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The Rock Garden

The Journal of the Scottish Rock Garden Club January 2015

Number 134

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Please note the editor's new email address

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Golspie and the North, 2013

Ian Christie

e (Ian and Ann Christie) really love our annual trip north. Once we leave Inverness behind life seems to go at a slower pace and the wonderful scenery of green fields, lush trees and vast expanse of the North Sea starts to exert its magic. We arrived in Golspie towards the end of June 2013 after the usual difficulties in getting away from our

garden and grandchildren.

We visited favourite sites, one of which is Balblair Wood, and speaking to a local lady there one day we mentioned our intention to go to the Pittentrail Inn at Rogart on the A839. She suggested we walk up the track beside the inn through fields to a large open area which had been used for horse jumping. There, to our delight, in a wet and low-lying part we saw hundreds of orchids. We had a perfect day and spent hours enjoying this treasure trove of forms of Dactylorhiza fuchsii in pale pinks, dark pinks and superb whites, some probably being hybrids with D. maculata; other orchids included Gymnadenia conopsea and Platanthera. We drove along a winding scenic road via Balnacoil back to Brora and in one site directly opposite huge windmills we found a thousand Dactylorhiza, while amongst this wet boggy ground were many Drosera rotundifolia and D. anglica.

The raised beach at Little Ferry, another of our favourites, provided a very special day. On a ramble along the edge of the dunes we saw large colonies of the vetch *Astragalus danicus* with its distinct purple pea-like flowers; these attracted dozens of the Six-spot Burnet Moth, dancing in a

Epipactis atrorubens

Precipitous plant-hunting

Platanthera bifolia



courtship frenzy; Thalictrum alpinum with its delicate yellow and purple flowers were magic and little Common Blue butterflies flitted around the

dunes seeking mates.

Strathy Point between Thurso and Bettyhill beckoned on another sunny day and, in spite of the usual gales at Strathy lighthouse, I managed at last to photograph the Scilla verna. Primula scotica were little jewels studded amongst the grass. After a picnic lunch we drove the short distance to Strathy East and parked near the cemetery. Over the hill towards the sea was a wonderful sandy beach and interesting rock formations. Down the grassy path, almost at once we found the pristine white buttercup-like flowers of Grass of Parnassus, Parnassia palustris, dancing in the breeze. Further on, the lime-green flowers of the Common Twayblade, Neottia (formerly Listera) ovata, flourished on these base-rich dunes of crushed shell. Down in the rocky shore outcrops were abundant Oxytropis halleri in flower, just as we had hoped. Some were small but old ones formed large mats over the rocks. O. halleri is a very attractive plant with heads of purple pea flowers and white silky hairs covering the pinnate leaves and stems so as to withstand drought conditions. Strathy is indeed a wonderful area to see our native plants.

Around Balblair woods we found perfect Moneses uniflora and Pyrola,

although the *Linnaea* by then had only a few flowers left. A short day to Glen Loth was worth the effort to see *Gymnadenia*, *Drosera*, *Pinguicula*, and – a real surprise – several very large Golden-ringed Dragonflies. We had intended to meet up with Anne Chambers but as usual we missed each other yet again.



Golden-ringed Dragonfly

Anne Chambers takes up the tale...

Ever since seeing the Dark Red Helleborine, *Epipactis atrorubens*, on the limestone pavements of the Burren in Ireland I had longed to see it in Scotland and in 2013 I decided that I <u>must</u> find it before I was too old to try. The excellent book *Wild Flowers of the North Highlands of Scotland* by Butler & Crossan describes it as growing in crevices on the steep cliffs up the burn in the Invernaver area of Sutherland opposite Bettyhill. I knew the Invernaver cliffs and burn from a previous visit to the headland, which has a bird's eye view of the prehistoric hut circles on the raised beach below. We followed Ian north at the end of June and although, like him, I saw lots of other lovely plants along the Sutherland coast, I failed to find the *Epipactis* at Invernaver, most likely because I was too early to see it, especially after one of the coldest springs in the last fifty years.

When I told Margaret & Francis Higgins of Berriedale of my failure, they not only offered to take me to the site but promised success too – irresistible! On July 18th I again made the long journey up the A9, met up with them and they took me onwards. After crossing the bridge over the Naver it is a short walk along the river estuary to a path that goes up beside the burn in line with the cliffs and crosses the headland. Mats of thyme and violas were in flower on the dunes as well as an alien (probably introduced), a pink form of *Erinus alpinus*, but the *Dryas* on the hillsides was largely past. Francis was as good as his word – after we had climbed about fifty metres up the burn he scaled the cliffs like a mountain goat, calling back to me to point out the sporadic *Epipactis* plants, while I followed on, searching for the best specimen to photograph. The plants were in shade, it was windy, I clung to the vegetation with one hand while the other hand struggled to operate the camera – but it was well worth it, thanks to him. If Ian Christie wants to see this gem, he'll have to consider going later in the summer.

Health warning! The cliffs are steep and the grassy ledges can be slippery.

A panorama over the estuary of the Naver





here will be an expedition to the north of Scotland in late June 2015 so that members may share in the delights described previously in our journal (issues 128 & 131). The excursions, on the four full days from Thursday June 25th to Sunday 28th 2015, will be centred on Golspie, where there are several bed & breakfast establishments, hotels, caravan & camp sites, together with various small shops and a Co-op. Participants are invited to make their own travel and overnight arrangements. For details please contact lan Christie at 01575 572977 or email ianchristie@btconnect.com

We will meet each day (10 a.m.) at the car park in the centre of Golspie. It may be convenient to share cars because roads to the plants' sites are sometimes narrow with limited parking. You are advised to bring your own packed lunches.

Day One: We first will drive north on the A9 for about thirty minutes to turn into Glen Loth before meeting in the layby where a single track road leads us steeply uphill to *Dactylorhiza* (above: *D. fuchsii*), *Drosera* and *Pinguicula*. Descending, we will stop at an old stone bridge for *Gymnadenia*, *Dactylorhiza*, *Antennaria* and even Dragonflies. After lunch comes a scenic route to Helmsdale, then on to Dunbeath to park at the old harbour with its interesting buildings before crossing the river to see *Mertensia maritima*. The day will end with a return to Helmsdale for an optional fish supper at La Mirage.

Day Two: Botanize in Balblair wood, with *Moneses*, *Goodyera*, *Linnaea* and *Pyrola*, while on the shore there is *Centaurea littorea* and abundant bird-life. Lunch will be taken at Little Ferry, followed by a walk along the

raised sand dunes with many plants that include *Astragalus danicus* and *Thalictrum minus*; blue butterflies and Burnett Moths abound. After returning through more flowers in the pinewood, we will have the options of the big burn walk on the outer edge of Golspie, a northward visit to the very interesting Orcadian Stone Company, or a visit to Dunrobin Castle.

Day Three: A fifteen minute drive takes us through Brora, turning left at the end of town to visit a *Platanthera* field before following the road to Balnacoil and Rogart for a picnic lunch. This wonderfully scenic route passes thousands of *Dactylorhiza*, *Drosera* and *Pinguicula*. Stopping for a picnic lunch, there is an inn at Pittentrail with a small shop, as well as a walk up the side of the hotel to a superb field site where five different orchids grow.

Day Four: A long drive will take us to Strathy Point near Bettyhill to visit the lighthouse with its wonderful rocks, lighthouse and perhaps a basking shark or two. Here are Primula scotica, Dactylorhiza, Scilla verna and many others. We will take lunch at Strathy East near the cemetery, then visit the beach to see Parnassia palustris, Listera, Oxytropis purpurea and some magnificent rock formations. For those who wish to stay longer on the north coast around Bettyhill area for more plant discovery, it is advisable to book ahead early. Others will head back to Golspie.

Glen Loth in June



Discussion Weekend 2015

Planning is well under way for the Discussion Weekend in Grantown-on-Spey in its sestercentennial year. The event will continue the success of previous years' weekends with plenty of Highland hospitality and the odd surprise or two. You all seem to love Grantown and the Grant Arms so much that we are breaking with tradition and holding a third weekend here. To check details please email findhorncarol@icloud.com

Delegates arriving by car should leave the A9 at Aviemore and follow the A95 to and through Grantown. The hotel is on the right of the Square. If you are coming by public transport we recommend the scenic train journey through the Grampian Mountains to Aviemore and then onwards via the frequent bus service to Grantown. The nearest airport is Inverness, approximately 45 minutes from Grantown, although delegates from the South may find it easier to fly to Edinburgh and travel northwards by train.

Saturday morning will, as usual, be free time for delegates to visit some of the local scenic spots. One option is to take one of the Bird Watchers and Wildlife Club (BWWC) guided walks through Anagach Woods and down by the River Spey. An alternative would be to drive out to Revack Estate for a wander around, with a visit to their rather good coffee shop! To absorb more of the scenic beauty of the area take a drive out to Lochindorb, admiring the views on the way, bird watching and plant spotting.

There is so much to do in the area around Grantown-on-Spey from bird watching to botanizing, golfing to fishing, that you may want to consider extending your stay and going on a Red Deer Rut Safari or driving over the Dava to Burghead to do some bird or cetacean watching; this is one of Carol & David Shaw's favourite spots for bird watching and, as always, the extremely helpful BWWC folk will be happy to give you advice on where else to go to see the local wildlife.

The 2015 Discussion Weekend programme's themes intertwine the old and the new with some tales of the unexpected. This year's speakers include some of our old friends and four exciting speakers new to Scotland. We are very fortunate to have seduced such a fine collection of leading international experts to speak to us in 2015.

We look forward to welcoming you back for another great weekend, one we know and hope you will enjoy thoroughly.



Programme

Friday 2nd October• Jānis Rukšāns: The Jim Archibald Lecture: Crocuses old and new Small Bulb Exchange

Saturday 3rd October Morning – Woodland walks and show Afternoon

- Robert Unwin: The John Duff Lecture: History of the RBGE Rock Garden
- Ian Strachan: Extreme botanizing on the north face of Ben Nevis
- Kaj Andersen: Danish rock building the crevice garden at Bangsbo Botanic Garden

Evening – Reception, dinner and plant auction

Sunday 4th October

- Johan Nilson: Bulbs of the western Himalayas
- Camiel de Jong: The William Buchanan Lecture: Growing hardy orchids
- Joanne Everson: 12 years' hard labour on the Kew Rock Garden
- Todd Boland: The Harold Esslemont Lecture: Where alpines meet the sea: the flora of the limestone and serpentine barrens of Newfoundland

Friday's Jim Archibald bulb lecture will be followed by the sociable small bulb exchange. After lunch on Saturday, our speakers will cover diverse themes of the history of the RBG Edinburgh rock garden, exciting alpine botanical survey of the North Face of Ben Nevis, and the development of the huge crevice garden at Bangsbo Botanic Garden in Denmark. Our Saturday evening will pass in a social blur of the reception, dinner and plant auction. Sunday's speakers will offer us a wide view over the bulbous plants of the western Himalayas, propagation and growing of hardy orchids, the development of the rock garden and alpine house at Kew, and the alpines of the famous Newfoundland barrens.

Red squirrel at Grantown



Cardiocrinum giganteum

Harold McBride

ardiocrinum giganteum is a native of the Himalayas, being recorded in India, Tibet, Pakistan, China & Burma. In its natural habitat it grows in wet forests at 1600 to 3500 metres; the large trumpet flowers are produced on three to four metre stems in late June or early July. It was first discovered in 1850 by Nathaniel Wallich, and a bulb collected by Major Madden of the Bengal Artillery flowered in Edinburgh around 1852. A variant from western China, C. giganteum var. yunnanense, has shorter, almost black, flowering stems and its new young heart-shaped leaves are bronze in colour. In recent years pictures have emerged from Japan showing a deep wine-coloured form; I understand seed from this plant has





reached a Scottish nursery - an interesting development indeed. Gardeners often complain about the damage excess rain does to our plants; however, this giant lily prospers in areas of high rainfall and I have recently heard that a large commercial seed company has sourced seed from New Zealand where it has become naturalized, no doubt enjoying the high rainfall and generally temperate conditions in its adopted new home.

This dramatic giant lily is intolerant of hot dry conditions, requiring moist but not waterlogged humus-rich conditions if it is to thrive properly. In my own garden I find it responds well to a deep mulch of at least fifteen cm of leaf mould in autumn, followed by several high potash liquid feeds after spring growth commences in late March. At this stage of its early growth the emerging leaves may be damaged by late spring frosts and particular care must be taken to avoid damage by slugs. Later, plants may be attacked by Lily Beetle, damaging the leaves heavily. Alarmingly, this is a fairly new pest in Northern Ireland that has recently arrived in our gardens.

I find that the giant lily sets copious amounts of seed. The eye-catching seed heads remain prominent on the tall stems during the summer,



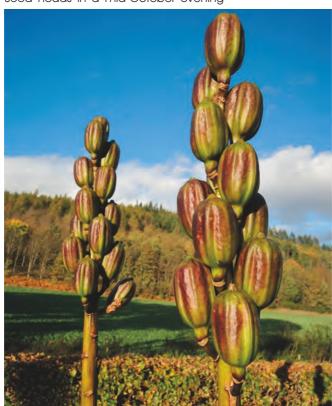




ripening well into September or October. The resultant seed germinates in its first spring but the seedlings will not reach flowering size for about six years. This method of propagation is therefore only for the most patient of gardeners who are prepared to reserve a patch of ground for a long time! *C. giganteum* is monocarpic. However, in the years when bulbs are approaching flowering size they produce many side bulbs that should be replanted and naturalized carefully until they reach flowering size three or four years later.

The impressively statuesque flowering stems of *C. giganteum* in my own garden carry flowers whose wonderful scent often reaches my neighbours on a gentle evening breeze, bringing requests for a closer look at the source. I have been growing this dramatic and beautiful plant for four decades. Each spring I look forward to the excitement of the leaves emerging through the deep mulch, with of course the promise of the delights to follow later in the year. I can only encourage you to try to find space for it in your own garden and heart.

Seed heads in a mid-October evening





Raising Meconopsis Species from Seed

Geoff Hill

ne of the great benefits of growing from seed is that you can produce lots of good healthy plants relatively cheaply. Members of the various alpine societies are spoiled for choice as there is a huge variety of seed available to us from the seed exchange lists, including wild collected seed and that of many other scarce plants which are often not readily available from nurseries. Each of us has our own methods for seed sowing which we refine with experience to suit our own circumstances and climate. There can be no definitive method for raising seed successfully because different genera have different requirements but there are some basic guidelines to follow. To achieve good germination we need to sow good seed at the right time and to give the seed the right conditions to germinate.

Most of the seed available from the seed exchanges is of good quality but the best results can often be achieved from seed collected from plants that you have grown and established in your own garden. These plants have adapted to your conditions and you have control of how the seed is treated and stored. One of my particular interests is growing monocarpic Meconopsis and I am often surprised when I hear experienced gardeners say that they have difficulty in germinating some of these species. I suspect that in many cases the problem might be that they are giving their seed pots too much protection. Meconopsis seed requires a period of chilling to germinate well and for many years now I have been successfully germinating and growing my seedlings on outdoors in southeast Scotland totally unprotected except for a wire mesh cover to prevent disturbance by birds. I have found that outdoor germination gives me much better results than raising from seed under cover in a cold frame. Seed of species such as M. punicea and M. integrifolia often germinates after heavy frosts in late January or early February during the coldest period of the year. Despite this I have not experienced much seedling damage or loss except for one year in which my seed pots remained completely frozen for several days. Even this proved not to be a total disaster as outdoor germination tends to take place over the course of a few weeks and new seedlings soon emerged to replace the few which had withered. By contrast I have experienced many occasions when seed has either not germinated under glass or where I have totally lost batches of seedlings through damping off or other fungal diseases. I therefore now raise most of my Meconopsis unprotected against the weather except for a short period of re-establishment after pricking out seedlings.

Overleaf: Meconopsis punicea in the author's garder





When to Sow

For most Meconopsis species January sowings give good results. Seed sown at that time germinates from March onwards allowing the seedlings to grow on rapidly in the early spring. Certain species though do not germinate well if sowing is delayed until January. Some years ago I carried out a series of experiments comparing the germination and growth of counted batches of the same seed of M. punicea and M. integrifolia sown at different times of the year. The results clearly showed the advantages of autumn sowing for these species. M. quintuplinervia and M. sulphurea (formerly M. pseudointegrifolia) also gave very good germination from autumn sowings. In a further experiment I sowed batches of M. punicea at monthly intervals throughout the year from seed harvested in July, one set of pots being kept outdoors and the others in a well-ventilated cold frame. From this study I concluded that as long as the seed was sown in October or November before the first frosts there was little advantage in sowing earlier. After November the percentage germination fell away rapidly until only a few seedlings were raised from seed sown in January or February. Germination was considerably better in the seed pots kept outdoors than those kept under glass. Percentage germination will vary from year to year but in my experience these species germinate much better in a hard winter. This obviously presents a problem to those gardeners who rely on the seed exchanges for their seed because this is often not distributed until January. However, all is not lost, as I found that seed of M. punicea sown in January or February and left outside in pots until the spring of the following year still produced a good crop of seedlings (variously 45% to 65% germination). Because of this I would suggest that seed received late should either be sown immediately and kept in a sheltered spot outdoors during the summer before being given full winter exposure until germination eventually takes place or, alternatively, that it be stored in an airtight plastic container at about 5℃ in the bottom of the fridge before being sown the following autumn.

If you do collect seed from the plants that you grow, don't send all of your surplus seed to the seed exchanges. Keep some back to guard against any future crop failures. Contrary to popular belief *Meconopsis* seed does not quickly lose its viability. Packets of dried seed stored in an airtight plastic container placed at the bottom of a domestic refrigerator can retain good viability for several years. In other experiments with counted batches of seed I have found little evidence of any major loss of viability of my own stored seed of a variety of *Meconopsis* species. Some of these results were as follows:

- 3 year old seed of *M. punicea* 45% germination
- 4 year old seed of M. sulphurea 41% germination
- 6 year old seed of M. x beamishii 61% germination
- 7 year old seed of *M. superba* 38% germination.

This method is more than sufficient to establish new colonies of plants if the need should arise.

How to Sow

I prefer to sow my seed in 7 cm or 9 cm square pots. These retain moisture better than seed trays and allow the roots to develop thus giving more latitude in the timing of pricking out. I fill the pots to about 2 cm beneath their rims with seed compost and lightly firm them. I mix some extra sharp sand and fine grit into my seed composts to improve the drainage. This also helps root separation on pricking out. Seed is sown lightly and evenly on the surface of the compost, avoiding over-sowing which may lead to congestion and consequent damping off. I tend to sow about twenty seeds per pot. The pots are then covered with a layer of about 5 mm of fine grit: I use Jondo Flint Chick Grit which is obtainable from agricultural merchants. The pots are then watered from below by standing them in a bowl of water to about half their depth until the surface of the compost and grit becomes moist. After draining, the pots are transferred to an exposed position outdoors to await germination. I stand my pots on grit sand trays on a raised bench. Holes have been drilled in the trays just below the surface of the sand to provide drainage. The pots usually need little further attention other than occasional careful watering to moisten them during any prolonged dry periods.

After germination, seedlings sometimes seem to pause in their growth. It is important to keep them growing on quickly and an occasional liquid feed with half strength Tomato fertiliser helps to keep them moving until they are large enough to handle and prick out into fresh compost. Losses on pricking out *Meconopsis* can be significant. Some growers favour pricking out very small seedlings before they make too much root but I prefer to sow sparsely and leave pricking out until they have made sufficient root to cope with the disturbance. After pricking out into individual small pots I put the seedlings into a shaded frame for a couple of weeks until they become established. Once established the young plants should be potted on regularly and should not be allowed to dry out or to become potbound. It is particularly important to move *M. integrifolia* on quickly so that the plants reach flowering size by the following spring. If not they then invariably flower in the autumn and do not set viable seed.

In Conclusion

If you already achieve good results with the method you use for raising *Meconopsis* seed then don't change it. If not, perhaps it is time to experiment? Try growing them harder and use the cold winter weather to your advantage.

Growing Miniature Daffodils... in Pots and Containers from September to April

Terry Braithwaite

he title of this article is a little misleading, as in the case of miniatures (both hybrids and species) the bulbs are sometimes in the same container for up to five years. I will explain later why the bulbs are grown on for such a long time but for the first part of this article let us assume we have new bulbs to grow.

Compost and Fertilizer

I use the same basic compost that I would use for standard exhibition daffodils and I believe that the fertilizer content is similar to that used by John Pearson, a well-known daffodil hybridizer, based on that used by the Irish hybridizer the late Guy Wilson.

The component parts of the compost mix are by volume and the basic structure consists of: 1 part sterilized loam – preferably very fibrous, greasy and granular; 1 part sharp grit – 8 mm (or less) horticultural grit, not sand; 3 parts sphagnum moss peat – medium grade.

To every bushel (8 gallons by volume) I add 12 oz of fertilizer mix and a 5" pot of charcoal and mix thoroughly. The fertilizer comprises: 1 part hoof and horn – fine grist; 5 parts bone meal – fine grist; 5 parts superphosphate of lime; 5 parts sulphate of potash. The ratio of the fertilizer mix is by weight and can be changed from ounces to metric or even to tons (if you've a lot of pots to fill) as long as the ratio remains constant.

For the miniatures I add a bucket of extra grit to a bucket of basic mix. For the acid-loving ones, for example *Triandrus* species or hybrids, I also add two to three good handfuls of composted pine needles and for those that like more acid I add a couple of handfuls of bark.

I believe that for good results you should always use the best materials available. Good compost needs granular components; loam and peat are the most important elements in its construction. To test the loam structure, take a handful and squeeze it firmly to produce a long sausage and then rub it between the thumb and forefingers. If the loam disintegrates into a good crumb structure then it is ideal for compost; if it stays in a big lump or disintegrates into dust it is no good at all.

Peat should be granular and spongy. You cannot go wrong with Irish or UK peat as long as it not of a fine grade which, although it may be good for the horticultural trade, is not suitable for compost – always use medium or, if pushed, coarse grade.

Potting

I like to pot or re-pot in late August or early September and I usually pot as the bulbs arrive or knock them out and re-pot the same day because miniature bulbs start to shrink very quickly when out of the ground. I use various sized terracotta pots ranging from 3" to 8" diameter. I also use mushroom containers (the ones that look like water lily baskets) and 5" square plastic pots which are sold for aquatic plants as they have lots of holes in them.

The important thing to remember when potting miniatures is that they like to be friendly and should be planted as close to others as possible because they do not like to be disturbed once established. I like to plant 8 bulbs to a pot which means I usually use a pot filled to about 5 cm from the top with the correct compost for the variety. For example, *Triandrus* with pine needles in the mix, and some bulbocodiums with bark added; the rest would be with added grit only. The bulbs are placed around the circumference of the pot, almost touching and then covered to just above the top of the bulbs. I finish with a layer of grit on top of this to just below the rim of the pot, put in a label – and the job is done!

I place the bulbs around the side of the pot because I intend to leave them in the same pot until it is completely full of bulbs (this could be up to 5 years) and I find the extra bulbs produced during this period tend to move to the centre of the pot. As a guide, the sizes of pots I use are: 3", 3-4 bulbs; 5", 4-7 bulbs; 6", 7-10 bulbs; 7", 8-12 bulbs; and 8" – usually for potting tazettas – about 7-8 bulbs.

I grow miniatures for two reasons: to grow the bulbs on and to extend the flowering period of the variety. Once potted, the containers are plunged into a bulb frame that has good drainage in the bottom, with about 6" of gravel three quarters of the way down and the rest of the frame a mixture of peat, a small amount of loam and lots of grit. When potting up the containers I fill them to about a third of their height with compost, put in the bulbs and then fill the container to the top. In a mushroom container I usually plant between 20 to 25 good size bulbs and then bury them in the bulb frame for at least two to three years. If the smaller containers are used I either do not have much stock or I am growing on newly acquired bulbs or seedlings and I use the same method of potting as for the larger containers.

Growing to Flowering

As I have mentioned, I grow my miniature bulbs in either sand or peaty compost filled bulb frames. The frames are two concrete blocks high and about 20' long and 4.5' wide. The washed sand-filled frames have a wooden skeleton structure on top of the blocks about 10" tall to support Dutch lights that are used to keep off the rain from late November until flowering has finished in mid-April, and to bake the bulbs from mid-July to late August. The rest of the time the bulbs are exposed to the elements. I sometimes take the lights off in March to catch the spring rain, depending

on the number of flowers that are out, and on very warm days during the flowering period, but I always cover at night in case of heavy rain.

The sides of the wooden structure are open to allow air movement and to admit the cold during the winter months; as long as the pots are not excessively wet it will do them no harm, in fact it will possibly do good. If, like me, you grow miniatures and are a flower enthusiast, then we have the advantage of having daffodils from October to May and – believe me – some of the more interesting ones flower between October and January; alas they are no good for showing but are well worth the frame space.

Feeding and Watering

Newly potted miniatures do not need a lot of feed because what is in the compost is sufficient for most of the first season, but I do like to give them a couple of feeds of Chempak No. 8 in late March and early April, about a fortnight apart, and a feed of sulphate of potash in mid-May. To those that have been in the same pots for two or more years I like to give a top dressing of the same fertilizer I use when potting, also Chempak No. 8 sulphate of potash in September and late February. The amount of basic fertilizer mix used in the first feed is one level Chempak spoon (it comes with every packet) to the 3" to 6" pots and one heaped spoon to the 7" and 8" pots; the same applies to the sulphate of potash. I use Chempak as a quarter of a spoon for the 3" and 4" pots, one third of a spoon for the 5" pots, half a spoon for the 6" pots, a level spoon for the 7" pots and a heaped spoon for the 8" pots. All the feed is sprinkled on dry and then watered in.

Watering is as required from September to early November and I hope that Nature will do the rest for me as the sand is watered at the same time. If we have had enough rain before the covers go on, the pots stay sufficiently moist until late February. If we have a warm winter I sometimes have to water in mid-January and February but I always like to do this after checking the weather forecast for any signs of heavy frost. If I have any doubts I leave the watering to another day. If the bulbs are getting desperate (you can always tell by the darkening of the foliage) I only give a very small amount of water to those that are in real need. From March onwards as the growth develops the watering increases until I am watering twice on some days. After flowering I reduce the watering gradually and finally stop by mid-June but keep the sand moist until July when the tops go on the frame. Cyclamineus species and hybrids do not have their frame tops put on but the pots are positioned in the frame so as to be shaded by the leafy cover of my neighbour's trees. The natural habitat of these bulbs is at the edge of the woods in moist places and they do not like to bake.

In peat plunges the containers that have been there for more than one year get a top dressing of 2 ounces to the square yard of the basic mix of fertilizer in early November and they also get a top dressing of Chempak No. 8 at the rate of 1 box per frame in mid-March when all feeds are applied dry and watered in.

Facing: Narcissus serotinus (Photo: Peter Maguire)



The Search for a Long-lost Primula

David Rankin

p there." The Chinese shepherd pointed to the skyline of the mountain ridge far above us. We showed him a photo of a primula like the one we were looking for. "Yes, many." He picked up a stone to show us that the plants were growing on the rocks. At last! We had found someone who could take us to a plant that we had been seeking for two years.

In 1883 Père Delavay, a French Jesuit missionary, working for Missions Etrangères de Paris, crossed this range on his way from his home to a mission chapel in the village of Mo-so-yn, near Langkong – modern-day Er'yuan in Yunnan Province of China. The journey took a day and a half, and on his way he collected plant specimens, which he sent to the Muséum National d'Histoire Naturelle in Paris. Amongst them were samples of a *Primula*, with tufts of slightly sticky leaves, yellow flowers, and lots of farina (a floury substance) under the leaves and all over the inflorescence. Two years later this was formally described as a new species, *Primula bullata*, by Franchet (*Bulletin de la Societe Botanique de France*, 1885, 32: 264–273.) In the same paper he also described a second species, *Primula bracteata*, collected by Delavay on the same trip in a gorge near Mo-so-yn. It also had yellow flowers and it was quite similar to *Primula bullata*, but the scapes (flower stems) were shorter and there was no farina.

Delavay continued to collect specimens of these two primulas until 1889, but then they went into hiding. George Forrest and Frank Kingdon-Ward each collected a single specimen of *Primula bullata*, in 1913 and 1922 respectively, about 40 km further north, but nothing else matching the original description has been reported since. *Primula bracteata* vanished even more comprehensively; it was never seen again – until late in 2012.

That didn't stop the name being used! At the Royal Botanic Garden in Edinburgh, William Wright Smith and Harold Fletcher couldn't understand why it hadn't been found again and concluded that Franchet's description must be too narrow, They were strongly influenced by the fact that, unfortunately, one of the plants on the herbarium sheet that was given to the RBG Edinburgh (the lower right plant on the facing page) was atypically congested, so they expanded the description of *Primula bracteata* to include other related plants that grew as cushions (*Transactions and Proceedings of the Royal Society of Edinburgh*, 1946, 61: 454–463.) And that broader

Facing: *Primula bracteata* plants collected by Pè re Delavay in 1883. Photo: © Royal Botanic Garden Edinburgh



The Search for a Long-lost Primula

concept of *Primula bracteata* has been followed ever since and even broadened further. Until now.

The *Bullatae* section of *Primula* is best known for *Primula forrestii* Balf. f. This has been widely grown for many years and lots of people have seen it growing on the Yulong Shan range near Lijiang. But where was its relative, *Primula bullata*? Had it become extinct? Or was it just that nobody knew where to look? It has been recorded in books about primulas as coming from Hee Chan Men but nobody, either in China or the West, seemed to know that name. But browsing on-line through Delavay's herbarium specimens I spotted an acute accent – it was Hée Chan Men. A tiny detail but it made a crucial difference: Delavay was French, and we were looking at a French representation of Chinese words. Delia Davin, a relative of my wife Stella, was a professor of Chinese who had studied in Paris. She pronounced the name with a perfect French accent, and then listened



Primula forrestii: it is being renamed ormula bullata var. forrestii

to herself as if she had just spoken Chinese! She decided that the most likely words were , Hei Shan Men in modern Pinyin, meaning black mountain gate or pass. So now we were looking for a pass, crossing the range between Delavay's home and his chapel, at 3000 m, the altitude that Delavay had recorded when he collected the plants. A step forward, but we could still only guess where exactly this might be.



Wild *Primula bracteata*, photographed in late June 2014. It is being renamed as *Primula bullata* var. *bracteata*

In 2012, Jens Nielsen explored a gorge near Er'yuan, hoping to find *Primula bullata*. No luck – he ran out of time – but he did find *Primula bracteata*! There was no doubt: it was clearly related to *Primula forrestii* and Jens must have been in the area where Delavay had been. We thought that Delavay might have descended the gorge when crossing the range. But where was Hei Shan Men?

A search for web references produced just one hit. A new species of grass had been found there and it had been given a Latin name that had been used before. The paper we found was simply correcting the error and giving a valid name. But it also referred to the original publication of the description of the grass, in Chinese (*Acta Phytotaxonomica Sinica* 1992, 30: 529–540); this gave the collection site as Hei Shan Men, Nan Da Ping. Delia's choice of the characters was proven to be correct, and Nan Da Ping was a name we knew – a village at the south end of the range, four or five kilometres from the region where we had guessed that Hei Shan Men might be. We now knew that we were looking in the right general area.

So it was that in June 2014 we – Jens, Pam Eveleigh, Stella and I – set off for China, determined to find *Primula bullata*. Jens was delayed for a few days, so the rest of us spent a long day exploring the gorge. We found

plenty of *Primula bracteata*, right up to 3000 m, but the local people did not recognise the name Hei Shan Men. The next day we went to Nan Da Ping village but, again, the local people did not know the name. We provisionally arranged to walk up the mountain the next day and then had a couple of hours to kill before going to Dali airport to meet Jens. We went round the east side of the range and took the first road towards the mountains. Although we could see the scar of a modern road, built to access windmills, high



above us, there was no way we could see to get up there. Where these roads meet public roads, access is always barred. So we stopped for lunch and pottered about looking at *Roscoea*, *Stellera* and a few other interesting plants. Which was when Mr Lu appeared, following his grazing animals as they happened to cross the track right by where we too were grazing.

First we asked whether there was a way to get up to the road that we could see. "Yes." Old farm tracks crossed the mountains and could still be used. Then we wondered whether he might know of Hei Shan Man. "Up there." And so our search at last gave its first solid

Stella Rankin, Mr Lu, driver Yang Kun and Pantead. We went excitedly to Eveleigh plan the next day's primula hunting the airport, and early next trip morning dragged poor jet-lagged Jens back to meet

Mr Lu. An hour later, having pushed our 4WD jeep through appalling mud, we reached the ridge and a few minutes later Mr Lu brought us to Hei Shan Men. On the limestone rocks and on red *terra rossa* soil under pine trees were hundreds of *Primula bullata*.

With the midsummer sun almost directly overhead we spent an age photographing, measuring and debating. There was no question: the primulas *bullata*, *bracteata* and *forrestii* are so close that they must be a single species. We could – just – define enough distinctions to keep them

Facing: *Primula bullata* plants collected by Pè re Delavay in 1884. Photo: © Musé um National d'Histoire Naturelle



The Search for a Long-lost Primula



Wild Primula bullata var. bullata, photographed in late June 2014

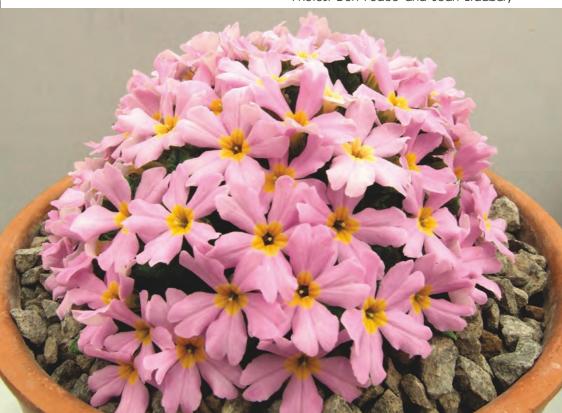
as varieties. We realised that it is only the winter leaves (growing in autumn) of *Primula bullata* that have thick farina, and that these leaves are smaller and a different shape from the summer leaves. These winter leaves are just visible at the bottom of the photograph of wild *Primula bullata*. How had this been missed? Because every single one of Delavay's specimen plants from Hei Shan Men with leaves (and there are nearly a hundred of them) had been collected in spring and they had all been beautifully tidied up by removal of the old, dead leaves! So some of the similarity to *Primula forrestii* (which also has different summer and winter leaves) had been hidden from botanists for well over 100 years.

So these three species have to be combined. As *Primula bullata* and *P. bracteata* were described in the same paper, long before *Primula forrestii*, either name could be chosen. Using *Primula bracteata* would just continue the confusion, so *Primula bullata* they will be, with varieties *bullata*, *bracteata* and *forrestii*. Where does that leave the plants that have been grown in recent years under the name *Primula bracteata*? The cushion plants with pink and white flowers, including those with ACE collection



Primula henrici in cultivation: plants grown and shown by Peter Hood.

Photos: Don Peace and Joan Bradbury





Primula coelata in cultivation: plant grown by John Richards. Photo: Sharon Bradley

numbers as well as those labelled *Primula dubernardiana* Forrest and their hybrids, are all *Primula henrici* Bureau & Franchet. Plants that are looser mats, grown from seed collected near Lugu Lake and shown by John Richards, are *Primula coelata* (pronounced koi-lah-ta) Stapf (*Curtis's Botanical Magazine*, 1935, 155: t. 9266).

The table compares names used historically, present usage and the new names. There are a lot of changes to be noted; in fact, *Primula rockii* W. W. Smith is the only one in the section that stays the same. Such wholesale changes are not always welcome, but seeing and understanding the plants forces the changes to be made. In this case, the name *Primula bracteata* had been applied to almost half the section – the half in which it doesn't really belong! And the other half consists of variants of one species. The full story, with all the botanical detail, is being published with Pam Eveleigh and Jens Nielsen as co-authors in Curtis's Botanical Magazine (2014, 31: t. 800, 333–374, together with a lovely painting of *Primula coelata* by Sharon Bradley. Thank you, Sharon, and all the other people who helped with this work, including the SRGC for contributing to the expedition costs.

Original name	Smith & Fletcher, 1946	Flora of China, 1996	Richards, <i>Primula</i> , 2002	Eveleigh, Nielsen & Rankin, 2014
bullata	bullata	bullata	bullata	bullata var. bullata
rufa	bullata var. rufa	forrestii	forrestii	bullata var. bullata
forrestii	forrestii	forrestii	forrestii	bullata var. forrestii
redolens	redolens	forrestii	forrestii var. redolens	bullata var. forrestii
ulaphylla	bracteata	bracteata	bracteata	bullata var. forrestii
bracteata	bracteata	bracteata	bracteata	bullata var. bracteata
pulvinata	bracteata	bracteata	bracteata	henrici
articulata	henrici	bracteata	henrici*	henrici
tapeina	henrici	bracteata	henrici*	henrici
pseudobracteata	henrici	bracteata	henrici*	henrici
henrici	henrici	bracteata	henrici*	henrici
coelata var. stenophylla	henrici	not listed	not listed	henrici
dubernardiana	dubernardiana	bracteata	dubernardiana**	henrici
monbeigii	dubernardiana	bracteata	dubernardiana**	henrici
coelata	bracteata	not listed	not listed	coleata
rockii	rockii	rockii	rockii	rockii

^{*}Subsequently changed to bracteata subsp. henrici (The Alpine Gardener, 2005, 73: 401-463)

Primula henrici: plant grown and shown by Peter Hood. Photo: Don Peace



^{**}Subsequently changed to bracteata subsp. dubernardiana

Gardening Scotland 2014

Stan da Prato and Clive Davies (photos)

he 2014 club stand had six main habitats. A central rock ridge of conglomerate dropped to a shady north corrie. A dry river bed in the middle of the display marked a fault line with sedimentary strata to the east. On the west side conditions were moister and mossy. The river dropped over a cliff to floor level where it ran through two woodland areas. Much work was needed to realise the scheme ...



Dummy run at Binny Plants





Ian Christie unloads our hired van



Materials by the sackful



Rob Graham adds rockwork



Alan plants as Rob adds the lower level





Rock strata and compost are ready



Celmisias planted on the rock ridge



The moister side is planted up



Ian among the Meconopsis



Alan just keeps on planting



Tea-break!



The central dry river bed



Looking over the habitats



Sun lovers contrast with gesneriads and ferns in the corrie

Primula sieboldii





Our banners complement the plants



Meconopsis in variety



Arisaema and Wikstroemia gemmata



Cypripedium and Rhododendron 'Everred'
It was all worth it - Gold again!

Jan Pryde ♣ Trina Rogerson ♣ Sue Simpson & George Watt ♣ Ann Steele Thomlinson ♣ Maureen Wilson ♣

RHS Joint Rock Garden Plant Committee

Recommendations made at SRGC Shows in 2013

Dunblane 16th February Awards to Plants Certificate of Preliminary Commendation (as a hardy flowering plant for exhibition) Iris 'Palm Spring', Jacques Amand International

Stirling 23rd March Awards to Plants Certificate of Preliminary Commendation (as hardy flowering plants for exhibition)

Callianthemum farreri, Cyril Lafong



Pseudomuscari azureum, David Millward



Scilla winogradowii, Sandy Leven



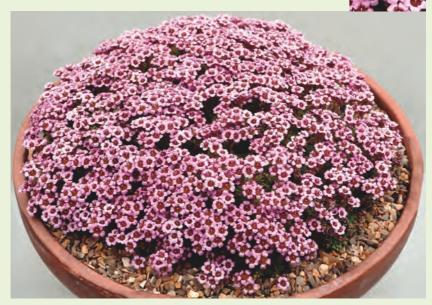






Perth 20th April Awards to Plants

Award of Merit (as hardy flowering plants for exhibition) *Saxifraga* 'Marsyandi', Carole & Ian Bainbridge



Erythronium x 'Ardovie Bliss', Ian Christie



Trillium rivale (exhibited as T. ovatum x rivale), Cyril Lafong

Certificate of Preliminary Commendation (as hardy flowering plants for exhibition)

Androsace idahoensis x laevigata,
Sam Sutherland





Erythronium sibiricum (exhibited as E. sibiricum 'Amur Star'), Ian Christie

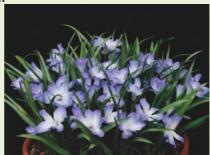




Awards to Exhibitors Certificate of Cultural Commendation

Cyril Lafong, a pan of Tecophilaea Storm Cloud'





Sam Sutherland, a pan of Ranunculus crithmifolius



Gardening Scotland, Ingliston 1st June Awards to Plants

Award of Merit (as a hardy flowering plant for exhibition) Cypripedium parviflorum var. makasin, Peter Semple

Certificate of Preliminary Commendation (as hardy flowering plants for exhibition)

Cypripedium 'Multi-White', Jacques Amand International





Meconopsis 'Mildred', Sharon Bradley

Meconopsis punicea 'Sichuan Silk' (2012 PC confirmed on application of cultivar name), lan Christie



Meconopsis 'Strathspey', the Meconopsis Group

Awards to Exhibitors Certificate of Cultural Commendation

Peter Semple, for a pan of Cypripedium parviflorum var. makasin

Discussion Weekend, Grantown-on-Spey 5th October Awards to Plants

Certificate of Preliminary Commendation (as a hardy flowering plant for exhibition)

Eucomis vandermerwei 'Octopus', Tony Rymer

Awards to Exhibitors Certificate of Cultural Commendation

Roma Fiddes, for a pan of Cyclamen mirabile

In Praise of 'thogs'

Brian Mathew

'he species of certain bulb genera tend to get poor press, sometimes because they are perceived to 'all look the same' or are somewhat weedy, taking over patches of the garden with great enthusiasm by seed or bulblets. Muscari used to fall into the latter category, partly because of the invasive forms of Muscari neglectum and M. armeniacum. This prejudice has largely passed, fortunately, and the genus is now much appreciated with the introduction of quite a number of attractive species and hybrid cultivars. Sadly the same cannot be said for ornithogalums, some of which suffer from both these traits: at a glance, most have monotonously similar flower colours and some are undeniably invasive and a nuisance if put in the wrong place. It is true to say that the flowers of *Ornithogalum* species are mostly white with a green stripe on the outside and for this reason they are so often dismissed as being uninteresting. How often I have been in the field and heard the comment 'Oh, just another ornithog'! Herbert & Molly Crook used to refer to them as 'thogs' which sounded even more derogatory.

On the other hand, some are superb small bulbs for early- to midspring that deserve to be more widely grown and appreciated in the garden or even in a special collection of bulbs in the alpine house. Apart from their appeal as garden plants they also have considerable botanical interest and, indeed, it is essential to look at the finer details for identification purposes. Admittedly they are, taxonomically speaking, a bit of a nightmare and there is no definitive account of the many northern hemisphere species so the naming of them is fraught with problems.

The characteristics while in flower are, of course, the most obvious and provide the initial impression as to ornamental value: features such as stature, inflorescence shape, leaf to flower ratio and flower size. But to identify them positively and at the same time to extend our sphere of interest, there are significant details of the fruits to be noted. Herein lies one of the problems that has dogged researchers. Most herbarium specimens – the taxonomists' working tools – are collected while plants are in flower so if the diagnostic features happen to be more significant in the fruiting stage there is not much chance of progressing further with the identification. Thus it is of great importance to study them as living plants, ideally – or perhaps even essentially – using only those of known provenance. Most have flowers facing upwards, opening out in response to the sun, but as they go into the fruiting stage the individual flower stalks – the pedicels - can do different things depending upon the species. In most species the inflorescences elongate somewhat, so what might have been a nicely compact flower head often becomes larger and looser; but it is the behaviour

of the pedicels that is so interesting. In some of them the pedicels turn strictly upwards; here the tall and widespread O. narbonense is a good example with the pedicels ending up pressed almost vertically against the main stem so that the capsules are erect and shed their seeds when they are disturbed, perhaps by wind or grazing animals. In others the stalks curve outwards and upwards, while some extend horizontally before turning upward just at the tips to present vertical capsules. Perhaps the most extraordinary are those in which the pedicels develop a swelling (a 'motor pulvinus') at the base where it joins the main stem – rather like a biceps muscle – which physically forces the capsules down to soil level where the seeds are most probably collected by ants. A very few species have pedicels that become flaccid (floppy), allowing the capsules to dangle loosely. The capsules too exhibit a considerable range of shape and form, useful for classification purposes; some are rounded in cross-section, others angled or winged at the corners to varying degrees. The seeds contained within are in some species furnished with a fleshy aril, probably linked to ant distribution.

There are, of course, features of the flowers that are of interest. Although they are mostly white with a green stripe outside there are notable differences in size and shape of the tepals and in the characters of the stamens and style. And what of the leaves? Well, here we have further diagnostic features in the number of leaves per bulb, their colour (green or grey-green) and sometimes with a silvery or whitish median stripe, their width and aspect (some spread on

Ornithogalum narbonense, Crete, Rhodopu – Paleochora





the ground, others erect), their crosssection (flat or channelled), glabrous or hairy, and so forth. The bulbs too differ in that in some species they are solid like those of the bluebells, *Hyacinthoides*, while others have a more conventional type consisting of concentric scales.

Although this is all very interesting for a botanist or 'thog' enthusiast it has little to do with overall garden value and the main idea of this article is to highlight a few of the more attractive smaller species that are suitable for the alpine gardener. Admittedly this is a rather subjective exercise but it is worth the effort in order perhaps to air a few of the species from this large genus of well over a hundred species.

Possibly it was too sweeping that ornithogalums are suggest undeserving and poorly-known, for several of them are generally 'around' in cultivation and the nursery trade. For me, one of the really outstanding species is O. lanceolatum which, in its best forms, has rosettes of flat glossy leaves that taper from a wide base up to the apex and, in the centre, a near-stemless head (corymb) of large flowers of purest white. Of course, like most species, they have a green exterior and here lies a valid criticism of the genus: they require good sunshine to encourage the flowers to open out flat otherwise all you see – or more likely don't see – are slender green buds. This attractive species does very well outside in a scree bed, molluscs permitting, and tolerates a lot of moisture in spring, originating as it does from mountain areas of Turkey, Syria and Lebanon, often in snow-melt turf.

Another well-known species in cultivation, and propagated for decades

Ornithogalum lanceolatum, Claygate



Ornithogalum balansae, in cultivation

by Dutch nurserymen, is *O. balansae* which is named in honour of its original collector Benjamin Balansa. He was a French botanist who travelled widely in Turkey during the 1850s and 60s and discovered his ornithogalum in eastern Anatolia in the Pontus mountains at Cimil above Rize. It is a really choice plant, compact, hardy, early-flowering and easily cultivated. In this case the few glossy green leaves are overtopped by wide racemes of white flowers that have only a small amount of green on the outside. This too does well in an open sunny situation in free-draining soil, although it does need plenty of moisture while it is in active growth through the spring.

A few species have short racemes of erect flowers, each on a very short pedicel giving the whole inflorescence a dense and very different aspect from the corymbose type that is the norm. Noteworthy here is O. bungei, the name telling us that it was first noted by Alexander von Bunge on one of his many travels through Asia. This he collected in northern Iran at 'Siarat and Asterabad' and it is quite widespread through the Caspian region in the Talysh and Elburz mountains of Azerbaijan and Iran from fairly low altitudes up to 2500 metres. Both Paul Furse and Per Wendelbo brought back living material of this and more recently I obtained it through Norman Stevens



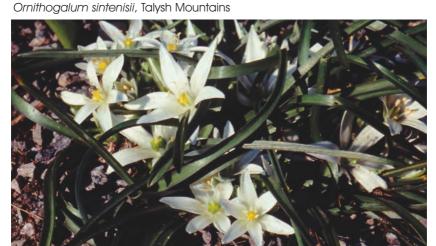
Ornithogalum bungei



Ornithogalum sigmoideum: late flowering stage with prominent swelling at the pedicel base; inset - in full bloom; Claygate

and also saw it in the collection of Janis Rukšans. If Janis can grow it in Latvia, it is hardy!

Some of the most appealing species are those with near-stemless 'heads' (corymbs) of flowers and narrow, silvery-green foliage, some of them having leaves with a white stripe along the centre. With these, the taxonomy is difficult and is probably in need of a careful study and overhaul. A good example is *O. sigmoideum (O. sibthorpii, O. nanum)* which inhabits open sunny sites in short turf and stony places over a wide area from the Balkans to the Caucasus and Iran. This is one of the delights of spring days on warm grassy hillsides in Greece but can also be found in stony places and light woodland over a wide altitude range from sea level to well over 2000 metres. It takes well to cultivation and stays nicely compact in exposed positions and although it seeds around it does so with tolerable enthusiasm. The specific epithet gives a clue here about the fruiting stage as the pedicels take on a roughly S-shape, bending sharply down at the base to press against the soil, then up again at the tip to present the capsule in







Ornithogalum exscapum, Serbia, Trebinje - Grab (L) and Crete, Rhodopu (R)

an upright position. The original specimen of this was collected in northern Turkey near Gümsane by Paul Sintenis so it is appropriate to mention the species that is named after him, O. sintenisii, which occurs in the Caspian region. This is not unlike O. sigmoideum and is of a similar stature but its narrow leaves often lie attractively coiled on the ground. It has proved to be a good plant for scree conditions. I have known and grown it since the early 1960s when material was introduced from Iran by the BSBE (Bowles Scholarship Botanical Expedition) team and separately by both Paul Furse and Jim Archibald. Paul Sintenis first collected it at Bandar-e Gaz but it is widespread through the northern Iranian mountains. It too has deflexed pedicels in fruit but perhaps not as dramatically so. Other similar species to O. sigmoideum are O. exscapum from Mediterranean Europe and O. refractum, a widespread species in south-eastern Europe as far east as the Crimea and Caucasia. Both are nicely compact and with usefully descriptive epithets: exscapum – with no stem, and refractum – with reflexed pedicels. The last of these differs from the other two in having a solid bulb rather than a conventional one of concentric scales. It also produces many bulbils so can be a little too enthusiastic with its offspring.

I have a particular liking for *O. oligophyllum*, which translates into 'sparsely-leaved' as it usually has only two grey-green leaves per bulb. The flowers are carried in a short, loose raceme on a stem up to fifteen cm tall, then in fruit it is one of those unusual species whose pedicels become floppy, allowing the capsules to dangle loosely before dehiscing. In the *Flora of Turkey* treatment of the genus, *O. balansae* is regarded as a synonym of *O. oligophyllum* but it seems to me that the two are 'good' easily distinguishable species. The latter has a more westerly distribution than *O. balansae*, in western Turkey and northern Greece. I have encountered it in several locations in both regions and it grows reasonably well in cultivation. Although *Flora Iranica* includes both these species and cites a distribution of western Iran for *O. oligophyllum*, I doubt



Ornithogalum oligophyllum, Turkey, Ulu Dag

that this is a correct identification as the fruiting pedicels are described as erect-spreading.

Not many of the 'thogs' have hairy leaves but this is a noticeable feature of *O. fimbriatum* whose silvery downward-pointing hairs give the foliage an overall grey-green appearance. Plants answering to this description are widely distributed in south-eastern Europe to Turkey and Crimea but it seems likely that there could be several distinct species lurking here under this umbrella name, lumped loosely together because of the hairy leaves. The inflorescence is a corymbose raceme some ten to fifteen cm tall of up to ten of the usual starry white flowers, a pleasingly compact species well

Ornithogalum fimbriatum: a variant (L), and at Manavgat-Aksek (R), Turkey





worth cultivating. A population of a hairy-leaved one I've encountered in north-western Turkey has only one leaf per bulb but is otherwise similar, so is this just a local variant or perhaps a distinct species? Further investigations are required. The same can be said for *O. armeniacum*, which closely resembles *O. fimbriatum* in having pubescent leaves, and the two have almost certainly been much confused. One of the key differences is alleged to be the absence of a white stripe on the upper side of the leaf (*O. fimbriatum*) or presence of such a feature (*O. armeniacum*): not an easy character to determine with leaves as narrow as one to one and a half mm in the case of the latter, usually slightly wider for *O. fimbriatum*. Although the epithet suggests an eastern Turkey or Caucasian distribution, *O. armeniacum* is thought to occur from northern Greece and Macedonia and widely through Turkey to the Crimea.

Very few of the northern hemisphere ornithogalums have flowers lacking the green exterior but there is a somewhat unusual species, *O. unifolium*, from the Iberian Peninsula, that has a short dense spike of all-white flowers. This has only one glabrous leaf to each bulb but is merely of interest rather than of notable garden value. The related *O. concinnum* is like a larger version with more flowers and leaves to each plant but is still scarcely a striking plant and I have found them both to be rather tender.

For naturalizing in grassy areas there are several possibilities, for example O. nutans with its pendent silvery-green flowers and O. umbellatum,





rather coarse but useful for carrying on the display in rough grass after other early 'bulbs' such as the crocuses and *Fritillaria meleagris* have departed. Neither of these should be allowed into the more orderly parts of the garden.

The Taller Species

The taller Eurasian species have their garden value too, having long racemes of flowers, although at between fifty and a hundred cm tall are perhaps not of such interest for rock or alpine gardeners. These include species such as the green-flowered 'Bath Asparagus', O. pyrenaicum, the very common widespread Mediterranean O. narbonense, the rather graceful O. arcuatum with its long upwardcurving pedicels and - one of the showiest - the robust Armenian O. magnum. The Spanish O. reverchonii breaks with the norm and has long spikes of funnel-shaped flowers that



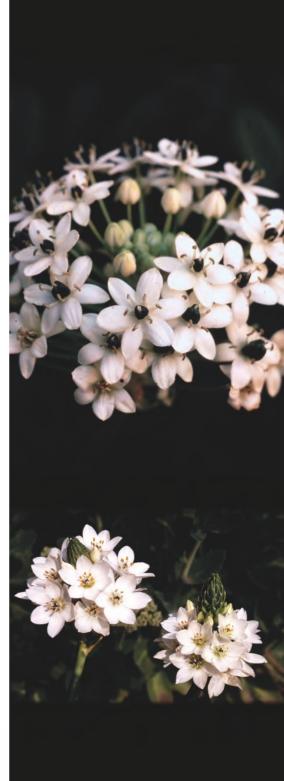
Ornithogalum reverchonii, Claygate Ornithogalum arabicum



are pure white without a green exterior. Undoubtedly the most striking is O. arabicum, a rather tender Mediterranean species with flattish corymbs of large milky white flowers, each with a blackish ovary in the centre. This is a reminder that South Africa also has a considerable number of species. One of these is not unlike O. arabicum: it is O. saundersiae. smaller than the former but also with a blackish 'eye' (again, the ovary) in the flower. It is also one of the hardier, coming from eastern Southern Africa and therefore a summer grower, so that its bulbs are dormant during winter and better able to survive than those of the South West Cape which are winter growers. Other 'southern' species are O. thyrsoides, the Chincherinchee, with its longlasting glistening white pyramidal racemes, a superb cut flower. One that bucks the trend of the 'all-white' label is the colourful orange O. dubium and its hybrids but these two species are really only for mild frost-free gardens, or should be lifted for the winter and stored dry.

There are many more species through tropical eastern and southern Africa but these are mostly not at all frost hardy and fall outside the scope of this article. They now include the familiar tall *Galtonia* species that have been merged with *Ornithogalum* by Peter Goldblatt and John Manning, so the four species

Ornithogalum thyrsoides, Claygate



formerly comprising that genus have become *O. candicans, O. princeps, O. regale* and *O. viridiflorum*. These do survive through some winters here in Surrey but I prefer to play safe and either grow them in pots to be moved into the garage when dormant in winter or lift the bulbs and dry them for storage. It has been suggested that the distinctive *Albuca* species should also 'disappear' into *Ornithogalum,* but John Manning and Peter Goldblatt have retained them in *Albuca* in their excellent *Color Encyclopedia of Cape Bulbs* (2002). They are instantly recognisable in having the three inner tepals held close together forming a tube around the stamens while the

Albuca aurea



outer three spread outwards. Most are fairly tall and some of them really striking, especially those with bright yellow flowers such as *A. shawii* and *A. aurea*, although too tender for outdoor cultivation. The small *A. humilis* from the Drakensberg is grown to some extent as an alpine-house plant by bulb enthusiasts and this is near-hardy although I have not succeeded with it outside.

All in all I would say don't write off the 'thogs' as their glistening white flowers can be a delight in mid to late spring sunshine, and most of them do behave themselves.

Ornithogalum (Galtonia) regalis





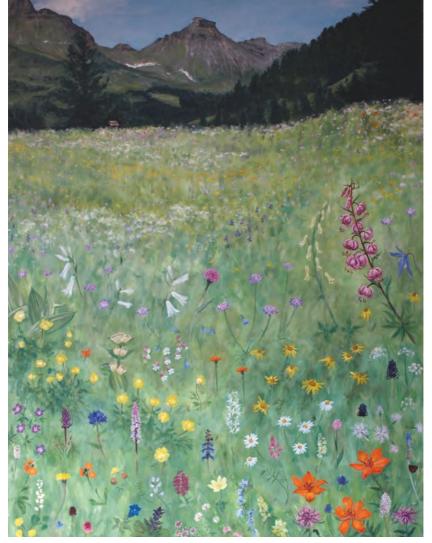
Anne Gilchrist, at Ben Lawers

and somewhat timid contributing to these pages. Nevertheless, I hope that by describing my experiences with plants and showing you my consequent expressions of them in paint, I might bring you a different perspective. A core aim in my work, and what drives me on, is to express my very personal experiences with the natural world, which may have a deeper and more meditative reach than, for instance, photography and, I hope, communicate my own careful considerations.

As well as always having expressed myself as a visual artist, I've also had a lifelong interest in the natural world. My work tends to put the two together. I always look around wherever I go, and I take notebook and sketchpad out with me, taking notes and drawing. Drawing is a fabulous way to look really closely at a subject. One notices in detail things like exact petal shape, how leaves are attached, veining on a leaf and so on, as well as variations within a species; people have different faces and so do plants! In this way, rather than looking for something in Nature to satisfy my personal agenda, I notice what Nature actually shows me and I find the specific, the unique and the surprising. All this has been happening for me in the Ben Lawers National Nature Reserve, where I've been getting to know this extraordinarily rich area in more and more detail.

Above: Dwarf Willow, detail Facing: Tumbling Array, 90 cm x 120 cr





Meadow Flowers of the Dolomites, 90 cm x 120 cm

However, I would like to start with a painting (a commission) I did of a meadow in the Italian Dolomites. I visited there in 2010 and was in botanical heaven. My brief was to paint a particular mountain in the background with a foreground containing as many different flowers as possible. I think I managed fifty-five species, with a few extra butterflies thrown in – you may have fun spotting them all. Even though this picture is formulaic (not wholly natural) and more schematic than photographic, it in no way exaggerates the remarkable abundance and variety of plants to be found in the Dolomites. It made a stark contrast to our landscape back home, our relatively barren (albeit lower) grass-covered mountains created by centuries of over-grazing by sheep, or our patchwork of finely managed



Small World, detail, Moss Campion

grouse heather, created for use by the few to make money for the few. The wonderful natural forests of the Dolomites also contrasted with our paucity of such a habitat. So many of our trees were felled around about the middle of the twentieth century and earlier, and so many non-native mono-cultures were planted in the second half of that century.

I'd always been aware of the status of Ben Lawers as a Mecca for botanists but it was only after this trip to the Dolomites that I went up for the first time to see what it could offer. I was immediately smitten, my first love up there being a patch of Moss Campion, bright and closely packed with flowers, visited by bumblebees. After observing the bees going about their business for a happy twenty minutes or so, I suddenly noticed the strange fronds of Moonwort poking through the Campion flowers and then, a bit further along, the compact green cushion of Cyphel (Minuartia sedoides) hugging the ground, leading me in turn to some very elegant Mossy Saxifrage (Saxifraga bryoides) ... and on and on ... Ben Lawers rapidly became an obsession and I began to visit as often as possible. A couple of years later I became Artist in Residence at the Big Shed, Tombreck, at the foot of Ben Lawers on the shore of Loch Tay. I stayed there for nine months, enabling this passion to grow, and I gained much knowledge and understanding of the place, its plants and its history.

The gloomy and somewhat dull picture of our Scottish landscape is changing. A huge groundswell of organisations, landowners and ordinary people is involved. Scottish Natural Heritage, the National Trust for Scotland (NTS), the Woodland Trust and our designated National Parks are all creating big changes, as well as outstanding landowners such as those at Aigas, and exciting projects like the Knapdale beavers. I discovered this on the lower slopes of Tarmachan last summer. The NTS has been creating



Our Native Mountain Meadow, oil on board, 90 cm x 120 cm

'exclosures', sections of land fenced in to exclude sheep and deer for many decades in the Ben Lawers National Nature Reserve, with plantings of montane willows and birches. Our native vegetation in all its natural variety and abundance is beginning to emerge at last.

Our Native Mountain Meadow is very much related to my Dolomite painting, except it is more specific and more local. When the senior ranger at Ben Lawers saw the picture she said, "Oh yes, I know that bit of old fencing!" I was very pleased about this, as this picture shows all the flowers and ferns that I found on only one afternoon in one small area. It is our native version of an alpine meadow. As well as the forty five species I found, I put two Mountain Ringlet butterflies into the painting. I wanted to



Purple Saxifrage, oil on board, 90 cm x 120 cm

recreate something of the wonder I felt that day - a sort of wow - as well as a feeling that this is only a section of land, a part of more, and more to come.

The first year I was up on Ben Lawers, I missed out on the Purple Saxifrage (Saxifraga oppositifolia). I just couldn't imagine anything flowering up there so early in the snow and ice. The second year I was high up on Tarmachan, admiring and photographing the magnificent cascading icicles that had formed on the rocks. And from my somewhat precarious position, I suddenly saw them everywhere – outrageous beauties, defying the snow.

The following year (2013) I was ready, and spent a marvellous week in sun, snow and ice with them. Weirdly, I was wearing sunglasses and sun-





Above and below:Purple Saxifrage, detail

cream while I sketched. As I was working, appreciating the stunning beauty and variety of these plants, I noticed their deep scarlet bud-coverings and their exquisitely fashioned tiny leaves, each tipped with a white dot of chalk, stacked up on each other like neat origami. And their variety! – something



that hardly ever comes up in an identification book – the colours ranging from light pink to deep purple. And their habit – from compact cushions to long strings, creeping over rock or through the mosses. These mosses, their deep burning orange a fabulous contrast to the zinging purplish pinks of petal, and the red of their stamen-stalks sent my colour-receptors into overdrive. Feeling none too comfortable wedged in a snow gully with freezing hands, looking up at the Purple Saxifrages' secret sunny cliff, I felt nevertheless privileged to be sharing their world and gaining an insight into their reality. They would be long gone to seed by the time the living became easy.

It took me some time to find the tiny Alpine Gentian (*Gentiana nivalis*). But, as with most things in nature, once you've experienced finding a tricky subject you become attuned and it gets easier. Flowering time can be a blow; plants adhere not to the Julian calendar but to the vagaries of opportunity. One week after the little blighters had closed for the last time in 2012, I met an eager couple on their way up, looking for the Alpine Gentians. They were sure they were at the right time but I had to break it to them they were too late; I was the lucky one that year. I had read in the books of their habit of opening in sunshine and closing in cloud and I

Alpine Gentian, oil on board





Closed Alpine Gentian, detail

had the privilege of actually seeing this. I had found them in full bloom and when the cloud closed in I was amazed to see it happen so quickly – the flowers folded up within a minute. It gave me a real sense of their being sentient. Responding so fast to the change was as close as I could think of a plant talking out loud.

These gentians thrive on misadventure. Being annuals they only have a short summer after the snow has gone – as late as May – to grow and set seed. They live on unstable ledges which keep crumbling away and they are nibbled at and pulled out by sheep or obliterated by falling rocks. I once noticed a very sharp, guillotine-shaped shard of rock stuck into the soil next to the gentians where it hadn't been the previous day. Made my blood run cold! I wanted to convey this precarious life in my painting. I even put in some muddy footprints from a hiker's boot in the picture for good measure. The Alpine Gentian needs the disturbed ground and it even needs the sheep; with the changing sun and the cloud it has found a perfect balance between all of these. I wanted to show how tiny blue perfection thrives because of the chaos in its world.

In Spangled Ledges I wanted to show the precipitous nature of the grassy slopes near the summit of Ben Lawers. The soft greens are spangled with jewels – Alpine Forget-me-not (Myosotis alpestris), Cyphel, Moss Campion (Silene acaulis), Mountain Pansy (Viola lutea), Alpine Mouse-ear (Cerastium alpinum) are all set like colours in a tapestry, joined by Rock Whitlowgrass (Draba norvegica), Moschatel (Adoxa moschatellina), Mossy Saxifrage (Saxifraga hypnoides), Wood Sorrel (Oxalis articulata) and Buttercup (Ranunculus repens). The hiker's boot is in the picture because it was there also – though what walker would lose a boot up on the tops, and did they then have to walk down the mountain in their socks?! When



Spangled Ledges, detail

I was sketching plants I took off



my own boots and clambered round in my bare feet with the well-intentioned idea that it would cause less disturbance to the ground. This may have been the case and the short turf felt lovely on the soles of my feet. However I could only take short bursts of this, as in high June my feet nearly dropped off with cold after about twenty minutes! The depiction of the boot in such a seemingly pristine and rarified place plays its part in this picture in reminding us of mankind's omnipresence and influence

Spangled Ledges, oil on board, 90 cm x 120 cm





Rarified, 90 cm x 120 cm

Rarified, detail

absolutely everywhere. The visitor numbers to Ben Lawers are huge, and we all, myself included of course, should be aware of our footprints.

The day represented in *Rarified* was a baking hot summer's day on the slabby rocks under the summit of Ben Lawers. There were Tortoiseshell butterflies everywhere, fresh and stunning, enjoying the nectar of the thyme and sunning themselves on the hot rocks. It was one of those magical days when all goes right, and more. The plants were displaying themselves like jewels in a shop window: Alpine Fleabane (*Erigeron borealis*), Yellow Mountain Saxifrage (*Saxifraga aizoides*), Hairy Stonecrop (*Sedum villosum*), Alpine Willowherb (*Epilobium anagallidifolium*), Alpine Gentian, Alpine Saxifrage (*Saxifraga nivalis*), and Thyme (*Thymus polytrichus*). So I laid them out in the painting as I found them on the rocks, interspersed with the butterflies, a display of precious items.

Rarified, detail, Alpine Fleabane and Yellow Mountain Saxifrage



It's always very tempting, when going botanizing, to keep one's pencil hovering over a checklist and one's nose in an identification book. I met one such person, a fellow plant-hunter, who kept asking me if I 'had' such and such a specimen yet, as if the plants were to be sought out for personal acquisition. Through drawing and painting I hope to convey the importance of the whole environment in which a plant lives and, working hard at the meditative power of a painting, to give a true representation of and reflection on a place, rather than a more illustrative cataloguing of specimens.

The *Tumbling Array* of plants on the south-west crags below Ben Lawers summit was a subject to return to in 2013. A wonderful mix of Moss Campion, Alpine Forget-me-not, Alpine Cinquefoil (*Potentilla crantzii*), Mountain Pansy, Alpine Lady's Mantle (*Alchemilla glabra*), Rock Whitlowgrass, Roseroot (*Sedum roseum*), Rock Speedwell (*Veronica fruticans*) and amazing coloured mosses all grow on the perilous, churning and dangerous rocks (to say nothing of the *Sibbaldia* and Alpine Gentian growing in the turf below), and contribute to a place of endless wonder and inspiration.

It is here that I saw so clearly the importance of looking around a plant at its habitat, its immediate neighbours, its community of nearby plants, the precise colours of the rocks or mosses where it grows, and sometimes also the birds or butterflies that were there on a particular day. The composition and balance of the painting and how they express what I see are not achieved lightly but must look natural. I have to rely on my years of practice to be relaxed enough to execute all this without being too formal or too tight. Relaxed, but never sloppy – for me there's no point in painting a picture if it's only half there!

It's worth saying that only by revisiting a place many times does one get to really know it, and yet another visit usually throws up something new.





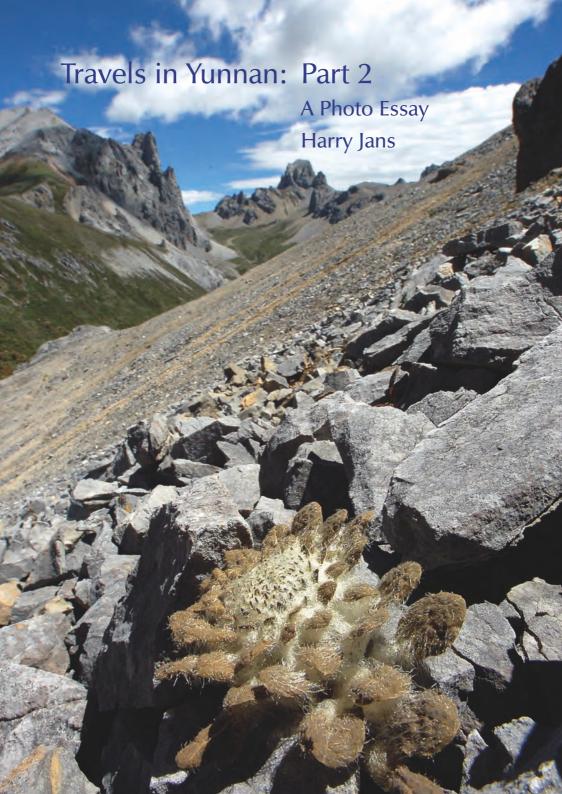
This is what I like to do for my work, and I feel so lucky to be able to do this in such a special place.

I end with a painting I've done of our Scottish Primrose (*Primula scotica*), which, although not a mountain plant, grows in a place full of surprises. I was amazed to find my mountain friends Yellow Mountain Saxifrage, Moss Campion, Mountain Everlasting and Roseroot growing there next to the sea on the Durness Peninsula. As amazed as I was to find my common old woodland friends Moschatel and Wood Sorrel growing just under the summit of Ben Lawers in the elevated company of Alpine Forget-me-not, Alpine Gentian and Mountain Pansy. And so ... you leave me on the misty cliff-top of Faraid Head, meditating on the different places that plants are found, and on the proper definition of a 'mountain' plant.

Anne Gilchrist is an artist based in Edinburgh and the shores of Loch Tay. Her website is: www.annegilchrist.co.uk





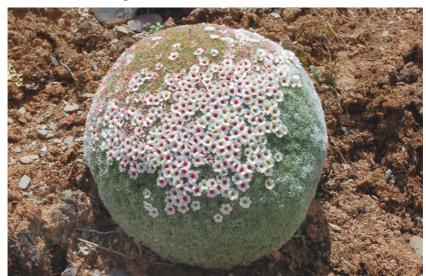




Fritillaria delavayi (Da Xue Shan, 4515 m): a species you can find in stable screes, always above 3800 m. The flower colour may be grey-green to sometimes a dirty yellow. It forms relatively small plants up to 20 cm with single large flowers. Other plants growing in the same habitat are *Rheum nobile*, *Lilium lophophorum* and *Corydalis benecincta*.

Facing: **Soroseris glomerata** (syn. *R. rosularis*) (Da Xue Shan, 4500 m): a Sino-Himalayan genus with 8 species, of which 6 are found in China. They grow mainly on screes and form nice hairy rosettes. Collected seed germinates well, but it is very difficult to keep it alive for a long period.

Androsace tapete (Da Xue Shan, 4650 m): I saw this particular plant in the picture for the first time in October 1994 during the ACE seed collecting trip. Fifteen years later I saw the same plant again and it hadn't grown much bigger. It is one of the most beautiful androsaces in the wild and really covered with white flowers. Unfortunately, it does not flower in cultivation. Androsace selago, which looks very similar to A. tapete, flowers in cultivation, although with smaller flowers.





Corydalis benecincta (Da Xue Shan, 4515 m): this is not always an easy plant to spot when out of flower, because the leaves are almost the same colour as the stones of the scree they grow in. It is one of the most beautiful *Corydalis* with large deep pink flowers. It is not often seen in cultivation because, if not grown at 4400 m, it becomes leggy.

Facing: *Corydalis hamata* (Da Xue Shan, 4350 m): one the most striking *Corydalis* of China with its deep yellow flowers and a purple marking at the top. It grows in damp rocky places up to 25 cm tall.

Hemilophia sessilifolia (Da Xue Shan, 4350 m): this genus contains only four species restricted to the South-West of China and therefore it is not well known. It grows on screes in large numbers. The flowers are almost stemless.







This page: *Primula boreio-calliantha* (Da Xue Shan, 4350 m): a large primula that first was named *Primula hongshanensis*. It is growing here under large rhododendrons in half shade. The flowers have a large ring of farina in their centres.

Facing: *Androsace delavayi* (Dechen, Bai Ma Shan, 4350 m): in Yunnan most of these plants have pink flowers and are seldom white. It can form cushions up to 30 cm across. It is not an easy plant in cultivation.









Corydalis melanochlora (Dechen, Bai Ma Shan, 4550 m): this corydalis has its home on large screes and is able to "walk along" as the screes go down. The colour combination can vary from white-ice blue to a striking electric blue, violet or pink. For me, next to Corydalis hamata, this is one of the most beautiful of all Corydalis. However, in cultivation it grows out of character.

Facing top: *Iris barbatula* (Zhongdian Plateau, 3275 m): only if the sun is out will you be able to enjoy this wonderful iris. It grows in grassy meadows up to 20 cm tall. The colours vary from pale blue to deep purple. It is one of the best small irises in China.

Facing below: *Thermopsis smithiana* (Dechen, Bai Ma Shan, 4350 m): Less known then its almost black cousin, *T. barbata*, the yellow *T. smithiana* may be found in large quantities around Zhongdian. This species has its home on the rocky slopes of the Bai Ma Shan. It can form large mats but usually the plants reach no more than 30 cm in diameter. It is not at all an easy plant in cultivation.



Above: *Spongiocarpella yunnanensis* (Dechen, Bai Ma Shan, 4550 m): *Spongiocarpella* is a genus with only five species in China, mostly with yellow flowers, although *S. paucifoliolata* has deep pink flowers. They all form compact mats and are very slow growing. They grow mainly in limestone crevices or in stable rocky slopes. The seedpods are also very attractive. Unfortunately, it is seldom available to grow but if you can get it, try to grow it in tufa rock.



Astragalus yunnanensis (Dechen, Bai Ma Shan, 4400 m): this is not a tall plant at 10 to 15 cm and does not form big plants. With its striking colours it is one of the best of over 280 Astragalus in China. It always grows above 3500 m in rocky slopes or short grassy meadows, often growing with various androsaces and miniature primulas.



Facing: *Paraquilegia microphylla* (Dechen, Bai Ma Shan, 4550 m): one of the best alpines ever introduced into cultivation. Here it is growing on the limestone cliffs at the Bai Ma Shan, the best plants I have seen during all my trips in China. Personally, I have the best results growing it outside in large tufa blocks and the tufa wall. In the wild it is very variable in colour from deep pink to deep violet and blue and sometimes even pure white.



Lilium euxanthum (Dechen, Bai Ma Shan, 4400 m): a very rare but beautiful lily. So far I have only seen it growing between *Bergenia purpurascens* on the higher slopes of the Bai Ma Shan. It grows up to 15 cm with one flower on each stem. During the ACE in 1994, seed was collected and I do hope someone was successful in growing it?

Facing above: *Chionocharis hookeri* (Dechen, Bai Ma Shan, 4650 m): the only member of the genus. The 'King of the Himalaya' just as the *Eritrichium nanum* is the 'King of the Alps'. You will not see it growing below 4500 m. It is found on windswept places in granitic stony slopes. Cushions may grow up to 40 cm but are often smaller. The few plants that have been cultivated did not survive more then one year - a shame, as this is a very attractive plant with its hairy grey-green rosettes and blue forget-me-not flowers.

Facing below: *Diapensia purpurea* (Dechen, Bai Ma Shan, 4500 m): of the four *Diapensia* species in China this is the most frequently seen. The colour varies from pale to deep pink and if you are lucky you may even find white forms on the Bai Ma Shan. It makes very hard and large cushions, sometimes more than a metre across. The shiny oblong leaves are dark green in summer but turn to dark copper in the autumn. I have grown it over ten years on a soft peat block, but it never flowered.





Chionocharis hookeri

Facing: Oxygraphis glacialis (Dechen, Bai Ma Shan, 4650 m): this is very close to our endemic Ranunculus ficaria but is much nicer although unfortunately more difficult to cultivate. It never grows taller then 6 cm and the leaves are ovate to elliptic, deep green and sometimes almost black. It is a very widespread species in most of the higher mountains in the Himalaya. At first the large flowers are fully yellow but as they age the centres (styles) turn to brown.

Allium chrysanthum (Dechen, Bai Ma Shan, 4650 m): I am sure this would be a much wanted *Allium* were it available. A very compact plant up to ten cm tall, I show it here in a bright yellow form but sometimes there are also purple-red forms. This species may be found on rocky slopes, growing together with *Oxygraphis glacialis*.











The Yangtze Bend near Benzilan (2150 m): a spectacular view over the Yangtze river near the border of the provinces of Yunnan and Sichuan. With a length of 6300 km, the river is the third longest of the world.

Arenaria polytrichoides (Dechen, Bai Ma Shan, 4500 m): a real cushion plant! It can form very hard cushions up to 50 cm. Its habitats are stony and grassy slopes, screes and moraines. When in full flower the whole cushion is covered in tiny, stalkless white flowers.

Miao Woman

In the province of Yunnan are 25 minorities. One of them is the Miao who can be divided in other sub-groups with their own specific dress codes.





Solms-laubachia retropilosa (Dechen, Bai Ma Shan, 4500 m): one of the most attractive crucifers in China. There are ten species of which one was just described in 2005. All grow on rocky slopes or in limestone crevices. A very attractive plant in full flower - but not at all easy to cultivate.

Facing: Androsace tapete 🛸

Daphne calcicola (Xiao Xue Shan, 3850 m): a beautiful plant with deep yellow flowers. The most compact forms grow in limestone crevices. Several clones are in cultivation but are never as compact as in the wild. Like the better known European daphnes, the flowers are very fragrant.





Japanese Native Alpine Plants in Kyoto Botanic Garden

Liz Cole

n May 2014 I travelled to Kyoto in Japan to photograph the beautiful gardens in the season when the irises, azaleas and water lilies would be in flower. While in the city I made a couple of visits to the Kyoto Botanic Garden. On a previous visit in autumn 2009 I had discovered that the garden had no area of alpine plants. This time I found while exploring the conservatory that an air-conditioned room had been landscaped and planted up with alpine plants, most of them Japanese natives. Keeping the room cool for the plants is essential in the climate of Kyoto. By the end of May on my second visit to the alpine room the outside temperature was 32℃. By July a friend in Kyoto told me it had reached 36℃.

The Kyoto Botanic Garden opened in 1924 but was closed in 1946 and did not reopen in its new form until 1961. It grows twelve thousand plant species and has around a hundred and twenty thousand plants. The garden includes Bamboo, *Paeonia, Iris* and *Camellia* areas. There is also a European style garden and a rose garden. There are special exhibitions throughout the year and while I was there I was able to see an excellent display of Bonsai.

The conservatory in which the alpine room can be found was completed in 1992; the design resembles the shape of Kinkaku-ji temple, the famous Golden Pavilion, and also echoes the silhouette of Kyoto's northern mountains. It displays four and a half thousand plant species. The garden and conservatory have displays and exhibitions in every season and are well worth a visit if you are in Kyoto. Many of the plants have labels with Latin names. As a bonus, the entry fee to both garden and conservatory works out at under £2.50.

In this brief photo essay I give you a description of some of the wonderful plants I found growing in the alpine room.

Lilium dauricum var. alpinum has beautiful orange flowers on a plant only fifteen to twenty cm tall. I have read that it is difficult to grow from seed







Potentilla megalantha, the Large-flowered Cinquefoil, is a deciduous perennial with lemon yellow flowers and is hardy to -15°C

Dianthus superbus ssp. alpestris is an herbaceous perennial that grows at altitudes to 2400 metres









From 'The Last Place on Earth' To Scotland

Martin Carter*

* This article is published with grateful thanks to Martin's wife Cynthia and to Chris Chadwell, who first brought it to our attention: Martin was an original member of the Himalayan Plant Association and a shareholder in many of Chris Chadwell's expeditions; he gardened on the banks of Loch Ard, within sight of Ben Lomond. Martin died in 2012. Photos: Chris Chadwell

am the warden of a youth hostel in Scotland and, oddly enough, my interest in Himalayan plants stems from this. From 1905 to 1948, Ardross House was a private residence complete with ornamental gardens, kitchen garden, glasshouses and orchard. Little remained of this magnificence in 1984 other than a superb *Abies procera* (Noble Fir), a *Sequoiadendron giganteum* (Giant Redwood) and a stand of *Rhododendron arboreum* (the Tree Rhododendron, the national flower of Nepal) fighting the masses of *R. ponticum*. In spring of that year I decided to tackle the jungle in front of the hostel and perhaps lay out a token flower bed. I then knew literally nothing about flowers; I had grown vegetables for about five years but that was the extent of my gardening knowledge. The winter of that year saw several areas cleared of bramble and bracken and made ready for planting, but with what? I soon realised that there must be more than the offerings from garden centres and in any case, limited funds precluded the purchase of more than a very few plants.

Growing from seed seemed to be the answer but the brightly coloured plants illustrated in the seed catalogues held curiously little appeal; more research was needed. The assistant on our travelling library van provided several volumes in response to a request for 'gardening books'. Two showed me the way forward: Royton Heath's *Collectors' Alpines* and *The Propagation of Alpines* by Lawrence Hills. A natural progression then followed, with membership of the Scottish Rock Garden Club, the Alpine Garden Society and the American Rock Garden Society. Several truths dawned on me, the most important being that species and natural hybrids are the only plants to grow and that a garden environment is not required by plants – but only a suitable habitat.

The ability to provide suitable habitat was the reason my interest first turned to Himalayan species, all the experts stating that they grow well in Scotland. I had discovered that growing from seed was to me the most fascinating part of gardening, with wild-collected seed being infinitely more interesting than that from cultivated sources. All this led me finally to Chris Chadwell. In the March 1987 Alpine Garden Society Bulletin I noticed an advert offering shares in a seed collecting expedition to 'The

Last Place on Earth' – Zanskar. The prospectus from Chris arrived promptly in response to my request. I found it initially somewhat startling, never having heard of the majority of the species mentioned. However, it all seemed very worthwhile and I duly applied for a share.

In December 1987 received thirty-nine packets of seed. How to deal with them was the first problem. I tried several methods with, as expected, varying results. By January 1989, thirty-one had shown some germination, and by January 1990 only six pots showed no life. All seeds were sown in peat based compost as I have had very limited success using John Innes mixtures (however, latest fears about the destruction of peat bogs suggests some rethinking may be necessary). All sowings were in plastic pots, 6 to 7.7 cm in diameter, and covered with fine grit. Seedlings were pricked out as germination occurred. I did not find it necessary to wait for the true leaves to appear and, given careful handling, the tiniest plants seemed to grow on happily. With two exceptions, all collections that germinated showed no problems in the early stages. Arnebia euchroma (CC 226) grew well at first but when five cm high the stem became hard and wiry, the plant dying shortly thereafter. Saxifraga

Meconopsis aculeata forms



hirculus (CC 286) simply did not grow, although it germinated freely. The species was amended to *Saxifraga hirculoides* by Chris Chadwell but then subsequently recognised by the Indian botanist Brij Mohan Wadwha as a new species, *Saxifraga chadwellii*.

The first to flower was Nepeta floccosa (CC 232). Only two seeds germinated but both produced plants that bloomed in the same summer. Despite close attention these plants rotted at the base of the stem, probably from too generous watering. Nonetheless, to have flowered plants from Zanskar here in Scotland was immensely pleasing. Since that first success I brought numerous species to flowering size both in the glasshouse and out of doors. Few looked as if they would persist, though in some cases viable seed was set. A brief list of these successes may be of interest to members.

Tanacetum (now Ajania) aff. gracile (CC 217) flowered in 1988 and 1989. Several plants of Codonopsis clematidea (CC 236) flowered with no smell! My one plant of Gentiana sp. (CC 241) produced four tiny white flowers only a few mm in diameter but was nonetheless superb. I have found Meconopsis aculeata easy to germinate but harder to grow on, but one plant came to the end of flowering in late June after producing nearly forty flowers. My favourite from the Zanskar collections is Oxytropis humifusa (CC 279). Two plants remained out of eight raised and grown indoors, one being considerably darker in colour than the other but looking like the illustration in Stainton's supplement to Flowers of the Himalaya. This may seem self-evident but it pleases me.

Primula minutissima



Ranunculus brotherusii (CC 297) is easy to grow but not to flower, and the only plant to do so died before all the buds had opened. Saxifraga stenophylla (CC 298) was a huge success and in the glasshouse I had four plants ready to bloom. One was in a twenty cm pot, rapidly filled with runners and fresh rosettes. The flowers, if not spectacular, are of a most intense yellow. Again, hardly a stunner and not a garden filler, Draba oreades (CC 319) flowers all summer and self-seeds in all adjacent pots. Then we come to Waldheimia tomentosa (CC 320). This plant, I suppose, sorts out the enthusiast from the gardener. The gardeners I showed it to simply could not understand my enthusiasm over growing a large daisy. Flowering well in 1989, my one plant did not survive the following wet winter, despite protection. A further twelve species grew well but did not flower, the most notable being Ephedra aff. intermedia (CC 224), Waldheimia glabra (CC 251) and Primula minutissima (CC 283).

I offer a few further cultivation points that my fellow members may find useful. In the glasshouse I tried various composts from pure Levington to nearly all grit, with John Innes No. 2 and leaf mould added in varying proportions. Given attention to watering, I found that there was little difference in rates of growth and general health — no magic mixtures from me! Two points I think most important are: keep the compost quite moist at all times and protect the plants from strong sunlight through glass — inattention to shading soon kills off young seedlings. Out of doors my problems have been winter wet, slugs and school groups. This last problem should not affect most people.





Newcastle, 11th October 2014

armth and sunshine in July, followed by September's prolonged and pleasant 'Indian Summer', helped to produce a large number of very high quality exhibits at this, the last national show of the year. Forty five exhibitors from Bedford to Stirling staged 450 plants covering the whole spectrum from the world's high mountains and woodlands. In the flowering plants it was cyclamen, gentians and crocus, and among the many foliage plants it was those from New Zealand - especially the celmisias with their silver and golden foliage, that took pride of place.

The major trophy of the show, the Ponteland bowl, was won by Don Peace from Yarm, whose many winning entries included several stunning pots of cyclamen and crocus, particularly *Cyclamen hederifolium*, *Crocus tournefortii* (Certificate of Merit) and *Crocus banaticus*, all of which are excellent late summer and autumn garden plants. *C. tournefortii* is significant in that its flowers, once open, remain open, making it a good show plant for those glum and cool conditions that often characterize plants shown in October. Don also showed a splendid potful of the Turkish white-flowered *Crocus mathewii*, all the more attractive for its deep blue to purple central blotch and its contrasting red style branches.

The most meritorious award, the Farrer medal for the best plant in the show, went to Rannveig & Bob Wallis from Carmarthen for an extremely floriferous, two decades old plant of *Cyclamen graecum* ssp. *anatolicum*, a species that demands levels of warmth and sunshine difficult to provide in Scotland and the cooler northern counties of England.

Facing: Crocus banaticus `Snowdrift'; Crocus gilanicus; Crocus mathewii Crocus tournefortii (Don Peace)







Crocus banaticus

The autumn shows are often the most nail-biting for the exhibitors as they urge plants to open those glorious flowers that were wide open on the sunny Friday beforehand. Gentians and crocuses are two such reluctant examples but they did well in the end. The South-African Oxalis massoniana was another slow to open but did so in time for judging, and displayed a glorious splash of orange and yellow flowers, urged on by its owner Tim Lever's muttering of strange and wonderful incantations. Another lovely exhibit with a Certificate of Merit, in full flower from its crack of dawn arrival, and usually seen as such much earlier in the year, was Ian Kidman's superb example

Oxalis massoniana



Crocus banaticus 'Snowdrift'

of *Viola spathulata*. With mauve flowers and a deep purple centre, this Iranian violet is still rather rare in cultivation and I gather it prefers a *Dionysia* cultivation technique.

Foliage plants are another essential part of this autumn show; in particular, many New Zealand plants were displayed. In the alpine and sub-alpine zones of that country grow the sixty or so species of the genus Celmisia, the remaining seven or so species growing in Tasmania and the mountains of south-eastern Australia. This alpine genus possibly demonstrates the widest variation of form and foliage in any of the mountain genera. Illustrating this, a fine range of Celmisia species was exhibited from a number of local



Viola spathulata





Crocus mathewii Celmisia semicordata var. aurigans





Myrteola nummularia Astragalus utahensis







Previous pages: Allium thunbergii 'Album' and Allium thunbergii 🔌



growers. It included the long bold silvery leaves of *C. semicordata*, the glistening golden leaves of *C. semicordata* ssp. aurigans, *C. traversii* with sea-green foliage and thick fawn and brown indumentum, intensely narrow silver leaves of the compact *C. spedeni* and the two compact cushion forms *C. sessiliflora* and *C. argentea*. This genus grows well in the gardens of the cooler and windier northern parts of the British Isles. However, it was not a celmisia that won the Millennium trophy for the best foliage plant but a fine mat of the grey-leaved North-American *Astragalus utahensis* exhibited by Peter Farkasch.

For many visitors and exhibitors the exhibit that attracted most attention was the educational display titled 'Alpine Plant Hunters' by Mala Janes. Mala was given the highest award available - a large Gold award. The display covered boards across the whole width of the hall and detailed, using maps, photographs and text, the activities of over forty of the most significant past and present alpine plant hunters who have introduced to horticulture the huge range of mountain and woodland plants that we now enjoy and take for granted in our gardens.

Alan Furness (Photos: Peter Maguire)





Nairn, 26th April 2014

his was our third year of being a full SRGC show. Despite the trepidation of upgrading from our local show to a full show, a small group of dedicated members, under the capable guidance of Carol & David Shaw, yet again managed to put on an event of which we could be proud. Once more, our benches were well-filled with exhibitors from as far afield as the Borders, Edinburgh, Glasgow, and Berriedale in Caithness. Section 2 was especially noteworthy, with strong support from the local area and in fact there were more entries here than in Section 1; many of the plants would not have been out of place in that section. Our efforts to persuade some of the local members to exhibit was clearly worthwhile – I just hope it will be easier next year!

On entering the hall, the visitor was hit with the impression of a sea of different colours. Closer examination revealed that this was provided by a host of plants in prime condition. It was good to see the range of exhibited varieties and the common ones were as well represented as the scarce and more choice delights.

As always, the vagaries of the season determined which plants were in tip-top condition. This year, lewisias were nothing short of spectacular, with entries in both sections attracting considerable attention and ensuring that any on the sales stands were quickly snapped up.

Entries in both six-pan classes were excellent. The winners (Carole & lan Bainbridge in Section 1 and Francis & Margaret Higgins in Section 2) contrived between them to display plants in eleven genera! This was no mean feat, in my opinion.







Coronilla minima

The Bainbridges also took the red sticker in a hotly contested three-pan class. One of their exhibits, a superb pan of *Narcissus x cazorlanus*, also won them the Askival trophy for the best pan of bulbs in the show. San Sutherland's entry was runner-up in this class, but included a lovely pan of *Primula rusbyi*, which took the Culloden cup for the best primula in show.

Carol & David Shaw staged some very nice specimens, claiming as usual that they merely wanted to ensure that the benches were well-filled – well-filled with high quality plants, that is! Notable amongst their exhibits was a

good range of interesting and well-grown arisaemas.

Stan da Prato would be sadly missed if he didn't attend shows with his 'Tardis' full of quality plants. As usual, quite a few of these won him red stickers and it was nice to see amongst them a wide range of both common and unusual plants. I am not sure 'common' is necessarily accurate when the superb condition of some of these plants is taken into consideration. His Coprosma and Coronilla minima attracted much attention, as did Clematis x cartmannii 'Pixie', comprehensively covered in flowers. Most notable amongst his entries was a large pan of Andromeda polifolia 'Blue Lagoon'. It won him the Grouse trophy (a new award this year for the best ericaceous plant in show) and, most deservedly, the Forrest medal for the best plant in show. This was quite some achievement considering the other contenders for the medal and the amount of time the judges took in reaching their decision.

Section 2, as is becoming usual at the Highland show, was very well contested, with entries in every class. Numbers of entries for its twenty classes totalled more than for the sixty seven classes in Section 1. As usual, many of

the plants would have looked perfectly at home in Section I.

Olive Bryers has been exhibiting and enjoying considerable success for many years. That continued this year. Amongst her winning entries was a spectacular specimen of *Iberis sempervirens*, absolutely covered in flowers, that had been dug up from her garden and potted up just a few days earlier. A near enough flawless specimen of *Celmisia coriacea* attracted considerable attention, as did a *Lewisia* that won Olive the Dunbarney salver for the best plant in Section 2.

Another of the Highland Group stalwarts is Tina Finch. Her six entries in Section 2 yielded five firsts and a second – quite an achievement by anyone's standards. Amongst her winners were a superb *Thuya* that won the dwarf conifer class, *Silene acaulis* 'Francis', a lovely *Phyllodoce empetriformis* and an impressive pan of *Iris suaveolens* that spent the evening before the show on the living room window sill in the hope that the warmth would encourage a few more flowers to open.

Francis & Margaret Higgins came down from Berriefield to exhibit for the second time – I hope this is a rut into which they are now firmly stuck. As well as a scattering of coloured stickers in Section 1, they achieved the greatest number of red stickers in section 2, which won them the George Roslyn-Shirras trophy for most points in that section. Their entries covered a very wide range of plants. They beat off three other worthwhile entries in the six small pan class and their well-flowered *Pleione* won them the Weir shield for the best plant entered by a member of the Highland and Moray groups.

We are keen to encourage participation by local gardeners, who are not (yet) group or SRGC members. Section 5 is for them and this year there were thirty-four entries. The classes for cut daffodils and tulips were especially well supported. Hamish Mackintosh took the award for the best plant in the section with a particularly fine *Primula vulgaris* 'Drumcliffe'.

The Nairn Community Centre is an excellent venue for the show, with good access and a welcoming and particularly helpful staff. Local members work hard to provide a smoothly-run show and a warm welcome and they assist in a variety of roles – setting up, manning the plant stall, selling raffle tickets and so forth. The Nairn Amateur Athletics Club does a good job in providing refreshments. We hope to welcome even more members from other areas in the future.

Thanks are owed to all our members who worked so hard to make the show such a success, to Ardfearn and Rumbling Bridge Nurseries for their lovely sales tables, and to all who visited the show from near and far. We very much hope to see you amongst the visitors in 2015.

John Owen

Primula vulgaris











Allium crispum
Anemone multifida
Androsace studiosorum 'Chumbyi'
Androsace robusta ssp. robusta

Glasgow, 3rd May 2014

he many factors that influence the success of any show converged to produce yet another successful display at our show on 3rd May. Exhibitors from far and wide filled the benches with an impressive display of colour and a diverse range of plants. Some 450 pots were placed, including 25 pans of *Lewisia* and 15 pans of *Fritillaria*. The show benches were enhanced by the trade stands displays and the plant sale table.

Cyril Lafong continued to add to his Forrest Medal count with an impressive pan of Cypripedium 'Ursel'. This, a compact and slow growing hybrid of the beautiful high elevation Chinese Cypripedium fasciolatum and giant-flowered Chinese Cypripedium henryi. The result is a forty cm tall plant with large creamy-yellow flowers. This pan stood out as a premier exhibit on the bench and won Cyril the Charles Simpson memorial trophy for the best orchid in the show. Continuing with Cyril's successes, he was awarded the Diamond Jubilee Class A for six pans of rock plant that included a superb pan of Ramonda









Arisaema sikokianum Arisaema triphyllum Astragalus utahensis Calceolaria 'Walter Shrimpton'









nathaliae. The crisp quality of this plant stood out and it gained the 75th anniversary prize for best small pan in show. Cyril was also presented with the Henry Archibald rose bowl for 1st in class 2, three large pans rock plant, and the William Buchanan cup for first in class 3, three pans new, rare or difficult. Corydalis rupestris stood out in this exhibit; a chasmophyte or cliff dweller from Iran, Baluchistan and Afghanistan, it held tightly compact, short spurred butter yellow flowers above finely dissected glaucous foliage. C. rupestris is reminiscent of Corydalis wilsonii but is smaller in stature and in a different taxonomic subgroup. Cyril's list of awards was completed with a Certificate of Merit for his Daphne calcicola 'Napa Hai', a Chinese species with sulphur yellow flowers and dense habit.

Fine specimens of Lewisia tweedyi, Saxifraga pubescens and Daphne gemmata x calcicola helped Tommy Anderson to win the William Buchanan rose bowl for first in class 1, six large pans rock plant.

The Diamond Jubilee class B award for six pans rock plant (small) was awarded to John & Clare Dower; amongst other delights, they included a well-









Campanula tridentata Cypripedium 'Paul' Cypripedium 'Ursel' Cytisus ardoinoi – dwarf

Fritillaria affinis 'Sunray' Erigeron vagus Fritillaria liliacea Fritillaria pontica var. substipelata









Globularia valentina Helichrysum pagophilum Junellia sp. nova Lachenalia latimerae

flowered pan of the Cretan endemic Anchusa caespitosa. They were awarded a Certificate of Merit for their miniature rock garden exhibit which was a delight to see. This established trough showed skill and many elements of rock gardening by matching size and form of the plants to the limited available display space.

Sue Simpson was awarded Bronze medal and the James Wilson trophy for the most points in Section 11. Her exhibits included a most impressive and well flowered of Androsace 'Chris Crawford Chadwell'. The challenge cup went to Stan da Prato for collecting the most points in Section 1, with the Don Stead prize for the most points in bulb classes. Not for the first time, Stan awarded the Edward Darling memorial trophy for first in class 4, three pans Rhododendron. His winning combination here were some well-flowered pans of dwarf hybrid Rhododendron 'Enzian', R. 'Swift' (R. mekongense x R.ludlowii) and R. 'Ginny Gee' (Rhododendron keiskei x R. racemosum).

The Ian Donald Memorial Trophy for the best Scottish Native Plant exhibited went to Tom Green for a fine plant of *Vaccinium vitis-idaea*, the









Lewisia tweedyi Muscari 'Ocean Magic' Paeonia obovata Pinguicula grandiflora









Cowberry or Lingonberry. Barry Winter presented the best primula in show and took the Joan Stead prize for his pan of *Primula x variabilis*. Also known as False Oxlip, this is a hybrid between the native Cowslip (*Primula veris*) and the Primrose (*Primula vulgaris*). The AGS Ulster group quaich for the best bulb in show was presented to George Young for a superb pan of *Fritillaria liliacea*.

Certificates of Merit were also awarded to Peter Hood for Lamium armenum, Cliff Booker for Lewisia cotyledon and Steve McFarlane for his Trillium grandiflorum 'Flore Pleno'.

plants deserve Many mention and only limited space prevents their inclusion here but any bench produces old favourites and complete delicate The newcomers. endemic Primula scotica. flowered Tropaeolum tricolor (for the name alone). Bukiniczia cabulica (formerly Dictyolimon macrorrhabdos or even Aeoniopsis cabulica), Meconopsis x cookei (M. punicea x M. quintuplinervia) and the lovely yellow Primula forrestii all caught the eye.



Tetraneuris scaposa Saxifraga pubescens ssp. iratiana Rhododendron 'Wee Bee' Rhododendron 'Himmelberg'









Ramonda nathaliae Pleione aurita Tristagma nivale Meconopsis x hibernica 'Ivory Poppy'

Discussion Weekend 3rd – 5th October 2014

e have found that many delegates to the Grantown-on-Spey Discussion Weekends choose to take a leisurely drive through the beautiful Scottish Highlands to arrive at the Grant Arms Hotel on Thursday evening. Because of this we now set up the show hall on Thursday afternoon so that these delegates may take show plants from their cars and leave them in the cool of the hall to start staging at leisure on Friday morning. Although the hall was set up in similar style to the previous year, quite early on Friday the organisers had to halt staging so that tables could be moved and a further row installed! Almost all exhibits had been staged by Friday dinner time and the show eventually featured sixteen exhibitors with most classes having two or more entries.

Colour was primarily provided by a mix of blue and white gentians, pink and white cyclamen, mauve crocuses and colchicum, all nicely balanced by a range of foliage plants and shrubs. Ian McNaughton treated us to a display of his gentian cultivars, sino-ornata forms but with short and tidy stems, and quite rightly was awarded the Peel trophy for them. In the Cyclamen classes Roma Fiddes provided fine quality and was awarded the Jim Lever memorial trophy for her excellent C. rohlfsianum although she was run a close race by Mala Janes and her C. hederifolium. One thing that I noticed about all the cyclamen exhibitors was the way that they (and I) scurried around just before judging, collecting handfuls of fallen petals; even after these ministrations the plants still carried a mass of blooms.

Great discussion followed the award of the Forrest Medal to Carole & Ian Bainbridge's Shortia uniflora 'Grandiflora'. We had to explain to the southern delegates that, unlike the AGS, the Forrest medal is awarded to 'the most meritorious plant in the show' regardless of flower power. Amongst the other foliage plants were three shrubs of Coprosma ('Evening Glow', 'Lemon and Lime' and 'Pacific Sunset') brought in by Stan da Prato. These had amazing green-brown-yellow leaves that looked as if they had been waxed or oiled – indeed I just had to touch them to see if they were wet or not: they were 'not'. Had there been an award for the heaviest pots it would probably have gone to Lionel Clarkson with his two cushion plants; he was told quite emphatically that it was the responsibility of the exhibitor to carry plants into the hall!

This was a Discussion Weekend – so was anything happening outwith the show hall? Just next door Tim Lever, John Amand and Ali Sutherland were beavering away keeping their trade stand stock looking tidy as plants were being swept away by eager buyers and Glassford Sprunt had a huge smile on his face as he reduced his stock of labels for sale.

Facing: Shortia uniflora 'Grandiflora' (Photo: Peter Maguire) 🌞



On Friday evening we traditionally have a bulb exchange where delegates donate and buy bulbs; at the end of the evening left-over bulbs are taken for to the club plant stall for sale. This year we started off with six tables piled up with bulbs and the last packet was sold after exactly thirty minutes! I have never experienced this pace before.

Of course, the main element of the discussion weekend is the lectures and delegates were well entertained by a string of excellent speakers from Poland, Scotland, England, Wales, Canada and the United States. After John Amand's insight into commercial bulb growing, our own Ian Christie gave us an update on the world of *Meconopsis*. Kit Strange showed us the work going on in the Falkland Islands to conserve the native flora - including mine clearance. The amazing (truly) Vail Alpine Garden, covered in snow for most of the year, was described by Nicola Ripley before Arve Elvebakk took us to the Land of the Midnight Sun in the Tromsø Botanic Garden. From Poland, Michael Hoppel showed his American 'daisies' growing in crevice beds and troughs around his house. We then had Stephanie & David Ferguson describing their Calgary garden. At first I did not know what to make of this talk. It took garden design to a completely new level with much heavy excavation, import of clay and then sandy soil, followed by hundreds of tons of crevice-bed rocks. There is said to be only a thin line between madness and genius but the resultant plantings in the second half of the talk put the Fergusons firmly on the 'genius' side. I wondered what the neighbours thought during their hectic construction period! On Sunday afternoon the talks finished with a breath of fresh air as Tim Lever recounted his trek around and over the Arunchal Pradesh.

With all of these things happening it is easy to forget to mention the most important aspect of any Discussion Weekend – the delegates. The organisers may set up a framework for the event but the enthusiastic participation of the delegates determines its success. This year our delegates were splendid, really got into the spirit of things and seem all to have a great time. Many thanks to you all and we look forward to even more fun next October.

David Shaw

The Jim Lever trophy: best cyclamen in show



Fuchsia boliviana from the Seed Exchange

Raymond Wergan

he Seed Exchange is immensely valued by members for the wonderful plants it sends round the world. Some kind contributor will be delighted to know that I received their seeds of *Fuchsia boliviana* in the 2010/11 distribution. They germinated in 2012 to give me three very good plants that suddenly took off in 2014 and went from 30 cm to 2 metres! This species grows to 5 metres in the wild and I have no such high shed for overwintering – will I have a long-term problem, and will I have to lie it down? Probably not ...



Named after a 16th century German botanist, Leonard Fuchs, fuchsias grow in the cloudy forests of Central and South America, New Zealand, the West Indies and Tahiti. Of a woody nature, they vary from ground-hugging species through to shrubs, vines and small trees. The berries of some varieties can even be made into excellent jam. Fuchsias' popularity reached its zenith in Victorian England, when many botanists explored the world for new and exotic species. Around this time was an era of glass conservatories built to shelter frost-tender plants, inevitably followed by development of many fuchsia cultivars.

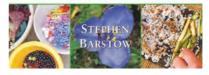
European botanists first identified *Fuchsia boliviana* in 1876 at high altitudes in Bolivia. The species is a medium evergreen shrub, growing to about 5 m tall, with a spreading and open habit. The leaves are large and hairy mid-green, with red petioles. It has large drooping corymbs, up to about 20 cm in late summer and autumn, of scarlet red flowers about 3 to 7 cm long. There is a white-flowering form 'Alba' with a white tube and scarlet petals. The fruits are small red-purple and edible. *F. boliviana* is widely grown in shade or part-shade in cooler, subtropical climates. Preferring light shade and about 40% humidity, it grows well indoors and may be pruned to suit any height. Plants need to be protected from direct sun and temperatures above 40°C. They are said to be hardy to about -4 °C if not prolonged. Propagation is by seed or cuttings. Given the right conditions, it is vigorous and may bloom almost every month! It has the virtue of resistance to Fuchsia mites.

Around The World in 80 Plants: An Edible Perennial Vegetable Adventure for Temperate Climates Stephen Barstow 304pp with colour photographs throughout ISBN: 978-1-85623-141-1 £19.95, Permanent Publications

he title of this book might be offputting to some readers, fearing yet another superficial glossy compilation from a writer with but a passing knowledge of the subject. Happily, the subtitle gives more hope for the content, which is indeed amply provided with a pleasing depth of information in many forms about these plants, both edible and ornamental, and referred to by the







author as 'edimentals'. In this chunky and well-illustrated paperback, over six main chapters with geographical headings, Stephen Barstow contrives to give us a most attractive mix of pure plant information, cultivation and propagation advice, insights into the medical uses of the plants and the foraging history in various indigenous cultures, some recipes and more besides – all delivered with a background of solid research, both practical and literary – and a light touch with some humour. Stephen is British and has lived in Norway for many years so his experiences with growing flowers and vegetables will resonate with many SRGC members who may be unaware that they are already growing many edimentals in their own gardens to enrich their diets and delight guests with innovative and attractive dishes. Some of the plants discussed may astound readers when they learn what might be added to their menus by foraging in their gardens. SRGC forum readers have been delighted in the past to be shown Stephen's way with a salad – many hundreds of ingredients all beautifully set off with dainty flowers – more than enough to set even a carnivore salivating!

This engaging book is perfect both for in-depth reading and occasional dipping by anyone keen on any kind of gardening in any situation in any temperate location. It has the added dimensions of foraging (wild and domestic!), permaculture, history and ethnobotany. Seldom do I find myself captivated by a book that provides interest on so many levels but this is one I recommend thoroughly. If you have any interest in plants and you eat on a regular basis – buy this book.

Margaret Young



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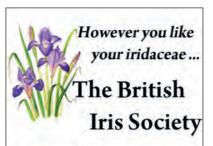
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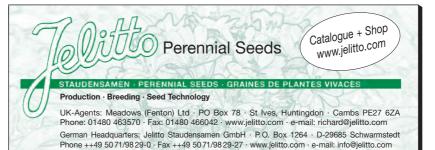
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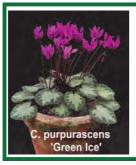








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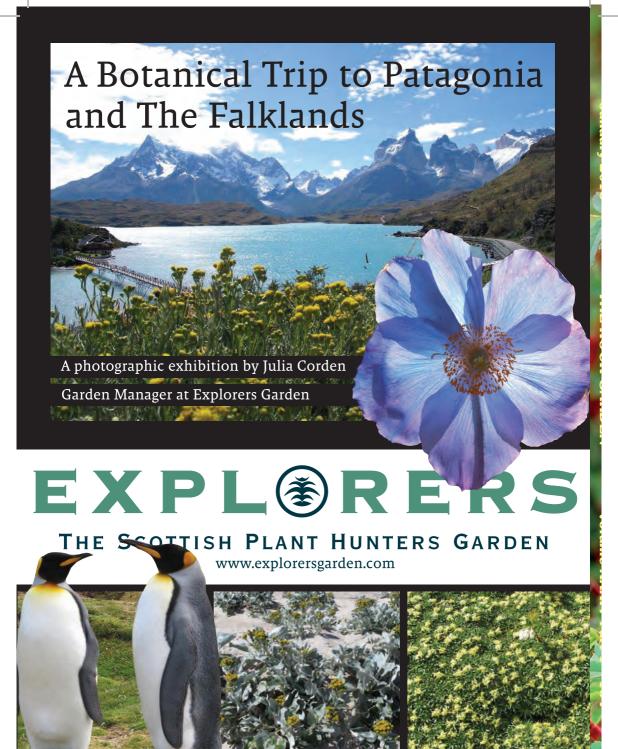












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