were only just a few more things blooming in the off-season, don't you agree?

There are legions of plants that crowd the high alpine meadows in monsoonal climates such as the Himalaya, the Drakensberg and the American Southwest during the summer months. Alas, many of these are meadow plants that grow a meter or more tall and need the summer showers and rich soils to prosper. Not that there aren't wild corners in most of our gardens where we feature the smaller summer blooming Rheum, Kniphofia, Agapanthus, Agastache or late blooming penstemons of Arizona or Mexico. These are really best for borders, alas. This still doesn't solve the dilemma of the summer rock garden proper.

Over the years I have noted hundreds of outstanding rock plants that wait to bloom in the long summer months. Many of these would take pride of place even in the spring rock garden, but how much more welcome and rewarding they are blooming in June, July and August! I have always wanted to gather all these minions of the summer garden together in one spot. I fear this article may be the only place I get around to doing this (I, too, succumb to the allure of spring and stuff my rock gardens full of primulas, saxifrages and the rest of the glorious spring rabble). If, however, we can create more of a summer spectacle in our rock gardens, I think it would do much to increase the overall popularity of our art. After all, perennial borders will never have the winter appeal of the rock garden, nor the same early spring punch. It's about time the rock garden met the border head on in the dog days of summer!

Perhaps some major public garden will be inspired to create a rock

garden with as much midsummer appeal as in the magic months of April and May. The added advantage of many summer blooming alpines is that their season is often greatly protracted, flowers lasting for weeks at a time. All the more reason to include some of these in your garden at the soonest opportunity!

Beguiling bellflowers

Campanula is undeniably the champion genus of the summer rock garden: the bulk of these protean plants wait to bloom during the hottest months. I am always surprised to see how few campanulas most rock-gardeners boast at any given time. There are three in particular that have proved extremely long-lived and showy in my home gardens. I would never want to be without them.

Campanula raineri is hardly a novelty. It has been grown in rock gardens for the better part of a century, although the label "raineri" does not always match the real McCoy. Many of the hybrid taxa are every bit as choice as the species (particularly the hybrids with *C. morrettiana*), but do not be fooled by the various "*pseudoraineri*" types, mostly hybrids with *C. carpatica*. These are much coarser and inferior to the true item. Of course, *Campanula raineri* is very compact; a caespitose mat former with attractive, ovoid leaves forming a tuft that can spread to many inches across in time if you site it perfectly. The flowers appear in July on very short stems, a luminous lavender or even purple. Although cultivated for many decades, the true species is not seen as often as it deserves.

Two spectacular midsummer blooming campanulas have only been introduced from eastern Turkey in recent decades. Zdenek Zvolanek is responsible for collecting seed of *Campanula choruhensis* in the late 1980s. This stunning plant belongs to the same section of the genus as *Campanula betulifolia*, which is, however, a very different plant in the garden. Both have nodding white flowers, but the flowers of *C. betulifolia* are funnel-form and the foliage is usually a bright green. *Campanula choruhensis* has much grayer tufts of leaves and more salver-form flowers that are much larger and showier in effect than the better-known species. Both are usually white, sometimes tinged with pink, although pure pink forms in both species are reputed to exist. It seems to tolerate far more sun and heat than *C. betulifolia*. The plant in the picture was a self-sown seedling that came up in a dry stone wall where it looks especially at home.

Campanula troegerae was introduced by Jim and Jenny Archibald from a restricted area in north-eastern Turkey where it is generally saxicole (rock

Campanula troegerae

Campanula choruhensis

4 - *Symphyandra armena*

loving). Out of bloom it is difficult to distinguish from *C. choruhensis*, but the flowers are (if anything) showier: comparatively huge stars over 2" across in the very depths of the summer doldrums. This has been very long-lived and adaptable in a variety of sites at our home gardens, growing most luxuriantly on cool, well-drained slopes with oblique sun much of the day alongside a variety of daphnes, summer gentians and saxifrages. Once you have seen this you must have it.

Closely allied to the campanulas are the highly variable members of the genus Symphyandra. The most frequently encountered species, *Symphandra wanneri*, blooms in late spring, but the rest of the genus have much more protracted summer bloom, and many flower in midsummer. *Symphyandra hoffmanii*, with tubular white flowers (quite rare in its native Dalmatia) can be a pest in the rock garden, forming large mounds of rather coarse herbage on rich screes. I have had it germinate in crevices of rocks where it is much more winsome and rewarding. *Symphyandra armena* is particularly graceful with twiggy, harebell like stems and classic bluebell blossoms for a long season in early summer. All the aforementioned Symphyandra are biennial, but *Symphyandra zangezura* has been soundly perennial and is the tiniest species to boot with wonderfully lyrate foliage and spidery violet flowers.

Trachelium jacquinii has become a mainstay of the summer rock garden here in Denver. It has self-sown extravagantly on one crevice garden, producing hundreds of luminous lavender, spherical flowerheads in July. Its only drawback is that the flowers only last a few weeks, but during its season of peak bloom, this campanula cousin from the Balkans is one of the showiest rock garden denizens. It thrives in a wide range of soils and exposures, producing massive quantities of seed. I suspect it will become a mainstay of gardens in short order.

And don't forget that there are so many other wonderful bellflowers such as Jasione and Phyteuma, Edraianathus and Adenophora and Codonopsis to play with in the summer rock garden.

Turkish treasures

Since the bulk of the Mediterranean flora blooms in late winter to late spring or in the autumn, I have been surprised to find a number of Turkish alpines that wait to bloom in the height of summer heat. Unquestionably, the most spectacular of these is *Pelargonium endlicherianum*, the smaller of the only two pelargoniums that escape Africa and can be found in Turkey. Restricted to a tiny range in Kurdistan,

Pelargonium endlicherianum

Pelargonium quercetorum can grow over a meter tall, with spectacular hot pink or rose flower clusters that are dazzling, but its massive size makes placement in the garden a challenge. The smaller species has a much wider distribution in nature, and several nurseries in America now sell this mail order, so it is easily obtained. It makes a wonderful dome of dark blue-green, scalloped, round foliage that is attractive through the garden year. The flower stems can vary from 8" to more than a foot, depending on the race and conditions. The showy, butterfly like blossoms are produced from late June through the summer months, varying from soft pinks to neon magenta. Properly placed, this makes a riveting focal point in the garden.

The genus Salvia is very fashionable in borders at the moment. With nearly a thousand species, most with showy flowers, ranging widely over four continents, it's perhaps not surprising that this genus has gained such popularity. There are, of course, many compact and even dwarf salvias found throughout the pantropical range of the genus. None are smaller nor more choice than *Salvia caespitosa*. This magnificent miniature makes dense mats of hairy, pinnate leaves that are attractive in their own right. For several weeks in early summer the cushion is spangled with hundreds of outlandish pale lavender gaping-mouthed faces that are irresistible and very showy. The form commonly cultivated is often pale, nearly white. I

Origanum amanum

Origanum acutidens

recall Jim Archibald showing pictures of a lemon yellow race and I've heard of pink and even quite dark purple forms that would be outstanding additions to the summer rock garden.

Perhaps the greatest gift the Mint Family offers the summer garden is genus Origanum. There are dozens of hybrids, one showier than the next providing bright splashes of summer color. *Origanum amanum*, from southern Turkey, is the aristocrat of the genus, with its outlandish, extruding rose pink trumpets. I am especially fond of the various chartreuse-bracted species which may have more subtle coloration, but can provide cool, ghostly splashes of color in the hot season that are quite appealing to the eye. Once again, Jim and Jenny Archibald are to be thanked for obtaining seed of *Origanum acutidens* from eastern Turkey. On a cool but sunny face of the rock garden, this can produce a quiet show from June to autumn. I even find the drying bracts attractive through the winter season.

Blindingly white gems to brighten the summer months

Bindweed being unquestionably the most ineradicable lawn and garden pest in Western American gardens, it's somewhat galling to have to pay good money for any Convolvulus but they can be so good that they force themselves on you. In my garden, none create the spectacle of

Salvia caespitosa

Convolvulus boissieri in any of its multifarious forms. We have found var. *compactus* from Turkey to be the easiest and most long lived of the cushion convolvulus in our climate. In the photograph you can see it growing alongside *Delosperma* 'John Proffitt' and *Sedum kamtschaticum* 'Variegatum': three very unlikely bedfellows from KwaZulu-Natal, east Asia and Anatolia.

We're not sure when we got the courage to plant *Daphne jasminea* out in the garden. The books had so thoroughly spooked us about its tenderness. I remember we killed several before this specimen in the photograph began to show its mettle: now some 15 years later it has formed the densest of tiny shrubs with a trunk that would impress a bonsai master. The gray twiggy foliage is beautiful at all seasons, but the sparkling white flowers (flushed with lilac on the reverse) are produced almost continuously through the summer months making this the most welcome of dwarf shrubs for the discerning rock gardener. This plant has provided hundreds of cuttings and its progeny are now in dozens of gardens growing lustily.

I remember when Bob Putnam, one of America's greatest rock garden nurserymen, pressed *Dianthus petraeus* ssp. *noeanus* upon me: it was not a hard sell. I am very fond of prickly plants (they do help direct

Convolvulus boissieri var. *compactus, Delosperma* 'John Proffitt' and *Sedum kamtschaticum* 'Variegatum'

Daphne jasminea

traffic in public gardens, you know) and this one makes a mat almost as dense and prickly as an Acantholimon. The mat is a dark blue green–very attractive and useful in its own right. In July it produces masses of threadlike stems 8" or so in height with a filigree flower in purest white. A well-grown clump is quite stunning in full bloom, but it is the heady, tropical fragrance it exudes in late afternoon that I find irresistible. Even if the plant did not have such stellar foliage and flower I would be tempted to grow it for the smell alone. Although too big for a crevice garden or most troughs, it is superb in the larger rock work where it is very long lived and easily maintained. There are, in fact, many summer blooming pinks that can add great swatches of color to the rock garden: *Dianthus nardiformis* from the Balkans forms airy mounds of twiggy stems and fine foliage, blooming from July to frost. *Dianthus amurensis,* parent to many of the flashy hybrids, has elegant wild selections from Mongolia that are extremely heat and drought tolerant, and are the closest approach to lavender or blue-purple in the genus. In the right spot, with some judicious deadheading, they can bloom continually through the summer.

The daisy family members are the undeniable stars of the summer rock garden: there are probably hundreds of compact daisies from the world's high places yearning to find a niche in the rock garden. Surely one of the loveliest and most rewarding of these is *Hirpicium armerioides,* a

compact alpine clump-forming relative of the gazanias that is usually found at the highest elevations in the Drakensberg mountains where it is often stemless. The dazzling white flowers close at night, revealing the dark coloration on the reverse of the ray florets–much like the Mt. Atlas Daisy. The first flush of heavy bloom can come in May or June, but hardly a week goes by through the summer months in Denver without a few spangles of flowers on the tufted mats, and they are often covered with flowers late in the season.

There are dozens of African daisies in numerous genera that are proving cold hardy and which will do much to liven the off-season rock garden. None are showier than *Gazania krebsiana* 'Tanager' which has produced its vivid orange flowers for me every month of the year including the long summer and also the interminable Colorado winter, opening its garish flowers during warm spells from November to February.

Two obscure Americans

Cacti may have given Reginald Farrer the willies, but anyone who has traveled around the American West know that these are characteristic rock plants found at very lofty elevations. That said, I must confess that *Escobaria echinus* grows at relatively low elevations in Central and Western Texas in a climate utterly remote from most people's conception

Dianthus petraeus ssp. *noeanus*

Part of the summer rock garden

of "alpine". Now there is a city not far from where this grows called Alpine, but the temperatures where this creature grows in nature can soar over 100F for rainless weeks on end. It can also be subjected to torrential monsoonal periods. The forms most commonly cultivated hereabouts come from central Texas where the plants often experience over 30" of rainfall annually. Strangely enough, it has proved cold-hardy and tolerant of much cooler climates, thriving in Colorado where it blooms on and off from May through till autumn. The funnel-shaped bright yellow flowers have a red center: absolutely spectacular! This cactus tolerates a wide range of garden conditions from extremely dry to regular watering along side classic alpines like phloxes and dianthus, provided it has full exposure to sun.

There are a host of penstemons that often rebloom in the summer season. Some, like *Penstemon richardsonii*, actually do not come into bloom until August and September. Most of these, however, are rather large and coarse plants, suited only for the largest of rock gardens, but they do have one tiny cousin that is arguably among the showiest of summer alpines. *Keckiella corymbosum* has a wide range through much of coastal California. Typical forms can be rather lax and diffuse, but Ron Ratko has collected several high altitude miniature races that are among the most fetching and attractive of summer blooming alpines.

13 - *Gazania krebsiana* 'Tanager'

14 - *Escobaria echinus*

Ostentatious orange-red trumpets begin to blossom in late June over huddled mounds of foliage, lasting through the hottest part of the summer. The foliage is deciduous, alas. Be sure not to remove it thinking the plant has died in the fall or winter months.

These are but a smattering of the hundreds of showy alpines that wait to bloom in the summer months. Make sure to use these liberally in your gardens, and you will find the summer months pass more quickly and far more pleasantly!

Acantholimon litwinowii (below) in seed and *Zauschneria garrettii* (above): noteworthy because both are very moisture tolerant for their genus (Note Saxifrages, *Geranium sessiliflorum* and *Geum capensis* which all need water and some shade.

16 - Stuart Pawley (centre) as Quince in *A Midsummer Night's Dream* at Nelson Hall in 1947

Seed Exchange

Jean Wyllie & Stuart Pawley

WHERE WERE YOU (asks Stuart Pawley) *when the SRGC Seed Exchange was initiated in 1947? Sixty years ago the idea was forming in the mind of Bobby Masterton and fellow members of SRGC. Requests for donations must have gone forth during the winter of 1947, when I remember three weeks off school due to snow followed by floods. In the autumn, as the SRGC stalwarts were collecting the harvest, this little lad was out in the Staffordshire countryside gathering all manner of seed pods from the widest range of plants in a children's project competion. I didn't want to waste my time on this, but my Dad was boss of the ad-hoc teacher training college for demobees at Nelson Hall, so I had to perform. I well remember the sheer delight of seeing how the scarlet pimpernel,* Anagallis arvensis, *produced its seed under a fairy-tale hemispherical cap; was this a subliminal start to my*

love of Primulaceae? When was time wasted so profitably, I wonder? The words "capsule dehiscing" took many years to penetrate my brain, but it is the final call of nature which is of most importance. So it was at this time precisely that Seed Exchange was born. When Bobby passed on the job after eight years, the membership had risen to 2000, surely as a result of the world's first Seed Exchange!

IN 1947 I had just come to this country from Uganda, *writes Jean Wyllie*, with my parents, sister and brother. We were staying in a large cold manse in Peebleshire. Snow to us was something that appeared on Mt Elgon in the morning and was gone within a few hours. To be able to roll in it and make snow-caves was a very new experience. Planting seed was something I had done with my mother and garden boy to entertain me. Gardening was in my blood, something you cannot fight.

17 - Jean Wyllie in Uganda carrying rocks on her head

The Council of the Scottish Rock Garden Club first discussed starting a plant and seed exchange but they decided the former would be too expensive. A Seed Exchange would be more feasible as it would be much cheaper. R S Masterton (Bobby) offered to work out a scheme for the approval of the President. This was accepted and the SRGC Seed Distribution was born. Bobby lived at Carndhu, Aberfeldy, but by the time of the list in 1950/51 had moved to Cluny House. He was a busy vet and a shy man, but could deliver a good talk from the camouflage of a dark lecture room. The very first talk I went to when I joined the SRGC in 1974 was at the Stirling Group and it was Bobby on "Bulbs, Corms and Tubers". Now most of my plants under glass are in this category.

The charge the first year was 2/- but was raised to 2/6 the next year and again to 3/6 in 1951/52. Beginners were well looked after, "A special collection of seed for beginners will be sent to anyone wishing it instead of choosing their own seed." Nothing changes - now we call it the 'Easy Ten'.

Bobby organised the first 8 lists but the earliest I have is 1949/50. 561 seeds were on offer: lots of Primula and Meconopsis but very few Cyclamen, Crocus or Fritillaria, and very surprisingly no Pulsatilla, one genus that came in vast quantities when I managed the Seed Exchange. By his last list the number was up to 808. A lot of the names have disappeared, maybe they were wrong, but some of the plants are no longer in cultivation.

In 1955 Mrs C E Davidson of Linton Muir, West Linton, took over, and the first mention of Overseas Donors occurs with 96 Home Donors and 15 Overseas. Her first list had 943 items, no mention yet of wild collected seed, but a thanks is sent to USA members "who responded so splendidly to the appeal for seed of American native plants", and in 1957/58 the first seed was received from Japan and Alaska. By the 1959/60 list we have wild seed; it may have been in the previous one but I do not have it (one of 3 lost lists). There was also the first indication in print of how many packets each member got: Overseas donors 18, Home donors 16, others 12, and the costs have come back down to 2/6. By 1959/60 Mrs Davidson was saying "A small proportion of seeds received has been subjected to expert scrutiny! The result is somewhat disturbing. A considerable number of packets have had to be discarded for the following reasons :- immature seed, no seed and incorrectly named seed. It is hoped that a more intensive scrutiny can be undertaken in future." How I feel for her – it only got worse when I was doing it and Stuart will have the same comment. Her last list had stretched nearly to 1600, 50 being wild seed mostly from the USA and some from New Zealand and Tasmania.

The next Seed Exchange Manager was Mrs Betty Cormack, a doctor's wife who lived in a large house in Corstorphine in Edinburgh. Betty had been a helper to Connie Davidson so was an obvious successor. Jill Sleigh, Betty's daughter, remembers that when her mother was busy the lounge was out of bounds to the children. My children will have similar memories. Another comment from Jill was that a stint in the garden was hoped for every day but not always managed during the Seed Exchange. When Seed Reception was in full swing the most I managed was a wander round with a cup of coffee.

Betty's lists have the comment "Another bad seed year" – how often did I hear that from donors during my time. But she was always able to deliver an excellent choice. Along with Connie, Betty was greatly helped by Sheila Maule whose garden at Balerno was always a delight to see. In the 1962/63 list it's interesting to find that Jim Archibald sent seed from the Middle and High Atlas - has he really

THE SCOTTISH ROCK GARDEN CLUB

SEED DISTRIBUTION, 1949

THE following is a list of seeds of Alpine and Allied Plants available this year for distribution amongst members of The Scottish Rock Garden Club. Members who sent on seed, and thus made this distribution possible, will get priority in the ballot for the rarer seeds, and I would like to thank them once more for their generosity and for the time and care taken in the collection of the seed.

Supplies of some of the seeds are very limited so I would be grateful if, when applying for seed, members would give as wide a selection as possible. On the other hand there is **no** restriction on the number of different species each member can select. All the seed must be distributed, so please make full use of this scheme and ask for as much as you wish.

When applying for seed please enclose 2/6 to cover expenses. Members who have not sent in seed please remember that they can share equally in this distribution. Your requirements should reach me before **7th February, 1950.**

R. S. MASTERTON.
Carndhu,
Aberfeldy.

18 - Cover of 1949 seed list

been on the go since then? In her last list in 1963/64 she draws attention to wild seed from New Zealand, the TCD (Trinity College Dublin) East Greenland Expedition, and the Bowles Scholarship Botanical Expedition to Iran in 1963, and also the continued collection of seed by Dr C R Worth in the Rocky Mountains.

Joyce Halley took over for the next 3 years. The number of seeds offered had stayed just under the 2000 mark but by her third year it was well over this mark. Joyce was still working through this time, a note mentions her regret at her retirement, but this was not to be forever! She was an Art teacher, as well as a gifted silversmith, and I remember a room in her house, which was designated to become her studio when she had more time, in other words, when she got rid, once and for all, of "Seeds".

When her father died she took over the running of his working man's public house and many at the school and in the club reckoned her loud voice came from shouting at the customers. One story is that she could be heard at the other end of the school corridor even when the classroom door was shut!

Mrs M R Robertson from Kilcreggan in Dunbartonshire took over from Joyce for two years. She lived in Dundee and worked with Henry Taylor at the research station before moving to Kilcreggan when she married. A comment from a current member who visited her just after she joined was astonishment at the time and space required to do the job even in those days — something which, like Topsy Bunny, 'Just Grew and Grew'.

Mrs Mary B Todd, who next managed the Seed Exchange, was married to Henry Todd, a past President of the Club. They lived in a large house on the outskirts of Edinburgh near Roslin. She only did the job for a year but her one list had 2898 entries. The Wild Collected section now listed each person's donation separately as the AGS still does!

Dr Lucy M Dean was a medical doctor who lived in Glasgow. Again I've been unable to find much information about her except that she was helped by May Lunn, Mamie Holgate and Margaret Nicholson. Of these, I only ever met Margaret Nicholson who had a lovely garden in Bearsden. Dr Dean's lists contained over 3000 items and the cost had gone up to 50p.

Joyce Halley now took over the Seed Exchange again and she set about organising it in a more efficient way. A card index was started to hold year-by-year information of each seed donated; by the time I took over there were thousands of cards and each year 300 – 500 new

names were added. She also used large envelopes to store each type of seed.

Her postman was well used to delivering large bundles even sack-loads of mail to her door. One year in October there was a strike, which lasted over a week. You can only imagine the amount of work when the backlog hit her front door. All her helpers rallied round and the list was saved. Other problems occurred when Customs decided that the seed had a value and wanted payment. Joyce battled with them for years and by the time she passed it on to me they had got the message.

When the list was closed it was typed and a number assigned to each seed and corresponding envelope. This took her, with help, two weeks. Then off to the printer, who did not have much idea on plant names so there were innumerable spelling problems to be sorted before final printing. No wonder the list was not sent out till after Christmas. Joyce organised the packeting of the seed and many members of the Angus Group and further away were press-ganged into this job. Her friend Murial Grey was given the job of doing the rare seed because Joyce trusted her to make up as many packets as possible. It was rumoured that she would "cut seeds in half to get an extra packet". Distribution was not started until at least one request had come back from each overseas country with more than a few members. People in Czechoslovakia, Poland and other countries behind the Iron Curtain could not join the SRGC as money transfers were not allowed. They sent Joyce seed, often Wild Collected and got seed free in exchange. Getting the list to them was a problem, the lists were often held up by the authorities. One year they were confiscated, someone thought it was a secret coded message with a little man in some backroom spending hours trying to decode it. Before she started the distribution she went through the previous 2 years' requests from each of the 40 people and worked out their preferences and made up their quota that way. Even when I took over there were still quite a few of these members.

Joyce was very careful and checked the day's work each night. During distribution she put stamps on the overseas orders herself but allowed Margaret Taylor and Doreen Fraser to stamp the Home ones, but still looked at them again. One for the USA had got mixed in and not noticed till later. Joyce found it and was not pleased, especially as it had a reprimand to the member for some misdemeanour, so she would have also had to pay extra postage on top of Joyce telling her off. Margaret and Doreen were soundly rebuked and a note was put on the mantelpiece saying they were not to stamp envelopes again.

It stayed there for 2 weeks, much to everyone's amusement.

Joyce spent a lot of time verifying names and sorting out synonyms. This was done either at St Andrews' Botanic Gardens or from the books she had at home. One that slipped by her was *Clematis marmoraria* the first time Joe and Ann Cartman sent it from New Zealand. She dumped it in the out bin. Margaret and Henry found it when they were clearing out at the end. They explained that it was a new discovery from the north of South Island, very desirable. Rubbish said Joyce, cannot find it anywhere. Henry informed her it had been the talk of the last International Conference at Nottingham!

She spent lots of time getting to grips with misnamed seed. Two spring to mind. *Lewisia brachycalyx* and *L. nevadensis*, the former being much more desirable, were certainly confused. Someone was sending the correct one but whom? I was lucky to benefit from Joyce's dictate to mix the donor packets and got a mixture of both. One seedling of *Lewisia brachycalyx* won me many first prizes. In the end it turned out to be a donor who live near Joyce who sent in the correct seed. It's a funny old world. Another confusion, rather oddly was between *Silene hookeri* and *Lychnis flos-jovis*, with 90% called the former being the latter. *Silene hookeri* seed was much larger and kidney shaped. The photo shows Joyce with a birthday cake made by Margaret depicting this problem. Margaret also made the cake we had

19 - Joyce Halley (with the cake made by Margaret Taylor)

at the Discussion Weekend when Joyce retired. Margaret and I carried the cake into the room behind Jim Sutherland who piped it in - in grand style. Margaret's cakes come a close second to her plants.

20 - Jim Christie surrounded by packets of seed

Joyce's other hobby was doing the make-up for the complete cast of the Dundee Amateur Operatic Society which entailed shutting down work on the seeds for week, luckily not at a busy time.

Joyce made many friends all over the world. Members on holiday in Scotland would be welcomed, and she went to USA, Czechoslovakia and New Zealand.

After doing Seed Exchange again for about 10 years she decided to find someone to take over. Not an easy task. A few names were considered and discarded. Mine was the only one that seemed to survive this process. I was asked but was not very keen. I still had a young family and also felt my husband would not be too happy. I jokingly asked her if she wanted a divorce on her conscience. She did not find anyone else, and a few years later got back to me and by then my family was fleeing the nest, Karen was off to university, Susie in 6th year, and Stuart was starting High School. I needed a challenge.

I spent a year going up to Barnhill to learn the ropes and work out how I would do it myself. I can still hear Joyce telling me to do it her way, at least for the first year. She never forgave me for using a computer: "It was a device made by the Devil and only disaster would come of it."

In 1987 it was all mine. Did I really know what I had taken on? I followed Joyce's way to the letter except for making the list on the dreaded computer, which saved a lot of time, and did the numbering for me. Jim got me an old one from the company he worked for and

one of the software lads (Grant Brodie) organised the program. It was a very steep learning curve. I used the printing firm Joyce used and asked the question as to whether in the future they would go over to using camera-ready copy. Their answer was that they never would as the print union would put him out of business for not using type-setters. That was me telt. The second year I did it my way, having found a printer in Edinburgh who did take camera-ready copy. David Simpson was a huge help, he had set up the members' list on computer and sorted my problems. The database was very good and over the years it got bigger and bigger. Glassford Sprunt would check my spelling and verify new names. Each seed name would be moved to the Current List as they arrived. When I got a new computer Chris Jones transferred the data to Access and was on hand to help me. I can still hear his groans when I phoned him with a problem.

After the second year doing the full thing I decided, for my own good, to divide the process into three: Seed Reception, Seed Packeting, and Seed Distribution. Morris Wilson took on the latter and set it up at the St Andrews' Botanic Garden. He could not believe I had managed to do the previous 2 years at home and still have a husband. His setup worked very well, Jim Christie was his right hand man and took on half the work. A band of ladies made up the orders – he called them his "Seedlings".

He always knew when I had sent out the list before I told him – quite a few arrived back to him the very next day, but one arrived the day I did the posting, I had hand-delivered to a local member. I cannot repeat Morris's comment.

One big problem for Morris was the transfer of monies from Overseas Members. This incurred huge costs getting it over here. It came in all shapes and sizes, some very peculiar. I worked out a plan with our treasurer to include the cost of seed with their subscription. All Overseas members got a list even if they did not use it and more than half the costs were incurred sending it. Morris's job was made much easier and not many people objected. I returned the favour by including "non-payment of subs" notes with the seed list.

The Seed Packeting went to Edinburgh and John and Marisa Main led the team there for 5 years. Margaret and Henry Taylor then took over and used a lot of the team Joyce had used. Their system was to check the last two years' lists to see how many packets were used and base the number required on that, which cut down extra work once distribution started. This did not always work: articles in the journal, new books, and lectures would give members new ideas. One

21 - Jean Wyllie (guarded by Teddy) building one of her first rock gardens

year Fred Hunt sent in a very stuffed envelope of *Clematis marmoraria* and over 300 packets were requested. Subsequent years the number fell to just a few.

My busiest years were when I had donations from well over 200 donors to process and most parcels arrived the middle to end of October. My post office was very good. When the bulk got too much to be carried by foot they sent it in the van by 8 in the morning. This at least meant that I could get them all processed by 10 in the evening.

One new idea I started for the distribution was to have cards marked with each number to insert between each block of seeds, but a friend of Joyce's who came to help in the early years felt they would get in the way. Within a few minuets she had changed her mind and they are still used to this day. Another idea was Jim Christie's. Joyce always used empty cigarette packets to hold the seed packets firmly in each row as the distribution progressed. Jim devised strips of heavy rubber which gripped the sides of the racks and could be moved along as the rows were used up.

Not everyone thought that splitting the Seed Exchange into three parts was a good idea but I knew I could not carry on as before. A few people reckoned it would be 'The Death of the Seed Exchange' but most other exchanges have followed the idea.

Various funny things happen to brighten the days. Early on I got a phone call, the caller had received the wrong seed. I phoned Joyce to be told "Tell him to use this year's list". This I did and all was sorted. A few years later I got an anguished call from Canada. His seed had arrived but his wife had checked it and it was wrong! I tried to tell him to use the current list but he insisted he had done that. I murmured that I would check with Morris and get back to him but it might take a few days. Within an hour he was back to me – his wife had in fact used an old list - sorry!

Another problem which at the time was serious, but which I can now see a funny side to, was when one year I delivered the list to the printers and by evening had the proof popped through the door. That

evening I checked the changes to the instructions and next morning remembered I needed to mark a few spelling mistakes I had found. I could not find the entries and quickly realised it was the previous year's list. I made a new copy of the current list and went along to the printer who was, luckily, only in the next village. He did not believe me and said it could not happen, but I insisted. Off to the back shop to discover I was right. His story was that as the old list was still on his computer it had decided it knew better and printed it. My comment, "Rubbish in rubbish out", did not go down well. It was sorted but I had nightmares till I got the finished lists back. Moral – check every thing. A friend who does a smaller list for a botanic garden could not figure out why a large chunk of seed was not asked for from his list one year until he checked the list and found the centre 4 pages missing.

After 16 years I decided to quit to get back to my garden – little chance. Grandchildren have robbed me of that dream "bless their little cotton socks" which is a saying from my mother, whatever it means!

Stuart Pawley took on the Seed Reception, and Edinburgh Group the Seed Distribution with Scott Cook at the helm. Margaret and Henry continued the Packeting, they must be the longest-serving members of our Seed Teams, starting in Joyce's time. Stuart and Scott are having the same joys and tribulations as previous members. We all worked very hard to provide a service which has made the name of the SRGC renowned world wide.

A final thank you to all the donors over the years who have sent photos, cards and funny stories to brighten our days.

A few notes from Stuart:

Please write the seed name and your name very clearly. I remember spending hours deciphering lettering that was not much more than a squiggle.

Check seed is:
1. named correctly
2. actually seed
3. clean, no chaff and no pulp on berries

The last day for receiving seed is 30th October. The list goes to the printers on the 1st November. You can email a list of late seed before this date and send the seed as soon as possible.

Have a good year harvesting. A few seeds of something rare are always welcome, someone else may also send 'just a few'.

US PHYTOSANITARY RESTRICTIONS - UPDATE

For the last few years the US phytosantiary restrictions have caused us all much difficulty, or even despair, but there are changes afoot which should be operational for the coming season. The details will be in the list which appears this winter.

For the second year the Discussion Weekend is in the heart of Perthshire at Pitlochry which is also called "The Gateway to the Highlands". Pitlochry is on the main A9 north of Perth. There are rail links from Edinburgh and Glasgow but also a direct line from London. The nearest airport is Edinburgh with bus and rail links to Pitlochry.

Pitlochry is a tourist town with many Hotels and B&B's. It is set in the most beautiful countryside with Ben Vrackie looking over the town. We have 2 distilleries near the town: Bell's and Edradour, the smallest distillery in Scotland. There is good High Street shopping and, of course, the House of Bruar just up the road. Gardens of interest include Cluny Garden and all the Perthshire Garden Collection, in total 11 gardens. The hotel, on the southern approach to Pitlochry, is set in 48 acres of beautiful grounds with red squirrels frequently seen and lovely walks into the local Black Spout Wood. Facilities include a pool, spa-bath and tennis courts. It is within an easy walk of the town - about 5 minutes - for shopping.

RESIDENT	
Friday Dinner – Sunday Afternoon Tea	£175
Saturday Lunch – Sunday Afternoon Tea	£120
NON - RESIDENT	
Saturday (morning coffee, lunch, afternoon tea)	£35
Saturday Dinner	£21
Saturday (morning coffee, lunch, afternoon tea, dinner)	£56
Sunday (morning coffee, lunch, afternoon tea)	£35

FRIDAY 6TH OCTOBER

16:00	Registration
19:45	President's Welcome Address
20:00	The Bulb Group Lecture – Tony Hall **'Rare and Unusual Bulbs for the Alpine House'**
21:30	Small Bulb Exchange

SATURDAY 7TH OCTOBER

08:00	Registration
From 08:00	Setting up plants for show
09:00	Workshops and optional tours – Cluny, distillery or The Scottish Plant Hunters' Garden
12:30	Show Opens
14:00	The Harold Esslemont Lecture - Bobby Ward **'Modern day plant hunters'**
15:45	TBA
19:00	Dinner
21:00	After dinner speaker, Plant Auction and Raffle

SUNDAY 8TH OCTOBER

08:00	Registration
09:30	The William Buchanan Lecture – Bobby Ward **'Native wild flowers of the American south east'**
11:00	**'Building for growing'** – Peter Korn
14.00	The John Duff Scottish Lecture – Ron McBeath **'Growing plants in a windswept garden in the Borders'**

Please book early to prevent disappointment, as we have an allocated amount of space in the hotel.

All accommodation at the Atholl Palace Hotel will be in double, twin or single rooms. If single members prefer to share a room, it will be greatly appreciated if, when booking, they could arrange this between themselves. Tell us the name of the person with whom you will be sharing. Otherwise, we will use our best judgement when allocating single delegates to twin rooms. Extra nights on the Thursday night before and the Sunday night after can be booked at a specially negotiated rate of £45 per person per night, sharing a twin room to include breakfast. Tell us on the reverse of this form if you need this extra accommodation and we will book it for you. There is no ground floor accommodation but there is a lift to all floors.

Star attractions will be the PLANT AUCTION, RAFFLE and 50-50 PLANT SALE, PLANT SHOW, and HOLIDAY PHOTOGRAPHIC COMPETITION. Details are in the Year Book.

Please use the booking form enclosed with the Secretary's Page.

Members should make sure that the form and remittance reaches Julia not later than 19th September:

The Registration Secretary, Miss Julia Corden, 2 Lettoch Place, Pitlochry, Perthshire PH16 5BB (Tel. 01796 474410)

Members wanting further information should write to Julia Corden at the above address or email ***julia.corden@pitlochry.org.uk***

A Botanical trip to Chile

Ger van den Beuken

IN DECEMBER 2002 my wife Mariet and I headed off for Chile. It's an enormous distance between the Central Cordillera and the Altiplano in the north which we wanted to visit, so to try and get the best time for the flowering we started botanising in the central part of Chile. All our travel to these remote places is focussed on finding special species and particularly cushion plants.

22 - Lago Negro near Portillo, Chile

This time our goal was to find and to do some fieldwork on *Azorella compacta* (syn. *Laretia compacta*) in the Parque National Lauca in the extreme north of Chile close to the Bolivian border and for this reason we got a travel award from the SRGC and the AGS. Anyway, to get to Chile we had to fly from Amsterdam via Madrid to Santiago. Fifteen hours later we arrived in this huge city filled with thousands of old buses and other vehicles driving with enormous speed. A few beautiful palaces and buildings were a very welcome intermezzo, and obviously it's not possible to get into Chile without being in Santiago, but we wanted to leave such a noisy place as soon as we could. So the very next day we took our hired four-wheel drive car and left for our first region, the Maipo Valley, a sunny valley south-east of Santiago and, as we found out, a very good region for the cultivation of grapes. Today it seems to be one of the most important regions for white and red wine and most of this wine is being exported.

From here the road was well-paved at the start but later on, ascending to a level of more than 2000 m the road started to be unpaved and dirty. We arrived at a wonderful lake with the high snowy peaks of the Andes in the distance: this was the start of our plant-hunting. We were immediately impressed by all the wonderful plants growing in mobile scree near the roadside. *Oxalis compacta* with its sulphur-yellow flowers was at its best. It is a nice compact plant, although not comparable with *Oxalis erythrorhiza* which we found many years ago on the Cerro Cathedral in Argentina. Near *Oxalis compacta* was *Oxalis squamata*, a very nice plant with purple flowers which is in cultivation. But take care, it's a quite invasive plant, so if you grow this in your garden you will have it for your whole life. A little bit higher up we found a wonderful plant which we had not expected, *Alstroemeria umbellata*, one of the loveliest plants I have ever seen in the wild. This reminded me a little of a succulent with blue-grey, spathulate, fleshy leaves, and stemless pink flowers with yellow spots


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Oxalis compacta

Alstroemeria umbellata

on the petals, one of the most spectacular combinations you can imagine.

A little bit higher we found a *Chaetanthera* sp. growing in a yellow, limy, sand in the baking sun, and growing in all the semi-shady crevices *Caiophora coronata* which belongs to the family Loasaceae, and is a prickly plant with huge white flowers. Some years ago I grew it in my alpine-house, but as with many of the South American plants it is very difficult to keep the plant compact and in character. Other plants here included a big *Calceolaria* clinging to a rock together with a *Haplopappus*. A little higher again, we spotted a nice group of *Rhodophiala rhodolirion* in different colours ranging from pale pink to very dark purple. These plants were all growing on open grassy places

Chaetanthera sp.

26 - *Calceolaria sp.*

facing south, together with the more common *Alstroemeria pallida*, a widespread species in cultivation for which we are indebted to John Watson and Anita Flores who live in Los Andes, supply an interesting seed-list almost every year which includes all those plants we want to grow. They really do a great job in the field and we have to be grateful for that.


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Rhodophiala rhodolirion

Higher again, and finally at a level of more than 2800 m in a very wet and muddy region with melting snow-water flooding the ground, we found a great number of the white flowering *Calandrinia affinis*. This was the only place we found this plant growing but I was hopeful we would be able to grow such an alpine plant at home. I tried to grow it from seed: the germination rates exceeded my expectations but after pricking out the problems started and resulted finally in only dead seedlings.

On a riverbank, big cushions of *Astragalus arnottianus* were growing in pure sand. Although the sand was dry when we were there, it was obvious that this plant could endure long wet periods. But it was getting late in the afternoon and we had to hurry to be back again at our camping place before dark.

The next day we had our second trip, driving along the main road, direction Santiago, and later taking a narrow side-road which climbed slowly to the totally deserted hamlet of Lagunillas, a small ski resort at an altitude of 2200 m. It was about an hour's walk to reach a summit which was botanically very interesting. The soil was very sandy, in


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Calandrinia affinis

Argylia adscendens

Calandrinia sericea

Calandrinia picta

some places rocky, and among the many plants we found here were *Tropaeolum sessiliflorum* with huge orange-white flowers. Very close by was *Argylia adscendens,* a bulb with big orange trumpets looking like a golden gentian. Another disappointment in cultivation. I have had a plant in my alpine-house for four years, until now without flowers, and growing with long slender stems.

Growing on big rocks was an *Azorella,* and the yellow-flowering *Anarthrophyllum cumingii,* a small shrub only about 30 cm tall, was abundant. On open dry grassy places we spotted another *Chaetanthera* species, this one with small yellow flowers, and *Calandrinia sericea,* a wonderful hairy plant with big shiny pink flowers which has proved to be suitable for our garden. From seed it takes a year before it flowers. It sets seeds freely and is propagated without any problem. *Calandrinia picta* was also growing here with very nice, purple-green, obovate leaves and shiny pink flowers. I have never seen seeds being offered but it would be a very good acquisition. *Mulinum spinosum* was also common, however it had only just started flowering. A little higher up we found the *crème de la crème,* the most exciting *Cruckshanksia hymenodon* growing in a few places with

its flowers ranging from pale pink with yellow, to purple with yellow. This species is not in cultivation as far as I know. The soil here was yellow-brown and extremely dry but made an attractive habitat for another common gem, *Mutisia sinuata*, a rather spiny plant, about 10–15 cm tall with big golden yellow flowers. All the time we stayed in this area we had wonderful views of the Andes but unfortunately the highest top of the Volcan Aconcagua was completely surrounded by clouds.

Cruckshanksia hymenodon

We spent a few more days in this region before heading further north for Los Andes, a very good base for making trips in the Andes. One of our highlights was a trip to Portillo, a small ski resort near the Argentinian border which we felt would be a very good place to find rosulate violas. The weather was perfect with bright sun and on our way to Portillo we had good views of the mountains, and in many places the mountain slopes were completely coloured yellow. Coming closer all these plants seemed to be *Tropaeolum polyphyllum*, a species which is quite common in the Central Cordillera and was flowering abundantly in colours ranging from yellow to orange or brown-orange. Apart from the normal variety we found *Tropaeolum polyphyllum* var. *incisum* (syn. *T. incisum*). Unfortunately it has not proved a vigorous plant here, only coming up in the spring. Later on it dies back and although it comes back the following year, it is always without flowering. In moist places near a mountain stream we spotted *Mimulus luteus* and *Mimulus depressus*.

A spectacular view on our arrival in Portillo was of the Lago Negra surrounded by the snowcapped peaks of the Andes. A fantastic place to stay, but after two days searching for rosulate violas we had not found any species which, considering the notes of the first AGS tour several years ago, was rather frustrating. What we did find however, on mobile scree, were other good plants like *Crypthantha capituliflora* and several *Calandrinia* species, *Alstroemeria pallida, Tropaeolum polyphyllum* and many other plants we did not know.

From Los Andes we headed in the direction of La Serena for a visit to the university to meet Professor Francisco A Squeo a botanist who has a huge knowledge of the vegetation of the Cordillera Dona Ana, a very

promising mountain range situated north of Los Andes. We discussed our itinerary with him and our plans to visit this area. He told us about the tin and copper-mines in the region, which was therefore probably not accessible without a permit, and that to get such a permit took about two weeks. Nevertheless we decided, despite his negative advice, to set off for these mountains, very impressed and excited by all the photos of plants in the book, *Flora de Los Andes de Coquimbo*, which Professor Squeo had written about this vegetation. It took us one day to get there and to find some accommodation. The following day we headed off for Dona Ana, but just as we entered the mountains we came to a control post. Three soldiers came out of their office and asked us the reason of our visit. We explained our intentions, but only got the answer that this area was rather dangerous and that we needed this permit. However, on the condition that we handed over our passports, and took one of the soldiers with us, we were allowed to make a day-trip. Well, I can assure you that it's no fun to travel around for a whole day with a soldier in the back of your car.

So this trip was rather disappointing and we travelled back next day to La Serena to take the plane for our final goal: the extremely dry north of

Tropaeolum polyphyllum

Chile. The flight to Arica, the most northern city in Chile, took about four hours. We were sitting on the right-hand side of the plane and had a good view on one of the largest deserts of the world, the Atacama. Sitting beside us was an Italian and we told him about our plans. I will never forget the exclamation of this man when we landed at the airport, "What plants do you expect to find here in this miserable region of just stone, sand and dust!" And I had to agree, my first impression was not very positive, but we picked up our four-wheel drive jeep and went to find our hostel somewhere in the centre of the city. The next day we left quite early for Putre, a small city, 150 km along the highway, adjacent to the Altiplano. To start with the road was winding and ascending quickly from sea level up to about 1200 m and although later the road was much straighter, it continued climbing. All this time we were driving next to a narrow valley, where very poor Chilean inhabitants tried to make a living from vegetables and cattle. This valley was the green part of this area, getting some melting snow-water from the snowcapped volcanoes on the Altiplano.

We were too early for the flowers of the desert (February is a good time to see them at their best) but everywhere, as far as we could see, were huge candelabra cactus (*Browningia candelaris*) with individual plants over 1.5 m tall. It is amazing when you realise that all the moisture these impressive plants get is from the fog which blows inland from the ocean and condenses on the plant. It never rains. One of the few other plants we spotted here was a wonderful purple *Cerinthe* in some of the narrow sandy valleys.

Later in the afternoon we approached Putre at an altitude of 3200 m. We were getting to the Altiplano and the vegetation here was completely different because of the Bolivian winter which means that from halfway through December the weather starts to change. There are some rain showers every week and plants such as the beautiful *Junellia minima*, with lovely dark pink flowers, was at its best, growing on rather stony places near the roadside just as we entered Putre. It was the most perfect arrival.

Putre is a small city with about 4000 inhabitants mainly living from growing vegetables and cattle. Barbara Knapton, an American from Washington, settled here several years ago and started a travel agency. Mainly going onto the Altiplano with people for birding trips, she also has a huge knowledge of the vegetation of the Altiplano. Before our expedition I arranged everything with Barbara and told her about our plans so she planned to guide us for a few days and then leave us to ourselves to study the plants. Actually we wanted to stay on the Altiplano

Atacama Desert

with the local population, the Aymaras but, because of the high altitude, I was suffering from headaches every day and Barbara recommended we stay with her, because at 4500 m everything gets worse. The Aymaras have electricity from a generator which stops at nine in the evening. From then everything is completely dark and if you get ill there you have a real problem. So, we decided our one-week stay would have Putre as our base. From here we would drive up into the mountains every day, onto the Altiplano, to levels from 4000 m up to 5600 m.

Our first day in Putre was acclimatising, very important if you want to go to such high levels, but the second day we left with Barbara for our first trip into the area. The vegetation would be very interesting for cactus-lovers with many species unknown to me but we also found other interesting plants common in the area like a *Balbisia* with huge sulphur-yellow flowers. In South America you can find a great number of *Adesmia* species, and we had found some in Patagonia, but the species we found here were completely different. *Adesmia spinosissima*, for example, was a perfect plant with long spikes, about 70 cm high with grey-blue leaves and significant yellow flowers with brown spots. When we came back in the evening to Putre we started to read about all the plants we saw during the day. From experience however I knew that it was almost impossible to determine plants from photos and particularly since this vegetation was so new to me.

Altiplano

A trip to a small Aymara village yielded some interesting plants: near the roadside we spotted the strikingly beautiful *Caiophora rahmeri* with orange-red flowers growing in the shade beneath a huge rock. It is another species from the Loasaceae which irritates your skin if it is touched. A little further we found a *Draba* completely covering a piece of rock with small shiny green rosettes and bright yellow stemless flowers. After another plant hunt in the direction of Lago Chungara, one of the highest lakes of the world at 4500 m, we were able to add several interesting plants to our list. Our drive was along a well-paved road which, as it climbed, gave us wonderful views across the Altiplano with the Vulcan Parinacota and the Vulcan Taapaca in the distance. On our left were the so-called *bofedales*, huge green cushions grazed by alpacas, a camel species essential for the Aymara Indians. A small gentian species was growing on these hard cushions. Most were blue although there were some white forms. When we arrived at the Lago Chungara we could enjoy the fantastic scenery. In front of the 6500 m high, snowcapped, Vulcan Parinacota, the lake had thousands of flamingos on it. On the mobile screes we found *Viola granulosa* our first and last rosulate viola. Very small pale brown rosettes, heavily lime-encrusted and hard to find in identically-coloured gravel. Another interesting plant growing in similar conditions was *Nototriche rugosa*. which is not comparable with many other Nototriche species. It's a rather untidy plant with grey leaves and

white flowers on 5-10 cm stems, but was the best Nototriche species we had seen.

The following day we planned the highlight of our stay in Chile. Barbara Knapton showed us where to find *Azorella compacta,* the plant were we had come for. We would start by following the main road to Bolivia, then joining a dirty track up to the slopes of the Vulcan Taapaca. It was certainly the most spectacular trip we made. The extensive Altiplano on our left with some of the higher peaks of the Andes was really impressive. Near the Laguna Cotacotani, a huge wet area with many small lakes, we took a steep track towards the Vulcan Taapaca, and at 4400 m we spotted the first cushions of *Azorella compacta* the plant we had come so far to see. On our left was an immense plateau where we could see vicunas, another camel species, much smaller than alpaca. These animals are rather shy, so to make good close ups you need a telephoto! We continued driving until we got to 5200 m the highest place we could go by car. To see more impressive plants in the wild than these cushions

Caiophora rahmeri

Vulcan Panicota

is difficult to imagine. As far as we could see, the slopes were covered with the unsurpassable cushions, some more than 4 m across. These plants, growing in pure lava sand, are very hard and woody inside. The local Aymaras use them for heating. Some students from Cornell University in the USA, did a study in the seventies and found out that these plants grow about 2 mm every year. So the biggest plant we found which reached a size of 4.5 m^2 and 1.20 m high should be more than 2000 years old. One thing that surprised me, even made me suspicuous, was that we did not find any small plants. It's still a mystery to me, because I collected some seeds, sowed them at home in pure volcanic sand and four weeks later I had a good batch of seedlings. In recent years I have spread several plants around and in our alpine house they are doing very well. So it is not clear why there were no young plants. Are the seeds waiting on the right climatic conditions to germinate? Or are small plants eaten by vicuna? Anyway, I know that the seeds are viable.

There were some other plants here. One of the most wonderful plants we found here in these arid conditions was *Nototriche meyenii* which makes small cushions of grey hairy rosettes. The white stemless flowers were just starting. Other plants we found, were a *Caiophora,* some *Senecio* species,

38 - *Azorella compacta*

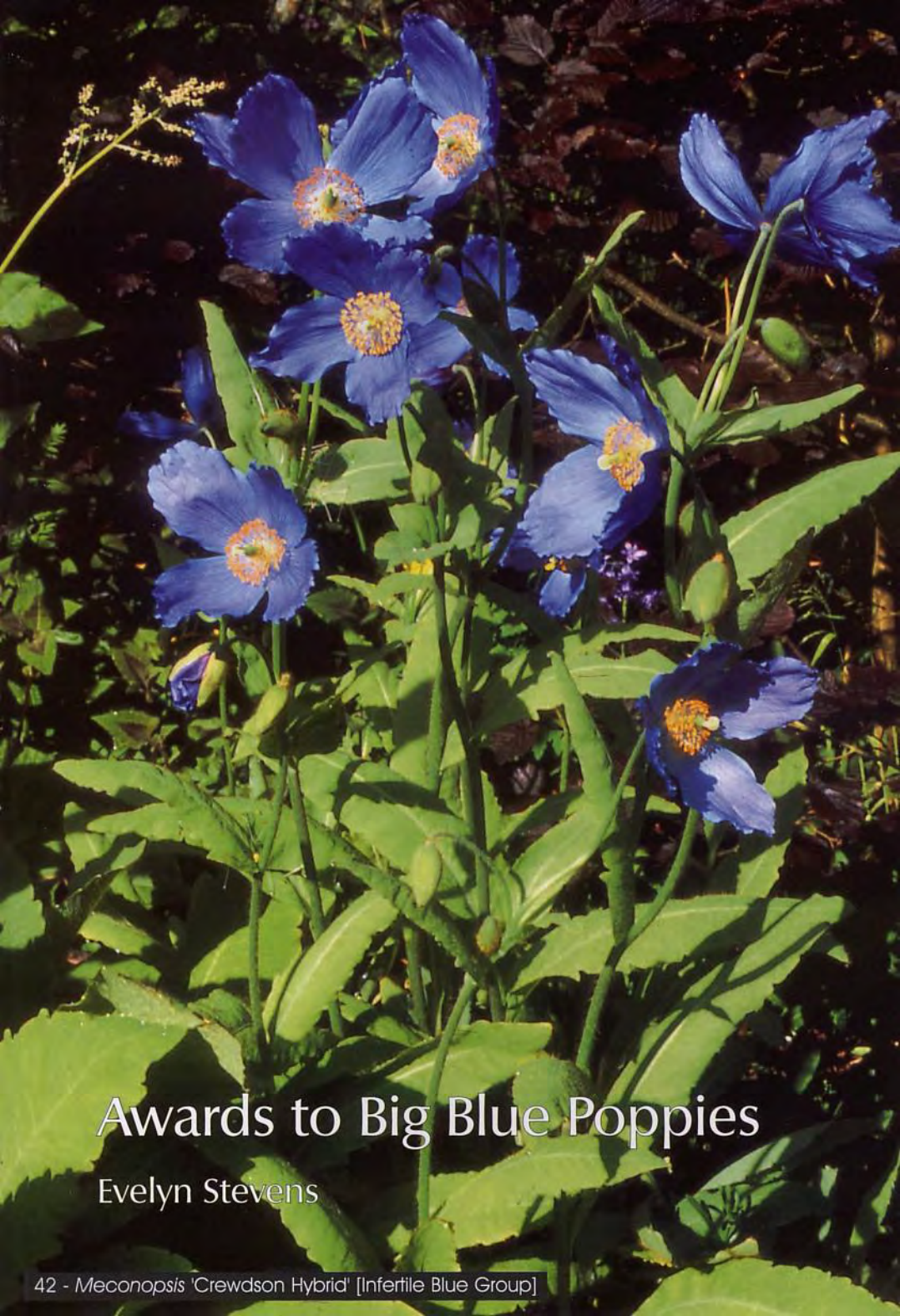
Vicuna

and a *Fabiana*. Some other spectacular cushions we found were *Pycnophyllum molle* and *P. bryoides*. During our stay here on this volcano the weather was bright and sunny without wind. However, every day, at the same time, 1 o'clock in the afternoon, the wind starts blowing. Later in the afternoon, immediately after sunset, the temperature falls and it starts freezing. By day it's about 15C, a very nice temperature for walking, but because of the lack of oxygen at this high altitude it is very hard work and I kept getting dizzy and suffering from headaches and despite going back the following day we did not find new material except some cactus species.

Nototriche meyenii

Altogether this visit to Chile was much better than we expected, so in one of the coming years we surely will make another expedition to these remote places.

41 - *Pycnophyllum bryoides*



Awards to Big Blue Poppies

Evelyn Stevens

42 - *Meconopsis* 'Crewdson Hybrid' [Infertile Blue Group]

THE SUMMER OF 2005 was a high point for the Meconopsis Group which was founded in 1998 when it had become clear that much confusion surrounded the identities and nomenclature of the big perennial blue poppies which were in cultivation. A preliminary survey had shown that many of the plants under review were sterile hybrids and a primary aim of the Meconopsis Group was to attempt to clarify these confusions. Three species were thought to be involved in the hybrids: *Meconopsis grandis*, *M. betonicifolia* and *M. simplicifolia* which were introduced into British gardens from the mid 19th to the early 20th century. By the end of the latter, it appeared that these species, probably also involving others, had crossed randomly when grown closely together in gardens, resulting in a range of sterile hybrids. Some of the hybrids had been named, others had not, and there was a decided lack of records. Names were often in doubt, but it was not in doubt that individual sterile plants could often be traced back 40 or 50 years. Apart from the sterile hybrids, we also came to appreciate the existence in cultivation of excellent fertile hybrids of more recent origin. Articles reporting on progress so far have already been published [1-4]. Particularly useful for the work was the decision to adopt a classification making use of the "group" concept. Three Groups which have been discussed in detail in earlier articles [1,2] were established: *Meconopsis* George Sherriff Group, *Meconopsis* Infertile Blue Group and *Meconopsis* Fertile Blue Group. A summary of these Groups' characteristics can be found in the table at the end of this article.

AWARDS FROM THE RHS

From early on we thought that these beautiful blue poppies were worthy of awards from the Royal Horticultural Society. Three plants already had awards: a First Class Certificate (FCC) in 1963 to *Meconopsis* 'Branklyn' (this may, or may not, still be in existence) and Awards of Garden Merit to *M. betonicifolia* and *M.* 'Slieve Donard'. Trials for AGMs, which assess plants for general garden use, are normally held at the RHS Garden at Wisley in Surrey. The big blue poppies, however, are better suited to cooler and moister climates such as northern Britain, and are not easy in the warm, dry climate of Wisley and therefore a trial at Wisley seemed inappropriate. We were delighted, however, when a special meeting of the Joint Rock Garden Plant Committee (JRGPC), which judges plants for exhibition, was arranged for June 2005, with the sole purpose of looking at the big perennial blue poppies and we are grateful to the Regius Keeper of the Royal Botanic Garden Edinburgh for providing the venue.

Fifteen different cultivars were presented: eight received awards. A First Class Certificate (FCC), the highest award given by the JRGPC, was given to *Meconopsis* 'Slieve Donard', Awards of Merit (AM) were given to *Meconopsis* 'Lingholm', *M.* 'Jimmy Bayne', *M.* 'Huntfield' and *M.* 'Barney's Blue'. and a Preliminary Commendation (PC) was given to *Meconopsis* 'Ascreavie', *M.* 'Crewdson Hybrid' and *M.* 'Marit'.

It was also encouraging that the JRGPC committee recommended that the plants to which Awards of Merit had been given should now be put forward for assessment for Awards of Garden Merit.

GENERAL DESCRIPTION

By and large, the "big perennial blue poppies" are a rather uniform group of plants, most of which are hybrids of garden origin. With certain exceptions, they are tall, leafy, deciduous, clump-forming, herbaceous perennials with large (10–20 cm diameter), four-petalled, bowl-shaped, blue flowers borne singly on pedicels concentrated towards the apex of the flowering stem. In some cases the clumps remain rather "tight" over time, not spreading very far laterally; in others, short rhizomes may be formed, reaching out into the surrounding soil, creating a gently expanding patch. Flowering is followed by gradual dying and rotting of the current year's flowering stems. This only happens after maturation of the seed-capsules (with seed formation in the fertile forms) and the development, underground, of incipient new shoots or rhizomes directly from the bases of the decaying flowering stems. If rhizomes are formed, new shoots may arise both along the length of the rhizomes or at their apices. Some of these new shoots produce a few fresh leaves in late summer and autumn, but with the onset of frosts these wilt and die down. Resting crowns, surrounded by the dead leaf-bases, persist over winter.

In spring the underground shoots begin to emerge as attractive rosettes of young leaves. A stout leafy flowering stem arises from the centre of individual rosettes. The apex of a flowering stem ends with a cluster of sessile leaves, sometimes referred to as a "false whorl". From here 3 – 7 pedicels arise, each bearing a single flower. Usually one or more ancillary flowers occur singly in the axils of the upper stem leaves, below the false whorl. Flowering occurs in late spring to early summer. After a flower fades, the enlarging seed-capsule becomes a prominent feature, and it appears that it will become filled with seed. However, plump viable seed production is restricted to fertile forms and, in the sterile cultivars mature seed-capsules contain only

shrivelled, aborted seeds. Care must be taken not to mistake this "dust" for properly developed seeds. The height of the plants at flowering is 1–1.25 m but may be much taller. The actual height achieved is undoubtedly partly dependent on growing conditions.

Variations occur in the appearance of all stages of development in these rather similar plants and an appreciation of all of these variations help in defining the different cultivars. Some of the distinctions between cultivars are readily apparent, others require a more practised eye to facilitate correct diagnosis. Features which are particularly useful in distinguishing between cultivars include the young leaves as they emerge in spring (red-purple pigmentation, appearance of the hairs, overall shape and indentations on the margins) and as they mature (any pigmentation usually fades, and overall shape and marginal indentations are most important), the flowers (shape and colour of the petals, characteristics of the style and stigma and overall shape of flower), maturing seed-capsules (overall shape and bristle features) and mature seed-capsules (presence or absence of plump viable seed).

Just two of the cultivars which were given awards have been known by name for more than fifty years: *Meconopsis* 'Slieve Donard' and *Meconopsis* 'Crewdson Hybrid'. The exact form of these names has been amended recently to avoid confusion in the case of *M.* 'Slieve Donard', and to conform with the requirements of the Culticated Plant Code produced by the International Commission for the Nomenclature of Cultivated Plants (ICNCP) [5] in the case of *M.* 'Crewdson Hybrid'.

Maturing seed-capsules (left to right) of *Meconopsis* 'Jimmy Bayne', *M.* 'Huntfield' and *M.* 'Ascreavie' (all George Sherriff Group), *M.* 'Mrs Jebb' and *M.* 'Slieve Donard' (both Infertile Blue Group) and of *M.* 'Lingholm' (Fertile Blue Group)

***Meconopsis* 'Slieve Donard' [Infertile Blue Group] FCC, AGM**

Deservedly, this cultivar, already a holder of the RHS Award of Garden Merit, was awarded the highest accolade: a First Class Certificate. *Meconopsis* 'Slieve Donard', is arguably the best of the big blue poppies with a good constitution and if you wish to be sure of a pure blue flower this is a good choice as purple shades very rarely occur. The rosette of young leaves which emerge in spring appear golden brown due to the furry covering of long, golden-brown, white-tipped hairs. The mature leaves, both basal and cauline, are elegantly oblong-lanceolate, and the margins are either almost entire or rather sinuous with a number of indistinct or shallow indendations. The flowers are strikingly refined sky-blue shallow bowls with broadly overlapping silky-looking petals of good substance, about 16 cm in diameter. Sometimes, rather than presenting an open outward-facing stance the flowers are downward-facing, yet equally appealing. Despite careful observation over many years, I have found no clear correlation between any external conditions (e.g. elapse of time since opening, sunny or cloudy, time of day, ambient temperature, windy or still) and which of these two aspects the plants assume. The style, prominent when seen in an "open" outward-facing flower, is long, curved and slender and merge with the slender stigma. The ovary arises from a central boss of golden stamens that soon fade to brown. On first opening, the ovary is directed downwards, but the seed-capsule gradually moves upwards as with other *Meconopsis*, to a striking vertical stance. During maturation, the seed-capsule in *M.* 'Slieve Donard', uniquely in my experience, either may, or may not, shrink markedly. It is covered with long and prominent bristles. As this cultivar is invariably sterile, no seeds are produced (although surprisingly there have been occasional reports to the contrary). *M.* 'Slieve Donard'

44 - *Meconopsis* 'Slieve Donard'

is clump-forming, becoming larger year by year, but there is little or no evidence of rhizomes reaching out from the center to produce new plantlets at a distance.

Dr. Charles Nelson [6] researched the origins of *M.* 'Slieve Donard' and Christian Curtis, the grand-daughter of the raiser, Dr. Alec Curle, has recently concurred with his account. James Cobb also gave a short exposition [7]. In brief, in about 1935, Dr. Curle deliberately crossed *M. grandis* with *M. betonicifolia* two ways, using *M. grandis* as both the pollen and seed parent and obtained a few seedlings. In several stages, *M.* 'Slieve Donard', as it was eventually named, reached the Slieve Donard Nursery in Northern Ireland. From here it was sold, first as *M. grandis* Prain's variety, later as *M. grandis* 'Slieve Donard' and later still as *M.* x *sheldonii* 'Slieve Donard' (in the 1967 catalogue). The latter is almost certainly a valid designation, but to avoid confusion with other sterile clones and, in particular, fertile hybrids also circulating as *M.* x *sheldonii*, the Meconopsis Group has proposed that the hybrid epithet is not used, and that the plant is now validly named *M.* 'Slieve Donard' or more fully as *M.* 'Slieve Donard' [Infertile Blue Group].

45 - *Meconopsis* 'Lingholm'

_M._ 'Lingholm' [Fertile Blue Group] AM

An important cultivar to receive an AM was the fertile hybrid *Meconopsis* 'Lingholm'. The special value of this cultivar is that it is fertile. This distinguishes it from the other big perennial blue poppies, apart from the smaller-flowered *M. betonicifolia*, and *M. simplicifolia*. The benefit, of course, is that a large-flowered blue poppy can be made available in large numbers, (as seed or plants), for wide distribution to a large number of gardeners. Recognition of the existence of this fertile hybrid cultivar was slow (e.g. see Cobb [8]). For many years it was

assumed to be the species, *M. grandis*, and not a hybrid. This undoubtedly still applies in certain circles to-day, and it is not uncommon to see plants or seeds of *M.* 'Lingholm' labelled as *M. grandis*, but we feel confident that the "word is getting round". For a full description of *M.* 'Lingholm' and an account of its origin and introduction into horticulture, see Stevens and Brickell, 2002 [3]. Recently, new, information has come to light, placing the origin of this cultivar back to the early 1960s, but space precludes its inclusion here. Further details can be found on the Group's web-site.

Similarities, particularly in the appearance of the young, emerging leaf rosettes, flower colour and in the appearance of the maturing fruit-capsules, suggest that the sterile clone that gave rise to *M.* 'Lingholm' might well have been *M.* 'Slieve Donard'.

It is quite possible that more cultivars within Fertile Blue Group may be named. In fact, we already know of several fine forms which could well merit cultivar status. However, several requirements would need to be satisfied before this was justified. First, could plants true-to-form be raised from seed? This would need to be rigorously tested. If not, vegetative propagation by division would be necessary. But to make this a viable proposition, each new potential cultivar would need to be bulked up to sufficient numbers.

46 - *Meconopsis* 'Jimmy Bayne'

Meconopsis George Sherriff Group cultivars

Four of the six cultivars now named by The Meconopsis Group within George Sherriff Group were given awards. All these plants are clearly strong cultivars that have stood the test of time. Prior to 1998, these, and a number of other as yet unnamed clones, would have been known collectively by the taxonomically invalid name *M. grandis* GS600. We have concluded that this Group of perhaps two dozen sterile, probably hybrid, clones are derived from the famous collection of *M.*

grandis seed (number GS600, or more correctly L&S600) collected by Sherriff and Ludlow in eastern Bhutan in 1934. They share a number of features which make them readily recognisable, at least to the experienced eye. The emerging leaf rosette is composed of rather spreading, relatively broad, lanceolate leaves with a distinctive red-purple pigmentation on both upper and lower surfaces. Contrary to our earlier impressions, however, the presence of red-purple pigment in the leaves is not confined to George Sherriff Group, but occurs quite widely in the big blue poppies. However, the amounts present and the patterns of distribution do appear to be cultivar dependent: for example, *M.* 'Huntfield' and *M.* 'Ascreavie' are always very intensely pigmented on both the upper and lower surfaces, whilst only a little of the pigment may be seen in *M.* 'Slieve Donard' (Infertile Blue Group), and this restricted to the lower surface. The leaves in George Sherriff Group are covered with a dense pile of short hairs. The flower colour may be rather variable, ranging from pure blue to blue mixed in with violet or purple. The violet to purple cast to the flowers is more prevalent in George Sherriff Group than in many other big blue poppies. The reasons for colour variability is still far from understood, speculation abounds, but it seems clear that there is a need for a thorough scientific investigation and further discussion can be found on the Meconopsis Group website. The seed-capsules in George Sherriff Group are elongate-ovoid and covered with dense, short bristles.

Two of the George Sherriff Group award plants, ***Meconopsis* 'Jimmy Bayne' AM**, which has been described in detail previously [9] and ***Meconopsis* 'Huntfield' AM** are very similar in possessing open, shallow, bowl-shaped flowers with broadly overlapping petals. The main differences are that *M.* 'Huntfield' is slightly larger in all its parts, the leaf-rosette emerges slightly earlier, the young leaves are

47 - *Meconopsis* 'Huntfield'

48 - *Meconopsis* 'Barney's Blue'

49 - *Meconopsis* 'Ascreavie'

consistently more intensely red-purple pigmented than *M.* 'Jimmy Bayne' and, at least in some gardens, it is more prolific in producing rhizomes and new shoots from underground. *M.* 'Huntfield' was purchased by Allan Jamieson a number of years ago from the garden of that name which previously belonged to Sylvia McCosh [10].

***Meconopsis* 'Barney's Blue' AM**, the most recently named George Sherriff Group cultivar, has a particularly close association with George Sherriff. It was found in 2000, still growing after many years of neglect following their deaths, in the garden that George Sherriff and his wife Betty created at Ascreavie House, Kingoldrum, in Angus. Divisions were given to Ian Christie by the present owners Barney and Ruth Baron. The most outstanding feature of this cultivar is the colour of the flowers. They consistently open a deep purple/pink and over the following few days the petals change from the centre outwards towards the periphery to a lighter violet and then to blue. This clear-cut progression results in an attractive bicoloured effect. There are other distinguishing features, but space prevents them being described here.

The fourth George Sherriff Group cultivar to receive an award was ***Meconopsis* 'Ascreavie' PC**. This is another cultivar with certain clearly distinct features. The most obvious is that the flowers present a dainty, more open, wind-mill like appearance as the petals do not broadly overlap one another as in the cultivars already described. This cultivar is also more obviously distinguishable on leaf characteristics than many of the others. The main points of difference are that the mature leaves are paler green, the margins indentations are more pointed (serrate) and the apices are also more pointed (acute). We have acquired this cultivar from a number of sources so that it appears to be quite widely distributed, at least in Scotland.

***Meconopsis* 'Crewdson Hybrid' (Infertile Blue Group) PC**

Along with *Meconopsis* 'Slieve Donard', *Meconopsis* 'Crewdson Hybrid' is the only cultivar to have carried its name for more than fifty years although it is now to be known as 'Crewdson Hybrid' rather than "Hybrids" to accord with the provisions of the Cultivated Plant Code. An important fact to note is that *M.* 'Crewdson Hybrid' is sterile. Seed, which is sometimes offered under this name, will undoubtedly be found to be of *M. betonicifolia*.

Unlike many clones, we have information on the origin of this cultivar (Crewdson 1950 [11]). In 1938 Cicely Crewdson found that "what I call the 'Sikkim' (true blue) *Meconopsis grandis* and *M. betonicifolia*". had crossed in her garden. She still had it as a "fine clump" in 1950. There is no mention of seed-setting, but Jack Drake's Inshriach Nursery catalogue of 1957/8 has the following entry: "*Meconopsis* 'Crewdson Hybrids' Raised from seed given us many years ago by that fine gardener, the late Mrs Crewdson of Kendal. John Lawson, retired proprietor of Inshriach Nursery, has said their records show that they raised this cultivar from seed until 1959 when it became sterile, and that it was subsequently propagated by division [12].

It possesses a distinctive set of diagnostic features which it shares in large measure with *M.* 'Mrs Jebb', which is undoubtedly a selection from *M.* 'Crewdson Hybrid'. These features include the appearance of the young emerging and adult leaves (neat, near parallel-sided oblong-lanceolate shape with well-defined, but not very deep, crenate teeth around the margin, and characteristic reddish-brown pigmentation), and the seed-capsules. The seed-capsules are short oblong-cylindrical in shape with a dense pile of short bristles. The style is unusually short and is surmounted by a prominent and rounded stigma. The flowers are always a deep, clear blue and without purplish tones. They are a little smaller than in most other cultivars. In *M.* 'Crewdson Hybrid',

they are deepish cup-funnel shaped, the obovate petals being longer than wide whilst in *M.* 'Mrs. Jebb' the petals are almost circular, thus forming a shallow, saucer-shaped flower.

***Meconopsis* 'Marit' PC**

In 1998 Finn Haugli, Director of the Botanic Garden in Tromsö Norway, introduced into Scotland a very beautiful near-white, large-flowered, sterile *Meconopsis*, which, after a while, has now become established and named *M.* 'Marit'. This clone has been growing well in Tromsö for around twenty years.

The emerging leaves form an upwardly-reaching rosette in which the lanceolate leaves are firm-textured with evenly indented margins, acute tips and a dense covering of long, bi-coloured hairs, ginger in the lower half, fading to colourless proximally. As the leaves enlarge and mature, their ginger appearance fades. The stout flowering stem bears several large stem leaves. Usually four oval flower buds develop within the false whorl, with additionally two or more arising in the axils of the upper stem leaves. At flowering the pedicels are short, tending to nestle within the false whorl giving a neat appearance to this cultivar. The near-white flowers are rounded and bowl-shaped with beautifully overlapping petals. The stigma is large and rounded and the bristly ovary develops into a distinctive oblong capsule, densely clothed with long ginger bristles and with a stout style and prominent stigma.

50 - *Meconopsis* 'Marit' (photo Finn Haugli)

51 - *Meconopsis* 'Huntfield' [George Sherriff Group]

52 - *Meconopsis* 'Ascreavie' [George Sherriff Group]

In summary, the combination of the highly features just described make this a very desirable cultivar. Every effort should be made to make this more widely available in future.

Finn Haugli has informed us that in Tromsö, in about 1980, Marit Espejord raised *M.* 'Lingholm' from seed, received then as *M. grandis* from Thompson and Morgan. She crossed it with *M.* x *sarsonsii* from Swedish seed. Three similar sterile plants resulted, one, *M.* 'Marit', was selected and vegetatively propagated. So presumably it has at least *M. betonicifolia*, *M. integrifolia* and *M. grandis* in its genetic make-up.

This article has been restricted to describing the big blue poppies which received awards in 2005. Apart from these there are other cultivars which will be put forward for awards at a later date. Some of these are undoubtedly award-worthy. In the meantime, the table below summarises the current position with regard to named cultivars and species. Also included are indications on the situation prior to 1998 when the Meconopsis Group was formed. Not included are a number of cultivars which have been identified and hopefully soon will be named and approved by the Meconopsis Group. There are also still others which may be named sometime in the future.

53 - *Meconopsis* 'Slieve Donard'
[Infertile Blue Group]

54 - *Meconopsis* 'Jimmy Bayne'
[George Sherriff Group]

Approved name	RHS award	Comments
M. George Sherriff Group		Sterile hybrids. Previously attributed collectively to *M. grandis* GS600. A number of clones have been identified, some very similar, others markedly distinct. A few have been named - remainder should be called *M.* George Sherriff Group until such time as they may be considered worthy of clonal names. Did not exist prior to 1998.
M. Infertile Blue Group		Comprises most of the long-standing 'old' sterile clones not covered by George Sheriff Group or Fertile Blue Group. Did not exist prior to 1998
M. Fertile Blue Group		Fertile. Almost certainly allotetraploid hybrids, allotetraploidy being responsibly for fertility being restored to erstwhile sterile forms. Did not exist prior to 1998.
M. betonicifolia	AGM	
M. betonicifolia 'Alba'		
M. betonicifolia 'Hensol Violet'		Not *M. betonicifolia* 'Hensol Lilac'. Name used in past varied.
M. grandis		True species is scarce in cultivation at present. This name is often still wrongly used for *M.* 'Lingholm' [Fertile Blue Group].
M. simplicifolia		
M. x *sheldonii*		This name applies to the cross between *M. grandis* and *M. betonicifolia*. First made many decades ago. Unsure which, if any, plants still in cultivation are true *M.* x *sheldonii*. Used erroneously and confusingly for both *M.* 'Lingholm' [Fertile Blue Group] and "old" sterile cultivars such as *M.* 'Slieve Donard'.
M. x *beamishii*		Long-known hybrid, *M. integrifolia* x *grandis*
M. x *sarsonii*		Long-known hybrid, *M. integrifolia* x *betonicifolia*
M. 'Jimmy Bayne'	AM	George Sherriff Group Name published 1997, previously known as *M. grandis* GS600.
M. 'Ascreavie'	PC 2005	George Sherriff Group. Name agreed in 2001, previously known as *M. grandis* GS600.
M. 'Huntfield'	AM 2005	George Sherriff Group. Name agreed in 2002, Would have been known as *M. grandis* GS600.
M. 'Dorothy Renton'		George Sherriff Group. Name agreed in 2005. Previously unnamed at Branklyn Garden, Perth.
M. 'Barney's Blue'	AM 2005	George Sherriff Group. Name agreed in 2005. Would have been known as *M. grandis* GS600 prior to 1998.
M. 'Dalemain'		George Sherriff Group. Name agreed in 2005. Prior to 1998, known as *M. grandis* GS600 or *M. grandis*

Approved name	RHS award	Comments
M. 'Slieve Donard'	AGM FCC 2005	Infertile Blue Group. Recent study convincingly indicates that *M.* 'Dawyck' and *M.* 'Slieve Donard' are synonymous. Was known as *M. sheldonii* 'Slieve Donard'
M. 'Ormswell'		Infertile Blue Group. Invariably plants given this name are members of George Sheriff Group, i.e. derived from *M. grandis* GS600. True plant (parentage, *M. grandis* x *betonicifolia*) with obvious affinities to *M.* 'Slieve Donard', is rare. See also refs. 1 & 2.
M. 'Bobby Masterton'		Infertile Blue Group. Previously in circulation as "Betty Sherriffs Dream Poppy". As it is a member of Infertile Blue Group, it could not be the Dream Poppy which, because of its reported place of origin in Bhutan, would belong to George Sherriff Group. See also refs. 1 & 2.
M. 'Crewdson Hybrid'	PC 2005	Infertile Blue Group. Sterile. Seed-raised plants with this name are incorrectly attributed.
M. 'Mrs Jebb'		Infertile Blue Group. Wrongly named as *M.* 'Miss Jebbs' prior to 1998.
M. 'Cruickshank'		Infertile Blue Group. Name agreed in 2001. Not formally recognised and named prior to 1998.
M. 'Maggie Sharp'		Infertile Blue Group. Name agreed in 2002. Not known, apart from by the owner, prior to 1998.
M. 'Crarae'		Infertile Blue Group. Name agreed in 2001. Not formally recognised and named prior to 1998.
M. 'Bryan Conway'		Infertile Blue Group. Name agreed in 2005. Incorrectly diagnosed as *M.* 'Slieve Donard' in Phillips & Rix (1991) [13]
M. 'Lingholm'	AM 2005	Fertile Blue Group. This fertile (probably allotetraploid) hybrid is widely distributed by garden centres, nurseries and seed companies. The only cultivar within the Fertile Blue Group to have been named so far. It is probable that there will be others when available in sufficient numbers. Prior to 1998 the allotetraploid nature was not recognised. It was (and sometimes still is) circulated under a number of erroneous names. e.g. *M. grandis*, *M.* x *sheldonii*, *M.* x *sheldonii* 'Lingholm', *M.* 'Blue Ice', *M.* 'Corrennie'.
M. 'Keillour'		Name agreed in 2002. So distinct that it is not placed in a Group. Not known (apart from by the owner) or named prior to 1998.
M. 'Willie Duncan'		Name agreed 2001. So distinct that it is not placed in a Group.
M. 'Houndwood'		'Old', long-established clone. Closely resembles *M. simplicifolia*, but reported to be a cross between *M. betonicifolia* and *M. quintuplinervia*.

Approved name	RHS award	Comments
M. 'Marit'	PC 2005	Sterile, white hybrid raised around 1980 by Marit Espejord in Tromsö, Norway. Not formally named or available in Scotland prior to 1998.
M. 'Branklyn'	FCC 1963	George Sherriff Group. Despite much work it still is not certain which, if any, of a number of plants we have collected with this name, are correct. Information on any plants that can be reliably traced back to the FCC clone shown to the RHS from the Savill Garden in 1963 would be much appreciated. Meantime, this name should no longer be used for purported *M.* 'Branklyn' but replaced with *M.* George Sherriff Group (previously attributed to *M.* 'Branklyn').

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ILLUSTRATIONS

Illustrations are by Evelyn Stevens (42, 43, 47 & 51-54), Jim Smith (44, 45, 46, 48 & 49) and Finn Haugli (50).

Show Reports 2006

BLACKPOOL SHOW - March 18th

Although the Blackpool Show is the first full show in the Scottish Rock Garden Club's calendar, it lines up as fourth for those of us at more southern latitudes, so it came as rather a surprise to find ourselves recovering from yet more snow, frost and ice so late on in March.

There was even a snowdrop from an English exhibitor in one of the classes! Ivor Betteridge of Ashby-de-la-Zouch showed a lovely dainty form of the yellow marked *Galanthus nivalis* Sandersii Group which had been winning prizes at the South Wales AGS Show in mid-February, and here it was, still looking good a month later. The unseasonally cold weather had been responsible for helping the early bulbs retain their quality, and there was a tussle for first prize in Class 67 between an impressive large pan of the diminutive *Narcissus asturiensis* (usually much earlier in flower with us, and notoriously slow to increase) and the unusual *Chionodoxa albescens*, shown by Trevor Whitaker of Bradford. This lovely species comes from Crete and the pan, which took second prize in this class, contained a well-balanced clump of this soft white-flowered plant with the flowers ever so gently flushed with the palest of blues.

Chionodoxa albescens

Although the inclement weather and delayed spring had taken their toll and many of the classes were quite thin, the arctic weather had perhaps contributed towards the unprecedented flowering in cultivation of an enviable plant of *Androsace ochotensis*. It is thought that there is only a single clone in cultivation of this normally shy flowering aristocrat which is native to eastern Siberia, northern Alaska and the Yukon, but Geoff Rollinson's neat, symmetrical dark green cushion sported at least sixty deep pink, yellow eyed flowers; a sight to

compete with any of the Aretian or Himalayan Androsaces. Geoff also thought that its impressive display of flower could be attributed to the inch of well-rotted cowpat which he had used to line the pot (one wonders whether polar bears do the honours in the wild). We lesser mortals must content ourselves with the odd well-spaced flower and consider showing the cushion for foliage effect in the autumn!

Androsace ochotensis

As usual at Blackpool, there were some mouthwateringly beautiful Dionysias which by their very nature had demanded alpine house treatment and protection from the vagaries of a British spring. The Farrer Medal went to Derek Pickard's lovely *Dionysia freitagii*, and he also was awarded two Certificates of Merit for equally impressive examples of *Dionysia bryoides* and of *Dionysia lamingtonii*, the latter gently irregular and propped up on one side by a piece of tufa, but no less of a plant for that. Brian Burrow's plant of *D. tapetodes* ENF92/1 was not as uniformly flowered as these, but the clear yellow flowers above farinose foliage were a reminder of what a desirable species this is. Small plants of *Dionysia rhaptodes* with long-tubed yellow flowers held high above tiny, tight rosettes of foliage and *D. iranshahrii* with long-tubed lilac, yellow-eyed flowers above a dense, hairy cushion also showed promise in the new and rare sections.

Equally impressive for us was an enormous dome of the hybrid *Dionysia* 'Monika' completely covered in its

Dionysia bryoides

Dionysia 'Monika'

Primula allionii 'Anna Griffith'

Primula allionii 'Chivalry'

rather acid pale yellow flowers, shown by Jenny Bourne of Dawlish. This is one of the easier Dionysia and is a good one to choose when you are starting to struggle with them, but to see such a perfect example of it was a pleasure as well as a credit to the cultivation skills of the exhibitor.

It is always a pleasure to see outstanding examples of good reliable old varieties on the showbench and this show had more than its share of these. The Primula classes were very depleted by the weather, but true to form the reliable and beautiful *Primula allionii* 'Anna Griffith' was much in evidence. Mike and Christine Brown won with a lovely pan; completely covered in flower. Apparently the technique is to tease apart the buds and rosettes with long nosed tweezers in the winter. *Primula allionii* 'Chivalry' was also outstanding with flowers much closer in colour to the type than 'Anna

Griffith'. In Section C, a pretty little plant of *Primula vulgaris* ssp *balearica* was a primrose to catch the eye. The flowers sported very distinctive diamond shaped orange marks surrounded by a yellow halo in the centre of the pale petals.

Primula vulgaris ssp. *balearica*

There were not many saxifrages on the bench either, and those there were predominately white flowered cultivars. *Saxifraga* 'Cumulus' was there of course and a well-clothed cushion of *Saxifraga* 'Coolock Gem' won for Geoff Rollinson in Section A. My favourite however was an excellent pan of *Saxifraga* 'Allendale Charm' shown by Edward Spencer in Section B. This is a first generation hybrid between the species *S. wendelboi* and *S. poluniniana*, its red buds opening palest pink and fading to white, giving the plant a sensation of movement when in flower. Even better, not only does this hybrid make an outstanding pan for the showbench, but it also performs well in the open garden: it flowered for us for well over a month this year, in spite of the snow and frost.

Dwarf shrubs and dwarf Ericaceae are often good standbys at the early shows, but the frosts had either delayed or aborted flowering for many. It was good then to see one or two good examples of *Epigaea gaultherioides* in flower on the bench. The flowers on our plant had been frosted even in the alpine house, so all the better to see Harry Robert's well flowered plant quite undamaged. Apparently Harry had gone to the extreme of taking it into his

Epigaea gaultheriodes

Corydalis sewerzowii

bedroom for a day or two to avoid the flower buds catching the frost! Another survivor was Ian Leslie's outstanding large pan of *Arcterica nana*, so full of bud that you could hardly see the foliage. The dainty white flowers were only just starting to open and the plant showed even more promise for subsequent shows. Ian grows some wonderful plants in the most inhospitable wet and acid terrain on the edge of the slate mines high in Snowdonia and had lost the roof of one of his alpine houses to the gales last year, but he tells me he has to be ruthless in controlling some of the dwarf creeping Ericaceae in his garden for fear of them engulfing all else in their path! Just ten miles or so away, as the buzzards fly, we have to make an effort to persuade them to grow!

Other notable plants at the show included Geoff Rollinson's lovely pan of *Fritillaria alburyana* which won the Duncan Lowe Award for the best pan in a 19 cm pot. The lovely dark violet-pink, tubby, lightly tesselated flowers of this pretty frit from stony or peaty soil in north-eastern Turkey are offset by a darker violet vertical band down the centre of each tepal, the flowers held neatly on short stems amongst the broad, flat leaves. There was also a fine pan of *Cyclamen rohlfsianum* which won the Kirby Cup for Ivor Betteridge, for best foliage plant in show; its glossy healthy leaves were beautifully patterned. Two Corydalis species were awarded Certicates of Merit : Jim Almond's *Corydalis kammellinii* and the curious *Corydalis sewerzowii* shown by Eric Rainford of Leeds. The latter comes from the Nuratali mountain range in Uzbekistan and sports showy bright yellow flowers with a long straight orange brown spur which suddenly curves at the end, looking for all the world as though the individual flowers are fighting with one another for dominance.

All in all, the number of entries may have been reduced by the weather, but as always at Blackpool, there were still plenty of interesting plants to see, unusual ones as well as reliable old friends. It also provides a welcome meeting place for growers and enthusiasts

from the length and breadth of the UK to exchange tales of dire weather and wonderful plants. Oh, and the lunches are good too. *Rachel Lever & Tim Lever.*

STIRLING SHOW in DUNBLANE – March 25th

Ben Ledi

This year the very early Scottish show has returned to the Stirling Group where it started 25 years ago and we were moving to Dunblane after all those years in Stirling. Would local people come to the show, especially when it was raining heavily all morning? Two weekends before the show we had more snow in Dunblane than there had been for many years. This snow also covered gardens and roads in most parts of Scotland.

Several regular exhibitors were unable to come. The cold weather held back many plants which normally could be relied upon to brighten the benches. Snow still covered Ben Ledi and melting snow and rain had turned the Allan Water, which flows behind the Victoria Hall to a raging torrent, worthy of the Himalayan foothills. Surely some plants *must* have liked the weather.

On the morning of the show all doubts faded away when car-loads of plants appeared from all points of the compass. I should have known how reliable SRGC show people are. Several factors contributed to the success of the day, at least in the eyes of the Show Secretary. The hall fitted the show perfectly.

Stirling Show hall

Iris nusariensis

We managed to recapture some of the couthiness and intimacy that the very first Stirling Shows had in the Guide Hut in Stirling. My concern for the next time is to ensure better signage for the nurseries to ensure that everyone knows were to go to spend their money. As usual there was a huge variety plants of different genera, species and varieties on the benches. One of the delights of our club is that it is a 'broad church' with room for all sorts of small hardy plants and bulbs and everyone is catered for at our shows.

The George Forrest Memorial Medal and the Institute of Quarrying Quaich for Best Non-European Plant in the show were awarded to a superb plant of *Iris nusariensis* exhibited by James Cobb from Kingsbarns. Its mid blue flowers were in perfect condition. The judges know this because they examined every singe flower! Jim said that he credited the recent very cold weather for the exceptional number of flowers on his plant. He remarked that usually the first flowers opened and then faded before the second buds on each stem opened. This year because of the cold, the first flowers were still open when the second buds opened, doubling the impact. David Mowle gave him a small plant of *Iris nusariensis* about 20 years ago during a visit with Jim. It grew in a bed in his alpine house for many years before it was lifted, split and this part grown in a pot. The tuber is rooted into compost at the bottom of the pot and the whole top half of the pot is filled with grit. Now you know the secret..... First get your plant!

A well deserved Certificate of Merit and the Ben Ledi Plants Trophy for Best European Plant went to Cyril Lafong's unbelievable *Pulsatilla vernalis* which has won several medals over the years. It keeps getting better and better but was not yet at its peak. The Spiller Trophy for Best Primula was taken by Anne and Viv Chambers with the beautiful *Primula whitei* x *bhutanica* 'Arduanie'. I always admire

this fine plant it is one of my favourite Primulas. Ian Steele has worked at our shows for many years and is long time Stirling Group member. He must feel like a founder member. This year he took the plunge and decided to exhibit in the show. He was rewarded with The SRGC Bronze Medal and the Fife County Trophy for gaining the most points in Section 2. His *Townsendia hookeri* was the best plant shown by a new exhibitor. The Carneigie Dunfermline Trophy for most points in section 1 went to Sandy Leven who as Show Secretary was forced to empty his garden to find plants for the show.

Primula 'Arduaine'

The peripatetic Christie Trophy for Best Foliage Plant (it travels from SRGC show to SRGC show according to the dictat of Chairman Barry Caudwell, who has a rota for its travels) was won by Ian & Carole Bainbridge with an exquisite *Celmisia macmahonii hadfieldii*. The judges awarded a Silver Medal to the Regius Keeper of the Royal Botanic Gardens, Edinburgh for a fine display of rock garden plants and bulbs. Thank you Elspeth for bringing them to Dunblane.

As the day went on the light in the hall improved and we were able to appreciate the many fine plants in real sunshine. As visitors entered the hall, their first glimpse of the show was impressive because we had 5 entries in Jubilee Class A [the small 6-pan class].

This meant that 30 good plants and lots of colour were the first thing that people saw. The class was won by Cyril Lafong whose plants included the appropriately named *Saxifraga* 'Your Success'.

There are some genera which are invaluable at an early show and these must include Corydalis, Narcissus and Fritillaria. This year's later season meant that Crocus contributed a lot of colour. Bob Meaden's *Crocus vernus* x *tommasinianus* attracted

Part of the range of crocuses on show

Crocus malyii

a lot of attention in the open ground class while in the classes for Crocus there were several stunners including *Crocus veluchensis*, *C. corsicus*, *C. ancyrensis*, *C. biflorus pulchericolor* and *C. malyii*. The 2-pan winners were Margaret and Henry with *Crocus vernus albiflorus* and *C. olivieri*.

Several members have a great affection for Corydalis with the result that we did have many different species. Cyril showed two Leonicoides Section seedlings which he says 'just appeared in the plunge'. They were both pale yellow and one had dark eyes. Being in this section it has a big tuber which does not divide and is effectively non-increasing. Among the various species and cultivars shown were the yellow, *Corydalis wilsonii* which has beautiful glaucous leaves and differs from many other in the show, by having fibrous roots rather than tubers. *Corydalis henrikii* is named for Henrik Zetterlund from Gothenburg Botanic Garden. *Corydalis* 'Frodo' is one of Janis Ruksans' new introductions. *C. kuznetzovii* must be named for someone important and has narrow flowers. *C.* 'George Baker' is an old favourite which was grown well by Jim and Janet Paterson. *C.* 'Evening Shade' is a nice white *C. solida* type. *C.* 'Smokey Blue' is a plant bought many years ago from Jim Jermyn when he owned Edrom Nurseries. It was offered before all the new selections came in from Latvia. The white *C. malkensis* is one of the best for the garden as well as in a pan.

Tall Fritillarias were prominent with *Fritillaria eduardii*, *F. raddeana* and *F. stenanthera* lifting the general height of the exhibits. There were three colour forms of *F. eduardii*, the darkest being the one with red flowers on the RBGE stand.

Margaret and Henry Taylor have been first to grow and exhibit many excellent plants at our SRGC shows. One of the best they have popularised is *Scilla winogradowii* with electric blue flowers. *Iris winogradowii* was also there close by. It is a delicate primrose shade of yellow. Good old Mr [or Mrs] Winogradov for having two superb bulbs named after him [or her]. Jean Wyllie was in charge of the catering but

also reigned supreme in several bulb classes. Her *Narcissus* 'Betty Mae' from New Zealand gets better each year and she has mastered *Fritillaria alburyana*. Graham Butler's *Galanthus* plicatus 'Sophie North' was beautifully presented in a large pot while Roma Fiddes displayed her *Galanthus plicatus* 'Warham' in a small trough.


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Pterostylis curta

John Lee and Sam Sutherland exhibited more Dionysias than we have ever seen at our show. From Sam we had *Dionysia aretioides* and 2 forms of *D. tapetodes*. John had *D. viscidula*, *D. freitagii* and their hybrid, *D. michauxii*, *D.* 'Cindarella', *D.* 'Monika', *D.* 'Markus' and *D. iranica* grown from seed. Perhaps the cold weather had held back flowering on these and allowed them to come to Dunblane in top conditions.


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Sanguinarai canadensis

Ranunculaceae is a wonderful family with Hepatica and Pulsatilla two excellent genera. We had *Pulsatilla* 'Budapest' from Brian Davidson as well as Cyril's *P. vernalis*. Ian Christie won with some choice *Hepatica nobilis*. Bob Meaden showed 3 very good pans 'grown from seed'. *Townsendia hookeri*, *Cyclamen coum* and *Androsace carnea* x *pyrenaica*, showing the wide range of plants he cultivates. In the Orchidaceous class Bob showed the Australian *Pterostylis curta* an Australian orchid which attracted much attention with its slightly sinister green hooded flowers, which look like wee snakes waiting to pounce. *Tropaeolum tricolor* with impossibly thin stems was an eye catcher. As I have said before this plant reminds me of the late president Joan Stead, who encouraged the Stirling Group to hold a very early show. Some plants looked much better in the afternoon with the natural sunshine shining on and through them. This was particularly so with *Sanguinaria canadensis*. In electric light or flash the plant was dull but in sunlight all the leaf veins were illuminated and the whole plant was much more vibrant.

We had a good entry in Section 2, thanks to the participation of several members. Ian Steele included one of the best of all spring Primulas namely *Primula* 'Clarence Elliot' in his 3 pan entry and his *Townsendia hookeri* gained the special prize for a plant shown by a new exhibitor. Katie Paterson and Miranda Radley were our Junior exhibitors. Miranda gained a first with her nice Primula and Katie's well planted miniature garden also won a first. Well done girls you put many of the adults to shame.

Thanks to our judges Anne Chambers, Bette Ivey, Brian Davidson, John Lee, Bill Robinson and Glassford Sprunt. Thanks also to the catering members and plant and book sellers. They all proved that a successful show is a cooperative event and that the better the cooperation, the better the event. There are lots of pictures of plants at SRGC shows on the club web site. *Sandy Leven*

NORTHUMBERLAND SHOW – April 1st

A cold late spring and reports of thin entries at some earlier shows prompted concern on entries. Benches were however well filled and some genera, normally past their peak, such as Saxifraga, were well represented.

Sections B and C were well supported and several entries in B would have given open section winners a run for their money. Sue Gill from Stobswood near Morpeth took the Cyril Barnes cup for most first prize points in Section C. Her *Primula gracilipes* had spent the winter

outside with no protection. Sue plans a covered shaded plunge bed for the expanding plant collection.

In Section B Derek Lockey from Heddon on the Wall staged some fine primulas but it was Peter Farkasch from Sandbach who took the award for most first prize points.

Outstanding quality and large numbers of entries were a feature of most small-pan Open Section classes. Exhibitors adept at spotting thinly entered classes and swapping plants or popping the odd spare plant in just before chucking-out time would have had a frustrating time. A few garden hybrids cropped up in the classes for plants from countries or continents. It was All Fools' Day - but all were spotted and disqualified.


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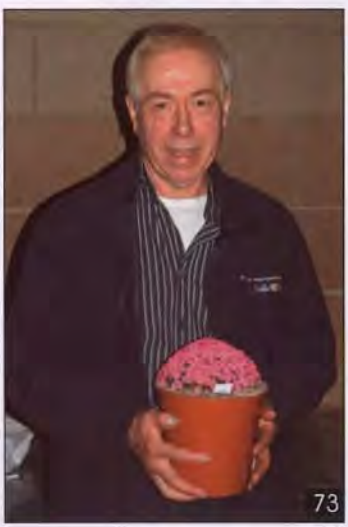
Sue Gill with her *Primula gracilipes*

The best 19 cm plant award went to Kendal exhibitor Tommy Anderson for *Saxifraga* 'Coolock Kate'. Tommy had grown this for around 5 years, it was flowered in a greenhouse but spent the rest of the year in a frame on a sand bed but not plunged. A compost mix of 50% J.I. 3 and equal parts of grit, vermiculite and peat with occasional feeds of half strength tomato feed was used.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Tommy Anderson with *Saxifraga* 'Coolock Kate'

The new and rare classes always attract attention At times "Nice botanical & cultural notes, shame about the plants" can sum up many entries for the non specialist. This years offerings all looked to be likely to feature in "ordinary" classes in future. Ian Kidman staged *Dionysia khatannii*, *D.iransharii* and *D. bazoftica* as the winning 3-pan new, Brian Burrows featured *D. khuzistanica* (formerly *D. zagrica*) as the winning single-pan new. Ian Kidman showed *Saxifraga serpyllifolia* as the winning single-pan rare. Alan Furness won the E. G. Watson

Alan Spenceley's *Trillium nivale*

Ian Christie with *Hepatica nobilis*

Draba ossetica

trophy with *Benthamiella nordenskjoldii*, Sown in December 2000 this South American had produced a tight olive green cushion studded with white trumpets. A compost of 50% leafmould and 50% pumice suggests mere mortals could easily drown this one.

Ian Christie has a range of home bred hepaticas and he has also generously passed stock of selected vegetatively propagated ones to other growers. Ian won the Ranunculacae class with a pale lavender *Hepatica nobilis* with striking contrasting purple anthers.

The Open Section large-pan entries were less numerous but not lacking in interest or quality. Alan Newton took the 6 pan class showing *Narcissus* 'Jumblie', *Cyclamen pseudibericum*, *Dionysia curviflora*, *Fritillaria obliqua*, *Iris rosenbachiana* and *Trillium nivale*.

Other winners catching the eye included a huge pan of *Trillium nivale* from Alan Spenceley , only around 30 years old – the plant not the grower – Fred Hunt's Tecophilaea, *Dionysia microphylla* x *freeitagii* from Ian Kidman and *Draba ossetica* from Robert Rolfe.

The Forrest Medal plant had however been picked out by most pundits. Cyril Lafong's *Pulsatilla vernalis* had around a hundred flowers in perfect condition Seen in medal winning form over several seasons now & just getting bigger and better. One nurseryman offering plants from Cyril's stock did a brisk trade. My purchase has now produced a single bloom so I am well on the way!

Overall another very successful Northumberland show & a credit to the hard work of the many helpers, exhibitors & nurseryman who support the show. *David Boyd.*

EDINBURGH & the LOTHIANS SHOW - April 8th

The Edinburgh and the Lothians Show was three weeks later this year but we endured a freezing fortnight preceding the show and the snow falling heavily during the morning itself. However, there was a good turnout of people and plants regardless, with benches full of delights, including a well-stocked Section 2 – well done Edinburgh members!

Judges Henry Taylor, Cyril Lafong, Margaret Young and John Mitchell from the RBGE

The plants displayed were a 'real good mixture', no group or genus dominated proceedings. Nice narcissus included *Narcissus jonquilla* and *N. rupicola watieri* 'Abaleish' shown by David Millward; worthy fritillarias included *Fritillaria kotschyana* 'Craigton Max' – two super pans from Fred Hunt and the Youngs, but the tecophilaeas showed to

Judges Julia Corden, Bette Ivey, Harley Milne and Carol Shaw

Cyril Lafong's Forrest Medal winning *Pleione* 'Shantung'

perfection: Margaret and Henry Taylor showed three forms of *Tecophilaea cyanocrocus* together, and Cyril Lafong's pan in Class 2 nearly won best bulb in the show. It was pipped by a fine-flowering form of *Erythronium americanum*, also from the Lafong stable, which had a bumper day.

The real star of the show as a huge pan of *Pleione* 'Shantung', with around 70 flowers, which won the Forrest Medal for Cyril, and on the opposite bench was his *Pulsatilla vernalis*, fresh from its Forrest victory in Hexham, with around 100 flowers; no surprise that traffic jams built up around these two!

The spectacular entry from the RBGE

Iris featured well: Bob Meaden's *Iris attica* won a Certificate of Merit, as did an *I. willmottiana*, which featured within a superb Gold-wining display from the Royal Botanic Garden Edinburgh, and in Section 2, *I. bucharica* won both the best in section and best first-timer's prize for Stan da Prato.

Waiting for results – Recorders Dave Millward and Ken East

There were good 'old favourites' on the bench: *Primula* 'Mrs J. H. Wilson' and *P.* 'Netta Dennis' won best European and Asiatic primula respectively for Messrs Millward and Lafong; nice to contrast these with 'new' arrivals like the lipstick red *P. maximowiczii* shown by Geoff Hill, and the *P. knuthiana* (should it be *P. jaffreyana*?) shown by both Bainbridges and Rankins.

Douglasias (oh no, I should call them Androsaces now!) also caught the eye; a big pan of *Androsace laevigata*, and a very good *Androsace nivalis nivalis* from Brian Davidson, to whom Joint Rock awarded a Cultural Commendation.

The talking point of the saxifrages was *Saxifraga dinnikii*; present in three forms – normal, "dark form" and 'Stasek' – are they really that different? Our plants – a parent and two seedlings - show similar variation, I think. The dark form won the Bill Mackie Quaich for best Saxifrage in show, Cyril also exhibited a nice wee *Saxifraga cinerea* x *dinnikii* (*S.* x *concinna*), and Frazer Henderson won the Section 2 six pan with six saxes, which helped him to the Bronze Medal. *Ian Bainbridge.*

PERTH SHOW – 22nd April

As always at Perth Show had a very varied display of plants. In Section I there were some wonderful plants with Jim Cobb winning the Forrest Medal with a large *Daphne petraea*. He told us that the plant was originally grafted onto *D. retusa* stock by Henry Taylor some considerable time ago, (no one could remember exactly how long!). At

Jim Cobb's Forrest Medal winning *Daphne petraea*

Margaret and Henry Taylor's *Rhododendron tsariense* x *yakushimanum*

first it was over-potted and allowed to grow into its pot to avoid the disturbance involved in re-potting too often. The technique certainly seems to have been worthwhile. Thanks to Jim for bringing this excellent plant in perfect condition.

Cyril Lafong had by far the most points overall and was awarded the largest number of trophies. These were the L.C. Middleton Challenge Trophy for most first prize points in Section 1, the Dundas Quaich for Class 2 (*Draba dedeana*, *Sebaea thomasii* and *Jeffersonia dubia* 'Alba'), the Alexander Caird Trophy for the six-pan class and the Joyce Halley award for the best plant grown from seed which was a large *Androsace vandellii*. Cyril's "six-pan" plants were *Cypripedium formosanum*, *Daphne arbuscula radicans*, *Sebaea thomasii*, *Androsace vandellii*, *Trillium pusillum* and *Trillium grandiflorum roseum*. The *Cypripedium* was a really nice specimen with its 4 large-lipped pink flowers. Certificates of Merit were also awarded to Cyril for his *Jeffersonia dubia* 'Alba' and *Androsace vandellii*. Thanks to Cyril for bringing so many excellent plants to the show!

The E H M Cox Trophy for the best dwarf Rhododendron was won by Margaret & Henry Taylor for *Rhododendron tsariense* x

yakushimanum. This specimen was garden grown, it's a Cox hybrid with good foliage and flowers and is normally easy to grow – the plant is about six years old and was originally grown from one of Peter Bland's cuttings.

A 9" diameter pan of *Primula* 'Joanna' exhibited by Stella & David Rankin was judged best Asiatic Primula and the winner of the RS Masterton Memorial trophy. Congratulations also to Jim and Janet Paterson for winning the Major-General Murray-Lyon trophy with *Anemone nemorosa* 'Vestal' and bringing lots of other superb plants.

The Bulb Trophy was won by Stephen McFarlane for a large *Trillium* specimen and Sam Sutherland was the winner of the small six-pan (Class A) with six pans, mainly of cushion plants, including 3 saxifrages, *Dionysia lurorum* and *Trillium rivale*.

Berneuxia thibetica

Unusual plants seen at the show included a specimen of Jim Cobb's – *Taraxacum pamiricum* originally grown from Halda seed 8–9 years ago. It now seeds around in Jim's sand plunge and the seedlings can then be potted up when new plants are required. I rather liked this one with its succulent but otherwise dandelion-like leaves and white dandelion flowers. Not sure if it will catch on with many folk though!

Anne & Viv Chambers showed an unusual Primula hybrid from Arunachal Pradesh which is thought to be a hybrid between *Primula calderiana* and the yellow subsp. *strumosa*. It has the bad smell of *calderiana* and a peculiar khaki colour with a golden brown centre. An interesting hybrid although possibly an acquired taste!

The standard of the entries in Section II was particularly high and several of the exhibitors were (happily) new or less frequent showers, amongst them our own show secretary, Julia Corden who won

the Perth Trophy as well as organizing the show. Jens Nielsen brought an exceptional pan of *Iris bucharica* which had been grown in open ground and looked fit for the Forrest Medal. Jens also won class 76 with a wonderful large pan of *Celmisia* 'David Shackleton' and in another class, the specimen of *Berneuxia thibetica*, for which he was awarded the John Duff Memorial Prize and Certificate of Merit. This is an infrequently-seen woodlander from China (although also seen at the Stirling Show this year), collected by Jens himself. Jens told me that *Berneuxia* is often found growing on rocky outcrops in woodland or semi-woodland conditions in the wild. The bronze medal was won by Geoff Hill who brought a lot of excellent plants, among them a *Primula maximowiczii* which won the Asiatic Primula class.

We had two junior entrants, Katie Paterson and Miranda Radley. Both were fine contestants and won equal numbers of points. Katie won the Georgina Blackwood Trophy with a *Fritillaria meleagris* which was judged to be the best plant overall. *Cathy Caudwell*

Many thanks to reporters and to photographers Tim Lever (Blackpool), Glassford Sprunt (Northumberland), Sandy Leven (Stirling), Ian Young (Edinburgh), and Barrie Caudwell (Perth).

"Don't you think it looks like Balamory?, asks Sandy Leven, who took this picture of Blackpool.

Sandy's Balamory

Pentachondra pumila with *Cryptandra* sp.

An uncommon quartet

Jeff Irons

G & J FORSTER, who were naturalists on Captain Cook's second voyage to Australia, gave the name *Epacris pumila* to one of their discoveries. Nowadays, some 200 years later, it is called *Pentachondra pumila* and is an alpine that is almost unknown in British gardening circles.

Found in south-eastern Australia and also (having migrated there) in New Zealand, *Pentachondra pumila* is a small mat-forming evergreen shrub with thick shiny leaves. In spring it is dotted with white flowers that on close examination can be seen to have corollas with attractively bearded inner surfaces. In the wild the previous year's fruits ripen at the same time as the current year's flowers are open and the combination of flowers and fruit makes the species very eye-catching. Unfortunately the cultivated plants being grown in Britain at the present time do not bear

fruit. This is because they are self-sterile, so fruit will only be obtained if two genetically different plants are grown. Nurserymen propagate by division of existing clumps and there appears to be only one clone in commercial cultivation. Consequently until additional clones are available we have to be content with flowers only. Nevertheless I believe that *Pentachondra pumila* is a desirable alpine and it is certainly one that is ideally suited to container cultivation. Grown thus the beauty of its flowers can be studied without stooping.

There are three other pentachondras. I grow two of them,


87

Pentachondra involucrata


88

Pentachondra ericifolia

Pentachondra ericifolia

both from Tasmania. The third is a recently discovered species (*Pentachondra dehiscens*) from New South Wales. It appears to have little horticultural value.

Pentachiondra ericifolia is a late summer and autumn flowering species, up to 40 cm high. Though small its white flowers are borne in profusion over several weeks. It too appears to be self-incompatible, for my only plant never bears fruit. That is no great visual loss, for the fruits are not showy. The late-spring-flowering *Pentachondra involucrata* is perhaps the best garden plant in the genus. It has the largest flowers and though usually much less, can be up to about 1 m high. It also has fruits of no horticultural value. Neither of these two species is alpine and as well as being a sub-alpine, *Pentachondra involucrata* can be found at quite low levels.

Although commonly found where the soil is moist, the thick leaves of pentachondras enable them to withstand quite dry conditions. In spite of that they have been found to be decidedly difficult to grow in south-eastern England, where not only the soil but also the air are dry in summer. Things are different further north, and in Scotland, north-west England and Northern Ireland, their cultivation poses no problems. Northumberland too will probably provide good growing conditions, though east Yorkshire could be more problematical. Acid soil is needed and I use a compost containing unsterilised soil and plenty of leaf-mould (mixed conifer and deciduous leaves, 4 years old) and peat. So far it has not resulted in any problems. My reason for using unsterilised components is that, in common with several other epacrids,

pentachondras can sulk for years after transplanting. Using unsterilised materials and taking at least some of the soil from a bed in which other heaths grow helps to ensure that the potting mix is innoculated with suitable mycorrhiza. However a Tasmanian government website states that *Pentachondra ericifolia* is susceptible to *Phytophthora cinnamomi*. It may be that all species are susceptible and sterilised soil could be desirable. In his book *Growing New Zealand Alpine Plants*, Cartman wrote that seed of *Pentachondra pumila* germinated well after 3 or 4 winters. I have not tried New Zealand seed, but like others before me, my experience with Tasmanian seed has been that germination is almost impossible. After more than 20 years of trying I have succeeded (by luck) in getting just two seedlings. The only practical solution is to copy nurserymen and use vegetative propagation; cuttings taken in early spring or late summer root equally well.

FOOTNOTE: I have referred to *Pentachondra* as being epacrids. Historically *Epacridaceae* was a genus containing the southern heaths. With their increased knowledge present day botanists prefer to regard them not as a separate genus, but as part of the *Ericaceae*. They are in the sub family *Epacrideae*.

The History & Cultivation of Sempervivum

Erwin Geiger
translated Thomas Huber

91 - The dramatically stoloniferous *Sempervivum charadzae* with a collection of other clutivars and species

IN THE LAST FEW YEARS Sempervivum have enjoyed a veritable reincarnation. In the 70s and 80s the plants had already captured the hearts of many plant-lovers with their magnificence of colour and shape. Most sempervivum are very economical and bring great joy in even the smallest space – in pots or boxes on your balcony or terrace, in the rockgarden or on the dry stone wall and as roof or grave planting. And whenever you're on holiday, you never need to give your key to the neighbour, requesting him to water your plants.

History and superstition

In the earlier centuries Sempervivum was the classical magic plant. It was planted on the roof to protect the house or the barns and stables against lightning strike. In the 4th Century B.C. the Greek botanist Theophrastus reported its presence on walls and rooftiles. In the 9th Century A.D. the great emperor Carolus Magnus (Karl the Great), in his instructions to his estate managers, commanded that Sempervivum be planted on the roofs. The Romans baptised it "barba jovis" in honour to their thundergod Jupiter, freely translated "Beard of Jupiter". Given that the plant has already been in cultivation for more than 2000 years, many folksy names are given: Dachwurz (roof-root), Donnerkraut (thunder-herb), Donnerbart (thunder-beard), Donnnerlauch (thunder-garlic), Hauslauch (house-garlic), Scherzenkraut (joke-plant), Wetterwurz (weather-root), Zittriwurzen, Zittrichskraut, Hauslaub (house-leaves), Hausrampfe, Rampfe, Wilder Rhabarber (wild rhubarb), Houseleeks or Hen-and-Chickens (in England) or Huslög (in Sweden) and many more. Primarily the Roof-root had just one purpose, to hold brick and straw roofs together and protect the clay-coating from erosion. When thunderstorms threatened, leaves picked by the superstitious people on "Johannisday", were burnt in the oven.

In southern Germany the plants were hung in the chimney, to keep witches out. It was popularly written that Sempervivum was one of the ingredients that witches used for weather-brewing and also for their "witchsalve" that they needed to fly.

Householders read their future from the unfolding flowers. Occasionally the flowers would indicate that a wedding would soon happen in the house. If Sempervivum didn't flower well in one year, this signified misfortune. If their flowers were reddish, joyful events were awaited, but if were snow-white, they foretold death. To banish warts, one would pass a cut Sempervivum leaf over the grave during a funeral, saying the words: "Ringing the dead in the grave, washing my wart away." This was not so very absurd, given that its medical benefit was similar to Aloe Vera.

Medical benefit

Sempervivum is one of the oldest herbs for first aid and was also used in animal medicine. The fresh leaves have to be collected from March until October. They can be used on warts, corns, little injuries like contusions or burns, itchy or scalded skin, and also on wasp or nettle stings: just break a leaf from the plant, crush it and rub the juice on the skin. A friend and visitor from the "Bavarian-market" in Neumarkt told me another healing secret: when he has toothache, he places a leaf between the affected teeth and the pain disappears in just a few minutes. An infusion of Sempervivum to treat bronchitis or inflammation of the mouth is very helpful. The German Reverend Sebastian Kneipp recommended this diuretic and antispasmodic tea for stomach ulcer, queasiness, septic angina and for cleansing the blood. But he also warned that too much can cause vomiting and dysentery. Hildegard von Bingen recommended the consumption of the fleshy leaves to men to force up their libido. Taken from "Alräunchen's Kräuterbuch" in the year 1883 is the slogan: "Whosoever the highborn Sempervivum holds in honour, can resist many an evil!"

Sempervivum arachnoideum 'Album'

Occurrence

Sempervivum belongs to the family Crassulaceae. The name means "living forever" or "the always-living" and stands in the language of flowers for liveliness and application. The homeland of Sempervivum is limited to the mountains of the northern hemisphere: Sierra Nevada, Cantabria, Pyrenees, Alps, Apennines, Balkans, Carparthians, Anatolia, and from the Caucasus to the high mountain ranges in Iran. The only species from Africa is *Sempervivum atlanticum*, native to the Atlas range in Morocco. These modest plants grow mostly in rock crevices, gaining their nutrients from their own dead plantparts. Some species also flourish on grassy hillsides, for

Sempervivums in bud – like little dragons

example *Sempervivum grandiflorum*, while the grey-green *Sempervivum ruthenicum* is even found in open pinewoods.

Species variety

The species are very variable, more than 200 have been described, but just 60 have been botanically accepted. Also, the "stone-roses" (Section Jovibarba, Candolle 1828), almost exclusively still cultivated under the genus-name Jovibarba, meanwhile became re-classified under the genus Sempervivum by the botanists Hart and Bleij. Furthermore, 3000 cultivars have been raised with an enormous variety of shape, colour and size. For example: two- or three-year-old rosettes can have a diameter from 0.5 cm (*Sempervivum arachnoideum* ssp. *arachnoideum* 'Minor' or *S. pumilum*) to more than 20 cm (*Sempervivum* 'Caldera' and *Sempervivum* 'Pip') and well-fed, even up to 30 cm! In the wild the plants propagate by seed or daughter-rosettes, growing on the stolons of at least two-year-old rosettes, forming more or less compact cushions. Sempervivum are monocarpic, in that the rosette, mostly flowering in the third year, gives all its power into the inflorescence and dies after anthesis. Given that 98% of the sempervivums generate sufficient "children" this loss is acceptable, especially on the small-rosetted species and cultivars. Whether the plant will flower or not can to be seen in the early spring.


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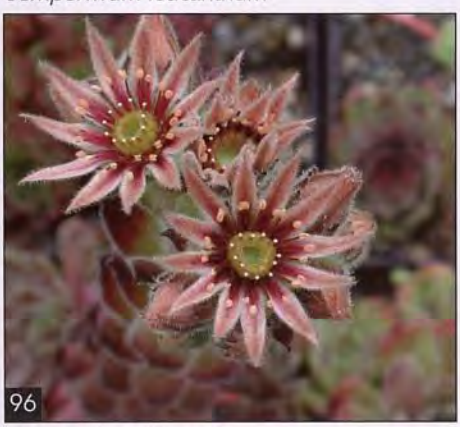
Sempervivum pumilum


95

Sempervivum leucanthum


96

Sempervivum 'Exorna'

If a rosette is showing no signs of making offsets you can expect flowers. Often the flowers are pink or red, for example in *Sempervivum arachnoideum* and *S. pumilum*, rarely yellow, as in *S. heuffelii* and *S. wulfenii*, or in a few hybrids apricot, and the albino forms of *S. arachnoideum* have white flowers.

Habitat

Sempervivum are children of the sun and love a position in full sun with a well-drained, porous soil. Standing water has to be avoided, except on "Donarbart" (*Sempervivum heuffelii*). If planted in a shady and moist habitat, they lose their typical form and colour and become vulnerable to pests and winter coldness.

Sempervivum are true quick-change-artists. Their rosettes are able to change their colour from month to month. The prettiest colours can be observed in spring on most of the species and types, where reddish tones prevail. Through hot summer days the colours become paler and in autumn many rosettes have greener tones. At this time the outer leaves die and the younger ones bend inside to protect

the rosette from the forthcoming winter.

Many factors are decisive in the plants' development. Most influential is the altitude of the location. The higher the altitude, the more intensive and shiny are the colours of the rosettes. Even weather conditions can cause rosettes to change their colour from year to year.

Sempervivum 'Grey Lady' in April 2003

Substrate and fertilizing

Major factors in growing sempervium concern the cultivation substrate and its feeding. Every collector and grower has his own formula. I take a mixture of equal parts of commercial potting compost, sandy loam, granite-grit and perlite, which aerates the substrate and thus warrants a good drainage and air supply. Perlite is also named Isoself and Perligan in commerce. Then I add a small portion of bone chippings. You should not use bone meal, because the dustlike substance will be washed out by rain and additional watering. Organic fertilizer generates a more intensive leaf colour, especially with the hybrids. Bigger quantities would stimulate the formation of more flowers and lead to

Sempervivum 'Grey Lady' in August 2003

Sempervivum 'Grey Lady' in September 2004

Sempervivum globiferum ssp. *arenarium*
(syn. *Jovibarba hirta*)

monstrous rosette growth. This also makes the plants less robust just like watering too much. For top dressing I use grit. This looks good and helps to keep weeds down. The plants are enabled to dry faster around the neck and are protected from rot.

Helen E. Payne wrote in her book *Sempervivum & Sedum, plant jewels of the high country* that extra minerals are given to the plants when using granite grit. Flint grit is better not used, because this stone stores moisture and the actual purpose can not be fulfilled. Furthermore algae and mosses are formed, looking very unsightly. When it comes to soil conditions, Sempervivum are most accommodating. They grow in acid, neutral and alkaline soil. All my species and hybrids thrive well in the same substrate.

Propagation

Authentic propagation is only guaranteed by gathering daughter rosettes. These have to be planted in small pots, where the root growth will soon begin. Hen-and-Chickens, *Sempervivum globiferum* and its subspecies (syn. *Jovibarba sobolifera*, *J. allionii*, *J. arenaria* and *J. hirta*;) form very thin, yarn-like stolons. The slightest touch will let the "children" roll away, quickly forming their own roots. "Donarbart", *Sempervivum heuffelii* (former *Jovibarba heuffelii*) builds its daughter rosettes directly on its beet-like root. This looks superficially like a division of the rosette. In the third year the offspring can be cut off with a sharp knife. Before planting up, the cuttings should be dried.

Sowing seed in spring is a longer project and really more interesting for breeders. Nearly every seedling will vary in size, form and colour. The seeds are light-germinated, which means that the dustlike seeds don't have to be covered, just gently pressed on the surface.

Pests, Diseases and other environmental influences

With climatic changes in the atmosphere, we are getting more hailstorms and hailstones. The scars on the plants remain visible and generally do not recover until the outer leaves die later in the year. The larger cultivars especially suffer from this.

Cultivating plants in the greenhouse with high air humidity can encourage aphids. An unwanted guest is the vine weevil, *Otiorhynchus sulcatus*, whose larvae feed on the plants' roots. A biological control measure for weevils is available as Nematode worms.

A friend told me some years ago, that he observed another pest damaging his Sempervivum. The larvae of a fly mine the plant leaves. I don't know the exact species, but it could be a relative of the narcissus-fly. Beside large-flowered plants it attacks also *Sempervivum arachnoideum* species. There are two generations each year. The first appears around Whitsun, the second in September. Some of them even overwinter within the leaves. Weak plants are preferred. The only non-chemical remedy I know is mechanical combat. The affected leaves should be removed and destroyed. There is another possibility - the use of pesticides such as Marshal or Confidor.

Slugs and mice can also cause damage. Two years ago I found a mouse-nest equipped with hairy *Sempervivum arachnoideum* rosettes – they surely had a warm and comfortable winter!

In some nurseries and collections a fungus named *Endophyllum sempervivi* appeared, this is sometimes found even in nature. The rosettes will bend and can elongate threefold when affected, and rustlike points will form. The fungus is persistent and the affected rosettes have to be destroyed immediately (not in the compost heap!) otherwise all the plants may be killed. In the past, the pesticide "Plantavax" was used. In Austria it is permitted until 2007 with the indication for "Rust diseases in ornamental plant cultivation".

Breeding and Cultivars

A big problem is the nomenclature and the definition of the species and cultivars, because, as we have already seen, many factors influence the plants' appearance. My own experiences show that at least 30% of Sempervivum offered by nurseries and garden centres are labelled incorrectly.

The species are very variable and we can find many attractive varieties even in nature. Furthermore, hundreds of hybrids have originated in cultivation, most of them by accident. In the majority of cases bumble-bees and bees pollinated the flowers and the breeder just took the seeds. Only a few were crossed deliberately. Germany's first breeders were Georg Arends, Karl Foerster, Goos & Koenemann,

Sempervivum 'Plastic'

Kayser & Seibert and Martin Haberer. Even in the UK (David T. Ford) and in the USA (Helen E. Payne, Edward Skrocki and Gary Gossett) some very pretty hybrids were raised and were propagated by the nurseries Zeppelin and Kahl in the 1980s. The preferred aim was to breed large-rosetted seedlings. The parents were mostly *Sempervivum tectorum* and *S. marmoreum* forms.

Today the trend tends to the compact growing species and *Sempervivum heuffelii* hybrids, which can give greatest pleasure in the smallest area. Plants with yellow and orange tones, such as *Sempervivum montanum* 'Cmiral's Yellow' and 'Alchimist', or with atypical leaf and rosette forms such as *S.* 'Grigg's Surprise' and *S.* 'Oddity') are still desirable and sought after. In *Sempervivum* 'Plastic' the leaves are irregular, thick and blunt - the name was a good choice!

It is a pity that there are so many beautiful cultivars, even some bred 20 –30 years ago, that are still unknown in gardens. The German standard assortment includes 'Smaragd', 'Rubin', 'Noir', 'Othello' and some forms from Georg Arends; 'Alpha', 'Beta' and 'Gamma', which originated in the 1900s. Latterly some new hybrids have arisen in Germany and Belgium (Andre Smits). The most beautiful of the new seedlings from my friend Johann Fritz and myself are 'Blaukraut', 'Gargamel', 'Plüschbär', 'Vasi Petru', 'Wolllaus', 'Zackenröschen' and this year's novelties 'Bloody Mary' and 'Wolllust'.

102 - *Sempervivum* 'Blaukraut'

103 - *Sempervivum* 'Gargamel'

104 - *Sempervivum* 'Wolllaus'

105 - *Sempervivum* 'Wolllust'

106 - *Sempervivum* 'Bloody Mary'

Possible uses

Sempervivum are best suited for planting in rockgardens, troughs, clay and terracotta pots, on dry walls, and roofs and on graves. They associate well with other members of the Crassulaceae family such as Sedum, Hylotelephium and Phedimus, Prometheum and Rosularia.

They may also be grown with hardy cacti like Opuntia and Echinocereus, Yucca and alpines like lowgrowing Campanula, Geranium and creeping Thyme.

Plant your Sempervivum in Grandma's enamelled dishes and even in disused shoes or on chairs: they will enjoy it! Or have you given any thought to planting up your birdhouse? Your imagination need know no boundaries.

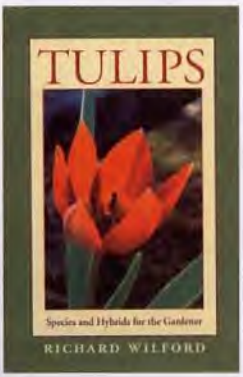
Erwin Geiger's website www.semper-vivum.de has a range of information but so far unfortunately almost wholly in German.

Sempervivum on a bird-house roof (photo Helga Zimmermann).

108 - Sempervivum growing among a roof tile garden in Birmingham Botanic Gardens

Book Reviews

TULIPS
Richard Wilford



212pp, 103 colour photos
ISBN 0-88192-763-5
Timber Press £25.00

I am always pleased to see a new book on bulbs and especially one that covers a genus as well known as Tulipa. The author, Richard Wilford, has followed a tried and tested formula in this book, the early chapters dealing with geography, the plant structure, cultivation and history before moving to the descriptive list of species then hybrids. Good simple maps show the known distribution of tulips in the wild and the text expands on this giving us lists of species found in the different regions. There are three good pictures of tulips growing in the wild in this section: I would have preferred to have seen more.

The plant itself is well described with detailed illustrated sections on the different parts of the plants such as the bulb, leaves and flower. I always like to see this information included in a book as I am a strong believer in understanding what you are trying to grow; it gives you a better chance of being able to cultivate the more challenging species. Genetics are also discussed, describing how they can be used to work out the relationships between species as well as how the genus Amana was spilt off from Tulipa as a result of DNA studies; the Amana species are dealt with in a separate chapter. I know that genetics are a mystery to many gardeners but this fast-expanding and important scientific study of plants will, I hope, eventually lead to an accurate understanding of the true relationship between the plants we think we know so well.

Eighteen pages are assigned to cultivation, dealing with all the normal situations that you will want to grow tulips in; from pots to the rock garden as well as propagation methods and pests and diseases likely to affect tulips.

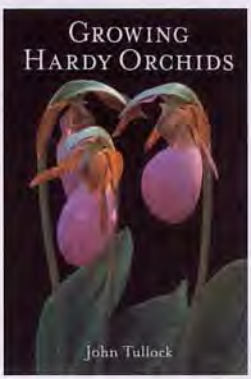
The section on history and classification deals mostly with how botanists have struggled to sort out the different sections and species

down the ages, it will be interesting to see how well they have done when all the DNA work has been completed but this may not happen in my life time. Again some gardeners may skip over this section but I find the background information to the plants I grow fascinating and I am very pleased it has been covered here in just the right amount of detail.

The section on the species is extensive enough for gardeners; it may not help you identify any unknown species you are growing, that is not what this book is meant for, but it does describe many species that you will want to grow. I am disappointed that there are not more pictures in this section. There are a goodly number of fine photographs but I am a very picture-orientated person and in these days, with modern printing methods making colour pictures as easy to print as text, I would liked to have seen every species illustrated. Twenty pages are devoted to garden hybrid tulips which is just enough to show some of the good groups of hybrids such as the Kaufmanniana types, many of which I enjoy growing, as well as some of the ones that I hate but I know are so popular, in the Fringed and Parrot Groups.

This is a good book and it does just as it says on the cover: Tulips, Species and Hybrids for the Gardener; covered in enough detail to satisfy most of us and I recommend it to you. *Ian Young.*

GROWING HARDY ORCHIDS
John Tullock



244pp, 99 colour photos
ISBN 0-88192-715-5
Timber Press £20.00

Orchids have a fascination for many people and while many are outside the scope of rock gardeners the hardy terrestrial orchids that Tullock surveys are very much in the territory of rock gardeners. It has to be said that Tullock's concentration is on native American species and he immediately opens up discussion of the perceived dangers inherent in encouraging people to grow these species. The first chapter deals head on with many of the issues of conservation and habitat destruction and the way in which the best intentions of individuals can be thwarted by inappropriate legislation.

He discusses habitat loss, legislative anomalies, and the conservation roles of nurserymen and individual growers as well as institutions. It is impossible to do justice to the range of his arguments in a short summary but it is fair to comment that he stands on the optimistic side of the argument as someone who would trust the good sense of individuals who love plants to make sound judgements about collection and the sources of plants. Nevertheless it would be unfair to characterise him as purely a liberal optimist and he lays out a series of measures that would in his view help conservation of native flower populations and orchids in particular.

A long chapter on cultivation is very valuable with useful discussions of composts and moisture, pH needs, sun exposure, humidity, nutrient, construction and media for orchid beds, and compost mixes. Other chapters discuss mycorrhizal association and hardy orchids through the seasons.

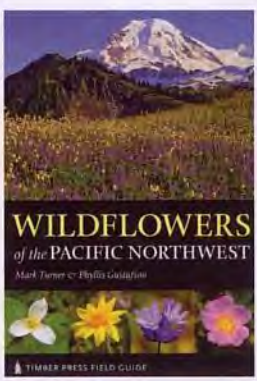
The central core of the book for most people will be the notes on the 103 hardy orchids, many of which are illustrated with very alluring pictures. This list has a very wide scope, ranging from Bletilla and Pleione, to European species like the Military orchid and Monkey orchid, Australian and New Zealand species like those from Pterostylis, some Cymbidiums, to quite beautiful American Platantheras. And here lies part of my uncertainty about the book. To take just two of these species, *Platanthera ciliaris* and *Platanthera grandiflora*. The first of these is obviously a beautiful thing which anyone would want to grow and apparently it is available commercially although none of the list of Suppliers and Organizations, in a valuable appendix, with a website seemed to have it listed when I searched them. The second, which is another splendid plant, is detailed as not being available commercially. This seems to raise a problem. Giving instructions on how to grow them may well be of value if someone happens to come along and present you with one (we should have such friends) but it is surely as inappropriate as giving instructions on how a rare parrot should be kept if one should happen your way. Indeed around 20 or the 103 orchids detailed are similarly unavailable and the bulk of these are North American species.

One other proviso should be entered here in that the book deals with hardy orchids but hardiness is a slippery concept when some of the species are listed as hardy in US Zone 10 (min 38F), not what most European readers would count as hardy and not what many American readers would count as hardy either. So great care needs to be taken to

winnow the list for hardiness (as well as availability).

But if these represent my uncertainties there are plenty of plus points and this is a book that will attract many members. Tullock writes well and his chapters on conservation, on general principles of cultivation, propagation, mycorrhizal association, and of hardy orchids through the season are excellent. Few books on orchids can have had an epilogue such as the one that we get here. Discussing fish from his stance as an icthyologist, Tullock brings the reader back to his discussion on the status of orchids in the wild, of the importance of persuading the local population of the value of their local wild-life resources, whether it is in the reefs of Fiji, the orchid-rich woodlands of Tennessee, or in the field behind your house. Observing the changes that an enlightened legislation can help enforce he finishes with a note on the state of play on the US Endangered Species Act and the ways in which its current enactment was being perverted under the Bush Administration. It's good to read something with such a clear statement of where the author stands. *Malcolm McGregor*

WILDFLOWERS of the PACIFIC NORTHWEST
Mark Turner and Phyllis Gustafson



512pp, 1247 colour photos, 1220 maps, 31 line drawings
Timber Press Field Guide
ISBN 0-88192-745-7
US$27.95 (not available in the UK)

This book attracted me when I looked at the Timber Press website although it did not appear in their UK list so I was delighted when Phyllis Gustafson was able to send me a copy for review. This is a field guide to the plants from northern California to southern British Columbia which therefore includes the whole of Washington and Oregon and hence the Cascades and Olympics as well as Vancouver Island and the Coast ranges. The first thing to say is that this is a field guide designed for the plant enthusiast who is trying easily to get a fix on a plant they find rather than for the botanist. The 1220 "commonly encountered" plants, three to a page, are each

illustrated with a photograph and each has descriptive notes and a distribution map (which is based on counties). They are organised by flower colour: white or whitish, yellow, pink to red or red-purple, violet to blue or blue-purple, brown and green. This is a well-established approach which has obvious advantages and some nearly equally obvious disadvantages. Within these colour-coded sections, plants are divided by number of petals and flower characteristics: 3 or 6 petals; 4 petals; 5 irregular petals, 5 symmetrical petals (ovary superior or inferior), forming a tube or a bell, or composite flowers. This then is an approach well-suited to the non-specialist non-botanist as long as you can decide whether a flower is pink or white in the authors' view (so not much good if you're colour-blind then). I would for example not have expected *Linnaea borealis* to be viewed as pink rather than white, and the violet Erigerons are split with some in the pink to red-purple and others in violet to blue-purple, and the palest ones are even in the section of white flowers. The latter example throws up the problem of genera being split around the book depending on flower colour. Nevertheless once you have decided that you are looking at an Erigeron the index is effective in offering alternatives. And you are going to use the index with genera split by colour in this way. There is list of the plant families divided by petal and flower characteristics in the same way as the species accounts preceding these which gives abbreviated descriptions of the botanical characteristics of each family and then page references to where they will be found in each colour section. I think my copy will gradually accumulate a lot of cross-referenced pencil notes in families which I gravitate toward.

The other major difficulty is in the use of photographs rather than drawings. In some cases it has not been possible to highlight distinguishing characteristics within the single photograph. Those who use different bird guides well know that the best are those that have illustrations rather than photographs. But this is a quibble perhaps although it is only in using any guide in the field that it is ultimately tested. Nevertheless it has already allowed me to identify a number of plants which I have photographed during visits which would otherwise have remained unidentified including *Cirsium occidentale*, a rather splendid very silvery thistle with bright red flowers which I saw with Phyllis on the border of Oregon and California.

For the visitor to the Pacific Northwest there is a very readable and useful chapter on Climate, Geography and Plant Habitats which would help anyone planning a plant-based trip. There are more botanical

treatments of the flora, and if you are so inclined then Hitchcock & Cronquist is the classic work and it would be worth looking at the Eugene Kozloff's *Plants of Western Oregon, Washington & British Columbia* (there is a detailed review by Dave Dobak in the NARGS Bulletin - Spring 2006) but if you are on a typical visit you need something more approachable (and something which you are going to carry with you all the time – it's very much the same size and weight as Sibley's guide to American birds).

Whatever reservations one might have, this book will become one of those that has a wide audience, much wider than some of the more technical offerings, and any European visitor to the area with the slightest interest in the wild flowers should get hold of a copy. *Malcolm McGregor*

... and its goodbye from me ...

... at the Perth show (from right to left) retiring President Ian Bainbridge and retiring Editor Malcolm McGregor with newly nominated and now acting Editor Anton Edwards.

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JACQUES AMAND
International

Below are photos of just a few of the plants and bulbs available from our two full colour catalogues published in January and July each year. See us in Edinburgh in June at Ingleston Showground. Visitors welcome to the Nursery. Many treasures not listed also available. To obtain our catalogues write to:

The Nurseries, Clamp Hill, Stanmore, Middlesex. HA7 3JS
or phone 020 8420 7110 or fax 020 8954 6784
or e mail bulbs@jaquesamand.co.uk or www.jacquesamand.com

Arisaema asperatum

Cypripedium formosanum

Arisaema elephas

Asarum splendens

Nomocharis meleagrina

Trillium stamineum

Trillium pusillum

EXPLORERS

THE SCOTTISH PLANT HUNTERS GARDEN

Workshops and Exhibitions held by The SRGC, in conjunction with the Explorers Garden at Pitlochry Festival Theatre

Workshops

July	
Sunday 9th	**Crevice Gardens Workshop, 11am-1pm with Ron McBeath from Lamberton Nursery**
August	
Sunday 13th	**Propagation Workshop, 11am-1pm with Graeme Butler, Rumbling Bridge Nursery**
September	
Sunday 10th	**Bulbs Workshop, 11am-1pm with Ian Young, former SRGC president**

Exhibitions

July - Dolomites, Mike Almond
August - Magnolias, Mike Thornley
September - Himalayas, Henry & Margaret Taylor
October - Lawrence Greenwood Paintings

Workshops: £10, SRGC members £5
For more information contact Julia.Corden@pitlochry.org.uk
Visit www.explorersgarden.com or call 01796 484626