

The Journal
OF
The Scottish
Rock Garden Club

Editor—J. L. MOWAT, University Botanic Gardens, St. Andrews



Obtainable from
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Fig. 59—*Syringa palibiniana* (see page 292)

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Editor's Notes

SINCE THE last issue of the *Journal* we all have had ample opportunity to assess the full effects of the long, hard winter and the equally unseasonable spring and summer with their continuing low temperatures and general lack of sunshine on the whole, and an unusually high rainfall. And what queer results they have been ! It is hard to understand why so many plants which we have always regarded as pretty hardy should have suffered so severely, while plants which were regarded as very definitely tender came through all adversities unscathed.

Be that as it may, another round of Club Shows is now past and surely we must admit that they surpassed our earlier expectations. In our last number of the *Journal* we mentioned the postponement of the Show at Penicuik by a fortnight. Whether that postponement was entirely responsible or not, the Show in the event was something of a record and the extraordinarily high standard of a large number of the entries was something to marvel at.

Again at Glasgow, where the R.C.H.S. joined forces with the Club and staged the Rhododendron Show in the adjoining hall, the colourful display of masses of all types of rhododendrons had to be seen to be believed. (It has been very noticeable that many plants—particularly flowering shrubs—which escaped the ill effects of the hard winter have been unusually floriferous this year). At Perth, where there was at one time some talk of possible cancellation due to lack of a Show Secretary and a local committee, the Show ultimately turned out to be one that will surely go down in Club history as a success that was almost an embarrassment to the volunteer officials who were faced with the task of staging all the magnificent entries.

It is most earnestly to be hoped that such a wonderful Show will reawaken a lively interest and activity in Club affairs in an area which was formerly regarded as one of the Club's strongholds. We understand that a local committee has got together to organise a renewal of activities ; we wish them every success possible in their efforts and ask members of neighbouring groups to lend support in any way they can.

We would like to draw the attention of members to the notice *re* Seed Distribution by its manager, Mrs. B. B. Cormack. There is every probability that this year in the long run will prove to be anything but a good seed year, while at the same time many members are almost sure to be on the look-out for seeds with which to replace some of their losses of last winter. It therefore seems in place to ask all members to do what they can—and that little extra—to send what seeds they can spare and are sure are true to name to Mrs. Cormack to be re-distributed to less fortunate fellow-members.

Another item in this issue of the *Journal* to which we would like to refer is that on 'Help for the Novices' by K. S. Hall. This is a subject which has been occupying the minds of many G.C.s and other office-bearers for some considerable time. Various suggestions have

been put forward, and tried out in some areas with a certain degree of success. We feel, however, that in this article the writer has given members something that is thoroughly practical and that could be put into practice wherever even a small group of members are gathered together.

It is probably fairly safe to say that, compared with Mr. Davidian, most of us are comparative novices when it comes to the study of rhododendrons. Mr. Davidian, however, in his comprehensive article on rhododendrons suitable for the rock garden, gives us all something to amplify our possibly scanty knowledge of these extremely fascinating plants. We hope that it will prove an inducement to members who have not so far ventured into this field to do so and find an added interest and satisfaction in their rock-gardening.

Surely all members will be grateful to Mr. D. Livingstone for his promise of a series of contributions on the plants of Mr. W. C. Buchanan's garden in Bearsden. In this garden are many extremely fine and rare plants, collected from all parts of the world, of which not nearly enough has been heard. In fact, one would not be wrong in terming it a garden of national importance, and we feel confident that all will look forward eagerly to forthcoming contributions to the series.

According to reports from our Hon. Treasurer it would seem as if the Club is settling on an even keel again after the troubled waters through which it has recently passed. It is safe to say that everyone connected with the management of the Club regretted the necessity for the increase in subscription rates. But necessity there was in the face of advancing prices all round, not least among which have been the several increases in postal rates in recent years.

Now it seems as if our membership numbers are beginning to climb again, and it would seem a good time to try to inspire a re-awakening of enthusiasm in all the Club's works. It may be that in recent years the Club has begun to suffer from some degree of complacency. Certainly one had reports from many Group Conveners that attendances at meetings were falling off, and from Show Secretaries that competitors at Shows were not in such numbers as before, without much persuasion. For our own part we know that, even though there are always a few new ones coming forward, it is becoming increasingly difficult to get contributors to the *Journal*.

One very useful scheme to help beginners has been mentioned earlier, but it would be a good thing if any member who has a suggestion to make which he or she thinks might benefit any of the Club's activities—meetings, Shows, group organization and the like—would write in and pass their ideas on. It would also be helpful if any new members who would like some particular aspect aired, or, from their own experience, feel that some gaps exist in the Club's activities, would likewise write in and tell us so that an effort can be made to meet so far as possible the wishes of all members and so try to add to the general well-being of the Club.

It is always interesting to meditate—or should it be ‘cogitate’—on fashions in plants. Why do these fashions come and go? Is it that after a run of popularity certain plants are pushed into the background by newcomers which take the stage, or is it just that old favourites by their own run of popularity lose their place in our esteem and begin to pall? Or is it that our likes and dislikes in plants are dictated to us by the nurserymen and professional plantsmen just as ladies’ fashions in hats and clothes are governed to a very large extent by the leading fashion houses? We do not know.

But we have noticed more than once at Club Shows that when an old favourite of earlier days suddenly reappears on the show bench, alone among the present day favourites, it seems to arouse quite an interest—a wave of memory among the older members of us and an enquiring keenness among the younger ones. The unfortunate thing is that so often old favourites are hard to come by. Nurserymen cannot afford to carry in stock plants which have gone out of fashion. So perhaps after all the fault is our own!

We would remind members that there is still one Show to come this year—that at North Berwick on Thursday, 5th September. For those members who have not yet seen this Show we would like to say that it is unique among our Club Shows in providing an opportunity for the display of autumn gentians, cyclamen, and other late season plants which cannot be seen at other Club Shows. One can always be sure of seeing some really superb specimens on show.

St. Andrews, *August 1963.*

Seed Distribution 1963-64

DONATIONS OF SEED (or list of seeds “to follow”) should reach Mrs. B. B. Cormack, 199 St. John’s Road, Corstorphine, Edinburgh 12, **not later than 1st November 1963.**

It is hoped that there will again be generous donations on behalf of the distribution, particularly of uncommon alpiners and dwarf shrubs. Clean seed, clearly named, sent as soon as possible, greatly helps the work of the Seed Distribution Manager. The locality of “wild” collected seed should be given. Seeds or lists arriving late may delay the publication of the Seed List.

Seed Lists will be sent to ALL Overseas Members and to Home Members who donate seed. Other Home Members may obtain a Seed List by sending a stamped (2½d) self-addressed envelope to above address **before 1st December 1963.**

For 2/6 Home Members can obtain 12 packets of seeds. Surely more members should avail themselves of this real bargain! Over 11,000 packets were sent out last season and the Distribution team will be very pleased to send more this year.

Information regarding *Surplus Seed* will be enclosed with the orders.

B. B. CORMACK

Peebles Discussion Week-end

19th and 20th OCTOBER 1963

PEEBLES HYDRO HOTEL

PROGRAMME

Saturday 19th :

- 2.30 p.m. Opening Address
- 2.40 p.m. William C. Buchanan, Esq. : "Plants in my Garden"
- 4.00 p.m. Tea
- 5.00 p.m. Discussion on Ericaceae, opened by a short paper with slides by Miss E. M. H. King
- 7.00 p.m. Dinner
- 8.30 p.m. Members' Slides. Members are asked to bring 6-12 slides and talk about them, with a discussion by members present

Sunday 20th :

- 10.15 a.m. E. B. Anderson, Esq. : "Wild Flowers of California and Nevada"
- 11.30 a.m. Break
- 1.00 p.m. Lunch
- 2.30 p.m. Major-General D. M. Murray-Lyon : "My Garden in Atholl"
- 4.00 p.m. Tea
- 5.00 p.m. Close down

CHARGES

Full Week-end	..	..	..	..	£3	5	0
All meals (except breakfast) and Lectures	..			..	2	5	0
Single Lectures	..	..	..	..	0	3	6

SUNDAY MORNING BREAK

During this time it is hoped to arrange for visits to one or two local gardens.

Reservation Forms may be obtained from Mrs. C. E. Davidson, Linton Muir, West Linton, Peeblesshire, and should be completed and returned to her, with the appropriate remittance, as soon as possible.

Those who wish hotel accommodation either before or after the official week-end should book direct with the hotel management.

HENRY TOD

JAMES DAVIDSON

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AN INDEX for *Journals* 1 to 19 inclusive (price 2/6, post free 3/-) is available to all members who apply with the necessary remittance to the Hon. Editor, J. L. Mowat, University Botanic Gardens, St. Andrews, Scotland.

Change of Address

THE POWERS that be have decided that the Hon. Treasurer's address should be changed and have decreed that it should now read:—

DAVID ELDER, Esq., Jessamine, 37 Kirkhill Road, Penicuik, Midlothian.

Club Christmas Cards

MEMBERS are reminded that Club Christmas Cards are available at 9/6 per dozen, post paid, as described in detail on page 157 of Journal No. 32.

Obituary

The late KENNEDY STEWART

BY THE death of the B.B.C. producer Mr. Kennedy Stewart, which occurred very suddenly, the Club has lost a very good friend. For a number of years various members and friends of the Club had tried to get us "on the air," but with little success. In 1962 Mr. Stewart approached me for a broadcast in "The Scottish Garden" on the subject of the International Conference of which I was the "Convener for Edinburgh." This was to be a joint broadcast by several of the speakers, introduced by myself as Convener—and it went surprisingly well, considering that for most of us it was our first appearance before the "mike." Mr. Stewart took endless pains in rehearsing and helping those who were nervous about the "ordeal," and the direct result of this broadcast was that a number of our Members were invited to speak on Rock Gardening topics in the monthly Magazine Editions of "The Scottish Garden."

We were also given excellent coverage for our Show dates—in fact, one mistake that was made in an announcement led to by far the best and most intensive advertising that any of our Shows ever achieved! Behind all this, directly or indirectly, lay the hand of Kennedy Stewart, generous, kindly, friendly, always cheerful and quite unbelievably helpful. He left behind him a number of uncompleted ideas for broadcasts in our interest and those of us who had to deal with him regret very deeply the untimely death of a very good friend.

H. T.

Plants in Mr. W. C. Buchanan's Garden

By DAVID LIVINGSTONE

WHEN THE Editor approached me with the suggestion that I should write about the treasures in Mr. W. C. Buchanan's garden at Bearsden, a Mecca for rock gardeners from all over the United Kingdom, I liked the idea but doubted my ability to deal with them adequately. Many of the plants he grows and has grown very successfully for over fifty years I have never had ; indeed, some of them have been grown by few other people and none with more conspicuous success than by Mr. Buchanan. However, I have been privileged to visit his garden regularly since I became a near neighbour a few years ago and to hear him talk about his beloved plants. He has promised, too, to fill in the gaps in my knowledge. With this assistance I have humbly undertaken the task set by our Editor and this will be the first of a series of articles for the *Journal*, for justice could not be done in one article. I have elected to begin with campanulas for the simple reason that he had many of this genus in flower or in bud at the time I received the Editor's request. It is not my intention to stick only to rarities but to deal with species and varieties which have taken my fancy. Thus I hope there will be something in these and subsequent notes of interest to the inexperienced and expert alike.

Campanula allionii is a variable species from the Western European Alps which likes a sunny position. Mr. Buchanan has it growing beside a path which is supported on one side by rock work. It has spread by underground runners, popping up here and there beside the path and appearing too in the spaces between the supporting rocks. This plant is in a scree mixture, but my own, which grows on a sloping bank, is in quite ordinary soil and thrives with little attention. One wonders why Farrer found it difficult except in the moraine. Although *C. allionii* spreads as described, it is not an invasive plant, and any pieces which show up beyond the allotted space can be carefully taken up in early summer and grown on to increase one's stock or give away to a friend. The flowers, which are borne on short stems above the leaf rosette in early June, are purple, in some forms purple/blue, and are for all the world like small Canterbury Bells. This is not a difficult plant and may be grown in the rock garden, in troughs or in pots.

Much rarer, indeed a scarce plant, is the very beautiful white form *C. allionii alba* which Mr. Buchanan grows in a ground level scree. It is less robust and requires more moisture at its roots. This it finds in the scree amongst the small stones. It, too, makes a good pot plant, but care should be taken not to over-pot it and, of course, moisture at its roots should be remembered during the growing season.

C. betulaefolia from Asia Minor, where it is found growing in rock crevices, is a most attractive plant, particularly at the pink bud stage. This is a comparatively easy doer but for some reason or another one does not meet it as often as one would expect. It is valuable, too,

in that it flowers in July when flowers in the rock garden are not too plentiful. Mr. Buchanan has it growing in the lower part of a small retaining rock wall. In other words, he has simulated its growing situation in its native habitat. The plant emerges from between the rocks and its roots go back into the soil behind and under the rocks. This position, too, takes account of the fact that the flowers are borne freely on six- to eight-inch stems which are too weak to carry the flowers erect. They therefore tumble gracefully down the front of the rocks. Planted on the flat the stems would collapse on the ground, the flowers become splashed with soil and the effectiveness of this splendid plant reduced. The rather large leaves, not unlike birch leaves, give rise to the specific name, and the flowers, pale pink and very pretty, are large.

Two gems of the genus *C. cenisia* and *C. zoysii* are growing together in a stone quern which stands well above ground level, out of the reach of slugs which are extraordinarily fond of them for dessert, but unfortunately not out of reach of birds which occasionally scrape at the surface, which is covered with stone chips, doing some damage to the plants. The quern is filled with a mixture consisting of 50% tufa chips and 50% John Innes seed compost. A few larger pieces of tufa slightly protrude through the surface. This mixture suits both species admirably, for they are in remarkably good health.

Growing beside them, also in wonderful condition, is *Androsace alpina x obtusifolia*, with almost stemless pinky white flowers very freely produced over a long period. This fine little natural hybrid was collected in the Swiss Alps by one of our own members, Professor Pontecorvo.

C. cenisia is a small species from the high limestone moraines in the Alps increasing by underground stolons. It has small rosettes of grey leaves on which sit the up-turned smallish flowers of steely blue. As I write at the end of July, Mr. Buchanan's plant, about two inches across, has six flower buds which should open in a day or two. Farrer wrote that *C. cenisia* had a far finer constitution than *C. allionii*; indeed, he called it a vigorous spreading species. This, I think, is not a commonly held view, but, given the treatment outlined above, it can be grown successfully. It is, I feel, a plant for the more expert gardener, but, as it is such a fine little plant, those with less skill may wish to accept the challenge it presents and run the risk of losing the 5/- or so which it costs!

C. zoysii is a fine little species from Jugoslavia, where I believe it is found growing on limestone rocks, scree and shingle, in which no slug could survive. In cultivation slugs appear to be its greatest enemy. As noted earlier, Mr. Buchanan has solved this problem by growing it in a quern raised off the ground and he has given it its growing requirement by using 50% tufa in his scree mixture. Its small, dark green, shiny leaves form rosettes close to the ground and in late July or early August come the curiously shaped flowers. They are pale blue in colour and the bells are pinched in the mouth quite unlike

any other campanula that I know. *C. zoyssii* usually flowers freely, sometimes too freely, but this year it looks as though Mr. Buchanan's plant will not flower and he is just as pleased because it flowered very well last year and he feels a rest this year will do it good. Mr. Alec Todd, also of Bearsden, had a plant in a trough two or three years ago which flowered magnificently, the best I have ever seen, but the strain was too much for it and it died. Perhaps the answer is to steel one's heart and reduce the number of flower buds at an early stage.

C. zoyssii increases by underground runners and is liable to pop up several inches away from the main plant as it has done in its quern home. Rosettes with roots attached may be carefully detached in Spring to increase one's stock. Clarence Elliott recorded a white *C. zoyssii* many years ago, but it seems to have been lost to cultivation.

In another quern Mr. Buchanan has *C. piperi* and flowering very well. This is another quite small plant with holly-like leaves which is found in the wild only in North West America. In this quern the mixture is 50% whinstone chips and 50% John Innes seed compost. The flowers, upturned and star-shaped, are purple blue and are borne on short stems in July. This one, too, may be increased by carefully detaching rosettes and growing them on.

C. morettiana, yet another treasure for the careful grower, is very happy in a hole drilled in a block of tufa. The hole is filled with John Innes seed compost. This small grey-leaved species is, I understand, found growing in shady precipices at high altitudes in the Dolomites. Mr. Buchanan's plant is on the north side of the tufa block but it gets a good deal of sunshine none the less. It, too, is beloved of slugs, but it also appears to appeal to rabbits! A half-grown rabbit spent a riotous fortnight early this summer in Mr. Buchanan's garden before he put paid to its capers, and among the precious plants it nibbled was *C. morettiana*. However, the plant recovered and in July he had half a dozen or so of its violet blue bells. In the frames near at hand there is the even rarer *C. morettiana alba* growing in a pot. The compost here is 50% tufa chips and 50% John Innes seed compost. This suits it well, as it grows and flowers satisfactorily.

C. raineri from Northern Italy is a splendid grey-leaved species of considerable merit which is not too difficult with careful cultivation in scree, trough or pot. The real difficulty is to obtain the true plant for as often as not the plant supplied is *C. pseudo-raineri* with smooth green leaves. The latter is undoubtedly a good rock garden plant, but it is a trifle annoying to find one has been given an impostor and not the true aristocrat! Mr. Buchanan's plant is in scree where it gets a good deal of sunshine, but its roots obviously derive some shade from a small protruding rock. This species, too, spreads slowly by underground runners which may be detached and grown on. The comparatively large blue cups are borne on short stems above the grey leaf rosettes in July and sometimes intermittently into the autumn.

Another scarce plant, *C. glomerata acaulis*, grows and flowers well between a path and the top of a small retaining rock wall. The

true plant, again difficult to come by, has cluster heads of violet flowers which sit close down on the leaves, giving a total height of four or five inches. It can be increased only by vegetative means, as seeds produce plants more like the well-known alpine meadow species *C. glomerata* itself, but reduced in stature to about twelve inches. The *C. glomerata acaulis* most often found in gardens is not the true plant, but obviously seedlings from it. Mr. Buchanan has the false plant, too, with violet flowers and another with white flowers. Both imposters are good garden plants and attractive, but quite different from the true one which Farrer called a freak. Don't be put off by this description because, if you can get it, you will find the true plant very attractive.

Mr. Buchanan has many more campanulas too numerous to mention. Those noted here are species which I like particularly well and which Mr. Buchanan also holds in high regard.

Metamorphosis

By VIDE

THE GARDEN, when we took it over, had a rough bank at one side of the lawn. It sloped steeply up to a low brick wall, also rough, and it was covered from end to end with a glorious assortment of Arabis (pink and white), Aubrieta (mostly purple), perennial Candytuft, Snow in Summer (*Alyssum saxatile* (somewhat leggy), Polygonum, and London Pride, with a fair sprinkling of Creeping Vetch, dandelions and couch grass. Fragments of stone peeped out here and there, so obviously it was a rockery. Equally obviously, to my wife at least, it was in sore need of overhaul. And, still more obviously, I was the person to do it. So I started. First I cut down the most rampant of the greenery, thereby uncovering more stonework, and then proceeded to pull the thing to pieces. This proved to be more difficult than I had anticipated, for the original constructor had worked on what, I believe, is known as the "Iceberg" method, with 15% above the surface and the remainder below. In fact, he, or she, had even improved on this, for the general percentages were more often 5 and 95, or even 0 and 100. However, at the expense of considerable labour, and knuckle-skin, the job was done and reconstruction commenced.

I was directed to ensure that the final layout was not too formal or regular. This was very simple. But I was also instructed that the strata on the stones, or at least those that were to be visible in the completed plan, should all run more or less in the same direction, to give, I was told, the appearance of a natural outcrop. (Incidentally, the nearest natural outcrop that I know of is about 15 miles away). This was much more difficult, as the stones varied from small boulders that might have been picked up on the sea shore, to portions of stone walling, part (I think) of a mill wheel, a previous door-step of the

house (somewhat worn), and something that, to my inexpert eye, looked like a fossil tree. However, by completely burying the most awkward ones, and almost completely burying most of the others, and bribing the dustman to take away the perambulator chassis and the damaged bust of Mr. Gladstone, the plan was completed, and did indeed look almost like the beginnings of a rock garden.

The plants that had been taken out were pulled to pieces, and small portions planted here and there for quick cover, leaving room for some of the more "select" Alpines which had been ordered, and for which special places had been arranged.

It all went according to schedule. In due course the plants arrived, some bought and others acquired by more devious means, and, with all due care and attention, were placed in their allotted spots, their special requirements all attended to.

* * * *

That was just a few years ago. The result has been most rewarding. We now have a rough bank, covered from end to end with *Arabis* (white and pink), *Aubrieta* (mostly purples), perennial Candytuft, Snow in Summer, *Alyssum saxatile* (not just so leggy now), Polygonum, and London Pride, with a sprinkling of Creeping Vetch, and the odd dandelion, and may be a little couch-grass.

And I rather like it !!

Swiss Week-end

By E. R. INMAN

I HAD MADE several previous business trips to Switzerland, but due to lack of time or unsuitability of the season had never yet fulfilled my ambition of seeing my well-known rock plants growing in their native haunts. Last June, thanks to the kindness of a Swiss colleague, Dr. G. Schetty, this wish was at last granted.

We left Basle one Friday evening and motored to Davos, arriving in a darkness which seemed strange to one accustomed to the lightness of a Scottish summer. The summer season had not yet started and, as in Britain, Spring was late and indeed snow fell that night down to 6000 ft.

After a good night's sleep we awoke to find lowering clouds, but fortunately no rain, and we were off bright and early up the nearby Dischmatal. The lower meadows were thick with flowers, red campion, blue myosotis and yellow buttercups being the most prominent. Just below the lower treeline there were many fine patches of cowslips and *Pulsatilla sulphurea* interspersed with intense blue gentians. One especially lovely sight was the shrinking corpse of a snowdrift, the

dead brown turf surrounding it peppered with blue and white *Crocus albiflorus* and *Soldanella alpina*. Here we first started photography and realised the handicap of not having a close-up lens, for one had to find a really big clump of flowers to get a decent picture at 3 to 4 ft.

The higher reaches of the valley were a jumble of rocks with patches of sodden turf and clumps of alpenrosen and pines, the former mostly still in bud. Despite the lacing of snow many flowers were to be seen, violet *Pinguicula vulgaris* and white *P. alpina*, yellow *Ranunculus montanus*, tiny yellow *Viola biflora*, *Primula farinosa* in all shades of pink, and of course, Gentians. The large *G. lutea* and *G. punctata* were only in leaf, in the lush corners of the valley and by the roadside. The short turf was full of *G. verna* together with a taller darker-flowered gentian, possibly *G. bavarica*. *G. acaulis* was a bit of a surprise, as there were two forms, one a much darker shade of blue than the other. Reference to the copy of Hegi's "Alpenflora" which I had brought with me indicated them to be *G. clusii* and *G. kochiana*. The chilly breeze and threat of further snow soon drove us back down the valley, my companion not having found any of the orchids for which he was searching, at least not in flower. The spotted leaves of *Orchis maculata* were much in evidence.

After lunch we went up the neighbouring Fluelatal and over the 7000 ft. Fluella Pass in search of better weather and were amply rewarded. The top of the Pass was a wilderness of cloud and snow, with only occasional glimpses of the Weisshorn and his neighbouring peaks, but as we came down the eastern slopes the sun came out and we were soon shedding our coats. There were not so many flowers in this part of the valley, but the sempervivums were a real surprise. They were everywhere, not only on bare rock in the open, but also in the comparative gloom of the pinewoods and also among the tumbled rocks by the stream in the valley bottom. This stream held yet another surprise, a wonderful blue-flowered dwarf plant growing on the otherwise barren stony islands in the bed of the stream. My more knowledgeable companion pronounced it a species of *Phyteuma*. It would certainly look splendid in a rock garden, that is, assuming it could be persuaded to grow there. Tiny specks of pale yellow far above us tempted us into a brief excursion into the heights but they turned out to be the same pulsatillas which had so excited us in the morning. Little of interest was seen in our scramble up the slopes except for the ever-present sempervivums, a few encrusted saxifrages, and a solitary *Clematis alpina* with its lovely drooping violet-blue flowers.

We returned the way we had come to find the Fluelatal drenched with rain and the light too poor for photography. A brief walk through a squelching carpet of *Primula farinosa* gave us the satisfaction of seeing a pure white form of this primula.

There was still an hour or two before dinner, so we set off up yet another valley and our optimism was rewarded by the rain stopping and by our finding yet another carpet of flowers including, much to

Dr. Schetty's delight, a fine stand of *Orchis latifolia* in full flower.

Sunday morning in Davos dawned grey and dull with a steady rain falling, so we decided to end our tour by taking a less detailed look of a wider area. Travelling south-west and then west, we followed the wild valleys of the Landwasser and Albula to their junction with the Hinterrhein near Thusis. Misty vistas of high peaks, awful chasms, with occasional splashes of subdued pink and blue suggesting untold botanical treats passed in rapid succession until, with rapidly improving weather, we arrived at the top of the San Bernadino Pass. Here, every snow free patch of ground was crowded with small pale violet primulas whose identity I was unable to establish with certainty even with the assistance of 'Hegi'. The southern approaches to this Pass provided some of the most brilliant displays of *Gentiana verna* we had yet seen. Great dollops of brilliant blue growing like weeds by the roadside, and to think that the same plant fades and dies when I try to grow it!

I will gloss over the later stages of our expedition, lunch in the glorious sunshine of Locarno, the hair-raising crossing of the St. Gotthard Pass to Andermatt and then along the shores of the beautiful Vierwaldstattersee to Lucerne and so back to Basle. During this time I had little desire to do other than gaze in wonder at the ever-changing view. It was also unfortunate that due to a faulty reloading of my camera this last stage went unrecorded.

In case anyone should be placed in my position I will mention my reactions on looking back. My first is to return at the first possible opportunity, my second to take a camera capable of taking close-up pictures, and thirdly to do a bit of botanical homework before setting out. I had to lean heavily on my companion's superior knowledge and it gives me great pleasure to acknowledge it here.

Automatic Watering

(i) Seed Raising

By HENRY TOD, Ph.D., F.R.S.E.

WATERING is one of the principal troubles which beset gardeners who are "in jobs," and especially those whose hours and length of day are erratic. This problem is perhaps at its worst in seed-raising where a few hours of dryness may—and generally does—mean the loss of a whole crop of seedlings.

Accordingly when the National Institute of Agricultural Engineering published (1) its method for capillary watering, it seemed worth while to try it out in seed-raising in a suitably modified form. The writer has in past years advocated the use of perspex boxes for seed-raising as a development of the "closed-box" described by Hanger (2). The writer's method has, however, differed in using a box with a hinged lid, John Innes Seed Compost and drainage holes in the box.

The technique proposed here adds to this the use of a modified N.I.A.E. Capillary Watering Bench consisting basically of a tray two inches deep, three-quarters filled with sand. A constant-level cistern was fitted to the tray and this, coupled to the mains water supply, kept a constant level of half an inch of water in the tray and hence in the sand. (see fig. 60)

The boxes, about $4\frac{1}{2}$ ins. \times 3 ins. \times $1\frac{1}{2}$ ins. deep, had either three or five holes of $\frac{1}{4}$ in. diameter bored in the bottom. A pad of fibreglass ("Cosywrap" pipe lagging 3 ins. wide split in half longitudinally is suitable; this gives two thin pads 3 ins. \times 4 ins. by half-thickness) was placed over the drainage holes, the box was filled to about 1 in. depth with J.I.S.C. pressed firmly down and the seed sown on the surface, with a very fine film of fungicidal seed-dressing blown over it. This may not have been necessary, but as it was mostly wild-collected seed in this trial it seemed advisable. It was then covered with a thin layer of $\frac{1}{8}$ in. fine gravel (No. 8 Tay Sand) to discourage moss growth, and the bases of the boxes worked hard down into the sand in the trays.

When all the boxes were in position, the lids were opened fully and the surface was thoroughly sprayed twice at a two-hourly interval with the finest of mist-sprays to establish capillary contact between the J.I.S.C. in the boxes and the damp sand in the tray below.

In practice it was found that in the dull, damp weather at the time of the trial conditions were too close and wet with the lids of the boxes closed down tightly. To avoid this, wires were laid across the boxes to keep the lids open in a crack. This meant that the surface of the fine gravel was just dry, while the compost below was suitably moist. The trays were housed in a loosely-constructed "frame" which allowed free circulation of air and access of light, but prevented the trays being flooded by rain. (see fig. 61)

As soon as free germination occurred the lids were lifted to a vertical position so that the seedlings were not drawn in any way. Subsequently, the lids were actually detached (which was possible in the boxes used without moving the box and breaking capillary contact) so that there was no possibility of a shadow being thrown by the raised lids. The seedlings were pricked out in the normal way and treated as usual. A very wide range of seeds were germinated by this method, ranging from wet-temperate zone seeds (Europe) to arid-hot material from the Nevada desert and all seem to have responded equally satisfactorily.

The trays were obtained from Messrs. Young & Wild (Shaw) Ltd., Shaw, Lancs., and the constant-level cisterns were fitted by Messrs. Findlay Irvine, Ltd., of Penicuik. The sand used was Grant's Levenseat No. 13 sand, which complies with the N.I.A.E. specification.

References :

- (1) M.A.F.F. Leaflet STL/16, Jour. Agric. Eng. Res. 1962 : 7 : 42 (D. A. Wells).
- (2) Hanger, F. W. Rhodo. Year Book 1953 : 7 : 97.

Rhododendrons for the Rock Garden

By H. H. DAVIDIAN

RHODODENDRONS which grow from a few inches up to about three feet, and which are particularly well suited for the rock garden, are amongst the important and popular plants in present day horticulture.

It may be of interest to give a brief note on the history of introduction of these low-growing species. The first rhododendron introduced into cultivation was *R. hirsutum*, in 1656, from the European mountains. The next was *R. ferrugineum*, which is said to have arrived about one hundred years later. A few more were added towards the end of the 18th and early in the 19th centuries. Between the years 1848-1851 Sir Joseph Hooker was responsible for the introduction of several species from the Himalayas, and during the latter half of the 19th century the French missionaries made some further contributions from south-east Tibet, south-west Szechuan and north-west Yunnan. A few others were received from Wilson during his exploration of western China early in the present century. In the year 1904, which is a landmark in the history of plant introduction, George Forrest explored Yunnan and Szechuan, and in the course of seven expeditions to western China, he enriched our rock gardens with a large number of rhododendrons. Several other species and new forms were sent by various other collectors, including Farrer, Rock, Kingdon-Ward, Ludlow and Sherriff.

The vast majority of these plants are natives of western China and the Himalaya, where they grow at elevations of 8000 up to about 16,500 feet, and are found in varied habitats. Some of the species of the Lapponicum Series are said to cover the moorlands just as heather does in the British moorlands.

In cultivation they provide colour from January or February until July or August, but most of them are in flower from the middle of April to the middle of June.

Although a great number of species present themselves for consideration, reference will be made in this account to a large selection which are ideally suitable for the rock garden.

ANTHOPOGON SERIES

One of the most remarkable in this Series is *R. sargentianum*, a native of western Szechuan, from whence it was introduced by Wilson in 1903. It is a compact shrub up to two feet high with aromatic foliage, and makes a wonderful show with its yellow or white flowers produced freely, in clusters of six to twelve. The plant is hardy, a robust grower, and is easy to cultivate.

Familiar to many gardeners is *R. cephalanthum*, discovered by Delavay in Yunnan near Lankong and Hokin in 1884. It is fairly widespread in western China and Upper Burma at elevations of 9000 to 15,000 feet. This wide distribution and altitudinal range explains



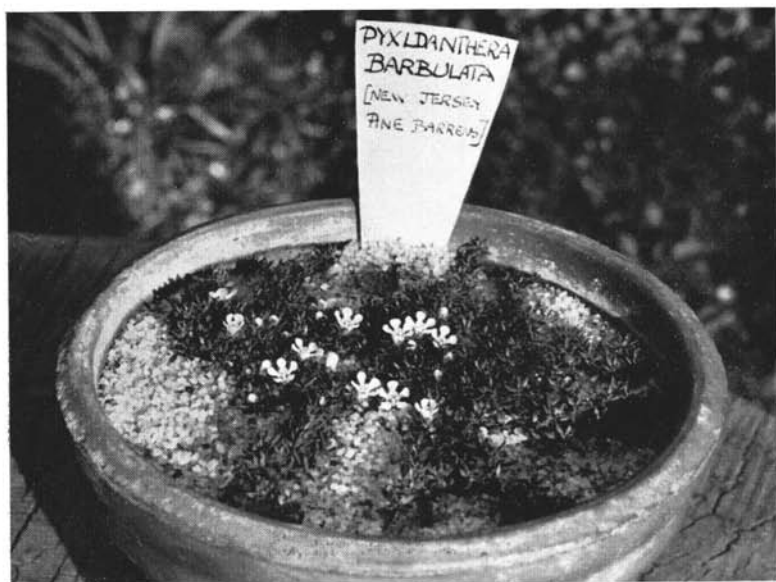
Photo—H. Tod

Fig. 60—Automatic Watering - Seed Raising (1) (see page 251)



Photo—H. Tod

Fig. 61—Automatic Watering - Seed Raising (2) (see page 251)



Photo—W. R. Cairns

Fig. 62—*Pyxidantha barbulata* (see page 291)



Photo—W. R. Cairns

Fig. 63—A Private Glacier (see page 292)



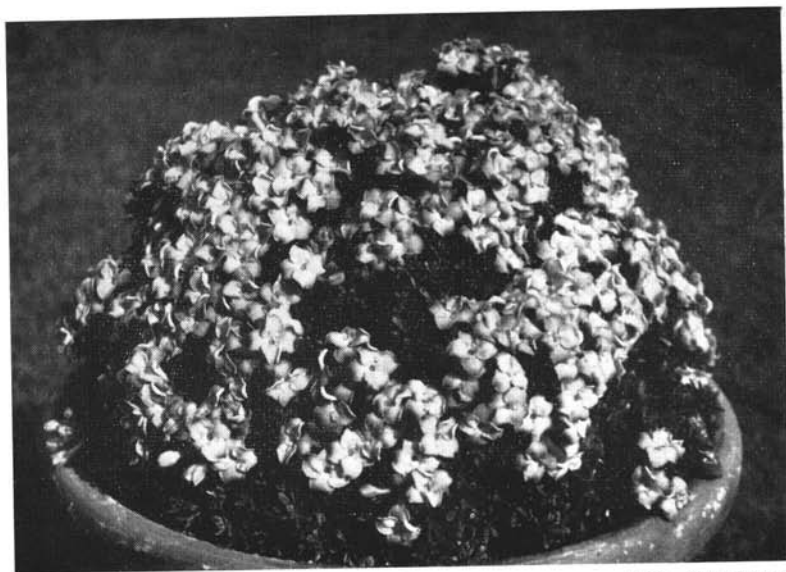
Photo—H. Eslemont

Fig. 64—*Primula allionii*, F.M. Glasgow (see page 294)



Photo—H. Eslemont

Fig. 65—*Lewisia trevosiana*, F.M. Dunfermline (see page 299)



Photo—H. Esslemont

Fig. 66—*Daphne petraea* (see page 296)



Photo—H. Esslemont

Fig. 67—*Iris pumila*, collected on slopes of Mt. Parnes

the great variability of the species in habit and height, in leaf shape and size, and in flower colour. Amongst the several forms in cultivation, one which is compact and wide spreading bearing a profusion of pink flowers in clusters of eight to twelve, is of great beauty and generally considered to be the best. The variety *crebeflorum* is a compact shrub up to eight inches high, and is greatly admired when covered with rose-pink flowers in April or May. A close ally is *R. primulaeflorum*, uncommon in cultivation. This plant is upright in growth up to three or four feet in height with rigid branchlets, and attracts attention with its white, pink or rose flowers. It is perfectly hardy, is easy of cultivation, and is worthy of being widely grown.

Another member of this series is *R. anthopogon*, introduced into cultivation in 1820 from the Himalaya, where it is widely distributed at elevations of 9000 to 16,000 feet. It is an interesting plant with large aromatic leaves which are said to be used as incense in Tibetan monasteries. The plant is a vigorous grower up to eighteen inches high, with pink flowers produced in April or early in May. The closely related *R. hypenanthum*, also a Himalayan plant, is distinguished by its yellow flowers.

A very rare plant in cultivation is *R. laudandum*, discovered by Ludlow and Sherriff in 1936 at Tsari Lapu, southern Tibet, growing at an elevation of 15,000 feet. This is a compact bushy shrub, up to one foot high in cultivation, and provides an admirable display with its many-flowered pink or white trusses, in April.

Among the dwarf rhododendrons introduced by Forrest from Yunnan, perhaps few stand out with greater distinctiveness than *R. trichostomum* var. *ledoides*. It is a densely branched shrub up to three feet in height, sometimes low and spreading, with linear-lanceolate leaves and large globose trusses of up to twenty-five or thirty pink or rose flowers. The plant is quite hardy, free-flowering, and should be a most valuable acquisition for any rock garden.

BOOTHII SERIES

One of the earliest of all rhododendrons to burst into bloom is *R. leucaspis*, an outstanding plant, discovered by Kingdon-Ward in 1924 at Musi La, in the Tsangpo Gorge, Tibet, at 10,000 feet. It is compact in growth, up to two feet high or more, with large rounded or obovate leaves up to two inches long, and is extremely charming when adorned with large, pure white, single or paired flowers. The plant is easy to grow, but as it flowers in February or March, disappointment is to be expected, for the flowers and flower-buds are sometimes completely destroyed by early spring frosts. Otherwise it is hardy, and well deserves the Award of Merit which it received in 1924 and the First Class Certificate in 1944. A near ally is *R. megeratum*, "lovely in the highest degree," with openly bell-shaped or saucer-shaped yellow flowers, usually in single or paired clusters. It is a compact shrub or sometimes straggly and spreading, with rounded leaves, very glaucous beneath. Although hardy, it is particular as to

position in the rock garden. To obtain the best results, some shade and protection from wind are essential.

Another interesting plant in this series is *R. auritum*, known only from an isolated locality in the Tsangpo Gorge near Pemako-chung, where Kingdon-Ward discovered it in fruit in November 1924. Although in its native home it is said to reach a height of ten feet, in cultivation in the Royal Botanic Garden, Edinburgh, it hardly exceeds three or four feet, being of a bushy habit with tubular bell-shaped creamy-yellow flowers about an inch long, produced in great profusion. It has proved to be of sturdy habit, fairly fast growing, and is well worth attempting.

A popular plant of great merit is *R. tephropeplum*, one of Farrer's discoveries in north-east Upper Burma in 1920. It was subsequently collected by Forrest, Rock and Kingdon-Ward in other localities in Burma, Yunnan, Tibet and Assam, at elevations of 8000 to 14,000 feet. As is to be expected from its wide geographical distribution and altitudinal range, it varies considerably in height of growth, in the shape and size of the leaf, and in the size of the flower. It is a spreading or upright shrub, with tubular-bell shaped, pink to carmine-rose flowers in clusters of three to nine. A low spreading form is ideally suitable for the rock garden and should be in every collection of rhododendrons.

CAMPYLOGYNUM SERIES

An old favourite in gardens is *R. campylogynum*, a most attractive plant, discovered by Delavay on the Tali range, western Yunnan, in 1893, and introduced by Forrest from the same region in 1912. It is a neat, spreading shrub, up to eighteen inches high, with bell-shaped flowers usually single or paired, nodding on long flower-stalks. The flower colour is very variable, from salmon-pink to almost black-purple. The variety *myrtilloides*, first collected by Kingdon-Ward in north-east Upper Burma, has tiny flowers, and well deserves the Award of Merit and the First Class Certificate which it received in 1925 and 1943 respectively. Variety *charopoeum*, discovered by Farrer in north-east Upper Burma, has larger flowers than the type, being about an inch long. In hardiness of constitution, in general adaptability to various situations, in freedom of flower, in beauty of habit and of flower, and in ease of cultivation, this species and its varieties have all the essential qualities of ideal rock garden plants and deserve the widest possible recognition.

CAMTSCHATICUM SERIES

A particularly fine species is *R. camtschaticum*. Although it was first introduced in 1799 and reintroduced several times since then, it is still uncommon in cultivation. The plant is hardy and well adapts itself to cold gardens. It is a deciduous low-growing shrub usually up to nine inches high with deep rose-purple or rose-crimson, rotate or openly funnel-shaped flowers. This plant has an interesting feature

in that it layers itself as it grows along the surface of the ground. In the rock garden, Royal Botanic Garden, Edinburgh, it provides an admirable display with masses of flowers in May or June.

FERRUGINEUM SERIES

This series consists of three species, *R. hirsutum*, *R. ferrugineum* and *R. kotschyi*, all of which are natives of the European mountains. *R. hirsutum* is of historical importance because, as already mentioned in the introduction, it was the first rhododendron introduced into cultivation in Britain in 1656. In its native home it is confined to limestone formations, but in cultivation it thrives and flourishes in acid soils. It is a pleasing shrub up to two or three feet high with bristly hairs on the margins of the leaves, and rose-pink or rose-scarlet tubular-bell shaped flowers. Closely related is *R. ferrugineum*, known as the "Alpine Rose of Switzerland," which is similar to its ally in several respects. In the rock garden, Royal Botanic Garden, Edinburgh, it forms a conspicuous feature, and is an unusually attractive sight when adorned with a profusion of rose-purple flowers. *R. kotschyi* is a densely branched shrub, usually up to two feet in height, and is exceedingly charming with its deep rose-purple flowers, narrowly tubular with spreading lobes. All three species are perfectly hardy, and are extremely useful in that they are late-flowerers, prolonging the flowering season into June or July.

GLAUCOPHYLLUM SERIES

One of the finest in this Series is *R. glaucophyllum*, a native of the Himalaya, from whence it was introduced by Hooker in 1850. The species is fairly common in cultivation, and grows up to four feet in height up to more, but some forms up to eighteen inches are well suited for the rock garden. An attractive feature is the glaucous under surfaces of the leaves. The flowers are bell-shaped, up to an inch long, pink, rose or pinkish-purple, in clusters of four to ten. The variety *tubiforme*, which grows up to two or three feet high, seldom fails to display the beauty of its long tubular rose-pink flowers in April or May. Closely akin is *R. tsangpoense*, discovered and introduced by Kingdon-Ward from the Doshong La, Tibet, in 1924. It is a vigorous-growing shrub up to two or three feet, with bell-shaped, pinkish-purple flowers about an inch long. In cultivation, several plants should be grouped together to give effect to the beauty of the flowers.

Special reference must be made to *R. charitopes*, "lovely of aspect," an uncommon plant in rock gardens. Farrer discovered this species in the Shing Hong Pass, north-east Upper Burma, in 1920 at an elevation of 12,000 feet. It grows up to two or three feet high, with large rounded leaves, and is of exquisite beauty when covered with large widely bell-shaped flowers of apple-blossom pink speckled with crimson. The plant is hardy, but requires a sunny aspect with some protection from wind, for the best results to be obtained. It is a charming plant for the rock garden, and is worthy of more general cultivation.

A remarkably distinct species in this series is *R. brachyanthum*, a native of Yunnan and south-east Tibet. It grows up to five feet, but a spreading form, up to two feet high, is well adapted to the rock garden. The flowers are yellow, bell-shaped, on long flower-stalks, in clusters of three to ten. It is a valuable plant in that it is a late-flowerer, the flowers appearing in June or July.

LAPPONICUM SERIES

This series consists of a great array of rhododendrons, most of which have proved their worth in general cultivation. Comment will be made on a selection of eleven species which, amongst others, may be considered both choice and interesting, worthy of being grown in any collection.

An exceptionally fine and popular plant is *R. impeditum*, discovered by Forrest on the Lichiang Rane, Yunnan, in 1910. This is a compact shrub, up to one foot or more in height, very free-flowering, and exceedingly attractive with its pale or purplish-blue flowers in clusters of up to five. The plant is highly rated, and received the Award of Merit in 1944.

One of the most distinct and beautiful in this series is *R. hippophaeoides*, an upright shrub of two or three feet. It commences to flower towards the end of April or early in May. Kingdon-Ward discovered this plant in 1913 growing in the Valley of Chung River, Yunnan, at 10,500 feet. It has been introduced into cultivation on several occasions. The best form is one with large deep violet-blue flowers, in clusters of up to nine. The species is very hardy, and is easy to grow.

Another exceptionally fine plant is *R. microleucum*, the albino of the Lapponicum Series. The species was described in 1933 from a plant growing in the rock garden at Exbury, raised from Forrest's seed presumably collected in western China, and was awarded the First Class Certificate in 1933. It is compact in growth, up to eighteen inches high, and is most attractive when covered with white flowers in April or May.

More sturdy of habit, and one which is uncommon in rock gardens, is *R. dasypetalum*, first collected by Forrest on the Li-ti-ping, north-west Yunnan, at 11,000 feet. It forms a compact bush usually up to two feet high, and seldom fails to put forth a wealth of colour in April or early in May. The plant is recognised by the large broadly funnel-shaped flowers, deep purple-rose in colour, in clusters of up to four.

Few plants are more magnificent than *R. russatum* when it provides a mass of blooms in late Spring. The species is one of Forrest's discoveries in north-west Yunnan growing at 12,000 feet. It is a variable plant up to four feet high, but the smaller forms are excellently suited for the rock garden. The flowers are usually larger than in most species in this series, being pale purplish-mauve to deep violet-mauve in colour, in clusters of four to eight. The plant is easy to grow and is generally regarded as being one of the best of this series.

Mention must be made of *R. lapponicum*, one of the most difficult of all species. Although first introduced in 1825, it is still a rare plant in cultivation. It is a slow-growing shrub up to about nine inches high, with deep purplish flowers in clusters of two to six. The plant should be grown in cold gardens, fairly moist at the root, with some shelter from strong winds, for the best results to be obtained.

One of Kingdon-Ward's finest discoveries is *R. chryseum*, a small shrub which grows up to two feet high with bright yellow flowers in clusters of two to five. Amongst the several forms in cultivation, one introduced by Rock is a compact shrub which no one can fail to admire when covered with a profusion of flowers in April or May. The species is hardy and should be included in every collection of rhododendrons. A close ally is *R. flavidum*, discovered by Soulie in western Szechuan. It grows up to three or four feet high with large pale yellow flowers, and is a valuable plant for the rock garden.

Two other species worthy of special notice are *R. intricatum* and *R. stictophyllum*. The former is upright in growth, up to two or three feet, with pale lavender-purple or mauve flowers, whilst the latter is compact, up to two feet, with purple to deep rose-purple flowers. Both species flower very freely, and give delightful colour displays in April or May. Yet another fine plant is *R. scintillans*, up to two or three feet high, with pale rose-purple or lavender-blue or deep blue-purple flowers. It is a pleasing species, very highly rated, particularly the form with deep blue-purple flowers, and it received the Award of Merit in 1924 and the First Class Certificate in 1934.

LEPIDOTUM SERIES

Amongst the later-flowering species is *R. lepidotum*, which is widely distributed in the Himalaya and western China at elevations of 8000 to 16,000 feet. It is a very variable plant, and in cultivation it is compact or straggly or upright up to two or three feet high, with pink to crimson or yellow flowers. The species has long been in cultivation, having been introduced in 1850. The free-flowering compact forms up to eighteen inches high are well worth growing in the rock garden. An ally is *R. baileyi*, a remarkably distinct species which makes a fine show in May with its deep crimson-purple or deep purple flowers in clusters of five to nine or more. It is a fairly fast-growing shrub and reaches up to four or five feet in height, although the smaller forms up to two or three feet are well suited for the rock garden.

One of the most beautiful of all species is *R. lowndesii*, a dainty spreading deciduous shrub, up to three or four inches high in cultivation, with single or paired yellow flowers situated on long flower-stalks. It was discovered by the late Colonel D. G. Lowndes in Nepal in 1950 growing in rock crevices at 13,500 feet. The species flowered for the first time in the Royal Botanic Garden, Edinburgh, raised from seed taken from a herbarium fruiting specimen collected by Polunin, Sykes and Williams in Nepal in 1952. It has proved to be most attractive in flower and would be well worth acquiring for every rock garden.

MADDENII SERIES

An interesting species in this series is *R. valentinianum*, discovered by Forrest in 1917 in the Shweli-Salwin divide, Yunnan, at 11,000 feet. It is a compact spreading shrub up to about eighteen inches high with rounded leaves. The beautiful large yellow flowers, in clusters of two to six, appear freely in March or April, but unfortunately they are apt to succumb to heavy Spring frosts. A near ally is *R. ciliatum*, introduced from the Himalaya in 1850. The plant is common in cultivation, and grows up to three or four feet in height or sometimes up to five or six feet or more. In March or April it provides a mass of colour with its white or pink flowers which, however, like those of its ally, are liable to be destroyed by early Spring frosts.

MOUPINENSE SERIES

An early flowering rhododendron is *R. moupinense*. It is a most remarkable species of two to four feet, introduced by Wilson from western Szechuan where it often grows as an epiphyte on broad-leaved trees. The plant flowers in February, and when it escapes the frost it heralds Spring with a blaze of white or rose-pink, funnel-shaped flowers. An attractive feature is the young foliage, bronzy-brown in colour. The species is easy to grow, and is well worth a place in every rock garden.

NERIIFLORUM SERIES

An exceptionally fine plant, being one of the most elegant of Forrest's discoveries, is undoubtedly *R. forrestii* var. *repens*, which well deserves the First Class Certificate awarded to it in 1935. It is a creeper with single or paired large, tubular-bell shaped crimson flowers, for which the dark green foliage provides an effective contrast. The plant is a slow grower and is reputed to be difficult, although in the Royal Botanic Garden, Edinburgh, two large plants seldom fail to display the beauty of their flowers produced with great freedom in April or May. The closely related *R. chamae-thomsonii* is an upright straggly shrub, up to two or three feet high with large flowers, usually crimson in colour, in clusters of up to four. Like its ally, it is a slow grower and many years are required before it flowers freely. The flowers appear in March or April, but an early Spring frost takes its heavy toll.

Another delightful plant in this series is *R. aperantum*, discovered by Farrer in 1920 in north-east Upper Burma, covering the high alpine slopes for miles. In cultivation it grows up to about two feet high with leaves arranged in rosettes and large, pink to deep crimson or yellow flowers. Although it is a slow grower and often a shy flowerer, it is well worth attempting, being one of the finest in its series. The plant is quite hardy but requires some shade and protection from wind. Related to it is *R. didymum*, a pleasing species with leaves covered beneath with fawn or silvery indumentum. It is hardy in sheltered positions, and a well-grown plant two to three feet high, laden with large deep crimson flowers, is most effective in June or July.

SALUENENSE SERIES

One of the most striking in this series is *R. calostrotum*, discovered by Kingdon-Ward in north-east Burma at an elevation of 13,000 feet. The species is variable in habit ; it may be compact or upright, up to three feet high. Some forms up to one foot are extremely free-flowering and make a fine show in May or June with large, saucer-shaped pinkish-purple or crimson flowers, completely hiding the leaves. The young foliage, bluish-green in colour, is most distinctive and attracts attention. The plant is very hardy and is easily adaptable to any position in the rock garden. Variety *calciphilum* has smaller leaves, with pale pinkish flowers.

A fairly common plant in cultivation is *R. keleticum*, first collected by Forrest in south-east Tibet in 1919. It is a semi-prostrate spreading shrub, usually up to one foot high, and produces masses of large, deep purplish-crimson flowers in May or June. Its near ally, *R. radicans*, is a completely prostrate creeper with very narrow leaves, and provides a glorious display of dark rose-purple flowers in May. In some forms a distinct feature is the rooting of the branches as they creep along the ground. Although both species are hardy, early severe frosts are apt to damage the plants, as was seen in the Royal Botanic Garden, Edinburgh, last season.

Another charming plant is *R. prostratum*, discovered by Forrest on the Lichiang Range, Yunnan, growing, at 15,000 to 16,000 feet, almost at the limit of vegetation. It is a prostrate spreading shrub, usually up to one foot high, which no one can fail to admire when smothered with crimson flowers in April or May.

Other interesting species include *R. saluense*, which grows from two to four feet high, flowering in April or May ; *R. chameunum*, up to two feet, usually with smaller leaves, the flowers appearing in May or June ; and *R. nitens*, a late-flowerer, extending the flowering season into July or sometimes August.

SCABRIFOLIUM SERIES

One of the finest in this series is *R. spiciferum*, a free-flowering species, discovered by Delavay in north-west Yunnan in 1891. It is a spreading shrub up to three feet high with bristly and pubescent branchlets and leaves. In April or May it makes a wonderful sight with its rose flowers in axillary clusters in the upper parts of the shoots. The plant is hardy, is easy to cultivate, and should be grown in every rock garden.

TALIENSE SERIES

Reference must be made to *R. pronum*, a remarkably distinct species which, however, is very rare in cultivation. Forrest first collected this plant in mid-west Yunnan in 1923, growing on rocky slopes at 13,000 to 14,000 feet. It is a prostrate shrub up to about one foot high, with large leaves covered with a thick wool beneath, and large creamy-yellow flowers with deep crimson spots. The plant is a slow grower, and many years are needed before it reaches the flowering

size. It is a unique species in its series and should be more often seen in cultivation.

THOMSONII SERIES

A most outstanding plant is *R. williamsianum*, discovered by Wilson in western Szechuan in 1908. This is a compact shrub usually up to three or four feet high with rounded leaves, and is exceedingly beautiful when laden with large pink or rose bells in April or early in May. A most remarkable feature is the young bronzy growths which, however, are often destroyed by late Spring frosts ; otherwise it is hardy in sheltered positions, and is a first class plant for the rock garden.

TRICHOCLADUM SERIES

A very distinct number of this series is *R. lepidostylum*, one of Forrest's discoveries in western Yunnan at 11,000 to 11,500 feet. It is a compact shrub up to three or four feet high, and is remarkable for its exceptional qualities as a foliage plant. With its young bluish-green leaves covered with a glaucous sheen, it is a plant of great beauty and is always admired. In May or June it makes a fine show with its single or paired yellow flowers, and is worthy of being widely cultivated.

TRIFLORUM SERIES

A remarkably fine rhododendron is *R. hanceanum* 'Nanum.' This is a compact shrub, up to two feet high, and is most pleasing when covered with masses of yellow flowers in clusters of five to ten, in April. Although a slow grower, it is an excellent plant for the rock garden.

Another beautiful plant with yellow flowers is *R. keiskei*, a native of Japan from whence it was introduced in 1908. It is somewhat compact in growth or sometimes straggly, up to two or three feet high or sometimes more, with large flowers produced freely in clusters of three to six. In some forms a prominent feature is the young foliage of a bronzy-brown colour. The plant is hardy, but to grow it satisfactorily some protection from wind should be provided.

UNIFLORUM SERIES

This series contains some of the best and most charming of all dwarf rhododendrons. One of these is *R. imperator*, a prostrate spreading shrub usually up to six inches high, discovered by Kingdon-Ward in Upper Burma in 1926. It is a plant of very great merit, and in May it gives one of the most delightful of all colour displays, with its large funnel-shaped, deep pinkish-purple flowers. It is a slow grower, however, and somewhat difficult to increase from cuttings. The plant is hardy, but requires a sheltered position.

Another splendid plant, common in cultivation, is *R. pemakoense*, one of Kingdon-Ward's discoveries in the Tsangpo Gorge, south-east Tibet. This is usually a compact shrub, up to about eighteen inches high, and one of its chief merits is that it flowers abundantly at a remarkably early age. It is hardy and makes a wonderful sight with

its large pinkish-purple flowers in March or April. Yet another fine species in this series is *R. uniflorum*, a small semi-prostrate shrub with broadly funnel-shaped flowers, appearing in April or May. It is a most desirable plant for the rock garden, although in cultivation it has not received the wide recognition it deserves.

A noteworthy species in this series is *R. ludlowii*, discovered by Ludlow and Sherriff in south-east Tibet at 13,500 feet. It grows up to one foot high, with small leaves, and single or paired bell-shaped yellow flowers which are large for the size of the leaves. The plant is a slow grower and somewhat difficult in culture, but is worthy of a place in every rock garden.

Among Hooker's discoveries in the Himalaya, one of the best is *R. pumilum*, a prostrate shrub, usually up to six inches high. It flowers freely, and cannot fail to impress us with the beauty of its pink bells in May or June. Although the plant is hardy, a sheltered position in the rock garden is desirable.

VIRGATUM SERIES

A well-known species which has long been in cultivation is *R. racemosum*, first collected by Delavay in north-west Yunnan in 1884. It has been introduced by various collectors from different areas in western China. The species is very variable and grows up to eight or nine feet high, with leaves glaucous beneath. One of Forrest's plants (under No. 19404) is well suited for the rock garden. It is a compact shrub of two or three feet, and provides an admirable display with its deep rose axillary and terminal flowers covering the upper parts of the shoots. The plant is a robust grower and is easy to cultivate.

Among Hooker's Himalayan discoveries, a particularly lovely plant is *R. virgatum*. It varies considerably in habit and height, but the spreading forms, up to two feet high, have proved to be extremely valuable for the rock garden. The flowers are large, pink, single or paired, and are produced freely in axillary clusters along the shoots, in April or May.

It is apparent that these low-growing rhododendrons, having such diversity of form and colour, provide a wide range of choice to the gardener. Many of these are easy to grow; some are difficult and require careful cultivation; however, they are all eminently suitable for the rock garden.

Help for the Novice

By K. S. HALL

WHEN PLANNING a programme of lectures it is inevitable that the Group Convener should cater for those who know at least a moderate amount about rock gardening. But in catering for those with some experience one is inclined to overlook the needs of the complete novice, for it is obviously impossible to interest the one without boring the

other. This may, indeed, be one of the reasons for the loss of new members after a year or two.

Talking to some of our newer members after the lectures last winter it became clear that more might be done to be "helpful and encouraging to the beginner" (the quotation is from the S.R.G.C. leaflet) and it was decided to start a small local group for beginners.

It was essential to limit the numbers to about a dozen in order that the meetings could be held in private homes, and, more important still, in order to keep the meetings informal and friendly. In this way even the most diffident member could be encouraged to raise problems and join in the discussions.

The first meeting, in May, was planned to find out just what help the new members would like. A walk round a rock garden in the making soon set them talking about construction and planting, related to their own particular gardens. This was followed by a down to earth demonstration on the mixing of soil. Bowls of loam, leaf-mould, peat, sand and grit were handled and mixed in order to give the 'feel' of a good soil for planting. This demonstration had been set up with some trepidation in case it should be too elementary, but it led to a great deal of discussion on the type of sand, where to get the ingredients, how to vary the mixture, and so on. Finally, some books on rock gardening and nursery catalogues were passed round and plans were made for another meeting.

It was encouraging, if a little overwhelming, that one member suggested a meeting the following week. However, by stretching the interval a little we have had three further meetings up to the end of July.

The first of these was a tour of the Rock and Peat Gardens of the R.B.G. on one of the many wet evenings of this summer, coming away, as always from there, with fresh enthusiasm and a long list of impossible names.

After that came a thoroughly practical evening, the reconstruction of a small section of rock garden from the rubble bottoming upwards, a task which was facing several of the group in their own gardens and which they have since begun.

For our final meeting the theme was 'Some Easy Plants' and for this we were invited to a garden where we could see a wide variety of plants, some in scree, some in peat walls, in troughs, and by the pond side. The owner, well-known to Club members, was not ashamed to point out the mistakes which had been made as the garden grew, and the beginners were obviously encouraged by these confessions. Probably the most important thing they have learnt in this course is that there are many ways of making a garden and that the real gardener always has something to learn.

More meetings are planned for the autumn and the novices are putting forward suggestions, including the naming of plants, which will take us into very deep waters. However, when this first experiment group graduates, we should be able to give even more help to the next, and meanwhile this outline of the Novice Group's activities may be of help to other Counties.

Among The High Hills

Pt. IV. The Upper Alpines

By A. W. ANDERSON

THE VEGETATION of the high mountains follows a well-defined pattern that is easily recognisable and is governed by altitude and climate, with winter snowfall as one of the main factors. So the alpine zone may be taken as the belt where the snow lies during the greater part of every winter. As a general rule this is between about 3500 feet and the edge of the perpetual snow, but heights are always modified by local conditions such as aspect and exposure.

It is here that the true alpine plants grow, and only a few qualify for inclusion in that select company, the high alpines, which have been able to adapt themselves for life under the very rigorous conditions obtaining thousands of feet above the summer snowline, which is usually about 6000 or 6500 feet. By the very nature of things they are not at all well known, because their homes are very inaccessible, and surprisingly few of the climbers who venture into those regions give them more than a passing glance. Of course, they are more accessible in the great national parks, but there they are rigidly protected, and rightly so. It is a moral duty of all who enjoy them to do all that is possible to see that these untouched parts of primeval New Zealand should be kept in a state of nature for all time.

Probably thirty or more species, including a number of grasses, manage to survive among the everlasting snows, but many of them are of little interest to the rock gardener. A few, however, are among the most beautiful of all our native species because their flowers are much larger for the size of the plant than is usually the case, and their dwarf habit of growth is often combined with woolly hairs or glistening white tomentum. Some are widely spread throughout the alpine belt, but specimens from the lower levels tend to be more robust in growth and to have smaller flowers.

The edges of the summer snowline are always the best place for the plant hunter because it is here that many of the best species are most likely to be found. They include several beautiful forget-me-nots, *Myosotis macrantha* with its long bluish leaves and spikes of funnel-shaped flowers of bronze or chocolate brown; the somewhat similar *M. concinna* whose flowers are sometimes yellow or vinous-purple, and the white-flowered *M. traversii*. Their leaves are all clothed with silky hairs, a character so well developed in the dwarf *M. pulvinaris* that it has the effect of being a tuffet of moss when not covered in a mantle of white, stalkless blossom.

The famous vegetable sheep, *Raoulia eximia*, reaches well above 7000 feet and seems to prefer warm sunny places among the rocks, while the grey woolly carpets of *Haastia sinclairii* with their chubby little flowerheads choose the wet shingle. The celmisias are beginning to thin out at this height, but it is still possible to come across tufts

of *C. brevifolia*, dark green and very white beneath, or the burnished, shining aluminium of *C. hectori*. Another plant that has the same burnished look is *Leucogenes grandiceps*, whose tiny leaves are very bright. Here it may be no more than a patch an inch or two across, and the golden heads with their flannelly bracts are very short. Very different are the spiky, bronze-green hedge-hogs that are *Aciphylla dobsonii*, very striking indeed when decorated with their little clusters of inch-wide creamy pompons at the top of six-inch stems. They form a remarkable contrast to the dense soft patches of *Raoulia youngii*, a beautiful snow-white species covered with cottony tomentum among which the florets are embedded.

A dwarf gentian grows up to above 8000 feet, and I have always thought of it as *G. divisa*, although this is supposed to be a sub-alpine species. They are notoriously difficult to run down, but this one certainly lives up to Cheesemen's description of *G. divisa* having "a remarkably distinct habit, often forming compact globose masses three to nine inches in diameter, so densely covered with flowers as to resemble large snowballs." The bright red stems of an epilobium give an unusual spot of colour, but it too is hard to identify with its glossy oblong leaves and pretty pink or purple flowers. The elegant four-inch *Cheesemania enysii*, better known under its old name *Nasturtium enysii*, is every bit as attractive as some of the alpine cresses treasured in our rock gardens with its pale pubescent leaves and decorative little sprays of white blossom.

By the time 9000 feet is reached plants of any kind are becoming few and far between, but it is here that are found two of our most alluring buttercups, and it is difficult to choose between them. Best known is *Ranunculus seriocophyllus*, not uncommon down to 4000 feet, but seen at its best nestling in some sheltered little pocket of rock debris high up among the snow. The light-green parsley-like leaves are copiously clothed with long silky hairs, and above them rise the lovely golden yellow flowers, reminiscent of *Adonis vernalis* when it begins to flower in mid-winter. *R. grahamii* is confined to a few peaks in the Mount Cook region, and prefers to live in fissures and rock crevices. It makes neat tufts of only a few leaves, coarser and fewer than those of *R. seriocophyllus*, and the flowers, somewhat paler and smaller, are about an inch across.

At lower levels *Cotula pyrethrifolia* tends to be coarse, but at high altitudes the small tufts of bright-green aromatic leaves are greatly reduced and the creamy-white rayless flower-heads are proportionately bigger for the size of the plant. Another plant that gets little notice at low levels is *Pratia macrodon*, but its pretty cream flowers with their engaging look of innocent wonder are a real delight when you see them nestling among the dark, toothed leaflets in a shingly little snow-hole with no other living thing in sight.

But the real mountaineers are two or three veronicas that go up to 10,000 feet or even more. They are *Hebe epacridae*, a shrublet with overlapping leaves that are close enough together as to give the

effect of four-square stems about half an inch wide. The small white flowers are densely packed into oval inch-long heads. The closely allied *H. haastii* is more prostrate and a brighter green so that the stiff mat-like effect is very pleasing. *Parahebe birleyi* may well be the plant that reaches the greatest heights and seems to be more widespread than was supposed. Known in the Mount Cook district as *Veronica grahmi*, it is also found among the heights of Otago. A sparsely branched little thing of six inches or so, it has grey-green box-like leaves that are reddish on the back and often have red margins, while the comparatively large white flowers are borne two or three together on short stalks.

Starting with Show Auriculas, at Sixty

By SAM BUCUS

THERE ARE various forms of lunacy and, according to most of my gardening friends, starting at 60 to try to build up a collection of Show Auriculas is most certainly one of them.

Why, they asked, if you must collect, not go in for something just a little less frustrating, like stamps, or Model T Fords, or cigarette cards? Show Auriculas, they said, are exceedingly difficult to come by in the first place. Only a couple of people in the Trade sell them, and they have only a very limited supply. The remainder are in the hands of enthusiastic (or misguided) amateurs, who *may* give you, or swop, the odd one, but there's no known method of getting in touch with these folk, and anyway, you can't swop if you've got nothing to swop with. Seed, they said, if you can get it, takes eighteen months to come to flower, and you'll be more than lucky if you get two worth keeping out of a hundred. The others go to swell the compost heap. And, finally, even if you do succeed in getting together a few of them, they flower, if at all, for one month in the year, and have to be looked after for the other eleven.

My only answer, if answer it was, was that the bug had bitten. Various bugs had bitten me during my lifetime, and this would probably be the last.

* * * *

I first came across Show Auriculas at a S.R.G.C. Edinburgh Show a few years ago—a few plants exhibited by the late James Arnot—and fell for them right away. Here was something entirely different from anything I had grown before, or even that I'd seen before. They fascinated me, and I made up my mind there and then that I'd find out about them and then get some and try to grow them for myself. After all, if somebody else could do it, why not me?

Theoretically, that was fine. Putting it into practice, I soon discovered, was a very different matter. None of the gardening periodicals that I bought had anything at all in them about Show Auriculas, and of books on the subject, new or second-hand, I could find none.

And then I had a bit of sheer good luck. I had occasion to write a letter, on an entirely different subject, and I mentioned Auriculas. They had a habit of creeping into a great deal of my correspondence about then. (And here I might give a piece of really good advice. If you are developing an interest in *any* out of the ordinary plants, mention the fact on every possible occasion. Nine hundred and ninety nine people will consider you a complete and absolute bore and avoid you like the plague. Let them. They're no good to you anyway. But the thousandth will welcome you like a brother, and may even give you a couple of offsets to be going on with).

That, more or less, was what happened to me, for my correspondent in his reply told me that he had had a fairly good collection of the plants I was looking for, but, as he was leaving his house and garden, he had given most of them away. However, he still had a few odd bits and pieces and would be glad to let me have them. For further good measure he put me in touch with his source of supply for both plants and seed—and told me to join the Auricula Society.

That was two years ago. Now, by purchase (a few), gifts (a surprising number), seed sowing, and offsets, I've just about quadrupled my original stock, and am getting more interest and pleasure out of them than from anything else I've grown.

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So far, so good, says the Editor, but it doesn't tell us anything at all about how to grow Show Auricula. Well, the trouble is that I don't know much about growing them yet, but here, based on my very brief and limited experience, are a few hints, tips and requirements.

First, you want a greenhouse of some kind. In actual fact, this is not strictly necessary, for they can be grown equally well in a frame, and one successful grower in the West of Scotland grew his under cloches. Mine, last winter, were frozen solid in their pots for practically the whole of January and February, with 22 degrees of frost on more than one occasion. But a greenhouse is undoubtedly a worth-while acquisition. At least it protects the Auriculist from 'flu, and gives him an excuse to slip away from the kitchen chores in the most inclement weather. It should have staging, so that he can examine his potential prize-winners without going down on his knees to do so. And the staging should be stout and well supported. Pots weigh heavy.

I find galvanised trays (which can be had from a well-known supplier of composts in Central Scotland) extremely useful. They keep the staging dry and, if I have to be from home for any length of time during hot weather, I just flood them with about half-an-inch of water before I go, and let the plants soak it up.

Pots. Most of mine are 3½ inch long-toms, though ordinary pots would probably do as well. The long-toms give more root room for the amount of space they occupy.

Having got the pots, you'll want something to fill them with. I use ordinary John Innes 2, but back your own fancy here. (A very successful English grower, asked what he used to get his results, said he always mixed in a little crushed Blarney Stone). One thing you should remember is that, in well-crooked pots—as you ought to have—J.I. composts can drain and dry out pretty quickly, but with my trays I much prefer it that way. It's easier to water a light compost than to dry out a heavy one.

For offsets I use the same J.I.2 with a little extra sharp sand, and for seed, J.I. seed compost. Seed I sow whenever it is ripe, or when I can get it. Germination is very erratic, some coming up in a few weeks, some taking six months or more. Moss on the pans can be a nuisance, but I find that if I cover the seed with a little sifted compost and then a light layer of crushed brick, that helps to keep it in check. Coarse sand, grit or small coal would likely be as good, but there's a builder's dump not far from me—and I've got a hammer!

Seedlings are pricked out into boxes, 3 to 4 inches apart, and left there until they flower, most of them in a year to eighteen months, but some take even longer than that. Even from crosses of the very best plants you'll get all sorts, shapes and colours, but you'll be very lucky indeed if more than one or two are worth keeping as prospective exhibition flowers. The others you can plant out in the garden, give away, or simply dump in the compost heap. And then you start again.

After the flowering season (April/May), re-potting begins. The plants are shaken out of their pots, examined for pests (you'll occasionally find a curly white maggot (Vine Weevil ?) which should be firmly dealt with), the "carrot" cut back if it's too long or rotted at the end, any offsets removed and put in pots, pans or boxes, and the old plant put in its new pot. I then stick them in a bucket of water, well laced with Tritox, which puts paid to any lurking greenfly or root aphid, drain them, and they go back to the greenhouse or out to the frame, depending on whether they look tough or tender, able to look after themselves or needing coddling, or, which is much more to the point, whether the wife has bull-dozed me into completely filling the greenhouse with tomatoes, or only half filling it.

In October, when the tomatoes are finished, they all come inside, and there they stay till they flower (or don't) and we're back at the re-potting again.

Well, that's all there is to it. You tend them from June to March and, if you're green-fingered, and it's your year, and their year, you'll be rewarded, in the remaining couple of months, with a sight of one of the most unique and beautiful plants in cultivation.

But perhaps you think, considering all the circumstances, that you'd be just as well to stick to the "Pools." Maybe you're right!

My First A.G.S. Tour

By J. A. HALLEY

I HAVE just returned from my first A.G.S. tour, and how I enjoyed it !

Before you read any further, let it be understood that this will not be a record of our tour ; the places we visited and the flowers we saw may be mentioned incidentally, but there are regular contributors to the A.G.S. *Journal* who will be providing detailed accounts of the trip very much better than I can. This will be only an attempt to convey the very great enjoyment and refreshment a visit to the Alps always gives me, as there the immensity of the mountains put the world into proper perspective again. As a member of this crowded isle, I enjoy the feeling of freedom and space, the quietness and solitude, a feeling that cannot be dispelled by the crowds on the tops that are served by cable car. In addition, the wealth of flowers on the mountains and in the valleys make the Alps a gardener's and colour photographer's paradise.

It is a pity that the average foreigner labels an English-speaking party as just that, as on this occasion we were a gloriously representative bunch of Britishers. Scots, English, Irish and Welsh gave a wonderful tonal variety that was lost to our hosts, not to mention the nuances from Yorkshire and Aberdeen. While this was my first organised tour, I am glad to say that the companions of my previous flower-hunting trips were with me, the interesting chatter from one, with the soothing coo of agreement from the other have provided the accompaniment of all my alpine expeditions. But this time there was the added lilt of Irish and Welsh voices, the clipped tongue of the English and the lower burr of the Scots which made for plenty of variety in the evenings.

Our first centre was Pontresina in the Engadine and our first day there an easy one for the purposes of breaking in our boots, legs and lungs. A climb through the woods and a trek along a hillside which gave us an idea of the gorgeous views and interesting flowers that were to be found in that locality.

Also we were introduced to some of the unusual floral companions we were to find, in *Pinguicula alpina* and *P. vulgaris* growing happily together and covering a large area in white and purple.

We scaled Piz Nair by cable car and found the rocky top studded with *Ranunculus glacialis* in beautiful clumps. My previous introduction to this plant was a poor dragged specimen found on a summit at St. Lue, with a reminder of it in a photograph taken in a snowstorm, which all added up to a slide with a rather black outlook. These gorgeous specimens bore no resemblance to that tatty effort and I am glad to say I now have a slide that does justice to this beautiful flower. Here, too, as we walked or slid down the mountain side, we found *Eritrichium nanum*, acres of *Gentiana punctata* and heard our first marmot whistling. The lower slopes were carpeted with *Viola calcarata*, which during the course of our holiday we found had a large colour range from white through yellow to deep purple and every possible

permutation of these colours. *Daphne striata* was another flower which we found widespread, almost as prolific as our heather.

Ten thousand feet up on Diavolezza we explored a very rewarding ridge that produced *Eritrichium* in truly royal splendour ; there was even a patch of a white form, some beautiful clumps of *Androsace alpina*, *Potentilla frigida*, and *Geum reptans* occupied every possible niche in the rocks. Although the ridge was very rewarding in flowers, it was easier not to watch the others negotiating the track ; it looked alright when on it oneself, but a bit hair-raising to watch others clambering over it. We had our lunch in blazing heat, overlooking the glaciers and snowy peaks of Piz Palu and Piz Bernina, enlivened by the attentions of a hungry chough or two, lovely black birds, larger than our thrush, with red legs and yellow beaks.

All who have listened to a lecture about this area have heard of Val Minor. It is a 'must,' so, accompanied by two experts in the party, we set out for Bernina Pass, climbed the gypsum hump at the apex of the two valleys, down Val Minor and home. Before this expedition we thought we knew about soldanellas, some of the primulas and gentians, but with these experts we discovered that all are not what they seem. Soldanellas and primulas hybridize and we learnt to beware of giving more than general names to many of our favourites. I will now have to wait until my *Gentian verna* blooms again before I will be able to tell whether it is *Gentian verna*, and I now know that a primula I have been cherishing as *viscosa* is not. I don't know what cross it is, but it is not *viscosa*.

Our last day at Pontresina was noteworthy for our lazy method of getting up Rosedg valley. We had been intrigued to see very ancient horse-drawn vehicles about the village and discovered they were used to reach the rest hut up this valley, so we had a go. There was nothing ancient about the horses, which were in beautiful condition, and we enjoyed our somewhat rough trip. The valley was full of interest, with the result we forgot our original intention of walking back, and arrived at the rest hut when we should have been home, so we engaged another horse to speed us on our way. One of our party didn't take too kindly to the pace we rattled down the rough road and her comments on harness tied with string, strong though it seemed, were not altogether filled with confidence.

It was with regret we left Pontresina for Chur and Arosa, but the scenery we passed through left us little time for regrets. From Chur to Arosa the least mechanically minded of us had to be impressed by the engineering feats evident on that railway as the train wound itself spirally up, the track crossing and recrossing the narrow valleys and gorges.

In Arosa we had to walk ! There was only one cable car up the Weisshorn and no ski-lifts. However, this mountain produced *Androsace helvetica* for us, the small clumps were better flowered than the larger ones, but it was exciting to see it at all. On the screes in front of the crags we found many of the more usual high alpiners and among them white *Primula farinosa* and white soldanella. Later, in another area where there were acres of grass studded with *Silene acaulis* in

every possible shade of pink, we found a white form of this as well. None of us are particularly addicted to white flowers, but we found these unusual enough to be very interesting.

In a wooded area near the village, after some searching, we found *Cypripedium calceolus*. There were many single ones well worth photographing and a group of six, unfortunately past their best.

The highlight of our stay in Arosa was a trip, accompanied again by our young experts. We were led a long trek up a valley which narrowed towards its head, producing steep screes on either side of a small river. Geologically I believe the screes are quite different, hence the flora is not the same. We spent so much time on the first slope that physical infirmity prevented inspection of the second side to all but one of the experts, who seemed tireless as long as he was out on the hills, although occasionally one could observe a distinct case of wilt about 10 p.m. in the lounge. I will always remember those screes with pleasure, between the boulder streams from the crags were strips of finer material studded with *Androsace alpina* in every possible shade from white to a colour I call 'sweetie pink.' While I belong to the 'no digging' fraternity, I must confess to uprooting androsace and actually walking on it, as it was impossible to cross these strips without doing so. *Geum reptans* was so prolific that the strips looked solid yellow from a distance. There were other flowers but the magnificence of these two makes the memory faulty about them.

It seems to me to be wrong to return to known country for a holiday when there are so many lovely places to see, but should the opportunity occur for me to revisit these two areas, I have a funny feeling that I will be sorely tempted to return.

The Problem of a Seaside Garden

By P. FIRTH

HOW OFTEN one hears, or reads in some gardening journal, the question—“What can I do with a seaside garden?” or—“What can I grow in one?” A little thought will tell us that, even though there are certain factors common to seaside gardens which must first be taken into consideration, the answer is largely a matter for the owner of the garden concerned.

First of all let us decide just what might be regarded as constituting a seaside garden. Just to say that a seaside garden is one by the sea is not quite enough. It may be right on the shore only a yard or two above the high tide mark, with nothing between it and the open sea; but the garden half a mile or a mile inland may easily be almost equally exposed to the harsh, biting winds if there is no form of protection between it and the shore. The difference between them is only one of degree.

One can say with reasonable safety that factors common to all seaside gardens are strong winds, very often salt laden, drift and spray, a light, sandy soil—sometimes thinly covering underlying rock, and, one redeeming feature, an actual temperature which in winter is considerably less severe than it is a few miles inland. This often makes it possible, once we have got a seaside garden to our liking—or plants' liking—to grow in it plants which would not be hardy further inland.

Now, although we must all know how some very attractive wild plants seem to flourish with no great difficulty in the sandy pockets and crevices of rocks and sea cliffs, this is not enough if we want to make a garden and grow a considerable range of plants. Even a rock garden requires some degree of humus in the soil if we are not to limit ourselves to a very narrow range of xerophilous plants.

The first thing that comes to mind in the way of feeding in connection with a seaside garden is of course seaweed, which in such a situation can usually be had in abundance for the gathering. Seaweed rots down very quickly to a very small fraction of its bulk when fresh, but in sufficient quantity it is extremely rich feeding and will produce excellent crops of plants. Combined with other waste organic matters it will build up a very rich garden compost ; in fact, if wanted for a rock garden it may be almost *too* rich.

For humus building without at the same time adding excessively rich feeding, good mediums are leaf-mould (preferably beech or oak), granulated brown peat which is not too acid, or compost prepared from garden and household refuse and other suitable organic materials. It is important that any garden refuse used for composting should be free of disease or pest infection.

Having decided how we are going to cope with the soil situation, the next essential point to be considered must be that of protection from wind—particularly from salt-laden sea winds. And here a decision has to be made by the owner concerned as to whether he regards as most essential the view out to sea or as complete as possible a screen from the sea. Coupled with this question he must decide for himself, or herself, what particular type of plants he wishes to grow—whether low growing rock plants or carpeting plants, or tall growing herbaceous plants and flowers for decoration work.

This problem, of course, is not nearly so difficult if the person concerned is a rock gardener. He can both retain his open view of the sea (that amenity so advertised by seaside landladies) and at the same time grow a remarkably wide range of low-growing rock plants that will be quite content with the minimum of protection provided by a screen of low shrubs or even by irregularities in the ground and some carefully placed stones. If the owner wants to go in for taller plants such as herbaceous, vegetables, and bush fruits, much more careful consideration must be given to sheltering wind-breaks, so before going further I think it is time we looked into the whole matter of protection from wind.

Whether it be protection from any prevailing wind, or from winds off the sea—with which we are more immediately concerned, a wall is in itself one of the least satisfactory attempts at sheltering a garden,

particularly if it is anything more than a very small garden. A wall may seem a perfectly impenetrable wind-break—and so it is, but what happens is that the wind is only deflected up over the wall to swoop down again, hitting the ground with apparently increased force only a few yards back from the base of the wall. The same objection applies to a close fence as applies to a wall.

What is really wanted is not something quite impenetrable, but some sort of screen through which the wind will filter but will be broken down and lose its force in the process. For the outer line of the screen—the first line of defence—one can use a split chestnut fence with interlaced brushwood of some sort (broom, whin, or spruce branches), or a double fence of wire netting with brushwood or something similar packed between the two layers of netting. It is quite surprising how much protection from the wind is given by small-mesh wire netting itself.

Once having got our first line of defence (and be sure it is firm and strong), the next thing to be considered is what form we want our main screen to take. The larger the garden, the taller the screen should be, so that where a large garden might need a screen of trees and tall shrubs, a hedge or staggered rows of more dwarf-growing shrubs might be quite sufficient to give reasonable shelter to a smaller garden. As fewer Club members probably are concerned with extensive areas of ground than with moderate-sized or small gardens, it should be sufficient to give a quick thought to taller screens before going on to more detail regarding screens for small gardens.

For large gardens the outer screen could very well be of Sea Buckthorn (*Hippophae rhamnoides*), Blackthorn (*Prunus spinosissimus*), *Olearia haastii* or *O. avicenniaefolia*, or even our native *Rosa rubiginosa*. Protected by this outer screen one might want a screen of taller trees and for so exposed a site the choice is pretty limited. There can be little doubt that the hardiest of all is the Sycamore, with Corsican and Austrian Pines and the Holm Oak among the best evergreens. Other useful trees are White Beam, Rowan, White Willow, and *Cotoneaster frigida*. This does not complete the list, but it ought to be sufficient meantime, and we can go on to consider more compact shrubs for the smaller gardens.

It may so happen that there is already a wall surrounding the garden, in which case it is a very good thing to plant a line of shrubs, a hedge, inside the wall to grow up and act as a filter above the top of the wall. If the wall is a low one, a very attractive and useful hedge can be made of our native Burnet Rose (*Rosa pimpinellifolia*), of which there are various good forms. *Senecio laxifolius*, *Olearia haastii*, or *Escallonia* varieties can also be used as low screens topping above a low boundary wall. *Potentilla fruticosa* in variety, *Veronica salicifolia*, *Baccharis patagonica*, *Atriplex halimus* and *Fuchsia magellanica* are also moderate-sized shrubs which stand up well to sea winds. Rather larger ones are *Berberis darwinii* and *B. stenophylla*, *Olearia macrodonta*, *Griselinia littoralis* and *Cotoneaster bacillaris*—these all being evergreen.

If we can take it now that from a selection of these we have ob-

tained the necessary shelter—and for rock plants much less is required than for the taller-growing plants—we are ready to consider the construction and layout of the rock garden, and the plants we want to grow in it. Rather than lay it out in long, smooth sweeps which are liable to be raked in winter by what wind filters through the screen, it is more desirable to have a broken, undulating form of layout so that while of necessity there may be various more exposed parts, there will also be many sheltered bays and crannies.

We agreed earlier that most seaside gardens being very sandy there was usually an abundance, often an excess, of natural drainage, but for those who may chance to have a heavy soil, even though near the sea, drainage should be provided and chips and coarse grit, along with a certain amount of humus, added to the soil.

It can fairly safely be said that nearly all greyleaved or hairy-leaved plants—the hairiness or wooliness being a sign of drought resistance—are likely to do on the more exposed parts, and so are fleshy-leaved plants like *Sedum*, *Cotyledon*, *Crassula*, and *Sempervivum*, of which there are many species and varieties from which to choose. Among hairy-leaved plants there come to mind such things as *Alyssum saxatile*, *Antennaria dioica*, *Raoulia* spp., *Achillea*, *Anthemis*, *Aubrieta*, *Artemisia*, *Erinus alpinus*, *Helichrysum* spp., *Convolvulus cneorum*, *Crepis incana*, *Celmisia*, and *Onosma* spp.

While not qualifying for the hairy- or fleshy-leaved group, there are other plants which are adapted to withstand dry conditions. Some, like the sea pinks, have narrow, thick-skinned leaves; others, like the *Dianthus*, *Aethionema*, *Oxalis enneaphylla*, and many of the saxifrages, have a protective covering or a waxy film on their leaf surface that prevents too much loss of moisture through their pores, while some—like *Acantholimon glumaceum*, *Phlox douglasii*, *P. subulata*, *Gypsophila repens*—have attained the same end, moisture preservation, by the reduction of their leaves to narrow needle-like structures, or to microscopic size: here *Raoulia* comes to mind again.

In addition to all the above mentioned there are many species of *Campanula*, *Geranium*, *Potentilla*, and *Iberis* which will do well, and *Douglasia vitaliana* and *D. laevigata* also come to mind along with *Frankenia laevis* and *F. thymifolia*. Added to these are a whole host of dwarf, low-growing shrubs and sub-shrubs which will do well in the dry, sandy conditions of a seaside garden. Among the many dwarf brooms there are such plants as *Cytisus ardoinii*, *C. decumbens*, *C. procumbens*, *C. glabrescens*, *C. demissus*, *Genista pilosa*, *G. delphinensis*, *G. dalmatica*, *G. sagittalis*, *G. villarsii*. The rock-roses, or helianthemums, can be had in a wide range of colour varieties and they quickly spread to cover an area if so desired. There are several fine dwarf hypericums and some dwarf veronicas which can be relied upon to do well.

When one weighs the advantages of a seaside garden against the disadvantages one must reach the conclusion that there are after all compensations—except for the fact that human nature seems to be such that we all want to grow those plants which are best suited to conditions the very opposite to what we can usually provide.

Greece — The Pindus Mountains and Mt. Olympus, 1963

By C. E. DAVIDSON

31st May. After crossing Europe by train, J. and I arrived at Larissa yesterday and are now setting out for Metsovo, a village in the heart of the Pindus Mts. The journey cannot be made in one day, so we stop off at Kalambaka to visit the famous Meteores—a group of spectacular rock pinnacles, on many of which are perched monasteries or nunneries.

1st June. Visit two of the monasteries, which date back to the XIVth century, and find them most interesting. Until comparatively recently ascent had to be made up the vertical rocks by ladders, but these have been replaced by stone staircases for the convenience of tourists, who come from all parts of the globe. In the ravines between the Meteores are beautiful shrubs and innumerable flowers, many unknown to us. It is to be deplored that there is no portable "Flora of Greece" to help the plant hunter. *Crepis incana* is abundant, mingling with a brilliant blue *Nigella*. We note *Cistus creticus*, which has enormous flowers of rose-mauve (not magenta !), and *Helianthemum guttatum*, with chocolate-centered, pale yellow petals. After lunch, board the bus for Metsovo, and sit beside two American girls from Athens, who are also going there. The road-side is brilliant with meadow flowers—*Salvia*, *Verbascum*, *Anchusa*, Poppies of a blindingly intense red, and, of course, innumerable species of the ubiquitous thistle. Reflect that Greece, not Scotland, is really the land of the thistle. One we particularly admire—a tall plant with vivid silver leaves and flowers of deep red. In the foothills of the Pindus, sheets of *Crepis incana* again appear, but vanish for good some 2000 ft. higher. As we climb into the mountains, the road, which is under reconstruction, becomes appalling, and we proceed at a very tedious pace. At the top of the pass (6000 ft., but still below the tree line) we see quantities of what appears to be a creamy-white *Alyssum* with silver foliage. At last the bus decants us, but alas ! some distance from Metsovo—a red-roofed village on a steep hillside. Groan at thought of humping luggage, but are soon surrounded by a swarm of small boys, who fight to carry it. Have no idea where to stay, but this too is promptly settled for us. A small man suddenly darts out of a cafe, whisks us down to a small white inn, and, with a flourish, indicates three bedrooms to let. Although primitive, everything is spotlessly clean. We take a room, and are fortunate in having the American girls, who speak Greek, under the same roof. Walk along the cobbled street in search of food ; the air feels remarkably chilly after the heat of the plains. Eat in 'Greek' restaurant, where we are offered various stews and vegetable dishes—all swimming in olive oil !

2nd June. Do not feel at all well, but J. seems to have survived excess of oil. Decide that Turkish food is probably more suited to British

stomachs—i.e. kebab, and lamb roasted whole on a spit. This cooked in the open over a brazier, entails two hours of turning a handle, usually performed unwillingly by a small boy. We are very struck by the friendliness of the villagers, who all salute us and wish to know our nationality. Many of the women wear native dress. Spend the day searching the slopes around the village. Several *Muscari* spp. are passing out of flower; a tall one with greenish-purple flowers, and a curious tassel at the top of the spike, interests us (*M. muscosum*). A *Campanula*, 1 ft. high (? *spruneriana*), and a dwarf *Euphorbia* are growing everywhere. We also find an attractive dwarf *Cytisus*, which has flowers of yellow and orange; an *Ornithogalum* two or three inches high, and an interesting vetch with grassy foliage and brick-red flowers. On the lower slopes are several *Orchis*, including *O. laxiflora* and *O. incarnata*. On our return we find the village crowded. The women are parading in beautiful dresses and richly embroidered aprons. The American girls tell us there is a fiesta in progress, which will last till tomorrow night. We all repair to a cafe and watch youths dancing. This is acrobatic rather than graceful, and accompanied by weird Greek music.

3rd June. Explore higher country and see several interesting plants which we are not able to identify. Again feel exasperated by lack of a reference book. There is a minute *Viola* growing on rocks, flowers yellow and cream, and, under pines, are fine plants of *Cyclamen neapolitanum*. Climb still higher to examine wild country to the north and realise with dismay that it would take at least two days—and hire of a mule—to reach the nearest of the high peaks. Spend afternoon watching street scene, which fascinates us. Shepherds have come in from the hills and sit in the village square dressed in black capes, short black skirts and long white stockings; strings of mules move up and down; a party of Albanians ride in from the frontier; *Papas* (parish priests) walk about and talk to the people. They wear tall black hats, black beards, and their long hair is pinned up in a 'bun.' We are impressed by the high standard of good looks, especially amongst the shepherds. Later there is dancing in the square, the women joining in this time.

4th June. Spend pleasant day in the high meadows above *Metsovo*, which are white with *Narcissus radiiflorus*. Peasant women are gathering large basketsful, but seem to make no impression at all on the sheet of white. We find a *Colchicum*, but fail to find *Tulipa australis*, which is reported from these meadows. On returning to the village we are stopped by a tall, dark man, who introduces himself as *Apostoli*. He looks like a brigand, but turns out to be a splendid fellow. In the flood of Greek which he pours out, cannot understand a word, but *J.* is more quick-witted and gathers that he has been guide to *Dr. Goulimy*, the Greek botanist, and is interested in flowers himself; he has heard that we are botanists (sic), and would like to act as guide to us. He invites us to his house and shows us a large collection of pressed flowers, but labelled with the Greek names! His wife offers

us glasses of welcome, ice-cold water and delicious Turkish Delight. Very interested to see interior of Greek village house. We sit in a large livingroom-cum-bedroom, a considerable part of the floor space being taken up by a row of mattresses covered with hand-woven rugs. Apparently the family all sleep cosily together. As we now have many acquaintances, we take Apostoli to the cafe of Stephanos, where we are certain to find Janis, who speaks English. Janis interpreting, it is arranged that Apostoli will guide us tomorrow to a mountain some distance south of Metsovo (Peristeri, 8000 ft.), and he guarantees to get us up to the snow-line and back in a day.

5th June. Set off at 6.30 a.m. The stony path drops steeply for over a thousand feet (oh, these ravines !). Cross river and start long climb up. Stop for lunch in a lovely green valley, and shortly after reach more alpine country. Encrusted saxifrages are growing on rocks beside a waterfall. At the snow-line there are, surprisingly, large clumps of an Anchusa, resembling *A. italica*. Here also are sheets of *Scilla bifolia*, with *Crocus sieberi* popping up amongst them—a lovely sight. *Helleborus cyclophyllus* is actually pushing up through the snow. On scree we find a new plant, but are unable to identify it. It is a Crucifer with heads of sweetly scented rose-lilac flowers, and is completely prostrate. We are now within 1000 ft. of the summit, and there are promising cliffs ahead. Apostoli tells us that Dr. Goulimy explored these cliffs but that they had to sleep out. We have no means of doing so, and reluctantly turn back, taking the opposite side of the valley. Here we are attacked by three sheep dogs. Have been warned of this; dogs are trained to protect flocks from brigands and wolves, and are very savage. Apostoli eventually succeeds in driving them off with a volley of stones. We have a long slog over rough ground, and see little of botanical interest, but for the first time hear the piping of a goat-herd high in the mountain—an enchanting sound. Descending at last into the ravine, we find no less than three species of *Ophrys*, including *O. apifera*; also a lovely little *Iris* (5 ins., deep purple flowers).

6th June. Our last day at Metsovo. Apostoli has been out on the hills and brings us two plants of a *Lilium* (probably *L. jankae*); also *Orchis pallens*, a lovely thing with pale yellow flowers. Hope we can get these home alive. Quite a farewell party develops chez Stephanos. Janis, Apostoli and several others appear. We sit round a table drinking local wine and eating roast lamb in our fingers—a brigandish gang, all enjoying ourselves enormously. Reflect that J. and I look more brigandish than anyone, and wonder what some of our friends at home would think of the scene. Janis is kept busy interpreting. We learn that most of the men present have seen wolves, bears and wild boars in the district. Apostoli asks if he may come to Mt. Olympus with us as guide. Very sorry to say no, as we have become attached to him. Two wild, gipsy-like men come in with fiddle and guitar, and there is a demonstration of 'handkerchief' dancing. Mountain village cafes in Greece are always in a ramshackle state, and this one is worse than most. Floor obviously unsound, and we feel somewhat appre-

hensive as the room is built over a ravine, with a drop of hundreds of feet directly below. Miraculously, floor holds, and we break up at a late hour.

7th June. Get up at 5 a.m. to catch bus for Larissa. Seen off by our landlord and the "brigands." Stephanos presents J. with a Macedonian shepherd's crook. Very sorry to leave. According to Dr. Goulimy, the district has been little explored botanically, and might repay a much more thorough search than we were able to make, but we have thoroughly enjoyed our stay in this charming village. As the bus crawls over the pass we get a last glimpse of it, now far below, and to the north a wonderful view of the giant peaks of the Pindus.

9th June. Arrive at Litochoron during p.m. This village (500 ft.) is on the lowest foothills of the huge massif of Olympus, and only about four miles from the Aegean Sea. There is a pleasant little inn, where we are cordially welcomed by the proprietrix, who introduces herself as Sophia. Beds, as usual, are lamentably hard, but the room is delightful and has a balcony facing north, which will be useful for plants. There is also running water, and one tap (c.) does not dismay us. At the hotel in Larissa could never detect any difference in temperature between h. and c. ! We are invited to drink coffee with Sophia and her family, and afterwards go out to make enquiries about a guide for Mt. Olympus. From the village square there is a magnificent view of the highest peaks of the mountain, some ten miles distant. Talk to a young Greek soldier who speaks a little English and learn that Mr. Zolatus, the guide, has gone up to the refuge, but that there is a muleteer, Niko, sitting at the next table, who would be glad to take us up. Do not commit ourselves.

10th June. Spend morning on slopes above Litochoron. It is exceedingly hot and vegetation already looks scorched. We find one plant of *Gladiolus byzantinus* (15 ins. high, bright red flowers), also, in a shady ravine, a beautiful Orchis, which we are unable to identify. There are many gaily coloured butterflies, all unfamiliar except the 'Peacock,' and a weird insect with black and white wings and long, black and white streamers. It would appear that, in Greece, insects as well as humans favour black and white garb ! *Jankaia heldreichii* is said to grow hereabouts, but we did not find it, and feel sceptical, as we are only 700 ft. above sea level. Later, on making enquiries about Niko, and discovering that he is guide No. 2 and works for Mr. Zolatus, look for the Greek soldier and find him at the same table on the same cafe terrace. We tell him we would like to speak to Niko. It turns out that Niko is again sitting at the next table—strange coincidence ! He is introduced and we both take to him on sight—a small wiry man with a clear tanned complexion. Niko agrees to take us up to the refuge the next day—a ten hours' journey—and to return with us two days later. He announces that he will be at the inn with his two mules at 5 a.m. Go to bed feeling very excited.

11th June. Sophia appears with coffee at 5 a.m. (British hotels please note). She tells us Niko is already waiting. Swallow coffee quickly

and rush down to inspect mules. They have no bridles or stirrups, and 'saddles' are composed largely of wooden spars from which baggage is hung. Decide to walk. Route at first takes us up very steep, stony mountainside. Cannot keep up with walking pace of mules, which we judge to be 4-5 m.p.h., so ride for a spell and find it far from comfortable. Mules take you where they will, leaping up and down rock steps, slithering over scree, and walking on extreme edge of narrow paths. Soon I realise that mules are very sure-footed, and there is no need for apprehension. Vegetation is still sub-alpine—*Euphorbia*, *Verbasum*, many shrubs, and, new to us, *Dracunculus vulgaris*, the Dragon Arum. This is a spectacular plant, with spotted stem and red spathe. After about two hours' climb reach the springs of Savros, where we stop for a drink and a rest. For the next five or six miles the path winds through woods and loses rather than gains height. We walk, and enjoy every minute of it, noting many lovely woodland plants, including *Cephalanthera alba*, *Ophrys apifera*, *O. uciflora* (the rare Hornet Orchis), *Orchis pyramidalis* and *Limodorum abortivum*, the tallest of the Orchis family. Emerging into more open ground, the path drops down to a rushing stream, where we stop for lunch. On resuming our journey, soon begin to see *Jankaea*. It grows on boulders and cliffs by the way-side, and is in full flower. Usually it favours shade, but not invariably. We agree that we have never seen anything more beautiful. High on a huge cliff we see dots of deep pink. Can it be . . . ? Binoculars, quick! . . . Yes, it is . . . *Viola delphinantha*! We hunt about but can find no other plants of this fabulous *Viola*, and decide to make a more thorough search on the return journey. The path continues to wind amongst *Jankaea*-decorated rocks. *Convallaria majalis* grows, surprisingly, in hot, dry places, and here, for the first time, we see the lovely *Fritillaria messanensis*, which has drooping flowers of pale green and mahogany brown. Niko, however, is urging us on and, realising that we have still over 4000 ft. to climb, concentrate on doing so. These last 4000 ft. are at an implacably steep angle and require a great output of energy. Some distance below the refuge we come to the first snow slide. Niko indicates that the mules cannot cross, so they are unloaded and turned loose. The refuge, when we at last pant up to it in an exhausted state, is surrounded by cold mist, but we are given a warm welcome by Mr. Zolatus. In the dormitory, which has thirty bunks, a German family is already installed. Have hot supper in the guide's room, where, thank heaven, a stove has been lit, and go straight to bed while still warm. Blankets and mattresses are inevitably very damp, and undressing seems out of the question. Peep at Germans and see they have all changed into thin pyjamas—intrepid creatures! Sleep remarkably well.

12th June. Germans leave early for the summit with Mr. Zolatus, who, we learn, is a climber of repute. He has asked us to join the party, but we have explained that we are dedicated to Flora. Gather he thinks us a little mad. Niko remains to look after us. He comes into

the dormitory and indicates that he would like to borrow my hair brush—why mine? Suggest that J.'s would be more suitable. J. gives me a baleful look but produces brush. Wash basins are in kitchen, and on repairing there find Niko making coffee. Fear that he may now ask for loan of tooth brush, and escape as quickly as possible. The sun is shining and from the terrace of the refuge there is a glorious view across the Aegean to the mountains of the Chalcidice peninsula. One far peak we think may be Mt. Athos. Spend the day scrambling about the steep slopes above and below the refuge. It is a late season, but in any case imagine that at this height (7100 ft.) July or later would be a better time. However, we find many interesting plants in bloom. *Saxifraga scardica* is abundant, a number having pink-tinged as well as white flowers. A handsome *Sempervivum* is growing on rocks near a large-flowered *Aubrieta* (*A. (?) intermedia*). Our bag also includes a Saxifrage of the Engleria section (*S. (?) thessalica*); an elegant *Viola* with flowers of deep violet; a *Draba* (*scardica* ?); *Iberis sempervirens*; a lovely species of *Myosotis*; and an attractive small prostrate plant with silver-grey, rather succulent foliage and heads of bright pink flowers. Not in flower, we note a neat *Hypericum* (? *olympicum*), and, just appearing in crevices, the leaves of a *Campanula*, which we hope may be *C. oreadum*. Of *Viola delphinantha* there is no trace, and it is useless to look for *Gentiana pontica*, which grows at a higher altitude and must still be under snow.

13th June. Start on homeward journey and find mules exactly where we left them—wonderful animals! We arrange to meet Niko down by the stream at lunch time, and he goes ahead. The walk down is leisurely and most enjoyable, with many stops for photography. We manage to dig up a few bulbs of *Fritillaria messanensis*, but this takes a long time, as they are inches down in hard, stony ground. About 2000 ft. below the refuge we come across a new plant. It is both curious and beautiful. The leaves are long and narrow, and the flowers, in spike formation and the size of a shilling, have reflexed petals of buff, mauve or dusty pink. *Jankaea* proves hard to collect, as the roots are usually deep in crevices. Search again for *Viola delphinantha*, and J. is successful in finding it in a fairly accessible place some distance from the path. The fragile stems are clothed with tiny, narrow leaves, not in the least like those of a *Viola*, and the flower, of a deep, almost pure pink, is exquisitely balanced and has long slender spurs. It is undoubtedly a beauty. We are nearly two hours late for lunch, but find Niko quite unperturbed. He has by now become accustomed to long waits, and employs the time in cutting timber. At last have to tear ourselves away from this Arcadian spot, as it is five hours' march from Litorchoron; but we have made up our minds that we must return once more. Mount mules meekly and cover the ground in good time. When approaching Savros, my poor mule, maddened by horse-flies, becomes very intractable. The ever-watchful Niko heads her off and soothes her down. Cannot help wondering, however, how long one could have remained in the saddle on this rough ground if she had bolted.

15th June. Once more take the Olympic path, this time alone. Encounter Niko and the mules at Savros with a Greek party. We are an hour late in reaching the stream, as we are forced to take shelter in the woods from deluges of rain—the only rain we have had in Greece ! The sun comes out again and we have a delightful time watching the numerous birds and photographing and collecting plants. It takes over an hour to extract four small plants of *Viola delphinantha* from the hard limestone in which they elect to live. A pale lilac *Pinguicula* is growing on damp cliffs, greatly enhanced by a background of dark green moss. Nearby are plants of an *Aquilegia* which is new to us, and very beautiful. It is 10-12 inches in height and has flowers of white and sky-blue. We also discover a *Linum* (yellow) and, festooning rocks, quantities of *Onosma echioides*. When we arrive back at Litochoron, rather tired and foot-sore, and drop into chairs on George's terrace for a much-needed drink, he tells us he has some new fish for our supper. Have often eaten fish prepared by 'Mrs. George,' which is always fresh from the Aegean, and quite delicious. Spend the rest of the evening with Mr. Zolatus, who has come down from the refuge, and his pretty German wife.

17th June. Leave for Katerini, where we are to board the train for the long journey to the Hook. Sophia gives me two smacking kisses and looks as if she would also like to kiss J., but is too shy. We are given a rousing Greek send-off. Have enjoyed every minute of our visit to this beautiful country, with its incredibly rich flora. Except in large towns, living conditions are undeniably primitive, but the lack of hot water is more than made up for by the warm friendliness of the people.

“He who cannot love the Greeks cannot love anything.”

Some Effects of Winter 1962-63

By R. J. R. MEASHAM

WRITING a year ago in the *Journal* (No. 31, p. 113) I found fault with the climate of South Devon as uncongenial for alpine plants, little expecting that the ensuing winter would contradict all my assertions. It would be tedious to describe its onset and progress in detail, but it will give a clear enough picture of the conditions experienced to say that the soil was frost-bound, but for a break of three days, for 9½ weeks from December 22nd ; and that snow lay continually for just over six weeks from December 30th. For most of that time the average depth on the garden was about one foot, with deeper drifts in places. The lowest temperature recorded was 16°F. on January 12th and the average minimum air temperature for January was 24.8°F. I hope it will be of some interest if I describe the effects of such unusual conditions on a miscellaneous collection of rock garden plants in the open.

There were some losses. For the second time in 12 years every plant of *Linum monogynum* was killed. It stood 22° the previous winter, but probably that is near its limit. It is now (August) flowering again from seed, which should always be saved. *Lithospermum rosmarinifolium*, planted in a low retaining wall, was killed, but might have survived if the frost had not returned, after the snow which almost completely covered the plant had thawed out. The lower shoots then looked green and carried plump flowerbuds. An unexpected loss was *Myrtus nummularia*, which had never shown signs of damage by frost since it was planted in 1952. It may have been partially smothered, for the thaw revealed that it had been covered under the snow with a sodden mass of dead leaves. Something similar happened to *Hypericum reptans*, growing in a wall with a projecting ledge below it, where it had made a thick clump with shoots spreading in all directions. All of that was embedded at the base in a mass of decaying vegetation, and before long went the way of the rest. The ledge, meant to be an insurance against drought, was probably fatal. I had previously lost plants of this species during the mild but extremely wet winter of 1960-61.

These were the only losses that I can attribute to the weather of last winter, and they were more than compensated for by the exceptional vigour and floriferousness of the general run of my rock garden's denizens. There are three species that call for special notice. First, *Veronica fruticans (saxatilis)*. I used to grow it at North Berwick, where it produced very few flowers. Here it has produced abundance of shoots and leaves, but never more than one or two shoots have flowered. This year two plants, in different situations, produced flowering spikes from practically every shoot—a sight well worth waiting 12 years for! On the larger plant, about 15 inches across, there must have been some 120 spikes of the bright cobalt flowers centred with white and crimson. Does it behave like this as a normal thing in its Scottish haunts (to me unknown)? Next, *Aethionema oppositifolium*. (The name calls for a digression. I bought my plant as *Eunomia oppositifolia*, which Farrer gives as a synonym for *A. oppositifolium*, hoping it would turn out to be the plant which used to grow as *A. oppositifolium* in the original scree bed at the Edinburgh R.B.G. near the stepping-stones; and so it has. But according to the R.H.S. Dictionary *Eunomia oppositifolia* is not a ghost name, but a different plant, with white flowers, and only half-hairy, and Farrer was mistaken.) For ten years it has grown happily enough in a boiler-ash scree, and more recently, in a wall as well, and its fat blue-grey leaves are always pleasant to see. Every year it has produced numerous clusters of flower-buds, but until this year they have always vanished without opening. This year they all opened, and proved to be the right colour, a rather washy lilac, but as they were among the earliest flowers to open (March 26th, the equivalent of early February in a normal year) they had few competitors.

Thirdly, there was *Soldanella pindicola* (a division of a plant that stayed in Scotland) which since 1957 has lived in pots, and flowered

only sparsely, or not at all. In the autumn of 1962 I split it up, and put three divisions in a small bed made up for alpine primulas, and later covered them with glass jars (to keep off slugs) and in due course the snow covered the jars. In April they produced between them ten flowering stems, taller and with more flowers on the stem than had ever come from the potted plant.

I must not go on with this chat, but cannot refrain from mentioning *Douglasia vitaliana* var. *praetutina*, *Dianthus neglectus*, *Potentilla nitida* (with 70 flowers on a plant 18 ins. × 15 ins.) and *Saxifraga x burnatii* as outstanding: on the other hand some plants, notably my few primulas of the auricula section, behaved just as usual. Certainly alpine plants were not alone in benefitting from the long winter. The growth and flowering of hardy trees and shrubs (including all the heaths) has been almost uniformly luxuriant, and, here at any rate, fruit crops have been much above average. The great advantage of snow in our gardens is that, unlike most of the rain that falls, it does not run away, and I incline to think that while the long winter gives the true alpins a much needed rest, the garden as a whole has thoroughly enjoyed its most refreshing drink of the century.

Dwarf Conifers Not Bonzais

By R. F. WATSON

I HAVE READ with great interest the views expressed by those members who took part in the discussion on the subject of "Most dwarf conifers being more suitable for Bonzai trees than for the rock garden." Being a lover and collector of these little trees, I would like to add my comments and views on the subject. Naturally, I defend and advocate their use as rock garden furnishings, but with reservations. The term "dwarf" is relative, and very loosely applied, especially in catalogues. It covers a wide range of plants, which would be better and more truthfully described as "slow growing, as distinct from the real pygmy forms," which would not outgrow a really small rock garden, or even a miniature garden in many years. It is a question of being sure when purchasing, what will be the ultimate size of your specimen in a given number of years. One wants to be spared Mr. Stewart Mitchell's point of having to tear down a large part of the rockery to take out a quite innocent conifer which has only offended by growing larger than the owner intended or expected it to. This could have been avoided had the owner known more about what he was planting in the first place. I write this with feeling. Before I gained some knowledge of dwarf conifers by being interested in making a collection of them. I have atoned for mistakes made by doing just that.

Mr. Barnes, in his opening remarks, referred to the term "dwarf conifers" as being a ragbag of odds and ends of plant life. Now I

believe that in days gone by the ragbag was a depository for lots of odds and ends of materials, and was occasionally turned out, when useful and decorative objects were recreated from its contents, to the great satisfaction of the owner. With our "ragbag" of dwarf conifers, which contains a very miscellaneous assortment of plants of all sorts of sizes, shapes and colours, much can be done to enhance the appearance of the rock garden. This was the point made by Mrs. J. L. Neilson. It is the gospel of rock gardening that we must try to achieve a natural effect, though realizing that no-one can copy the grandeur of an alpine scene in the garden.

My point is that if it is right to create as natural an effect as our conditions allow, then dwarf conifers must be a part of our planting. I well remember a high grassy slope in the Austrian Tyrol which was thickly strewn with boulders and rocks of every conceivable size and shape, the whole area thickly carpeted with vivid bright alpine flowers, and almost every rock adorned with one or more specimens of *Picea abies*, *Pinus montana*, or *Juniperus sabina*, all of very dwarf proportions and of various shapes from prostrate mats to globular and conical outlines. The general effect was very beautiful and gave the impression that here was what a rock garden should look like in effect. The "dwarfed" conifers which seemed to bring the scene into complete scale relation were, of course, climatic states, reduced by climate and environment to dwarf stature : if it had been possible to move them from their age-old positions they would soon have reached normal proportions in our softer climate. As all gardening is artificial, as pointed out by Mr. Reginald Kaye, then it is quite legitimate to use any plant material to achieve our end and for the purpose of trying somewhat to imitate a piece of alpine scenery, however poor our copy may be. These true dwarf conifers which are under discussion are just what we want to complete the picture. They give the effect of permanency which is such a feature of the timeless mountains. I do not suggest that anyone could build a miniature "Jungfrau" or "Triglav" in his garden ; but a rock strewn outcrop could be achieved such as I have described.

Mr. W. V. Miller mentioned that identification of dwarf conifers is a problem difficult to solve, and this is definitely so. One only has to visit a show to see the obviously absurd names attached to the specimens in many cases. I have often observed that even the generic names are incorrect, having seen *Chamaecyparis obtusa* forms labelled as *Pinus* and other such "howlers." The only reliable book on the subject at present is Mr. Murray Hornibrook's "Dwarf and Slow-growing Conifers," which is an authoritative work as far as it goes, but is now rather out of date, and it is good news that my friend, M. H. Welch of Devizes, is undertaking the revision of this work and bringing it up to date, with full details of ultimate heights, spreads, and growth rates for the guidance of planters of these little trees.

One important point arising out of the mention of growth rate is the difference of growth of grafted plants and of those on their own

roots. It is quite astonishing what a difference this makes, as a real pygmy form can grow completely out of character if grafted. It is a pity that this method of propagation is used, except where absolutely necessary, but the nurserymen's point must be taken into consideration. Dwarf conifers propagated from cuttings make slow growth and do not make a saleable plant very quickly, and he has of necessity to ask what the general public considers a very high price through lack of appreciation of what is involved in producing them. But they are by far the better proposition in the long run. I am very interested in Mr. W. Buchanan's list of tree dwarfs, one of which, *Pinus lapponica*, I know nothing about. With regard to *Abies koriensis*, usually found under the name *Abies koreana*. This is not a dwarf form, but a striking slow-growing conifer which bears its beautiful deep blue cones when only about two feet tall, and it is a plant that I would consider worth while going to some trouble to remove when it got too big, as it is really worth it. To add to Mr. Buchanan's list of dwarf conifers suitable for the smallest rock garden, may I suggest the following which I have found quite satisfactory.

Cryptomeria japonica vilmoriniana.

Chamaecyparis obtusa caespitosa.

Chamaecyparis obtusa juniperoides.

Chamaecyparis obtusa intermedia.

Chamaecyparis pisifera nana

Chamaecyparis pisifera nana compacta variegata.

Picea abies pygmaea.

Picea abies 'Gregoryana.'

Picea abies humilis.

Pinus sylvestris 'Beauvronensis.'

Taxus baccata nutans.

Taxus baccata pygmaea.

Taxus baccata decora.

Thuja plicata 'Rogersii.'

There are many others, but these have proved quite reliable, and the tiny *Ch. obtusa* forms would not outgrow a trough garden in many years. They also make interesting specimens for pot culture if desired. Any one of these could be planted with confidence by the owner of the smallest rock garden. They are real pygmy forms which I have on my own small rock garden, where they have enhanced the planting scheme for many years.

In conclusion I would just say that the collecting of as many plants of these dwarf forms of various conifers over a number of years has been a fascinating pursuit. I cannot agree with Mr. Barnes when he questions the justification of perpetuating these forms. Great variation there is among them and some are doubtless more of botanical interest than decorative garden plants. But I cannot think they are diseased, considering the healthy growth they make over such a long period of years, and I feel that my conscience is none the worse because of advocating the planting of dwarf conifers.

Notes from a North-West Garden

By C. M. CREWDSON

NOW IN the middle of July I can really tell what shrubs and plants have been killed or damaged by the last severe winter.

Various *Daphnes* were either killed or harmed, though a large plant of *Daphne retusa* was completely unhurt though it is planted in an exposed position getting all the north-east winds.

Daphne collina and *Daphne fioniana* looked completely dead and only recently have they shown a little green at their base. *Daphne blagayana* is still alive, though it looked very sorry for itself, with straggling bare branches.

Chaenomeles simonii was completely killed and I shall miss its brilliant scarlet-red flowers next Spring. *Veronica hulkeana*, on the other hand, was quite unharmed and flowered well; this seems to me rather strange, as I always understood it to be reputed as tender, and my plant is in rather an exposed position, getting all the south-west winds, and some well-rooted cuttings in pots in a frame were all killed.

Genista lydia, which at one time looked brown and dead, has recovered marvellously, though it has not been the mass of yellow it usually is.

Turning to the rock garden: lavenders, helianthemums and lithospermums were a sorry sight in early March, but they have made a good recovery, though there has been a good deal of dead wood to cut out.

A bright side to the early Spring was the wonderful mass of colour from all daffodils and crocuses, and in the grass below the rock garden *Crocus tommasinianus* made a veritable sheet of pale mauve.

Cassiopes in the peat wall flowered well and were completely unharmed by the severe winter, and all primulas of the Petiolares section seemed to enjoy the snow and cold, though I find that *P. scapeosa* seems more sensitive to our damp climate than some of the others.

In the early summer the garden was full of colour, and a group of meconopses grown from S.S.W. seed collecting at last flowered and were very effective; their pale yellow flowers looked beautiful with a background of dark yew. I almost regret that these have now flowered, as their winter rosettes were so beautiful, and now, being monocarpic, I shall have to wait some years for their "progeny" to flower!

Other species of meconopses have also been good, some really brilliant (almost scarlet), flowers from S.S.W. plants, my own white hybrid and some pink ones being exceptionally good, and there was a wonderful amount of flowers on *M. quintuplinervia* and *M. cookei*.

Ramonda, too, have been good in the walls, and though I have had a good many losses in the troughs and sinks, the damage on the whole has been slight.

The little *Albuca* sp. from Basutoland is now in flower and is interesting with its crocus-like flowers and sweet scent.

Primulas have flowered well ; the one I love best from the Sikkim-ensis section is *P. chumbiensis* (L. & S.). This has pale, primrose-coloured flowers with crimson stalks, and though it looks so fragile and delicate, must be hardier than it looks, for it survived the winter and flowered well. I believe this primula was found on wet river banks, but mine have done well below the peat wall facing north-west.

Review of the Year

By THE PRESIDENT

SO WE COME to the end of another year of the Club's activities, and an extraordinary one at that. After intensive soaking in August and September last year, winter began a month or so early with very heavy snow at the end of November—and went on as though it would never stop. Snow, severe frost, more snow, and so on, month after month as though it would never end—for the first time in nine years the Penicuik Show had to be postponed for a fortnight as everything in Midlothian and much of Edinburgh was still deep under snow. Most of us, I think, had the gravest doubts as to what would happen to our Shows—and I fancy few of us ever dreamed that the final effect would be to produce a higher standard than ever at all of them. Whatever we may have thought of the weather, the plants had quite obviously thrived on it—even if we did lose a few of the more "doubtful" ones.

As the previous Show Secretary for Perth had to resign owing to pressure of work and no successor could be found, the Show was run "from Headquarters" and, thanks to Mr. Elder and an enthusiastic group of helpers which he recruited in Perthshire and Angus, the Show, which was held experimentally at Scone, was an enormous success and has led to an arousal of interest in this group, which has pleased everyone. I heard, incidentally, that the success and standard of this Show had been "going the rounds" in gardening circles in London, and that the same applied to the excellent group of plants put up before the Joint Award Committee at Scone.

After wobbling about for some months, sometimes up, sometimes down, our membership has stabilised and has once more started to rise steadily again. Our probable loss on raising the subscription was assessed at from 25% to 33% or even more, but I am glad to report that, when all Members who were in arrears, who resigned and so on, were written off, our maximum loss was about 20%, which seems to be about the figure that a number of other organisations have found in similar circumstances. It is particularly pleasing that our overseas membership has not fallen—in fact, it shows a most satisfactory and steady rise.

At the time of writing we still have one Club Show, North Berwick, remaining on our 1963 calendar, and I would appeal to as many competitors as possible to support this Show which was, after all, started to provide a Show where the very lovely late summer and autumn plants could be seen in all their beauty. Entries for this Show have been down a bit in the last few years and I would like to see this remedied.

After that the Edinburgh and Midlothian Group is trying the experiment of a later Gentian Show—on a small scale—and then comes the Peebles Week-end, and after that our round of winter activities begin anew. May I wish all Groups the very best success in their winter meetings, for after all these are the source of supply of the majority of new Members who join the Club and *remain* Members. Many join in a moment of enthusiasm induced by a particularly good Show, and then their interest wanes somewhat and they do not renew their subscription, but those who are brought along to one of the winter meetings by a friend who is a Member seem to be those who stay with us. Do, then, please bring any friends who you think may be interested to the winter meetings. They may join, and some may later become exhibitors, and we do need more and still more exhibitors to keep our Shows up to their present standard (or to raise them even higher), for the Shows, after all, are our “shop window” and keep our activities in the public eye.

H. T.

Correspondence

Extract from a letter to P.P., Major-General Murray-Lyon, by a Club member from Seattle, Mrs. Rodney Allan.

THE CONFERENCE programs were a tremendous success ; it is with some regret that the project is now behind me, as I enjoyed it tremendously. After nearly two months of Rock Garden Conference, research on plants and places, reading and re-reading the Conference Report, and having the slides right here to look at at my leisure, I almost feel as if I had been there. I don't remember if I mentioned it in my note, but in answer to your request I will write it up for the *S.R.G.C. Journal*. I hope there is no hurry for it, as I must get caught up with things here first.

Last Sunday we took our first trip of the season to the mountains and thought you might like to hear about it. Here in Seattle we are very lucky in that we can get to the mountains within several hours' drive, which enables us to take many Sunday trips without the bother of taking all the camping equipment, which seems hardly worthwhile for only one night's camping. I get up about 4 a.m. (or perhaps an hour later if I can't drag myself out of bed !), pack food and equipment for the day, then call the rest of the family. We put sleeping bags in

the back of the station wagon for the children, and they are intrigued with starting out in the dark. It is lovely driving at that time in the morning, watching it get lighter, and meeting the sun coming up as we drive east, up over Snoqualamie Pass.

The destination this time was the eastern slope of the Cascades, up the Teanaway River. I wanted to get up to DeRoux at the end of the road to find at long last *Douglasia* in the wild. However, it is a late season and we had to stop short of our destination because of snow on the road, at Beverly Creek Camp ground. Within three hours of the time we left home, bacon and eggs were cooking over a wood fire (we have a little two-burner gas camp stove, but much prefer to cook over a wood fire, even though it is slower). And is there anything that smells and tastes any better than strong, black coffee in the brisk mountain air?

The lovely little yellow *Erythronium grandiflorum* was in bloom everywhere. I have seen larger flower forms, but never a lovelier display. They are difficult to collect, as their small bulbs go quite deep and the soil is very rocky. We took quite a hike fairly carefree in the thought that it was too early for rattlesnakes. We treat the eastern slope with considerable caution, although we have never seen one. In climbing up a very steep rocky hill, I was delighted to find the two nice little ferns I wanted, *Cheilanthes ciliquosa* and *C. gracillima*. You just have to remove a piece of the small rock and easily dig the ferns from the dry soil. *Do you grow these in Scotland?* The latter is one of the loveliest dwarf ferns that I have ever seen.

After climbing quite a distance, in the hope of finding *Douglasia*, we returned to the camp ground, again without it, through *Ponderosa* pines where we saw the two *Pipsissewas*, *Chimaphila umbellata* and *C. menziesii* (Pyrolaceae). I would love to get these started in the garden as they are such dear little plants. The smaller of the two, *C. menziesii*, is the easiest to collect; it seems to grow as individual plants with complete root systems, where *C. umbellata* meanders all over, with no beginning or end, and precious few roots. I also collected a plant of *Pyrola picta*, with the lovely mottled leaves. I guess this is very difficult to establish, but shall give it a try. The one other plant that I collected was *Goodyera decipiens*, the Western rattlesnake plantain. At one time I had a lovely stand of it growing in a shaded portion of the garden, about 18 ins. across, which even bloomed. However, the neighbors' big horse of a dog dug the entire thing out, and I discovered it too late to rescue a single bit! *Trillium ovatum* was at its peak of perfection, such a lovely one, and also so satisfactory in the garden.

At one time when we sat down for a rest I looked over my shoulder and saw two enormous ticks on my jacket—I had forgotten all about them. From then on they seemed to drop quite frequently on us, and we were constantly removing them from the children's hair. We had never before had such trouble with them, but perhaps we haven't been in such areas so early before. Curiously they weren't too active,

as none attached themselves, only crawled around. For several days I felt as if I had them on me.

By the time we got back to camp we were all starved ! We had a delicious dinner of steak, potato salad, string beans and sliced tomatoes. Just as we finished eating a black cloud came over, a cold wind came up, and it hailed. We packed up and went a few miles down-stream and came into sunshine. Although we didn't discover anything "new" in the way of plants, it was a completely delightful day.

I have several thrilling additions to the garden. One shrub I have wanted for so long—*Rhodothmanus*. How does one grow this successfully ? By reputation it is difficult, and now that I have it I don't know what to do with it ! I'm afraid to even look at it. Another is a tiny plant of *Cyathodes colensoi*, and I also have a tiny plant of *C. fraseri* which is about to bloom.

This has turned into quite a lengthy letter ! It is a simply beautiful day, so I will close my eyes to the housework and spend the day in the yard—we may not have another day like this in a long time !

With all good wishes.

Sincerely,

SALLIE (ERICA !) ALLEN

Plant Notes

TWO OTHER ANDROSACES

AT THE end of his article on Androsaces in the April *Journal*, General Murray-Lyon invited members to contribute notes on any species he had not described. Strangely enough, he omitted from his survey two of the only four Androsaces growing here. So here goes for a small supplement.

One of the two, *A. primuloides*, was mentioned, but only as a catalogue synonym for *A. sarmentosa*. Its distinctive feature, as given by Farrer and confirmed by the R.H.S. Dictionary, is that the bracts at the base of the umbel are of unequal size ; but also, when in good form, it is an altogether bigger plant than *sarmentosa*, with fuller scapes, longer pedicels and larger flowers. I got the ancestor of my plants over thirty years ago, but it was rather later that I first saw it in the Edinburgh Royal Botanic Garden and really took it from a little distance for a primula of the *farinosa* section. Here in Exmouth, with our droughty Springs, it is not often in good form, but this Spring, after six weeks or so under a foot of snow, it did look almost "primula-like."

The other, *A. lactea*, is to my mind one of the gems of the family. It is near *A. carnea*, but an altogether daintier plant. The individual rosettes are much like *carnea*'s, but the leaves are of a brighter, fresher green, and form a lax—not a tight—clump, usually with some runners of an inch or two. The flowers, clear warm white with a golden eye,

are larger than carneas, and wide open, not cupped. They are borne in few-flowered umbels on bright green scapes and pedicles, so that each flower makes its own delightful appeal instead of being merged in a cluster. It is very easy-going, growing here in a 5% boiler-ash scree in full sun, and though individual plants sometimes succumb to drought, there are always self-sown seedlings to carry on.

The aretias and such 'fluffets' as *A. villosa* and its forms are impossible here, but if I had to choose one out of the possible it would certainly be *A. lactea*. May I respectfully recommend it to General Murray-Lyon's notice as very easy from seed.

R. J. R. MEASHAM

HELICHRYSUM MILFORDIAE

THE R.H.S. *Journal* for January last (Vol. LXXXVIII, p. 36) gives this as the correct name of the plant known to most of us as *H. marginatum*, with the notes that it is "apparently hardy though sensitive to winter damp" and "described as not free-flowering unless covered in winter."

Writing in the *Journal* seven years ago Mrs. Boyd-Harvey gave reasons for thinking that the bare patches were due to summer drought rather than winter wet. But it is on freedom of flowering I want to comment. My original plant was put about ten years ago in the middle section of a boiler-ash scree bed, divided into three by low stone ridges. One side of it usually got some winter protection from the end of a cloche placed for the benefit of *Draba polytricha*. It grew healthy and had soon to be restrained to protect smaller neighbours, but flowers were sparse. Three years ago I broke it into three. One part was left in the scree bed near a stone ridge, over which it proceeded to scramble; one was planted in a retaining wall I was building; the third between two stones edging a path. This year there are 20 flowers in a space of 7 ins. × 4 ins. on the wall plant; 23 in 9 ins. × 3 ins. on the section over the stone ridge, and 4 on the much larger area of the rest of the scree plant; none at all on the plant beside the path.

Whatever the reason for this behaviour, it suggests that to get flowers for *Helichrysum milfordae*, it should be grown either in a wall or between paving stones.

Undoubtedly there are no bare patches on the wall plant, some small ones on the others. Winter protection shows no effect.

R. J. R. MEASHAM

PYXIDANTHERA BARBULATA

"... successes can rarely be reported for the elusive Pixie-moss."
Dr. B. C. Blackburn, The Second International Rock Garden Plant Conference, 1951.

"... in collecting the plants one must use discretion and find the tiniest young seedlings, perhaps an inch or an inch and a half in diameter, and collect them that way—and take approximately half an acre of land with the seedlings. One comes back with an auto-

mobile full of soil, with perhaps a few meagre plants in it, and we find this is the only way to grow the Pyxie moss."

Mr. Harold Epstein, The Third International Rock Garden Plant Conference, 1961.

"... I have not found it difficult to move or grow. Of course I move it, and grow it, in its own New Jersey sand."

Mr. Harry Fuller, Scottish Rock Garden Club *Journal* No. 31.

MY PLANT (see fig. 62) was collected by Mr. Fuller and came to me via Mr. David Elder. It arrived in autumn 1962, with shoots as well as roots dusted over with gritty black and white sand. It was treated as a cutting in a 6 in. pot of silver sand with a one-inch layer of rich leaf-mould at the bottom of the pot. Some of the sand was washed from the leaves with a soft paint brush. The cutting frame which housed it was frozen solid and buried in snow most of the winter. In late March, when pale green growth could be seen at the tips of the shoots, the pot was copiously watered from below and brought out into the open. The leaves dry up very easily, so frequent dribbles of water were trickled the length of the shoots. There was a saucer of water under the pot to imitate the high water table of the pine-barrens.

The flower buds are bright red, but this colour comes from the sepals and not from the reverse of the corolla, which, when it opens, is pure solid white.

Now, half way through July, after so much cold rain and mist, the plant is looking very green and lush except for the calyces which are still bright red. If we are to have any summer this year, I would like to see the whole plant turn red in broiling sun, as described by Mr. Fuller in his letter.

I took the plant to Scone on 5th June to show it to the "Joint." It was found that it had already received its Award of Merit. In 1890 ! East Lothian.

L. CHRISTINA BOYD-HARVEY

PRIVATE GLACIER

THEY SAID it wouldn't flower—indeed, they almost said it couldn't flower, and when I asked why it should be so they looked with pity on me in my ignorance. Finally, two kind friends enlightened me : "It grows on the snowline just where the snow melts, and in conditions almost impossible to provide in this country." I looked through a well-known catalogue and found that it was "a challenge to any gardener," and that, of course, was all that was needed. I sent for it, and when it arrived I planted it with its three glossy fern-like leaves, and all I could provide was Hope—for I hadn't an Alp. They looked at it and said "really !" They looked at it and smiled and said nothing, and that was much worse to bear. In desperation I emptied the contents of the refrigerator ice tray round it, and the gales of laughter which greeted the sight almost blew it away. Finally, the three small leaves died, and my hopes went with them. Came a winter of Blizzard and Frost, when I couldn't even reach the spot where it lay buried,

but at long length the brown earth appeared again, and a whole year had passed, and one fine day there were suddenly not three small fern-like leaves, but a whole cluster, and two buds. With what joy I emptied the ice tray daily! With what pride I watched the larger bud swell and finally the glistening white petals unfold! Perhaps it wasn't quite the huge full-size flower of its native habitat, but you see I hadn't an Alp—no constantly melting snow, no "banner with a strange device"—only a tray of man-made ice and an aluminium label which said "*Ranunculus glacialis*" (see fig. 63).

Reston, Berwickshire.

M. S. DUNLOP

DWARF SHRUB SUITABLE FOR THE ROCK GARDEN ?

AT THE Glasgow Show, ten years ago, the Forrest Medal was awarded to a dwarf pot-grown lilac under the name of "*Syringa microphylla*." Elsewhere on the show bench there was a smaller specimen under the name "*Syringa palibiniana microphylla*." At home, growing in a scree, I had an even smaller one which I had received as "*Syringa palibiniana*." Pots of the same lilac are annually a feature of the Dunfermline Show and are always very much admired. Small wonder, because they would appear to be ideal dwarf shrubs for the alpine house or small rock garden.

I bought my specimen round about 1949—four inches tall, a few leaves and a small panicle of flower buds. I remember thinking that 7s 6d was rather a high price to pay for so unpromising a twig. However, it has grown considerably, and now, when I tell people that blackbirds are nesting in its branches, I am either disbelieved or told that I can't have the proper dwarf, or the feeding is too rich. Its picture (see fig. 59) is not published as a warning to discourage others from growing the plant. Its form, colour and lovely scent, its hardiness, and its freedom from pests and diseases, make it outstandingly garden-worthy.

Even if in the years to come it should grow to 12 feet by 12 feet and block the path, and even though it should turn out that the names "*palibiniana*" and "*microphylla*" must both be forgotten in favour of *Syringa meyeri*, I shall still be delighted to have it.

L. CHRISTINA BOYD-HARVEY

PARAQUILEGIA

P. anemonoides (synonym *P. anemonoides grandiflora*) belongs to the genus Ranunculaceae, but at one time it was included amongst the Isopyrums. It is a native of the Himalayas, where it has a fairly wide distribution, and it is also found in N.W. China. It is reported as growing in rock crevices. The leaves, which form a clump 2 to 3 ft. high, rather resemble those of an aquilegia and are silvery-grey and very dainty.

The flowers, about the size of a shilling, are usually lavender/blue, but the colour varies to a certain extent and there is a white form, sometimes rather an 'off' white. The stamens are golden yellow. It

is a real connoisseur's plant and I will now quote what Sir George Taylor has to say about how it struck him when he first saw it growing in the Tsang-Po valley : "I shall never forget my amazement on seeing *Paraquilegia anemonoides* for the first time, and indeed for sheer delicacy, poise and refinement the plant must be supreme. I was stunned by its perfection as it hung in aged tufts from dry overhanging rocks, the glaucous leaves a beautiful foil to the tremulous pale lilac flowers."

It is not a difficult plant to grow if its simple wants are attended to ; these are a cool, humusy soil and shelter from the sun during the heat of the day.

The plant of mine which flowers most freely is growing, shaded but not overhung, by a species rose in a position facing N.W. It therefore gets only the later afternoon sun and it is sheltered from the east wind. It is growing in what I might call Dwarf Rhododendron soil, say approximately one part loam, one peat or leaf-mould (or a mixture of the two), and one of gravel and coarse sand. In a heavier soil than mine, more gravel would probably be advisable.

It received an Award of Merit in 1951.

Show Reports

GLASGOW

THE SHOW of 9th and 10th April in the McLellan Galleries is, like certain Professors, now Emeritus, honourably discharged from public duty. Beyond all expectation, and despite a fabulous winter and late spring, the entries came in, the plants arrived, and the judges, Messrs. Duguid, Evans and Livingstone, went into action. Well-deserved trophies great and small did follow them. This notice cannot be a complete record even of winners of First Prizes, but rather an account of plants of signal worth and beauty.

Mrs. Michael Noble, wife of the Secretary of State for Scotland, with unaffected enthusiasm opened the Show, happy to be among her "ain folk." Later she was obviously at home appraising the rock plants and the opulent display of Rhododendrons next door. For this was happily a joint occasion, because the Royal Caledonian Horticultural Society simultaneously presented a breath-taking display of Rhododendrons. Not a few of our members and exhibitors of other years were in that gallery and ably acquitted themselves. The estates at Rhu, Inverary, Crarae, Port Logan, Brodick and the Royal Botanic Garden, Edinburgh, among others, gave noble displays. Mr. Davidian smiled and smiled and was nowise a villain. What a wealth of colour, form and foliage ! How like a lily was a hybrid (*R. cubittii* x *johnstoneanum*) shown by Sir George Campbell and awarded a 1st Prize !

There was an engrossing display of flower variants *in species* mounted by R.B.G. Edinburgh. In *R. eclecticum* there were at least twelve from white through pale yellow to deep purplish-crimson, and

of *R. uvarifolium* there were nine forms. The foliage, too, was delightful. *R. macabe anum* had large drooping collars of leaves only a foot long, while *R. sino-grande* had gigantic rosettes of leaves at least two feet long.

It was a noble Show after all the jeremiahs.

In our own two rooms we missed the usual splashes given by daffodils and tulips. Even the dwarf narcissi and tulips were scarce but delightful. A small pan of *Narcissus romieuxii* was very good. We had about half-a-dozen rhododendrons. *R. gloriosum*, too seldom seen, was shown by Mr. Urie in the 6 Pan Class, along with a lovely *Pieris* "Wakehurst." Two *Rhodo. leucaspis*, each distinct in tinting, severally brought First Prize awards to Mr. A. Todd (Section I, Class 52) and to Brigadier G. F. Hutchison (Rockcliffe) in Section II, Class 90.

We were indebted (I use the word advisedly) to our four friends from Aberdeen and three more from Dumfries and Kirkcudbright for the challenging entries which set us on our toes and also reminded us how late our own sun-starved flowers were.

A high standard was noted by the judges in primulas, notably the *Petiolares* group with six good *P. aureata*, good plants of *P. boothii*, *P. gracilipes* and a noble *P. sonchifolia* shown by Edrom Nurseries and considered for the Forrest Medal.

The nurseries of Wm. B. Boyd and Ponton showed very fine examples of *Primula bilecki* and *forrestii* to the chagrin of some of us who were only seeing our plants coming into bloom, and even our *P. gracilipes* fully a week late. We envied but did not grudge Mr. J. B. Duff his lovely pan of *P. bilecki* or Mr. J. D. Crosland his equally fine *Primula boothii*.

The major awards were: Class I (six pan) William Buchanan Trophy, 1st Prize and Silver Medal to Mr. John Archibald for *Rhodo. campylogynum* var. *myrtilloides*, *Rhodo. racemosum*, *Vaccinium nummularia*, *P. aureata*, *P. hyacintha* ? (*hyacinthina*), and a fine *Jeffersonia dubia* in which the flowers stood well above the foliage.

Mr. Urie, Second Prize, and already mentioned, showed also a *Lewisia tweedyi* of very beautiful colour.

In Class II (3 pan) Mr. Esslemont gained 1st Prize (The George Forrest Medal) and Henry Archibald Rose Bowl. A Cultural Commendation by the Joint Rock Garden Plant Committee was awarded to his magnificent pan of *P. allionii* (a "miracle" as someone said). This plant was well supported by *P. albo-cincta* (four plants collected in Cima Tombea 1961) and *Paraquilegia anemonoides*. (fig. 64)

Second Prize (Class II) went to Mr. John Archibald for *Pyrus japonica*, *Androsace imbricata* and *P. aureata*. Mr. Darling was only third, but what a lovely trio were his *Cyclamen coum*, *Sax.* "Christine" and *P. edgeworthii* ! In Class 7 Mr. Crosland's *Helichrysum coralloides* had 1st Prize and Mr. Darling's *Celmisia racemosum* (2nd Prize) made me covetous.

Class 9. Award of Merit to Mr. A. L. Macbeth for *Sax. oppositifolia alba* and First Prize for his two pans contrasting the normal and the white forms.

In Class 13. 1st Prize to Dr. M. E. Gibson for *P.* x "Linda Pope," *P. marginata* "Pritchard's var." and *P. pubescens* "Mrs. Wilson."

Mr. and Mrs. Todd's trio was very interesting: a good little *P. allionii*, a nice *P. bilecki* and a shy *P.* "Barbara Barker." This last ("Linda Pope" x "Zuleika Dobson") is scarce and one of the last hybrids grown by George Barker. Frail as it is, it is the result of five years of solicitous nurture by Mr. Todd.

Mr. Neil Morris was awarded the Crawford Silver Challenge Cup as the winner of most points in Section I, and Mr. J. H. McPhail gained the Wilson Trophy and Bronze Medal for most points in Section II. The Urie Trophy for most points in the Rhododendron Section was won by A. C. and J. F. A. Gibson, Glenarn, Rhu.

There is one aspect of our Show which is always highly esteemed, that is the Trade Shows, which we hope are of reciprocal benefit. This year the plantsmen gave us excellent displays despite the adverse conditions of the back end, winter and late Spring. We cannot be ungrateful, but we can be appreciative, as we tried to be in awarding these "Trade Medals." A Large Gold Medal for a built-up garden to Messrs. J. R. Ponton, and a similar award to Edrom Nurseries for their display of plants in pots. Knockdolian Nurseries received a Gold Medal for their stand of bulbous plants, and W. Barclay Boyd a like award for a very interesting display of rock plants in pots. The stand of heathers and *Rhodo. x praecox* mounted by Camis-Eskan Farm Nurseries, the fascinating stall of the Scottish Orchid Society, and the invaluable display of soils, etc., by Grants of West Calder, were individually and jointly appreciated and welcome.

Messrs. John Smith & Sons (Glasgow) Ltd. again presented a fine, helpful and alluring exhibit of books on gardening, plants and flowers to suit a wide range of tastes and capabilities. We would thank again our friend who mounted a show of jewellery and express our appreciation of the high standard in ceramics staged by the Bute Pottery.

The Show is over and we are optimists looking forward to next year and wondering about those depressions and troughs that have been too much with us.

W. H. M.

EDINBURGH

THE TWENTY-THIRD Edinburgh Show was held on 30th April and 1st May in the Drill Hall, Dalmeny Street, Edinburgh, since the rent of the Music Hall had been raised to such a completely exorbitant figure that it was quite impossible to run a Show there without incurring a disastrous financial loss. The new hall was, in many ways, the ideal site for a Show, with excellent top-light, plenty of space, easy access

on street level and adequate parking, but unfortunately it was so far from the city centre and so difficult to find that the "gate" suffered very seriously, and even members had considerable trouble in finding the hall in spite of the sketch plan in the *Year Book*.

The Show was opened for us by Mr. Younger of Easter Park, Barnton, and of Eckford, with a neat speech in which he commented, among other things, on the fact that entries were at the same level as last year, in spite of one of the worst winters in living memory and an exceptionally late Spring—and this was quite remarkable, for the exhibits were well up to standard, and a high standard at that, and showed little signs of damage.

The Forrest Medal was awarded to a beautiful plant of an exceptionally good form of *Rhododendron cephalanthum crebreflorum* shown by Brigadier G. F. Hutchinson of Rockcliffe—his second "Forrest" within four weeks! The competition for the Forrest Medal was very close and even more closely argued by the Judges, for at one point no less than seven plants were under consideration for it.

The Corsar Trophy was won by Mr. Esslemont of Aberdeen with six extremely good plants: *Daphne petraea*,* *Primula aureata*, the true *Anchusa caespitosa*, *Shortia intertexa*, *Lewisia tweedyi*, and a pan with three beautiful small plants of *Androsace imbricata*. Mr. Reid, now also of Aberdeen, made a welcome return to the Edinburgh Show at which he had so many successes in the past, with a fine set of three plants with which he won the Carnethy Medal. These were a truly magnificent plant of *Rhododendron imperator*, *Daphne arbuscula* and *Veronica tetrasticha*. In the class for three pans of new, rare and difficult plants for the Elsie Harvey Memorial Trophy, Mr. Esslemont showed and won with *Carduncellus rhapsodioides* (in flower at last—it stubbornly refused to open at previous Shows), *Ptilotrichum reverchonii* and *Nardophyllum bryoides*. In Class 4 (one pan of the same category) notable plants were *Pyxidanthera barbulate*, shown in beautiful condition and full bud by Mrs. Boyd-Harvey, a very nice little pan of *Oxalis laciniata* shown by Mrs. Galloway (this was still another colour-break, blue with flecks of red), and three plants of *Aquilegia jonesii* with a total of four flowers. Considering that this plant seldom reaches a 10% flowering in the wild, this represents a very considerable achievement by Mr. Crosland, the exhibitor. Another feat of Mr. Crosland's was to have two very good pans of *Paraquilegia anemonoides* in full flower in different classes—the writer can well remember when this plant first appeared at Glasgow just before the War, and the furore it caused.

The cushion plants were, in general, fairly good, though obviously some had suffered considerably from the winter, but the Saxifrage classes were definitely weak, as was, unfortunately, most of Section II. The entries were good but the numbers were not. The Council has the question of the qualification for Section II under consideration to see if anything can be done to encourage exhibitors in it.

In this Section the Bronze Medal was won by Mrs. E. Taylor,

*See fig. 66

Edinburgh, who also won the Archibald Rose Bowl. The other Trophies in the various sections were won as follows. The Boonslie Cup for a Miniature Rock Garden was won by Dr. and Mrs. Davidson, Linton Muir ; they also won the Kilbryde Cup for Cut Flowers and Foliage of Rock Plants. The Reid Rose Bowl for the highest aggregate of points in Section I was won by Mr. and Mrs. J. T. Aitken, Barnton, and the Curle Memorial Trophy for three pans of Rock Plants raised from seed by Mr. Esslemont.

Primulas were of a good standard, but many of the rarities were missing—the recent dry Springs have wrought their damage on them. The class for Primulaceae included several very fine pans, notably *Soldanella alpina* from Mrs. Wilson of Dunfermline—that pan was considered for the “Forrest”—as were also very fine pans of *Douglasia laevigata* (Mrs. Maule) and *D. vitaliana* (Dr. and Mrs. Simson Hall).

The Pulsatillas were better than the writer has ever seen them at any of our Shows for many years, and the same could be said of the Cassiopes. Quite evidently the winter had suited them well and, oddly enough, the same seemed to apply to the dwarf rhododendrons, which were quite outstanding. They have been a little “scruffy” in recent Shows, but these were superb—and this was also the case at the three previous Shows this year. Mr. Corsar of Cairniehill had a pan of *Rh. forrestii* (our old friend *repens* in its new guise) which, unfortunately, had been ready just a week or so too early, but which was still in good flower and showing the capsules from the fallen flowers. It is rare enough to get *any* flowers on *forrestii*, let alone more than a dozen on a plant in about an eight-inch pan.

The entries of dwarf conifers were less than usual ; here, it would appear, several of our usual competitors were missing. The entries in the dwarf bulb classes were good and in fine quality and showed just what an asset they can be in any rock garden display. It was, perhaps, just a little late for the best of the Narcissi, but the tulips were extremely good.

After such a winter with its complete cessation of any activity whatever, we were delighted to have some Trade stands, though many firms had to “pull out” as they were still struggling to make up for time lost over winter.

A Large Gold Medal for a built-up rock garden was awarded to Messrs. Ponton’s Nurseries, who had a fine display of rhododendrons and bulbs—especially irises—which were exceptionally good. A Gold Medal was awarded to Messrs. Dobbies, Ltd. for a delightful floral display of a big variety of Narcissi—how good these have become with the wide range of colours and shades available. A Large Gold Medal went to Mr. Jack Drake for an exhibit of Rock Garden Plants in pans ; he showed a big variety of plants, but the primulas were quite outstanding, his *Primula obtusifolia* gaining the Cooper Bhutan Cup for the best species *Primula* in the Show. The Edrom Nurseries gained a Gold Medal for a display of rock garden plants in pots with a very wide range of plants from *Pleiones* to Rhododendrons and back

to bulbs ; perhaps the most noticeable were the Anemones in a striking variety of colours.

Messrs. Dobbies, Ltd. had also a stand of garden furniture—commendably practical stuff and not the rather arty-crafty type one so often sees, while Messrs. James H. Steele, Ltd. displayed a wide range of equipment which is now available for the mechanisation of the garden—motor mowers, diggers, rototillers and the like. Messrs. James Thomson, Ltd. had a stand of paving slabs, stone, gravels and chips which let members see just what could be obtained, and they were displayed in large enough areas so that the real appearance of the material could be seen—a handful from a bag can be sadly misleading at times.

Last, but far from least, our regular supporters from many years back, Grant of West Calder, showed us some of the range of sands, composts, peats and such like that they have for us, and I was glad to see that even though the numbers who attended the Show seemed sadly diminished, all the stands of our friends in the Trade, both Nursery and Sundries, seemed to be reasonably busy.

Our sincerest congratulations are due to Mrs. McLeod who, as a completely new Show Secretary, had not only to take up the whole business of running the Show, but also had to cope with a new and totally unknown hall—and made a most excellent job of it, for everything ran smoothly and without any hitches. The total number of entries was almost exactly the same as last year, with more in the open classes and, unfortunately, less in Section II. Let us hope that next year entries for both Sections I and II will be up—and let us do our best to see that this is so.

HENRY TOD

ABERDEEN

CLUB MEMBERS from other districts who visit Aberdeen Show have come to look for a very high standard and some keen competition there and it is seldom they are disappointed. Even this year was no exception, as could be seen when the Show opened on 16th May, in spite of the terrible winter, of which Aberdeenshire had more than its share, and a far from genial Spring. Some classes were a bit thin, and some plants which had been grown in the open and lifted showed obvious signs of damage due to adverse weather conditions ; but over all the standard was high and it was an excellent Show.

The premier award, the Forrest Medal, was given to a magnificent plant of *Androsace imbricata* shown by Mr. J. Crosland and reminiscent of that famous plant of Mr. Esslemont's so well-known a few years ago. Certificates of Merit were awarded to Dr. H. Robertson's *Phyllo-doce nipponica* and Mr. H. Esslemont's *Androsace arachnoidea superba*.

First in Class 1, for the Aberdeen Bronze Medal, was Mr. Esslemont with fine plants of *Rhododendron sargentianum*, *Primula strumosa*, *Ranunculus seguieri*, *Gentiana verna*, *Androsace arachnoidea superba*

and *Daphne collina*. The second six consisted of *Androsace imbricata*, *Fritillaria* "Poseidon," *Corydalis cachmeriana*, *Primula kisoana*, *Veronica gilliesiana* and *Rhodo*. "Carmen."

In the third six were *Gentiana alpina*, *Lewisia columbiana* "George Henley," *Saxifraga exarata* and *Lithospermum oleifolium*. It is obvious what a wide range of plants was covered in this one class.

In Class 2 Mr. Esslemont was again first, with plants of *Myosotis decora*, *Anchusa caespitosa* and *Primula redolens*, followed by Mr. A. Reid with *Primula aureata*, *Polygonatum hookeri* and *Vaccinium nummularia*.

First in the 'native' class was Mr. Crosland with a fine *Salix reticulata*, while another salix came second, an attractive unnamed hybrid shown by Dr. Robertson. *Carduncellus rhapsodioides* gained first for Mr. Esslemont in Class 5, while a most attractive *Dicentra peregrina pusilla* was placed second and Mr. Duff's *Omphalogramma vinciflora* third.

In the silver-grey foliage class Mr. Duff's *Leucogynes leontopodium* was placed first and a plant of *Senecio uniflorus* second, while in Class 14 the eye was caught by Mrs. E. Brown's fine *Schizocodon macrophylla*. Class 16 was really an attractive class, with Mr. Robertson's *Phyllodoce nipponica* first and Mr. Duff's *Cassiope selaginoides* 'L. and S. Form' second.

Some fine primulas were on view in Class 30, where Mrs. E. Brown was first with a very fine *Primula aureata*. Second was a good plant of *P. reinii*, and third a plant of *P. reidii williamsii*, and in Class 37 all the lewisias were very good.

A Large Gold Medal was awarded to Messrs. Jack Drake for a very fine display of rock garden plants in pots, and a Gold Medal to Mrs. McMurtrie for a built-up display of very attractive plants. From the Cruikshank Botanic Garden Mr. Sutherland put up his usual magnificent display of excellently grown and presented rock plants and associated dwarf shrubs, for which he was awarded a well-deserved Certificate of Merit.

DUNFERMLINE

THIS SHOW was held on 24th and 25th May in the Music Pavilion, Pittencrieff Park, and though perhaps some classes were a little thinner than usual, the standard of entries was high and first prizes were not easily come by.

The Forrest Medal (for the most meritorious plant in the Show) was awarded to a very fine *Lewisia trevosiana* shown by Mr. H. Esslemont of Aberdeen, but among a host of good plants the selection could not have been easy. (fig. 65)

First Prize in Class 1 (which carries with it the Robertson Challenge Cup) went to Mrs. Maule of Edinburgh for three excellent plants—*Raoulia grandiflora*, *Corydalis cashmeriana* and *Oxalis laciniata*, while Mr. Esslemont was a close second with *Primula redolens*, *Spiraea*

hendersonii and *Myosotis decora*, and Mrs. Simson Hall a good third with *Dodecatheon tetrandum*, *Fritillaria pyrenaica* and *Rhodo. sargentianum*.

Mr. J. D. Crosland led in Class 2 with *Ourisia ruellioides*, followed by H. Esslemont with *Aciphylla dobsonii*, and in Class 3 Mrs. Maule won with a fine plant of *Sagina x boydii* from Mrs. Wilson's *Salix reticulata* and Mr. G. Hill's *Antennaria dioica rosea*. In Class 5 first was a good plant of *Primula forrestii* and second one of *P. reidii*, and in Class 6 *Androsace arachnoidea superba* was followed by *A. sarmentosa*.

Mr. J. Y. Carstairs led in Class 7 with a fine *Sax. exarata*, closely followed by Mrs. Maule's *S. cebennensis*, and in Class 8 H. Esslemont's Forrest Medal *Lewisia trevosiana* was first to a fine *Lewisia purdyi* belonging to Mrs. Cormack. Out of nine entries in Class 15, first was a fine *Rhodo. sargentianum*, second a good *Andromeda polifolia nana* and third a good plant of *Cassiope mertensiana gracilis*, and in Class 16 a very attractive *Oxalis laciniata* was first and two good *O. enneaphylla* second and third.

In Classes 26 and 27 were several more very good oxalis, outstanding among them being a magnificent plant of *O. enneaphylla rosea* belonging to J. Y. Carstairs, while Mrs. Simson Hall showed a good *O. patagonica*. Sempervivum entries were very good as usual at Dunfermline, and in Class 50 both J. Y. Carstairs' and Miss Milburn's entries of 3 pans were excellent specimens, as were Mrs. Brown's and Miss Niven's single pans in Class 51.

Compared with previous years entries in Section II seemed to be down a bit, but then so many members have graduated out of this into the Open that it would need a steady inflow of newcomers to keep up the numbers in Section II. The Carnegie Dunfermline Trust Trophy, for most points in Section I, went to H. Esslemont, and the Institute of Quarrying Quaich, for most points in Section IV, to Mr. J. R. Terris, whose wife gained the Bronze Medal for most points in Section II. The prize for the best plant in Section II was awarded to Mrs. M. G. Champion, Rosyth, for *Aethionema* "Warley Rose."

Various reasons conspired to prevent the presence of Trade Stands at Dunfermline Show this year, but Mr. N. Lyle of Maryfield Nurseries, Leslie, very generously sent a number of plants to be sold for the benefit of the Show funds. Mrs. Wilson and the band of willing helpers deserve all credit for a most satisfactory Show.

PERTH

WITHOUT any doubt the Club Show at Perth on 5th and 6th June must be regarded as the Show of the year ; in fact, it must rank as one of the outstanding Shows in the history of the Club. With approximately three hundred entries, and among them a plethora of exceedingly high quality exhibits, it reflected great credit indeed on our Hon. Treasurer, Mr. D. Elder, and his active band of volunteer helpers who

got together and put in such a magnificent effort to ensure the success of the Show in the absence of a Show Secretary for Perth. It was perhaps rather unfortunate that the schedule (unrevised) did not quite fit the exhibits coming forward on the Show date and many fine plants had to find a place in the 'not eligible' class, while for some there was no place at all.

It would also seem as if a new record had been set for the Joint Rock Garden Plant Committee too. At least twenty-eight or thirty plants were put forward for adjudication, and of these four were recommended for Awards of Merit, two for Preliminary Commendation, and one for a Cultural Commendation.

After such an outstanding success it would indeed be a tragedy if the Perth Show or the activities of the Perth Group were allowed to lapse. One must hope that such a wonderful experience will have inspired every member in a wide district around Perth to determine that the standard achieved will be maintained and even perhaps surpassed, and that an equally vigorous enthusiasm will be apparent throughout the winter season.

A prominent feature of the Show was the extraordinarily high standard and number of entries in Section II, where both the Forrest Medal and a Certificate of Merit found a home. All who saw it must hope that the amazing plant of *Lewisia* hybrid which gained the Forrest Medal survived successfully its lifting and transportation to the Show and home again.

The Alexander Caird Trophy for 6 pans (Class 1) went to Mr. H. Esslemont for a fine entry which included *Linum elegans*, *Lewisia trevosiana*, *Cypripedium cordigerum*, and *Anchusa caespitosa*, while the Dundas Quaich, for 3 pans (Class 2), went to Mr. J. H. Rorie for a very fine plant of *Rhododendron campylogynum myrtilloides* (which received a Certificate of Merit), *Lewisia* hybrid, and *Penstemon newberryi*. In Class 2 there were five entries, second place going to Mr. Esslemont for plants of *Myosotis eximea*, *Campanula carpatha*, and *Pinguicula grandiflora*, and third place to Mr. A. Reid for *Ramonda serbica*, *Heuchera racemosa*, and *Rhodo. c. myrtilloides*.

In Class 3, out of four entries, Mr. Crosland came first with *Dicentra peregrina pusilla* and *Anarthrophyllum desideratum*, while Mr. Esslemont was second with *Campanula atlantis* and *Aciphyllum dobsoni*. In Class 4 *Calochortus maweanus* gained first for Mr. Esslemont, *Tsusiophyllum tanakae* second for Mr. Rorie, and *Incarvillea grandiflora* third for Mr. Crosland.

There were eleven entries in Class 5 (native to Scotland) and Mrs. E. Wilson led the field with a fine *Salix reticulata* closely followed by Mr. and Mrs. Stuart with a good native *Orchis* and Mr. Strachan with a very nice *Vaccinium vitis-idaea*. It was interesting to see *Convolvulus cneorum* come in first in Class 6, while second place went to *Artemesia nana* (?), shown by Mrs. Pattullo. In Class 7 first two places went to plants of *Draba mollissima* shown by Mr. Esslemont and Mrs. Wilson.

Class 13 was interesting for the fine quality of some of the entries, first place going to General and Mrs. Murray-Lyon for a great specimen of *Cryptogramme crispera* and second to Mr. S. Mitchell for a fine *Cystopteris fragilis*. Saxifrages were present in force, and out of nine entries in Class 33 first place went to Miss J. Halley for a handsome plant of *S. norvegica*, second to General and Mrs. Murray-Lyon for *S. aizoon baldensis*, and third to Mr. J. B. Duff for a grand *S.* "Southside Seedling."

Mr. Duff led in Class 36 out of seven entries with a fine *Sedum spathulifolium* 'Capablanca,' while Mr. Terris (who won the L. C. Middleton Challenge Trophy) was second with a nice pan of the monocarpic *Sedum pilosum* and Miss Halley was third with another *S.* 'Capablanca.' Of the twelve pans of Sempervivums on view in Class 37, the pair presented by Mr. J. Y. Carstairs reminded one of a matched pair of carriage horses in their perfection, and his first prize pan in Class 38 was equally perfect. An attractive plant of *Cotoneaster microphylla thymifolia*, shown by Mrs. Pattullo, caught the eye in Class 42, but most of the twenty-five dwarf conifers on show in Classes 43 and 44 were rather disappointing. Mr. Japp's *Pernettya* and Miss Barrie's *Andromeda polifolia nana* caught the eye in Class 53, while in Class 55, five plants out of six shown were oxalis, first prize going to a specially fine *O. adenophylla* shown by Mr. R. Rutherford.

The Show abounded in *Lewisia*s in perfect condition, with ten entries in Class 59 and five in Class 84. Mr. Watson's *Lewisia* 'Hybrid' (in Section II) gained the Forrest Medal, but others which caught the eye were *L. heckneri* and *L. pygmaea*. Few *Rhodohypoxis* were on view, but one fine pan of *R. baurei* was shown by Mr. D. Dorward.

In Class 73 Mr. — Green came first with a fine pan of *Sax.* "Southside Seedling," and in Class 74 with an attractive *Antennaria dioica rosea*. A plant of *Sax. norvegica* shown by Mr. R. Rutherford in Class 76 was awarded a Certificate of Merit. Mr. Green had a very fine *Rhodo. kiusianum* in Class 94, and in spite of the extremely keen competition in Section II, he won a very well-deserved Bronze Medal.

Joint Rock-Garden Plant Committee

GLASGOW—9th APRIL 1963

AWARD TO PLANT

AWARD OF MERIT

To *Saxifraga oppositifolia alba*. Shown by A. L. Macbeath, Esq., 71 Fereneze Avenue, Clarkston.

AWARD TO EXHIBITOR

CULTURAL COMMENDATION

To H. Esslemont, Esq., 9 Forest Road, Aberdeen, for *Primula allionii*.

PERTH—5th JUNE 1963

AWARDS TO PLANTS

AWARD OF MERIT

To *Petrophytum hendersonii*, shown by Mr. and Mrs. T. A. Stuart, Millglen, Pitlochry.

To *Rydbergia grandiflora*, shown by Messrs. Jack Drake, Inshriach Nursery, Aviemore, Inverness-shire.

To *Myosotis eximea*, shown by H. Esslemont, Esq., 9 Forest Road, Aberdeen.

To *Androsace* 'William Buchanan,' shown by Messrs. Jack Drake, Inshriach Nursery, Aviemore, Inverness-shire.

PRELIMINARY COMMENDATION

To *Primula sieboldii*, 'Madam Butterfly,' shown by Messrs. Jack Drake, Inshriach Nursery, Aviemore, Inverness-shire.

To *Dodecatheon pauciflorum* 'Redwings,' shown by Messrs. Jack Drake, Inshriach Nursery, Aviemore, Inverness-shire.

AWARD TO EXHIBITOR

CULTURAL COMMENDATION

To Mrs. L. C. Boyd-Harvey, Boonslie, Dirleton, for *Pyxidantha barbata*.

Group Activities

AYRSHIRE

THE WINTER SEASON opened in October with a Bring and Buy Sale of plants which was well attended, and funds were raised to cover the cost of printing and postage for the coming year. In November Mr. Barnes made the long journey from Newcastle to tell members how he constructed his own Rock Garden—with slides to show how he overcame his problems.

In January Dr. Dovaston talked about his favourite plants and showed magnificent slides of these. Because of weather conditions the February meeting had to be cancelled at the last minute. The night was the coldest and frostiest of a pretty grim winter. Mr. Davidian, who was to have come on this date, is now coming in November, and we look forward to his visit.

There were three summer visits to gardens—Auchincruive on a rather blustery day, but the rhododendrons were magnificent, and to Mr. Urie's lovely garden at Northcote on a perfect May evening.

On June 16th members visited the gardens of the Misses Stephen at Alloway, and Mr. and Mrs. Horsburgh in Ayr.

The early flowering plants were over here, but there was much of interest in Miss Stephen's collection of rare plants and shrubs, all perfectly grown, in particular *Telopea truncata* and *Rhodo. campylocarpum*.

EAST LoTHIAN and BERWICKSHIRE

OUR TIME-TESTED policy of having meetings distributed geographically throughout the county has been maintained again this season. The idea of having meetings distributed chronologically throughout the days of the week has been tried out this season, for the sake of those who have permanent engagements on one particular day of the week.

The season opened with a lecture by Dr. Henry Tod, who had only just got back from his trip with Dr. Worth, in fact some of his slides had only arrived that morning. Among these were some astonishing pictures of *Kelseya uniflora* several feet across. The habits of the plants appeared to be of great interest geologically, but there was little time left to question him about this. If any members are going to the A.G.M. in Glasgow on 30th October, they should note that Dr. Tod will be dealing in greater detail with this aspect of his trip in the Clark Memorial Lecture after tea.

The November meeting was a "do-it-ourselves" affair, followed by the Show and Group balance sheets. The lighter side of the evening was provided by competitions for those who are artists with flowers (even in November) and those who are clever with plant names. Mrs. Mill Irving and Mrs. Dunbar excelled among the artists, and Miss Edith Logan Home and Mrs. Loraine Orr were top solvers of problems.

In December we were delighted to welcome Mr. Stewart Mitchell. As a photographer he is most meticulous and is satisfied with nothing short of perfection. His pictures were an object lesson to those who need to use every inch of a small garden to best advantage.

The February meeting in Haddington had to be cancelled because of snow. It seemed unbelievable that this could happen in East Lothian, where February meetings have been held without impediment since 1949. It had been hoped right up to the last that at least some members would be able to struggle through, and then on the morning of the meeting all roads to Haddington were blocked, so that was that.

A month later there was a little anxiety because of the weather and the floods which followed the thaw. The lecture was by Mrs. Tweedie on her most recent visit to Patagonia. Members who are trying her plants from seed were thrilled to see how they look growing wild. *Calceolaria darwinii* looks as though it ought to be as easy to grow as buttercups and daisies. Besides showing us various colour forms of *Anarthrophyllum desideratum*, Mrs. Tweedie brought with her some dried flowering branches, which made us more impatient than ever to see our own plants reach maturity.

The Annual Coffee Morning and Bring and Buy Sale was held at The Rectory, Dunbar, by invitation of the Rev. E. M. Ivens. Fortunately it had been arranged a month later than usual, and this made all the difference to the number of good plants contributed. It was an enjoyable morning and brought in enough money to pay for the next North Berwick Show and all meetings in the forthcoming winter. Our only regret was that a visiting member from south of the Border found, when she arrived, that everything had been sold out.

Our first garden visit this season was to the Royal Botanic Garden on the morning of the Edinburgh Show, and we were joined by members from other Groups who were excluded from the hall during the judging. The party split into two, one half going to the Propagation Department, escorted by Mr. Wilson, and the others to the Rock Garden, escorted by Mr. Wood. The new gorge was under construction and members were interested to hear from our guide how the rocks, of awe-inspiring proportions, had been hauled up the hill. We shall remember it in the years to come when it has become a great water-fall.

The June visit was into Berwickshire to see Whaups Whirr, by invitation of Mr. and Mrs. Cairns. The garden is hidden away in the hills and on the way there we could see patches of winter snow still lingering on. Mr. and Mrs. Cairns had warned us beforehand that it was still a new garden, as they had only been making it for fifteen years! To our East Lothian eyes, accustomed to plants which will tolerate a high pH, we might have been in the Highlands. There is a wonderful collection here of rhododendrons, asiatic primulas and gentians, many of them in flower, and all with the lovely rich green foliage which is so difficult to attain in the coastal part of East Lothian. Afterwards some of us went on to Edrom Nurseries, where there were plants of great interest and rarity growing in sinks, troughs and tanks, notably *Calceolaria darwinii* and *C. fothergillii*, and a new form of *Lewisia rediviva*. The loveliest sight of all was in the wild, woodland garden, with hundreds of blue, yellow and red meconopses, towering over the tall lush grasses.

Our last garden visits have not yet been made; they will in fact overlap with Mrs. Stuart's first winter meeting in North Perthshire. Some of us are going on October 8th to see Mrs. Stuart's new garden in Pitlochry. At night we are joining her Group for a lecture, and then the next morning we shall be visiting General Murray-Lyon's garden.

Note of forthcoming events:

- Nov. 7 Unionist Rooms, Haddington, 7.45 p.m. Members' evening; Mr. Ivens' tape recording; Mrs. Cairns' film; Members' photographs taken at garden visits. Show and Group Balance Sheets.
- Dec. 4 The Harbour Pavilion, North Berwick, 7.15 p.m. Rock Gardeners' Forum. Members' questions answered by a panel of experts. (Complimentary tickets will be issued to members and their guests).

Full details of these and meetings in 1964 will be sent by post.

FIFE—EAST

THE OPENING meeting of the winter session on 8th November 1962 was a talk by the Group Convener on "Dwarf Flowering Shrubs," illustrated by colour transparencies.

On Members' Night, 6th December, Mr. J. Y. Carstairs gave a brief but very excellent talk on "Sempervivums, Their Care, and Preparation for Showing," a provocative talk which led to some keen

discussion. Mr. F. O'Riordan showed a number of striking colour slides illustrating his collection of dwarf rhododendrons and their development from planting to the present. His accompanying explanatory talk was greatly appreciated by all present, several more of whom showed slides taken in their own and other gardens.

A talk from Mr. James Aitken of Perth on 10th January brought out as usual a full house, and everyone fully enjoyed Mr. Aitken's racy talk and his magnificent colour slides of alpine plants at home in their natural settings. Mr. Aitken never fails to amuse and at the same time thrill his audience with his lively talk and superb pictures.

Thursday 14th February brought another feast of pleasure and interest, this time from Mr. Esslemont of Aberdeen, whose talk—"Temples and Flowers"—took his audience with him so vividly on his travels in Greece that one entirely forgot for the duration of the meeting the fact that we were still in wintry Scotland and not sweltering under Greek sunshine. Perhaps the heat of the crowded room helped this illusion.

The meeting on 7th March was eagerly looked forward to as another special occasion with a talk on some favourite plants from Mr. W. C. Buchanan. As it turned out, however, Mr. Buchanan had not been well over winter and did not feel able to travel. However, Mr. David Livingstone offered himself to fill the breach and right nobly he did it. He told us at the start of his talk that he had been well coached by Mr. Buchanan on each slide, and what he was to say about it, so that it was a most enjoyable, and at times hilarious, evening which ended with warm thanks to Mr. Livingstone and messages of thanks and sympathy to Mr. Buchanan.

Fife members do not regard the winter session complete without their "Judging Competition" evening and this took place on 11th April, when an amazing—in fact a record—number of fine plants were on show. Discussion is always keen at this meeting, and everyone enjoys testing his or her own knowledge and picking up tips from his neighbours'.

The winter session ended with a "Coffee Evening" on 8th May when a large turn-out enjoyed an evening and chatting over coffee with friends and re-stocking their collections from the many plants brought in for sale. The income surpassed all previous records and should keep the Group solvent over next winter.

Summer meetings are not so frequent, but a number attended to meet fellow-members from Dundee and Aberdeen at St. Andrews on 11th and 25th May, and Glasgow and Edinburgh members on 8th and 15th June.

On a beautiful evening on 13th June a large attendance of members visited the garden of Mr. and Mrs. McKechnie at Dairsie and saw the great developments recently made there. From there they went to the gardens of the G.C. and of Mr. and Mrs. Playfair at Baltilly, Ceres. Baltilly is a most attractive and spacious garden with a wealth of interest for all, and Mr. and Mrs. Playfair completed a most enjoyable evening by entertaining the large number present to tea.

A full bus party travelled to Keillour on 20th June to be warmly welcomed by Major and Mrs. Knox Finlay. Their garden seems to go from strength to strength. Although the rhododendrons were over, many azaleas were in colour and there were several magnificent plants of the Chilean Fire Bush—*Embothrium coccineum*. Most of the many spp. of Himalayan primulas at Keillour were still in good colour, several very beautiful lilliums were in flower, and altogether there was an unlimited range of interesting and beautiful plants. I dare say that if members had been asked to name what struck them most, the answering names would have been as many as there were members present. Major and Mrs. Knox Finlay entertained all present with their usual generous hospitality before we left for home again.

This completed a very full year's programme.

G.C.

GLASGOW

- Monday 7th October 1963 : "Alpine plants in the Rockies, the Pyrenees and the Alps," by Professor G. Pontecorvo, F.R.S., Glasgow.
 Monday 4th November : "The Peat Garden," by E. E. Kemp, Esq., Royal Botanic Garden, Edinburgh.
 Monday 2nd December : "Plant Collecting in Greece," by Dr. James Davidson, West Linton.
 Monday 6th January 1964 : "Saxifrages," by David Livingstone, Esq., Bearsden.
 Monday 3rd February : "Walls and Scree," by Major-General D. M. Murray-Lyon, D.S.O., M.C., Pitlochry.
 Monday 2nd March : "A Beginning—from Scratch," by J. D. Crossland, Esq., Torphins.
 Monday 6th April : "Rock Garden Plants for the Novice," by David Livingstone, Bearsden.

OUTINGS TO GARDENS

- Saturday 23d May : Visits to gardens in Bearsden and district. Details to be announced later. Bus leaves St. Enoch Square, Glasgow, at 2 p.m.
 Saturday 13th June : Visits to gardens of : Dr. James Davidson, Linton Muir, West Linton ; W. A. Bruce Robertson, Esq., Parkhill, Wester Howgate, Penicuik ; Dr. Henry Tod, F.R.S.E., Carnethy Seafield, Roslin ; Bus leaves St. Enoch Square, Glasgow, at 9 a.m.

NORTH PERTSHIRE

THE 1962-63 SEASON was opened by Dr. James Davidson, West Linton, whose subject was "Heathers."

In December there was "Members' Transparency Night"; it was very rewarding to note that more members took part in this programme.

On 11th March J. L. Mowat, Esq., University Botanic Gardens, St. Andrews, visited us and showed slides of "Some Favourites—Old and Not So Old."

In April a sale of plants to augment the Group funds was arranged. Where possible, colour transparencies of the plants for sale were shown, and cultural details were also given. This was an enjoyable and financially successful evening.

On 27th June the Group visited Inshriach Alpine Plant Nursery, by kind invitation of Mr. Jack Drake. The weather was cold and showery, but this did not in any way dishearten the Group. The Nursery was very colourful and there were many rare alpinists to be seen in and around the alpine house.

Programme 1963-64 :

Excepting the first meeting, which will be held in Scotland's Hotel, Pitlochry, at 7.30 p.m., all others will be held in Fisher's Hotel, Pitlochry, at 7.30 p.m.

Tuesday 8th October 1963, in Scotland's Hotel, at 7.30 p.m. Joint meeting of East Lothian and North Perthshire Groups. (This meeting is restricted to members only).

Major-General D. M. Murray-Lyon, D.S.O., M.C. : "Peat Beds and Banks."

Monday 11th November 1963, in Fisher's Hotel, at 7.30 p.m. Stewart Mitchell, Esq., Dundee : "The Small Garden and its Plants."

Monday 9th March 1964, in Fisher's Hotel at 7.30 p.m. : Members' Transparency Night." All members with 2 × 2 colour slides of gardening interest are invited to take part.

A syllabus will be posted to all members in North Perthshire Group. Any other members who are interested in our winter programme and wish to attend will be very welcome. Arrangements for 1964 Garden Visits will be posted to members.

M. R. STUART, G.C.

NORTH NORTHUMBERLAND

ON TUESDAY 19th March, Mr. David Livingstone gave an excellent talk on "Saxifrages," illustrated with coloured slides. His cultural hints were most helpful and he recommended the best varieties, particularly mentioning a new one. *Saxifraga burseriana major lutea*, which he said had flowers as large as a two shilling piece. He stressed that some kabschias were more difficult in cultivation than others and that *S. diapensioides* took more care than most. The lecture was of great interest as the kabschia saxifrages bloomed more profusely than ever before this year and so encouraged more planting.

On Thursday 25th April, 28 members visited four small gardens in the Coquet Valley. First, The Barn, Snitter, the home of Mr. and Mrs. N. H. Bodenham. This was a new garden, very well laid out by Mrs. Bodenham, and it contained a number of interesting miniature trees and conifers. Next, Moorway, Thropton, where Mrs. E. Angus

showed the party her dwarf rhododendrons, a fine show of *Primula denticulata*, and a white soldanella which she had collected in the Alps. At Blue Mill, Thropton, Mr. and Mrs. E. Capstick had a small garden newly laid out by a landscape gardener. This contained a charming waterfall and stream. Miss E. Nelson's garden at Anton's Letch, Rothbury, contained that joy of every Alpine gardener, natural rock and water. This was well planted with many ericas. Miss Nelson kindly entertained the members to tea.

On Wednesday 8th May, 31 members visited Mayfield, Reston, the home of Mr. and Mrs. J. J. Dunlop. Here many alpinists were seen in a most flourishing condition and Mrs. Dunlop's skill as a cultivator was easily appreciated. In the beds at the front of the house there were many forms of *Erica carnea*, a very large plant of *Daphne blagayana* in full bloom, and a fine show of Roberts' form of polyanthus. A raised bed at the side of the house was reserved for the most precious plants. Here was seen *Petrocallis pyrenaica*, *Thlaspi rotundifolia*, *Soldanella pusilla* with a big display of bloom just over, and last but not least, *Ranunculus glacialis* with three buds. A new bed at the back was planted with shrubs and rhododendrons, which were looking very well, as were many young meconopses. Not the least pleasure of this garden was the magnificent view of the surrounding country. The party then continued to Swinton House, Duns, where Canon and Mrs. A. E. Swinton welcomed them. This extensive garden provided a wonderful display of naturalised daffodils and cherry trees in full bloom; also a magnolia and a wisteria on the front of the house. The front garden is admirably laid out with a grass walk bordered with groups of the little Queen Anne's Double Daffodil, terminating in fine wrought iron gates framing the view of the Cheviot Hills. Mrs. Swinton has planted many fine rock plants and mention must be made of her new big stone trough. Mrs. Swinton kindly entertained the members to tea.

On Friday 7th June, three gardens in the Belford area were visited. This saw the largest gathering of the summer, as 40 members were present. This was most gratifying, as the day commenced most unpleasantly with thick fog and rain, but the weather improved and the afternoon was quite bright. Newlands, the home of Miss C. J. H. Sanderson, is always a horticultural treat and Miss Sanderson is well-known to the members as a very skilled cultivator of meconopses and primulas. The pink and white forms of *Clematis montana* were making a good show on the front of the house and it was noted that the pink was an unusually clear, attractive shade. *Rosa xanthina* 'Canary Bird' made a fine display by the lake. The party then visited the pond at the bottom of the garden where the damp and shaded surroundings are so suitable for Miss Sanderson's favourite plants. Here they saw flourishing meconopses in five colours—*Ms. superba*, *betonicifolia*, *sarsonii*, and pink and red shades of the new Ludlow & Sherriff forms. There was also a wonderful show of primulas, many of which were naturalised. *Euphorbia griffithii* was noted by many

members. The party then continued to Woodlands, Spindlestone, where they were welcomed by Mr. H. S. Thorne, who has built a bungalow in an intriguingly secluded woodland setting by a stream. The position was an ideal one for rhododendrons, though these were past their best, as were the daffodils ; but the extensive grounds contained much of interest : beautifully berried *Pernettya mucronata*, *Enkianthus*, red-leaved acers and wonderfully scented azaleas. A very short drive brought the members to Waren House, where Mrs. M. N. Fenwick kindly entertained them to tea. Waren is a fine house in a lovely situation and Mr. and Mrs. Fenwick are to be congratulated on the great strides they have made in taming a garden they found in a very neglected condition. The vegetable garden was the model of what such a thing should be and gained much admiration.

On Thursday 13th July, Newton Don, Kelso, the home of the Hon. Mrs. A. Balfour, and Mellerstain, Gordon, owned by the Earl of Haddington, were visited. 27 members attended, which again was very creditable, as the weather commenced very badly with fog and rain, and although the rain kept off in the afternoon, it remained very damp and thick, which marred the prospect from both houses. The lovely wrought ironwork and gates at Newton Don were greatly admired, as was Mrs. Balfour's favourite silver-foliaged border, which was not yet at its best. There were many interesting large trees, among which was noticed *Cupressus balfouriana*. At Mellerstain, the view over the lake to the Cheviot Hills was unfortunately not seen at its best, but the lawn with its magnificent trees and interesting conifers was the most extensive ever seen. There was a lovely vista west from the house, with an avenue of pale pink rhododendrons, a wrought iron gate in the foreground and a statue at the end. This was framed by a very dark lilac and *Syringa persica*. The members also visited the house.

The Annual General Meeting on Wednesday 3rd July, at the Blue Bell Hotel, was well attended by 33 members. A lively discussion took place upon the Winter Programme and it was followed by an exchange of plants. The members took tea together.

At the end of May 13 members stayed for two nights at Helmsley in the North Riding of Yorkshire. Gardens visited were Nawton Tower, Harlow Car and Langbaugh Hall. This was very much enjoyed and thought to be one of the most successful distant trips arranged by the Group.

On Thursday 19th September, at 3 p.m., the members will visit Grindon Corner, the home of Miss D. C. Pape, the Group Convener. Miss Pape will display her many illustrated books on Alpines and entertain the members to tea.

It is hoped to arrange three lectures to take place before the end of the year.

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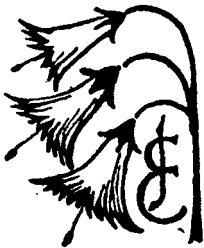


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