

A photograph of a rocky mountain slope covered in moss and purple flowers. The slope is steep and covered in a dense carpet of green moss and small purple flowers. The background shows a dark, rocky mountain peak under a cloudy sky.

THE ROCK GARDEN

THE JOURNAL OF THE SCOTTISH ROCK GARDEN CLUB

Volume XXVII Part 1 Number 106 January 2001

Subscriptions for 2000-2001

Members' subscriptions for 2000-2001 become payable on 1 October 2000. The subscription rates established in 1995 have been revised and the new rates set out below were adopted at the 1999 Annual General Meeting.

The Club is again seeking to simplify the process of subscription renewal in the longer term by encouraging all members who pay by cheque, credit card or in cash to change to one of the 'automated' subscription arrangements in order to reduce the effort demanded of the Membership Secretary whose role now includes that of the Subscription Secretary. Members not already doing so are asked to change their method of paying to one of the following: *Direct Debit* or *Standing Order* from a UK bank account, or by *Recurring Transaction Authority* for either UK or Overseas members with a Visa or Mastercard account. The Club is grateful to the 2000 members who already have made arrangements to pay their subscriptions by these methods. Forms for making the relevant change are enclosed with the membership renewal notice or are available from the **Membership Secretary, Harrylayock, Solsgirth, Dollar, Clackmannanshire Scotland FK14 7NE.**

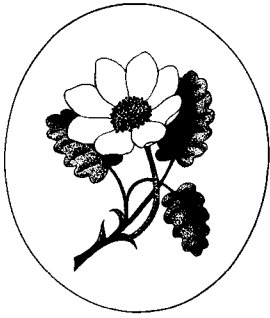
Members in the UK are urged to pay by *Direct Debit*, *Standing Order* or *Recurring Transaction Authority* but if unable or unwilling to do so should send a cheque with the payment slip provided to the Membership Secretary. Members proposing to pay by *Standing Order* from a bank or building society account are asked to complete the Club's *Standing Order Instruction* provided and send it to their bank as it requests that any previous instruction is cancelled.

Overseas members are urged to pay by a *Recurring Transaction Authority* from a Visa or Mastercard credit card account each year until they wish to cancel it. Alternatively they may return the payment slip to the Membership Secretary authorising collection of the subscription from a Visa or Mastercard account or with a cheque: all payments must be made in GB Pounds Sterling or in US Dollars. Payments by Visa or Mastercard can only be accepted if all the following information is given: the number on the card, name and address of the cardholder, the card number, the card expiry date and the cardholder's signature.

All cheques must be made payable to **The Scottish Rock Garden Club.**

Subscription Rates for 2000-2001	UK	OVERSEAS (inc Seed Exchange Fee)	
Single Annual Membership	£12	£15	SUS25
Junior Membership (under 18 on 1 October 2000)	£3	£6	SUS10
Single Life Membership (aged under 65)	£240	£300	SUS500
(aged 65 or over)	£120	£150	SUS250
Family Membership (Two adults and up to two children under 18 on 1 October 2000)	£14	£18	SUS32
Additional Adult or Child	£3	£6	SUS10
Family Life Membership			
(Two people at one address) (aged under 65)	£280	£360	SUS640
(one or both aged 65 or over)	£140	£180	SUS320

Membership Cards will be sent out in January 2001 with the Journal to those members whose subscriptions have been received by 31 December 2000: members whose subscriptions are received after that date will not be included in the January circulation but will be sent their card(s) and other items in March 2001.



The ROCK GARDEN

The Journal of the
Scottish Rock Garden Club
Vol. XXVII Part 1

Number 106 January 2001

Editorial	1
President's Review of the Year 2000 <i>by Sandy Leven</i>	5
Growing Himalayan Primulas <i>by Alistair McKelvie</i>	11
Confessions of a Visiting Speaker <i>by Malcolm McGregor</i>	34
Aspects of the Picos de Europa: Part II <i>by Francis Ferns</i>	51
Discussion Weekend 2001	60
× Ramberlea 'Inchgarth' <i>by Maureen & Brian Wilson</i>	62
The Crosland Prize	64
The Stone Column	65
Book Reviews: <i>Creating and Planting Trough Gardens</i> by Joyce Fingerut & Rex Murfitt; <i>Lewisias</i> by LeRoy Davison	76
Show Reports	79
RHS Joint Rock Garden Plant Committee	87
Alpines 2001	89

Published by The Scottish Rock Garden Club
Printed by Oriel Printing Company Limited, Hull

ISSN 0265-5500

© The Scottish Rock Garden Club, 2001

Cover photograph: *Primula deuteronana* at Gosainkund, Nepal (Malcolm McGregor)

THE ROCK GARDEN

is published twice yearly by The Scottish Rock Garden Club
on 31 January and 30 June

Edited by

Malcolm McGregor

16 Mill Street

Hutton, Driffield

East Yorkshire, UK

YO25 9PU

tel. 01377 270717

email: mcgregor@cix.co.uk

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

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

Enquiries about **advertising** should be sent to Mike Reid:

4 Robert Street, Stonehaven

Kincardineshire AB39 2DN

Tel. 01569 763877

Enquiries about **illustrations** should be sent to John Howes:

42 Louis Street

Spring Bank

Hull HU3 1LZ

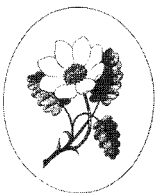
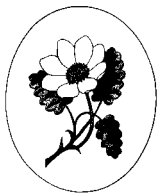
Tel. 01482 225663 (Evenings only)

Individual copies are available from Glassford Sprunt:

17 Claremont Drive, Bridge of Allan

Stirlingshire FK9 4EE

Tel. 01786 833607 (Evenings only)



EDITORIAL

THERE ARE FEW rock gardeners, whatever their favourite genus, who do not have a soft spot for primulas. There are species and cultivars in all sorts of colours, shapes and sizes, and among them are plants to suit an enormous range of conditions. Many of us have wild primulas growing in the country around us. There are easy-going members of the genus for the beginner, but there are endless challenges for the expert. There are plants of extreme high altitudes uncovered for only around four months a year, and plants from areas of prolonged monsoon, which will test the skill of even the most experienced grower.

Primulas belong to one of the great genera for both the grower and shower of alpine plants, and the Himalayan species are particularly popular. Along with the cultivation of meconopsis and rhododendrons, it is with Himalayan primulas that the Scottish gardener scores over most others, and this is reflected in the article by Alastair McKelvie. Articles on cultivation are always rather thinner on the ground than one might expect. A survey of this sort, from someone who has seen the plants in the wild, collected and brought back seed, and has had experience of growing and showing them, has great value. That this article is by my immediate predecessor, helping to set me on my way as editor, only adds to my pleasure in it.

If I had not been the Travelling Speaker in Scotland in the autumn, I might have adopted the policy of “laying low and saying nothing”, for a while at least, but I felt that the tour was worth recording. It is not surprising perhaps there has been no such account before; at the end of such a tour writing an article is not top of most people’s agenda. I’m happy with the result. It reflects the whole experience and it emphasises the fact that it is the local groups which are one of the great strengths of the club. During the tour I visited ten local groups, with around a quarter of the membership in Scotland attending one or other of the talks. Apart from their programmes of meetings and speakers, the groups organise the Club Shows, and take turns at hosting the Discussion Weekend. They are the heart of the Club. For members from further afield, however, the club has necessarily been represented by those things they receive through the post: this journal and seed from the Seed Exchange.

Next year, our Seed Exchange Manager, Jean Wyllie, retires after doing a wonderful job for many years. The Seed Exchange has provided us with so many gems over the years. It’s a wonderful source for beginners and experts

alike and Jean deserves enormous thanks for her work. It also demonstrates that there is always room for people who feel like taking something on.

There are new developments as well. In particular, there is the club's website which is already a valuable addition to the club's activities. Fred Carrie and Ian Christie have done a lot of work to get the site to where it is now and among other things there are accounts and photographs of all the year's Forrest Medal-winning plants posted on the site. Some of the plants are just outrageously good and if you have not had a look but are hooked up to the internet then try it (www.SRGC.org.uk). If you're not hooked up ask a friend (or your local group).

The developments of the internet are continuing to expand but their impact for the plant enthusiast are no greater than was the advent of modern colour printing. Higher quality colour reproduction has led to the ever-increasing use of colour, with wonderful photographs of plants we can only envy, and habitats we can only imagine visiting. But it is at a price. Fewer line drawings appear in publications today than in the past. When they do, they illuminate an article, bringing with them the personality of the contributor in a way that photographs do only rarely. Francis Ferns's illustrations exemplify this and it's a pleasure to have the second part of his consideration of the Picos de Europa. Spanish mountains have a great range of endemics and Francis' account of his botanical travels with their particular blend of observation, knowledge and reflection makes this very clear.

Last among these notes on contributions to this issue, I turn to the contribution from Mike and Polly Stone. For the newcomer to the club, it might take a little while to realise that "The Stone Column" has been running since the early 1980s. Over nearly two decades, Mike's writing and Polly's photographs, have provided a record of gardening development, successes and failures, of plant hunting, of personal commentary which it is too easy to take for granted. Few journals can have had such a continuous and idiosyncratic record. Mike and Polly's trip to Greater Yellowstone is the centrepiece of the column this time.

MOVING TO A NEW HOUSE can be fun - particularly if you are about five years old and do not have to worry about the possibility of things going wrong. Will they accept our price? Is it the right house? Should I worry about that little note in the survey? What about the neighbours? Can I live with the bathroom? And then there are the serious problems: poor drainage; clay soil; north-facing garden; mare's-tails and couch grass; leaking pond; a rotting greenhouse. But those you can look forward to because taking over a garden is a pleasure: clearing the undergrowth (just to find out what's there underneath); weeding, pruning, mulching, sorting out the basic structure - paths, frames, greenhouse - and all that before you even start on planting. Of course you can get stuck into it

all too quickly before you know what's actually in the garden, and spending time just looking at a garden is rarely wasted.

Absorbing the nature of the space; the way the wind and sun define what you might do with different areas; thinking about which way you're going to move around the garden, so you get different and considered views from wherever you might site the alpine house as well as from the kitchen and the sitting room. All this take time. Deciding on where the main rockery is going to be and which direction it is going to run - this is always easier if you lay the whole garden to rockery but it's not ideal for infant footballers, games of tag or soldiers, dolls tea-parties and the like. Most gardens are compromises - yes, you would like to have a moraine running down from the north-east corner of the garden, with water being pumped up to the top and running down through it, but you're not quite sure how to do it, whether it will work, or how to persuade your partner. Garden design may seem to be a highly fashionable activity but is far too often ignored. Getting the major physical elements of the garden in place: paths, sheds, swings, rock, glass house, sand-pits, ponds, frames, is critical. Once they are right, so much else falls into place, and you can settle down and start planting up the spaces.

Taking over as editor of *The Rock Garden* is like this. The rockery, frames alpine house, and paths, are layout, structure, margins, paper, typeface, and the order of articles. The pruning, planting, taking cuttings, and sowing seeds, are proof-reading, correcting, encouraging new contributors and maintaining the long-established, seeking new types of article and ones on new areas of interest.

The Discussion Weekend in 1999 was my first public run-out - my appointment to view as it were - so that both sides could decide if it felt right. So now, something over a year later, I'm actually sitting down writing this first editorial, quietly saying a prayer that nothing goes wrong, and that the journal that appears has some resemblance to the Platonic ideal I have in my head. The long lead-time has meant two things. One, I've had plenty of time to get nervous; two, I've had plenty of time to sit and think about things - sometimes I sits and thinks and sometimes I just sits. If you like the changes - and I obviously hope you do - then you'll think it time well spent. If you don't you'll probably reflect that the devil makes use of idle hands.

THE ROCK GARDEN comes to you courtesy of a team of contributors, photographers, proof readers, as well as friends and a partner providing moral support, and thanks are due to all of them. To take over the journal once could be regarded as brave; to do so twice is beyond the call of duty. It is fifteen years since Alastair first took over the journal, with an interregnum from Ian and Carole Bainbridge, which was to become *The Rock Garden*. Not satisfied with all this, however, Alastair undertook to join Forbes Robertson in producing *Scottish Rock Gardening in the 20th Century* which the Club published in January 2000. This far exceeds in scope the claims of its title, with its wide-

ranging surveys of those plant families and genera from across different continents that are relevant to the rock gardener wherever they are based - it's a magnificent achievement of which both the authors must be proud. The Club has been fortunate to have such as Alastair as its editor over such a period and he deserves all our thanks.

Journals tend to become more expert with time and they also tend to get set in their ways. There are various reasons for this and it is not just true in the rock and alpine gardening world. When they start, groups of like-minded enthusiasts will produce publications full of all sorts of different articles. Once established, a contributor to such a publication will tend to go on contributing but will, over time, become more experienced and more specialised, and this will be reflected in what they write. And as the individual writer becomes more specialised so too do the publications become more esoteric. Out goes the advice on building a rockery, in comes an article on vertical segregation in East African alpinists, a discussion of how semelparity operates in *Meconopsis*, or of hybridisation within Caucasian valley systems. It is not of course that these are uninteresting, but rather that they can, if not checked, elbow aside contributions on such things as how to plant a trough, and how to keep autumn gentians alive.

The job of an editor is to bring a point of view to the task in hand. It is about pruning, and transplanting, and it is about structures and layout. But it is also about being willing to say "This is what I think the journal should look like. This is what it should have in it."

There are three major journals in the rock gardening world: from each of the three major rock or alpine gardening clubs. The AGS and NARGS, like the SRGC, have journals with very distinct characters of their own. Each has its own particular strengths, and each editor in turn leaves an imprint. In recent years, at the AGS, Chris Grey-Wilson has seen through many changes in their *Quarterly Bulletin* which has made it a by-word for professionalism.

This is my first issue. I'm excited about actually seeing the finished product, and about the possibilities for the future. NARGS is about to go through the same process as the SRGC: Gwen Kelaidis is retiring and the next issue of their journal, *Rock Garden Quarterly*, is the first for their new editor, Jane McGary. Just as I'm excited about the prospect of seeing this first issue of *The Rock Garden* in print, I'm sure that Jane will feel the same in her turn. Good luck to us both.

Few of us only have difficult plants in our collection, it's just too demanding. So with the journal: there will be high-altitude, hairy, cushions among the articles but there will be the robust open-ground articles as well. One of the things that happens as an editor is that you've read the whole of each issue many times before it's actually published, so none of it comes as a surprise when it finally appears in print - well I hope, Alastair, that you can now sit back and enjoy *The Rock Garden* and, I hope, you'll like what I'm doing.



President's Review of the Year 2000

Sandy Leven

THIS IS THE END of my third and final year as President of our Club. Clause 1 of our constitution reads as follows : "The Club shall be called the Scottish Rock Garden Club and exists to foster an interest in Rock and Peat garden plants, to spread a knowledge of such plants and to encourage their cultivation. The Club shall hold meetings and exhibitions, publish Journals and yearbooks and carry on such other activities as may promote these objects."

In the past year, we have had great success in furthering these objectives of the founding members of the Club. We have brought the Club to the attention of the wider gardening public through many initiatives. We demonstrated how exciting and interesting a rock and peat garden can be through our shows and exhibitions. We spread knowledge of them through our publications, conferences, demonstrations and lectures. We have carried on as instructed by our founders. In doing so we have recruited record numbers of new members to the SRGC.

NEW MEMBERS

As I reported to you last year, we offered a 2-for-1 membership deal to members of the AGS and NARGS. This was successful beyond our expectations. At the same time, by diligently following up those members who failed to renew their subscription, Hazel and Robert reduced the number of lost members to a record low. Our membership is growing. In this way we bring a transfusion of fresh ideas and a new generation of gardeners into the SRGC. The increased total subscription income helps to keep the individual membership fee as low as possible. The recent increase in subscription will last the club for many years. I would ask you all to recommend membership of the SRGC to all keen gardeners that you meet.

The SRGC has strengthened its links with our sister societies, the Alpine Garden Society, Royal Horticultural Society and the Royal Caledonian Horticultural Society.

ALPINES 2001

With the AGS we are organizing the 7th International Rock Garden Plant Conference at Heriot-Watt University in Edinburgh next summer.

Already almost half the places have been booked. Mere words are not enough to thank the 2001 committee for their hard work. The driving force behind ALPINES 2001 is the Bainbridge dynamic duo. Ian and Carole have laboured long and hard to ensure its success. Ian Aitchison, the Treasurer; Ian Young, the Show Secretary; and Peter Bland, the Bookings Coordinator; have spent untold hours on the preparation. Chris Grey-Wilson will edit the Conference Proceedings into a book at the end of the event. We had a marvellous open-air committee meeting at the Morecambe Show in March! Warm and sunny weather allowed us to contemplate Edinburgh in early summer 2001.

BIRTHDAY GREETINGS

On your behalf, I sent our Birthday Greetings to Her Majesty Queen Elizabeth, the Queen Mother, on the occasion of her 100th Birthday on August 4th of this year. To commemorate this wonderful occasion I asked Jack Brownless to bind a copy of our Millennium Book. This he did using beautiful soft leather, embossed in gold lettering. I received a few days later a letter of thanks which reads as follows:

*Castle of Mey
Caithness
August 8th 2000*

Dear Mr. Leven,

Queen Elizabeth the Queen Mother has asked me to thank you and those who joined with you, for the beautiful bound copy of the SRGC's Millenium Year publication, Scottish Rock Gardening in the 20th Century which Her Majesty is greatly looking forward to reading.

During her long life Queen Elizabeth has always been encouraged by, and felt grateful for the friendship and support of many people and would like to send her best wishes and thanks to you all.

*Yours sincerely
Jennifer Gordon Lennox
Lady in Waiting*

OFFICE BEARERS

The Club's elected office bearers are the people who work hard to keep the SRGC the dynamic club that it is. I need to acknowledge the appointment of new office bearers in the past year as well as thank those who are retiring. The new Chairman of the standing committee of Show Secretary is Barry Caudwell. Membership Secretary is Hazel Smith. I must thank Alastair McKelvie for his work as Editor. Our new Editor, Malcolm McGregor is already finalising his first issue of *The Rock Garden*.

CONVENERS

Hilary Hill retired as group convener of the Lorne Group; she is succeeded by Helen Brotherston. Helen Greenwood is Secretary of the Aberdeen Group. Professor Yeoman has taken over from Frank Williams in North Northumberland. Mr J. Willis has taken over the North-East England Alpine and Rock Garden Group, and Dr Judith Heyworth the North Cumbria Rock Garden Group. Ian Douglas has retired from the Fife Group as convener and has been replaced by former SRGC President, Bette Ivey. Ronnie Loveland has succeeded Ian Smith in the Moray Group.

To all who have demitted office as group convener I offer the thanks of the Club and to those who have taken up their new office I welcome you. With all this new blood the Group Conveners committee will be bursting at the seams with new ideas.

DEATHS

It is with deep regret that I have to remind you of the death of Dr Paddy Ryan of Cleveland, and of Ailie MacLaurin of Stirling

MILLENNIUM BOOK

January 2000 marked the publication of *Scottish Rock Gardening in the 20th Century*, by Alastair McKelvie and Forbes Robertson. Their dedication and determination has given us a book of which we can be truly proud. In its time, the SRGC has produced only a few stand-alone publications. This book is a triumph for the Club. To help publish it we received a grant of £5000 from the Stanley Smith Horticultural Trust and £10,000 from the SRGC Publications Fund. Please continue to buy copies of the book as birthday and Christmas presents for your friends and relations. In years to come your extra unblemished copy will be a highly desirable collector's item. Get one to read and one to keep.

BACK TO BASICS

Ian Young worked hard preparing the "Back to Basics" day here at Battleby in June. A superb day full of interest and information presented by great speakers who were willing to share their knowledge with other members. Almost 100 members of the SRGC and RHS attended and were treated to talks and demonstrations on a wide range of rock gardening subjects. Glassford Sprunt produced a superb book for the meeting. We intend to expand upon its contents and in time to offer a copy to all new members. Anyone with any articles to contribute, or ideas for this, should contact Glassford. Some of us had to be in Perth and at Ingliston on the same day because of a clash of dates. I stopped near Cowdenbeath for a sleep in the car between the venues.

RHS COOPERATION

As I mentioned earlier, we offered the RHS the chance to join with us in the "Back to Basics" day. On the 16th November we are joining with the RHS to offer members of both a Gardener's Question Time Panel, with guests Jim McColl, Carol Baxter and Willie Duncan. Chairing the meeting will be the inimitable Maggie Young. This we hope will be the first of an annual series of autumn events sponsored by the SRGC and the RHS.

For these events the RHS pays much of the expense. The SRGC is promoted through the pages of the RHS 'Perspectives Section' in *The Garden* magazine which has a circulation of 2.5 million. This can only be good for the SRGC. We have negotiated some sponsorship towards lecturers expenses at ALPINES 2001 from the RHS. Again we will receive publicity for the SRGC and the AGS, as well as our ALPINES 2001 conference, to a huge readership of gardeners. In this way we can get our message across the world at little expense to the club.

WENGEN

Bette Ivey organised and Julia Corden led our highly successful trip to Wengen in the Bernese Oberland in June. Around 30 members went on the trip. Everyone had a superb time and it was obvious at the Discussion Weekend at Airth Castle that we now have a Wengen mafia in the club. Thank you to Bette and to Julia. Through your work we can strengthen links between members of the Club in different parts of the country. Friendships between members strengthen the Club. We will follow this trip up, probably in 2002.

SHOWS

It is a truism but none the worse for that, that the shows are the shop window of the SRGC. At the shows, members of the public see what we like to grow. Ingliston shows a further range of our ideas. Hopefully the keenest of them will join us, but even if they only take away ideas and grow some plants, we have given them something worthwhile.

We have had a very successful show season, with the prizes and awards being well-distributed among our members who exhibit their plants at our shows. I would encourage all members to join in at the shows, either by showing plants, contributing to the plant sales table, or helping at the show with stewarding, or with the catering. Everyone enjoys the shows but I know more people could help at them. By joining in you get the most from all events.

The new Joint SRGC/AGS show in Ponteland has held its second very successful show, this time under the stewardship of Ian Kidman. Alan Newton has sensibly decided to run only one show, the Northumberland Show in springtime.

This will be the last Morecambe show at its present venue and it is to be

moved to Blackpool in 2001. Whether this is a permanent move or not remains to be seen.

INTERNET

Fred Carrie is our webmaster. Ian Christie with an enthusiastic committee, whose members unfortunately do not always have as much time as they would like, continues the progress with our website. The site has been well received by the web gardening community. We need more input from more members. The site will develop as the input develops. Pictures of all the Forrest Medal winning plants of the last year are on the site. Details of Group meetings and coming events are listed. Soon, my picture as President will be replaced by that of our next President. So if you want a photo of me on your computer you had better download it before Fred replaces it. Send your ideas for development of the website to me or to Ian.

FUNDS

The SRGC has several restricted funds in which the use of the money is restricted for a certain purpose. We have used money from most of the lecture funds in the past year to fund lectures at the Annual General Meeting, the Early Bulb Display and at the Discussion Weekend. Unfortunately this year no money was given by the Exploration Fund and to compound this the grant from the previous year was returned because the recipient did not explore! If you know of anyone who might benefit from the SRGC Exploration Fund ask them to contact the Secretary.

FARRER TROPHY

For our display at the RHS Scotland's National Garden Show in June 1999 the SRGC was awarded the Farrer Trophy for "The Most Prestigious Display of Alpine Plants at an RHS Flower Show in 1999". I travelled to London in April to receive the trophy from the President of the RHS, Sir Simon Hornby. He reiterated the RHS's own belief that its flower shows were the best in the world, and that as we had won the RHS's supreme award for alpines, our exhibit was without any shadow of a doubt "The Best in the World". I agreed with him, and had enormous pleasure in accepting the Farrer Trophy on the Club's behalf. Thank you to my travelling fan club who cheered me on and who gave me lunch. I think you are wonderful.

GARDENING SCOTLAND 2000

Again we triumphed. This time a Gold Medal from the Royal Caledonian Horticultural Society and the Caithness Glass Trophy for the Best Floral Exhibit in the Show. This was presented by Lord Steele, in the presence of Lady Steele and the Lord Provost of Edinburgh as well as Professor Fred Last, lots of happy Scottish Rockers and bemused members of the public.

To those members who worked with me on our Display at Ingliston words cannot express my gratitude. We have a committed team to build these displays. Many members help to man the stand during opening time but the rods of steel underpinning the whole event are Susan and Jean Band, Ian and Carole Bainbridge, Ian Frier, David Walkinshaw, Graham Butler, Glassford Sprunt and my wife Anne.

Thank you to everyone who lent plants for the display and who helped in any way. Through their hard work the club triumphed in 2000. The display costs about £1000 to stage, even though we are all amateurs. Again this year we made a profit on the event. If you want to take over next year speak to Ian or to me.

THANKS

I offer my warmest thanks to members of my Advisory committee for the last three years. It is important to be able to discuss things with friends. Thank you to Ian Aitchison, Harley Milne, Bette Ivey, Fered Hunt, Peter Semple and Ian Young.

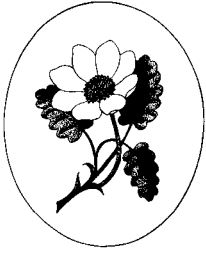
I would also like to thank all those members of the Club and of Council who have worked hard with me to make this year another great success for the Club.

Come forward and help at our events. Take part in as many things as possible. Talk to your group on Members' Night. Membership of the SRGC is the key to the door of a world of rock gardening, people and plants. Use your membership key. Open the door. Share my love for the Club, and my delight in our plants. Offer yourself for service on Council and Local Group committees. When a vacancy arises don't ask "I wonder who THEY will get for that job?" We are "THEY", you are "THEY". It's your club. I can't be President again. I can't bully you from up here.

As my wife said, in her introduction to Maggie Young at the Discussion Weekend, "Some people make things happen, some people watch things happen, while other people don't know what is happening at all."

I want you to make things happen. If you want to know what is happening come to the shows, go to your local group, read the journal, read the Year Book (don't throw it out), consult the website. Don't dare sit back and say "I Didn't Know!"

Think which post will suit you and come and serve the club. Come and enjoy yourself. Use your membership key and lock yourself into the future success of the Scottish Rock Garden Club.



Growing Himalayan Primulas

Alastair McKelvie

THE FIRST PROBLEM when dealing with such a vast subject is to define what is meant by the term "Himalayas". They stretch from Nanga Parbat in Kashmir south-east for 3500km down to Namcha Barwa on the Tsangpo in Tibet. I intend, however, to limit myself to the area from Kashmir across to Sikkim for the two good reasons that this is more or less the area covered by my Himalayan expeditions in the 1990s and because (with the exception of Sikkim) it is the area covered by Polunin and Stainton in *Flowers of the Himalaya* (OUP, 1984).

Polunin and Stainton decided on the geographical area to be covered in their book because they knew that east of Sikkim the Himalayan flora had an altogether different content compared with the western ranges. Also at the time their book was published in 1984, few Europeans had access to Sikkim, Bhutan, Arunachal Pradesh or Tibet.

Like Polunin and Stainton, I have had to be selective in the species I choose to mention and have limited myself either to those that I have seen in the wild, have grown in my own garden, or have seen in the gardens of SRGC friends. Not everybody realises that Polunin and Stainton were selective as to which species they mentioned in their book on the Himalayan flora. Actually, with the primulas, they have been pretty good and have described around 40 of the 66 species which they say are to be found within their geographical area. With other genera such as *Ranunculus* they only describe 12 of the 30 species which exist within the area.

It is interesting when taking people on a flower trek to the Himalayas that they always want to identify a plant as being one of the ones mentioned in Polunin and Stainton and are really reluctant to admit that it might be one of the ones not described in the book. Perhaps even more obviously they tend to want to ascribe their plant to one of the illustrations in the book. One of the first things one learns when leading flower treks is that clients are not satisfied until they can put a name to a plant. I think they would be horrified if they could see typical herbaria sheets at Kew or Edinburgh with the many queries and corrections on almost every sheet, most made by eminent botanists.

TAXONOMY

Because *Primula* is such a vast genus with over 400 species, it is natural that it has been split up into Subgenera, Sections and Subsections. There have been several classification systems over the years but I propose to use the one drawn up by John Richards in 1993 in his monumental monograph *Primula* (Timber Press, 1993). The table below lists the species which I will describe in this article, allocating them to the appropriate Section.

SECTION	SUBSECTION	SPECIES
Sphondylia		floribunda
Cortusoides	Geranioides	geraniifolia
Petiolares	Petiolares	petiolaris, gracilipes, sessilis, deuteronana, scapigera, boothii, irregularis, bracteosa, aureata
	Edgeworthii	nana
	Griffithii	calderiana, tanneri, pulchra
Crystallophlomis	Crystallophlomis	macrophylla, obtusifolia, obliqua, stuartii
Cordifoliae		rotundifolia
Amethystina		dickieana
Sikkimensis		sikkimensis, reticulata
Oreophlomis		rosea, elliptica
Armerina		involucrata
Glabra		glabra
Minutissimae		minutissima, reptans, primulina
Denticulata		denticulata, cachemiriana, atrodentata, glomerata
Capitatae		capitata
Soldanelloides		reidii, buryana, wollastonii, klattii

This hopefully will allow the non-botanist to see how the various species are related. This is important because, by and large, species within Sections tend to look alike and to have fairly similar growing requirements. At the end of the article I have given an alphabetical list of species plus page numbers in the text and references to illustrations.

GROWING CONDITIONS

Thirty-nine species from the Western Himalayas seems a lot but, in fact, for most of the ones I have listed, fresh seed has been collected at regular intervals over the last 20 years by people such as Ron McBeath, Margaret and Henry Taylor, Joel Smith, Chris Chadwell, Fred Carrie, and Ian Christie as well as by myself. In addition most of the species are in cultivation, many in Scotland where growing conditions are so much better for primulas than in many parts of the UK.

The species listed come from many diverse habitats, ranging from almost semi-tropical conditions for *P. floribunda*, found in the wild as low as 800 m, up to species such as *P. reptans* up to 5400 m and *P. macrophylla* as high as 5800 m. Obviously growing conditions for these species would be expected to be rather different. *P. floribunda* needs protection from frost in winter but does not mind sunshine and plenty of water, while *P. reptans* does not mind cold but detests winter wet and direct sunshine.

Habitats of these species in the wild also differ, from wet marshes for species such as *P. involucrata*, *P. rosea* and *P. elliptica* to species such as *P. stuartii* which can be found in rock crevices. Strangely enough, *P. sikkimensis* can be found growing in running water but also grows on dry exposed ridges with no obvious source of water. Plants from these drier habitats have very definitely much longer roots than those in the wet situations, presumably to explore the rocky soils in their search for moisture.

In spite of the different conditions in the wild, many species can grow happily together in the garden, illustrating the hypothesis that to grow species successfully it is not always necessary to simulate the conditions of their natural habitat. Most gardening is artificial anyway; what compares in the wild with a cloche or a pane of glass over a plant in winter?

Many primulas grow perfectly happily in a wide range of ordinary garden soils. Species such as *P. elatior*, *vulgaris*, *x pubescens*, *japonica*, *pulverulenta* and *juliae*, to name just a few, need little attention in any garden where herbaceous perennials thrive. Most of the Himalayan primulas listed in the above table, however, need quite specialised conditions and considerable care. The one major exception has to be *P. denticulata* which falls in to the category of easily grown herbaceous perennials. This species underlines the general rule that species which are widespread in the wild and are obviously adapted to differing conditions are easy garden plants. As always there are exceptions to this rule but, by and large, it holds true.

For the Himalayan species there are two main criteria for success in the garden. Firstly, almost all of them need plenty of moisture during the growing season and, secondly, they need a winter rest when they are dormant and must not be allowed to rot.

The need for moisture is paramount. In the dry years in Scotland of 1996 and 1997, even *P. denticulata* suffered from drought in my garden and did not produce the usual amount of flower the next spring. Although I have said

it is an easy species, it certainly thrives better in wet Argyll than in dry East Lothian. *P. floribunda* may like the heat of the Sutlej valley in India but it still likes to grow in cliffs which receive a regular spray of water.

Dry winter rest is important for most species but more especially for those which have a resting bud just at or just below soil level. It is easy for species such as *P. aureata* and *P. nana* to rot off if not kept dry during winter. But, having said that, I recently saw magnificent beds of both of these species growing permanently and happily outside at 300 m in the Carrie's nursery at Tough in Aberdeenshire where presumably the cold dry winter climate is more akin to their natural habitat and ensures their winter survival. Even at Tough however, species with hairy leaves such as *P. reidii* and *P. buryana* tend to go mouldy with botrytis so they also need to be kept dry. On the other hand, the more or less evergreen species such as *P. gracilipes* seem able to survive wet winter conditions quite happily.

In my experience of growing Himalayan species in a cold glasshouse I find it is preferable to grow them in the winter in clay pots plunged in sand which is kept just slightly moist. In this way there is little need for watering during the winter which reduces the risk from botrytis. In the summer the pots should be placed in a shaded frame and kept fed and watered regularly.

Where applicable it is best to split clumps up regularly; this helps to promote flowering and to prolong the life of the plant.

SOILS

All Himalayan primulas like plenty of water and air at their roots as well as lots of organic matter. Until peat became politically suspect, it was the usual substrate for providing organic matter but it does have the drawback of holding moisture too closely round the crown. Looser materials such as leaf mould seem to provide more ideal conditions. Well-rotted farmyard manure is excellent for most of the species provided it is placed deep down under the plants so that the roots can go down in to it. Most of these Himalayan species tend to be gross feeders. They appreciate regular feeding during the season either with liquid feed or slow-release fertilisers when grown in pots.

They do not need an acid soil; most species seem to do best in a pH of between 5 and 7; they do not really appreciate soils derived from limestone.

SEEDS

Himalayan primulas tend to be short-lived so it is important to collect and sow seed regularly. Some of this decline in vigour is due to virus disease.

Successful fertilisation and seed set in primulas depends very much on the incompatibility system of *pin* and *thrum* types of flowers. Richards in *Primula* gives an excellent account of this subject and gives much useful advice for individual species on how to obtain seed.

Many years ago I wrote an article on the germination of *Primula* seed (Journal SRGC 1979, XVI, 261) which gave recommendations for many of the species listed in this article. Since most species tend to be short-lived in cultivation it is important to keep raising fresh stocks from seed. Some, but not all, species germinate best when seed is sown fresh so, as a general rule, it is best to sow some of the seed as soon as possible in late summer but to keep some dry over winter and sow in the spring. Many species appreciate four weeks at a temperature of 5°C followed by gentle warmth. Species for which no mention is made of germination requirements in this article are ones for which I have no experience or knowledge.

PESTS AND DISEASES

There have been good accounts of pests and diseases in primulas over the years in the AGS Bulletins and SRGC Journals so I will not deal with them here. Richards in his *Primula* book gives a good account of these topics.

SPECIES

Section SPHONDYLIA

Primula floribunda. This perennial evergreen species is evolutionarily old and still has traces of a homomorphic pollination system. It grows on shaded moist cliffs from east Afghanistan to south-west Nepal at altitudes from 800-2000 m. In 1994 the inhabitants of the Sutlej valley must have wondered what was happening as first myself, then a few weeks later Chris Chadwell, stopped our jeeps at a wet cliff near a small village and leapt out to collect *P. floribunda* seeds.

It seems that plants from below 1500 m are heteromorphic (pin and thrum types) while above 2000 m they are homomorphic (only one flower type and can be self-fertilised).

In cultivation it needs protection from winter wet and cold (min. 0°C) and is best grown in a clay pot, kept fairly dry in winter. It flowers from January-March and should then be placed in a cold frame for the summer. It does not mind direct sun.

It produces plenty of seed which germinates readily.

Section CORTUSOIDES

Deciduous perennials with soft hairy rounded leaves.

Subsection GERANIOIDES

Leaf veins branching from the mid-rib and sepals with many nerves.

Primula geraniifolia (fig. 1). A short creeping species with rounded or kidney-shaped leaves reminiscent of those of *Cortusa* spp. or a small version of *P. polyneura*, with both of which it has been confused on the few occasions it has been in cultivation. It grows from central Nepal east to Sikkim and Bhutan in light damp forest amongst moss at altitudes from 3000-4500 m.

The slender hairy stems bear umbels of 5-10 drooping, pink or purple flowers about 20 mm in diameter.

Although fairly common in Nepal, this species has only occasionally been in cultivation, notably in the RBG Edinburgh. It has been reintroduced several times in the 1990s, including CC & McK collections, and is still grown by a few gardeners who specialise in Himalayan plants. It is listed in *The Plantfinder* but quite often so-called *P. geraniifolia* plants are something else.

I have grown it for a few years but it died without setting seed. One thinks that it should require much the same conditions as *Cortusa* but



Fig. 1 *Primula geraniifolia*



Fig. 2 *Primula calderiana*
ssp. *calderiana*



Fig. 3 *Primula calderiana*
ssp. *strumosa*



Fig. 4 *Primula pulchra*

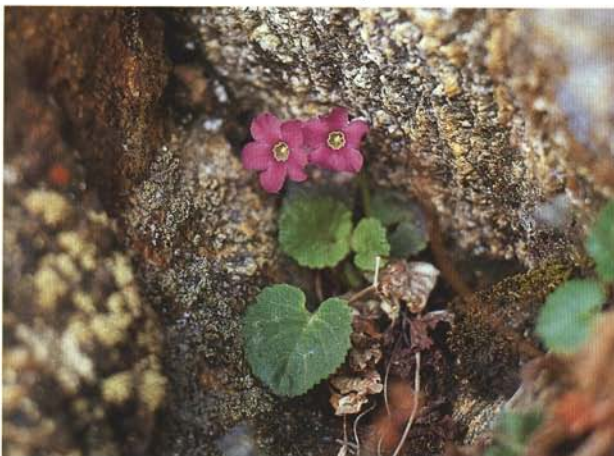


Fig. 5 *Primula rotundifolia*



Fig. 6 *Primula nana*



Fig. 7 *Primula sessilis*



Fig. 8 *Primula irregularis*



Fig. 9 *Primula gracilipes*



Fig. 10 *Primula petiolaris*



Fig. 11 *Primula boothii*



Fig. 12 *Primula aureata* (above)



Fig. 13 *Primula deuteranana* (left)

Fig. 14 Hybrid with pink-edged
P. aureata-type flowers
(below left)

Fig. 15 Hybrid with white
P. deuteranana-type flowers
(below right)



successful experience is limited. It is not of such great beauty as to be missed in cultivation.

Section PETIOLARES

Evergreen or deciduous species with oval toothed leaves often with much farina (meal). Flowering stems absent or very short.

Subsection PETIOLARES

Pink flowers (yellow in *aureata*).

Primula petiolaris (fig. 10). A widespread evergreen or deciduous species, which grows from Kashmir right through to Sichuan at altitudes from 2000-4000 m in wet grassland and on cliffs. It is a variable species, closely related to *P. gracilipes* from which it differs by the tight crisp rosettes at flowering time and the complete absence of farina.

It is one of the easier petiolarid primulas to grow and is quite happy outside during the winter. Unlike some others of the Section it does not tend to open its flowers spasmodically throughout the winter but waits until March-April when it produces them all at once. In the summer it should be kept cool and moist and split regularly.

Seed of all the species of this Section is best sown fresh just as the capsules begin to dehisce (best to tie a paper bag over the flowers a few days in advance just to make sure of catching the seed). But generally, *P. petiolaris* does not produce a lot of seed. In addition, seed of this Section should not be germinated at temperatures of above 20°C and some growers suggest not above 7°C. Four weeks at around 5°C does seem to speed up germination.

Primula gracilipes (fig. 9). Another widespread species, from central Nepal eastwards to Assam from 2000-4600 m, to be found on wet banks and cliffs. It is like *P. petiolaris* but usually has farina on the young buds and leaves and a red stalk at flowering time.

A very variable species in the wild, it grows in huge colonies in places such as Ghopte, east of Gosainkund in central Nepal where it makes a spectacular display in April. It flowers immediately the covering snow has melted, producing a mass of flowers which hides the leaves completely. In cultivation it has a tendency to flower spasmodically throughout the winter so that this great display does not occur. Peter Cox at Glendoick has devised a method of keeping this species quite dry outside over the winter and then flooding the ground in early spring which leads to a great mass of bloom.

Seed is only sparsely produced in cultivation. In the wild it has to be searched for as the capsules are hidden under the leaves. It does, however, germinate readily and will produce flowering plants in the second year.

Following the GOS and MECC expeditions to Nepal in 1995 and 1997, Fred Carrie of Tough Alpines and Ian Christie of Christies' Nursery have produced a beautiful range of colours from collected seed, much the result of crawling on hands and knees around the leech-abundant slopes of Phedi.

Primula sessilis (fig. 6). Similar to the previous two species but distinguishable with its five (or four) pink pointed petals with a single tooth, lack of farina and dark green leaves. It grows from Kashmir through to north-west Nepal at altitudes from 2100-3600 m on wet cliffs. Locally common, it is best known for its occurrence in the Kullu valley around Manali in Himachal Pradesh. Magnus Ramsay (formerly of Threave Gardens) found an excellent colony of it just north of Manali in 1989 which I visited regularly with flower trekking groups as did the Taylors. There is no danger of destroying the habitat by removing a few seeds since much of it grows on a high inaccessible cliff.

Flowering in early spring, it is short-lived in cultivation and is doubtfully hardy in a hard winter so should be given some winter protection. Seed collections by Ron McBeath and by the Taylors are still in cultivation. It germinates readily from seed sown fresh.

Primula deuteranana (fig. 13 and front cover) A distinctive dwarf species with solid crisp, tight winter rosettes with farina, and lilac (or even white) stemless flowers with the narrow tube filled with hairs at the mouth. It grows, often in profusion, in grassy meadows in Sikkim and in central Nepal, most notably along with *P. aureata* at Gosainkund, at altitudes from 3500-4500 m. It flowers in the wild about May and in April-May in cultivation.

It is very slow-growing in cultivation and needs protection from winter wet and from bright sunshine in summer. Seed germinates readily when fresh but is not readily produced.

It is an uncommon species in cultivation but is still grown by a number of people. The GOS expedition to Gosainkund in 1995 collected seed which has subsequently produced some unusual plants which appeared to be hybrids. One, described in an article in JSRGC 1998, XXV, 412 by Carrie and McKelvie, produced a dazzling white flower with deeply fimbriate (cut) petals very similar to *P. aureata* but with the hairy throat of *P. deuteranana*. They concluded it was probably a hybrid between the two species but John Richards has doubted this because the pollen is fertile and he suggests it is just a form of *P. deuteranana*. Whatever its parentage this beautiful plant is still in existence and stocks are being built up. These plants were raised from seed collected when there were no flowers visible. Malcolm McGregor has been to the area more recently in May and has photographed a wide range of plants flowering at the interface of a cliff full of *P. aureata* and a grassy slope full of *P. deuteranana*. The plants at the interface are almost certainly hybrids as can be seen in figs. 14 and 15.

Primula scapigera. A larger species characterised by its smooth leaves, lack of farina and the long pointed sepals. It grows in the wild from Annapurna in central Nepal through to Sikkim (Kanchenjunga) at altitudes from 2300 to 3800 m.

The large lilac-pink flowers in April are not particularly attractive and the species is rarely seen in cultivation. It has, however, produced a number of good hybrids with *P. nana*, such as *P. 'Pandora'*, and with *P. bracteosa*. Many of these hybrids have been badly affected over the years with virus and many no longer exist.

Primula boothii (fig. 11). A species with dark green serrated leaves with a reddish stalk and no farina. Flowers purple or lilac with a whiteish zone. It grows from central Nepal through to Assam on damp mossy banks at altitudes from 2200-3000 m. A very variable species in which the taxonomy is somewhat confused. It flowers in early spring.

It is short-lived and has never been regularly in cultivation. Of doubtful hardiness, it has proved susceptible to virus attack. Plants currently in gardens are quite likely to be hybrids. A white form *alba* was introduced from the Kali Gandaki area in central Nepal in 1983 but although still in cultivation it seems to be virused.

It is not of any great garden merit but it has proved a good parent in crosses with *aureata*, *nana*, *bhutanica* and *gracilipes*. G. Munday made a large number of such crosses to which he gave the appellation "Tinney" such as 'Tinney's Appleblossom' and 'Tinney's Thor'.

Primula irregularis (fig. 8). A large plant with stiff but loose rosettes, mealy when young with beautiful pink flowers with a green-orange eye. It can be found throughout Nepal and in to Bhutan on moist banks at altitudes from 2400-3700 m. It flowers from January-March and is fairly close to *P. bracteosa*.

It is a robust species which flowers well but is very short-lived, needing to be propagated regularly from seed which germinates readily. It definitely needs protection from winter wet and even from dry cold. In summer it does not tolerate sun so needs to be kept well shaded.

It hybridises freely with species such as *scapigera*, *boothii* and *gracilipes*.

Primula bracteosa. This species resembles a rather large *P. gracilipes* but differs by having a short flowering stem with leaf-like bracts. The urn-shaped calyx is also diagnostic. It comes from eastern Nepal through to Bhutan and Assam and grows on wet banks near water at altitudes from 2200-3400 m.

A clone L&S 3162, collected in 1937 by Ludlow and Sheriff, is still in cultivation but is of poor colour. There are now better clones available. It is hardier than some of the petiolarids although a pane of glass in winter is

usually beneficial and it is more tolerant of sun. It flowers in early spring. Quite widely grown nowadays, it has produced hybrids with species such as *boothii*, *scapigera* and *irregularis*.

Primula aureata (fig. 12) This species has given rise to more speculation than any other Asiatic primula. The manner of its arrival in cultivation, the amount of variation, and the considerable number of putative hybrids, all contribute to this.

It is of limited distribution in the wild being confined to the northern parts of central Nepal around Gosainkund and the Langtang valley at altitudes between 3000-3750 m. I have seen it on several occasions in different places but always in the autumn when seed was available but never in the spring. According to Ron McBeath and Anne Chambers it is a breath-taking sight in full flower, nestling at the base of rocks. It is usually near water but never in it and always more or less protected from overhead rain.

The true species has dentate leaves heavily marked with white farina especially at flowering time. The stemless flowers elongate and have a red stem when in fruit. The flowers are up to 30 mm in diameter, yellow with an orange eye. It flowers in the wild from April-May and in cultivation from March-April.

It is hardy and requires no winter heat but must be kept dry with no overhead water throughout the winter. A clay pot in a plunge bed seems to suit it well. In summer it dislikes hot sun so should be kept shaded with plenty of water and liquid feed. It can survive outside at the base of a sheltered rock but is short-lived. In a pot it can, however, live for many years. Harold Esslemont was one of the first people to grow it successfully, doing so in a fairly heavily shaded glasshouse with lots of ventilation even in winter. These conditions gave the necessary dry cold conditions for winter and also the cool moist conditions for the summer.

Seed can be set if pin and thrum types are present but it is best to hand-pollinate to ensure a good set. Seed may not always germinate well; a period at 5°C seems to help.

Hybrids have been produced with *gracilipes*, *boothii* and *bhutanica*.

P. aureata* ssp. *fimbriata. It had been known since the early 1950s that two forms of *P. aureata* were in cultivation. The form now called ssp. *fimbriata* is smaller than the type with a cream-coloured flower not exceeding 25 mm and with a small yellow eye. Richards suggests that the type species is found from 3050-3750 m but that the ssp. *fimbriata* does not grow below 4200 m. Also, according to Needham, quoted by Richards, the ssp. *fimbriata* grows in wetter conditions while the type species grows in the shelter of rocks and this would agree with perceived wisdom in that ssp. *fimbriata* can tolerate wetter conditions in cultivation than can the type. However, Malcolm McGregor noted on a visit to Gosainkund in May 2000 that the two types seemed

actually to grow side by side as can be seen in fig. 12 and that there was continuous gradation in the various taxonomic characters rather than absolute differences. This suggests that the ssp. *fimbriata* is not a distinct entity and could simply be subsumed into *aureata* proper.

Richards mentions the occurrence of *P. aureata* plants at Gosainkund with purple edges to the leaves and says that they were spotted by Stainton and Bowes-Lyon in 1962 but have not been seen since. To my knowledge several people have since seen this variation at Gosainkund and J. Michael Pearson photographed and made notes on it in 1995 and 1996 (AGS Bulletin, June 1999, p199). It has been suggested that it is a hybrid but the pollen is fertile which would suggest that it is not a hybrid. If it is a hybrid, the only possible other parent has to be *P. deuteronana* which occurs in the area and flowers at the same time (see discussion about *P. deuteronana* above). Richards suggested that one of the parents was *P. nana* (J. SRGC 1976, XV, 23) but refuted that idea in his book on the realisation that *P. nana* does not grow there. He also suggests that the other parent might be the late flowering *P. pulchra* which does grow there. Fig. 14 taken at Gosainkund illustrates these lilac forms of *aureata* and it can surely not be doubted that they are hybrids, as are others such as that shown in fig. 15. The only possible other parent is *P. deuteronana*. There is still obviously work to be done to sort out the relationship of the various primulas at Gosainkund.

Subsection EDGEWORTHII

Plants deciduous with an open winter rosette with abundant white farina, leaves unstalked and smooth at flowering but stalked and toothed later with little farina.

Primula nana (fig. 7). This species has a long confused taxonomic history which there is no need to go in to except to remind readers that this is the species which many people still know as *P. edgeworthii*. Even older readers may know of it as *P. winteri*.

Leaves at flowering are grey-green and mealy, the mealiness being much more pronounced under glass, compared with the open where much of it is washed off by rain. Later leaves paler green with no farina. The flowers produced in early spring can be as much as 35 mm in diameter and are purple, lilac, blue, pink or white. It is a very variable species but is always quite distinctive

The species is found from Himachal Pradesh (Shimla) eastwards to Kathmandu at altitudes between 2000-3700 m. It grows on wet shaded banks often at the side of paths.

It has been grown pretty continuously since it was discovered by E. L. Winter in Kumaon in 1909, with fresh introductions of seed from time to time since then. Interestingly, plants from the western end of their range in

Kumaon have blue flowers as in the cultivar 'Drake's Blue' while those from the eastern range in Nepal are pink as in 'Ghose's Variety'.

It grows well from seed which is just as well since plants often die after flowering. Seed sown immediately it is ripe will germinate in 2-3 weeks and produce sizeable plants before winter. Plants appear to be making good growth in the summer after flowering in February-March but then seem to die during the summer. It pays to hand-pollinate the pin and thrum flowers to get good set. Seeds germinate readily and seedlings may flower the next year. Seedlings can be very variable in size and flower colour and it is worthwhile crossing the best forms.

Ian and Margaret Young exhibited a trough of *P. nana* plants at the Dunblane Early Bulb Show in February 2000 with a fantastic display of large well-flowered plants with a huge range of pink flower colour. They had come from a collection in 1990 on the south east slopes of Annapurna in Nepal (CC&McK 219) and had been through many seed generations since collection. They had been grown outside with a glass cloche over them. But as noted on p. 8 this species can be grown outside over winter provided there is a rigorous enough winter.

The species hybridises freely with several other species including *scapigera* (already noted), *bracteosa*, *boothii* and *bhutanica*. The cross with *bhutanica* made by Henry and Margaret Taylor produced the splendid cultivar 'Tantallon' in 1977. Since then Mike and Polly Stone, and also John Mattingley at Cluny, have repeated the cross and produced plants similar to 'Tantallon' so that there is considerable variation in the plants in commerce of this cross.

Subsection GRIFFITHII

Deciduous perennials with strong thick roots. Resting buds at or just below ground level and stalks well developed at flowering. Flowers yellow or purple.

Primula calderiana (figs. 2 & 3). A very variable species from west Nepal eastwards at altitudes from 3200-4800 m in alpine turf or under trees. The resting bud is blunt, usually with farina. There are two subspecies: *calderiana* with purple, red, or occasionally white, flowers, and *strumosa* with yellow flowers. In both subspecies the flowers can smell strongly of fish. Fig. 2 shows a particularly bright red flowered specimen of ssp. *calderiana*, an example of the purple colouration often found in this subspecies can be seen in fig. 47 in *Scottish Rock Gardening in the 20th Century*. The subspecies *strumosa* (CC&McK 669) which we collected from Ganesh Himal in Nepal in 1992 was an elegant plant which smelled most strongly of smoked haddock. Perhaps stupidly, I lifted my only plant for a show from which it never recovered. Will I ever learn?

Both subspecies are difficult to maintain for any length of time and do not always flower well. They may intercross but some forms are not of great garden merit. They have survived in various Highland gardens but are rarely seen nowadays.

Primula tanneri. Resembles *calderiana* but the roots are orange and there is no farina nor any scent. It comes from west Nepal eastwards to the Tsangpo at altitudes from 2000-2800 m. There are three subspecies: *tanneri* with dull purple flowers, *tsariensis* with rich purple flowers, and *nepalensis* with yellow flowers. It is an easier species than *P. calderiana* in the garden, requiring a cool position in rich organic soil. In years past there were great drifts of the plant in some Scottish gardens but, again, their days seem to be numbered.

Primula pulchra (fig. 4). A much smaller plant than the other two species mentioned in this subsection with flower stalks only elongating to about 3 cm. Flowers rich purple with a yellow-orange eye. It grows from central Nepal through to Tibet at altitudes of 3500-5000 m but is nowhere common. Introductions by Ludlow and Sherriff in 1936 have died out but fresh introductions by George Smith in 1985 were propagated by the Stones at Fort Augustus and the species is now quite common in the trade.

In my experience it is a plant for the cold glasshouse or under a pane of glass in winter followed by a shaded frame or bed in summer.

Section CRYSTALLOPHLOMIS

Subsection CRYSTALLOPHLOMIS

Deciduous perennials with a large resting bud, with farina, at ground level. Inflorescences in umbels or whorls on longish stems. Flowers flat-faced.

Primula macrophylla (fig. 18). Leaves narrow and lanceolate with white farina especially below. Slender flower stem with up to 20 purple flowers with a yellow eye, fragrant. Widespread from the Hindu Kush through to Tibet at altitudes from 3300-5400 m in marshy ground, flowering just after snow melt.

A variable species which is easy from seed and will flower in the second year (around April-May) surviving cold winters but it tends to be short-lived, rarely flowering more than twice in the open ground. There are various forms in the wild and in cultivation, one of the finest being H78 collected by Paul Huggins in the Karakorams in 1970 with large purple flowers with a black eye. Another good and fairly similar one was CC&McK 505 from Himachal Pradesh in 1991 which Fred Carrie has grown to perfection.

This is a desirable species which is easily grown as long as care is taken to obtain seed and sow it fresh. Cold helps also but germination is often poor in this species.

Primula obtusifolia. A similar species to *P. macrophylla* but with shorter capsules and rounded leaf blades. Of the species mentioned in this article it is similar to *P. calderiana* and *P. elliptica*. A rare species from Himachal Pradesh at 4000-5300 m. Collected by a Ludlow and Sherriff expedition to the Rupin Pass in 1939 and found again in 1998 by Henry and Margaret Taylor (*The Rock Garden*, vol. 26, pp. 199-208, 1999). It used to be in cultivation at places such as Inshriach and it is hoped that it may soon be back again in our gardens.

Primula obliqua (figs.16 & 17). A most striking species with enormous resting buds like golf balls covered in farina. The magnificent flowers are pendant and may be creamy-white as can be seen in the photograph by Peter Wallington (fig. 112 in *The Rock Garden*, vol. 26, fig. 112, 2000) or cream flushed with pink as shown in figs. 16 & 17. From east Nepal to Bhutan in wet grassland at altitudes from 4000-5000 m.

It was grown successfully at Inshriach for many years but is doubtfully in cultivation nowadays.

Primula stuartii. A close relative of *P. macrophylla* but with yellow flowers and a large resting bud with farina. Frequent from Himachal Pradesh in the west across to central Nepal at Gosainkund in wet alpine meadows between 4000 and 5000 m.

It has not often been in cultivation although it persisted at Inshriach for some time. Recent introductions by the Taylors and the GOS expedition in 1995 have seen fresh sources of material available to gardeners. In my experience it should be grown like *P. macrophylla* and the same precautions taken to save seed in view of the short life of plants.

Section CORDIFOLIAE

Deciduous perennials with masses of creamy-white farina over the whole plant and large ground-level resting buds.

Primula rotundifolia (fig. 5). Leaf blades more or less circular with abundant white farina especially on the under sides. Flowers red-purple with a yellow eye, on 6cm stalks.

Local but abundant from Gosainkund across to Sikkim at altitudes of 3000-4900 m. In my experience from Gosainkund it grows in the shelter of rocks, often at the roadside, and is always protected from heavy rain.



Fig. 16 *Primula obliqua*



Fig. 17 *Primula obliqua*



Fig. 18 *Primula macrophylla* var. *moorcroftiana*



Fig. 19 *Primula reptans*

Fig. 20 *Primula primulina*



Fig. 21 *Primula involucrata*





Primula glomerata Fig. 22
(above left)

Primula atrodentata Fig. 23
(above right)

Primula denticulata
- wild type Fig. 24
(right)
- in garden Fig. 25
(below)





Fig. 26. *Primula buryana*



Fig. 27 *Primula buryana*
var. *purpurea*



Fig. 28 *Primula reidii*



Fig. 29 *Primula klattii*



Fig. 30 *Primula wollastonii*



Fig. 31 *Primula wollastonii*

It definitely needs some winter protection and is probably best under glass until after flowering in March-April when it can go in to a shaded frame. It is a graceful species which has been seen at shows for a number of years but it is short-lived and should be renewed regularly from seed. Germination can often be poor but I was particularly pleased to have tremendous success with SRGC seed this spring (2000), wherever it came from.

Section AMETHYSTINA

Perennial deciduous plants with tiny resting buds, lacking farina. Leaves fleshy, flowers variable from purple right through to yellow or white.

Primula dickieana. Very wet peaty alpine meadows from eastern Nepal eastwards to the Tsangpo at altitudes from 4000-5000 m. Leaves narrow. Flower stalks to 7 cm, flowers with flat faces, ranging from purple-violet to white. It flowers in May-June in cultivation.

It has been introduced as seed on several occasions over the last ten years but it has never proved long-lived and is now rare in cultivation. The plants I have seen in Sikkim were in very wet slopes with a soil mixture of gravel and yak dung which does not give much hope of success in our own gardens. It is, nevertheless, a splendid species in all its huge colour ranges and it is to be hoped that one day someone will succeed in growing it. At present, Fred Carrie at Tough is flowering plants from seed which I collected in Sikkim in 1996.

Section SIKKIMENSIS

A variable section of perennial herbs with a crown of resting buds below the soil surface. Leaf blades round with a long stalk. Flowers more usually white-yellow with abundant farina.

Primula sikkimensis. A variable but usually stout perennial to 90 cm tall with elliptical leaf blades attenuated at the base. Flowers delightfully fragrant, yellow to creamy-white.

A widespread species from west Nepal east to Sichuan at altitudes from 2900-5200 m, often in wet meadows but also up on dry rocks near the snow line.

It flowers in May-June in the wild and in cultivation. It is long-lived in moist humus-rich soil which is not allowed to dry out except for accessions from the drier rockier parts of its range. In my experience it does not tolerate severe winters as well as its more eastern counterpart *P. florindae* so that seed should be sown whenever possible. It has been in our gardens since Hooker introduced it in 1849.

Various varieties have been collected over the years. To my mind the finest is the var. *hopeana* from Nepal, Sikkim, Bhutan and Tibet, a smaller

plant with creamy yellow flowers. Although slightly out of the range of this article it is so lovely and amenable as to deserve a mention.

Seed germinates readily whether fresh or stored; a temperature of 5°C and light are also said to help.

Primula reticulata. A dwarf version of *P. sikkimensis* from which it differs by its more rounded leaves. It grows from Gosainkund to Bhutan at altitudes from 3300-5000 m in alpine meadows.

It has been brought into cultivation on several occasions but has never been long-lived. The true species is doubtlessly in cultivation but seed from some seed exchanges has proved to be *P. florindae*. It requires similar growing conditions as *P. sikkimensis*.

Section OREOPHLOMIS

Perennial species usually with stout rhizomes and resting buds just below the soil surface. Flowers usually rose-pink with a yellow eye.

Primula rosea. A common species in wet snow melt marshes from Afghanistan to Garwhal east of Shimla at altitudes from 2600-4300 m. It is readily distinguished by the pink flowers which peep out just as the leaves begin to unfold, often as early as the beginning of April in the garden but as late as July in the wild. The Rohtang Pass, north of Manali, is one of the easiest places to see it growing in great profusion.

In the garden it likes plenty of moisture but also likes sun which is often a difficult combination. It will grow in shade but not flower well. Plants can readily be split up which helps to extend longevity but seed should be sown, as fresh as possible. This is definitely one species where old seed fails to germinate. Seed raising is important as plants can often be lost in dry summers. This is an excellent easy species which should be more widely grown.

Primula elliptica. Similar to *P. rosea* beside which it grows on the Rohtang Pass but with long narrow whiteish leaf stalks and blue or purple flowers. It has much the same distribution and grows from 3300-4800 m. Henry and Margaret Taylor gave an account of finding it on the Hampta Pass near Manali in *The Rock Garden*, vol. 24, p. 378, 1998.

A more difficult species than *P. rosea* which has been introduced into cultivation frequently but has usually failed to become established. It seems to prefer the same conditions as *P. rosea* but it is short-lived and fails to set seed regularly. It is a delightful species which should be persevered with in order to find out how to grow it.p

Section ARMERINA

A section with about 12 species, only one of which, *P. involucrata*, is commonly grown. The species are small glabrous perennials without farina. Leaves are slender on long stalks. Flowers are white to pink or purple with a yellow eye. They grow in the mountains of Asia and North America and also into the arctic tundra on wet bare ground near streams.

Primula involucrata (fig. 21). A common Himalayan and Chinese species from Pakistan right through to Burma in the east, growing near streams or on moist rocky ledges from 2700-5000 m. Common around the Rohtang Pass.

The leaves are elliptical with long petioles. Flowers are white, pink or purple with a deep yellow eye. The ssp. *yargonensis*, was at one time a species in its own right but Richards has now subsumed it into *involucrata*. It differs from the species in having deep pink or purple flowers. The whole plant tends to be larger.

This is a charming and easily grown species for a moist shaded spot where it sets seed readily and self-sows. Individual plants can be split but generally are not long-lived. It flowers in May and makes a colourful display. According to Schwarz as quoted by Richards it does not like acid soils but that is not my experience over several years of growing it. It is certainly one of the more tractable of the Himalayan primulas.

Section GLABRA

A small group of two species closely related to Section Armerina but with rooted resting buds and short corolla tubes. The only Himalayan species is *P. glabra* which grows from eastern Nepal east into Sichuan.

Primula glabra. A species of acid turf from 3600-5000 m. It has been introduced several times since Cooper first brought it back in 1904 but is of no great garden merit with small flowers of a dingy dull purple colour. It is currently in cultivation and can be kept going in cool shade but is short-lived and seed is needed to keep it going I have had it for several years but it is not of any great garden merit.

Section MINUTISSIMAE

This large group of around 23 species consists of small mat-forming species with tiny leaves and winter resting buds. The flowers tend to be small, single and stalkless.

Primula minutissima. A mat-forming mealy plant with tiny toothed leaves and flowers from Kashmir through to eastern Nepal. It is regarded as rare in the wild but being so small it is easily over-looked when not in flower. I remember camping some years ago at the foot of the Bara Shigri glacier east

of the Rohtang Pass in Himachal Pradesh and only noticing after several days that my tent was on top of a sizeable clump of the species. It seems to prefer dryish banks with little soil or other vegetation present and these are the conditions in which it does best in cultivation. It is never long-lived and needs a constant supply of fresh seed from the wild to keep it going. It has been successful at Cluny in Perthshire and also in Wilfred Holme's garden at Banchory, Aberdeenshire. I have never been able to grow it for any length of time.

It is small charmer without ever been striking and is very much a connoisseur's plant.

Primula reptans (fig.19). Another tiny species found from Pakistan to central Nepal on rocks and peat banks from 4000-5000 m. Tiny cut leaves, bright green with no farina. The flowers are enormous for such a tiny plant, deep purple or blue up to 15 mm in diameter and with a white eye. It is almost impossible to see the plant when not in flower. Years ago on the Rohtang Pass I saw a large clump in flower and thought I would collect seed when I returned that way four weeks later. What a job I had to find it with no flowers to guide me and only the tiny leaves sunk into the surrounding grass.

It is not easy to grow. It seems to need a moist atmosphere in the growing season because it is shallow-rooted and to be kept dry in winter and with cold enough temperatures to prevent it coming into growth too soon. The compost has to be very well drained and plants need to be repotted every year. Richards quotes the successful use of top-dressing with small pieces of coal at the Alpine Garden at Schachen in Bavaria which presumably prevents the growth of moss and liverwort. Lyn Bezzant at Lake of Menteith, Stirlingshire seemed to have mastered the art of growing it when she wrote about the plant in *The Rock Garden* vol. 19, p. 276, 1985. She used crushed charcoal in the compost and as a top-dressing and was adamant that constant spraying with water was necessary in the summer.

Primula primulina (fig. 20). This is a rather larger member of the Section with single stems rather than clumps and with a definite stem. It grows from central Nepal (abundant in the Langtang) east to Bhutan at altitudes from 4000-5000 m. The leaves are coarsely toothed and the blue-violet flowers are up to 10 mm in diameter with a white eye and very obvious white hairs in the throat.

Like the other species in the Section, it is short-lived and needs frequent re-introduction from seed. It requires cool moist shady conditions during growth and to be kept almost dry in winter. It rarely seems to set seed and, unlike other members of the section, it does not propagate vegetatively. It is available from time to time from expeditions but is never common.

Section DENTICULATA

Species in this Section are large perennials which form clumps and have large resting buds at ground level with large bud-scales and strong thick roots which can often be used for propagation. The stalkless flowers are on a spherical many-flowered head. Although it is a well-defined section there has been considerable debate about its relation with other Sections such as Capitatae, Muscarioides and Soldanelloides.

Primula denticulata (figs.24 & 25). Found right throughout the Himalayas from Afghanistan to Sichuan from 1500-4500 m. In suitably moist grassland it can cover huge areas of ground much as buttercups can cover meadows in the west of the UK. As suggested from its wide distribution it is the easiest of all the Himlayan primulas to grow in temperate gardens. In the wild it varies greatly in size but can always be identified by its wrinkled leaves and leathery bud-scales. In the garden it is usually constant in vegetative growth although flower size can vary. Wild collections tend to have flower heads with pale blue flowers loosely arranged as compared with the results of many years of crossing and selection by breeders which has resulted in the large solid heads of flowers from white to deep purple which are sold nowadays.

Cultivation is easy in any decent fairly moist garden soil. In dry conditions it may look bedraggled in mid summer but soon perks up with the autumn rains. It can readily be split but is subject to virus and fresh stocks should be raised from seed from time to time or bought in. In the garden it does not seem to produce much seed and rarely self sows.

Seed seems to like light and also fluctuating temperatures. Cold does not help; neither does the seed have to be fresh.

Primula cachemiriana. Similar to *P. denticulata* in growth and flowering but, in winter and early spring, it had yellow mealy resting buds which open to smooth hairless leaves. It comes from streamsides in Kashmir at around 3700 m.

It is easily grown and is a good sound perennial but is not often seen nowadays in gardens.

Primula atrodentata (fig. 23). A small version of *P. denticulata* which can be distinguished by its lack of bud-scales. It comes from wet grassland from Kumaoan to south-east Tibet at 3000-5000 m. Easily grown but uncommon in gardens.

Primula glomerata (fig. 22). At first glance this species would seem to belong to Section Capitatae along with *P. capitata*. Vegetatively it could be in Section Capitatae but, as Richards points out, the inflorescence characters lean more to *P. denticulata* while the chromosome count of 11 puts it firmly

in Section Denticulatae. The discoid head of purple flowers held at right angles to the stem is quite distinctive.

It grows from central Nepal through to southern Tibet at altitudes from 3300-5700 m in moist shade.

It flowers in late summer and is fairly easy to grow but tends to die out after a few years and sets little seed and is not easy to propagate vegetatively. Diligent fertilisation of pin and thrum types is essential to produce any seed at all. It is common in Nepal and I have introduced seed regularly from there but regrettably it does not live for long. Fresh imports of seed from the wild would seem to be the answer. Seed should be sown fresh.

Section CAPITATAE

Primula capitata. This is the only species in the Section. It is obviously related to *P. glomerata* but has only 9 chromosomes as opposed to 11 in Section Denticulatae and the discoid head of flowers is not vertically inclined as in *P. glomerata*. It grows from eastern Nepal east to Yunnan at heights from 3300-5000 m in well drained scrub above the tree-line. It is a variable species with Richards listing six subspecies. The commonest of these is ssp. *crispata*, without any farina, formerly known as a species in its own right and often confused with the species *P. crispa*, an old synonym for *P. glomerata*.

P. capitata is a fairly easy species to grow in a moist situation without too much sun. They are short-lived and so need to be replenished regularly from seed (sown fresh) which is normally produced especially if plants are grown in clumps. There have been many introductions of this variable species over the years since Hooker introduced it around 1850 from Sikkim and it is worth selecting plants in flower to ensure a good strain. This species flowers in late spring over a long season.

Section SOLDANELLOIDES

Richards lists 21 species in this Section of which 19 have been in cultivation. Only four species fall within the remit of this article. They are all short-lived deciduous perennials with softly hairy leaves. The flowers are usually white and fragrant with a short corolla tube as opposed to the long narrow mealy tube of the closely related Section Muscarioides.

Primula reidii (fig. 28). This is a species of crevices and rock ledges from Kashmir through to central Nepal from 3200-4800 m. The many plants I have seen in the wild seemed to have their leaves protected by overhanging rocks from overhead rain but with drainage water seeping around the roots which perhaps gives a clue to its cultivation requirements.

The leaves are pale green and hairy but the short flower stems are glabrous and have a few white, slightly drooping, scented flowers. The var.

williamsii from Nepal has pale blue flowers. Flowering is from May to June in cultivation.

It has been in gardens for more than 100 years but has always been a temperamental plant. It needs cool moist conditions with some degree of overhead protection as it comes into growth in spring and also during the winter when dampness will rapidly kill it. It is most usually grown in pots in a cold glasshouse but a few people do manage to grow it outside. It does best outside when it does not suffer great cold in the winter. Like many Himalayan plants, *P. reidii* seems to appreciate a good and prolonged snow cover.

Seed should be sown fresh. Old seed does seem to need some cold in order to germinate and it may take two years to come up.

It is the lack of fertile seed which really places the very closely related *P. wigramiana* outside the main scope of this article. A central Nepalese species, with its white flowers on taller stems, it has been introduced more than once in the past and was maintained in various Scottish gardens for some years. It has proved impermanent and is now lost again.

Primula buryana (figs. 26 & 27). This species is similar to *P. reidii* but has white flowers which are stalkless and held horizontally. The leaves are covered in dense white woolly hairs. It comes from rocky banks and screes at 3300-5000 m from central Nepal east to the Everest region. There is a purple variety *purpurea* from the Gosainkund region of central Nepal but it is not common.

It has been introduced several times since it was collected by Dhwoj in 1931 but has never persisted for long. A collection from Dalaguir in 1990 by Chadwell and McKelvie lasted for several years but has probably vanished now. The main problem with this species is winter wet. The dense hairs on the leaves attract any moisture around so that a very dry winter atmosphere is required, probably an alpine house with a fan. In spring and summer it likes a cool moist shaded spot where it can produce its spectacular white heavily-scented flowers but it has an unfortunate habit of dying after flowering. The 1990 introduction was kept going for several years to my knowledge by cross-pollination among a group of Aberdeenshire growers but, as so often happens, the plants all succumbed in the same year, in 1995. It may still be in cultivation but, if so, is extremely rare.

Primula wollastonii (figs. 30 & 31). This differs from the other two species mentioned in this Section by being rhizomatous with rounded hairy leaves and blue to purple pendant flowers with a constricted mouth. It grows in central and eastern Nepal from Langtang to Mt. Everest at altitudes from 3600-5500 m. on moist cliff faces, banks and even in open pastures.

It was introduced by Dhwoj in 1930 from Nepal but first found by Wollaston in Tibet in 1924 and subsequently reintroduced several times since, never remaining long in cultivation. It can be propagated from lateral rosettes

but this ability seem to be responsible for plants failing to reach flowering size and producing offsets instead, although it is said not to do this in the wild. Richards reports it as having been grown in a peat bed at temperatures as low as -15°C but it is more usually attempted in an alpine house. Burnett and Mattingley in an excellent account of the life of Alexander "Sandy" Wollaston in *The Rock Garden* vol. 21, p. 414, 1990 and with a photograph of *P. wollastonii* on p.404, said that seed germinated freely from one-year-old capsules. In cultivation they suggested "an open position on a slight slope, within a mixed colony of dwarf plants, with plenty of light but not too hot. The species enjoys snow cover from January to April, plenty of moisture during the growing season through to mid-July, summer rain to mid-September and then a dry autumn". A counsel of perfection perhaps. However, it is rarely seen nowadays in cultivation.

Primula klattii (fig. 29). This primula was formerly known as *P. uniflora* but this name is invalid as it had already been used for another primula. It is a plant of wet alpine grassland in Nepal east of Mt. Everest at heights from 4000-5000 m. This low growing creeping species can easily be identified by its huge nodding cup-shaped pale blue flowers which are up to 20 mm across. The flowers are larger than the small hairy serrated leaves which are rather like *P. wollastonii*.

It was first introduced in 1911 from Sikkim and then re-introduced by Ludlow and Sherriff in 1937 and 1949 from Bhutan and then by George Smith from Nepal in 1976 but it seems always to have been short-lived. Cultivation would seem to be as for many Soldanelloid primulas in pots in a cool glasshouse.

CONCLUSION

Probably the most important thing is that almost all the primulas mentioned are short-lived so that seed should be obtained annually whenever possible, remembering that pin and thrum plants are needed for most of the species. Some species, such as *P. denticulata*, can live for many years, but there is always the risk of virus or vine weevil attack so even here it is best to collect seed.

The need for shade, plenty of water, and some degree of winter protection for most of the species has been stressed throughout but these factors can always be tempered by locality. Anyone growing Himalayan primulas in north or west Scotland can get away with growing them in the open, almost as folk do with *P. denticulata*, but gardeners further south and east are bound to find most species tricky to grow without constant attention

to sun, water and protection. Another factor is winter cold where those people with cold climates with frost and good snow cover find that they need little winter protection. On the other hand, gardeners with wet and erratic winter weather often struggle to prevent plants mouldering away and trying to flower sporadically throughout the winter.

So ends this account of the wonderful world of Himalayan primulas which present a challenge to us all. We don't all have the ideal conditions for growing them but by adapting our gardens and glasshouses a bit we can all have a go.

INDEX

atrodentata	p. 29 fig. 23	macrophylla	p. 23 fig. 18
aureata	p. 20 fig. 12	minutissima	p. 27
boothii	p. 19 fig. 11	nana	p. 21 fig. 7
bracteosa	p. 19	obliqua	p. 24 figs. 16,17
buryana	p. 31 figs. 26, 27	obtusifolia	p. 24
cachemiriana	p. 29	petiolaris	p. 17 fig. 10
calderiana	p. 22 figs. 2, 3	primulina	p. 28 fig. 20
capitata	p. 30	pulchra	p. 23 fig. 4
denticulata	p. 29 figs. 24, 25	reidii	p. 30 fig. 28
deuteronana	p. 18 fig. 13 & front cover	reptans	p. 28 fig. 19
dickieana	p. 125	reticulata	p. 26
elliptica	p. 26	rosea	p. 26
floribunda	p. 16	rotundifolia	p. 24 fig. 5
geraniifolia	p. 16 fig. 1	scapigera	p. 19
glabra	p. 27	sessilis	p. 18 fig. 6
glomerata	p. 29 fig. 22	sikkimensis	p. 25
gracilipes	p. 17 fig. 9	stuartii	p. 24
involuta	p. 27 fig. 21	tanneri	p. 23
irregularis	p. 19 fig. 8	wollastonii	p. 31 figs. 30, 31
klattii	p. 32 fig. 29		

PHOTOGRAPHS & CREDITS

Many thanks are due to all those who supplied the photographs published here as well as those for which there was not room. Special thanks to Peter Boardman for allowing us to use photographs by the late George Smith.

Peter Boardman (figs. 20, 26, 29, 30, 31)

George Smith (figs. 2, 16, 17)

Margaret & Henry Taylor (fig. 6)

Ian Young (figs. 4, 7)

Malcolm McGregor (figs. 1, 3, 5, 8, 9, 12-15, 18, 21, 23, 27)

Alastair McKelvie (figs. 10, 11, 19, 22, 24, 25, 28)

Diary of a Travelling Speaker



Malcolm McGregor

Any trip brings with it its own particular excitement and usually some trepidation. Touring Scotland for a fortnight as Travelling Speaker certainly brings both of those. It is exciting to be talking about your favourite subjects to new audiences (it's always nice to be asked of course) but it is certainly a major undertaking with some underlying tensions. Will my voice last out for a fortnight? Will the car hold out? And, as the Club's new Editor, the added tension of not blotting my copybook. At the same time it is a great opportunity for people to find out who I am, and for me to meet more members than I possibly could in any other way. As long as it goes well.

Watching weather forecasts beforehand was no help at all - the forecast gales never materialised and, everywhere I visited, people told me they never bothered much with forecasts in the particular corner of Scotland they were in - but it did mean that I packed the car with even more sweaters, rain wear, alternative footwear, alternative outfits in which to speak than I ever would normally. How do I ever go on trek if I need this much to tour Scotland?

The Travelling Speaker is organised by the Club to tour Scotland for two weeks, speaking to ten of the local groups on a variety of subjects. Since there are only about fifteen local groups (depending on which you count and how), visiting ten as I was to, would be a major slice of this part of the Club's activity. I was also booked to go to Aberdeen a couple of weeks later as a one-off (more of that later - at the time of writing this it's still in the future). It's obviously quite an undertaking for one speaker to do a fortnight, speaking every weekday night for two weeks, driving on every day, meeting new people every day, staying with strangers and so on. There has been discussion of splitting it into two separate weeks, probably with two separate speakers, so I was trying to look at that as well. As far as local groups are concerned it provides a valuable input to their programmes, costs are shared, with the Club providing transport costs for example, and it provides the chance to bring someone from further afield who might not be able to do just the odd single lecture.

When I was first approached by David Tattersfield I was on a short tour, lecturing in Kent, and spent an hour in a layby agreeing in principle ("It's urgent and I really need an answer right away"). We settled on 4 different subjects: Saxifrages (my obsession); two geographically based talks, one on

Nepal and one on south-east Tibet; and one conjuring with questions raised by looking at plants in the wild. Which groups and which subjects were taken up was down to individual conveners and whether groups have had the speaker recently or have missed out: some groups aren't looking for the Speaker this year, some just respond slowly; some leap in immediately.

Monday 2nd October - SCOTTISH BORDERS

My first destination is the Borders Group which meets at the Village Hall in Bowden (just south of Melrose). It's about 170 miles from home so I'd decided to give myself plenty of time, set off early, potter through North Yorkshire, Durham, Northumberland and on into Scotland. The car saw that idea off by activating its immobiliser for the first time. A visit from an AA-man resolved the problems, and armed with a screwdriver so that I could disconnect it in the same way as he had, I set off around two hours later than planned and far less certain that everything would go smoothly.

My bed for the night is with Teyl de Bordes, a Dutchman whose Lilliesleaf Nursery in an old walled garden specialises in Epimedium. Teyl has the National Collection of these but he grows a great range of plants, quite a lot for their seed including a range of more unusual clovers (*Trifolium* if you're that way inclined) which were suffering from the attentions of a hare. I've suffered very occasionally from a rabbit depriving me of seed from *Saxifraga granulata* which now grows near the base of a small tree in our front lawn, but a bad hare day? Since I'm a saxifrage specialist, Teyl, who is the group Secretary/Treasurer makes a point of showing me that even his plants of *Saxifraga longifolia* are being nibbled. Our meal is provided by Christine Watson, who has all the roles on the committee that Teyl does not, "It makes committee meetings easy."

I'll be glad to get the talk done tonight - first-night nerves I suppose. The talk tonight is the one on saxifrages which I'm scheduled to do another four times (and then again in Aberdeen). It's the first meeting of the new season as will be the case for most groups, and the Village Hall has new chairs which means there is only room for around six dozen chairs downstairs, "but we can use the balcony if we need to." It's really chilly outside but the heating is impressive bringing the hall to a decent temperature very efficiently.

The Borders Group is only four years old but has the enthusiasm of youth: seventy people turn up, quite a few having had a long drive. There is a good sales table, which I did manage to look at, and a raffle but thankfully no display to judge (that's reserved for my last night). Ron McBeath has come over from Lamberton (he's off to Eastern Nepal at the end of the week with Ian Christie, Ben Wilson and others), Jim Jermyn gives a vote of thanks which was very much appreciated - thanks Jim and I'll not forget about the other plants you mentioned, and someone asks me if I'd be interested in an article he was thinking of writing because he feels that there are things that

need to be said. What more could a new Editor ask for. The highlight though has to be the Group singing Happy Birthday to Christine who is retiring from teaching at the end of the week. A late night back at Teyl's house, is followed by a soft, slightly damp morning, chatting before I leave with Teyl's father over from near Utrecht. It's a good start and if it all goes as well as this I'll be happy.

The Borders Group meet from September/October to May, the first Monday of the month, 7.30, Bowden Village Hall. Further details from Christine Watson, telephone 01835 822265.

Tuesday 3rd October - PERTSHIRE

This is the home patch of David Tattersfield who organised the whole fortnight but he's in Morocco with a trekking group, so I won't actually get to meet him. Again it's a fair journey up from the Borders to Perth but I'm stopping off at the Botanic Gardens in Edinburgh just to see what's about at this time of year. I thought I might get some photographs of the autumn gentians and the alpine house. I manage some but discover the repairs to the camera (after being damaged on a trip to Poland) have not been completed quite properly so the meter's not functioning convincingly. With difficulty I manage to get one or two pictures, one of a beautiful, lush, white *Gentiana sino-ornata* 'Gloriosa'. Have to take the camera back in.

Back on the road it's not so long to Perth. Tomorrow I'm in Stirling and then on to Thurso which rather looms over the next day or so. The instructions on how to get to Jean and Tom Band's at Pitcairngreen near Almondbank are great and I try to follow them to the letter - apart from getting photocopies of the slidelist for the group tonight at a little post-office on the edge of Perth (only 5p a copy so that was OK). "You pass Huntingtower Castle shortly before you get to the turning off the main road for the village."

Jean has a wonderful garden, developed over the last 25 years, and it repays all the time and energy spent on it. Facing gently south it catches the warmth and prospers on it. The rockery is enormous with large trees providing shady beds with primulas and meconopsis under mature rhododendrons and a range of smaller shrubs. Jean and Tom's daughter, Susan, has a wholesale nursery in the village and, although they are out of flower, her beds of *Meconopsis betonicifolia* and *M. quintuplinervia* grown as seed crops are staggering. For someone from south of the Border and in the east at that, they are literally unimagined, and must be worth travelling a very long way to see when in flower (next Open Day is on Sunday 27 May 2001). But whilst they are grown for seed, Susan also has an intriguing range of plants she's raised from seed - obviously her passion.

Richard Lilley is one of the guests at dinner at Jean's and he's particularly interested that I'm talking about the Langtang National Park in

spring tonight because he's off to just there next week (separate trip to Ron McBeath, this one with Jim Sutherland, Anne Chambers and others). I hope that one of them will be making notes so that we can put together a comparative piece on the two seasons in that particular area. I'd been twice to the Langtang in May so the talk finished with quite a detailed selection of slides of the primulas, particularly at Gosainkund where we were able to see a range of the hybrids between *P. deuteronana* and *P. aureata* [some of these slides illustrate Alastair's article on Himalayan Primulas]. Visitors in the autumn get a quite different view and it would be interesting to show that.

There's no point taking my car - all I have to do is swap the slides over into Kodak carousels when I get to the meeting so I get a lift from Susan. The meetings of the Perth Group are at the Perth Bowling Club (apparently the windows along the side of the hall look out on the greens) on the south side of Perth and it's a good easy-to-get-at venue, quite a low ceiling, friendly feel, plenty of room for the fifty or sixty who turn up. Unfortunately there's a hitch when it transpires that the carousels for the slides have gone astray, and a delay whilst Susan and Richard drive back to get my projector from my car (parked at Pitcairngreen). Still it gives me time to chat for a while to some of the people there including Henry and Margaret Taylor and Bette Ivey, who I'll be staying with next week on Monday and Tuesday. It also gives me the chance to break the ice by standing up and letting the group know what's happening about the projector - and to look at the display table where there is a beautiful pan of *Primula cawdoriana*, four plants of different sizes among smaller and larger pieces of rock, from Nick Boss.

My projector doesn't have a remote control, I only take it as a backup, but it does autofocus well which I think is vital. Without a remote it needs someone willing to press a button to change slides. I am always happier if the person doing it is willing just to take me as they find me and change slides when it feels right rather than waiting for me to tell them and I have to thank Anne St. John for doing me proud - it's really nice when you can relax and not worry about that side of things. The talk is one I've done a few times recently to local groups (Women's Institute etc.) but I've not given a botanical version since I came back from Nepal this spring so it's fun to have the chance to reflect on it again.

The Perth Group meet from October to April, the first Tuesday of the month, 7.30, Moncreiffe Community Centre, Glenearn Rd, Perth. Further details from David Tattersfield, telephone 01250 881451.

Wednesday 4th October - STIRLINGSHIRE

Following recommendations I take myself off to Branklyn Garden in the morning before setting off for Stirling. It's not far to Stirling, so I thought I'd get in just a bit of sightseeing. October is obviously not the best time but there's a lovely soft autumn feel to the garden even with the threat of rain.

Apart from some gentians there isn't much in flower except a group of *Meconopsis punicea* with flowers just emerging from buds. Definitely a place to come in the late spring. My other major piece of sightseeing is Stirling Castle. There's a swirling, cold, rainy wind which just emphasises the impregnability of the castle as it comes into view. By the time I've followed a tour from archway, to doorway, shelter to shelter, I'm frozen but hot chocolate and a scone sets me back up before I'm on to find where I'm going. The newly renovated Great Hall is not to my taste but it's certainly impressive.

Jean and Arthur Broome are my hosts for the night on a Kinross-shire farm where gardening, although not top of the priority list, is large scale when it takes place, and where plants once they reach down set off for the sky. "You can forget what the book says about being up to three feet, I'm going to be ten feet tall!" But alongside this, in the last three years of excessive rain, Jean and Arthur have lost long-established fritillaries and other bulbs, in particular daffodils which have just rotted in the ground. The willows round the pond (nearer a lake to many of us) are looking fine though.

The Stirling Group meets at Bridge of Allan in the substantial Chalmers Church Hall and is currently one of the hotbeds for the Council: Sandy Leven our just retiring President, Hazel Smith the Club's Membership Secretary, Glassford Sprunt, Jean Wyllie who's been in charge of the Seed Exchange for nearly fifteen years, and Evelyn Stevens are just some of the stalwarts and there's a very comfortable and lively feel to the meetings with what seemed to be an excellent plant stall (I say *seemed* because I'm not actually managing to get to the sales tables any more). Among the delights of the evening was being told by Jean Broome and Betty Hamilton, who is into flower arranging and snowdrops, of their trip south (to London) earlier this year with Hazel to see Sandy Leven receive the Farrer Trophy from the RHS, on behalf of the Club, for the best alpine exhibit at any RHS show in Great Britain.

The talk tonight is about "Lessons from the Wild" which illustrates a series of themes with slides of plants in the wild, habitats, rock, plants you'd never grow (thistles, dandelions), plants we might grow, plants in sand (my favourite sand plant is *Arisaema flavum* growing in sand dunes in Tibet - completely the opposite of what you'd expect from an arisaema), problems of scale, labelling (there aren't many in the wild), design, how we might use rock, about plants being happy. When I ask how long the group has been going we get as far back as someone saying that it was going strong when they joined in 1960. As my hosts are farmers, and dairy farmers at that, it's not quite so late tonight but still nearly one when I get to bed. 370 miles so far and my voice is holding up although it's just a little rough.

The Stirlingshire Group meet from October to May, the 1st Wednesday of the month, 7.30 in Chalmers Church Hall, Bridge of Allan. Further details from Jean Broome, telephone 01259 743188.

Thursday 5th October - CAITHNESS & SUTHERLAND

Before I left home I'd kept a careful eye on the long range forecasts and they'd been talking of gales on Wednesday and Thursday so I hope there's not a follow-up to yesterday's grim weather at Stirling. I'd always thought it was the English who went in for understatement but I was told by more than one person that it would be a "wee way" up to Thurso - 270 miles as it turned out - and then back to Elgin tomorrow. So there is no time for stopping en route today - just keep on driving.

I was particularly keen to go to Thurso, I've never been north of Inverness before, and it was a perfect opportunity for me to do it, and it seemed only right for people farther away to get the chance to meet the new Editor. As it turned out it was a lovely day up across the Highlands. Not a lot of traffic to slow me down as I went on up past Inverness and across the Black Isle, where I would have loved to have gone and seen Hugh Miller's cottage: *The Old Red Sandstone* is his classic but *First Impressions of England* is worth anybody's time. I finally stop for lunch just past Dornoch with another two hundred miles under my belt.

It's always nice travelling north, the skies cool, the sun warming your back rather than shining in your eyes, and the run up the coast past Helmsdale and then turning straight north across the Caithness plateau with the mountains rising individually from the plain in the late afternoon. Thurso itself at last and a sudden view of the Orkneys and especially of Hoy standing out rugged further off. I'm on my way to Reay just past the reprocessing plant at Dounreay and suddenly I'm assailed by oncoming traffic, mainly coaches bringing the workers home at the end of the afternoon shift. I'd been expecting wild weather and a quiet road - the opposite: knots of traffic and quiet gentle weather. Edna and John Walford live no more than 100 yards from the beach with a view straight north across a startlingly tranquil Pentland Firth.

The talk tonight is on Nepal again and is in the Thurso College Campus for the Highland University in one of their seminar rooms which would hold a couple of dozen. This is almost exactly what we get and after slides being swapped into carousels again the talk goes fine although, unfortunately, there's no opportunity for refreshments at the end which always opens up the chance for discussion afterwards. Nevertheless it was nice to chat with a few people at the end, especially a lady who had been to just the same area of Nepal a few years ago and was so pleased to have it renewed. Our journey back is on the back road and suddenly in the northern sky, not bright but quite distinct, are the Northern Lights, and when we get back we sit looking out of the dining room window with the lights off at the lighted northern sky.

The morning is still fine and Edna's garden is fascinating, desperately exposed, although not as cold as you might expect so close to the sea, the major difficulty is providing shelter. Once that is in place it's possible to

grow all sorts. Meconopsis flourish where they get enough shelter as do a range of both primulas and rhododendrons. But it is rowans and their relatives which are a speciality and a long stand of Whitebeams in full fruit is a joy in the sun. Finally Milosevich appears to have been ousted.

The Caithness & Sutherland Group meets from September/October to May, whenever it is most convenient for speakers to travel, in the Morven Building, part of Thurso College. Further details from Edna Walford, telephone 01847 811356.

Friday 6th October - MORAY

Leaving Thurso late morning I'm expecting to get to Elgin by about four in the afternoon although in the end the traffic, particularly from Inverness to Elgin, means I'm nearly an hour late on my estimate. It's the last day of week one and I'm still going strong, voice intact. I'm looking forward to the weekend - I'm off to the west coast, Ullapool, just to get away from it all for a couple of days.

So that I'm not actually driving exactly the same route back to Inverness as I followed on the way north, I start from Reay by heading slightly west and then down the Strath through eastern Sutherland, quite different in feel from Caithness yesterday on the way up - it's slower, single track with passing places, but it is a lovely run. Travelling south changes the feel immediately and the light is rather like one of those autumnal Victorian paintings, heather and moor, and Highland cattle which watch me from the side of the road. Finally, when I get to turn east at Inverness on the road to Elgin, I get held up in long queues which never evaporate. Tonight I'm in bed and breakfast because there have been difficulties with the arrangements but Ronnie Loveland who has made the arrangement has done me proud.

Ronnie is like me, retired from a career, and now following a quite different path, and both of us obviously happy with our decision. Our meal is sumptuous, out in the country at the house of Alison Montgomery who is the Treasurer of the group, and with Davie Sharp and his wife Margaret as additional guests. Together with Bob Mackie they form an enthusiastic young group, only about eight years old, and they've got me as an addition to their standard programme (they've already had one meeting a week before, and there's another in a couple of weeks). The Hall is a Community Hall in New Elgin, which is a compact community. The hall's got a nice atmosphere and with something under thirty in the audience, it's quite easy to discuss things as the talk goes along - I'm quite relaxed having got this far (around 850 miles and counting) and there's a very comfortable feel to the group. Glad I came. Since I'm talking about Saxifrages here, as I will be in Aberdeen at the end of the month, a separate date from the tour, and since some of them come to Aberdeen as well, I promise them I'll change at least a section of the talk so that they don't get bored (why do I do this?).

When I get back to my lodgings, a very nice guesthouse, it's good to be able to reflect on completing the first week, and to let myself relax completely. It would be lovely not to go anywhere for a couple of days and I nearly change my mind and see if I can stay on over the weekend but I want to get over to Ullapool and Inverewe as a real break.

When I started out I had a suitcase full of clothes (a wardrobe for all seasons), rucksack and slides all in the boot and only a briefcase in the front and a projector behind the passenger seat. Accumulating plants has already displaced the suitcase. By the end of next week the only thing that will fit in the boot along with the plants are the slides: suitcase and briefcase will be on the back seat, rucksack in the front passenger seat, and the projector wedged in behind the front seat.

The Moray Group meets from September to May, the third or fourth Friday of the month, 7.30, in the New Elgin Hall, Land Street, New Elgin. Further details from Ron Loveland (tel 01343 821316).

WEEKEND

My plan for the weekend is to get away from things after visiting Lossiemouth - just to see part of my maternal grandfather's history - and Jim Sutherland at Ardfearn. Luckily I ring the nursery in advance and discover Jim's got a stall in Inverness Farmers' Market which meets once a month. So I set off for that on my way and, having found a place to park in Inverness on a Saturday morning (in Safeways in the end), I spend a really nice time with Jim and Agnes on the stall for a couple of hours in the rain. Agnes gets us ostrich burgers from another of the Farmers' Market stalls and I share their flask of coffee and buy a little composite (*Asteraceae* as they are today) *Solidago virgaurea minima*, a miniature Goldenrod about half an inch high with single flowers rather than the complex heads of the normal plant we know, before I go on to meet Alastair at the nursery. By the time I leave there it's after three and the England team are in full cry against Germany. By the time I get to Ullapool the game is almost over and England are losing. I find a room in a pub on the waterfront in Ullapool with a seal bobbing just a few yards out. It's only late in the evening in the pub while Scotland are playing that I find out Kevin Keegan has resigned.

Since I'm due in Dundee on Monday I've decided to break the back of the journey on Sunday visiting Inverewe on the way - I've never been before and although it's October I'd rather take the chance than miss out. The day is clear when I set off although there's the threat of rain later. The run down from Ullapool to Inverewe (and then on to Gairloch) is so spectacular that I feel totally refreshed - it's what I need before the coming week - just wish I had a couple more days free. Inverewe is sumptuous with autumn colour. Although obviously little is in flower it is revealing to find *Saxifraga fortunei* on the Peat Banks covered with its froth of white flowers - ahead of East

Yorkshire obviously by a couple of weeks. Most sensuous plant of the day - *Rhododendron barbatum* with its bark in shades of smooth rich pinkish-brown and its trunks, sometimes tall and lithe, at other times reclining like lazy limbs - I spend the forecast storm beneath its canopy.

The afternoon is a run back to Inverness and then south into the Highland heart. On an off chance I turn off at Aviemore to see whether Inshriach is open and am startled to find it is. Since the design of the catalogue cover hasn't changed I'd not picked up the fact that there are new owners. It will be interesting to see what of their plans they achieve (they've got a couple of holiday cottages among other things) but there was a positive feel to the place and I picked up replacements for some mossy saxifrages I've let die: nice plants, first-class condition, well presented. Thanks for the tea and biscuits. By the time I actually leave there it's very late afternoon and I decide enough is enough at Newtonmore - another place in family history.

Monday 9th October - DUNDEE

I'm staying with Henry and Margaret Taylor tonight and I am so looking forward to seeing their garden which I've heard so much about, but since I'm on the road I'm going to stop off at Ian Christie's near Kirriemuir, even though he's already left with Ron McBeath for Nepal. Ian and Ann have such a great reputation and there is nothing nicer than pottering about a nursery. Even if you have nothing special on your list something attracts your attention, and the feel of nurseries is so important. Apart from the wind, which is definitely on the cold side, the most impressive thing is obviously the beds of autumn-flowering gentians with blocks of different cultivars planted in open ground. With them all flowering together it makes it so easy to compare: I reckon 'Compact Gem' looks as good as any.

As always my instructions for finding my hosts work first time. Margaret and Henry are great company and the afternoon is spent chatting; it's raining so looking at the garden is put off till tomorrow. They've invited Mike and Lynn Almond to join us for dinner and it's nice to meet another important contributor to the *Rock Garden*.

As far as weather is concerned this is the worst of the fortnight. The venue tonight is Dundee University in a lecture theatre which would probably take 300 odd. When we get there it's a rainstorm and as people arrive it's clear that out of the city the roads are badly affected with tales of roads inches deep in water. Ann Christie's managed to get there and it's lovely to have some repeat visitors from last week, Jean and Susan Band who were so good to me, and Nick Boss who is very complimentary about the way I'd set up one of my troughs - in our approach to the way in which plants and rocks form a vital relationship I think we're on a similar wavelength. The audience of somewhere between 50 and 60 is really pretty good given the weather and the Dundee group is one of those that make sure everyone wins a prize in the raffle - rather like in *Alice*, "Everybody has won, and all must have prizes."

Like the Borders Group the Dundee Group has a small committee - Henry and Margaret, and Fred Hunt, plus an informal gathering of friends including Mike Almond and others who meet in the Taylors' house after lectures, so committee meetings are very simple. The advantage of course is that it's easy to get things done if you're willing to do it yourself, as they are. The everybody-wins raffles are just such an example and are an inspiration.

The next morning does provide a good opportunity to look at the garden with all sorts of fascinating things tucked away in corners. It's a garden which would repay many days of thoughtful study - a total of perhaps an hour is about my limit squeezed in between getting up late, rain showers and lunch.

The Dundee Group meets from October to March on the first Monday of the month (second in October and January) at 7.30pm in the Tower Lecture Theatre, Dundee University. Further details from Henry Taylor, 32 Morris Place, Invergowrie, Dundee. Phone 01382 562280.

Tuesday 10th October - St ANDREWS

I'm staying tonight with Bette Ivey at Cupar in Fife, who'd come to the talks at Perth and Dundee and who, with many others, I'd half met at the Discussion Weekend last year. Bette is an ex-President of the Club (which must have been lively) and for many years she and her husband, Bill, were the mainstay of the group in Ayr who I'll be meeting later in the week. For those who don't concentrate on such things, the President is elected for a once only period of three years so as Bette says, "It's a real honour to be President and you have to get on and get things done." Bette and I get on from the word go and it's a lovely stay.

Bette's garden has a good view over the top of Cupar to the hills to the south and the garden has all sorts in it. I'm thankful that I manage to pass my exam by correctly identifying a range of *Saxifraga fortunei* varieties and cultivars which are growing in the garden, looking very healthy, in particular the very new 'Blackberry and Apple Pie' which has very distinctive foliage.

The St Andrew's group is another of the older groups, along with such as Perth and Stirling, but it has just had its long-time convener, Ian Douglas (he's still the projectionist), retire after many years. There is now a committee of which Bette is one, along with Marigold Speir, Meg Pringle and Jim Thompson and others whom I do not meet, each taking responsibility for the arrangements for one month out of the season. Yet again my visit is the first meeting of the season and the arrangements are different from those of last season.

We're meeting in the Herbarium at the Botanic Gardens, somewhere else I never see in daylight, in a room which will hold around three dozen, but we're not sure whether this will be full or not. The route through the Botanic Gardens is well-signposted through some of the glasshouses which is rather exotic, and by the time we get to start there are almost fifty people in a room

for thirty-five. There are people standing, sitting on the floor at the front (it's nicely carpeted) and I'm more or less pinned against the corner of the screen with about three square feet to move in, of which at least half is out of bounds because of sightlines for people at the front and side, including Walter Melville who is 90 plus and sitting at the front. (Perhaps the limited space is a way of resolving the problem of last night when I started pacing round the platform at the front at Dundee.) Partly because of the sheer informality it turns out to be great fun, the group is very lively.

At the end after questions, Leslie Drummond gives me a specimen of *Primula reptans*, after I'd been discussing how difficult it was to grow (at Perth I think, but it could have been Dundee ... or Stirling or ...) and, for a Saxifrage man, a pot of 'April Blush' which he'd raised from seed collected from *Saxifraga granulata* which was crossed with an undetermined small red hybrid mossy saxifrage. Thank you for both - they mean a lot. Having passed Bette's exam earlier I don't manage the same for a lady with a series of questions about what she should do to improve things for a number of shrubs and other things that I've not grown myself. Back to earth then.

The Fife Group meets from September to April, the third Tuesday of the month, 7.30pm in the Herbarium, St Andrews Botanic Gardens. Further details from Angela Montford, telephone 01334 478026.

Wednesday 11th October - AYR

Although, in comparison with some of the days, driving down to Ayr is not such a long way, I've got 7 talks and well over a thousand miles on the clock since I started and for the first time I nearly mistake my route as I cruise through Glasgow on the motorway, so it is good to arrive in Ayr with Ailsa Craig in the distant south but also with the much larger profiles of Arran and behind it Kintyre. I'm staying with Margaret Williams and her husband Gareth whose quite small garden is supplemented very effectively by a nice high roofed conservatory and a couple of allotments. The plant theme is also brought right into the house with the Georgia O'Keeffe reproductions. What is quite clear from the herbaceous plants, and even more clearly from the shrubs, is that the climate here is very mild and provides great opportunities for the ambitious plants-person. By ambitious I suppose I mean insatiable.

The talk tonight is in the College and I've been told by Bette to look out for "Wee Aud" who'll be on the door, as of course, she is. Despite being weary the talk goes well. As I say to a number of groups, doing this is a bit like doing stand-up, and it's the adrenalin of being out in front which brings out the best in you, in that respect being tired just makes me slightly more nervous of how it will go and that's no harm. It's rather interesting as a venue - it's the staff room, with large soft armchairs, which all helps make me conscious that the audience of around three dozen, might just drift off if I give them half a chance. In the end the talk is actually quite interesting for me

tonight - I catch myself listening to what I'm saying which always generates that sense of a conversation actually going on - partly of course it's just that slight sense of dislocation that catches up with you when you're tired. I have quite a chat with one or two members at the end and promise to send a list of recommendations of "Saxifrages for Beginners", made by members of the Saxifrage Society earlier this year, which reminds me that I need to get that written up for *The Saxifrage Magazine* as well. One of the things I've enjoyed about doing this particular talk a number of times is that it's given me the chance to adjust the balance of what I've said as the fortnight's gone on. Although it's the Porphyron saxifrages (Kabschia, Engleria and Oppositifoliae) which have clearly attracted a lot of attention, there's been quite a lot of interest in some of the other sections I've emphasised such as the beautiful autumn-flowering Irregulares (Diptera that were) species such as *Saxifraga fortunei* which really do illuminate a dark corner and go so well among the autumn leaves. It also makes me look forward to revising the talk slightly to discuss some of those others that have got neglected: I think I'll bring in some of the slides I took this summer in the Maritime Alps before I go to Aberdeen.

Before I leave in the morning, after a superb breakfast which really does set me up again, I collect the pots of geraniums that we potted up yesterday including 'Ann Folkard' which was growing nicely in the front by the gate - we've not got them at home and Monica and I have patches that can do with something to grow through them in that way. Donald Dewar has died.

The Ayr Group meets from September to May, the second Wednesday of the month, 7.30pm, in Ayr College. Further details from Margaret Williams, telephone 01292 263132.

Thursday 12th October - GLASGOW

The Burrell Collection in the end loses out to the Glasgow City Art Gallery, although if I'd realised just how hard it is to find out how to get to the car park I might not have bothered, but it was worth it to see George Henry's 'Japanese Lady with a Fan', a wonder in soft greys and black, with a few splashes of white and red among the smoky tones.

I'm staying with Robert and Ursula Edge who live just out on the North West edge of the city at Milngavie with a garden which faces and slopes generally south. Although this means that some parts of the garden give problems they've managed to generate spaces for most things you could want with small rhododendrons, trees, and species roses giving shelter for Meconopsis. *Clematis montana* is a good thirty foot plus up into the conifers and by the wall there it is - 'Ann Folkard' covering an area of about twelve to fifteen square feet - not quite what I'd seen the day before - and that in just one year - I'll take care where I put that Margaret. Robert's specialities though are primulas and auriculas, which he has in frames and in the alpine

house, as well as celmisias and arisaemas. It doesn't matter what your speciality is - it's the fact that it is your speciality that makes it of interest to others. Later we find we share an enthusiasm for the music of Shostakovich.

The talk is in Glasgow itself and the group is really a number of groups with a joint existence (group conveners are John Lee, Keith Pinkerton and George Cheeseman) under the heading of the "West of Scotland Group", and I've got competition in the city, with the Friends of the Botanic Gardens having Chris Chadwell giving a talk about plant collecting, in the Himalayas I presume. This is not usually a problem in smaller towns but I've already been up against the Geographic Societies of Perth (where I was talking about the plants of Nepal) and Stirling, so I've got used to it. An absentee here is Anne Chambers who is another one of those who are in Nepal at the moment, which is a shame because I'd hoped she might confirm some identifications among the slides tonight. I'm talking about Tibet and that is an area for which plant identification is much harder than it is for the more western areas of the Himalaya, where there are good general floras for the mountain flowers. For the third time I get a new identification for a Rhododendron which now seems contentedly to be *R. triflorum mahogani* but lose my identification of another which I thought was *R. triflorum* and which someone is certain is not, but to which they cannot give an alternative name. Viv Chambers, Cameron Carmichael and the Thornleys from Rhu contribute to the debate and I look forward to hearing of a definitive identification of the puzzle rhodo. This is the only time on the tour that I'm showing these particular slides and it's exciting to get such a different stimulus. It was a particularly rewarding trip and unusual in that my ability to put accurate names to plants was severely limited by the lack of available references. It was very beneficial to be forced back to look at the flowers for what they are rather than just to label them as you find them. As a talk I enjoy it because it shows the range of habitats in south-eastern Tibet, from high mountain passes which are predominantly Himalayan in floral terms; to 100% humid jungle full of palms, gesneriads, climbing Hydrangea and various members of the gourd family; woodland with terrestrial orchids, *Cardiocrinum* and *Meconopsis*; Rhododendron woodland; sand banks and water meadows full of *Primula alpicola* by the rivers; and on up onto the plateau of Tibet proper. As you can tell it was a trip to feast upon.

The West of Scotland Groups meet from October to April, the third Monday of each month at 7.30 in St Stephen's Church Centre, 260 Bath St, Glasgow. Further details from Betty Anderson, telephone 0141 639 6727

Black Friday - NORTH CUMBRIA

The last couple of days have been a bit of a zig-zag from Cupar down past Glasgow to Ayr back up to Glasgow and now south again to Carlisle where I'm staying. The North Cumbria is one of three English groups which have an

allegiance to the Scottish Rock Garden Club having got support from the Club in its early days. The meeting itself will be in Penrith at the NFU Hall which is opposite a MacDonalds.

I'm staying the night with Celia and Tony Mitchell and manage to arrive while Celia still has two of her grandchildren before they're picked up after school - somehow it sets the informal family tone which carries on right through - I need something pretty informal by now. Fittingly perhaps the talk tonight is the one I've done most, "Saxifrages in Cultivation and the Wild", and the one thing I have to concentrate on is not just going through the motions. We manage to get the screen very much in everyone's line of sight, and the projector a long way back to make the most of the size of the screen, and of the modern and attractive hall. What you have to do to go on repeating a lecture is to let the slides set you off fresh - to actually notice things so that you can surprise even yourself by some of the things you say during the evening; and it turns out like that, with a rather enjoyable freewheeling version of what I've done other nights. There are between sixty and seventy present with people having to sit at the side behind the group's library tables - by the way, the library, run by Tony Mitchell, is the best I've seen at any group; if it was my local group I'd always be borrowing. Overall I've talked to something over 400 during the tour which is a significant proportion of the membership (probably over a quarter of the Scottish membership) and makes it a great experience. I know there have been thoughts about splitting the tour into two separate weeks but, despite the weariness involved in a second week, I wouldn't have missed the opportunity to enjoy the middle weekend suspended as it is between two good runs of lectures.

For the only time on the tour I'm asked to judge the display table and since there are only three plants on it there is very little hiding place. Despite my usual non-choice of bulbs I am taken with a pan of *Crocus banaticus* and choose that over nice specimens of *Saxifraga fortunei* and *Gentiana sino-ornata* either of which would have deserved recognition.

This final night has been fun, as has the whole tour, but on the way back I'm given a tour of Carlisle by car, something I would never have been able to do myself. The chances of penetrating as far as the cathedral by car seem infinitesimally small for those who don't know the town. I've been up quite late most nights - it's a strange pattern of work on a tour like this. It does not really matter how tired you are during the day, what you have to do is be wide awake and at your best from about seven o'clock till ten in the evening, but of course it's always difficult to switch off the adrenalin again afterward. This last night is a truly late night chatting and talking about plants, the world in general, and arranging to see globeflowers in the Pennines next year.

The North Cumbria Group meets from September to April, the third Friday of the month, 7.30, in the N.F.U. Hall in Penrith. Further details from Celia Mitchell, telephone 01228 528546.

It's a week since I got home now and I was really quite pleased that I'd survived with my voice intact, my car still happy after it's belated start. I got back to work after a day's rest on the Sunday (I drive a van for Iceland delivering shopping to customers' houses: just a couple of days a week to keep the wolf from the door) and was happily driving around again, thinking I might get an early night. Then I twisted my ankle whilst unloading the van, fell full length and had to go off to hospital for an X-ray of my ankle. Luckily it's not broken but I've been on crutches, foot up whenever possible, ice-packs and all the rest. Trying to imagine the chaos it would have caused in the middle of the tour makes me blanch. I'm just coming off the crutches now so I'll be back on the road to Aberdeen in about a week's time. In just ten days' touring I could not get to all fifteen groups, but I'm pleased to be getting up to Aberdeen so soon and I've talked to one or two of the other groups, and pencilled in a date in 2002 to visit Oban, so I will be out and about if asked.

POSTSCRIPT in ABERDEEN

With my ankle having recovered over the last week I'm confident of driving (it gives me the chance to pop in at Lamberton to see Ron McBeath's nursery on the way up and so on) - conveniently it's my left foot so it is only needed for changing gear - which is lucky since I'm not sure how confident I would be of the railways up to Aberdeeen, then down next weekend to Battleby for the AGM, and then back here to East Yorkshire. I'm going to be staying with Alastair McKelvie, my predecessor as Editor, and his wife Frances. It'll be nice: Alastair and I first met in 1993 when he was the botanical leader for a trip to north-west India on which I'd booked my family and myself, and we've remained in touch ever since. I've put off actually getting down to changing that piece of the talk I've been promising for the last two weeks, and it's now the Saturday before the talk on the Tuesday, so it's time to get on and do it.

The journey back up to Aberdeen is a fair run again - 375 miles but I break it at Lamberton where the weather is almost perfect - clear and remarkably still with views out across the North Sea and down the coast to the Farne Islands. Ron has a wonderful range of less common Himalayan primulas and, although many are not suitable for my style of gardening or my local climate, I still manage to find four or five which are irresistible including *P. calderiana* from Tibet which I've seen in the wild and can't resist. I also add to the Meconopsis which are going to need a home by buying a couple of plants of 'Slieve Donard' which Ron recommends. Once I get to the Forth Bridge it's only two and a half hours to Aberdeen.

Alastair's garden is known to many from his appearance in the rain on *The Beechgrove Garden* (a Scottish TV gardening programme for those who don't know - I'm learning fast). It's quite a narrow garden facing and sloping

south, with a wonderful range of Himalayan rhododendrons (grown from seed as are many of the other plants), primulas and meconopsis, supplemented by beds of trilliums, troughs and tufa, and right at the bottom a stream which has an extremely happy *Chrysosplenium davidianum* growing by it.

The Aberdeen Group is long-established with Bob Maxwell as its convener but it is Alastair who's introducing me tonight. The talk rattles along (as usual it's quarts and pint pots with me) and I've managed to change a few parts of the talk and the emphasis of other parts, so that at least the three who've come down from Elgin don't get exactly the same talk. The hall is a nice space to talk in (I'm wearing a microphone - "We've bought it - you'll wear it" - although, as Margaret Young says afterwards, there's not much chance that people won't hear me anyway). The library is great with the group buying its own books including the *Encyclopedia of Alpines* and a beautiful encyclopedia on rhododendrons by the Coxes. Ian Young, the Club's new President, is on the committee up here and is in charge of the projector which is a very high class piece of equipment. Coffee and tea are upstairs at nine sharp after the raffle. A very civilised setting with a good chance to chat to people after the talk. Other people in the group include Maureen and Brian Wilson, who pass me on slides; Mike Reid from Stonehaven who is the Advertising Manager for the Club and a key person for me (and I've already managed to get to see his garden); and Chris Jones who's responsible for the index which appears at the end of each volume of *The Rock Garden*.

The Aberdeen Group meets from September to April, the last Tuesday of the month, 7.30 in the Rubislaw Church Centre. Further details from Bob Maxwell, tel: 013398 83266.

It's now Friday and the Council Meeting and AGM are tomorrow at Battleby. The last couple of days have been great. On Wednesday, Alastair and Frances took me for a tour of Donside and Deeside with a fascinating contrast between the two - "Come to Donside and drive on empty roads" is Alastair's slogan - but don't expect to find many places open for lunch in November. Among the highlights of the day are the Wade bridge over the Gairn north of Ballater and a red squirrel which may not seem much to you but is a gem to me. Another is a visit to Fred Carrie's Tough Nursery (pronounced "tookh" (with the "kh" like the "ch" in "loch") rather than "tuff"). It's about 1000 feet up and certainly any plants from here are truly hardy. We are all wearing coats and hats and although there's sun it's pretty chilly. There are great blocks of primulas with such things as *P. aureata* spending the winter in the open under snow. Fred's got a great range of saxifrages as well and so it's another tray of plants and a couple of bags of granite chippings in the boot.

Alastair and I have spent the morning sorting out slides from our respective collections for his article on Himalayan primulas and then in the

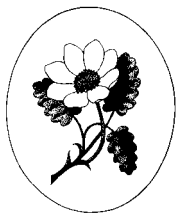
afternoon, Mike Reid and I meet up at Ian and Maggie Young's which is only about half a mile from Alastair's. Although the rain cuts short garden viewing, there's enough time to get a real sense of the play of plant and geology in the way that things are growing, with some magnificent bonsai among everything else - but then it's down to an informal meeting of at least a part of the Editorial Committee to discuss the journal. [*While I'm typing this, Alastair is out digging up plants for me out of his garden, so I'm going to stop to make sure I can get them all in the boot.*]

To all those I met, do feel free to get in touch - that's why I did it. To all those involved with organising things for the tour - for projectionists, for those who gave votes of thanks, for conveners and secretaries and treasurers - I think it went pretty well. To all those who don't get to a local group - you should. To all those who provided me with bed and board, for all the plants and the whisky and the chat and the hospitality - thank you. Back to "old clothes and porridge". *Slàinte.*

If you would like to see all the Forrest Medal winning plants from the SRGC Shows they can be found on the website at

www.SRGC.org.uk

**There are some spectacular plants on show
and there's a lot else besides.**



Aspects of the Picos de Europa

Part II

Francis Ferns

PUERTO DE PIEDRASLUENGAS 1329m

The Pass of the Prominent Stones lies south-east of Potes on highway C627. The road winds along the river Bullón valley, flanked by typical woodland of ash, beech, oak, holm oak and black poplar; all rather mid-green in colour, broken only by the yellow of *Cytisus* and *Genista*. There are no native firs or pines in the Picos, only a few plantings of *Pinus radiata* D. Don, the Monterey Pine which has been introduced from North America. One other foreigner wears a Mexican sombrero, *Erigeron karvinskianus* D. C., and invades inhabited stony places.

Above the village of Piedrasluengas stands a huge dog's tooth of grey stone surrounded by several outcrops; the exposed rock is splashed with orange and white lichens; each is a limestone rockery in itself. The lightly grazed turf is studded with little sparkles of colour; the blue of *Gentiana verna* L., the white of *Saxifraga granulata* L., the common Meadow Saxifrage; *Viola bubanii* Timb. covered with rich violet-purple coloured flowers, a new face to me; spots of yellow rockrose, potentillas, erysimums, and not forgetting the dandelions and their cousins, dozens and dozens.

The little blue powder puffs of *Globularia repens* Lam. weave between the cracks in a rock outcrop; the woody stems holding tight to the stone. There also *Saxifraga canaliculata* Boiss. & Reut., its dark green leaves deep channelled by veins, showing off the flowers of unblemished white. A smaller outcrop has the Livelong saxifrage, *Saxifraga paniculata* Mill. with lime-encrusted foliage. The main rock mass shelters *Anemone baldensis* ssp. *pavoniana* Boiss. and *Globularia nudicaulis* L. with the much larger tufted growth and paddle-shaped leaves than *Globularia repens*. There is a report by Lionel Bacon which implies that he found *Globularia* × *fuxeensis* Giraud when he passed this way over 20 years ago. *Flora Europaea* describes this natural cross as "occurring locally with the parents . . . intermediate between them . . . reported to be fertile . . . $2n = 16$." Not very specific, no mention about which species provides the seed; the reporting source is reliable, but the whole evidence is weak; nor could I find a Spanish bumble bee to help

me. Nava reports its existence throughout Cordillera Cantábrica and in particular gives Majada de la Redondal, 1800m.

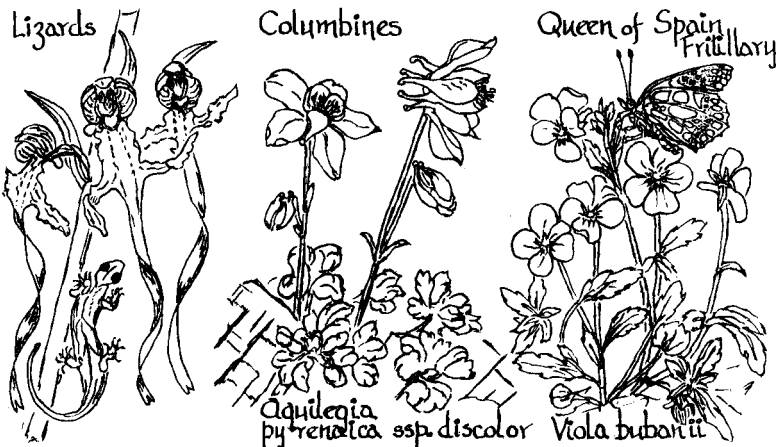
Somewhere, not remembered, were the blue flowers of *Centaurea triumfetti* All., the inner florets are violet, the outer a deep cornflower blue. *Flora Europaea* lists thirteen subspecies of this centaurea. This Spanish plant, for reasons I have not space to give, is probably *Centaurea triumfetti* ssp. *lingulata* (Lag.) Dostal, being the most compact of the alternatives in this baker's dozen. The royal purple of *Pinguicula grandiflora* Lam. adds its share of colour, as does the pink of *Asperula hirta* Ram. and the silky blue texture of the flowers of *Linum narbonense* L.. A glance at my little altimeter showed 1460m, but since I never zeroed it that morning I think it was overheating with excitement and guess 1400m as a reasonable estimate of height on an overcast day. Edging round to what I guessed to be the more northerly face of the main rock, where the strata sloped to ground were bright yellow patches of *Erysimum grandiflorum* Desf. alias, unbelievably, the Large-Flowered Treacle Mustard. So many quasi-Anglo-Saxon names that I begin to expect that I shall meet a Sticky Toffee Pudding Plant coming round the menhir any minute. What would Alice have said to that in her Mad Hortiland of talking flowers?

Where sub-alpine herbage found shelter, *Lithodora diffusa* (Lagasca) Johnst. scrambled among yellow "gorse" answering to the name of *Genista hispanica* ssp. *occidentalis* Rouy. *Erica arborea* L. gives cover along with *Erica australis* L., the Spanish heath. The deep pink, campanulate, tubular bells, and exerted stamens remind me of some South African heathers and it does in fact extend its range into North Africa.

I understand that the limestone bedrock of this site overlies neutral shales, but the repeated occurrence of alleged calcifuge plants like *Lithodora* . . . formerly that old garden friend *Lithospermum* 'Heavenly Blue' . . . and ericaceous genera makes me wonder to what extent a preference for acidic soils matters much, except in conditions where the water supply is markedly limy, like for example some domestic mains supplies; once a topsoil has formed in the wild and there is heavy leaching rainfall, it seems to matter less still.

Finally . . . ignoring the existence of *Lonicera xylosteum* L., an insignificant-flowered, bushy honeysuckle seen growing in a hedgerow, though fairly common in Europe, rare in Britain; and *Ornithogalum pyrenaicum* L. with its tall spike of greenish, yellow-anthered flowers, no beauty, and no rock plant, reportedly once cultivated for the edible young shoots, so earning the name of Bath Asparagus . . . I have to mention the doyen of the Bullón river valley. No-one could fairly call *Himantoglossum hircinum* (L.) Spreng., a beautiful, or a rock, or an alpine plant; but these plants growing on a bank and in a roadside ditch were quite the most striking ground orchids that I have ever seen. I measured plants from base to top of the flower spike that were over a metre high. The tongue of the individual

flower starts life in a coil, to form, as it uncoils, the lizard tail from which this plant gets its justifiable Anglo-Saxon name. The colouring is made up from subtle grey, green and lilac hues, with brownish-green sepals. To count the flowers is like trying to count a flock of starlings; my conservative guess from my slide is about 170.



FRESH PASTURES and HIGH PASSES

We left Espinama with regret at not being able to spend another day on the heights above El Cable or screes around the peaks of Macondiú; if you only had two fine days these are the places to go. "Beyond that last blue mountain clothed with snow . . . sang the poet, . . . always a little further we shall go" . . . but not just now my friends, that is for another day, another year, for now we must be in for tea and there is still an awful lot to see. About nine-thirtyish we moved off, having loaded baggage, stores, library, and not forgetting to have field permits handy. In the sunlight as we climbed towards the San Glorio Pass, 1609m, we stopped by a roadside hay meadow. Spots of colour were everywhere. In the morning sunlight a plant of *Viola cornuta* L. was sitting up just asking to be photographed. This clear bright violet can be found as high as 2500m on close-knit mountain grassland. In the rock garden it has many colour forms and keeps flowering all summer. There is another unexpected string to its bow; with other ground violets, it is the food plant of the Queen of Spain Fritillary larvae; no sorrel or grasses for this queen of fritillaries, with the whole lower reverse of the underwing lit by platelets of shining silver . . . while being admired as it fluttered in its pillbox before release, Mike was hailed by the crew of a police car which had drawn up . . . not a parking problem, but a request to examine naturalists' permits which were duly produced . . . when they continued on their way photography went on apace. These parks in Spain are policed by the Servicio Para la Protection

de la Natura under the control of, and financed through, the Guardia Civil.

That damp sunny bank and two more hay meadows yielded a handful of interesting plants in the course of the day. There were perfect specimens of *Pinguicula grandiflora*, *Nigritella nigra* ssp. *nigra* (L.) Reich., *Pulsatilla alpina* (L.) Delarbre . . . the white one on limestone, its sulphur yellow cousin is usually found on acidic rocks, so the latter was never seen, and *Polystichum lonchitis* (L.) Roth, the Holly Fern, which I first found on Ben More Assynt many years ago; all of which need no further introduction. *Geranium cinereum* ssp. *subargenteum* Lange is a nice little local plant; not as good to my eye as the pink-flowered and silvery-leaved *Geranium argenteum* L. of the Dolomites, but with silvery leaves and deeper purplish-pink flowers; it has kept, what *Flora Europaea* finds with some other subspecies, a marginal taxonomic status since 1878, but the authority of long usage carries little weight in the naming game, where Linnaeus, I believe, once said "*Nomina si nescis perite et cognitio rerum*" . . . I translate . . . "Unless the names are known to you, the concepts will be hazy too" . . .

Being in hay meadows, the bulbous genera begin to appear. First a single flower of *Fritillaria pyrenaica* L. and, nearby, *Tulipa sylvestris* L.. Before taking a photograph I looked around for a better specimen; this plant looked rather dwarfed compared with a plant that I used to grow which had much larger yellow flowers and spread by runners or stolons; this plant had outer perianth segments which were quite coppery in colour. However I got down to work clearing the grass and rubbish from the basal leaves; if photography has to take the place of digging up and pressing these days, as much of the plant as possible needs to be shown *in situ*; so, a little judicious gardening is necessary. This time it paid off handsomely, because, on looking up the *Flora Europaea* description it confirmed that this plant was *Tulipa sylvestris* ssp. *australis* (Link) Pamp. These meadows revealed leaves and seedheads of *Narcissus pseudonarcissus* ssp. *nobilis* (Haw.) L.; Dog Tooth Violet, *Erythronium dens-canis* L., never in a clump, just a few leaves; *Scilla lilio-hyacinthus* L., all leaf and not much flower; and also *Colchicum autumnale* L. with the crocus of this region *Crocus nudiflorus* Sm.. There must be quite a display in spring and autumn. The higher sub-alpine areas have *Narcissus asturiensis* (Jordan) Pugsley and the pale yellow form of *Narcissus bulbocodium* L.. *Narcissus bulbocodium* ssp. *citrinus* (Baker) F.Casas has been recorded near the Aliva Refuge. No snowdrops or cyclamen are to be found in the lists. Onions, bluebells and gageas et al., I will pass by.

ONE WET DAY

Does it surprise to read of spending half a lovely day in the field, walking around hay-meadows and seeing nothing, and another half day we got soaked and my interest never wavered . . well, hardly ever. The mist thickened as we drove up the track leading to the zinc mines below the peaks around Macondiú, all mountains just topping 2000m. We stopped at a gate on the

Pulsatilla rubra s.sp. *hispanica*



track to walk through ankle-deep wet grass on a ridge south of the village of Beges. The mist began to clear as a fine drizzle washed it from the sky to reveal an oak wood ahead. At our feet, on the edge of the wood, the turf was dotted with the cheerful, bright pink flowers of *Orchis papilionacea* L.. Walking a little further, the ground dropped away quite sharply, revealing the village in the distance below. Here bilberry and ling gave ground cover with the grass, among which an anemone pulsatilla grew with seemingly black petals offset by soft hairs white with dew. I have never seen such dark specimens of *Pulsatilla rubra* (Lam.) Delarbe. They seem to come within the description of *Pulsatilla rubra* ssp. *hispanica* Zimm. ex Aich. & Sch. in *Flora Europaea* . . . "they are said to differ from ssp. *rubra* in having blackish or purple violet flowers" . . . rather a tenuous differentiation when combined with the description of *Pulsatilla pratensis* (L.) Miller to which *Flora Europaea* refers the reader as being "like", then omits a territorial reference to indicate which part of Spain *Pulsatilla rubra* ssp. *hispanica* might be found. Allowance must be made for the conditions in which I saw the plants. They had cylindrical flowers smaller than

the *Pulsatilla vulgaris* Mill. of gardens and of the wild. The flower heads tended to nod. I thought, when I first saw the flowers in the field, that they were deep indigo blue in colour, or velvety black . . . impossible; on holding the dried flower heads up to light, to do my drawing, I realised that they were

more a gemstone, deep garnet red; if you enjoy playing guessing games with colour charts I give R.H.S. nos. 183/185, only much darker than say, *Nigritella nigra*.

Further research in a copy of *Feddes Repertorium*, a German publication of long standing, in an article on the genus *Pulsatilla* (vol.60, p158, 1957) reveals that the original (holotype) of this subspecies was found on the banks of the river Ebro . . . "in ophrys rich dry meadow of soft sandstone . . . at altitude about 500m . . .", its territory given as . . . "mountainous terrain between Ebro and Júcar." The river Ebro is a long one and the only "Júcar" that I can find is a river in the south of Spain. I had a German friend to help with the text.

Another reference is more specific of *Pulsatilla rubra* itself being found in the Cantabrian mountains and the source of the river Ebro is only a few kilometres to the east of Piedraslungas; so this siting in the Picos of the "blackest" anemone *pulsatilla* could well be correct. For myself, I find the search for its correct name an intriguing one, even if not yet proven. Alas seed had not yet set. [Since writing this Teresa Farino has confirmed this plant is *P. rubra* ssp. *hispanica*. FF.]

Circuiting another small wood, mainly ash with a few oak, I started my own guessing game. Nothing was in flower so I did a leaf count. Leaves of primrose, bluebell, wood anemone and hepatica were identifiable in the undercover; never a large specimen plant, always single crowns with two or three seedheads. Aspleniums and both hellebores were present, *Helleborus foetidus* L. and *H. viridis* L., and on raising my head from watching my foothold, I saw a large patch of *Lilium pyrenaicum* L.. It would be three to four weeks before the buds opened. *Lilium martagon* had been seen in similar open woodland at Fuente Dé.

As for the other day, having an in-built tendency not to see anything over knee-high, or looking like an ox-eye daisy or a dandelion, I saw nothing. Granted that it was a lovely morning and the pastoral view of meadow and open woodland up and down the valley was absorbing as were the butterflies and birds; I will only say that I acquired a list of some twenty species of the healthiest hedgerow weeds that ever graced a roadside ditch or meadow in May; when I look at it again in retrospect there is not a thistle among them. Who said that plant hunting . . . "has all the elements of serendipity balanced by hope"?

I had been hoping to see *Sempervivum vincentei* ssp. *cantabricum* (J.A.Huber) F.Casas & M.Gar. growing in the wild in the company of *Sempervivum arachnoideum* L., since these are alleged to be the parents of a wild hybrid currently known as *Sempervivum giuseppii* Wale and named after Dr. Giuseppi who spotted it on Peña Espigüete which is a rather off-the-track mountain 20 km south of Fuente Dé as the crow flies. M.C.Smith thinks he found this plant when he did a very comprehensive survey for a thesis in 1968 or '69; in all he brought back some 2500 live Spanish sempervivum



Fig. 32 Picos de Europa - limestone scenery at Fuente Dé



Fig. 33 *Erysimum grandiflorum*





Fig. 35 *Centaurea labascana*



Fig. 34 *Digitalis parviflorum* (opposite)

Fig. 36 *Iberis spathulata*



Fig. 37 *Linum narbonense*



Fig. 38 *Linum suffruticosum*

specimens. In an *A.G.S. Bulletin* article in June 1976 he suggested the possibility of this plant being a hybrid rather than a distinct species. He also wrote an article (date not known) published in *Lagascalía*. Nava expresses doubt on the merits of the case on which Smith bases his reasons for the hybrid deduction, in *Ruizia* 6,198 . . . "*Pero consideramos que, por ahora, el tratamiento más correcto es el específico*" . . . which translates in other words . . . "But we think for the reasons given, that for the time being this plant is more correctly to be classed as a species."

I never saw *Sempervivum giuseppii* in the wild, the Princes of Serendip had deserted me, all sempervivum plants, on Peña Espigüete and near the Aliva hostel were out of my reach, due to distance and weather respectively; but I did see and photograph a stand of *Sempervivum vincentei* ssp. *cantabricum* near Oseja de Sajambre, and in spite of a superficial search found no *Sempervivum arachnoideum* there. I almost forgot, the list that day contained the following fern species which must have been growing alongside the woodland track as we walked in: *Adiantum capillus-veneris* L., the Maidenhair Fern; *Asplenium scolopendrium* L., the Hart's Tongue Fern; *Gymnocarpium dryopteris* (L.) Newman, the Oak Fern; *Polystichum setiferum* (Forsk.) Woyнар, the Soft Shield Fern; and *Thelypteris limbosperma* (All.) Fuchs, the Lemon-Scented Fern.

CHASMS and CHASMOPHYTES

Gorges are impressive the world over, consequently they have two drawbacks; they attract the gazing and gasping crowd and the plants are not accessible. The Deva Gorge is a highway and access route to the region. The Cares Gorge is only negotiable on foot. The Cares Gorge is visually impressive, but only three plants registered in my mind; not forgetting the hardness of the rock in the tunnels which had not been cut for two metre man. I like *Digitalis parviflora* Jacq., seen on the roadside when walking down to Cain, with a thin elegant spike of close-knit, dainty, chocolate coloured foxgloves. Hanging from the roof of some of the entrances to the short tunnels, the white flowered variety of *Petrocoptis glaucifolia* (Lag.) Boiss. did a trapeze act by growing upside down, which makes me wonder how its seed sticks and germinates. I prefer the darker pink variety which I saw near the main highway above the Deva Gorge. The third plant which I thought at the time was a rather poor specimen of *Campanula rotundifolia* L., the Scottish Harebell, would seem to be *Campanula rotundifolia* ssp. *legionensis* (Pau) Lainz, which identifies this variant of plants in the north of Spain of a species which is wide-ranging and subject to much taxonomic splitting.

Whirled around, up hill and down dale, homes for people, villages and towns begin to look much the same; whereas homes for plants, limestone hilltops, outcrops and scars, hay meadows and lush marshland, tracks to somewhere and nowhere, each take on a fresh significance as different flora and fauna emerge.

I have no space to do justice to two remaining areas. The first, fringing the northern flanks of the Cantabrian mountains, where the Arroyo el Cable bickers down the centre of a wide valley from a small lake at the foot of Pico Gildars. The eastern slopes of the valley are golden with *Genista hispanica* L. The meadow grasses are spiked with metre-high spears of *Asphodelus albus* Miller. Occasionally the broad-leaved stems of *Gentiana lutea* L. show, and those of the dowdy-flowered *Veratrum album* L.; so alike at a distance, when not in flower, but the leaves of the gentian are placed opposite each other, those of the veratrum alternately on the stem.

In these conditions one expects to see the Globe Flower, *Trollius europeus* L., and we did, along with healthy clumps of the fresh white-flowered anemone *Pulsatilla alpina*, and *Viola cornuta*. Names are beginning to repeat, but these have not the vulgar familiarity of roadside weeds. We have not seen the Parsley Fern, *Cryptogramma crispa* L. before; here it is growing in a sheltered hollow. Still smaller plants grow on and around outcrops of rock; the iberis-like *Teesdaliopsis conferta* (Lag.) Rothm. and *Ranunculus amplexicaulis* L.; the little yellow *Linaria supina* (L.) Chaz.; *Homogyne alpina* (L.) Cass. the Alpine Coltsfoot, also the common one, *Tussilago farfara* L., as its Latin name indicates, good for coughs. Someone saw the little yellow-flowered *Orchis pallens* L. and we found just two plants of *Dactylorhiza sambucina* Soo.. There must have been many bulbous species hidden in the turf of this delightful valley, like *Narcissus triandrus* and erythronium, because the turf along the track was spiked with seeming hundreds of *Fritillaria pyrenaica*.

The second area covers land to the south of Riano and the fringes of the Cantabrian hills; in no way can it be called alpine in character and I shall not repeat names.

Two flaxes were outstanding, dwarf and neat in habit, ideal for the rock garden, their silken petals shining in the sun. The blue one is *Linum narbonense* and *Flora Europaea* states . . . "Plants from the Pyrenees are particularly variable . . . a difficult group, in need of further study". The white one is of course *Linum suffruticosum* ssp. *salsoloides* (Lam.) Rouy. Two thistles were also noteworthy and ideal plants for the rock garden: *Centaurea lagascana* Graels, with sulphur-yellow flowers nestling in a rosette, held tight against the gravelly turf; and *Jurinea humilis* (Desf.) DC., a pink one with similar habit; neither are listed in *The Plant Finder*. Strange it may seem, but what impressed me most floristically on this summer day was a rather ordinary cornfield full of red poppies and blue cornflowers, set off against the hazy blue grass of unripe corn. Only a pre-century Raphaelite Monet could have done it justice. Camera and colour film are clumsy recorders of such scenes.

Inevitably, I have missed many plants and places which some knowledgeable readers might think deserve or need mention. Others have



been this way before and written articles of varying quality. I referred the reader to them at the end of part I. Searching through the material available to me to write this note, I have found time and again that I am thrown back to original sources which are in reality so scanty that it is difficult to put a name to a plant seen or reported with certain accuracy or to put a plant in hand to a subspecies description. The report may be in Spanish or German, mixed with the necessary jargon of taxonomy with a Latin description all filled in with a habitat code of the author's own concoction. The Tower of Babel still casts its dark shadow to conceal clarity. I am not competent to penetrate the fog.

The area is still pretty wild country; though the comforts of modern civilisation are quite close at hand. Much remains to be found and confirmed; so, I can only say . . . "Go there whilst you can" . . . and wish you good hunting.

CORRIGENDA and ADENDA for Part I

- | | |
|-------------|--|
| p.252 | The <i>Dianthus</i> on the coast is in fact <i>Dianthus gallicus</i> Pers. |
| pp.277, 283 | Peña Remoña, not Romana |
| p. 282 | For <i>Linaria triornithora</i> read <i>Linaria triornithophora</i> . |

Teresa Farino's email provider has changed the code to farino@sinix.net

All photographs in this article are by the author.

THE SCOTTISH ROCK GARDEN CLUB DISCUSSION WEEKEND 2001



**Friday October 5th – Sunday October 7th
at the Jarvis Caledonian Hotel, INVERNESS**

THE NEW MILLENNIUM brings challenges to all and we in the Inverness and Moray SRGC groups welcome the challenge of hosting the annual Discussion Weekend. A new venue in the Highland capital Inverness, city of 100 000, will offer a great weekend and a chance to visit places of note.

A few miles north of Inverness, at Bunchrew, is Ardfearn Nursery run by Jim & Alasdair Sutherland, one of the best-known alpine nurseries in Scotland. Overlooking Loch Ness is Abriachan, a garden and nursery of increasing fame since becoming part of the RHS scheme. The garden has been created on a steep slope furnished with woodland and other plants, including many alpine species. The important historical site of Culloden is a mere 4 miles from the Hotel and the beautiful "Island Walk" along the banks of the River Ness is in the immediate area. Inverness serves as a shopping centre to the North of Scotland, the North West, and a major part of the Moray coast. It knows the needs of people in every walk of life and offers shops of a variety not often seen these days, as well as the best High Street stores. Travel to Inverness is provided for with excellent rail, road and air services.

The Hotel is situated in the city centre a short walk from the railway station. Accommodation is in double and twin rooms. There is a single room supplement. It would be appreciated if single members who wish to share a room could arrange this between themselves. Please remember to give details of dietary or any other special requirements. As usual there will be a PLANT AUCTION and 50:50 PLANT SALE. If possible please support the PLANT SHOW and the HOLIDAY PHOTOGRAPHIC COMPETITION. Details are in the Year Book. If you have lost your copy ask for a show schedule when you book.

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

Members should have their bookings made before 8th September 2001. Applications for bookings together with the appropriate remittance should be sent to **The Registration Secretary, Mrs. Lorna Milnes, Dunbarney, Myrtlefield Lane, Westhill, Inverness.**

Members wanting further information should write to Davie Sharp, Kincaig, 4 Walkers Crescent, Lhanbryde, Elgin, Morayshire IV30 8PB.

DISCUSSION WEEKEND 2001 PROGRAMME

FRIDAY 5TH OCTOBER

- 16.00 Registration
19.45 President's Welcome Address
20.00 THE BULB GROUP LECTURE
 John Anderson: *Cobra Lilies*
21.30 Small Bulb Exchange
 Donors to the bulb exchange will have priority for the first 10
 minutes

SATURDAY 6TH OCTOBER

- 08.00 Registration
08.00 – 09.30 Show Exhibitors Setting Up Time
09.00 City Walk/Garden/Nursery Visits
11.15 Gerben Tjeerdsma:
 Narcissus/Amaryllidaceae at Gothenburg Botanical Garden
12.30 Show Opens

14.00 THE HAROLD ESSELMONT LECTURE
 John Anderson '*Plant Hunting In Japan*'
15.30 Mike And Polly Stone

19.15 Dinner
 Guests: The Editors - Alastair and Malcolm
22.00 Plant Auction

SUNDAY 7TH OCTOBER

- 08.30 Registration
09.30 THE WILLIAM BUCHANAN LECTURE
 Gerben Tjeerdsma '*Plant Hunting In The Drakensberg*'
11.00 Andrew Fraser - *Uncle George*

14.00 THE JOHN DUFF SCOTTISH LECTURE
 Ian And Maggie Young - *63 Craigton Road*
-

× *Ramberlea* 'Inchgarth'



Maureen & Brian Wilson

× *Ramberlea* 'Inchgarth'

(International Gesneriad Register No. IR00734)

One of the frustrations of having chosen the Gesneriaceae as a "special interest" subject is that out of a family of over 4,500 species comparatively few are of alpine affinity. Of those that are, even fewer can be said to be reliably hardy in our British climate. Indeed, they could be counted on the fingers of one hand.

One way of enhancing the choice of hardy gesneriads is to look into the possibilities of hybridising. The classic example of course, is between *Jankaia heldreichii* and *Ramonda myconi*, created in 1923 by Van Dedem and called × *Jankaemonda vandedemii*. Doubt as to the parentage of this hybrid was expressed by the late Otto Schwarz of Jena, but it was later confirmed by Josef Halda using the stated parents in a remake. Four other intergeneric hybrids were reported by Halda in the 1980s (*Preslia*, Praha, 61: 125-127, 1989) although no plants are known to have survived.

Intergeneric hybrids are difficult to create and one of the reasons is because the chromosome numbers of the parent plants differ. The fact that it is not impossible to achieve is thought to be because the species are more closely related than at first appears. The Ice Age was responsible for wiping out many species of gesneriads altogether, and the relicts which survived subsequently continued their evolution in geographical isolation.

One of Halda's four 1989 hybrids was a cross between *Ramonda myconi* and *Haberlea rhodopensis*, which he named × *Ramberlea kistlerae*. From our point of view, this was the most desirable hybrid to attempt to re-create because of the reliable hardiness of both parents in the cold climate of north-east Scotland.

Our first attempts failed, despite emasculating the *Ramonda myconi* and enclosing the flower to prevent contamination by stray *Ramonda* pollen from neighbouring flowers. (An empty teabag cover and wire twist is useful for this purpose because, while not pollen-proof, the bag is certainly insect-proof.) The resulting seedlings all turned out to be *Ramonda*, but fortunately we repeated the cross in successive years without waiting the 3+ years it takes for plants to flower from seed. This time the results were more promising, even though on the second occasion some of the progeny appeared to be pure *Ramonda* - limited pollen contamination perhaps, or apomictic behaviour?

Second cross made: May 1996. Details are as follows:

Female parent *Ramonda myconi*; male parent *Haberlea ferdinandicoburgii* 'Connie Davidson' (a vegetative descendant of a wild-collected form). We are aware that Halda used *H. rhodopensis* for the male parent, and opinions vary between "lumpers" and "splitters" as to whether the two haberleas are separate species or not. Although the RBG lists them as two species, others suggest that they are too similar for the progeny to be given a different Latin specific name from that used by Halda. There are however, obvious differences between our hybrids and the description of Halda's plant, (see later) and we have registered our selected clone as \times *Ramberlea* 'Inchgarth'.

Seed sown: September 1996. Very few seeds germinated, as anticipated from crossing species from two genera with differing chromosome numbers. Culture followed our usual method for alpine gesneriads (see "Growing Alpine Gesneriads" *The Rock Garden* 24: 191-199, 1995). The first 2 plants (out of a total of 6 surviving hybrid seedlings) flowered in May 1999, another 3 followed in 2000, while one is still to flower and will not do so until 2001 at the earliest. Differences between the clones that have flowered to date are insignificant, but the one selected for naming has outperformed the others in growth rate and flower production.

\times *Ramberlea* 'Inchgarth', in its second year of flowering, has a rosette of 16 cm diameter. The immature leaves are shiny, smooth, mid-green and sparsely covered in short, white, hairs. As they mature the leaves lose their gloss and the hair covering becomes denser. Underneath the leaf, the hairs, while still white in the main, show a hint of light brown particularly on the veins. The leaf blade dimensions are 6.0-6.5 cm x 3.8-4.2 cm wide with a 2 cm petiole. The shape is best described as midway between elliptic and ovate, a characteristic inherited from the *Haberlea* parent. The leaf margins are dentate as in both parents.

Twelve scapes, each bearing four flowers, arise from the leaf axils. The scapes (6.5-7.0 cm) are dark brown and covered in soft white hairs. A pair of linear bracts (10mm) emerge from where the pedicels join the peduncle. The 5-pointed calyces (7-8 mm) are light green giving way to brown at the base, and are covered in short white hairs. The 5-lobed flowers clearly show characteristics inherited from both parents. They are semi-campanulate, being neither tubular as in *Haberlea*, nor rotate as in *Ramonda*. The average size is 1.8 cm x 2.6 cm wide. The colour is a two-tone mid-violet suffused with white and they have a yellow hairy throat (as in *Haberlea*) with minor purple spotting. There are 5 filaments, some of which are rudimentary, while others carry violet-black, sterile, anthers shaped like a blunt arrow-head. The stigma is white with a slightly swollen tip. Attempts to backcross with each of the parents last year failed to produce any seed, suggesting that the plant is sterile.

We mentioned earlier Halda's \times *Ramberlea kistlerae* - the most obvious difference between his plant and ours is in the foliage. Halda's description, and the accompanying drawing shows rugose leaves as in *R. myconi*, whereas the leaves in ours are smooth as in *H. ferdinandi-coburgii*. His plant only has 1-3 flowers per scape, as had ours in its first flowering, but this year there are consistently 4 per scape.

At the time of writing [Oct. 2000], one of the unnamed \times *Ramberlea* clones has been planted outside in a vertical north-facing wall. So far, the plant is thriving, and we see no reason why it should not survive our winter climate as its parents have done for many years, including our all-time low of -18° C in the winter of 1994-5.

Peggy Crosland, herself a valued member of SRGC, has made a gift to the Club in memory of her late husband, Jack, one of the greatest growers, and most successful exhibitors the Club has known. The Croslands' skills and kindness are much appreciated throughout the Club and especially by their local Group, Aberdeenshire.

The Crosland Prize will be awarded annually by the Aberdeenshire Group for the best contribution in the journals issued in January/June. Make a contribution to *The Rock Garden* and be eligible for this award which will be made at the AGM. Budding scribes, photographers, or illustrators are all eligible: make a contribution to the Journal and be the first to win The Crosland Prize.



Fig. 39 *x Ramberlea* 'Inchgarth' Maureen & Brian Wilson



Fig. 40 *Saussurea weberi* Polly Stone



Fig. 41 *Arnica angustifolia* var. *tomentosa*



Fig. 42 *Gentiana algida*

photos: Polly Stone



Fig. 43 *Telesonix jamesii*
"var. *flavescens*"



Fig. 44 *Telesonix jamesii*
var. *heucheriformis*



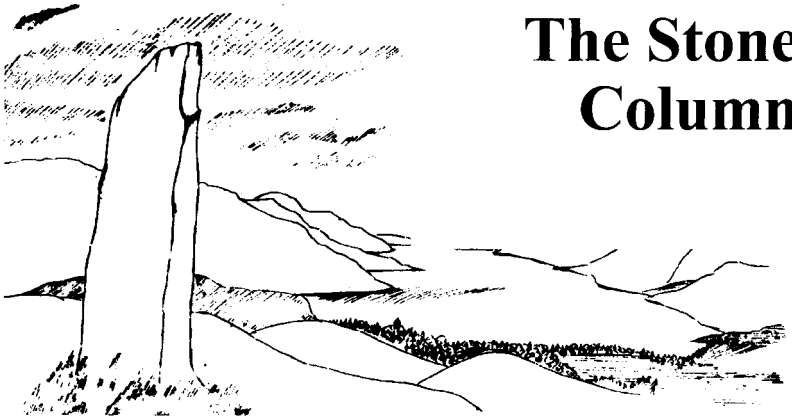
photos: Polly Stone

Fig. 45 *Campanula scabrella*

Fig. 46 *Collomia debilis* var. *ipomoea* (overleaf)



The Stone Column



A TALE OF TWO SCREES

One of the consequences of growing older is that the roles of parent and child have an increasing tendency to become reversed. Our children keep telling us that we are trying to do too much; but of our triumvirate of enterprises, the garden, nursery, and fieldtrips, none is expendable. All we can do is to hope that we can achieve 'efficiency savings' rather better than most politicians. To this end there lies permanently on my desk a large index card headed succinctly: 'Jobs 2000'. Of the 17 major tasks listed, other than routine maintenance, 12 have been completed so far and crossed off, appropriately in green. In the nursery we are definitely going down the back straight for the last time; I have converted the final old low-level frame into a standard raised double-sided one: no.7. The numbers always confuse Poll; they bear no relation to the geography of the upper frame yard, but follow the order of completion. I have also added a small raised bulb frame, 4 x 1.2 m, filled with scree compost into which we hope to plunge lattice pots of bulbs. The intention is simply to cut down on repotting. Unfortunately one has to make a living, and one of the penalties of involvement in larger scale commercial production is that our personal plant collections are shunted down the priority list. The inevitable consequence is that we must drastically reduce the number of pot-grown specimens, other than propagands.

Over the last few years it must have been obvious to even the most casual observer of our frames that there were quite a number of potted alpinines which were looking decidedly tired. While concentrating on the nursery infrastructure there was always the temptation to leave them alone and rely on liquid feeding for 'just one more season'. It speaks volumes for the tenacity of many alpinines that they have been able to tick over for years while

awaiting liberation. Back in January 1998 we described the construction, during the previous summer, of the bottom terrace of our main scree, 'Mt Sherman' (*The Rock Garden* no. 101, p. 333). Little did we realise then that it would be three years before a second was added. Meantime a large pile of spent scree compost from bulb boxes had been built up at the top of the slope, together with a second mound of 5 mm gravel. Each time we had a delivery of the latter, the spare which wouldn't fit into the compost store bays went up there. Now all I had to do was dig over the second strip, 1.8 m wide by about 14 m long, removing only the largest stones. The terrace wall 0.4 m high was made up of two courses of split boulders from our usual mine, an old ruined dyke. In went the spent compost, already 50% gravel and a roughly equal proportion of the gravel itself. These were then thoroughly mixed into the light stony soil; and the usual row of stepping stones laid along the back. The latter and the front wall reduce the planting width to about 1.2 m, a convenient one for weeding access.

The backbone of the plantings is made up of the bulk of our European primula collection, both species and natural hybrids. The rest is an eclectic mixture; there was no planting plan, I just tried to keep the primulas and gentians separated, and mix up the growth forms. Colour did not come into it; there are no garden designers in the wild. Priority was in fact given to the plants from the last low frame mentioned above, to empty it for rebuilding. When planting I set the plants slightly high to allow for the final top dressing of about 5cm of the 5mm gravel.

Readers will be aware of our interest in American alpines and one popular method of cultivating them 'over there' is the so-called sand bed. Rick Lupp even sent us a sample of his successful bed at Mt Tahoma Nursery, south of Seattle, which has a climate much closer to ours than that of, say, New England. It consisted of particles in the 1-3 mm range, and is nothing like building sand used for mortar. We happened to be running low on grit for compost, so decided to kill two birds with one stone. Capo Quarry near Edzell, Aberdeenshire, has been mentioned more than once in *The Rock Garden*, as a source of horticultural grit. Their gradation analysis indicated that it was somewhat coarser than Rick's material, the largest proportion being 3-5 mm particles. Haulage up to Loch Ness is always expensive so we applied the economy of scale and ordered 20 tonnes. Even then the owner-driver complained that he was 7 tonnes light. His articulated lorry had a tare weight of 13 tonnes and a permitted gross of 40. The huge pile on the drive would as usual be split between the compost store and the garden.

To give the grit bed the maximum possible exposure we sited it in the centre of the upper grass above Mt Sherman. I marked out an island about 10 m long by 5.5 m wide and stripped the turf from one half, stacking it on the other. I added further turfs to the pile by widening the north-east shrub border

to make room for various shrubs which we had accumulated on our travels. These included old favourites like *Philadelphus* 'Belle Etoile', newcomers such as *Physocarpus opulifolius* 'Diablo', and less common ones including *Deutzia calycosa* from Glendoick and *Eleagnus commutata* cuttings from Mt Usher. The loam stack half will be left for a couple of years to rot down and form the basis of another raised bulb bed. 'Chris next door' barrowed a small half of the Capo grit uphill to the cleared site. Converting Chris' pile into a bed was simple; I just built a retaining wall of boulders around it, in the shape of a fat teardrop about 5.5 by 4.5 m and varying from 30 to 50 cm in height as the site slopes slightly. A row of large flat stepping stones two-thirds of the way down the longer axis starting at the blunt end completed the job; no tedious mixing was required.

Planting was equally simple. Choosing species with long root systems, I washed them clean of compost and dug narrow holes about 30 cm deep. The grit does not collapse if it is damp, no worries here at Askival. Spreading the roots downwards, the hole is then back filled without ramming; a copious watering is all that is needed to settle them in. Like most of one's horticultural endeavours the grit bed is an experiment. I hope to have space to report on the progress of our various screes, comparing those with and without winter covers, next time. Meanwhile, I have always felt that cold rain does little harm, so let us hope that the coming winter is not too mild.

STARTING WHERE WE LEFT OFF, GREATER YELLOWSTONE 2000

It must be obvious to anyone even slightly involved in horticulture that the relentless rhythm of the seasons has an all-pervading influence, one cannot help being pulled into phase, and the Stone Column is no exception. Occasionally such synchronisation is distorted by external forces, be they natural, such as a flood, or as artificial as the numbering system of the Gregorian calendar. Over the last few years it has become the norm to write a short account of each summer's fieldtrip the following autumn, for the January edition of *The Rock Garden*. The Millennium book having delayed last year's report until June, I should perhaps apologise for returning 'up the mountain' in two consecutive editions. If it had to happen then this is quite an appropriate occasion, for the serious joint plant-hunting part of our trip commenced in eastern Idaho not far to the north of where we said *au revoir* to Betty and Ned Lowry in 1999.

Poll and I had flown into Denver a week earlier than in 1999 and as usual rented a sports' utility vehicle; in this particular case a Ford 'Explorer' fitted with Firestone tyres, defective examples of which subsequently were said to have caused over a hundred deaths in the USA. This was unknown to all of us at the time. Betty and Ned were actually driving a similar vehicle; and although the tyres were punished quite severely on numerous occasions, none gave any trouble, not even a 'flat'. Our guardian angel was obviously

still on duty. As in the previous year, Poll and I had managed to escape from Askival for the odd day's training back in Scotland; Poll even got to climb Sron A 'Choire Ghairbh after looking at it down the glen for almost 40 years. When I first made the ascent, with some boys from the Abbey School back in the 1960s, one rarely saw other walkers. Now, with the enormous rise in popularity of 'Munro bagging', we encountered three other parties even though it was midweek. In Colorado we first spent a couple of days in Rocky Mountain National Park both for altitude acclimatisation, and to investigate the local population of *Telesonix jamesii* var. *jamesii*.

Within the Park this grows as relatively small plants threading the shady crevices of granite outcrops, and at a much lower altitude than further south in the Front Range, where it forms mats out on open scree slopes. Opinions differ as to whether *Telesonix jamesii* is one species with two varieties, or whether var. *heucheriformis* should be a separate species. Although we have only ever found the latter on limestone, I subscribe to the former view, but of this more later. Next day we found copious correspondence on the subject at the University of Wyoming at Laramie. While there we took the chance to talk to one of their young field botanists, currently working on his doctorate, who has made a number of interesting discoveries in the Wind River Range.

Heading west the first obvious port of call is the Medicine Bow, where we paused only briefly this time, before continuing on across the upper valley of the North Platte to the Sierra Madre, a northerly extension of Colorado's Park Range. Our various fieldtrips out West have fallen into three distinct phases. At the beginning when it was all new we went to traditional spots such as Mt Evans and the Big Horns. Then, as our interest and experience grew, we started to track down the rarities amongst the alpine flora; a process which continues, but is probably past its peak. Now the third, and possibly even more rewarding, phase is increasingly taking over, poking about in the less well known ranges just to see what might be growing there; in the words of Jackson Browne's epic road song 'Running on Empty': "I don't even know what I'm hoping to find". The hike to the highest point of the Sierra Madre provided excellent altitude training and superb views. People were absent; and so, more surprisingly, were quite a number of the standard alpinists. We did see two old friends in fine form: an excellent short-stemmed *Erigeron peregrinus* with large single heads, and a white-flowered population of *Aquilegia caerulea*, which looked particularly striking against the black boulders crowning one subsidiary summit. Every mountain has something. I well remember a long hot hike in Austria to find nothing of note bar the finest stands of *Soldanella pusilla* one could wish to see.

Time had run out on our all too brief acclimatisation, we had to race westwards to our above rendezvous with Betty and Ned in Montpelier, Idaho. Together we went in search of one of Pennell's splits, the one he called *Synthyris paysonii*. This is said to differ from the rest of the *S. pinnatifida* complex in its more attenuate leaf segments, relatively tubby inflorescence,

and larger corolla. As in all this snow-melt group, the differences are more of degree than kind; we were to see two more later. The mountain was open to quad-bikes, they have to be allowed to play somewhere, leading to a confusing complex of tracks with many re-ascents. These were especially tiring on the return; we refer to them as the 'rotten unfair' bits.

If our first full day had its problems, the second was one of those classic hikes which one may not only look back on with fond nostalgia but also relive over and over thanks to the camera. Every fieldtrip leaves its loose ends and our 1998 one was no exception. In our account of that visit (*The Rock Garden* no. 103, p.97) I mentioned that we had only found a few precocious blooms on *Collomia debilis* var. *ipomoea* (fig. 46). As this rich rose-pink flowered variety, endemic to the overthrust ranges of western Wyoming, is undoubtedly one of the West's finest alpines, we just had to do better this time. It was also very high on Betty's priority list; they had found it many years before, and grown it for almost 10 years in their Seattle garden, before eventually it was lost. All the varieties are specialised growers in shifting talus and scree, forming quite large patches in the wild, but tending to be short-lived in cultivation. Seed germination in pots is usually fitful, but they will often self-sow in the scree and bloom the first year. We have found a violet form of *C. debilis* var. *debilis* from the Bitterroots to be the most amenable so far here in Scotland.

After starting as usual in heavy timber, our chosen trail wound its way up the valley through lush meadows, blue with waist-high *Mertensia ciliata*, before switch-backing up to a high col where we paused for a well-earned break. After lunch in the shade of a krummholtz of the last gnarled trees struggling up the mountainside, the real fun began. A faint fisherman's trail continued across a steep south-east-facing slope, which the topographical map had indicated was free of trees, to reach a high corrie lochan. Rounding a pale shallow outcrop, ablaze with royal blue spikes of *Penstemon humilis*, yellow mats of *Eriogonum flavum*, and clumps of *Castilleja sulphurea* in every shade from orange to lemon and lime, it became obvious that the slope ahead was indeed the loose talus I had hoped for. Fingers crossed, we approached and almost immediately spotted the first collomia in full bloom. On went the broad grins and out came the cameras. Ned's equipment included a digital camera; he was able to download into his laptop computer and present us with colour prints that same evening, one of which is pinned up by the desk as I write. Above and below the narrow tread the whole slope was splashed with the bright pink of the collomia interspersed with the lavender-blue of *Penstemon montanus*. Both species varied from scattered tufts amongst the larger and more mobile rocks, to quite large cushions where finer material had accumulated. Some of the more spectacular ones were over 0.5 m across and easily visible 100 metres away. So long was spent scrambling about here that there was insufficient time to fully explore the

area around the lake itself, but most of the usual wet-growers were on display including a fringe of *Pedicularis groenlandica*.

Travelling on north via Teton Pass, we entered the Greater Yellowstone ecosystem proper around Henry's Lake. Hiking along the crest of the Centennials, one of the few ranges to run east–west, the flora suddenly became much more diverse as we moved off igneous rocks and onto limestone. I remember, at an AGS weekend centred around calcicole plants, one speaker stated pedantically that there was no limestone in the Rockies. When I tackled him about this later he said he meant the Colorado Rockies; but even here he is incorrect. Some of that state's rarest alpiners, such as *Braya humilis* and *Erigeron lanatus*, are confined to Palaeozoic calcareous outcrops, of roughly the same age as those of the Yorkshire Dales. The aptly named Fossil Ridge in the east of the Gunnison Basin is also composed of similar ancient limestones. Back up north not only did the plants improve but I suddenly spotted a moose standing by an old snowbank. Now I know how to get Poll up a mountain quickly: put a camera in her hand and tell her to follow that moose. By dodging around the krummholtz, she managed a series of shots from some 20 to 30 m, before the young bull snorted a warning and we backed off. Returning our attention to the plants, *Townsendia montana* was in fine form, with really rich purple rays, while *Linum lewisii*, *Delphinium nuttallianum*, and *Penstemon attenuatus* var. *pseudoprocerus* added various shades of blue. We found one vigorous but short-stemmed plant of the last with large heads of pure Cambridge blue. It has been suggested that this highly variable species is an aggregate of several stabilised hybrid swarms. Normally this penstemon is found at low to subalpine elevations, but here it was right on the summit, together with the best compact *Bupleurum americanum* we can remember, its heads a really bright yellow, and another species well above its usual station: *Erigeron tweedii*, here forming low tufts of broad grey foliage with ample spraying heads of the usual lavender-pink.

Continuing our circuit, we passed through the Red Rock Lake Wildlife Refuge, where the excited staff produced a telescope to show us a Whooping Crane striding about the meadows, a white form towering over its Sandhill cousins. It was an exceedingly rare sight; there are only some 300 individuals all told. Of course, one never achieves all one sets out to do, and our next hike had to be aborted when a prolonged thunderstorm turned the tops of the mountains white with hail. As we sheltered, two cow moose and their calves appeared in the meadow just below. Fortunately they did not see us, such mothers can be very aggressive, and the next peal turned them back into the trees. We had hoped to show the Lowrys the glories of Bluefly Ridge next day, but the same storm had rendered the long approach road too dangerous, its clay surface becoming what the Americans call 'slick'. Lack of space precludes a detailed account of all the score of mountains we visited, so I must skate rapidly over the next two stops on our way north. Neither threw up

anything new, but both had 'best evers'. *Erigeron ursinus* made splendid large mats in the turf on the first, *E. rydbergii* bespangled a high rocky ridge on the second. *E. ursinus* has a slowly spreading fibrous rootstock, and a good form makes an excellent plant for the scree; whereas *E. rydbergii* is a tiny tap-rooted species which we have found difficult. It is perhaps better suited to the alpine house.

When we were in Missoula in 1993 we met the late Klaus Lackschewitz who was an authority on the flora of south-west Montana. Like most plant people he gave freely of his experience, and we were now to reap the benefit by visiting one of his favourite hunting grounds. A notice by the road warned that the track ahead was not maintained, its surface very rough and rocky in places rather like the one shown in the current Jeep advert. One reads the road carefully, and tries to keep at least three wheels on high points. Eventually we pulled off where we could park in the shade, and continued on foot. This is yet another of those non-existent limestone areas, here interspersed with igneous intrusions. Leaving behind the last few weather-beaten conifers, we crossed a wide shoulder where dark mats of *Dryas octopetala* dotted the open areas of calcareous gravel. Associated with the dryas was one of those special plants which can make one's day: *Arnica angustifolia* var. *tomentosa* (fig. 41). This is a variable circumpolar species, thought to be the ancestral arnica, but one which is very rare and local in the 'Lower 48'. It ran gently through the stones throwing up scattered tufts of grey hairy foliage here and there. At about 15 cm this is rather dwarfer than the widespread *A. rydbergii*, the single heads differed most notably in their very woolly involucre. Two varieties of *Eriogonum flavum* grew nearby, *E. f.* var. *piperi* largely on the limestone gravel, whereas the smaller *E. f.* var. *polyphyllum* preferred nearby dykes of volcanic rock. It soon became obvious that Klaus' advice had been sound, this was a very rich area. On a small meadow near the ridge line *Gentiana calycosa* var. *obtusiloba* was just starting into flower; and as we gained height we found a small population of *Erigeron radicans* confined to patches of limestone scree. In effect a white-rayed equivalent of *E. rydbergii* this is yet another rare and local species straying down from the Canadian Rockies. Up on the summit *Douglasia montana* and *Eritrichium nanum* lingered on in late bloom, but we had caught the local endemic *Lesquerella pulchella* at its peak. Only recently described in 1995, this is one of the smallest species. In most lesquerellas the flower stems spray out from the central rosette of grey foliage to 10 or even 15 cm, but our plants were much more compact. Their small rosettes were noticeably silvery from the layers of hairs, technically trichomes, and the 2-3 cm stems carried close-packed clusters of large bright yellow crosses. Although constrained by altitude, they exhibited no preference as to soil pH, occurring both on the pale limestone and the dark rocks of a dyke. This lesquerella is an excellent example of a species which has probably arisen as a result of isolation inhibiting gene-flow to and from related populations

elsewhere. Heading on down, we passed by scattered tufts of *Campanula scabrella* running gently in the steep thin turf, its blue stars looking straight up as if reflecting the sky. We had seen this miniature gem several times before in the Pacific North-West but not previously in Montana. As we approached a ruined mine cabin on the flat below, Poll found a beautiful piece of Montana moss agate; but even this was not yet the end of the day's excitements. As we drove carefully back down, Betty and Ned were 200-300 m ahead when a black bear suddenly appeared beside the track. Perhaps intending to cross behind them, it saw us approaching, reversed into the trees and took its frustration out on a hapless bush. We were so transfixed that we forgot all about the camera.

By way of a contrast our next hike was devoid of relics of past human activities, as it was into a designated wilderness area where all vehicles, permanent buildings, and even airdrops, are prohibited. Skirting a lake, the trail passed across cool north-facing rock slides where alpines such as *Heuchera grossularifolia*, *Polemonium viscosum* and our little *Campanula scabrella* grew at an unusually low altitude. Below a vestigial snow bank *Anemone parviflora* belied its name, the flowers large for such a tiny species. At the col up above, the contrast between the north and south slopes was stark. The former had patches of the delightful little penstemon relative, *Chionophylla tweedii*, together with two phyllodoces: *P. glanduliflora* and *empetriformis* and the hybrid between them *P. x intermedia*. This last is quite frequent wherever the parents meet, we must have seen it in a dozen places, but all the wild plants were pale rose-pink quite unlike the clone 'Fred Stoker' common in cultivation. The south slope was penstemon and eriogonum territory, including the diminutive *E. capistratum* var. *muhlickii* its bright yellow heads from bronzy-red buds almost stemless above tight grey mats. The specific name illustrates that taxonomists can have a sense of humour; it is from the Latin 'capistratus', to be tied up or hitched, and commemorates Dr Leo 'Hitchy' Hitchcock co-author of the standard flora of the Pacific North-West and Betty's late mentor.

As most readers will probably be aware from news bulletins this was an exceptionally hot and dry summer in much of the West; and as our wilderness hike took us onto a broad ridge we found that the warmth had brought the gentians into precocious bloom. The blue-tipped spraying stems of *Gentiana calycosa* decorated the damper spots while the much more numerous clumps of *Gentiana algida* (fig. 42) preferred open thin turf, often patterned by stone polygons. Amongst the American gentians the latter is absolutely unmistakable; no other species forms basal rosettes of narrow leaves nor has cream flowers sometimes slightly tinged with green. The purple markings on the outside of the corollas vary from almost non-existent, just a few obscure dots, to prominent dark lines. The flowers are borne either singly or in small clusters on stems of around 5 cm, a typical plant carrying 3-6 blooms, but one exceptional clump had no less than 42 trumpets! There is a natural tendency

for plant photographers in the wild to seek out the 'best' plant, avoiding those individuals with few flowers, dead sections, damaged foliage or whatever. This can lead those who only know a species from photographs into gaining totally the wrong impression of how the average plant appears in its natural habitat. All too soon it was time for us to tear ourselves away from the realm of gentians and get back to the trail-head.

Our gain on one range was, however, later balanced by loss on another. As we drove north towards our overnight stop an ominous cloud of smoke dominated the horizon ahead. Our original plan for the following day had to be abandoned; the area was out of bounds as a result of a huge fire, which was still burning weeks later. It is perhaps worth adding that the days of 'Smokey Bear' are fading; the US Forest Service now often regards fire as a necessary part of the natural cycle, rejuvenating the woodland. They only attempt control when lives or property are at risk. The disruption to our itinerary was not serious, all we had to do was bring forward the next destination, the range just to the south, as we closed our wide circle around Yellowstone. This is a steep limestone (yes, again) ridge where we renewed our acquaintance with *Arnica angustifolia*. Down below in the corrie grew the related *A. rydbergii* and there was one intermediate plant which was most probably a hybrid between the two. Here were also the most magnificent stands of short-stemmed *Aster foliaceus* var. *apricus*. This is the archetypal aster, its leaf-like involucral bracts quite different from those of an erigeron; and this dwarf variety is the one to choose for the rock garden.

The following day's outing clearly belonged in phase two, as our objective was a particular plant. While we were hiking together back in 1993 Erwin Evert had told us that he had found a yellow form of *Telesonix jamesii* in the Northern Absaroka. Unfortunately the relevant trail-head was at a low altitude, and lay behind a dude ranch. The confusing complex of horse trails for their clients was not shown clearly on the map; I missed the way and we ended up making two false starts. These cost us over an hour, and 120 m of extra ascent to add to an already tough day. My information for the telesonix said that it grew in the crevices of a steep limestone pavement, quite possibly a euphemism for a cliff. Finally, breaking out of the trees into the meadows at the head of the valley, our objective loomed up above and my apprehension grew. Could we actually get to the plant, after such a long hot ascent. Then as we passed a large fallen boulder, Betty suddenly stopped and pointed at its north side, "Mike, is that your telesonix?" Never have packs been dumped so thankfully; we got out our water bottles and toasted Betty's eye for a plant. Pieces detached from the cliffs above, some as large as houses, were scattered all over the steep slope amongst isolated groves of trees. Our telesonix was seeding freely into moist cracks and ledges on the vertical shady faces of most of them, presumably having originally fallen with the rocks as androsaces do in Europe.

The usual form of *Telesonix jamesii* var. *heucheriformis* (fig. 44) has a dark purple calyx, glistening with glandular hairs, and reddish purple petals. Even the upper part of the flower stem is tinged with purple. Here on the boulders the plants had somewhat paler foliage, the stems and buds were green, and as the flowers opened the calyx turned to a clear light yellow. The petals, which only protruded slightly beyond the sepals, were a paler purple-pink. I do feel that this distinctly different population deserves taxonomic recognition at varietal level, and an appropriate name would be *Telesonix jamesii* var. *flavescens* (fig. 43), distinguished as above. How it came to be isolated in the middle of the range of the variety *heucheriformis* I cannot say. While we made our weary way back down the sky became increasingly threatening. That evening we were treated to a magnificent display of fireworks as an intense lightning storm crashed around the peaks. Doubtless our telesonix were, unlike most of the Rockies that summer, receiving a thorough watering.

Thanks to the fires, we still had a day in hand before Betty and Ned were due to depart. All were very tired after the telesonix trek, and so we decided to make use of the mechanical uplift at Big Sky. If they must ruin a hill for skiing then Lone Mountain is as good as any, it's just a giant pit bing. Even the corrie floor was disappointing, thin grass and almost no flowers. The rock slides round about were virtually devoid of vegetation, just here and there deposits of finer material allowed a few specialised plants such as *Hulsea algida* and *Chaenactis alpina* to take root. One of the risks of phase three is that one may draw the occasional blank; it was perhaps a pity that this was our last day out together. Without Betty and Ned's encouragement we should not have achieved anything like so much. A congenial party on the hill is much stronger than the sum of its members.

With the Lowrys en route for home, it remained only for Poll and me to tie up one last loose end from the 1998 trip, a hike into the Wind Rivers, postponed by Poll's accident that year. Heading south, the direct route took us through Yellowstone itself; and on the way we called at Mt Washburn. This is said to have one of the largest ranges of alpine plants within the Park. It also has two dirt roads, tramped by an endless procession of family groups, reminding us of a popular alpine pass on a Sunday, and a fire-tower complete with a nest of microwave dishes and a pay-phone. Whether one considers the wildlife, especially the bison, and the geothermal phenomena adequate compensation for the crowds, poor roads, and traffic jams is a matter of personal taste. It is perhaps unfortunate for the plant hunter that much of Park's back country is out of dayhike range, as indeed is the granite and gneiss core of the Wind River Range. However, some of the limestone mountains around the fringes of the latter are just about within day range, and as luck would have it carry the richest floras. One of these was our destination when, setting off in the cool of early morning, we had first to wade a fast-running river, which came up to the tops of Poll's thighs.

Hanging on to each other and bracing our sticks and legs against the boulders on the riverbed, we edged across moving one of our six points of contact at a time. We were told later that the local outfitters consider this a difficult ford for horses. Once safely over, the trail was an excellent one, well graded and easy underfoot, which wound its way around low cliffs and through patches of woodland to attain a dry sloping meadow overlooking the trail-head, but 600 m higher. From here the trail continued along the flank of the long ridge, slowly gaining another 300 m. As we took a water break at the highest point on the trail, a bighorn sheep appeared briefly on the skyline above. A few minutes later a second animal appeared, about 400 m away and 100 m vertically above us. Out came the binoculars again for this was obviously no sheep. Standing on top of an outcrop less than twice its height, it regarded us for a while before wandering around the rocks and away. When we ourselves attained the ridge line later this vantage point was higher than my shoulder. Clearly far too large for a coyote, this must have been a wolf. To see it out in the open calmly observing our presence was indeed a rare privilege.

Limestone mountains by their permeable nature are susceptible to drought, and the dry season had certainly taken its toll. Most of the alpinus up on top were just into seed, including the tiny hairy *Townsendia spathulata*; but *Aquilegia jonesii* must have bloomed much earlier for most of its seed had already scattered. These were the largest, but paradoxically the tightest, plants of this calcicole columbine that we have ever seen. Many of the scree areas looked as if someone had gone around scattering small blue-grey rugs everywhere. There still were flowers of course, most notably our first sight of *Saussurea weberi* (fig. 40) a regional endemic with a very disjunct distribution, and one which normally blooms in mid-August. Although rayless, this woolly composite really is quite attractive; the heads, borne on 10 cm stems, appearing like balls of white fluff impaled with dense clusters of dark violet-purple pins. This is clearly an area well worth visiting again in a more favourable year.

With the season so far advanced, the remainder of the trip was dominated by the Gentianaceae. Further south in the Wind River Range, *Swertia perennis* bloomed in willow turf, over an acid substrate, alongside *Gentiana algida* and the tiny bright blue annual *G. prostrata*. The last two were again in evidence on our last half day out in the Colorado Rockies, before packing for the flight home the following day. Two annual gentianellas, one purple, the other white were also present, as was the royal blue perennial *Gentiana parryi*. Distinguished by the cauline leaves increasing in size towards the top of the stems, this last is a good garden plant bridging the gap between spring and autumn gentians, and one which we have grown for 25 years ever since we inherited a plant from the collection of the late General Murray-Lyon. Thus a first sight of it in bloom in the wild made an entirely fitting culmination to our tenth fieldtrip out in the American West.

Book Reviews



Creating and Planting Garden Troughs

by Joyce Fingerut and Rex Murfitt

Published by B. B. Mackey Books,

P.O. Box 475, Wayne, PA 19087, USA

1999, 164pp 22 colour and numerous black-and-white illustrations.

\$21.00 ISBN 1-89344300-0

THE USE OF TROUGHS in rock gardening has grown enormously in popularity in recent years partly at least because of the decreasing size of new gardens. The supply of old troughs is hopelessly restricted and newly-constructed troughs of whatever material are all that many growers can aspire to. The first half of this book concentrates on trough design and construction.

Joyce Fingerut and Rex Murfitt score over other authors on trough gardening in a number of ways. They are very upfront about the methodology of constructing hypertufa troughs and no detail is outside their scheme of reference. Discussion of different constituent materials carries right through to the different types of synthetic reinforcing fibres, and it was satisfying to note that my question about what would happen to the sticking-out ends, was answered by the use of the hand-held propane torch which had puzzled me when it appeared on the "Hypertufa Shopping Checklist". The comment on the volume of liquid acrylic bonding agent gives a flavour of the style: "And no real harm can come of using either too much, or too little, of the acrylic in a trough. Let's keep things in perspective - we're not constructing the World Trade Center here!". The discussion of methods and materials is never less than informative, never patronising, and full of valuable asides which we too often find are left to one side, such as the idea of incorporating a screw-eye bolt in the hypertufa "for security from high winds in unsheltered positions (or fleet fingers in public places)". Materials, design, and method all figure largely in the first third of the book with the numerous black-and-white photographs being helpful. An example of their use is that showing exactly how hypertufa should look when it is ready to be used - the truism about pictures and thousands of words comes to mind. There is mention of polystyrene troughs but the lessons of the Ian Young fish-box approach have not taken hold here which is one of the few areas of criticism which I would want to level. Before moving on to plants the authors turn to rocks, soil and the like, grits, ecology, timing of planting, protection from the elements and so on. Again never less than interesting.

The second half of the book is headed “Plant Talk” and it feels just like that. Very often the lists of plants at the back of books such as this seem either obvious and bland or bizarrely esoteric. I found the section on plants in this volume interesting and informative. One of the chapters deals with groups of plants: Cushion Plants; Other Favourite Alpine Plants; Sedums and Succulents; Bulbous Plants for Troughs and Woody Plants. What saves this from the usual fate of such lists is the unfailing sense that this is informed by the authors own experiences and there is an open-mindedness about what can be included which appeals, although I have to admit that the comment on reactions to *Equisetum* as a possible trough plant applied to me, “This suggestion may send shudders through anyone who has grown or dealt with it in the garden. But, contained to an escape proof pot, it adds a linear, reedy quality to a waterside planting.” This is from the final chapter which discusses the various ways in which a trough might be used; the groups of plants which might be brought together; and planting plans for a variety of situations - sun, shade, dryland plants, moisture lovers, classic alpinists.

Too often books like this may be informative but dull - this is a pleasure. As it says at the beginning of the last chapter. “Above all, enjoy.”
Malcolm McGregor.

Lewisia

by B LeRoy Davidson

Published by Timber Press, 2000, 236pp 100 colour plates

£27.50 ISBN 0-88192-447-4

THIS IS NOT so much a reference book as one to be read straight through in order to assimilate the accumulated wisdom from a man who has a lifetime’s experience of lewisias. Indeed it is often not easy to find specific information on details about particular species without having to read a whole section.

The colour plates are excellent but are not numbered so they can not be referred to in the index although they tend to be located within the relevant portion of text.

The identification keys are, as the author says, best used for identification in the wild rather than in the garden Even so it is difficult to use and really of little use to gardeners.

The information on cultivation is based on American experience and is not always accurate for the UK. He summarises this aspect as drainage, no fertiliser, no midday sun, no drips and remove dead leaves. But he then goes on to say — “Skilled growers manage to maintain lewisias outdoors in New England, Norway and even in Iceland. Attention to these cultural requirements should make them accessible to most careful growers wherever

they live.” Somewhat conflicting views there. The author also mentions the new ‘Carousel’ hybrids from Ashwood Nurseries but omits to say that one of their great merits is that they can grow on the flat in much wetter conditions than most *cotyledon* cultivars. Indeed there is really no mention in the book about growing lewisias on their sides. Is it or not a good idea?

The requirements of individual species conflict somewhat with our own experiences. For example, *L. tweedyi* is regarded as a species which can not be grown outside and which does not set seed. Many UK growers can grow it successfully outside provided it receives good drainage and slight overhead protection. We can readily get seed if we pollinate and can achieve flowering the year following spring sowing, something not always possible with *L. cotyledon*.

In spite of these reservations, this is an excellent book which the author sums up as one which presents a holistic picture of the genus and which is a field guide, horticultural guide and a memoir including history and art. A book to be read and savoured, it sums up beautifully the lifetime’s expertise of a dedicated plantsman. It is presented in a most delightful style.
AlastairMcKelvie.

NOTE

In the "Review of 1999" published in place of the January 2000 issue of *The Rock Garden* there was a short review of Forbes W. Robertson's *Early Scottish Gardeners and their Plants, 1650-1750*. Unfortunately publication of this was delayed until the late summer. It is now available. Published by Tuckwell Press, hardback £25.00, pp.292, illustrated in colour, ISBN 1 86232 085 3.



Show Reports

Joan Beeston, Stella & David Rankin,
Cathy Caudwell, Anne Chambers,
Heather Salzen, John Richards

Morecambe Show - 18th March 2000

THOSE remembering the early years of this show may recall the incidence of much colder winters and, perhaps, the occasion when early morning snowfall delayed erection of a marquee designated for the trade stalls by nearly two hours. In marked contrast this day was mild and sunny and a total of 90 exhibitors brought along some 632 plants to create a splendid and colourful show.

Eight plants were in competition for the Farrer Medal and a superb pan of *Hepatica nobilis* shown by John Saxton was a worthy winner. Geoff Rollinson, as usual, brought along an excellent collection of well grown plants which won the Hollett Trophy for the most first prize points in the Open Section.

The Michael Roberts Memorial Trophy for the most first prize points in Section B, and the SRGC Bronze Medal for the most points in Section II, went to Mr R Hall of Walsingham and the Reginald Kaye Trophy for most first prize points in Section C was awarded to Mark Childerhouse of Brigg.

Owing to the early season, Narcissus were few in number, but

N. watieri exhibited by Mrs K Rimmer of Eccleston was a worthy winner of the Narcissus Salver. The Kirby Cup for the best foliage plant went to George Young of Stocksfield for *Celmisia insignis*. Once again Mr S Cumbus gave an extra dimension to the show with another of his interesting photographic exhibits. This time it was the 'Spring Flora of South Africa', winning a Silver Award.

At this show we have come to expect a profusion of magnificent domes of *Dionysias* and *Primula allionii* and we were not disappointed. Two *Dionysias* were worthy winners of a Certificate of Merit, namely *D. bryoides* exhibited by Derek Pickard of Stockton-on-Tees, and *D.* 'Eric Watson' exhibited by Ian Kidman of Ebchester. Fred Hunt for *Fritillaria aurea*, and Jim Almond for *Iris graeberiana*, were also given Certificates of Merit.

The presence of the late and much-loved Duncan Lowe was greatly missed this year but the new Duncan Lowe Award, for the best exhibit in a 19 cm pan, will

happily link him to this show in perpetuity. The winner this year

was a fine pan of *Fritillaria crassifolia*, shown by Alan Furness of Hexham. JB.

Edinburgh Show - 25th March 2000

IF YOU had climbed up at one end of the show hall to get an overview, what would have been your impression? Rising from the tables immediately in front of you, the rather unpleasant smell from the array of wonderfully patterned fritillaries would assail you. To the left, a host of dancing daffodils (all miniature) would be prominent; to the right, a mass of multi-coloured corydalis, beyond them throngs of primulas. While viewing all this you would have been standing on the Gold medal display of bulbs and primulas from the Royal Botanic Garden Edinburgh. Above all, you would have seen crowds of people happily peering at the plants - many more than usual - and relishing the happy atmosphere that was such a feature of the day.

Although there were a lot of fritillaries, corydalis and primula, there was an enormous variety of other plants as well. The Forrest Medal was won by Ian Kidman of Ebchester for his *Dionysia* 'Eric Watson', a perfectly circular shallow dome, nearly 25cm across, with many hundreds of mauve flowers, each with a white centre and yellow eye - an amazing plant. Ian brought other *dionysias*, rarely seen in

abundance at this show, and won the 6-pan class with a display of fine plants. Competition for the Forrest Medal must have been provided by Cyril Lafong's two enormous pans of *Androsace muscoidea*, both awarded Certificates of Merit. 'Millenium Dome' and "ex CR188" were shallow domes covered in white flowers with yellow centres fading to pink. These contributed to Cyril's award of the Reid Rose Bowl for most points in Section 1.

The Henry Tod Carnethy Quaich for the best bulb, corm or tuber was awarded to a rhizome - *Trillium chloropetalum rubrum* - which your reporters heave out of the ground for at least one show each season, stuffing it into a larger pot each year. And, though we say it ourselves, it is rather good - with long maroon petals and striking mottled foliage.

Although this was the earliest competitive show in Scotland, the warm spring meant that many primulas were already over. The most popular varieties were 'Aire Mist', 'Clarence Elliott' and 'Wharfedale Village', but the trophies for best European and Asiatic Primulas went to Carole and Ian Bainbridge for a remarkable *Primula hirsuta* with great drumstick

heads of flowers, and Bob Meaden for *P. x kewensis*.

The range of *Fritillaria* species was remarkable. The 15 pans in the three-pan class were all different. There were 13 different kinds shown in the two-pan class, and in all about 30 different frits were on display, demonstrating the value of shows to educate and stimulate. Our favourite was *Fritillaria hermonis-amana* 'Sunglow' with large, flared, yellow bells.

There were relatively few species of *Corydalis* present, but the many varieties of *C. solida* covered a wide spectrum of colour: white, purplish-pink 'Prasil Strain', darker purple 'Jaroslavna', pale pink 'Jean Machin', and upright, purplish-blue 'Blue Giant'. *Corydalis* can tend to straggle, and it was not surprising that three compact, well-balanced ones, exhibited by Cyril Lafong, won first prize. There were also several specimens of each of two clones purporting to be *Corydalis solida* 'George Baker' or 'G.P.Baker'. The one that circulates as the FCC clone is distinctly inferior, and was probably the least

attractive *Corydalis* on display on the day. This raises the question of the usefulness of such a certificate, awarded a long time ago, and indeed about the whole long-term worthiness of such a system of classification. Perhaps the certificates should be biodegradable. Four new Awards of Merit were made by the Joint Rock Garden Plant Committee but they are reported elsewhere.

So what else struck us? Ron McBeath's *Arisaema griffithii*, a Hogwartian monster in great contrast to the delicate *Paeonia cambessedesii*, beautifully presented in a shapely pot by Alan Thompson; the wonderfully smooth *Raoulia eximia*, one of the "vegetable sheep", but with its many protuberances more like a vegetable warthog; Joanna Leven's amazing punk daffodil, *Narcissus* 'Double Campernelli'; the absence of a first prize for either of the colourful rock gardens; the vast consumption of tea and buns; the huge number of plants sold by both trade and club stalls; and the public asking the plantstalls, "Do you have any of them *Dionysias*" S&DS

Perth Show - 22nd April 2000

THE George Forrest Medal was awarded to Ian and Margaret Young for a magnificent specimen of *Tropaeolum azureum*. It had been cultivated around a piece of wood and was sporting literally hundreds of flowers (too many to

count!). It is a dark, violet-coloured form, even darker when still in bud; the tuber is about the size of a potato. It exhibits curious behaviour in that it doesn't come up every year, and is particularly huffy if it gets dry. Ian and Maggie also

won the Dundas Quaich, their 3-pan was made up of the *Tropaeolum azureum*, *Narcissus cazorbianus* and *Clematis* 'Craigton Comet' - a selection from seedlings of *C. marmoraria* crossed with *C. x cartmannii* 'Joe'.

Class 3, for "New, Rare and Difficult" plants, was well-subscribed and won by Cyril Lafong with *Iris babadogica* from the Eastern Caucasus. It is a rare species of Section Pogon. A Certificate of Merit was awarded to Cyril Lafong for *Argyroxiphium macrocephalum* ssp *sandwichense*. This Silversword was 50 cm across with silver woolly leaves. The plant was originally raised from seed by Ian and Margaret Young, and is now four years old having spent two years with the Youngs and two with Cyril who says that this plant doesn't need much feeding, it gets a feed twice a year on NPK 1:1:1 and

is potted on regularly. Cyril got another Certificate of Merit for *Iris bucharica*, a well-grown, compact, plant bearing 40 flowers.

Fred Hunt got a Certificate of Merit, and the Major-General Murray-Lyon Trophy, for a *Pleione* 'Shantung', an excellent pot with over 30 flower heads. Fred also won Class A and brought along an exhibition of *Fritillaria* specimens from his own collection. Other trophies were awarded to Nick Boss (the Perth Trophy) and the E H M Cox Trophy was awarded to James White for *Rhododendron* 'Ginny Gee'.

It was good that Section II was well-represented. The Perth Salver went to A & B Wilson. Their 6-pan entry consisted of *Zaluzianskya ovata*, *Anemonella thalictroides* 'Amelia', *Erysimum pulchella*, *Androsace vandellii*, *Lewisia brachycalyx* and *Cyclamen pseudibericum*. CC.

Glasgow Show - 6th May 2000

AFTER a couple of weeks of warm sunshine, many West Coast exhibitors wondered if any of their plants would be fit to show at Glasgow, but fortunately cooler conditions had prevailed elsewhere and the benches were as well-filled as ever.

For the second year in succession, Fred Hunt's growing and presentational skills gained him the Crawford Silver Challenge Cup as

the overall winner in Section I. His entries in the two 6-pan classes included fine displays of *Fritillaria liliacea* and *Fritillaria guicciardii*, and *Daphne petraea* and its forms 'Bramdean' and 'Cheriton'. He also won the trophy for the best plant in Orchidaceae with a pan of *Pleione chunii*. This lovely little Chinese species was given the name *aurita* before it was realised that it corresponded to the earlier

introduction *chunii*. Carol & Ian Bainbridge won Class 2 and, of their three entries, two were awarded Certificates of Merit; one, a large mat of *Calceolaria uniflora* was studded with flowers, and the second, a pan of *Arisaema sikokianum* with variegated leaves, bore five flowering stems. More and more species of *Arisaema* are appearing on the benches and another very attractive one, *Arisaema auriculatum*, was shown by Stella & David Rankin in Class 5 for new, rare or difficult rock plants. They also gained the Don Stead Prize for most points in the bulb classes. In the 3-pan class for new, rare or difficult rock plants, Maureen & Brian Wilson showed gesneriads, including the delectable *Jankaia heldreichii*.

Alison Ward's attractive, dark form of *Orchis mascula* was judged to be the best plant native to Scotland, and the Joan Stead Prize for the best *Primula* in the show was awarded to the Bainbridge's American *Primula ellisiae*.

Two more Certificates of Merit were awarded, one to a well-flowered *Lewisia cotyledon* 'Pink Selection' shown by the Taylors and the other to Steven McFarlane's large pan of dark red *Trillium sulcatum*. The top award, the Forrest Medal, went this year to a pan of bulbs, Cyril Lafong's magnificent display of *Fritillaria pyrenaica* 'Lutea'.

The Edward Darling Memorial Trophy for three pans of Rhododendron was won by J and S Whyte with the hybrids 'Carmen', 'Wee Bee' and 'Wren'. There were few damaging frosts in the weeks prior to the show which was evident in Section VI for cut exhibits of Rhododendron. Four exhibitors filled the bench with a quality selection of interesting species and hybrids. Both trophies were awarded to Sue & Mike Thornley of Glenam. Although Section II was less well filled than in previous years, Ian Frier was worthy winner of the James A. Maxwell Trophy for most points in the section and a Bronze Medal. AC.

Aberdeen Show - 20th May 2000

THE show was well-attended, though never overcrowded, and attracted an increased number of paying visitors, which, with profits from plant sales and teas, ensured that costs were covered.

The benches were filled by many beautiful and some unusual plants. *Lewisia* species provided brilliant

colour from white to pink, lilac, and deep cerise, and 'George Henley' gained a Certificate of Merit for Fred Hunt. Another eye-catching plant was a cultivar of *Primula sieboldii* with frilled lilac-pink petals which won the Criag Cup for June Machin. The high standard of entries in the 6- and 3- pan, and "new, rare

or difficult" classes must have caused problems for the judges. The Diamond Jubilee award for 6 smaller pans went to Fred Hunt, who also came first in Class I over superb entries by Jean Whyllie and Bob Maxwell, who showed *Glaucidium palmatum* in both lilac and white-flowered forms, and took the Walker of Portlethen trophy for most points in Section I. The Forrest Medal was awarded to Bill & June Mackie for a fine pan of white *Phlox nivalis*. In the classes for "new, rare or difficult" and "from seed" the Esslemont Quaich went to Cyril Lafong for *Cypripedium parviflorum* var *pubescens*, while Brian & Maureen Wilson's expertise in growing Gesneriaceae was demonstrated by, among others, *Briggsia aurantiaca* and *Ramonda myconi*, a perfect plant of soft lilac flowers surrounded by velvety leaves.

Though the area had experienced a week of sunshine prior to the show, the low air temperature and plentiful rainfall were, perhaps, factors which enabled several fine pots of Trilliums to be staged in perfect condition. A Certificate of Merit was awarded to *Trillium grandiflorum flore pleno* shown by Bob Maxwell.

A magnificent plant of *Rhododendron* 'Scarled' won the Simpson Salver for Anne & Viv Chambers, while *R. campylogynum* shown by June Machin, had flowers unusually coloured orange inside and purple-bloomed outside.

Other plants which caught this reporter's attention were *Phyteuma*

nigrum in Campanulaceae, with heads of almost black flowers, shown by Chris Greenwell; *Penstemon couleri alba* in Scrophulariaceae, with white long-tubed flowers, shown by Sandy Leven; a neat pan of *Calceolaria uniflora* which took First in the same class for C Lafong; a superb pan of *Pinguicula alpina* shown by B & M Wilson; and a large *Celmisia argentea* shown in a very large pot by Ian Brooker.

The increasing popularity and expertise in growing aroids, was illustrated by the number of splendid plants of *Arisaema* species, a rare *Pinellia kernata* shown by S Leven, and *Arisarum proboscoideum* (which perhaps should be shown with a warning "invasive, can never be removed once introduced!"). A superb plant of *Arisaema sikokianum* raised from seed by Carol & Ian Bainbridge was unplaced against the competition of Himalayan species raised from their own seed by Anne & Viv Chambers. The giant of the show was a 1.3m *A. tortuosum* carried in (with some difficulty) by Helen & Jo Greenwood.

Among the most difficult plants to grow well enough to enter a show, are Scotland's native alpinines. It was good to see a few of these, especially when presented in a "natural" setting of mossy stones as done by Nick Boss with *Saxifraga nivalis* grown from seed. For most visitors a Rock Garden Show provides their only glimpse of some of Scotland's increasingly rare native alpinines.

Section II entries were

comparatively few, no doubt a consequence of expert new exhibitors being rapidly upgraded to Section I. Such a one is Bob Mackie who took the Bronze Medal for most points in Section II and the Diamond Jubilee award for the 6-pan class. Other notable entrants were Edward Stephen (Aberdeen Quaich for best plant) and Chris Greenwell (special prize for best plant by first-time exhibitor). The upgrading rule certainly increases competition in the open Section I, but is tending to make this show rather uneven, due to the small numbers of new exhibitors who enter Section II each year.

“How to transform a polystyrene fishbox into a stone trough”, a practical exhibit by Ian Young, clearly demonstrated the simple, inexpensive steps involved in this transformation. There were samples of each stage from white fishbox, to the finished product, a trough with the appearance of natural stone and the advantages of extreme lightness and, given careful handling, long use. The entrance was decorated by a display of paintings by Heather Salzen (whose illustrations of *Roscoea* accompanied her article in the last issue of *The Rock Garden*) which was awarded a Silver Medal.
H.S.

Newcastle Show - 30th September 2000

AUTUMN shows depend for their major impact on very few genera; effectively only five. Within each, different species have their season, and the season itself varies so much more than in spring. Shortening day-length and falling temperature combine to trigger flowering. Whereas the former does not vary between years, the weeks of muggy nights which preceded the Millenium Show had resulted in a very late, autumn flowering season. Many exhibitors would like to see the third Newcastle Autumn Show (2001) move back to early October when far more *Crocus* and *Sternbergia* species would be available for exhibition. Newcastle is already at the dog-end of the *Colchicum* season, but to judge from

the magnificent gentians and cyclamens on display, another week or two would only improve their condition.

Dr & Mrs M P Brown must enjoy their visits to Ponteland. They maintain a 100% record for the premier award (a Farrer Medal this year). Any of their three magnificent plants in class 1 could have received this accolade, including last year's recipient. Judges are a fickle, inconstant crew and this year they chose possibly the weakest of the three, *Campanula cashmiriana*. Notwith-standing, the Browns also won the AGS medal for six small pans, but despite all these accumulated points were still submerged by a flood of unusual bulbs benched by Dr & Mrs R B

Wallis who achieved the greatest number of points in the Open Section. Amongst these your reporter noted the multi-flowered *Colchicum troodii* from Cyprus; *C. boisseri* from near Meteora in northern Greece (this elegant small species is better known from the southern Peloponnesos and also occurs in Turkey); *C. lingulatum* in a small broad-petalled form which fell within the scope of very variable populations of the Mani peninsula; and the newly-described *C. sanguiniale* from south-west Turkey, the smallish purple flowers of which are shown off to best effect by a stunning red bract.

As usual, gentians were dominated by Aberconwy selections. This year 'Blue Silk' proved its undoubted worth as a show plant, winning a professional Farrer Medal for Ian Christie, and the L G Browne Trophy for Ian Leslie. Aberconwy staged its traditional autumn display to which *Primula boothii* ssp. *autumnalis* added an unusual touch, but quite as much interest was generated by a display by Jan MacNaughton's "Macplants" of Berrybank nursery, Haddington. Their gentian 'top crosses' have not yet been named, but a tendency for some to produce strikingly white-striped exteriors, and others very large, uniformly deep violet, funnels will ensure huge popularity when they are released onto the market.

The Dionysia has become one of the staple genera of the spring shows. This is remarkable testament to the expertise and dedication of a

small band of enthusiasts, for most introductions were made during a very short 'window' in the late 1960s and early 1970s. Afghanistan is still closed to foreign travel, but recently it has become encouragingly easy to travel in Iran. Perhaps the most significant incursion so far was made by the Swedish and Latvian Iranian Zagros Expedition, which has reintroduced tricky species such as *D. diapensifolia* (SLIZE 253) which has now been persuaded to set seed. The doyen of the Dionysia brigade, Eric Watson was at the show, demonstrating that he remained ahead of the game with the newly introduced *D. esfandiari* (SLIZE 259) for which he received a Certificate of Merit.

Incongruously, the foliage award (temporarily named the 'Christie Stone' after its donor) was awarded to a *Cyclamen graecum* in full flower although with very lovely leaves (Sandy Leven). Ray Johnston's *Nardophyllum bryoides* should have competed strongly for that award, but astonishingly had been overlooked by the relevant set of judges. The latter received metaphorical slapped wrists when it was awarded a Certificate of Merit. Quieter foliage pleasure came from the recent collections of Kiwi Steve Newall. *Celmisia macmahonii hadfieldii*, with sliver spiky rosettes; *Chionohebe thompsonii* and the very rare *C. myosotoides* from the stable of the local horse doctor George Young all promised well. JR



RHS Joint Rock Garden Plant Committee

Recommendations made at SRGC Shows in 2000

Dunblane - 19th February

Awards to Plants

Certificate of Preliminary Commendation to

Crocus tommasinianus 'Eric Smith' exhibited by C Jones, Inverurie

Corydalis haussknechtii exhibited by A Leven, Dunblane

Awards to Exhibitors

Certificate of Cultural Commendation to

I & M Young, Aberdeen, for a pan of *Primula nana*

C Jones, Inverurie, for a pan of *Crocus dalmaticus*

Edinburgh - 25th March

Awards to Plants

Award of Merit to

Erythronium citrinum exhibited by C & I Bainbridge, Easter
Howgate

x *Kalmiothamnus* 'Haytor' exhibited by C Lafong, Glenrothes

Androsace muscoidea (derived from CR188) exhibited by C Lafong,
Glenrothes

Certificate of Preliminary Commendation to

Narcissus jonquilla var. *henriquesii* exhibited by I & M Young,
Aberdeen

Awards to Exhibitors

Certificate of Cultural Commendation to

I & M Young, Aberdeen, for a pan of *Narcissus willkommii*

C Lafong, Glenrothes, for a pan of *Tulipa humilis* var. *pulchella*

C Lafong, Glenrothes, for a pan of *Androsace muscoidea* derived
from CR188

C Lafong, Glenrothes, for a pan of *Oxytropis multiceps*

Perth - 22nd April

Awards to Plants

First Class Certificate to

Tropaeolum azureum exhibited by I & M Young, Aberdeen

Award of Merit to

Alkanna sieheana 'Royal Blue' exhibited by C Lafong, Glenrothes

Daphne x hendersonii 'Rosebud' exhibited by C Lafong, Glenrothes

Lamium microphyllum exhibited by C Lafong, Glenrothes

Certificate of Preliminary Commendation to

Erythronium multiscapoideum exhibited by D & S Rankin,
Lasswade

Awards to Exhibitors

Certificate of Cultural Commendation to

I & M Young, Aberdeen, for a pan of *Tropaeolum azureum*

C Lafong, Glenrothes, for a pan of *Lamium microphyllum*

Glasgow - 6th May

Awards to Plants

First Class Certificate to

Fritillaria pyrenaica lutea exhibited by C Lafong, Glenrothes

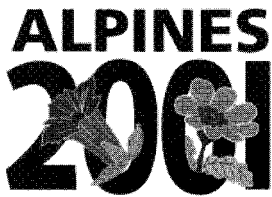
Award of Merit to

Erigeron 'Goat Rocks' exhibited by C Lafong, Glenrothes

Certificate of Preliminary Commendation to

Lewisia 'Ashwood Ruby' exhibited by F Hunt, Invergowrie

Note: all awards to plants; First Class Certificate, Award of Merit, Certificate of Preliminary Commendation are to a plant "as a hardy flowering plant for exhibition".



The 7th International Rock Garden Plant Conference

28th June to 2nd July 2001
Heriot-Watt University, Edinburgh

This is only the second time this prestigious, major international ten-yearly Conference has been to Scotland, and you are assured of a warm welcome. The Conference is being organised jointly and hosted by The Scottish Rock Garden Club and The Alpine Garden Society. The venue and the timing of the Conference will give delegates the opportunity to see the attractions of Edinburgh in the early summer, the Royal Botanic Garden and gardens further afield, as well as the chance to go on alpine plant tours to Scottish gardens or the European mountains before or after the Conference, when they are at their best.

The price of the full conference is only £390, if booked by 30th April, 2001, including single en suite accommodation, all meals including the conference dinner, the entire conference and the conference report. Day delegates will also be very welcome, at excellent rates.

The Conference's formal programme extends from Thursday evening 28th June to Monday afternoon 2nd July; more than four days of lectures and workshops, with the best speakers from around the world. The main speakers are Ron McBeath on Chinese plants, Baldassare Mineo on Siskiyou Rare Plant Nursery and the American north-west, Verna Pratt on Alaskan alpiners, Peter Erskine on the Southern Andes, Kenneth Cox on rhododendrons and alpiners in Tibet, Finn Haugli on Asian alpiners in north Norway, Harry Jans on innovation in growing alpiners, Robert Rolfe on new introductions, Rannveig Wallis on Mediterranean monocots, Ian Young on bulb growing, Chris Grey-Wilson on Greek and Balkan bulbs, Joe Cartman on growing and Steve Newall on finding New Zealand alpiners, and Panayoti Kelaidis on South African introductions.

There will also be contributions from Graham Nicholls, David Rankin, Jimmy Persson, Dave King, Alan Furness, David Mowle, Sandy Leven, Zdenek Zvolanek and John Richards, either speaking on their special subjects, or presenting one of six workshops on Meconopsis, gesneriads, cushions, troughs, crevice gardens and primulas. There will also be question

times on bulbs and southern hemisphere plants, and time to enjoy the Show, art exhibition, photographic displays, poster presentations, and plant and book sales, or just to have a chat with conference delegates from around the world.

Any alpine conference in Edinburgh would be incomplete without the Royal Botanic Garden, Edinburgh (RBGE). We have arranged a special Friday evening visit and reception at the RBGE, hosted by the Regius Keeper, and including guided tours with the staff to the main areas of interest, including those not generally open to the public.

Conference Proceedings will be published, edited by Chris Brickell and Chris Grey-Wilson, and will be provided free to all full-conference residential delegates.

The venue for the Conference is the James Watt Centre on the Riccarton Campus of Heriot-Watt University, just to the west of Edinburgh, close to the ring road and ten minutes from the airport. The Conference auditorium and exhibition area form a self contained venue, and all accommodation is in en-suite study rooms on the campus itself. Riccarton Campus is set in landscaped grounds developed from gardens dating back to the early nineteenth century, well worth a walk in a spare moment.

Around the time of the Conference there will be special botanical and garden tours, organised on our behalf by AGS Expeditions Ltd. Before the Conference there will be tours around Scotland, and to the Spanish Pyrenees, and after the Conference to the Bernese Oberland in Switzerland and the Dolomite Mountains in Italy. Informal arrangements will also be made for visits to private gardens in central and southern Scotland and northern England, both before and after the Conference.

Full details of the Conference are available now. These contain a conference programme, details of the accommodation available, and outline information for prospective plant exhibitors, artists, photographers, trade stands and those interested in the alpine plant tours.

Please write for details to :

**Mr Peter Bland, Bookings Manager Alpines 2001, Inglewood,
Inglewhite Road, Goosnargh, Preston, England, PR3 2ED.**

or e-mail your name and full postal address to
alpines2001.conference@care4free.net

Information on the Alpines 2001 Conference is also posted on the web pages of the Scottish Rock Garden Club: **<http://www.srgc.org.uk>**

We are looking forward to a superb Conference, and we hope to see you there, so write or e-mail now for the full details.



Quality Garden Tours 2001

Brightwater Holidays is Britain's leading specialist Garden Tour Operator. Our fully inclusive itineraries combine the famous and grand gardens with the small and private - most tours also visit specialist nurseries.

Tours for 2001 include:

Cornwall and the Eden Project

• *Tresco and the Abbey Gardens*

- *Monet's Garden* • **Rome and the Gardens of Ninfa**
- *Andalucia* • **Springtime in Crete** • *Gardens of Australia*
 - *Gardens of Ireland* • **Wild Flowers of the Alps**
 - *Dutch Bulbfields Cruise* • *Gardens of Norfolk*
 - *Flowers of Malta* • **Highland and Island Gardens**
- *Summer Gardens of Holland* **plus many, many more**



To obtain full details of these and other garden tours please telephone for a copy of our 2001 brochure: 01334 657 155

BRIGHTWATER HOLIDAYS, Eden Park House, Cupar, Fife KY15 4HS.

Tel: 01334 657155 Fax: 01334 657144

Email: info@brightwaterholidays.com

Website: www.brightwaterholidays.com

**BRIGHTWATER**
holidays



A fully bonded tour operator

HIMALAYAN SEED COLLECTING EXPEDITION 2001

Chris Chadwell, veteran of fifteen plant hunting expeditions, is now back devoting his full energies to Himalayan plants. His team are returning to the Himalaya this year. Whether a seasoned shareholder or a first-time subscriber, there will be plenty of interest - much of it not available from other sources and of high quality in terms of reliability of identification (i.e. receiving the genuine article) and subsequent rates of germination. The following can be expected to form part of the allocation which will go to shareholders: *Primula*, *Meconopsis*, *Arisaema*, *Geranium*, *Rhododendron*, *Androsace*, *Iris*, *Saxifraga*, *Gentiana*, *Lilium*, *Codonopsis*. Detailed prospectus available by April.

CHADWELL PLANT SEED

A reliable source of unusual alpine, rockery, woodland and perennial seed, especially from the Himalaya (non-expedition), Japan, & N. America. Items suited to both the beginner and connoisseur. This year's catalogue includes: *Primula*, *Meconopsis*, *Aquilegia*, *Adenophora*, *Campanula*, *Gentiana*, *Draba*, *Geranium*, *Iris*, *Viola*.

Seed Catalogue and prospectus (if required) available for either: 3X2nd class stamps or 2 US\$ bills or 2 International Reply Coupons from C.Chadwell (SRGC), 81 Parlant Road, SLOUGH, Berks. SL3 8BE. England.

Pacific Horticulture

The magazine for gardeners everywhere who enjoy reading about plants and gardens. It is colourful, varied, and our readers say, not frequent enough. They also say:

"What a treasure it is."

Ken Gillanders, Tasmania, Australia

"Exceptional ... in content, depth, breadth and intelligence."

Paul Hawken, California, U.S.A.

"One of the finest horticultural magazines in circulation today."

Rosemary Verey,
Gloucestershire, England

"... a very high standard ... the highest in the world."

Graham S. Thomas, Surrey, England

Subscribe now by sending \$25 (in U.S. currency please) for a year of four issues to Pacific Horticulture, P.O. Box 680, Berkeley, CA 94701, U.S.A.

French Pyrenees

Discover
the unique
flora of
the Pyrenees

From our hotel in the spa village of Baresges discover an exceptional flora in magnificent unspoilt mountain scenery - lots of easy walking.

We offer guided walks in the National Park at Gavarnie and outings with National Park botanists. Flights arranged. Fully bonded.



Call for brochure 01963-250117
Borderline Holidays
www.borderlinehols.com
e-mail: sorbiers@sudfr.com

CHRISTIE'S NURSERY - The Alpine Specialists

"Downfield", Main Road, Westmuir, Kirriemuir, Angus DD8 5LP.

Telephone: (01575) 572977

Our range of plants is ideally suited for Rock Gardens, peat and raised beds, screes, troughs, gems for the Alpine House or cold frame and a range of cool house orchids.

Open from 1st March to 31st October 10.00 am to 5.00 pm. Closed Tuesdays and Sundays. Outwith the above dates and times by appointment only.

Plant list available on receipt of two 1st class stamps. All major credit cards accepted.

Email:- Christiealpines@btinternet.com Web site:- <http://www.christies-nursery.co.uk>



The Alpine Garden Society

Join the world's largest alpine garden society and enjoy the benefits:-

- highly acclaimed quarterly bulletin
- opportunity to buy specialist publications
- tours to see alpiners in their natural habitats
- local groups and countrywide national shows
- participate in annual seed distribution (over 6000 entries)

Membership: Home £16.50 Overseas £18.00 Visa, Mastercard or American Express

The Secretary, The Alpine Garden Society, AGS Centre, Avon Bank, Pershore, Worcestershire, WR10 3JP, UK. Email: ags@alpinegardensoc.org Web: www.alpinegardensoc.org

ALPINES and DWARF BULBS

Our fully descriptive mail order catalogues offer 1800 varieties of alpiners & dwarf bulbs. We also offer Seed & Orchids - Pleione, Dactylorhiza and Bletilla.

Nursery open throughout the year, 9am to 4.30pm.

Send 4 first class stamps or 3 International Reply Coupons

Potterton & Martin

Moortown Road, Nettleton, Caistor, Lincolnshire LN7 6HX ENGLAND
Tel 01472 851714 Fax 01472 852580
e-mail pottin01@globalnet.co.uk

TIMPANY NURSERIES

Susan Tindall

Nursery and Garden well worth a visit. Otherwise use our renowned Mail Order service for selections from our extensive list.

Particular Specialities are:

European & Asiatic Primula.
Meconopsis and New Zealand Genera.
Saxifraga, Rhodohypoxis, Androsace, and Cassiope.

For Catalogue send £1.00 to:

Timpany Nurseries,
Magheratimpany Road, Ballynahinch,
Co. Down, Northern Ireland BT24 8PA.
Tel/Fax 00 (44) 028 97 562812
Email: timpany@alpines.freemove.co.uk
Web: <http://www.alpines.freemove.co.uk>

We welcome export to R.O.I.,
GB, Europe and beyond.

Winter Opening: 10 am - 5 pm.
Tues-Sat. (Closed Sunday and Monday)
Except Bank Holidays



NORTH AMERICAN ROCK GARDEN SOCIETY

Join Today! Benefits of Membership Include:

Beautiful, Colorful Quarterly Bulletin; Seed Exchange offering Thousands of Plant Species; Spectacular Annual Meetings

Membership is available to rock garden enthusiasts everywhere. United Kingdom members may pay the annual \$US30 dues by Visa or as £19 sterling cheque.

For further information, please write:

Executive Secretary, PO Box 67, Millwood, NY, 10546, USA

Are you looking for something new, rare or unusual for your troughs, rock, alpine or woodland garden?, look no further, call or visit

Ron McBeath at Lamberton Nursery

No.3 Lamberton, Berwickshire TD15 1XB (01289 308515)

We are close to the A1 between Burnmouth and Berwick upon Tweed.

Open 1st April to 31st October 10am - 5pm Group visits welcome.

Website: www.mcbeath.clara.net E-mail: ron.mcbeath@lineone.net

Mail order catalogue available.

The New Zealand Alpine Garden Society



invites you to join other overseas members enjoying the benefits of our Society. Two informative Bulletins each year and an extensive NZ Native section in our seed list enhance the contact with New Zealand alpine plant lovers. Enquiries to the Secretary, or join now by sending N.Z. \$30 for annual membership, Visa, Mastercard or Bankers Draft, NZ\$.

**The New Zealand Alpine Garden Society,
PO Box 2984, Christchurch, NEW ZEALAND**

GROW SOMETHING NEW FROM SEED!

The Seed Catalogue you won't want to put down!

Now with over 300 pages!

Containing over 4600 items (the largest of its kind anywhere), all described in entertaining - even witty - eminently readable English, it includes hundreds of Hardy Plants to say nothing of a host of Wild Flowers, Trees, Shrubs, Cacti, Annuals, Houseplants, Exotics for your Greenhouse and, of course, Vegetables and Herbs.

There's lots and lots for specialist and non-specialist; beginner and experienced alike.

Send, 'phone, fax or email for your copy now (50p in stamps appreciated) and enjoy a cheerful read, or why not visit our website at www.chilternseeds.co.uk

CHILTERN SEEDS, Dept. SRG, Bortree Stile, Ulverston, Cumbria LA12 7PB.

Tel: 01229 581137 (24hrs). Fax: 01229 584549. e-mail: sg@chilternseeds.co.uk

FIELD HOUSE ALPINES

Doug Lochhead and Val Woolley

Leake Road, Gotham, Nottinghamshire NG11 0JN. U.K.

Tel: 0115-9830-278 Fax: 0115-9831-468

AURICULAS PRIMULA ALPINES

Auriculas, Barnhaven primroses and polyanthus, bog garden primulas and many others. Excellent selection of seed of primula and auricula.

Catalogues 4 x 1st class stamps or 4 x IRC.

Mail order for Auriculas, Primulas and Seed only.

Open every day except Thursday, 9am to 5pm.

Daphnes, Named Rhodohypoxis, Rare Bulbs, Gentians, Pieris, Cassiope,
Dwarf Shrubs, Dwarf Rhododendrons,
Rare and Dwarf Conifers, Primulas particularly Asiatic.
Masses of rare items in small numbers.

Visitors preferred Saturdays and Sundays (weekdays by appointment)
Plantsman's Garden.

List and Supplements available for four 2nd class stamps

S. W. BOND

Thuya Alpine Nursery, Glebelands, SRGC, Hartpur, Gloucester, GL19 3BW. 01452 700548

ARDFEARN NURSERY

Specialists in Alpine and Rare Plants

Tel: 01463
243250

Fax: 01463
711713



Open 7 days a week 9-5.30 throughout the year

With hundreds of top quality alpiners and dwarf shrubs to choose from (many of which are not widely available), a visit to the nursery is a must.

For those unable to make the journey to the nursery a mail-order facility is available from October to March.

Please send 3X2nd class stamps for catalogue.

Special concessions for group orders

**JIM AND ALASDAIR SUTHERLAND
ARDFEARN NURSERY**

Bunchrew, Inverness, Scotland IV3 6RH



MORE NEW FRESH RARE SEEDS

Many not in cultivation.

At last! Hardy Geranium pratense 'Purple-Haze' (purple foliage, 6-24in high, with blue or mauve flowers, bred from Relter seedlings).
Variegated Helleborus 'Pacific Frost', and golden-leaved Helleborus
'Gold Bullion'. Perhaps the world's best selection of aquilegias (including our new
'Sunburst Ruby', red flowers/golden leaves), 40 other geraniums, 6 new diaramas, 10 astroemerias & numerous campanulas, euphorbias, meconopsis & primulas (inc. Jack-In-Green).

We will send you a FREE PACKET of Helleborus 'Pacific Frost' with your first order.

**FOR EXCITING FREE COLOUR CATALOGUE SEND
3X1st CLASS STAMPS OR 3 INTERNATIONAL
COUPONS TO:**

**PLANT WORLD BOTANIC GARDENS (SR)
ST MARYCHURCH ROAD,
NEWTON ABBOT, DEVON TQ12 4SE**



**The Vicarage, Sheffield,
Canterbury, New Zealand.**

Premium New Zealand alpine seeds from the Southern Alps

*Descriptive catalogue
and newsletter £2.00*

Phone: 00643 3183 814

Fax: 00643 3183 813

e-mail: e.paterson@ext.canterbury.ac.nz

DRAKE'S ALPINES

GROWN
IN THE
HIGHLANDS



OPEN EVERY DAY (1st March – 1st November) 10.00 – 16.00
SEED LIST & MAIL ORDER CATALOGUE (descriptive) AVAILABLE
AUTUMN 2000: 2 SELF-CATERING COTTAGES TO LET ON SITE

INSHRIACH NURSERY,
AVIEMORE, INVERNESS-SHIRE,
SCOTLAND PH22 1QS

Tel. 01540 651287
Fax. 01540 651656
E.mail: drakes.alpines@virgin.net

Greentours
NATURAL HISTORY HOLIDAYS

Selected Mountain Holidays

Expert Guides • Small Groups • Relaxed & Friendly

Dolomites, The Tien Shan,
The Altai Mountains, Crete, Pontic Alps,
Turkish Lake District, Iceland,
Maritime Alps, Peloponnese and more.

Call 01298 83563 for our 2001 brochure

Rock Cottage, High Street, Longnor, Buxton, Derbyshire SK17 0PG
Email: enquiries@greentours.co.uk Web: www.greentours.co.uk



Retail Agent for ATOL 2792

MENDLE NURSERY

Holme, Scunthorpe, North Lincolnshire, DN16 3RF. Telephone: 01724 850 864

ALPINES

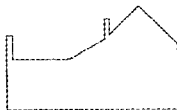
We offer a wide range of alpine plants, bulbs and ericaceous plants, many rare and unusual, for the alpine house, raised beds, scree, trough and tufa.
Open times - Tuesday - Sunday 10am to 5pm.

Mail Order All Year.

Please send 3X2nd stamps for catalogue.

WHITE COTTAGE ALPINES

Specialist grower of alpine and rockery plants



We are an old fashioned sort of nursery. We believe the customer is important. We offer plants that fascinate us as well as honest and informed opinion. Our customers tell us that we offer a good range of unusual plants. We ask you to

judge for yourself by looking at our catalogue. (4x1st class stamps please). Mail order is by 48hr delivery via a carrier, throughout most of the year. credit cards are accepted as well as more conventional methods of payment. **Contact us at White Cottage Alpines Sunnyside Nurseries, Hornsea Rd, Sigglethorpe, E Yorkshire, HU115QL**



SCOTLAND'S GARDENS SCHEME

Our handbook 'GARDENS OF SCOTLAND' is available from mid February in major bookshops at £3.50 or £4.25 by post from the address below. Listing over 350 gardens opening for charity, it has become a must for all garden lovers.

Under SGS you can **OPEN YOUR GARDEN FOR CHARITY** on one day a year, on a regular basis, by appointment, or in a group of gardens. All openings are covered by our Public Liability Insurance policy.

Rock gardens are a major feature in many of our gardens and at our **PLANT SALES** alpines are sold with the expert advice of the garden owner. Sales are held throughout central Scotland in September and October.

FURTHER DETAILS FROM
31 Castle Terrace, Edinburgh EH1 2EL
0131 229 1870

SMALL ADVERTISEMENTS

RARE, wild collected seeds from the Alps, Caucasus, Pamir, Kashmir etc. Send 2 International coupons for new seedlist to:- Mojimir Pavelka, P.O.Box 95, 74101, Novy Jicin, Czech Republic.

WANTED Buy or swap *Orchis morio alba*. Contact: Shirley Pierce on 01530 262250.

PERSONALLY Guided Botanical Tours of Western Cyprus. Available from Feb - May 20001. Write for details to: Struan Harley, Kritou Terra, 8724, Paphos, Cyprus. email: struanharley@yahoo.com

ADVERTISE IN THE ROCK GARDEN - NOW!

Full page £168. Half page £92. Quarter page £52.
Small Adverts 52p per word. All prices include VAT

Orders should include the advertiser's name and address and must be accompanied by the remittance. An order for the same advertisement in consecutive issues - 10% discount. Payment may be made by VISA/MASTERCARD, QUOTING NAME AS ON CARD, CARD NUMBER, EXPIRY DATE and with your signature.

Advertising Manager: Michael J. Reid,
4 Robert Street, Stonehaven, Aberdeenshire AB39 2DN.
Telephone: 01569 763877 email: srgcad@rei.demon.co.uk

*Alpine and Rock Garden Seed from
Rocky Mountains and Around the World*

Send for free catalogue



*Rocky
Mountain
Rare Plants*

1706 Deerpath Road
Franktown, CO 80116-9462
USA
Website: www.rmrp.com

WESTONBIRT PLANTS

Bulbs for Autumn 2001

Including Crocus, Fritillaria, Erythronium, Iris (Juno & PC Hybrids)
and Liliium (seed grown).

Free delivery UK and EU (airmail)

Send 3 2nd class stamps or 2 IRC for list (available Spring 2001) to:

**Westonbirt Plants, 9 Westonbirt Close,
Worcester WR5 3RX, England.**

❁ LINGEN NURSERY AND GARDEN ❁

Lingen, Nr. Bucknell, Shropshire SY7 0DY
Telephone: 01544 267 720

"A Horticultural Haven set in the Magnificent Marches"

Featuring The National collections of Iris sibirica (dispersed collection held by Shropshire
N.C.C.P.G.) and Herbaceous Campanula plus large personal collections of Auriculas,
Primulas and Alpine Penstemons.

Specialist Alpine and Herbaceous Nursery. Tea Room. Access to The Mortimer Trail.
E.T.B. Quality Assured Visitor Attraction.

Nursery open daily from February to October. Tea Room open April to October. 10am-5pm
Free Entrance to nursery, £1.50 entrance to garden.

Back Issues

Please note that I cannot tell you about your NEW JOURNAL or why it has not arrived. If you have a query about this please contact the Editor.

Most back numbers of the Journal are immediately available from stock. The Waiting List for the original Journals 1-8 is closed but reprints of these are available.

Discount Offer

25% discount on orders of 15 Journals and over. There is NO discount on Journals 1-8, nor on reprints 1-8.

CURRENT AVAILABILITY AND PRICES (PER COPY TO MEMBERS)

<i>Journal</i>	Pence	US Dollars
1-8(Waiting List closed)	300	5.10
1-8(Reprint-no discount)	200 (post paid)	3.40
9-66	100	1.70
67-76	150	2.55
77-86	175	2.97
87-93	250	4.25
94-105	350	5.95
Index 1-19	45 (post paid)	0.77
Cumulative Index 20-69	240 (post paid)	4.10
Cumulative Index 70-93	150 (post paid)	2.55
Index and Cumulative Index	265 (post paid)	4.50
Indices 1-93	375 (post paid)	6.40

Postal contribution 40p per Journal up to a maximum of £10 for UK members only. For overseas members the charges are 50p (85c) per Journal to a maximum of £12 (\$20).

PAYMENT

Payment may be made by Sterling or US\$ remittances- Cheques, Money Orders, Bank Drafts etc. made payable to SRGC Publications Account or through Giro No. 10 787 9808. Please note that this Giro Account number is **NOT** for subscriptions.

I will gratefully receive Journals as gifts to the Club or buy them at half the above prices. Postage for either arrangement will be refunded.

BINDERS

Stocks of binders to hold four numbers of the Journal are available at £3.each plus post (home) 45p, (overseas) 60p.

Journals and binders are available from Mr T G Sprunt, 17 Claremont Drive, Bridge of Allan, Stirlingshire FK9 4EE, Scotland, UK. Tel 01786 833607 (evenings only) e-mail:- Glassfordsprunt@cs.com

The Seed & Plant Catalogue

you cannot afford to miss



Helleborus purpureus



Galtonia viridiflora



Cobaea scandens f. alba



Astroemeria psittacina



Lapageria rosea



Salvia patens

Plants of Distinction 

Abacus House, Station Yard, Needham Market, Suffolk, IP6 8AS.

Tel: (01449) 721720 Fax: (01449) 721722

Please send 2x1st class stamps for your personal copy.