

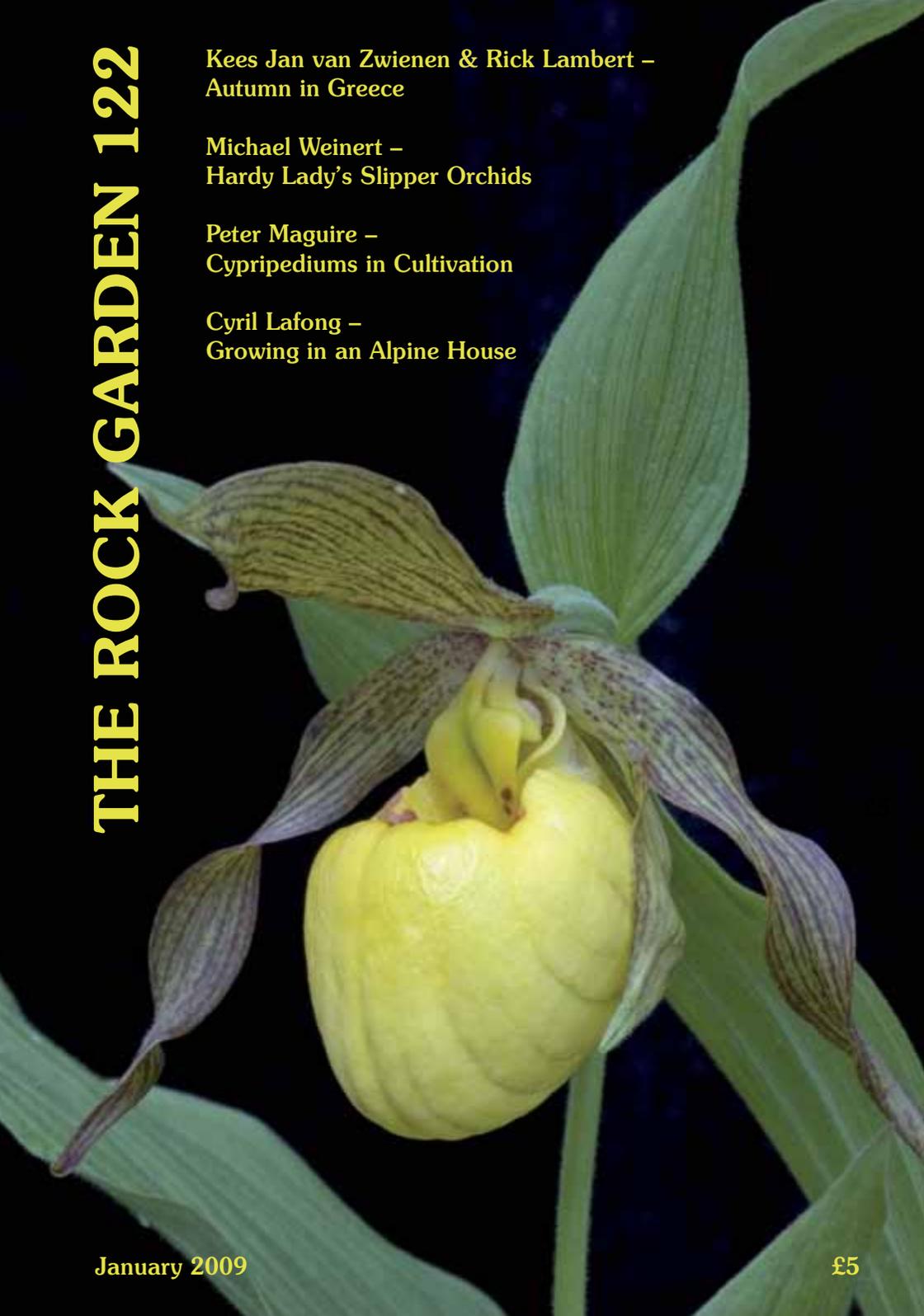
THE ROCK GARDEN 122

Kees Jan van Zwielen & Rick Lambert –
Autumn in Greece

Michael Weinert –
Hardy Lady's Slipper Orchids

Peter Maguire –
Cypripediums in Cultivation

Cyril Lafong –
Growing in an Alpine House



SUBSCRIPTIONS FROM 1st OCTOBER 2008

Members' subscriptions are payable annually on 15th October and provide membership of the SRGC until 30th September in the following year.

Subscription rates from 1st October 2008

	UK	OVERSEAS
Single annual membership	£14	£18
Junior membership <i>(Under 18 on 1st October 2008)</i>	£3	£7
Family membership <i>(Two adults and up to two children under 18 on 1st October 2008)</i>	£16.50	£21
<i>Each additional adult or child</i>	£3	£7

All payments to the Club must be in GB Pounds Sterling, although cash can be accepted in US dollars or Euro notes. Cheques should be made payable to "The Scottish Rock Garden Club" and must be drawn on a UK bank. Unfortunately, due to the high commission now charged, we are unable to accept cheques or credit card payments in US dollars or Euros. Where subscription payments are made by Visa or Mastercard they can only be accepted if all the following information is given – the number on the card, the name of the cardholder as shown on the card, the card expiry date and the cardholder's signature.

Visa or Mastercard subscription payments can also be made via the secure order form on the Club's website at www.srgc.org.uk

Applications for membership and all subscription payments or authorisations for payment from a Visa or Mastercard account should be sent to:

Graham Bunkall, 145 Stonehill Avenue, Birstall, Leicester, LE4 4JG, UK

New subscription rates planned for 2009

Although every effort is made to minimize costs, they continue to rise. The club therefore decided at its annual general meeting of November 8th 2008 to increase the annual subscription during the course of 2009. Allowing for inflation, the new subscription will be about the same as at the end of the last millennium. The support of members in this matter will be vital.

SRGC email - info@srgc.org.uk

The ROCK GARDEN

The Journal of the
Scottish Rock Garden Club
January 2009

Number 122

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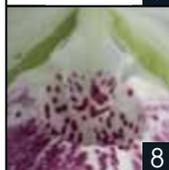
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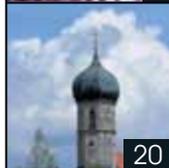
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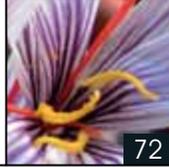
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The Editor welcomes articles, photographs and illustrations on any aspects of alpine and rock garden plants and their cultivation. Authors are encouraged to submit material electronically but articles may also be submitted in manuscript, preferably double spaced. Digital images are particularly welcome but 35 mm slides, high quality prints or drawings may also be submitted for professional scanning.

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

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Permission to use photographs or articles should be sought from the editor or the author.

Contact may also be made through the website: www.srgc.org.uk

The Cover

Issue 122 is replete with cyripediums: Michael Weinert enthuses about growing these beautiful plants in the upland climate of Bavaria; Peter Maguire shares his love of the genus from a more domestic perspective. Your editor – often spoilt for choice of delicately composed images from our authors – had little difficulty in picking out one of Peter’s images as the cover of this issue. The plant shown here is *Cypripedium parviflorum* var. *pubescens*, the Greater Yellow Lady’s Slipper. It is a reasonably common and widespread slipper orchid found across Canada and the United States. Despite its widespread occurrence it is nevertheless at risk from various pressures and is listed as threatened, endangered or vulnerable in several of the United States of America.

A commonplace nature is not inconsistent with great beauty, as Peter’s picture so vividly demonstrates. Nor, sadly, is beauty any shield against harm, as the fate of our Eurasian *Cypripedium calceolus* reveals. Once widely distributed through mainland Europe, west to Norway & the south-west Alps and eastwards across Asia to the Pacific coast, *C. calceolus*, the Lady’s Slipper Orchid, has become rare and threatened over much of its range. In Britain, it has always been local, formerly occurring in limestone districts of Derbyshire, Yorkshire, County Durham and Cumbria. Collected and exploited for its beauty, it is believed to remain as a native plant at only one locality in Yorkshire, where until recently only a single plant survived, but is now being increased by conservation efforts.

1 - Distribution of *Cypripedium parviflorum* var. *pubescens*

The plant is at risk within the red states



Stirling Group Discussion Weekend

2nd to 4th October 2009

After the spectacular discussion weekends of the past two years, the 2009 event will be held at the Macdonald Inchyra Grange Hotel, Polmont, just off the M9, Junction 5. With easy access by road, the hotel is close to Polmont railway station and Edinburgh Airport. Edinburgh, Falkirk and Stirling are within twenty minutes drive while Linlithgow Palace, the Falkirk Wheel, the Pineapple and other attractions are nearby.

The hotel is an extended country house on the landward side of Grangemouth. The facilities are modern and spacious and there is a heated pool for delegates to use. The registration area, lecture room, plant areas and restaurant are all on the ground floor. Accommodation is in double, twin or single rooms. A few rooms on the ground floor will be reserved for disabled delegates. There are lifts to the upper floors where there are more rooms for any delegates with disabilities.

A booking form is enclosed with the Secretary's Pages. Please indicate on the back of the booking form if you require special facilities. If you are sharing a room with someone, please indicate the person's name. We will help you to find a sharer if you need one. Extra nights are available on the Thursday and Sunday as per the booking form. Please return the form and booking fee to Liz Mills as soon as possible, but not later than 7th August 2009. After this date bookings will incur an extra charge of £10.

The registration secretary: Liz Mills,
Upper Kinneddar House, Saline, Fife KY12 9TR
Telephone 01383 852321
e-mail liz.saline@hotmail.co.uk



RESIDENT (per person)

Friday dinner – Sunday afternoon tea, double occupancy	£195
Friday dinner – Sunday afternoon tea, single occupancy	£255
Saturday morning – Sunday afternoon, double	£137
Saturday morning – Sunday afternoon, single	£167

NON-RESIDENT

Saturday - morning coffee, lunch, afternoon tea	£40
Saturday - morning coffee, lunch, afternoon tea, dinner	£66
Saturday - dinner	£26
Sunday - morning coffee, lunch, afternoon tea	£40

PROGRAMME

Friday 2nd October

16.00	Registration
16.00 - 17.30	Plant staging
19.45	President's Welcome Address
20.00	The Bulb Group Lecture: Magnus Lidén - <i>'Corydalis flora of China - a never-ending adventure, including the genus Dactylicapnos'</i>
21.30	Small Bulb Exchange

Saturday 3rd October

08.00	Registration
08.00 - 09.00	Plant staging
09.00	Optional activities
11.30	Martin Walsh - <i>'Plant hunting in the Himalayas'</i>
12.45	Show opens
14.00	The Harold Esslemont Lecture: Harry Jans - <i>'Alpine plants on the Equator: Ethiopia, Bale Mountains and Kenya, Mount Kenya'</i>
15.45	Magnus Lidén - <i>'Dionysia - plants in the wild & cultivation'</i>
16.15	Harry Jans - <i>'Highlights of ten times in China: a selection of the best - some ungrowable!'</i>
19.00	Dinner
21.00	Plant Auction

Sunday 4th October

08.30	Registration
09.30	The William Buchanan Lecture: Graham Nicholls - <i>'Alpine plants of the Western USA from the Rockies to Alaska'</i>
11.00	Ian Christie - <i>'Wild Patagonia'</i>
14.00	The John Duff Lecture: Jim Jermy - <i>'Eastern European Alps: plants in the wild and cultivation'</i>

Club Events at Brechin, Glendoick & RBGE

Members are invited to three events in the first half of 2009: a snowdrop walk, a visit to Glendoick Gardens and a snowdrop conference at the Royal Botanic Gardens Edinburgh. The two SRGC outside events have been optimistically timed to coincide with the best times for flowering. Further details of the two events may be obtained from Ian Christie on 01575 572977; Downfield, Westmuir, Kirriemuir, Angus, DD8 5LP; ianchristie@btconnect.com.

SRGC Snowdrop Walk 1st March

Last year's popular Snowdrop Walk at Brechin Castle will be repeated from 11.30 a.m. to 4.00 p.m. on the slightly later date of Sunday 1st March 2009. Tickets will be £25 per head, to include a superb lunch in the castle dining room - a wonderful opportunity to dine surrounded by interesting treasures, followed by a visit to Auldbar Den with its millions of *Galanthus nivalis* in a lovely natural setting that is complemented by the ruin of a small church built for the family who owned Auldbar many years ago. We will then visit Maulsden, a few miles away, where there are carpets of *Galanthus plicatus*, *Galanthus nivalis* and a wonderful mixture of singles, doubles & naturally occurring crosses between the two species. The delightful setting among mature beech trees by the River South Esk should add special atmosphere to the day.

The castle will be open only for the SRGC. Please remember that you will need good strong footwear and plenty of warm waterproof clothing for outside parts of the day, which is being run exclusively for SRGC members. Bookings and cheques payable to 'The Scottish Rock Garden Club' should be sent to Ian Christie at the above address.

SRGC Glendoick Visit 11th May

There will be a visit to Glendoick Gardens on Monday 11th May 2009. The price will be £17-50, to include an informative garden brochure and choice of lunch. The occasion will start at 10.30 a.m. in the Glendoick car park before moving on to the gardens, lunch and the garden centre. Bookings and cheques payable to 'The Scottish Rock Garden Club' should be sent to Ian Christie at the above address.

2 - *Galanthus* at Maulsden



Background to the SRGC Visits

Brechin Castle and the snowdrop collections have been described on pages 32 & 33 in Issue 120 of 'The Rock Garden'. The background to the development of Glendoick Gardens was described on pages 9 to 11 of issue 121. Further useful and colourful information on Glendoick is available at www.glendoick.com.

RBGE Snowdrop Conference 20th February

The Scottish Snowdrop Festival is taking place at Edinburgh, Dawyck and Logan Botanic Gardens during some of February and early March 2009. There will be opportunities to see carpets of *Galanthus*, together with other exotics, such as rhododendrons and camellias at Logan. At Edinburgh there will be chance to see '*More Snowdrops in the Frame*' - a set of historic snowdrop photographs and botanical illustrations from the RBGE Library and Archives.

A highlight of the festival will be the Snowdrop Conference. Join galanthophiles and enthusiasts for a special day devoted to snowdrops! The conference will be held at the Royal Botanic Garden Edinburgh on Friday 20 February 2009. There are several prominent speakers:

Programme

- 9.30 Registration, tea & coffee and sign-up for tours
- 10.10 Welcome by David Mitchell, indoor curator of RBGE
- 10.15 '*Autumn and Early Flowering Snowdrops*' - Rod Leeds
- 11.15 '*Yellow Snowdrops in Northumberland*' - Professor John Richards
- 12.15 Buffet lunch and 45 minute tours with experienced garden guides, looking at species and cultivars of *Galanthus* and other seasonal points of interest
- 2.00 '*Sir Herbert Maxwell - A View*' - Professor Peter Behan
- 2.40 '*The Life and Work of Samuel Arnott*' - Professor Michael Tooley, Professor Emeritus at the University of Kingston
- 3.15 Tea & coffee, exhibition of snowdrops by the Scottish Rock Garden Club, and plant sales

Up-to-date information on the conference and festival is at www.rbge.org.uk/whats-on/snowdrop-festival-2009. The conference fee of £35 includes registration fee, guided tour, buffet lunch and refreshments. Bookings and cheques payable to 'Royal Botanic Garden Edinburgh' should be sent to Rachel Brown at The Royal Botanic Gardens Edinburgh, 20a Inverleith Row Edinburgh, EH3 5LR; 0131 248 2844; email r.brown@rbge.org.uk.



Celebrating the 75th Anniversary of NARGS



Bobby J Ward

In 1934, Americans were listening to Paul Whiteman & Duke Ellington on the radio and watching Clark Cable & Claudette Colbert on the silver screen. In March of that year, 250 American garden enthusiasts gathered in the Commodore Hotel in New York City to formally launch the American Rock Garden Society. The organization grew to over 30 chapters by its 60th anniversary in 1994, the year it changed its name to the North American Rock Garden Society (NARGS) so as to recognize its large Canadian membership. Now with 35 chapters, the society celebrates its 75th anniversary this year.

My introduction to NARGS was in 1989 when I joined my local Piedmont Chapter, which was organizing its first winter study weekend. I attended that meeting and made the acquaintance of long-time NARGS members, many becoming fast friends over the years. Expert speakers there sparked my abiding interest in bulbs and hellebores.

I soon discovered that there is much diversity in gardening styles and plant interests among the NARGS members across North America, reaching from Alaska through the Canadian provinces to all corners of the US. Regional differences in climate, rainfall and temperature push gardeners to adapt. Verna Pratt in Alaska does not garden the same way that Ev Whittemore does in North Carolina. Todd Boland in Newfoundland may not fully appreciate the gardening challenges that Marion Jarvie faces in Ontario. Larry Thomas's admirable eleventh-floor terrace garden in New York City is far different in space and concept from the rock gardens at the University of British Columbia in Vancouver or the Denver Botanic Gardens.

I learned that dryland steppe plants of the Colorado inter-mountain basin won't last a minute in the warm nights, high humidity and summer heat of Delaware or Maryland without amended soil or raised beds. But we seldom give up if we fail the first time, often relying on pass-along information from more experienced rock gardeners. With better understanding of a plant's requirements, such as drainage, soil type, the right amount of shade (and a bit of a green thumb) we usually can have success.

NARGS members freely interchange the terms 'alpine plants' and 'rock garden plants' and we don't always agree on what constitutes a rock garden or how to define it. Thus, we grow plants in small troughs, rock

walls, raised beds, large mounds (berms), woodland settings, alpine meadows, or among natural rock formations. For the neophyte or would-be rock gardener, placing native plants in scale among local rock is often the first, tentative, beginning of 'rock gardening fever.'

North American rock gardeners can grow an extremely wide range of plants. Jane McGary, an Oregon bulb grower and editor of the NARGS publication, *The Rock Garden Quarterly*, notes that '*Rock garden plants comprise both evergreen and herbaceous perennials and shrubs, and bulbous plants; a few annuals or biennials may be admitted, such as alpine poppies. In addition to flowering plants, rock gardens may include dwarf conifers, small ferns, and small-scale, non-spreading ornamental grasses.*'

There are many styles of rock gardening practiced by NARGS members. Pam Harper, who gardens in coastal Virginia, has pointed out that the great woodland forests of North America have provided a backdrop for '*a distinctive American style (of rock gardening) that has evolved naturally in regions of rocky woods rich in wildflowers.*' These include spring ephemerals, such as *Trillium*, *Claytonia*, and *Erythronium*. Tom Stuart of New York says '*what North America has contributed more than methods is in the extension of plant materials.*' He notes the presence of cactus and mosses in NARGS members' rock gardens.

Our members often develop speciality gardens for their interests in a certain genus (such as *Penstemon*) or in bulbs (such as *Crocus*). Many rock gardeners grow plants from seed, planting dozens - even hundreds - of pots each year. Some foreign members join NARGS specifically to acquire seed from the annual seed list, which generally consists of about 4000 selections.

Panayoti Kelaidis of the Denver Botanic Gardens has said that North American rock gardening is a vibrant community of plant enthusiasts who share not only a complex and fascinating art, but also great bonds of friendship - '*It fosters enthusiasm and excellence and honors biodiversity and human diversity: a tall order indeed!*' North Carolina gardener Elizabeth Lawrence wrote that '*the cultivation of rock plants is the highest form of the art of gardening . . . Gardening is an art, and the rock garden is its purist form. All gardeners become rock gardeners if they garden long enough.*'

As NARGS heads towards its centenary, I look forward to its continual inspiration and support for its members in this most rewarding of pastimes.

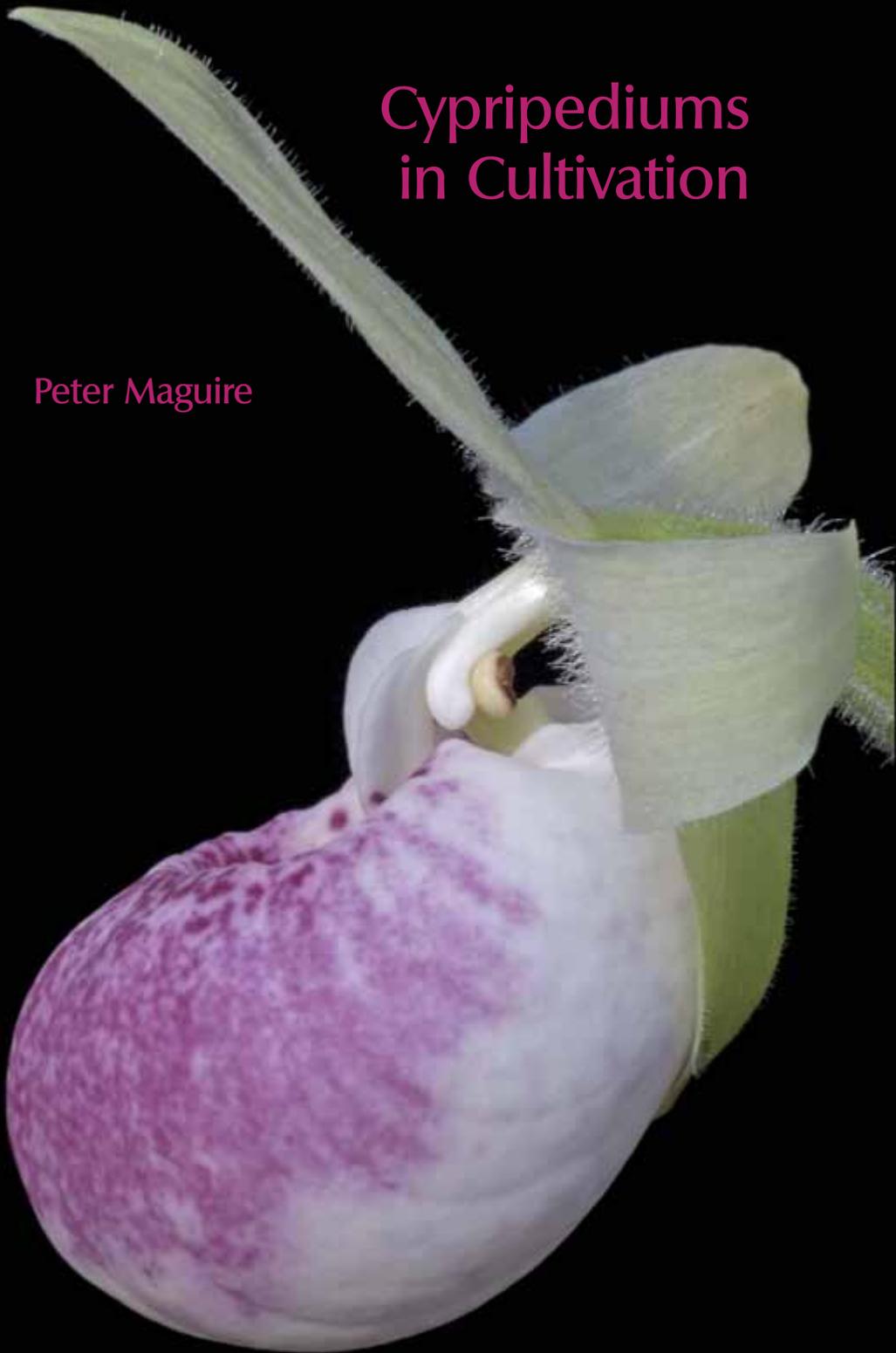
Editor's Note:

Bobby J Ward lives in Raleigh, North Carolina. He is a past president of NARGS and currently is its executive secretary.

To join NARGS, see the advertisement in this issue, page 122.

Cypripediums in Cultivation

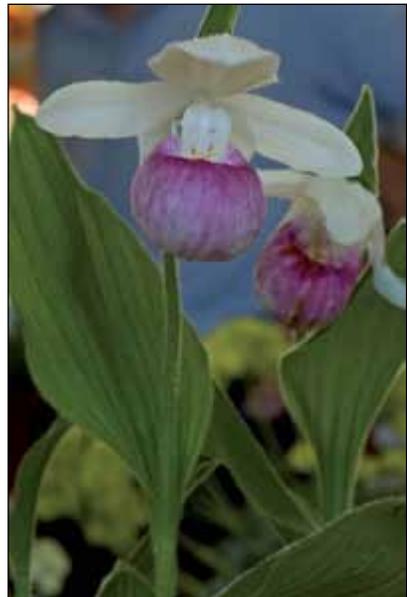
Peter Maguire



Cypripediums can be one of the most spectacular and satisfying groups of orchids to grow but their cultivation continues to be seen as difficult and I find that people are reluctant to attempt them, perhaps put off by their high retail price, coupled with doubts about the ethics of growing plants which have in the past been plundered wholesale from wild populations. Fortunately, this trade is vastly reduced: a recent report from Kew reports that just under 2% of reported global trade between 1998 and 2002 was of wild-collected plants. Trade in cypripediums is governed by CITES (Convention on International Trade in Endangered Species) regulations, which require certification to cross international boundaries. Exporters who offer CITES certification may be assumed to be offering cultivated stock, although ultimately the responsibility lies with the buyer. Bear in mind that nursery-grown plants will be healthy and easier to establish, and will have been selected from forms with good flower quality and vigour. For CITES purposes, the EEC counts as one country, so buying plants over the internet becomes feasible. Indeed, we can now buy deflasked seedlings directly in this way which – if you are patient - is a cheaper way of acquiring several plants; they will take four years and upwards to attain flowering size. When purchasing about 15 to 20 plants of the same species in



3 - *Cypripedium fasciolatum*



4 - *Cypripedium reginae*

5 - Opposite: *Cypripedium* 'Ulla Silkens'



6 - Linda Pickering's *Cypripedium* 'Gisela'

this manner, it makes sense to share the order and the cost with other growers, although it has to be said that 15 mature plants of *Cypripedium reginae*, for instance, would make a welcome addition to any garden!

Another factor helping the acceptance of cypripediums as plants in cultivation has been the emergence since the mid 1990s of many attractive hybrids, many new varieties being registered in recent years. These have been raised by growers such as Werner Frosch in Germany, Svante Malmgren in Sweden & Peter Corkhill in the UK, and are becoming more widely available from nurseries in the UK. As with many tropical orchids, it seems that geographically disparate species hybridize with relative ease. Second generation hybrids are beginning to be registered,

7 - Seedling



8 - A healthy root system





9 - Beware snails!



10 - Mature plant for repotting

with earlier hybrids cited as parents of many of the latest offerings. Whether we end up with the bi- and tri-generic hybrids that are seen in tropical greenhouses remains to be seen but - perhaps fortunately - there are no obvious candidates for this treatment.

Regarding cultivation, I claim to have had only moderate success to date. Perhaps it is best to describe how I approached it in the past, with my ideas on how it may be improved. As may be imagined, I am reluctant to try these plants in the open ground, given the high initial cost of purchase, so my experience has been with plants in pots and I'm sure that most growers are in a similar situation. I prefer to use 15 cm-deep plastic pots of the sort used in the UK to sell clematis; they have fairly large holes that give excellent drainage and the base of the pot may be covered with a small disc of weed control fabric to retain compost. During the summer I stand the pots on a sand bed in a fairly narrow passage between my alpine house and a high boundary garden wall, both of which run approximately north-south. This area is open to the South but is shaded by climbers on the wall and receives less than an hour of dappled sunlight at midday. The sand bed idea seems successful, helping to maintain humidity around the pots, and most plants fill the pots with roots. Although the odd root escapes into the sand it lifts easily with the pot at the end of the season. The siting of the sand bed is less successful and I believe some of the plants become slightly drawn because of the limited light. Linda Pickering's fine example of *Cyripedium* 'Gisela' at the AGS show in Harrogate in 2007, which

11 - Waiting for slug pellets and top dressing after repotting





12 - *Cypripedium formosanum*

subsequently won a Farrer medal at the East Cheshire show, shows how compact these plants can be when well grown. I suspect that they require more light than I have given them in the past and I have this last season relocated them to a sunnier spot, but with shading to prevent scorch.

The other requirement is a humid atmosphere, so the plants are misted automatically for ten minutes or so twice each day when they receive no direct light - currently mid-morning and late-afternoon. This also helps to keep the temperatures from rising too high in summer. Moisture in the sand bed helps keep the humidity high throughout the rest of the day and we are fortunate in having good quality mains water which allows this to be done. I place plants on the sand bed in spring when the likelihood of hard frosts has passed and I leave them there over the summer. I then bring them into the alpine house and under the bench when the foliage dies down, or perhaps earlier for questionably hardy species if there is risk of an early frost. The pots remain under the bench over winter, both before and after repotting, but are lightly dampened periodically to ensure that they do not dry out completely. These days we do not suffer severe frosts, having an urban garden in north-eastern England where -5°C would be unusual. Many of the species will take light frosting but, having begun by growing *Cypripedium*



13 - *Cypripedium calceolus*

formosanum - which does not take well to hard frosts, I treat all plants in the same manner so as to prevent losses.

Repotting is a task to do during dormancy, either in autumn when most plants become available in the nurseries and top growth has died down, or in early spring just as growth begins. In the past I repotted in spring but, as I seem to be in a minority, I am changing to autumn repotting. Nevertheless, the plants generally survived my previous regime and put out good root systems. My choice of compost necessitated annual repotting: it is based on organic materials such as bark, which I have used successfully with pleiones, but it breaks down over time and could induce rotting if the plants are left in it for too long. For those who like compost recipes, I currently use a mix of equal parts of chipped pine bark, composted bark, perlite, roughly chopped moss and leaf mould. The moss provides some water retention; it comes in bags for hanging baskets from our local garden centre and is harvested from conifer plantations so is probably sustainable. Whilst researching this article, it has become apparent that many successful growers are using completely different compost mixes - even pure pumice. I intend to move away from my bark-based compost for those plants which only slowly increased their number of growing points or for those whose root system does not seem



14 - *Cypripedium tibeticum*

in good health, showing a high proportion of pale new roots. However, the bark mix that I have used for several years has worked well with *Cypripedium formosanum* and what began as a single-nosed plant now regularly puts up six to ten flowers each season. Strangely, this compost has not been successful with *Cypripedium reginae*, a plant found in boggy areas in the wild. Although it might be expected to thrive in such conditions, it has been one of my few losses.

Most cypripediums in nature are found in areas of reasonably sharp drainage; my bark mix perhaps has promoted rotting in some cases, probably through water-logging from the moss component. The key to success seems to be adequate moisture during the growing season, combined with excellent drainage; this explains why these plants can be successfully grown in pure pumice, albeit with regular watering and feeding – essentially an almost hydroponic system. I don't have the courage to change to a pure pumice substrate, so my next step is to try four parts pumice to one part leaf mould on the plants which have not grown well; the leaf mould will tend to break down and provide regular feed over a season. One could try loam instead of the leaf mould but I am happy to continue repotting annually, because it allows assessment of the plants' progress. Unfortunately, I tend to forget to feed plants during



15 - *Cypripedium macranthos*

the growing season but ... the watering can be automated for those of us who are working during the day! It is very difficult to be prescriptive about compost mixes, as what works in one person's conditions will not necessarily work for others. As long as the basic principles of humid environment, cool summer temperatures, dryish winter rest and free-draining compost not too high in organic matter are followed, one may be reasonably sure of success.

When repotting, I take the plants out of the old pots and shake off all old compost so as to inspect the root system for problems before replacing in a well-cleaned pot with the growing point just at the compost surface. The compost is added lightly before settling it with a tap on the bench. As I have a problem with slugs and snails, I scatter a few slug pellets around the growing points before the top dressing is added and this reduces the chances of the growing point emerging with a ready-made hole spoiling the long-awaited flower. Top dressing with pine needles is often advocated as an ideal but, lacking a ready source, I use chipped bark instead. The pots are then drenched thoroughly – the water should virtually run straight through the pot – and stood on the sand bed for the summer. Ideally, the plants should be fed regularly but sparingly with a weak fertiliser; half strength inorganic liquid fertiliser is often cited

as a good choice. Slow release fertilisers should be avoided in the compost as they may lead to local concentrations of nutrients that suppress root development. Organic fertilisers too may be problematic, as the microbial activity needed to break them down can promote root rotting. Ideally, I aim to water once every two weeks with half strength (or less) tomato fertiliser but in reality this does not happen more than three or four times per season. The leaf mould in the compost makes up for this inattention so I will continue with its use and with the attendant annual repotting.

Pests are, essentially, the usual suspects. Slugs and snails are controlled chemically. I find it useful to water the sand bed with a liquid slug killer at the beginning of the season. This, I hope, gets rid of slugs and snails that spend the day under the pots where they are unlikely to be picked up by local wildlife if they expire. I also need to be vigilant

16 - Opposite: *Cypripedium Californicum*

17 - *C. parviflorum* var. *pubescens*







18 - Opposite: *Cypripedium formosanum* (detail)

throughout the season, sometimes using pellets on the surface of the pots, so pets and wildlife need to be kept away. I tend to be ruthless with aphids – a systemic insecticide spray at the first sign of trouble keeps them under control, for they are well known vectors of disease. I am not aware of any viral diseases of cypripediums spread by aphids but, as the only cure for viral problems is to destroy the plant, I take no chances. Otherwise, cypripediums seem trouble-free; vine weevils are a problem in the garden but so far they have not developed a taste for the roots.

Such is my approach to cypripedium cultivation. Outside of a burst of repotting activity, if you can automate the watering and



19 - *Cypripedium 'Gisela'*

either feed regularly or add leaf mould annually, the only other requirement is to enjoy the flowers when they arrive - and that certainly is not difficult! As proof, I have included a selection of portraits of various species and hybrids that I have taken at shows or with thanks for the kindness of other growers who allowed me take pictures of their plants when in flower.



20 - *Cypripedium kentuckiense*

21 - Opposite:
Cypripedium 'Aki Light'

Hardy Lady's Slipper Orchids for the Garden



Michael Weinert

Lady's Slipper orchids have always been highly regarded by garden enthusiasts as jewels for the shaded garden. Until recently only the sensitive species were available. But times have now changed! Ten years of growing terrestrial orchids as a hobby gave me the idea of propagating large numbers from promising Lady's Slipper hybrids for garden enthusiasts. I introduced vigorous and easy-to-grow *Cypripedium* hybrids to the market in 1997. Now, I am creating a selection of high-quality crosses that enables laymen to grow Lady's Slippers successfully in the garden.

Upper Bavaria offers a good climate for cypripediums – *Cypripedium calceolus* grows wild here in big clumps. My nursery lies 20 km north of the European Alps, not too far away from Munich, at an elevation of 700m and the main wind direction is westerly. We enjoy 1600 hours of sunshine every year; the climate is not dry and hot except for perhaps a few weeks when temperatures exceed 30°C. The annual rainfall is about 1200 mm - pretty well scattered throughout the year. There is snow from the end of December until March, usually about 30 cm deep although we have had one metre or more, sometimes with 30 to 60 cm falling in one night. The annual average temperature is 6°C to 7°C, with ranges from 0°C to -20°C in winter and 15°C to 30°C in summer.

22 - Snow in March



With this continental climate, the cypripedium growing season goes from the beginning of April to mid-September. The plants are grown outside in the harsh climate and are therefore totally hardy but it is not before three to five years in soil that they are fit for sale. That's why hobby gardeners can be sure of acquiring vigorous and healthy orchids that continue to grow without problems in their own gardens.

The Lady's Slipper hybrids are proof that not all cypripediums have to be delicate and expensive. My enthusiasm for offering exclusively cypripedium hybrids and no wild species is fourfold: these hybrids are absolutely hardy (at least to -20°C); they are not very demanding and are therefore much easier to grow in the garden; they invariably come from artificial propagation with the resulting advantage that they are healthy and strong plants that grow well; and they are considerably more vigorous. For example, three shoots of *Cypripedium* 'Gisela' planted in a garden near Munich produced 25 flowers after only five years, 152 flowers after eight and nearly 250 flowers after nine years!

Cypripedium hybrids may be grown in all areas where temperatures do not regularly exceed 30°C in summer and remain below 5°C for two to three months in winter. Temperatures below -20°C present no problem, given sufficient snow cover. No separate protection during winter is required - Lady's Slipper orchids are completely hardy. The planting site should be situated in semi-shade, without direct sun at midday; a very suitable place would be on the north side of a building. Most cypripediums are woodland plants and therefore prefer cool sites that do not become too dry and hot during summer. Places where ferns thrive are also suitable for Lady's Slipper orchids. Don't plant cypripediums close to trees or big shrubs because their roots are effective competition for water and nutrients.

Lady's Slipper orchids need a well-aerated, crumbly soil structure (10 cm deep) and medium moisture conditions. Dense and loamy soils

23 - Spring blooms in my village



should be improved with mineral materials such as crushed clay pebbles or lava. If the planting site is too wet, a drainage layer with crushed clay pebbles or lava should be added. In sandy soils which dry out rapidly it is recommended to increase water retention by mixing in perlite, Seramis® or Isolite®. Covering the soil with a layer of beech leaves or pine needles has a favourable effect on structure and moisture. Autumn is the best season for planting. I usually recommend: *'Spread out the roots in the upper 10 cm of the soil, the rhizome 2 to 3 cm below the surface. Fill in the remaining substrate without compressing it and water thoroughly.'* For aftercare: *'The soil should never dry out completely; in dry summers careful watering is therefore needed. Fertilize your Lady's Slipper orchids regularly during springtime by using commercial mineral fertilizers in half concentration.'* Special attention has to be paid to slugs, because they can wreak havoc within even one night. Protection is indispensable, particularly during springtime.

Lady's Slipper orchids look best in combination with slow-growing ferns such as Barrenwort (*Epimedium*) and small *Hosta* species. They cannot compete with vigorously-growing perennials, shrubs or trees. *Leptinella* (syn. *Cotula*) has turned out to be a suitable and good groundcover: it forms loose green carpets which do not inhibit the growth of the cypripedium shoots. The most popular hybrids are 'Gisela', 'Emil' and 'Hank Small'.

24 - A strong hybrid clump: *Cypripedium* 'Gisela'





25 - *Cyripedium* 'Gisela' at 8 years

26 - *Cyripedium* 'Gisela'

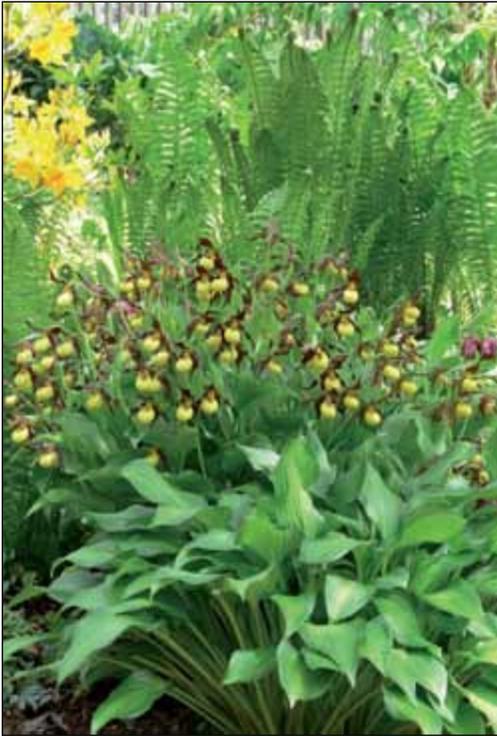


Cypripedium 'Gisela'

'Gisela' is a particularly robust hybrid and is famous for its vigour. Even if you haven't had any previous experience of Lady's Slipper in your garden, 'Gisela' will delight you. Within a few years it forms big clumps, 30-45 cm high. Regular fertilizing is required for vigorous growth - just fertilize it as you would other perennials. The striking flowers open at the beginning of May and enrich the garden with an exclusive beauty. There is no need for winter protection; even when exposed to -35°C and only a thin snow cover, 'Gisela' will not be harmed. An interesting variation of this hybrid is 'Gisela Pastel'.

Cypripedium 'Emil' and *C.* 'Hank Small'

The hybrids 'Emil' and 'Hank Small' resemble the European Lady's Slipper (*C. calceolus*) and the North American yellow Lady's Slipper (*C. parviflorum*) but are much easier to grow in the garden. For example, five single-shoot rhizomes of *Cypripedium* 'Emil' produced 23 flowering shoots with four double blossoms after only three years – in a normal garden and without special care! These hybrids are a bit daintier than 'Gisela' and grow to about 35-50 cm. The intensely-coloured flowers open in mid-May. Strong plants occasionally grow two blooms on one stem. 'Emil' and 'Hank Small' are absolutely hardy; they too have no need for winter protection.



In the past, many orchid enthusiasts have been disappointed with the poor quality of Lady's Slippers generally offered for sale, feeling that they have spent a lot for nothing - new offerings have therefore met with justified scepticism. To encourage a much wider enjoyment of these uniquely beautiful plants, I have tried to overcome

27 - *Cypripedium* 'Hank Small' among ferns and hostas









31 - *Cypripedium* 'Inge'

this problem by the commercial expedient of registering a trade mark to help recognize Frosch® *Cypripedium* hybrids in plant catalogues and nurseries. The mark indicates superior hybrids; merely 'average' rhizomes are not eligible for this sign of quality. I hope my words have stimulated you to try these wonderful plants in your own gardens.

Editor's note:

Some of these photographs were taken by Sebastian Urban. More pictures of these striking plants may be seen at www.cypripedium.de. In Scotland, Michael's cypripediums may be obtained from our own Ian Christie, Downfield, Westmuir, Kirriemuir, Angus DD8 5LP; ianchristie@btconnect.com; www.christiealpines.co.uk; 01575 572977.

Tulipa goulimyi in Crete

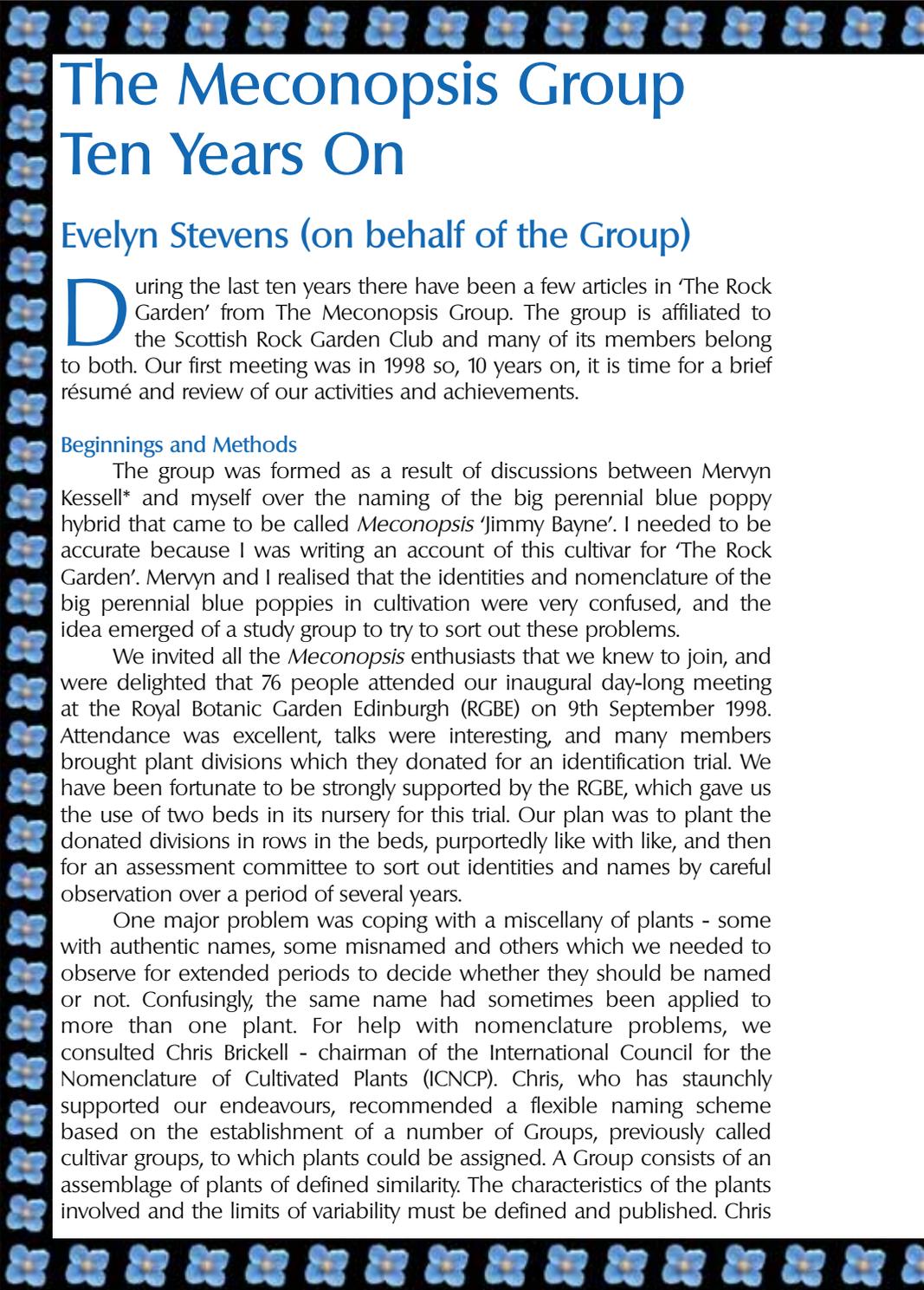
Brian Allan



32 - *Tulipa goulimyi* at risk in Crete

Although *Tulipa goulimyi* is found throughout the Peloponnese, Mike Hopkins's likeable and useful article on tulips (issue 121, page 21) questioned the status of the plant in Crete. I am pleased to confirm that the plant is still alive and well on the Phalasarna peninsula in western Crete.

Having found this rare species in the Peloponnese in 2004 I was determined to locate the long-lost Cretan colony, despite having searched for it unsuccessfully in previous years. In April 2005 I was leading a small botanical group to Crete and we all fanned out in the area where I had been told the plant could be found. However, we failed to find it until - as I was heading back to the cars - I spotted a single flower very close to the road. Further search revealed plants in scrub on either side of the road. Since 2005 I have seen these plants every year and despite a summer fire they have all survived. I am sad to report some risk that the colony will disappear, as there is recent fencing and much new building close by.



The Meconopsis Group

Ten Years On

Evelyn Stevens (on behalf of the Group)

During the last ten years there have been a few articles in 'The Rock Garden' from The Meconopsis Group. The group is affiliated to the Scottish Rock Garden Club and many of its members belong to both. Our first meeting was in 1998 so, 10 years on, it is time for a brief résumé and review of our activities and achievements.

Beginnings and Methods

The group was formed as a result of discussions between Mervyn Kessell* and myself over the naming of the big perennial blue poppy hybrid that came to be called *Meconopsis* 'Jimmy Bayne'. I needed to be accurate because I was writing an account of this cultivar for 'The Rock Garden'. Mervyn and I realised that the identities and nomenclature of the big perennial blue poppies in cultivation were very confused, and the idea emerged of a study group to try to sort out these problems.

We invited all the *Meconopsis* enthusiasts that we knew to join, and were delighted that 76 people attended our inaugural day-long meeting at the Royal Botanic Garden Edinburgh (RGE) on 9th September 1998. Attendance was excellent, talks were interesting, and many members brought plant divisions which they donated for an identification trial. We have been fortunate to be strongly supported by the RGE, which gave us the use of two beds in its nursery for this trial. Our plan was to plant the donated divisions in rows in the beds, purportedly like with like, and then for an assessment committee to sort out identities and names by careful observation over a period of several years.

One major problem was coping with a miscellany of plants - some with authentic names, some misnamed and others which we needed to observe for extended periods to decide whether they should be named or not. Confusingly, the same name had sometimes been applied to more than one plant. For help with nomenclature problems, we consulted Chris Brickell - chairman of the International Council for the Nomenclature of Cultivated Plants (ICNCP). Chris, who has staunchly supported our endeavours, recommended a flexible naming scheme based on the establishment of a number of Groups, previously called cultivar groups, to which plants could be assigned. A Group consists of an assemblage of plants of defined similarity. The characteristics of the plants involved and the limits of variability must be defined and published. Chris

also pointed out that plants which did not yet, in our view, warrant separate cultivar status could simply be given a Group name.

Naming Scheme

In December 2000 we approved the following naming scheme:

1. Species

2. Hybrids

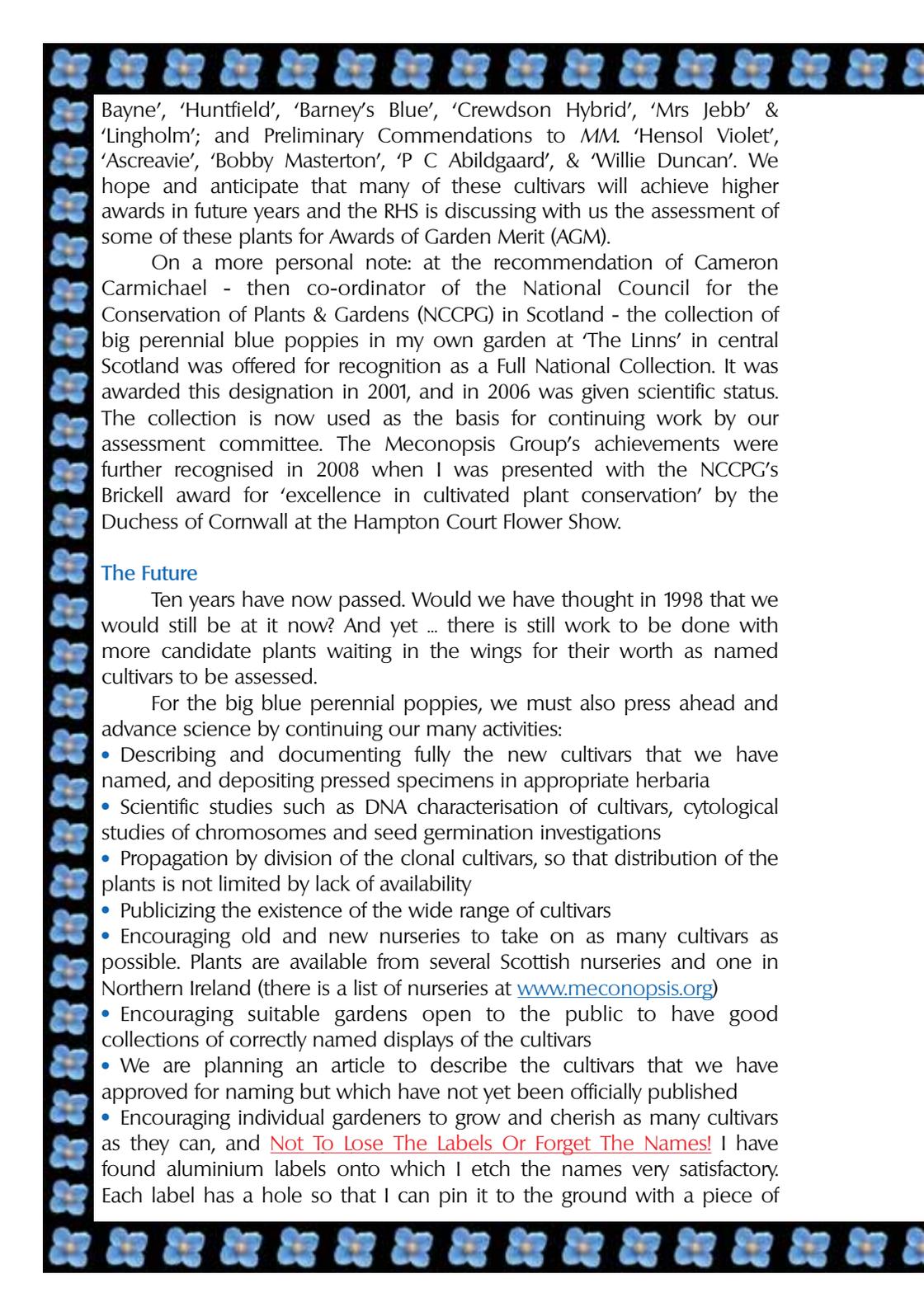
- *Meconopsis* George Sherriff Group – for the sterile hybrids lumped as *M. grandis* GS600, such as *M.* 'Jimmy Bayne' and *M.* 'Ascreavie'
- *Meconopsis* Infertile Blue Group – for the rest of the long-standing (i.e. many decades old) sterile hybrids such as *M.* 'Slieve Donard' and *M.* 'Crewdson Hybrid'
- *Meconopsis* Fertile Blue Group – for the fertile hybrids of more recent origin which are allotetraploid, such as *M.* 'Lingholm'
- Hybrids would only be put into an appropriate Group where it was useful to do so. Those that were so distinctive that they did not need to be placed in a Group would simply be referred to by their cultivar name - for example - *M.* 'Keillour', *M.* 'Willie Duncan' and *M.* 'Mervyn Kessell'.

Achievements

We have sorted out confusion in the names and identities of longstanding cultivars and have identified and named about 20 new cultivars. Without our work many of these plants would probably have remained unrecognised, unknown and unappreciated except by their owners and a few of their friends.

The *Meconopsis* Group was appointed the International Cultivar Registration Authority (ICRA) for the genus *Meconopsis* in 2002. An important aspect of our work is the promotion of the genus and the publication of our researches. Our web-site, www.meconopsis.org, has proved popular on Google and other search engines since its launch in December 2004 and has received many plaudits. We owe a debt of gratitude to our web-master, Peter Taylor, for the high regard in which our site is held. Peter is not a plantsperson but has generously and effectively made his time and computer expertise freely available to us.

Our work has been recognised by the Royal Horticultural Society, which has incorporated our nomenclature recommendations in the 'Plant Finder' www.rhs.org.uk/rhsplantfinder/plantfinder.asp. We were delighted when in 2005 & 2006 the RHS convened special meetings of the Joint Rock Garden Plant Committee at the RBGE to assess big perennial blue poppies for awards. In 2008 the committee met at 'Gardening Scotland' and assessed plants on our stand. The outcome of these meetings was very satisfactory and numerous awards were made over those three years: First Class Certificate to *M.* 'Slieve Donard'; Awards of Merit to *MM.* 'Jimmy



Bayne', 'Huntfield', 'Barney's Blue', 'Crewdson Hybrid', 'Mrs Jebb' & 'Lingholm'; and Preliminary Commendations to *MM*. 'Hensol Violet', 'Ascreavie', 'Bobby Masterton', 'P C Abildgaard', & 'Willie Duncan'. We hope and anticipate that many of these cultivars will achieve higher awards in future years and the RHS is discussing with us the assessment of some of these plants for Awards of Garden Merit (AGM).

On a more personal note: at the recommendation of Cameron Carmichael - then co-ordinator of the National Council for the Conservation of Plants & Gardens (NCCPG) in Scotland - the collection of big perennial blue poppies in my own garden at 'The Linns' in central Scotland was offered for recognition as a Full National Collection. It was awarded this designation in 2001, and in 2006 was given scientific status. The collection is now used as the basis for continuing work by our assessment committee. The Meconopsis Group's achievements were further recognised in 2008 when I was presented with the NCCPG's Brickell award for 'excellence in cultivated plant conservation' by the Duchess of Cornwall at the Hampton Court Flower Show.

The Future

Ten years have now passed. Would we have thought in 1998 that we would still be at it now? And yet ... there is still work to be done with more candidate plants waiting in the wings for their worth as named cultivars to be assessed.

For the big blue perennial poppies, we must also press ahead and advance science by continuing our many activities:

- Describing and documenting fully the new cultivars that we have named, and depositing pressed specimens in appropriate herbaria
- Scientific studies such as DNA characterisation of cultivars, cytological studies of chromosomes and seed germination investigations
- Propagation by division of the clonal cultivars, so that distribution of the plants is not limited by lack of availability
- Publicizing the existence of the wide range of cultivars
- Encouraging old and new nurseries to take on as many cultivars as possible. Plants are available from several Scottish nurseries and one in Northern Ireland (there is a list of nurseries at www.meconopsis.org)
- Encouraging suitable gardens open to the public to have good collections of correctly named displays of the cultivars
- We are planning an article to describe the cultivars that we have approved for naming but which have not yet been officially published
- Encouraging individual gardeners to grow and cherish as many cultivars as they can, and [Not To Lose The Labels Or Forget The Names!](#) I have found aluminium labels onto which I etch the names very satisfactory. Each label has a hole so that I can pin it to the ground with a piece of

fencing wire bent into a shepherd's crook shape – no blackbird or inadvertent digging around can dislodge it.

Although much of our work to date has been with the big perennial blue poppies, it has always been our intention to fulfil the promise of our title and to extend our studies to other species of the genus. We have



34 - *M.* 'RBGE 19651278':
an as yet unnamed cultivar

had several excellent lectures about these at our meetings and intend to research them more fully in the future. We encourage gardeners to grow as many of the monocarpic species as possible - preferably isolated to minimize the chances of cross-pollination. There is the ever-present threat that, if the monocarpic species are not regularly raised from seed and kept pure, they will be lost in cultivation. To promote raising from seed we have established a successful seed exchange for members (see our site www.meconopsis.org).

The last ten years have passed very quickly. It has been hard but very worthwhile work and never lacked interest. On behalf of all in the

Meconopsis Group, I would like to thank everyone, members and others, who has supported, encouraged and helped us in many different ways and who shares our passion for these wonderful plants. As we look to the future, who knows where the next ten years will lead us?

I know that Mervyn Kessell, co-founder of The Meconopsis Group, would have been pleased with this report of 10 years of endeavour but it is sad to reflect that Mervyn died suddenly and all-too-young, in December 2001. **Carpe diem!*

RHS Joint Rock Garden Plant Committee

Recommendations made at SRGC Shows in 2008

Dunblane – 16th February

Awards to Plants

Certificate of Preliminary Commendation

(as a hardy flowering plant for exhibition)

To *Galanthus* 'Lady Dalhousie' exhibited by I Christie, Kirriemuir.

To *Dionysia curviflora* 'Ewesley Edinburgh' exhibited by A Newton, Ponteland.

Edinburgh – 5th April

Awards to Plants

Award of Merit

(as hardy flowering plants for exhibition)

To *Fritillaria* 'Canmore Park' exhibited by M Hopkins, Kemnay.

To *Fritillaria graeca* ssp. *graeca* 'Bill Ivey' exhibited by F Hunt, Invergowrie.

Certificate of Preliminary Commendation

(as hardy flowering plants for exhibition)

To *Narcissus bulbocodium* ssp. *tananicus*, subject to name verification, exhibited by the Regius Keeper, Royal Botanic Garden, Edinburgh.

To *Saxifraga columnaris* x *dinikii*, exhibited by S Sutherland, Kincardine-on-Forth.

Botanical Commendation

To *Betula calcicola* exhibited by the Regius Keeper, Royal Botanic Garden Edinburgh.

Awards to Exhibitors

Certificate of Cultural Commendation

To P Semple, Buchlyvie for a pan of *Ranunculus calandrinoides*.

To B Robinson, Paisley for a pan of *Viola columnaris*.

Glasgow – 3rd May

Awards to Plants

Certificate of Preliminary Commendation

(as a hardy flowering plant for exhibition)

To *Saxifraga aretioides* exhibited by C & I Bainbridge, Easter Howgate.

Awards to Exhibitors

Certificate of Cultural Commendation

To C & I Bainbridge, Easter Howgate for a pan of *Saxifraga aretioides*.

Gardening Scotland, Ingliston – 31st May

Awards to Plants

Award of Merit

(as hardy flowering plants for exhibition)

To *Celmisia spectabilis* 'Eggleston Silver' exhibited by S & D Rankin, Lasswade.

To *Primula japonica* 'Apple Blossom' exhibited by S & D Rankin, Lasswade.

To *Primula japonica* 'Postford White' exhibited by S & D Rankin, Lasswade.

To *Meconopsis* 'Crewdson Hybrid' exhibited by E Stevens, Sheriffmuir.

Certificate of Preliminary Commendation

(as hardy flowering plants for exhibition)

To *Cypripedium* 'Hank Small' exhibited by I Christie, Kirriemuir.

To *Calceolaria lanigera* exhibited by the Regius Keeper, Royal Botanic Garden Edinburgh.

To *Primula luteola* exhibited by S & D Rankin, Lasswade.

To *Primula aurantiaca* exhibited by S & D Rankin, Lasswade.

To *Paris polyphylla* var. *stenophylla* exhibited by S & D Rankin, Lasswade.

To *Meconopsis* 'Willie Duncan' exhibited by E Stevens, Sheriffmuir.

To *Meconopsis* 'Bobby Masterton' exhibited by E Stevens, Sheriffmuir.

To *Meconopsis* 'P C Abildgaard' exhibited by E Stevens, Sheriffmuir & I. Christie, Kirriemuir.

To *Roscoea cautleyoides* 'Pennine Purple' exhibited by N Huntley, Alston.

Recommendation for AGM assessment

To *Dicentra* 'King of Hearts' exhibited by I Christie, Kirriemuir.

To *Celmisia spectabilis* 'Eggleston Silver' exhibited by S & D Rankin, Lasswade.

To *Primula japonica* 'Apple Blossom' exhibited by S & D Rankin, Lasswade.

To *Primula japonica* 'Postford White' exhibited by S & D Rankin, Lasswade.

Discussion Weekend – 4th October

Awards to Plants

Certificate of Preliminary Commendation

(as hardy flowering plants for exhibition)

To *Eriogonum holmgrenii* exhibited by A Furness, Wooley.

Botanical Commendation

To *Nerine rehmannii* exhibited by C & I Bainbridge, Easter Howgate.

Aberdeen Show

17th May 2008

Last year's rainbow in the show hall (Issue 120, figure 9) brightened members' thoughts again but, more compellingly, attention was focussed on the delicate and polychromatic beauties found at the show benches. The selection shown here reflects the effort and skill of all - growers, judges and stewards - who made such a successful day.



35 & 36 - The Forrest Medal plant was David Millward's pot of *Ramonda nathaliae* JCA 686. Magnificent, just lovely ... huge and all-over gorgeous.





37 - The winner of the Craig Cup for the best *Primula*, which I neglected to photograph, was Mike Dale. Here instead is a more unusual photo - three generations of Dales: Mike & Pearl; a daughter, Heather, and her three girls. Mike & Pearl are secretaries for Ponteland show.

38 - Arisaemas continue in their popularity and here is just one from this year's contingent - *Arisaema taiwanense*.





39 - The Royal Botanic Garden, Edinburgh was awarded a Gold Medal for its display. Here is the garden's fine *Iris iberica* ssp. *lycotis*.

40 - A miniature garden from 2008's junior exhibitor, Amy White.

41 - Nick Boss grows as naturally as possible. Here is his *Sedum pilosum*.



42 - Judging is a tough job but someone has to do it ...



43 - *Iris paradoxa choschab*

44 - Our judges, Fred Hunt, Glassford Sprunt, Bette Ivey, John Mitchell & Sandy Leven look a little surprised to be photographed.



45 - *Oxalis*
'Waverley hybrid'



46 - Cyril Lafong's entry for three pans - new, rare or difficult - comprised *Viola dasyphylla*, *Daphne gemmata*, *Raoulia mammillaria*.

This year he was beaten by the Esslemont Quaich-winning entry of Brian and Maureen Wilson which was: x *Briggostemon* (*Briggsia aurantiaca* x *Ancylostemon humilis*), *Ramonda myconi alba* x *Jancaea heldreichii*, best called x *Jancaemonda* and *Jancaea heldreichii*.

47 - *Cornus canadensis* - a North American woodlander very similar to the Scottish plant *Cornus suecica*.



Cyril Lafong entered a large three pan entry: *Dactylorhiza* 'Sweetcorn', *Lewisia leeana alba* and *Dicentra* 'King of Hearts'. All three were considered for the Forrest Medal and the first two were given a Certificate of Merit. Interestingly, I read that a similar large *Lewisia leeana alba* was considered for the Farrer Medal in Southport, on the same day!

Margaret Young

48 - Ian and Carole Bainbridge had this small three pan entry comprising a cheery *Lewisia* hybrid, *Globularia bellidifolia* (Horts. Var.) and *Androsace hirtella*.

49 - Margaret and Henry Taylor's wonderfully bright *Saxifraga bulleyana*



Newcastle Show

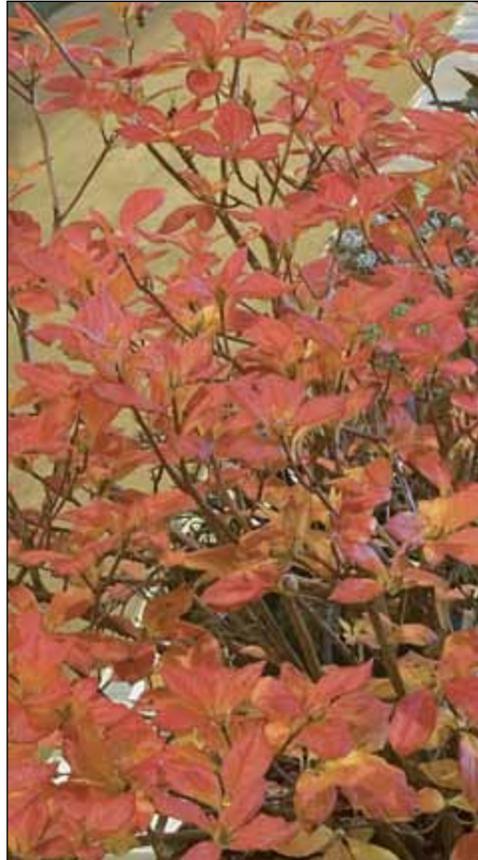
11th October 2008

With the exceptionally wet year and the torrential rain in the Ponteland area several weeks ago it didn't seem as though an Alpine show would be possible but on entering the hall it quickly became evident that all was well and that Autumn had arrived, bringing a good showing of crocus, gentians and cyclamen. There were 49 exhibitors showing 378 plants.

Several plants made themselves conspicuous on entering the hall, including *Cyclamen graecum* (Bob and Rannveig Wallis, Carmarthen) and *Gentiana* 'Amethyst', the latter being a complete pan of blue. Two

50 - *Menziesia ciliicalyx* from Ian Leslie

51 - Class 54





52 - *Cyclamen mirabile* from Bob and Rannveig Wallis

antipodean shrubs in class 5 caught my eye: *Trochocarpa thymifolia* (Brian Russ, Ormskirk) with its red bottlebrush flowers, and *Mitraria coccinea* 'Lake Puyehue Form' (Harry Roberts, Ashby-de-la-Zouch) with orange flowers and scrambling habit.

53 - *Galanthus reginae-olgae* from Ivor Betteridge





54 - *Crocus cambessedesii*

The *Hyacinthoides lingulata* (Bob and Rannveig Wallis) in class 20 won a Certificate of Merit and was much admired by the visitors. The *Galanthus peshmenii* (John Richards, Hexham) made you realise that snowdrop time would be not far away. A large plant of *Menziesia ciliicalyx* (Ian Leslie, Bangor) in full autumn colour certainly caught the eye and on closer examination it even had a few flowers opening.

55 - *Gentiana* 'Amethyst'





56 - *Cyclamen hederifolium*

Several interesting plants attracted attention in the 19 cm class. One that was well talked about was *Empodium flexile* (Bob and Rannveig Wallis), a South African bulb with yellow star flowers and a scent like old-fashioned roses. The same exhibit, which won the AGS medal, also contained a pan of *Narcissus miniatus*.

Cyclamen were well represented at the show with *C. mirabile* (Bob and Rannveig Wallis) winning the Ewesley Salver for the best cyclamen in a 19 cm pan, exhibiting a perfect rim of silver and green leaves set with a topping of pink flower. The same exhibitors also won the Millennium

57 - *Trochocarpa thymifolia* from Brian Russ





58 - Robin Pickering's *Colchicum autumnale* 'Album'

Trophy for the best foliage plant with *Cyclamen graecum* ssp. *anatolicum* while David Boyd won the Ponteland Bowl for the most points in the open section.

Crocuses are one of the other heralds of autumn and there was a good cross section of species and cultivars. It was nice to see several pans of *Crocus goulimyi* 'Mani White' and a pot of *Crocus goulimyi* ssp. *leucanthus* (Jean Wyllie, Dunblane) so as to show the contrast within a species. A fine pot of *Colchicum autumnale* 'Album' (Robin Pickering, Goole) won the Newcastle Trophy for the best plant in sections B and C. This form has the faintest flush of pink, compared to the clear white of *Colchicum speciosum* 'Album' shown by Ivor Betteridge (Ashby-de-la-Zouch). Robin Goole won the Inner Eye for most first points in section B. The last two plants, which remind us of spring, are *Primula boothii* ssp. *autumnalis* (John Richards, Hexham) with its nice show of colour, and a small plant of *Primula amethystina* (Ian Leslie, Bangor). A display of autumn colour with plenty of *Sorbus* in berry all made for a fine autumn show, with the North East England AGS group winning a gold award.

Keith Blundell

Discussion Weekend

October 3rd to 5th 2008

The show held every year at the discussion weekend is traditionally described as an autumn show but, in a year where there was no noticeable summer, the 2008 version could perhaps be best described as being in the very, very late spring. Fortunately, although I myself was extremely confused by this strange year, the plants were not, and the benches in Clydebank were well filled with beautiful and interesting exhibits. We also had the added pleasure of marking the SRGC's 75th Anniversary.

Sandy Leven won the Diamond Jubilee Award six pan class and the East Lothian Trophy three pan class with beautiful plants including *Galanthus reginae-olgae*, *Crocus pallasii*, *Cyclamen graecum* and *Sternbergia sicula*. Sandy also won the J L Mowat Trophy with a fine example of *Pinus mugo* 'Mops' but was edged out of the Mary Bowie Trophy for most points in Section 1 by the wonderful selection of plants shown by Jean Wyllie. Jean also won the Jim Lever Memorial Trophy with an excellent pan of *Cyclamen graecum candidum* while among her many other fine exhibits were the three varied leaf forms of *Cyclamen graecum* in the three pan foliage class, which received a Certificate of Merit. Two very small but very interesting plants were to be found in Class 2. *Nerine rehmannii* is just a few inches high with white flowers only a centimetre or so across. However, they have the typical wavy edged petals of the larger Nerines and strangely purple pollen. This little gem was shown by Carole and Ian Bainbridge and received a Botanical Certificate from the Joint Rock Garden Plant Committee. *Eriogonum holmgrenii* was shown by

59 - After a good lunch & before a good talk





60 - *Sternbergia lutea*

Alan Furness. This tiny mat-forming plant - only a few centimetres wide - was studded with little pink pompoms of flowers. Alan's plant won the class and received a Preliminary Commendation from the Joint Rock Committee. Other plants to gain awards were Sandy Leven's *Leucothoe axillaris* 'Curly Red' and *Polystichum setiferum* 'plumosum densum' shown





61 - *Eriogonum holmgrenii*
(Alan Furness)



62 - *Sedum calcareum*
'Sir William Lawrence'

by Peter Maguire. Finally, in Section 1, the Logan Home Trophy for a miniature garden was won by a tiny crevice outcrop constructed and planted by Ian and Margaret Young.

Section 2 had a number of very good plants with many being shown by Diane Clement of Wolverhampton. Diane won the East Lothian Cup for the best plant in Section 2 and the 75th Anniversary Jubilee Award with a sparkling pan of *Sternbergia lutea*. Diane's other fine plants included *Cyclamen mirabile* and *Cyclamen hederifolium* 'White Cloud'.

63 - The benches stand ready





64 - A corner of the show - Class 1



65 - *Laganum natalis*
(Gill Anderson & Pamela Airth)

The Holiday Photographic Competition was once again a closely fought affair with the winner being '*Cyprus Holiday March 2008*' with pictures taken by Ann Sinclair of Stewarton on an SRGC outing in spring.

And so at the heart of another successful discussion weekend was another successful show. Perhaps no stand-out Forrest Medal winning exhibit but many beautiful cyclamens, sempervivums, ferns and foliage plants that will long remain in the memory of all who came.

Steven McFarlane

66 - Well deserved tributes: Anne Bush, Anne Chambers, Ian Christie & Peggy Anderson



Glasgow Show

3rd May 2008

Every season brings different challenges and opportunities but it has to be said that the rather mild winter followed by a long cool spring produced one of the best Glasgow shows of the last few years. The tables were full and there were many beautiful and interesting plants to be seen.



67 - *Androsace studiosorum* 'Doksa'

third consecutive year with his superb *Androsace studiosorum* 'Doksa'. Two of Cyril's other plants were also considered for the premier award: *Daphne petraea grandis* and *Daphne arbuscula grandis* along with

One of the greatest challenges, is to overcome whatever conditions are thrown at the exhibitor and to produce a wonderful plant in perfect condition on the day. This year Cyril Lafong once again showed this highest level of skill when he won the Forrest Medal for the



68 - Cyril Lafong's *Daphne petraea* 'Grandiflora'



69 - *Trillium pusillum*

Anne & Viv Chambers' *Trillium pusillum* and Peter Semple's huge (I know how huge, as I carried it into the hall) and floriferous pan of *Gentiana acaulis*. All of these plants won Certificates of Merit.

The Crawford Silver Challenge Cup for most points in



70 - *Tulipa aucheriana*
71 - *Potentilla neumanniana*



section 1 was won by Mike Hopkins. Mike also won the Dr William Buchanan Memorial Rose Bowl with a wonderful selection of fine plants including *Primula sinopurpurea*, *Tulipa whittallii* and *Trillium erectum* 'Cream Form'. He won Jubilee Class A with *Townsendia florifer*, *Fritillaria graeca* and *Calceolaria* 'Walter



72 - *Sebaea thomasi*

Shrimpton' amongst others.

Cyril went on to further success in classes 2 and 3, winning the Henry Archibald Challenge Rose Bowl and the William C Buchanan Challenge Cup. The first winning trio consisted of *Daphne arbuscula*



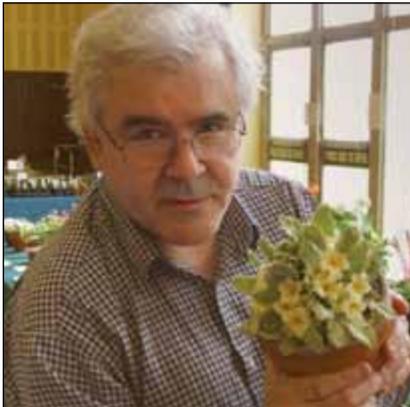
73 - *Phlox nivalis* 'Violet Queen'

grandiflora, *Trillium pusillum* and *Fritillaria pyrenaica* 'Bernard Tickner'. The second group - of new, rare or difficult plants - comprised *Amblynotus rupestris*, *Oreopolus glacialis* and *Iris sari*



74 - Bill Robinson's *Viola columnaris* ssp. *manissadjanii*.

Section 2 was dominated by the many fine plants exhibited by John di Paola. John won the James A Wilson Trophy and the Bronze Medal with plants including *Arisaema amurense*, *Phlox nivalis* 'Violet Queen' and *Ourisia* 'Snowflake'. Other good plants in this section included Dai Davies's *Gentiana verna* and Alan Gardner's *Orchis mascula*. Alan also won the Charles M



75 - John Lee's *Primula aureata*

Simpson Memorial Trophy with a fine pan of *Cypripedium* 'Sunny'.

Last year's Section 2 winner, Stan da Prato, completed a successful move into Section 1 by winning the Edward Darling Memorial Trophy for three Rhododendrons and the Ian Donald Memorial Trophy for a plant native to Scotland with a very attractive *Potentilla neummanniana*. Other prize winners included Graham Butler who won the Alpines 2001 Trophy with *Silene Acaulis* 'Frances', John Lee - whose *Primula aureata* won the Joan Stead Prize, and Bill Robinson. Bill's wonderful example of *Viola columnaris* won the special 75th Jubilee Award for the best plant exhibited in a six inch pot.

The Joint Rock Garden Plant Committee met at the Glasgow Show this year and made several awards. An Award of Merit went to *Primula bracteata* shown by Stella & David Rankin. Certificates of Preliminary Commendation were awarded to *Primula* 'Kusum Krishna' also shown by the Rankins, *Saxifraga aretioides* shown by Carole & Ian Bainbridge and *Iris media* shown by the Regius Keeper of the Royal Botanic Garden in Edinburgh. The iris formed part of the RBGE's beautiful display, which won a Silver Medal.

All in all, Glasgow 2008 was an excellent show that will only be improved in 2009 if you come along too. Make a date for the first Saturday in May either to exhibit or just to enjoy the superb plants and friendly people that you will find in Milngavie.

Steven McFarlane

76 - A corner of the Glasgow show, 2008



Autumn in Greece – The Peloponnese and Eastern Attica

Kees Jan van Zwienen & Rick Lambert



Greece offers a wealth of flowering bulbous plants in autumn. This article highlights places we visited in early autumn 2006 and late autumn 2007 and may be read in conjunction with a previous article about the autumn bulbs of the Peloponnese (issue 115). We invite you to share our 'journey' from Athens to the southern tip of mainland Europe, Cape Tainaron in the southern Peloponnese ...

Like much of southern Greece, Attica and the Peloponnese contain large areas of limestone karst. The *terra rossa* clay found amongst the rock is a favoured habitat of bulbous plants from sea level to about 2000m. Not all autumn-flowering bulbs are confined to *terra rossa* but the limestone areas have the greatest diversity, particularly at relatively low altitudes, although some species are restricted to the mountains. In general, autumnal flowering seems to start in the higher populations, probably as a result of the cooler temperatures and more moisture.

The term '*autumn-flowering*' seems well defined but in reality is not. Several of the early-flowering colchicums such as the large flowered *C. bivonae* start in late September but there is a subsequent succession well into winter and indeed into spring and summer. Many of the colchicums tend to flower early, whereas most of the autumn-flowering crocuses tend to flower later in the season - particularly at lower elevations - and are at their best in November. It is interesting that some species, like *Crocus*

77 - Opposite: *Crocus cartwrightianus* in shade, Lykabettos Hill

78 - Below: *Crocus laevigatus*, Malea Peninsula



laevigatus, *Arisarum vulgare* & *Anemone coronaria*, display late-autumn, winter and spring flowering. An interesting example is *Crocus biflorus* ssp. *melantherus*, an endemic crocus of the Peloponnese that flowers in autumn whereas all other *Crocus biflorus* subspecies flower in spring.

Athens and Eastern Attica

Athens is a bit of an enigma on a first visit – a place of great contrasts; modern concrete buildings are interspersed with desolate vacant building sites; grand modern offices and commercial buildings with

79 - *Colchicum bivonae* in its habitat





80 - Lykabettos Hill, Athens, home of *Crocus cartwrightianus*

81 - *Crocus biflorus* ssp. *melantherus* near Mt Killini





82 - *Sternbergia sicula*, Parnon mountains

city and the new airport. After a short climb on the north-west facing slopes we came to roadside banks rich in *Hypericum*, an array of dry thistles and herbage, dried by the fierce summer sun. Athens has experienced extremes of summer temperatures in recent years but the first rains of autumn had fallen and moist night air rolled in from the Mediterranean. A massive annual germination had begun and, underground, roots of perennial plants had been triggered into growth, many showing green. The bulbs, corms and tubers were of great interest. We climbed the limestone bank littered with boulders among which grew *Scilla autumnalis*, *Colchicum cupanii* and *Cyclamen graecum* ssp. *graecum*. The leaves of this cyclamen were everywhere, appearing from

83 - *Cyclamen graecum*

buildings of antiquity. An area strewn with litter and debris was home to a colony of *Sternbergia lutea*. The city sweeps up the surrounding mountains and in places intrudes into them. It was surprising that such a sprawl of housing and commerce offers easy access to good locations of *Crocus*, *Colchicum*, *Sternbergia*, *Dianthus*, *Fritillaria*, *Campanula*, *Onosma* ... and so on.

The day after our arrival we shopped for essentials and made our way through the suburbs, past partly-built houses and through open scrub onto the lower slopes of Mount Imittos. This mountain forms a barrier between the





84 - *Colchicum cupanii* and its habitat on Mount Didmo

85 - *Scilla autumnalis* ssp. *latifolia*, Malea Peninsula





86 - *Sternbergia colchiciflora*

under rocks, crevices and limestone holes. The flowering period seemed to be prolonged, with flowers at several stages. The *Scilla autumnalis* was a delight. Its form differed from one that Rick Lambert had studied in Cornwall and Brittany in that the flower spike contained more flowers and was fairly consistently darker, although well within the variation expected of such a widely-distributed species. Throughout our visit we continued to see this bulb, concluding in the south of the Mani and Malea peninsulas with a distinct and only recently described subspecies.

Further upslope were extensive but not thickly populated patches of *Sternbergia sicula*. Lower down was a colony of difficult-to-identify *S. sicula* drawn by overgrowth, or *S. lutea* shortened by the drier location. The leaves seemed neither one thing nor the other, suggesting their being one continuous species.

Two other bulbs had sent us to this mountainside: *Crocus cancellatus* ssp. *mazziaricus*; and *Colchicum cupanii*, which excited Rick because he had seen a full pan of this delightful plant at an AGS meeting in the 1990s. He has tried to grow it in the garden but thinks it a tender species as it generally grows at rather low altitude. Here on Imittos we found several colonies of *C. cupanii* and remarked both its small size of 4 cm and its variations in colour. One exceptional form had very dark and faintly tessellated petals and a yellow throat. This colchicum was quite prolific here and afterwards during our southward journey.

Almost at the summit we found *Crocus cancellatus* as its subspecies *mazziaricus*. It had flowered before its leaves among what seemed to be isolated plants of *Iris attica*, *Fritillaria graeca* and a low scrub vegetation of herbs – *Thymus capitatus*, *Dianthus arboreus* (or *fruticosus*), *Senecio* and *Hypericum*. The road down was lined with numerous stately *Cupressus sempervirens* and, after a sharp hairpin bend, a cliff face played host to *Aubrieta deltoidea*, an *Onosma* species, *Dianthus petraeus*, a monocarpic campanula and *Sedum sediforme*.

Mount Didimo

This mountain in the north-eastern Peloponnese is 40 km east of Nafplio, a former Greek capital. The summit at 1121m is a rather flat and grassy area where, at about 1000m, *Colchicum cupanii* was just beginning to flower in early October 2006 and, as on Mount Imittos and in the Malea peninsula, the plants were much smaller than we saw previously at Delphi and Kalamaki. On steeper and rockier slopes lower down the

mountain we found *Cyclamen graecum* ssp. *graecum*, *Crocus cancellatus* ssp. *mazziaricus* and *Sternbergia*.

Mount Chelmos

Our visit was aimed primarily at autumn-flowering bulbs but we also noted locations of other alpinists; Mount Chelmos is the home of three saxifrage species and numerous other spring-flowering plants. We approached from the ski station and arrived to find it all but deserted. We set off up a gruelling zigzag in good weather and came on two bulldozers gouging a new ski track out of the side of the mountain, up to the highest parts. Tempted by sight of a plant, we cut up to the higher path and found clumps of *Arenaria cretica*, very close to *A. stellata* in cultivation but showing itself resistant to extreme drought. It often covered large parts of boulders of limestone. While the roots had found their way deep into crevices, the cushions of sharply pointed leaves shunned shade and grew on the exposed sides, open to all weathers. Although some of the plants must have been a great age they showed very little die-back. At our feet (and ankles!) sat a couple of *Astragalus* species, the coarser one with a few late purple flowers.

On a set of isolated peaks we found *Saxifraga scardica*, *S. sempervivum* and - in a well sheltered spot - *S. sibthorpii* with its buds already darkening at the centre of the rosette, ready for next spring. Further up in the tussocks was either *Viola chelmea* or *V. graeca*, difficult to identify because it was a late flower and somewhat damaged. Several *Draba* nestled among the limestone rubble as did *Cerastium* species, a monocarpic rosetted *Campanula* and *Asperula*. These were sparse and never abundant whereas *Daphne oleoides* was always under our feet until the very highest slopes; even there, one or two plants still hugged the ground. Descending, we saw *Acantholimon* and *Artemisia* species, *Arabis caucasica* and *Juniperus communis*, a prostrate form probably

87 - *Crataegus pycnoloba* on Mount Killini





88 - *Campanula versicolor* at Mistras, Taigetos

reflecting the effects of the weather and wind.

The early snows that had settled in gullies made progress difficult at times. After a short visit to one of the ridges in a biting cold wind we

descended in deteriorating weather to the car. On the lower slopes were copses of *Abies cephalonica* and in sheltered walls grew the small prickly tumbleweed *Drypis spinosa*. All this was very tempting for a return trip in an April or May when it would be easier to identify the plants.

Once rested and back at warmer altitudes, we sought more bulbs. On the plateau near the ski centre in early autumn are good displays of white *Crocus cancellatus* ssp. *mazziaricus*, accompanied by *Sternbergia colchiciflora*. The site is easily accessible by dirt roads, one of which leads to the base of a minor summit north of Chelmos where *Colchicum graecum* may be found. This species, widespread in the Greek mountains and closely related to *C. haynaldii*, was growing in karst-limestone, confirming that it does not need the deeper, moister soils preferred by another close relative, *C. confusum*. *Crocus cancellatus* ssp. *mazziaricus* and *Colchicum bivonae* both flowered in late September 2006 and were found further north in the foothills of Chelmos near Kemitsa. *C. bivonae* was also discovered near Kastria, south of Chelmos.

Mount Killini

We were delighted by *Crataegus pycnoloba*, a very local hawthorn, in fruit. This wonderful shrub has silver-grey leaves and yellow-orange-red fruits. Confined to Mount Killini and a few other mountains in the northern Peloponnese, it dominates the vegetation here at about 1600m. A nearby shrub with linear leaves was *Prunus prostrata* weaving its way through the rocks. *Arenaria cretica* grew high up on boulders in perhaps even drier and more exposed locations than Mount Chelmos.

Passing ten-metre high vertical cliffs, we ascended and, with the temperature no longer Mediterranean, we found a minute *Euphorbia* species, possibly an annual. It grew on the more sheltered stable scree in the crevices at an altitude of 2200m. With opposed round leaves and minute stems terminating in a cluster of typical *Euphorbia* flowers, it was reminiscent of a much reduced *E. helioscopia*.

The terrain deteriorated as it flattened to a rounded hill where the summit was marked by a trigonometric point. It looked sparse of plants so, not wasting energy on a climb, we found a spot out of the wind. There we found a Caryophyllaceae species, *Cerastium* and a *Draba* with rounded leaves. Lower down were *Drypis spinosa* and a *Viola*, once again with two poor flowers.

Mount Menalo

This mountain is easily reached by a good road that leads up to a small ski centre from the plains in the East. In early autumn 2006 we found *Sternbergia colchiciflora* with *S. sicula* in a clearing of *Abies*

cephalonica forest beyond Kardaras half way up at about 1300m. This is a most unusual combination because *S. sicula* is more common in the foothills whereas *S. colchiciflora* is generally a true mountain plant.

The road continues to climb until it reaches a polje at about 1500m. Poljes are shaped in limestone country by the solution of calcium carbonate - resulting in hollows, sinks, underground streams and lack of surface water. In this one, *Crocus cancellatus* ssp. *mazziaricus* and *Sternbergia colchiciflora* are common but may also be found on the surrounding slopes. It is a straightforward walk to the highest summit of Menalo at 1980m, passing *Campanula versicolor* on limestone cliffs half-way up. It flowers in late summer and early autumn, although in 2007 we found it still in flower in the Mani peninsula in November.

Tripoli Area

Last autumn we found a wonderful population of *Crocus hadriaticus* ssp. *hadriaticus* when we approached Tripoli from the north-west. This subspecies is easily distinguished by its yellow throat.

Mount Parnon to the Malea Peninsula

When approaching the Parnon range from the south in early October 2006, we found populations of *Colchicum boissieri* and *Crocus hadriaticus* on west-facing slopes above the road to Kosmas. Both species are fairly typical of mountain meadows and woodland clearings in this range. Just north of Kosmas were *Colchicum bivonae*, *Sternbergia lutea* & *S. sicula*. Although there was suitable habitat we found no crocuses, perhaps because it was too early through lack of rain.

90 - *Crocus boryi*, Mani Peninsula



However, we found *Crocus hadriaticus* higher up along a jeep road north of Agios Vasiliios. The type specimen of *Crocus hadriaticus* ssp. *parnonicus* was a cultivated plant collected around 1500m near Agios Vasiliios, so we were keen to seek *C. hadriaticus* here. The subspecies differs from the other two in its pale lilac flowers and its lack of yellow colour in the throat, a feature it shares with ssp. *parnassicus*. Of the populations we saw, about 10 percent indeed had pale lilac flowers but all the plants we found lacked yellow in the throat. We had expected all ssp. *parnonicus* to have lilac flowers so we're not sure whether ssp. *parnonicus* was growing together with another subspecies of *C. hadriaticus* or if the flower colour of ssp. *parnonicus* really varies between white and pale lilac.

The area between Monemvasia and the Parnon range is of considerable botanical interest but we restricted ourselves to two of the best sites: Sykea and Lambokambos. Sykea is perhaps the first site documented for forms of *Crocus goulimy* intermediate between ssp. *goulimy* and ssp. *leucanthus*. There are large numbers in the margins of cultivated fields. As usual with bulbous plants, you must be at the right place at the right time: in early October 2006 there was still no sign but in early November 2007 there was a breathtaking display! Lambokambos is a village well known for its displays of *Crocus goulimy*, and botanical tours pay annual tribute. But it is well worth it, because the fenced-in fields harbour amazingly rich displays of *C. goulimy* in the Sikea form. This crocus may be found elsewhere in this area, sometimes with *Crocus laevigatus*.

91 - *Crocus goulimy*, Sikea Form, intermediate between ssp. *goulimy* and ssp. *leucanthus*

The Taigetos

These mountains rise steeply from the plain of Sparta. The Byzantine town of Mystras is an important archaeological site on a Taigetos foothill just west of Sparta. An early morning visit to the site





92 - *Colchicum parlatoris*, Mani Peninsula

before most of the tourists had arrived was fascinating, with *Campanula versicolor* in full flower, including a white form. Near Mystras, we also found the inconspicuous *Allium chamaespathum*. This late-flowering onion grows to about 30 cm and has pale-green or white flowers, cylindrical with projecting stamens. We also found a few plants in flower further south in the Mani Peninsula near Areopoli.

A botanical treasure occurring higher in the Taigetos Mountains in autumn is *Galanthus reginae-olgae*, which is quite common along streams and in gorges. Marijn van den Brink and Kees had found this plant during our 2004 visit in two locations. Our present *Galanthus* hunt took place after the visit to Mystras on the last day of September 2006. It is quite easy to find suitable *Galanthus* habitats in the Taigetos but we wondered if it would already be in flower. Taking the road from Paliopanagia up the eastern flanks of the Taigetos, we found *Colchicum bivonae* in flower in the foothills. The road continues upwards until it reaches a small stream with wonderful old oriental planes. Along this stream we found *Cyclamen hederifolium* ssp. *hederifolium* and ... what must have been some of the first *Galanthus reginae-olgae* ssp. *reginae-olgae* flowers of the season!

Malea

This peninsula, situated south of the Parnon range, is the eastern of three peninsulas in the southern Peloponnese. Malea harbours a very



93 - *Crocus niveus*,
Mani Peninsula

exciting flora with many endemic species, although several of them also occur nearby in the Mani peninsula.

Early in autumn, *Colchicum sfikasianum* may be found in large numbers north-west of Monemvasia. Kit Tan & Gregoris Iatrou described this Greek endemic as new to science in this journal in 1995. Nearer to Monemvasia we found the extremely rare and local onion, *Allium ritsii*, an even more recent addition to the Greek flora. It is somewhat similar to *Allium callimischon* but has a laxer inflorescence with 6 to 10 rather than 10 to 25 flowers; they are whitish and urceolate rather than campanulate. It is an inconspicuous plant of the coastal *phrygana*.

Further south and higher into the mountains we found a large population of *Colchicum parlatoris*. This is distinguished from *C. cupanii* and *C. psaridis* by its narrow grass-like leaves which are, unlike the wider and less numerous leaves of its relatives, usually completely absent at flowering time. On looking carefully it is sometimes possible to find a specimen in which the leaves are just emerging and, even more rarely, one with last

94 - *Colchicum sfikasianum*, Malea Peninsula



year's withered leaves still visible. The other difference from its close allies is in the anthers, yellow in *parlatoris* but purplish-brown to black in *cupanii* and *psaridis*. The colchicums seemed to be somewhat smaller at this high altitude than plants that we found relatively lower in deeper soil and they were also much smaller than those we saw in the Mani Peninsula.

The white-flowered *Crocus laevigatus* is quite common on the Malea Peninsula in late autumn. Like its close ally *Crocus boryi* it has a multi-branched yellow-orange style. *C. laevigatus* is quite a bit smaller than *C. boryi* and some plants may usually be found in which the outer three tepals have a clear purplish feathering. *C. laevigatus* flowers tend to open flatter in the sun, being more star-shaped, unlike *C. boryi* which tends towards a goblet-shaped flower.

In late autumn 2007, an exploration of the rock of Monemvasia revealed *Crocus goulimyi* in forms intermediate between ssp. *goulimyi* and ssp. *leucanthus*, *Cyclamen graecum* ssp. *graecum*, *Sternbergia lutea*, and many *Colchicum cupanii* - several in white forms.

Mani

The Mani Peninsula is the central of the three large peninsulas in the southern Peloponnese and is said to be the driest area of Greece. Much of the Mani seems to have been very badly affected by fire during the summer of 2006, particularly on the eastern flanks and east of Areopoli. Many olive groves were destroyed, with only a small minority of the trees regenerating - a rather sad sight. In early autumn, good displays of *Colchicum parlatoris* may be found south of Kalamata and there are several populations in the north-west of the peninsula. It was joined in our first location by the aroid *Biarum tenuifolium*.

We came across *Crocus niveus* in flower on a

95 - *Anemone coronaria*, autumn flowering form, Mani Peninsula





96 - *Crocus goulimyi* ssp. *goulimyi* pale form, Mani Peninsula

97 - *Sternbergia lutea*, central Peloponnese



ridge just east of Germa and Karea at about 1000m. This delightful species has large, white or pale-lilac flowers with a deep-yellow throat. The perianth tube is usually yellowish, the anthers are yellow and the style is orange or red. It is supposedly very common in the Mani and Malea peninsulas but in early October 2006, at the beginning of its flowering season, we found only a small number of plants at relatively high altitude. However, we found a wonderful population in the southern Mani, where it grew with *Crocus goulimyi* ssp. *goulimyi*.

The scented *Cyclamen hederifolium* ssp. *confusum* flowers on shaded banks and in open *Quercus aegilops* woodland from early October to late autumn. This subspecies has larger flowers and taller stems than ssp. *hederifolium*. Leaves tend to be absent at flowering time but if present you can see that they are thicker than in ssp. *hederifolium*.

Colchicum sfikasianum is an early autumn species that was found in the south of the peninsula, although only as a single plant near sea level near Vathia. *C. parlatoris* was very common over almost all of the southern Mani; near Cape Taineron, the southern tip of mainland Greece, it was joined by the endemic *Scilla autumnalis* ssp. *latifolia*.

In late autumn 2007, the landscape of the Mani was much greener and we saw crocuses in huge numbers. One of the 'new' species for us was *Clematis cirrhosa*, an evergreen flowering from late autumn to early spring, often climbing on walls and shrubs, with charming nodding cream flowers. There were impressive displays of *Crocus goulimyi* ssp. *goulimyi* and *Cyclamen hederifolium* ssp. *confusum* in the Areopoli area. *Arisarum vulgare* flowered in shaded locations. One of the highlights of this late autumn trip was *Anemone coronaria*, a species that usually flowers in spring but with one population between Kalamata and Areopoli that often starts flowering in late autumn!

Conclusion

The autumn flowering season is quite long and it is certainly not possible to see the complete range of 'autumnal' species during a single short visit. The second half of October might be regarded as the best time to see the greatest diversity of autumn-flowering bulbs in good displays but you really need to go earlier or later to enjoy others that flower away from this period.

Colchicums, as a general rule, start flowering earlier than the crocuses and *Colchicum bivonae* is one of the first. Late September and early October is quite a good time for many *Colchicum* species whereas a visit in the second half of October or in early November would probably be ideal to see the crocuses. Nevertheless, there are several exceptions: *Colchicum cupanii* and *C. psaridis* tend to flower at the same time as most crocuses and, higher in the mountains, *Crocus cancellatus* ssp. *mazziaricus* and *C. hadriaticus* flower as early as late September.

An autumn visit to Greece is enormously rewarding and there is a lot more to see than autumn bulbs. The deciduous trees and shrubs start their autumn display in October, in particular the yellow leaves of *Platanus orientalis* and the red leaves of the Smoke Bush, *Cotinus coggygia*. There are many plants with interesting berries or other fruits. The Rosaceae is well represented in the mountains with several species of hawthorn (*Crataegus*) in fruit; several species of rose carry attractive hips and there is the deciduous alder *Sambucus racemosa* with its black berries. One of the most eye-catching examples of autumn fruits is *Tamus communis* (Black Bryony) – a rather common climbing perennial with striking red berries.

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Growing in an Alpine House

Cyril Lafong



I started growing alpiners in a 180 cm x 240 cm (6' x 8') greenhouse about twenty years ago and later upgraded to a larger one, 240 cm x 300 cm (8' x 10'). In these greenhouses, plants were grown in plastic pots in trays on aluminium staging. This worked well for newly germinated seedlings and young plants but, beyond a certain size, plants became more difficult to manage in plastic pots. I eventually decided to get a 600 cm x 360 cm (20' x 12') greenhouse so as to provide optimal conditions for more delicate and mature plants. This larger size provides a more stable environment. For instance, the temperature can build up very quickly in a small greenhouse if there is a delay in opening the doors and vents on a sunny day, especially after a hard frost overnight. I grow alpiners and dwarf bulbs in clay pots in the large aluminium greenhouse which has been modified with extra ventilation to become an 'alpine house'.

99 - Aladdin's alpine cave - cool, large and ventilated



Many alpinines and dwarf bulbs begin flowering in January or February when the weather can be decidedly unpleasant. How comforting it is then to be able to go into the alpine house to watch the activity that is taking place. There I am able to admire the unspoilt flowers of *Helleborus thibetanus*, early flowering crocuses such as *Crocus michelsonii*, *C. moabiticus*, *Fritillaria carica* ssp. *serpenticola*, dwarf narcissi, and so forth. Some plants such as cushion plants, for example - dionysias, androsaces and certain bulbs from the bulb belt regions of central Asia or North America, will neither grow nor thrive outdoors in open ground in our British weather, though my wife always wonders how they even survive in the wild. This drawback sometimes owes to excess winter wet, or a plant's not being bone hardy, or - in the case of bulbs - to excess summer moisture when they need a dry rest. Sometimes I choose to grow plants in the alpine house rather than outside, so as to appreciate them at their best. One such plant is a compact pink variety of *Pulsatilla vulgaris* which flowers to perfection every year.

There are some plants that for a particular reason will not grow for you. Before acquiring a rare or expensive plant, it is important to learn about the right conditions it requires, so as to save your pocket. The best advice may be obtained by asking people who grow the plant successfully. If you particularly like the plant it's worth trying again and again just in case the conditions were not right previously. I usually try three times before giving up. You just have to accept that you cannot grow everything you like!

100 - *Helleborus thibetanus*





101 - *Crocus modofficus*

102 - *Crocus michelsonii*





103 - *Fritillaria carica* ssp. *serpenticola*

104 - *Pulsatilla vulgaris* pink



The Alpine House

A fair bit of work is involved as plants have to be potted up and watered, and dirty clay pots must be washed. It is easy to take on more than you can manage.

Ventilation, summer heat and frost protection are important factors to consider in the design of an alpine house in order to provide the plants with optimal conditions.

Alpines will not tolerate stagnant air for long and ventilation is of the utmost importance. This is



105 - *Androsace* in flower

106 - *Androsace vandellii*





107 - The plunge

108 - *Jeffersonia dubia alba*

of great consequence all the year round but especially in the summer when heat can be a real problem, even in Scotland. My alpine house has double doors at both ends which allow the air to flow through and are left open most of the time with a metallic grid to prevent the entry of wild life such as cats, squirrels or rabbits. The doors are only closed in severe gales or on very frosty days. I can only fit ridge vents at intervals because of the structure of the house but it would be ideal if





109 - *Sebaea thomasii*

vents could be fitted along the entire length on both sides. Hot air rises and in the summer it is important to extract as much of it as possible. This is the principle that is used in the new alpine house at Kew Gardens in London; two back-to-back twin tall arches create the height necessary to draw warm air out of the building; this is supplemented by cooling of the air below ground to be re-circulated around the perimeter of the house; shading is based on a fan-like form similar to a peacock's tail; all these measures help keep summer temperature at the required levels. In my own alpine house, louvres and vents run along the sides with their bottoms level with the plunge. If there is a choice, louvres are preferable to vents as they allow in more air. I supplement the ventilation with overhead fans that are timed to come on and off at 15 minute intervals. I am convinced that this helps cushion plants to stay more compact and also makes them less prone to botrytis. The overhead fans are fitted on the half of the house where I grow the alpines. The other half is devoted to special bulbs. In the summer I also have a floor-standing fan that is angled upwards and runs during the day, extracting the hot air from the alpine house. In addition to the greenhouses I have a 600 cm x 120 cm (20' x 4') plunge frame which is like a mini alpine house. The frame does not provide ideal conditions for some plants such as cushions but it is a



110 - *Pleione* x 'Shantung'

useful place to have for the spill-over of plants from the alpine house - with a lot of pot-shuffling between the two.

Previously, I never used any shading for my alpine house but, in view of recent hot summers with resultant scorched plants, I have now tried various forms. Initially, from June to August I used green plastic shading that cuts out 40% of the light and heat. The shading covers the vents and louvres, resulting in sub-optimal ventilation. It was adequate for a couple of years until the very hot and wet August of 2004. This was a disastrous year for cushion plants: nearly all my large plants of *Androsace vandellii*, *A. hirtella* and *Raoulia eximea* died from botrytis and rotting. Noticeably, many of the survivors did not flower well the following year. Since then I have come to a compromise and use a proprietary whitening agent ('Coolglass') on the side of the glass that the sun strikes, thus protecting the plunge nearer the sun. Other plants that need more shade are moved to the floor of the alpine house or to a shaded frame. There are plants which thrive better outside in a sheltered and partly shaded spot where they can enjoy the fresh air and the rain. *Androsace studiosorum* 'Doksa' is in the alpine house only from November to May. *Sebaea thomasii* flowers over a long period of time and can be in peak condition for four weeks; it has to be grown hard if it is to stay compact. After flowering, the



111 - *Anemonella thalictroides* 'Oscar Schoaf'

plant is given a haircut and left outside all summer and autumn. I have a small *Pleione* collection and have noticed that plants grown outside in the summer do better than ones kept inside all the time. I am not sure of the reason. Plants outside do not often get an opportunity to be fed because it often rains when I decide to feed. One theory I have heard is that rain water contains small amounts of nutrients that may constantly feed the plants.

My alpine house runs north-east to south-west. There is debate as to whether an alpine house should run east-west or north-south. I think it depends on which part of the country you are in. In the South, a north-south aspect may be better but in the cooler North, east-west provides maximum light and this might be a useful factor in the winter months when a lot of activity is going on and you want to maximize the available light. The orientation is probably not critical and – as often happens - many people have no choice. However, the alpine house should be in an open situation to receive maximum light, unless you grow shade-loving plants.

Plants up to about 12 cm are usually grown in plastic pots. Beyond that size, they are a lot easier to manage in clay pots. Clay pots keep the



112 - *Primula* 'Broadwell Milkmaid'

roots cool and maintain more constant moisture levels. In my large alpine house I therefore have 20 cm (8") deep aluminium sand plunge beds raised to waist level which run the full length on both sides. They are 90 cm (3') wide - just within my reach. Raised benches provide a good height to look at and to smell the plants. One of the keys to success in growing alpiners is keen observation: the raised benching allows you to give the plants constant attention and to detect problems more readily.

I water with a 40 cm lance attached to a hose. This is more comfortable and easier on my back, as I do not have to bend to reach the far side of the plunge.

Winter protection is essential during extensive cold spells. A slight frost does no harm but a plunge frozen for days will damage actively growing plants such as winter-growing bulbs. Alpiners in pots are very susceptible to extremes of temperature such as are imposed by prolonged freezing: it prevents the uptake of water and puts a lot of stress on the plants. Under-soil heating cables may be used but I use a fan heater to keep the air moving. With the thermostat set at 0°C, I find this adequate to prevent the plunge from freezing.



113 - *Penstemon absarokensis*

Seeds

Most of my plants are grown from seeds – mainly my own but I do also buy seeds from many sources. We are now spoilt for choice with society seed exchanges and several specialist collectors' offerings. I start by sowing in 7 to 10 cm square plastic pots, depending on the number of seeds. I use different composts according to the types of plants but my seed compost is always the same. It is equal parts of J1 No 3, peat, vermiculite, and 5 mm grit. I sow seeds on the surface and cover them with an appropriate layer of compost covered by about a centimetre of grit. I used to give the seed pots some protection in a frame but space there is always at a premium and is better used to house plants. Some seeds on the borderline of hardiness, such as various American fritillaries or some *Cyclamen* such as *C. graecum*, are placed under the staging in the alpine house to protect against freezing temperatures that may kill the seeds outright. I think that germination is perhaps better when pots are exposed to all weathers outside. Possible explanations are that seed inhibitors are washed away and damping-off is less with increased ventilation. Also, stratification (exposure to freezing temperatures) seems beneficial to some seeds with hard coats. Nevertheless, during January to April I constantly check the germination because I want to move seedlings as soon as possible to a frost-free environment in the small greenhouse. Rain causes no harm in the early stages but a hard frost



114 - *Erythronium americanum*

might. The only problem in placing seed pots outside is again one of space. They threaten to take over my whole patio, including the picnic table. Remember that these plants need to be outside in the summer!

I have been using gibberellic acid to aid the germination of certain plants such as *Viola*, *Androsace*, gentians, primulas and some members of the Ranunculaceae such as *Aquilegia jonesii* & *A. scopulorum*. *Penstemon uintahensis* and *P. absarokensis* also respond very well to this treatment. Some of the hard-to-germinate erythroniums like *Erythronium pusaterii*, *E. taylorii*, *E. pluriflorum*, *E. purpurascens* and other cold-climate taxa also seem to benefit, although I have not made any controlled experiments. Growers have germinated such species successfully by conventional treatment, in Britain placing seed-containers outdoors; germination is not necessarily sooner but seems more uniform and more thorough. My experience is that some erythronium seeds usually germinate the first year and the remainder the following year. I use gibberellic acid at a concentration of 500 to 1000 ppm, soaking the seeds for 24 hours and drying them before sowing. It is probably best to start at 500 ppm and - if not successful - to try at 1000 ppm. The stronger solution tends to make the seedlings etiolate. It used to be difficult to acquire gibberellic acid but there are at least two websites in USA that offer it at very realistic prices. The other advantage is the ability to measure accurate quantities using scoops with instructions provided.



115 - Juno irises

Seeds collected from my plants are stored in glassine envelopes in plastic tubs in a domestic refrigerator. They stay viable for a few years. As my storage requirements always increase, I have to compete for fridge space so to keep the peace I shall just have to get my own fridge in the future.

Damping-off of seedlings is a problem in muggy spells. Dousing with a solution of liquid copper fungicides is a good preventative measure. Other ways to minimize this problem are to sow more thinly and to place the pots in a well-ventilated area.

Seedlings, when large enough to handle, are pricked into 5 cm (2") plastic pots. I grow as many seedlings as possible in the smaller greenhouses. I repot regularly as necessary, keeping them free from pests. The most promising are then grown in clay pots in the alpine house from 10 cm (4") diameter onwards and are plunged where they can be looked after more closely. The others are planted out in different areas of the garden. It is surprising what will survive outside given the right location.

Compost

Growers in our club talk about composts all the time as if this offers a magic recipe for success. The truth is that the formula does not have to be precise: an open, granular and moisture-retentive mix is what to aim

for. There are as many recipes for composts as there are growers. My own basic compost for most alpine and bulbs is based on 1 part JI No. 3 : 1 part grit : 1 part peat-bark-vermiculite mix : 0.5 part coarse perlite. Perlite is an expanded volcanic rock that is light, adds extra drainage and holds moisture. The only disadvantage is its white colour. I use different composts according to need. For Juno irises - 1 part of limestone chippings added to the mix above; for dionysias - 80% drainage material (grit, vermiculite, perlite) and JI No. 3; for orchids (*Cypripedium*) - 8 parts 'Seramis' or similar drainage material : 1 part JI No. 3 : 1 part bark.

There never seems to be enough space in the alpine house, and plants in clay pots are grown close together. This cramming together makes maximum use of space. In an ideal world, more space between the pots would allow more air circulation and probably benefit the plants but I believe that additional ventilation with the overhead fans compensates for my less-than-ideal conditions.

Pots and Potting

One half of the alpine house is devoted to bulbs - the special ones only - but I also have a spill-over frame dedicated to bulbs. It is probably better to grow bulbs in a separate alpine house because of their different requirements but with restricted space this compromise of half alpine with half bulbs works reasonably well.

Alpines are potted on as appropriate in the growing season, usually in March to July - although it is possible to do the job at any time. After potting, plants are kept shaded for a week or so before going into the plunge. Complete repotting is done very rarely and plants may need a couple of weeks or more to recover from that particular trauma. I dislodge medium sized plants (say 18-25 cm) by a sharp tap on the edge of the pot with a wooden rolling pin and then use a trowel to extract the plant. The trowel is also handy to help place the plant in larger pots. For transfers from larger pots such as 25 to 30 cm I use a safer approach in order to keep the root ball intact. I place a frame made of four pieces of wood screwed together on top of the pot and underneath the plant foliage. I then turn the ensemble upside down, remove the pot, cover the root ball with 2 overlapping pieces of cloth, turn it over again and place it in its new larger pot, withdrawing the frame and the cloth.

July and August are probably the busiest period - this is the time to re-pot the bulbs. About half of the plants I grow are bulbs so it is always a race against time to try to finish repotting before October. The early growers such as Chinese fritillaries are potted first - some in May, whereas Juno irises and dwarf lilies are the last - sometimes into September or October. If I had enough time I would re-pot bulbs every year but there is never enough time so some remain in their pots for 2 or even 3 years. Visual inspection of the bulbs at repotting time is very important to spot any problems early on.

Turning pots regularly is important, especially if cushion plants are to flower evenly. This is crucial if you are thinking of showing, because judges like to see an evenly-flowered plant. Yes - it is a chore, but I find the best way is to set a regular time for this activity. One of my jobs on Sunday mornings is to turn the pots through 90°. This also gives an opportunity to observe closely and to spot early problems such as botrytis or pests in time for remedial action. There is no substitute for spending time with your plants!

Water

Never mind the compost ... the answer lies in the watering. Watering is one of the most difficult aspects of growing alpines. Skill in judging water requirements is vital to success: a key to good growing is knowing when and how to water. This only comes with experience. Many more plants are killed with overwatering than underwatering. You need to learn by killing a few plants before getting it right. There are so many variables – and there is no exact formula. Factors that affect watering are the type of pot - plastic or clay, whether plunged, the compost mix, the time of year, and so on... It is best to water thoroughly and to follow with a drying-out

116 - Double potting of a rosulate viola





117 - *Silene hookeri* ssp. *bolanderi*

period rather than to apply a little bit of water every day.

I reduce watering when alpiners go dormant, usually around the end of August. Bulbs are different; they commence growth in the autumn and they need moisture in September and October to get them started. Be careful when alpiners start into growth - usually in February - as there may not be many active new roots to take up excess water. Likewise, in August the roots start to rest and too much water may induce rotting. Watering should not be stopped but should be reduced for six months of the year from October to March, except for bulbs, which need watering in proportion to the amount of top growth. A lot of winter growth goes unseen and at that time I water the plunge about once a month, depending on weather conditions.

118 - Dormant *Silene hookeri* ssp. *bolanderi*



The problem of growing different plants with divergent requirements in the same plunge becomes obvious during the resting period. Bulbs of course need to be kept relatively dry while alpiners are in active growth, and *vice versa*. One strategy for dealing with dormant plants that are susceptible to too much moisture is to double pot them - a technique of putting the pot into a similarly sized empty pot. This also works well for *Iris kolpakowskiana* and other bulbs that like to be well into growth before being watered. Plants susceptible to rot at the neck may be

grown in a plastic pot with no bottom, plunged in a clay pot. With this prudent arrangement, water only reaches the plant from the bottom. This system works well for the rosulate violas, especially for young plants in small pots.

Another problem to watch out for is dormant plants in a large pot (e.g. 30 cm diameter). *Silene hookeri* ssp. *bolanderi* dies back completely when dormant and the compost at the centre of the pot may become very dry. Occasional watering in the centre of the pot keeps the plant evenly moist. The usual form grown is very straggly with lanky stems, whereas the form shown here is much more compact. It was grown from seeds collected by John Andrews in California and was sown in 1994.

Feeding

Young plants if repotted regularly need no additional feeding but other plants require some food in the growing period to keep them in good health. '*Little and often!*' is the rule, perhaps half strength weekly. If you have to choose only one type of fertiliser, tomato feed is appropriate for all plants.

Ideally, for bulbs one should start with high nitrogen (2:1:1) at the start of the season to feed the leaves, switch to a balanced feed (1:1:1) in mid season and to high K (1:1:2) around flowering time. If bulbs are repotted every year, a high K fertiliser alone is adequate. I also add a little granular slow-release fertiliser (for example, Vitax Q4) to the compost. Generally, bulbs are gross feeders compared to alpiners and respond quite well to this additional feeding. '*Osmocote*' is a granular controlled-release fertiliser that feeds for up to six months. Remember that the slow release of nutrients is temperature dependent: there is some debate as to its usefulness in feeding bulbs because too much leaf growth, if followed by a cold spell, can be detrimental. I have not come to any firm conclusions on its usefulness but I have been trying it out on a few bulbs in the last 2 to 3 years. However, I think the problem may be in the NPK ratio of these granular fertilisers. '*Osmocote*' comes in different NPK ratios but I would recommend one with a high K such as 10:11:18.

Pests

In recent years the number of pests I have to deal with has increased. The large pests include deer, cats, rabbits (a big problem just now!), voles & birds and the tiny ones are aphids & spider mites. Ultrasonic deterrents work to some extent with the bigger pests like cats and deer. One has

119 - Spider mite in *Androsace*



to be watchful of aphids all the year round and spray accordingly.

Spider mites are proving particularly troublesome and are a frequent problem in increasingly hot summers. I believe whole collections of dionysias have been wiped out. There is an increasing armoury of weapons ranged against this pest, not all of which are available to the amateur gardener. Prevention is better than cure and it is a good idea to move susceptible plants to a cool and humid outside place before infection. Large rosette-forming *Androsace* such as *A. studiosorum* and others of the *villosa* type are particularly susceptible. Dwarf penstemons such as *Penstemon uintahensis* and *P. absarokensis* are also affected and can be used as indicator plants. Systemic insecticide containing Imidacloprid & Bifenthrin, Liquid Derris Plus (which needs frequent application) and 'Provado Ultimate Bug Killer' are available in garden centres in Britain. The latter is ready to use and has proved quite effective. It kills adult mites very quickly but it is not effective against the eggs. Neem oil and other oil-based products like 'Spidermite Control' (available from hydroponic shops) work by suffocating the mites. Other brand names that are available in the trade include 'Torq ®', 'Pentac ®', 'Aquaflow ®', 'Keltane ®' and 'Dynamec ®'. 'Envidor ®' is a lipid synthesis inhibitor that may well be the most effective, working as it does by contact with all developmental stages of mites, including eggs, nymphs and female adults.

Botrytis is a particular problem in muggy spells in autumn or winter; androsaces that form resting rosettes and dionysias are particularly susceptible. Again, one has to be vigilant and take preventive and corrective measures promptly.

120 - *Pulsatilla vulgaris*



Is it Easy?

I hope that so far I have encouraged you to grow plants in the alpine house. The dreadful truth is that my account may have the opposite effect on people. Here is a comment I received after giving a talk on growing in the alpine house: 'You obviously spend a massive amount of time looking after your alpine houses, particularly in the summer, when I like to be away as much as possible - which is why I said your talk had

put me off having one! People also ask me whether I ever go on holiday. Holidays are usually taken in autumn or winter but ... yes, we do manage to go away in the summer too. We are fortunate to have understanding friends who look after the watering when we are away. All it takes is very precise instructions on a large label for each area under glass, and a practice run before the holidays!

That said, for people who like to get away for a long time in the summer, the idea of using an alpine house mainly for bulbs is a good one as bulbs require little attention during their summer dormancy.

Some Plants Grown in my Alpine House

I show here some of the plants grown in my alpine house that have given me great pleasure over the years. The situation is not static and what I grow varies from time to time. There is always competition for space and each plant has to earn its keep. If a plant is not happy or grows out of bounds, it is replaced - no matter how scarce it is.

Cushion plants grow at high elevations and in exposed habitats; they make ideal plants to grow in an alpine house. Some of the most attractive cushion plants belong to the genus *Androsace*. Most androsaces fare better outside in a trough or raised bed and some can even be invasive.

121 - *Androsace muscoidea* 'Dome Group'





122 - *Androsace studiosorum* 'Doksa'

A. vandellii and *A. hirtella* & its hybrids do better in the alpine house all year round. They flower well and reliably every year and can literally cover themselves with flowers so that foliage is invisible. *Androsace muscoidea* 'Dome Group' is looser in growth but equally attractive when in full flower.

Dionysias are the ultimate cushion plants. They come in such a wide range of colours ranging through white, blue, yellow, pink and purple but I do not find them as reliable as androsaces. Once at a certain size, rosettes start to die off and botrytis sets in readily, especially in muggy weather spells. Spraying with a fungicide containing Myclobutanil every two weeks can be helpful. They need maximum ventilation and shading in the summer. The *Dionysia* specialist grows them in a separate alpine house. I grow a select few and keep them going by propagation from cuttings. I endeavour to keep *Dionysia* 'Annielle' (named after my wife) because it is an attractive sight when it covers itself with its pale yellow flowers with deeper yellow centres.

Drabas are cushion crucifers, usually with yellow flowers. The white-flowered varieties such as *Draba racemosa* and *D. dedeana* grow well with alpine house treatment although the latter will grow well on scree. *Draba dedeana* 'Eric Watson' is a particularly attractive form with large flowers on short stems. A cushion plant with blue flowers would be very desirable. *Chionocharis* and *Eritrichium* come to mind but, although I keep trying these from seeds, I cannot say I have had long term success with them. *Alkanna sieheana* is considered the Turkish *Eritrichium* and although it is not as compact, the combination of blue-grey foliage with the royal blue flowers is very pleasing.



123 - *Dionysia* 'Annielle'

Thinking of cushion primulas, *Primula allionii* and forms come to mind, with a wide variety to choose from. Asiatic primulas are not usually thought of as cushion plants but *P. bracteata* is one that grows well in an alpine house and does not mind the hot drier atmosphere in the summer. *P. henricii* is another choice Asiatic primula that I grow, with

124 - *Draba dedeana* 'E Watson'





125 - *Primula bracteata*

attractive pure white flowers. The plant has set a few seeds and I eagerly await germination. This could turn out to be hybrid with *P. bracteata*.

Raoulia eximea is a cushion plant that does not flower in cultivation. It was grown from SRGC wild-collected seeds from drier mountains of South Island, New Zealand. This is one of the vegetable sheep, an

126 - *Primula henricii*





127 - *Raoulia eximea*

outstanding species but very slow-growing. Rosettes are liable to rot in winter and, if they do so, they should be removed promptly.

'Bulbs' including corms, tubers and others comprise about half my plants. I grow some dwarf Juno irises such as *Iris fosteriana* and *I. narbutii*

128 - *Iris suaveolens* 'Yellow Form'





129 - *Crocus chrysanthus* 'Sunspot'

which flower very early, sometimes in January. The only drawback is that the flowers are very short-lived unless kept cool, when they last longer. With care, they grow & multiply and set seeds which, if sown fresh, germinate well. The rather splendid dwarf Junos I have selected for this

130 - A nonet of *Corydalis*





131 - *Iris fosteriana*



132 - *Iris narbutii*



133 - *Corydalis schanginii* ssp. *ainii*

134 - *Corydalis nudicaulis*





135 - *Crocus serotinus salzmanii albus* 'El Torcal'

136 - *Dicentra* 'King of Hearts'





137 - *Tecophilaea cyanocrocus*

article have all flowered for me. The reticulate irises are dwarf plants with very attractive flowers. There are many named varieties of *Iris reticulata* to choose from and most will grow well outside. *I. bakeriana* is an attractive member of the reticulate group of irises but I have found it not very permanent.

It is difficult to think of a genus with such a wide colour range as *Corydalis*. They come in all colours of the rainbow. *Corydalis solida* comes in different colours other than pure blue but *C. fumariifolia* is blue and there are bi-coloured ones such as *C. nudicaulis* (coffee and cream) and *C. schanginii*. Perhaps the most dramatic colour combination of all is *C. schanginii* ssp. *ainii*.

I am not a 'croconut' but I love the crocus flower's shape. The one downside is that the flowers

138 - *Tecophilaea cyanocrocus*
var. *violacea*





139 - *Tecophilaea cyanocrocus* var. *leichtlinii*

flop once they are over and must be removed to keep the display attractive. *Crocus michelsonii* is not an easy one to grow outside and, flowering so early (December in some years), is best admired in the alpine house. The flower is variable in colour and some named forms

140 - *Tecophilaea*
'Storm Cloud'



have been selected but they are all very beautiful. *C. chrysanthus* 'Sunspot' grows outside on a raised bed but similarly - because it is early - I grow it under glass. The black anthers make a lovely contrast to the yellow petals.

The Chilean crocus comes in different shades of blue and violet. *Tecophilaea cyanocrocus* var. *leichtlinii* has a contrasting white centre. *T. c.* var. *violacea* is another selected clone. By growing from seed, other shades such as 'Storm Cloud' (probably a hybrid between *T. c.* var. *leichtlinii* & *T. c.* var.

violacea) or near-white may be obtained. My favourite is *T. cyanocrocus* var. *cyanocrocus*, which has the most pure attractive blue flowers.

If you grow only one tulip, *Tulipa humilis pulchella* is surely the one. The steel-blue centres with the white

141 - right: *Fritillaria crassifolia* ssp. *poluninii*

142 - below: *Fritillaria pluriflora*



petals make this plant singularly attractive.

Erythroniums grow better outside where the deep tubers have a free root run but I grow *Erythronium americanum* (the flowering form) in a pot. A bright day with a lot of natural light is needed if the flowers are to open. This plant is very frustrating to show: when it flowers in early April it is not bright enough in the show hall in the morning whereas in the afternoon - when the judges are not looking - it shows its true colours.

Fritillaria is my favourite bulbous plant. I love the subtle colours and tones of the bells and am fascinated by the variations of form, shape and colour that exist



within many species in cultivation or in the wild. My collection has increased over the years as I try to amass as many species and varieties as I can. I only have space to show a few favourites. *Fritillaria glauca* is one of the most attractive dwarf American species. The combination of grey leaves and yellow bells is particularly beautiful. The

143 - left: *Fritillaria glauca*

144 - right: *Fritillaria acmopetala* 'Lamplight'

yellow form of *F. pyrenaica*, 'Bernard Tickner' is a wonderful sight when a potful of bulbs is in full flower. Yellow forms of many fritillaries exist but *F. acmopetala* 'Lamplight' is a recent form that I have selected from a batch of ordinary plants grown from SRGC seeds sown in 1993. The pink *F. pluriflora* is another favourite - a very elegant medium to tall plant with good size open facing flowers.

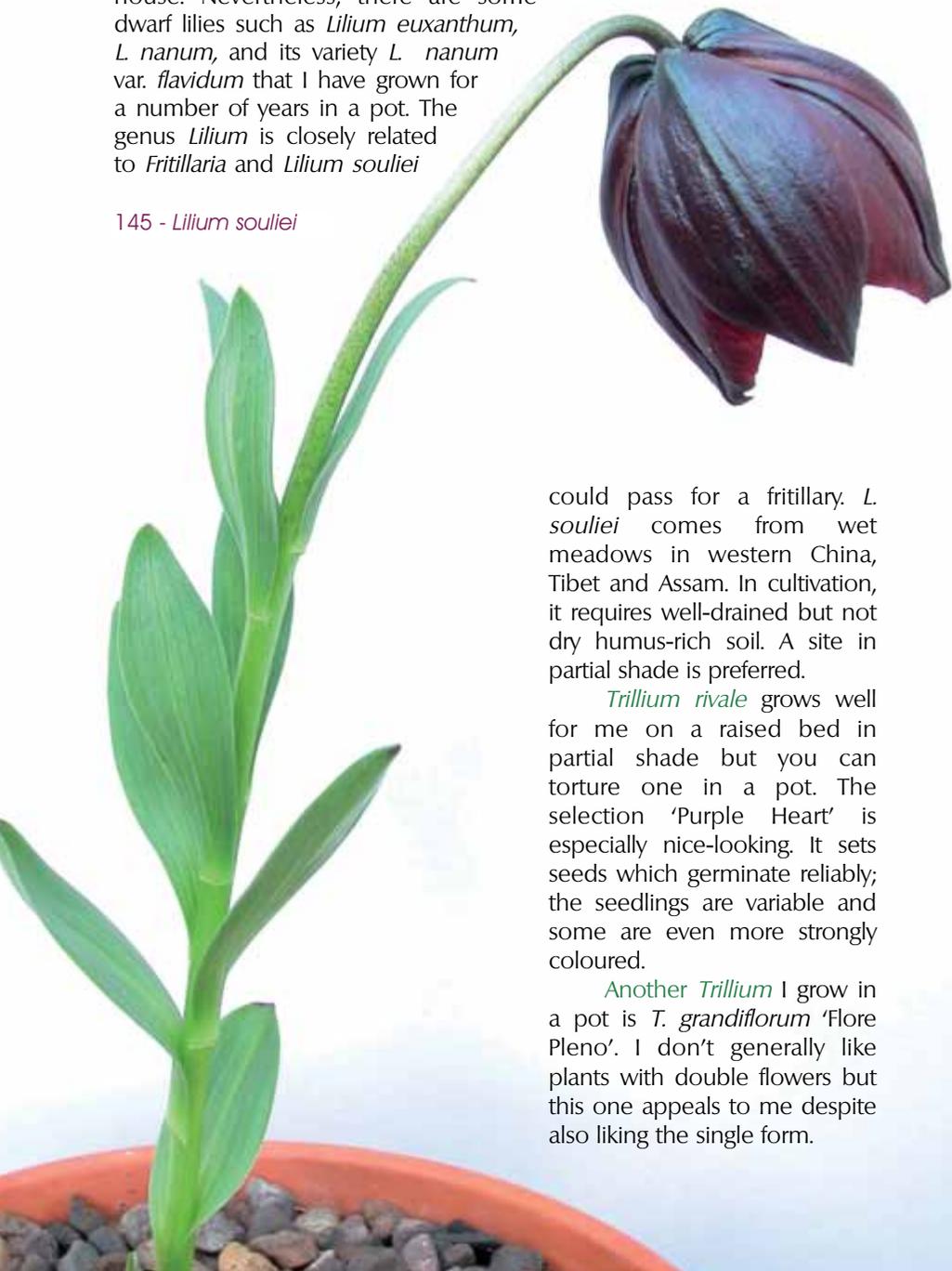
Fritillaria crassifolia ssp. *poluninii* is one of the dwarfest fritillaries, best grown in a pot. I don't think anyone has had enough to try in the open but in any case it is so small that it would be



lost in the garden. It is so distinct from the other *Fritillaria crassifolia* complex that I think it deserves specific status.

Lilies do not come immediately to mind for growing in the alpine house. Nevertheless, there are some dwarf lilies such as *Lilium euxanthum*, *L. nanum*, and its variety *L. nanum* var. *flavidum* that I have grown for a number of years in a pot. The genus *Lilium* is closely related to *Fritillaria* and *Lilium souliei*

145 - *Lilium souliei*



could pass for a fritillary. *L. souliei* comes from wet meadows in western China, Tibet and Assam. In cultivation, it requires well-drained but not dry humus-rich soil. A site in partial shade is preferred.

Trillium rivale grows well for me on a raised bed in partial shade but you can torture one in a pot. The selection 'Purple Heart' is especially nice-looking. It sets seeds which germinate reliably; the seedlings are variable and some are even more strongly coloured.

Another *Trillium* I grow in a pot is *T. grandiflorum* 'Flore Pleno'. I don't generally like plants with double flowers but this one appeals to me despite also liking the single form.



146 - *Trillium grandiflorum*
'Flore Pleno'



147 - *Trillium pusillum*

148 - *Trillium rivale*
'Purple Heart'





149 - *Daphne x hendersonii* 'Kath Dryden'

150 - *Daphne petraea* 'Tremalzo'

151 - *Daphne petraea* 'Lydora'

152 - *Daphne arbuscula*





153 - *Daphne calcicola* 'Gang Ho Ba'
154 - *Benthamiella patagonica*





155 - *Nototriche macleanii*

original plant suddenly collapses – a well known characteristic of the genus. I grow various forms (10 different) of *Daphne petraea* but the most reliable and 'faster'-growing to date has been the classic *D. petraea grandiflora*. 'Faster' means it takes 20 years to fill a 30 cm pot. Other favourites are *D. petraea* 'lydora', the most intense deep-pink flowered clone available, and *D. petraea* 'Tremalzo' - which has pure white flowers of a crystalline texture. *D. calcicola* is a daphne with yellow flowers and is a wonderful sight in nature. It is quite variable in leaf, flower colour and compactness but is distinct in habit from the taller open bushes of *D. aurantiaca*. Two of the *D. calcicola* clones were selected and named: 'Sichuan Gold' for compactness and freedom of flowering; and 'Gang Ho Ba'

156 - *Viola dasyphylla*



Many dwarf slow-growing shrubs may be grown in pots. Dwarf daphnes are such another favourite. Sometimes they can be temperamental and it is best to propagate them from cuttings or grafting in case your



157 - above: *Dactylorhiza* 'Sweetcorn'

with the largest leaves and flowers on a compact plant.

South American alpine plant introductions have been frequent in

recent years. Hummock-forming *Benthamiella*, *Leucheria* with daisy flowers, *Junellia*, rosulate violas including *Viola columnaris* & *V. dasyphylla* are not new but it certainly taxes our skills to grow and flower them well. *Viola*



158 - *Ourisia microphylla*

dasyphylla comes from Argentina, in volcanic regions of Patagonia in sandy alpine fields among dwarf scrub. It has been with me for a few years, stays in character and even flowers reliably every year.

Hardy orchids have a particular charm and are awe-inspiring. *Dactylorhiza* 'Sweetcorn' started life in a test tube as a deliberate cross between *D. majalis alba* and *D. sambucina* 'Yellow Form'. The results were unpredictable but, pleasingly, this clone combines the robustness and vigour of the former with a colouration midway between the two. This plant was obtained from Paul Christian in 1996 as 'infant size' (from a flask seedling) which was indeed tiny: the sizes he listed then for *Dactylorhiza* were infant, junior, first size and flowering size.

159 - *Viola columnaris*



Growth was initially slow and it was three or four years before it was big enough to flower. Since then, it has clumped up at a modest pace and the





160 - *Cypripedium* 'Sebastian'

plant has multiplied slowly. In stature and vigour, it most resembles *D. majalis*. I have grown it in my usual *Dactylorhiza* compost - moisture retentive (Jl & peat & grit) mix. It dies back earlier (end of July) than most marsh orchids, more like *D. sambucina* in growth (*D. sambucina* requires a drier rest period and perhaps better-drained compost). I usually repot it in August or September. I have not tried it outside yet but I suspect it will be vigorous enough to thrive.

The Lady's Slipper orchids are hardy and grow outside in Britain if the right spot is chosen. They like a sharply-drained compost that does not dry out completely. Some of them are more reliable in clay pots. In nature they like a bit of shade but they die down before the summer heat and can stay in the greenhouse all year round, the sand plunge keeping the roots cool. *Cypripedium parviflorum* is one of the easier cypripediums to grow. *C. parviflorum* var. *pubescens* is a compact variety that grows well in a pot. *C. formosanum* and *C. 'Sebastian'* have also performed well until now. The latter is very similar to *C. montanum*, one of its parents (the other being *C. parviflorum*), but is easier to manage; *C. montanum* itself is one of the most difficult cypripediums to cultivate.

Other plants that I grow in the alpine house include the attractive composite, *Pyrethrum leontopodium*. This is a fairly new introduction from granitic glacial moraine at 4200m in the Tien Shan mountain range in Kyrgyzstan. It is an extraordinary white and woolly caespitose plant with large white daisies on short stems. I don't know if it has been tried in the open yet but the snow-white velvety foliage suggests that wet weather will not be tolerated. It is not often seen but deserves to be kept in cultivation. It has set seeds when cross-pollinated but I have found it to germinate very erratically, unusual for a member of the Compositae.

161 - *Cypripedium* 'Ursel' (*fasciolatum* x *henryi*)





162 - *Pyrethrum leontopodium*

The Lady of the Snow, *Pulsatilla vernalis*, is a very rewarding plant. In nature, individual plants do not produce very many flowers but, in cultivation, one clone I grew performed consistently for a number of years and produced numerous flowers on short stems. I love all pulsatillas but this is surely my favourite.

163 - *Pulsatilla vernalis*





164 - *Argyroxiphium*

Penstemons are many and varied, to the point that there are societies devoted to the genus. Many American seed lists have numerous varieties on offer, ranging from tall 150 cm to very dwarf sessile plants. Some of the dwarves are very slow growing and produce large flowers. Others worth searching for are *Penstemon uintahensis*, *P. yampaensis* (a challenge!), *P. caulis*, *P. speciosus* ssp. *kennedyi*. *Penstemon absarokensis* is a fairly recently described species, discovered in 1974 and named ten years later after the Absaroka Mountains. It has a low tufted habit only 10 cm tall, producing several upright stems from a woody caudex. It is rarely collected, perhaps protected by the long trek to the volcanic Absaroka peaks. This collection was from the highest station on record - on steep south-facing cinder screes. I sowed seeds treated with gibberellic acid at 1000 ppm; according to the seed catalogue, it is one of the penstemons that respond to this treatment. The seeds germinated in the spring after about 2 months. I grow it in very well drained JI-based compost in a deep pot in the alpine house, give it full exposure and water it carefully in



165 - *Paraquilegia microphylla* from Josef Halda's seed

winter when it dies back completely. It is very prone to red spider mites so might be better outside in the summer. Young plants have survived last winter on a scree raised bed. It sets seeds readily (the parent plant flowered for the first time last year) and these have germinated this year (2008).

The dwarf aquilegias make wonderful rock garden plants. *Aquilegia jonesii* is one of the most attractive but also a challenge to keep going and flowering. Another alluring but more accommodating species is *A. scopulorum*. It may be grown outside in a trough or raised bed.

Argyroxiphium sandwicense ssp. *macrocephalum* is the Hawaiian Silver Sword; it makes a spectacular show plant with the most striking silver foliage. The species is monocarpic and it flowered for me but then duly died without setting any viable seeds. Cross-pollination with another clone is needed in order to get viable seeds. Unfortunately, collecting seeds in the wild is now prohibited and their supply is running out.

Finally, *Paraquilegia microphylla* comes from high (3500m) in the mountains of China. It is recognized as a distinct species in the 'Flora of China' and, as its name implies, it is a smaller and more compact plant than *Paraquilegia anemonoides* / *P. grandiflora*. It typifies what an ideal alpine should be - hardy, attractive and not too difficult to grow. What else can one ask for?

400 Trees & Shrubs for Small Spaces
How to Grow the Right Plant in the
Right Place

Diana M Miller

224 pages & 150 colour photos

ISBN13: 978-0-88192-875-4

Timber Press, £20, 2008

This book aims to introduce gardeners to the range of woody plants available today. This it does well, with a very diverse range of plants to cover all aspects and tastes.

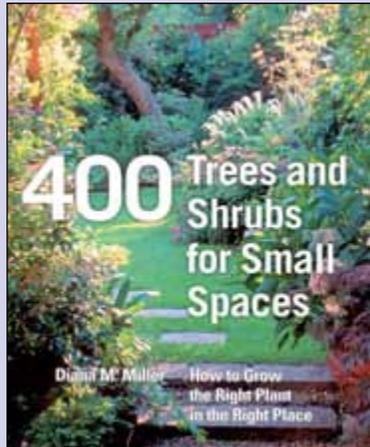
The climate (possibly), if not the times, is a-changing; gardeners are always looking to grow something more adventuresome. This book presents a range of woody plants - small trees and large to small shrubs - to encourage people to find a plant to their taste, of a desired size and for the planting position. The text is crisp and informative but, for some gardeners inland and in the North, a few of the plants mentioned will have to wait a bit longer for the warmer weather to catch up. Plants such as *Lagerstroemia indica*, *Rhodochiton atosanguineus* and *Clianthus* are perhaps a little tender to be reliable for everyone. However, for many people, part of the fun of gardening is seeing what succeeds - if only for a short time. This book will give everyone some interesting plants worth trying in their own garden.

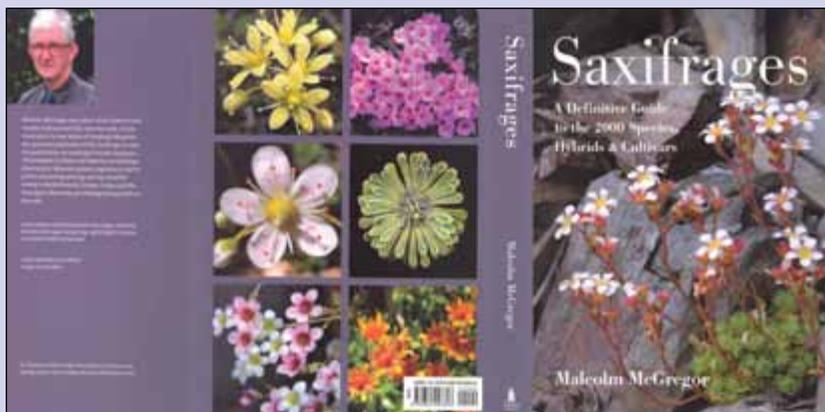
In a book of this size it is impossible to cover the larger genera such as *Rhododendron* or *Viburnum* to any great degree but there are good pointers to plenty of weightier tomes that may be consulted on these subjects if necessary. Unsurprisingly, in a compass of just 400 plants it is impossible to be comprehensive but the book covers a great range of possible planting subjects and offers good indications of suitable situation and conditions. Sections on selection and maintenance are both useful inclusions.

There is a good range of photographs to support the text together with very useful information in tables that document planting conditions and the characters of the plants. A few trivial typing errors do not detract from this useful and enjoyable book, which is arranged alphabetically by genus and is supported by a good working index.

All in all, this compendium is a very useful addition to the gardener's bookshelf.

Paul Matthews





Saxifrages

The Definitive Guide to 2000 Species, Hybrids and Cultivars

Malcolm McGregor

384 pages, 339 Colour Photos

ISBN 0881928801, 9780881928808

Timber Press £35 (or from the SRGC Book List), 2008

This is a beautiful book that can be highly recommended both for the enthusiast and the beginner. It is a true encyclopaedia of saxifrages, a complete overview. It brings us up to date with all the latest scientific research, the new classification groups of the species and descriptions of all the new cultivars that have arisen in recent years. Much new information has only appeared in scientific papers or magazines devoted to the genus, and now to have it all together in one publication is a great advantage.

The majority of the photographs are mouth-watering, particularly the full page illustrations. My only criticism is that a few photos in the wild are very small and whereas the habitat is clear the plant itself is sometimes indistinct. I like the contrast between the botanical illustrations, the close-ups, and those images showing plants either in their natural habitat or in a garden. I do, however, find the omission of numbers on some pages frustrating when using the index for reference; occasionally, as many as four consecutive pages were numberless. There is a minor caption error to the photo of the new hybrid on page 151: it should refer to *Saxifraga callosa* x *S. cuneifolia*, not to *S. cuneifolia* x *S. crustata*.

For new saxifrage growers there are some useful starting points on cultivation and recommended plants. Surely the photos will whet the appetite and encourage more rock gardeners to try this wonderful genus that has so much to offer throughout the year. Perhaps more growers

will try the London Pride group and the mossy saxifrages will stage a comeback. For the specialist, the comprehensive listings of all the species and particularly the current knowledge of saxifrages in the Himalayas, the Caucasus, Iran and China are very welcome.

It is a super book and I have really indulged myself reviewing it.

Beryl Bland

A Natural History of Conifers

Aljos Farjon

304 pp, 173 colour photos, 26 line drawings, 8 black and white illustrations, 4 maps

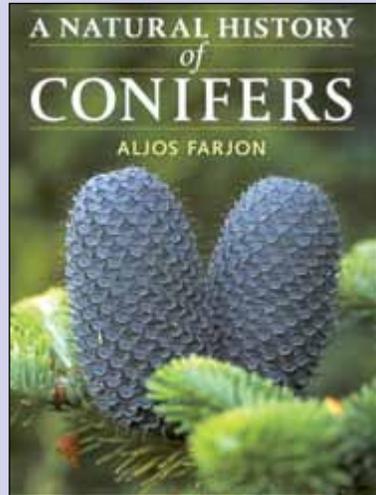
ISBN 13: 978-0-88192-869-3

Timber Press £25, 2008

Partly because of their size, conifers do not play a large part in our gardens. Apart from the much hated *leylandii* hedge, their use is confined chiefly to so-called dwarf specimens often derived by vegetative propagation from Witches' Broom. Even this limited palette allows conifers to give the garden an added dimension through their colour, form and texture. Books

abound, yet until now there has been a huge gap in the literature, with nothing between technical books for botanists and those purely about conifers' garden features. This book fills that gap. Farjon is not a gardener and his is a popular science book, written by a man who knows more about conifers in all their aspects than almost anyone else.

The contents are themed: sections are devoted to conifer systematics, extinct species, ecology, geographic occurrence, their impact on people, and conservation. Starting with their origin, the author explains what conifers are and why plants such as yews and junipers are included even though they do not bear cones. He explains how the non-flowering conifers survived the onslaught of flowering plants. He uses non-technical language to make even the most unscientifically minded of us understand what a clade is and how botanists use it! We are taken through the evolution of conifers and told how they manage to survive all their enemies so successfully that they live several times longer than the flowering trees and have managed to colonize most parts of the world. The Dawn Redwood and Wollemi Pine are given their proper places in the line of conifers. We are told why conifers are important in



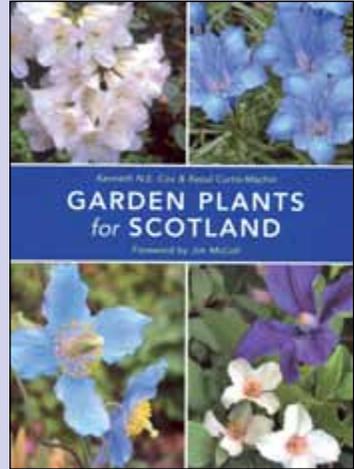
nature and how they provide the base of the whole ecosystem – a large conifer is a little world of its own, supporting many bacteria, insects, animals, plants and birds. The book is profusely illustrated with superb photographs throughout and many line drawings. These latter show Farjon's skill as a botanical illustrator. The book is full of the little anecdotes that make plants so interesting. As an example, the rules for botanical names dictate that the Wollemi Pine should be called *Wollemia nobleana*. However, Australian botanists, fearing that – if so-named – people would call it *W. knobblyana*, called it *W. nobilis*. When the makers of the film 'Jurassic Park' asked Farjon where it should be filmed, he told them - 'New Caledonia'. Ignoring his advice, they chose one of the most unlikely locations possible – Florida. Although he does not say so, the makers of the BBC's series about dinosaurs chose a better location, for some parts of it were filmed among the *Athrotaxis* forests of Central Tasmania. Did you know that the Norway Spruce, *Picea abies*, has two foliage forms? Farjon tells us that in the western Alps, Jura & Black Forest it has pendulous foliage (called Kammfichte) that helps it to shed wet snow. In the eastern Alps, the Carpathians & Scandinavia it has spreading foliage (Plattenfichte) that lets dry snow fall through it. These are just a few of the book's many interesting facts about these plants, as ancient as horsetail.

When a child I was told that conifers have their shape because it helps them to shed snow. When I saw pictures of snow-covered trees in the Alps it seemed that the shape was not always very effective; anyway, I realised that not all conifers have a conical shape. On seeing the scattered coniferous trees in the remnant Caledonian Forest it seemed more likely that the shape enabled the tree to make the most effective use of the low northern sun. The discovery that conifers originated in high latitudes, when the world was uniformly warm and moist, clinched my hypothesis. If this book had been available all my mental effort would have been unnecessary, for in his book Farjon explains not only conifers' origin but also how they were unable to compete with the flowering plants and had to retreat to places where the flowering plants are at a disadvantage. Their occurrence in cold places is not an original characteristic but is a consequence of their adaptation to cold.

Although it is difficult for a gardener to criticize a botanist, I am surprised that, when mentioning relict species of conifer, Farjon does not include *Lagarostrobos franklinii*. Now found only in wetter parts of Tasmania, 40 million years ago it was formerly much more widespread, being found over a large part of south-eastern Australia. Surely that is evidence of its relict nature? That apart, Farjon's style of writing flows easily and his arguments are clear and well explained. This book was compulsive reading and I cannot think of any that I have enjoyed more. It is one to read from beginning to end and to dip into for years to come.

Jeff Irons

Garden Plants for Scotland
Kenneth N E Cox & Raoul Curtis-Machin
240 pages, more than 800 colour
photos
ISBN 071122675X, 9780711226753
Frances Lincoln £25 (or from the SRGC
Book List), 2008



Had it been possible to acquire such a book when I came, an enthusiastic but distinctly novice gardener, to live in Scotland nearly forty years ago, I should have been spared wasting much time, effort and money in the years that followed, trying to grow unsuitable plants – the only information then available to me being relevant to the southern half of Britain. This dearth has been rectified by the publication of this book.

In the introduction the authors tell us why Scotland is one of the best places in the world to garden. Its maritime climate, generally ample rainfall and the rarity of severe droughts or really hot weather mean that many plants grow well here. But the climate varies considerably, depending on geography, and choosing plants that are suited to the local conditions is critical to success. The book suggests many simple practical measures that can be taken to extend the range of plants grown in any given position and provides good information on soil types, planting and pests and diseases. A very strong case is made for buying locally raised plants and the particular relevance of the 'Scottish Garden Plant Award' is convincingly explained.

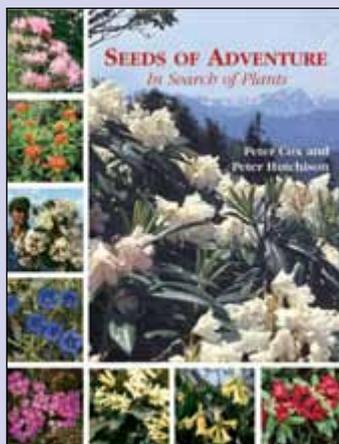
The bulk of the book is devoted - with the aid of over eight hundred photos - to description of the most reliable shrubs, conifers, hedges, trees, fruit and perennials. Cox and Curtis-Machin have evaluated the performance of thousands of plants, giving a brief description of each and a hardiness rating relevant to Scotland along with excellent cultural advice. Distributed throughout the book are useful lists of plants for particular situations such as moist shade or windy sites inland, and of plants with certain attributes like deer-resistance or fragrance.

Scottish gardeners from The Borders to Shetland, whether experienced or beginner, will find this book to be an essential companion giving them accurate information on hundreds of plants ideally suited to where they live. I know I shall be consulting it regularly.

Margaret Edwards

Seeds of Adventure: In Search of Plants
Peter Cox & Peter Hutchison
415 pages, more than 700 colour
photographs and maps
ISBN-13: 9781870673587
Garden Art Press, £35, 2008

This is a sumptuously produced and fascinating account by two of Scotland's modern plant hunters, Peter Cox & Peter Hutchison. It covers 16 of their many expeditions, starting in Turkey in 1962, then from 1965 to 2002 along the eastern Himalaya, Tibet and China. They visit places in wild and exciting country where few people have travelled.



The reader feels themselves to be a participant in each expedition, often starting with the planning, encountering the trials of airports, and the requisite organisation before hitting the trail. We share the two Peters' excitement as they encounter plants, and their obvious & infectious love of and interest in all types, from forest trees through rhododendrons, primulas, *Meconopsis*, gentians and a host of other shrubs, herbaceous plants and alpiners. The garden-worthiness of the plants and comparisons with existing plants in cultivation are often debated. This book is a mine of information about the conditions in which the plants grow in the wild and their requirements for successful cultivation in our gardens. Along the trail we meet the local folk and find out how they live, eat and dress. The authors are full of humorous stories of incidents as they deal with slippery and crumbling paths, rickety bridges, ticks & leaches and find out what it is like to ascend steep hills in the sub-tropics or camp in the rain and snow.

We are indebted to the authors for introducing a host of new plants for our gardens; it is marvellous here to see and read about many of those plants that we now cultivate so successfully.

The book is lavishly illustrated with more than 700 wonderful colour photographs - some on every page - depicting the plants, countryside and local people. The standard of photography is impressive, especially when you consider that it often rains and that photographers may be extremely tired, under pressure, or often in a rush to keep up with their companions, even when they find the plant they wish to photograph.

This book is easy to read; in fact is difficult to put down. Without a doubt, it is destined to become a classic amongst the great books on plant hunting and travel. No matter whether you are an avid gardener, a potential explorer or an armchair traveller, this is a book that you must have and at only £35 it is a great buy.

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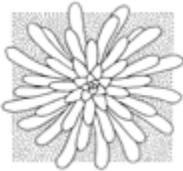
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The Saxifrage Society



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THE SCOTTISH PLANT HUNTERS GARDEN



WORKSHOP

with Ian Young
& Sandy Leven

Rock Garden Building

Saturday 22 August 10am-4pm

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Tickets: £10 for SRGC members,
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WORKSHOP

with Ian Young, Sandy
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