

The Journal
OF
The Scottish
Rock Garden Club



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The Journal

OF

The Scottish Rock Garden Club

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

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Editor's Notes

THE STEADILY GROWING increase in Club membership and activity, and the phenomenal spread of the cult of rock gardening generally, would almost make one inclined to say that so far as our Club is concerned there are no worlds left to conquer. Evidence that this is far from being the case, however, has been provided by the outstanding success which attended the Club's first "Discussion Week-end"—an innovation held in Edinburgh in April this year as an experiment. We are sure that all members will be delighted to see in later pages of this *Journal* that the success of the experiment has prompted the organisers to arrange another for November (see page 281).

What pleases us even more is the fact that it has been possible to publish such detailed reports of most of the "Discussion Week-end" matter in our *Journal*. We hope that in this way even our most distant members will be able to feel that they have been able to take part, even if only at second hand. It is continually the earnest desire of the Council that every member should be made to feel his or her kinship with fellow members, and that he or she can take part, however indirectly, in all Club activities. In the case of many members in outlying districts, both in Scotland and in other parts, this of necessity must be chiefly through the pages of the *Journal*, and by correspondence with their fellow enthusiasts.

In this association we are reminded that thanks are again due to a number of overseas members for some very interesting letters and articles. The graphic descriptions in both letters and articles demand little effort on our part to conjure up vivid pictures of the plants mentioned and their natural settings; Scotland is not the only country with its "Lawers" or "Clova," its "Torridon" or "Grampians."

Unfortunately, we still feel impelled to say that far too few of our more than three thousand members make use of the pages of the *Journal*. Any note or article written from first hand experience of the plants concerned, and of reasonable accuracy, can be sure of a welcome and of favourable consideration; there is no intention that the *Journal* should be confined to "experts only." Then again, the editor from time to time has enquiries from members with problems peculiar to themselves—sea-swept gardens, or burnt up rock faces, etc.; without their previous permission we do not publish these, but there must be many who would get help and advice—or at least sympathy and fellow feeling—through these pages and at the same time bring interest to others. An Ayrshire member has already written in the April *Journal* (No. 20) of his experiences with salt spray sweeping across his garden, and we know that it would be read with keen interest by a fellow member whose garden is situated on the shore of the Pentland Firth and who therefore has to contend with much the same sort of problem. It is in matters like this that our Founders visualised the Club's use-

fulness to its members and in their wisdom decided to name it a Club rather than an association or society.

The longer we live the more firmly convinced do we become that all those people whose love is to work with plants must be amongst the happiest and most contented of mankind, no matter what their nationality or creed. This may seem rather far fetched in view of the gardener's proverbial tendency to grumble at the weather ; but who ever heard of a real garden enthusiast letting adverse weather get him or her down so completely as to make him, or her, forsake his hobby ?

Probably we all have many other complaints that we can list if we give thought to the matter. Enthusiasts will nearly always insist that their garden is not nearly large enough for all they would like to grow, or else that it lies the wrong way and does not get enough sun, or that it gets too much sun. But after all the complaints have been enumerated they usually settle down to do the best they can with a selection of plants likely to suit their particular conditions, quite happily making the best of them. Even the plant-lover who would like an acre or so in which to spread himself but instead finds himself in the heart of a large town or city, decides to make the best of his few square yards and produce the most perfect garden attainable under the conditions prevailing, gaining a high degree of happiness and satisfaction in cultivating a limited number of choice plants up to show standard.

It is here of course that the rock gardener gains over enthusiasts in most other branches of horticulture. We cannot say how the lover of soup-plate sized dahlias or giant vegetables would cope with backyard or window-box limitations. We do know, however, of many Club members who win prizes at shows with fine specimen plants which are the production of gardens measured in feet rather than in yards, or even of carefully nursed window-box or trough gardens.

And are these enthusiasts with such limited scope jealous or envious when, with a group of fellow Club members, they visit some extensive garden of wide vistas with large colonies of primulas and meconopses or rampant carpeters and trailing shrubs draped over massive rocks ? Not a bit of it ! After admiring an avenue of cypress or sequoia one may remark that he hasn't seen a *Juniperus compressa* as neat as his own at home, while another may wonder why there were really no good cushion plants such as she grows so well in her minute frame. Having studied all to be seen, and almost certainly having carefully noted some very useful ideas and tips, each returns contentedly to his or her own garden, happily resolved to do even better with what they themselves do grow, and perhaps, who knows, beat so-and-so on the show bench next year.

Annual Subscriptions, 1957-58

ALL MEMBERS who have not already paid their annual subscriptions of 10/- due on 1st September 1957 should do so as soon as possible to the HON. TREASURER, STEWART MITCHELL, 1 MUIRFIELD CRESCENT, DUNDEE, ANGUS. Please do not send to any other Official, as this creates unnecessary work for those concerned, including the Treasurer. If you have a Banker's Order in force, do not send cash—it has to be returned to you. Banker's Orders save a lot of trouble—you are invited to renew your subscription by payment in this way. A form is sent with the *Journal*.

Club Christmas Cards

AS INTIMATED in the April *Journal*, these attractive and inexpensive cards will be made this year from the four colour plates in that *Journal*, i.e., Figs. 25, 26, 27 and 28. They will be supplied in *lots of not less than one dozen*, which may be either all of one kind, or mixed, as you desire. It will be sufficient to give figure numbers when ordering. The price is 9/- per dozen, including envelopes, and post paid. **Please order early** from the HON. TREASURER, MR. STEWART MITCHELL, 1 MUIRFIELD CRESCENT, DUNDEE, ANGUS, enclosing remittance.

The steady rise in costs makes production of the *Journal* increasingly difficult. By your active participation in this Christmas Card scheme you can help to maintain the standard of our publications.

Seed Distribution

MEMBERS are reminded that donations of seed—or a list of seeds which they intend to forward subsequently—should be sent not later than 31st OCTOBER 1957. All good and reasonably clean seed is welcome, particularly that of alpine plants. Please send as much as can be spared, and help to make the Seed List as comprehensive and interesting as possible.

Seed of *Tecophilaea cyanocrocus* was in great demand in the last distribution, and a further supply of this would be most acceptable.

C. E. DAVIDSON (Mrs.), Linton Muir, West Linton, Peeblesshire.

Discussion Week-end

SCOTIA HOTEL, GREAT KING STREET, EDINBURGH

Saturday 9th, Sunday 10th November 1957

THE COUNCIL has decided that another Week-end Conference should be held and that this, and possibly subsequent conferences, should take place in the Autumn. A Discussion Week-end commencing 9th November 1957 has therefore been arranged and the undernoted members have kindly consented to give talks and open discussions.

The following is the programme provisionally arranged :—

Saturday 9th :

- 2.30 p.m. "Soil," by Henry Tod, Esq., Ph.D., F.R.S.E., Roslin.
 4.15 p.m. Tea.
 5.15 p.m. "Alpine Plant Locations," by Gerard Parker, Esq., Enfield.
 7 p.m. Dinner.
 8 p.m. Discussion Period :
 (a) "Too much drainage," introduced by Mrs. J. J. Boyd-Harvey, Dirleton.
 (b) "Are Rock Gardens Necessary for the Growing of Alpines?" introduced by James Davidson, Esq., F.R.C.P., West Linton.

Sunday 10th :

- 10.30 a.m. "Peat Beds," by Alfred Evans, Esq., Royal Botanic Garden, Edinburgh.
 1 p.m. Lunch.
 2.30 p.m. "Dwarf Rhododendrons," by H. H. Davidian, Esq., B.Sc., Royal Botanic Garden, Edinburgh.
 4 p.m. Tea. 5 p.m. Close down.

A conducted Tour of the Propagating Department of the Royal Botanic Garden will again be arranged, starting at 11 a.m. on Saturday 9th. From experience of the other visit it has been decided that as only small groups can with advantage be conducted within the time available, the visit will be limited strictly to members who have booked for the conference. (Local members may have other opportunities for such visits).

HOTEL CHARGES, ETC.

The following are inclusive charges for the periods noted. They include 10% for gratuities and an entrance fee to cover the expenses of the week-end.

Full board and accommodation 2 p.m. November 9th to 5 p.m. November 10th : £2 12s 6d.

Non-residents, all meals except breakfast : do. do. £1 10s 0d.

Non-residents, all meals one day, November 9th or 10th, 17s 0d.

Application for reservations should be made to Mr. A. Bruce Auckland, Ythancraig, Currie, Midlothian and payment made to Mrs. N. J. Murphy, 29 Clarebank Crescent, Edinburgh, 6, *before 7th October* in the case of Hotel residents and *by 28th October* in the case of non-residents.

Residents requiring extra accommodation must book this direct with the hotel.

ATTENDANCE AT SINGLE LECTURES

A few seats may be available for local members who may wish to attend a single lecture. Seats will be allotted *in order of application* (to Mr. Auckland) up to the number available. A small charge will be made to help to meet expenses.

Through the Flower Season in the Siskiyou Mountains

By DOROTHY B. MARSHALL

WHEN EXPLORING a plant area, it is seldom convenient to report on the succession of blooming. During the spring of 1956 we were fortunate to be able to make three excursions into a little exploited district. Admittedly the excursions were distressingly short, but they were very productive.

This area, in the southwestern part of the state of Oregon and extending into northern California, is an unusual flower country. As a whole it is rugged, which can be described well, as the cowpuncher said, as having no north and south or east and west, only up and down. There are a few very fertile valleys, and some sterile flats, but mainly it is steep ridges, sometimes running up to 5000 or 7000 feet. Between these are rocky canyons with rushing streams. There is a great variety of tree cover, though it is not heavily forested: Douglas and white fir, some pines, cedars, several live oaks, alder, dogwoods and madrona (*Arbutus menziesii*—see fig. 41). Where the forest is sparse, there is opportunity for a heavy growth of underbrush having in some instances attractive blooms. Why should this country produce such a variation of plant forms: mauve coloured erythroniums, yellow van-couveria, a diminutive trillium, and many other plants with a limited range? Along with these are often the other species from the north and south, resulting in a great variety of plants.

Perhaps this variation may be due somewhat to the general geological make-up of the country, which primarily is considered much older than the strictly volcanic basalt of the Cascades and the sandstones of the Coast. In this old land, the composition of which is varied and complex, has been found much of the wealth of gold of the West. There are still a good many small working mines in the district, now for chrome and other strategic minor metals. The picturesque place-names reflect the mining history of the 1850s: Eight Dollar Mountain, Rough and Ready Creek, Louse Creek, Tincup Creek and Illinois River, where no doubt men from the state of Illinois mined. The name Siskiyou (pronounced Sis-kew) is lost in the obscurity of the fur trapping times.

Our first trip to the Siskiyou in 1956 was in the middle of April. We left Portland Friday evening, and drove up the Willamette valley, sweet with blooming locust. We cast a hopeful eye on the new moon showing, as we hoped for good weather for taking pictures, a hope not fulfilled, incidently. We spent the night at Roseburg, 195 miles south, and in the morning took a road westward towards the coast. Buttercups were yellowing the fields, and mahonia and ribes were blooming in the fence rows. At times where the grass was lush, the roadside was starred with the lovely white *Nemophila menziesii*. We

found enough erythroniums to see that they were in their prime. Near the summit of the Coast Mountains is a clearing we have come to call "Flower Hill." Here is a little ranch, with some cleared fields, and a strip of unimproved land bordering the highway. We made our call on the hospitable landowner, and were soon scampering about the upper pasture. As usual we found interesting flowers here: dodocatheon, dentaria, *Synthyris sweetzeri*, trilliums and a little yellow violet. A tiny rose-coloured anemone, which probably was *A. adamsiana*, took my husband's fancy especially. In the woods above I found calypsos, which are becoming not-too-common, due to the inroads of logging and stock raising.

From Flower Hill we returned to the main highway, continuing south for about 50 miles to the little village of Wolf Creek. Here our map showed another road towards the west. While looking for the turnout, we came upon a corner of the settlement, tree shaded and with street unimproved. A great profusion of bloom of creamy *Erythronium oregonum (giganteum)* spread before us. We asked directions from an old lady in one of the cottages, and complimented her on the scene. "Yes, they are nice, aren't they? I try to keep the children from picking them, but sometimes they take a few." This was a surprising response. Few of the residents of the country, loggers and ranchers mostly, take note of any of the natural flora.

After following her instructions, we were soon on our way, and not disappointed, for we found more erythronium, huge specimens of *Fritillaria lanceolata* and a large blue camassia. We were surprised that here should also grow two species not often found west of the Cascade Mountains in the Willamette Valley, the miniature yellow daisy, *Crocidium multicaule*, and *Sisyrinchium douglasii (grandiflorum)*, the latter just out of bloom. Farther on we discovered a few lovely scarlet bells of *Fritillaria recurva*, which almost invariably refuses to be civilized and flourish in a garden. As we continued on our planned route, the wooded hillside began to threaten to crowd our road into the stream which we were following, and which carried the suggestive name of Grave Creek. As the road showed much more effect of winter wear than of travel, I insisted that it would be good sense to turn about. My husband grudgingly agreed, but I was glad to have gone as far as we did. Here on the shady, rocky hillside were the largest erythroniums I have ever seen, as large as coffee cups, I swear. To me, a spread of these lilies is breath-taking, they have such an ethereal charm of simplicity and naturalness.

Following side roads like this can always be an adventure. You may find a great display of bloom, a desolate logging camp, or a road designed for jeeps which has become a waterway. Safely back on the highway this day, after several other stops, we reached our night's lodging south of Grant's Pass, a motel in the Illinois Valley.

The next day we travelled about the side roads hereabout. Two or three miles over is Waldo, where miners in the 1850s took out gold by

the millions, the travelling companion declares. He is an engineer, and he should know. Now there is left to show for this activity only heaps of blue clay and a few crumbling foundations. Along the Applegate River we came to a field of *Erythronium hendersoni*. This was a rocky sterile flat, with scrubby underbrush. The flowers grew so thick between bushes that one could not walk about without treading on pale lilac blooms. A half mile west was another sheet of them. These were all several shades darker ; why I could not guess ; perhaps it was better soil or more shade. In this district are also more *Fritillaria recurva*.

Our main excursion was on what is called a road following down the Illinois River. Here the river has no valley, and when the road is high up on the hillside, the views below are at times breath-taking, especially if one is nervous about narrow roads. No wonder the wind was chill, for the crests of the ridges above were still snow covered. This is real Siskiyou country. Out on a rocky flat was *Ceanothus prostratus*, both pale and a lovely lilac ; pink arabis and eriogonums. In the wet areas here were camassia, mimulus in variety and *Lewisia oppositifolia*, just budded. This is the home of *Erythronium howellii*, which is really much like *E. citrinum*. Along the rocky roadcuts we found a vivid purple flower like a wallflower which, having no seedpod as yet, I could not identify. Also unusual was an early purple brodiaea which I could not get named. In shady spots were plants of violets, both yellow and the little white *ocellata*, and dodecatheon. *Iris chrysophylla* (see fig. 42) was in bud, very occasionally showing colour.

We had so much hoped to locate *Trillium rivale*, so from the motel we drove south to the California line, stopping to search the creek banks, as we had heard they grew there. There were plenty of trilliums, but no small *rivale*.

With the lowering weather darkness cut late exploration to an end, which probably was as well, for we had over 300 miles to travel home that night.

* * * *

Our next trip to this country was over Memorial Day, and we had from May 26th through the 30th for a holiday. Joining with us on this occasion were Mr. and Mrs. Donald Kroeker, who are also interested in native plants. Mr. Kroeker also is an engineer with a camera hobby. His specialty is photographing miniature flowers with an ingenious enlarging attachment. It is amazing the exquisite detail he can disclose on a tiny saxifrage.

The whole country was gay with blooms ; camassias in variety ; lupins, wild roses, mimulus, balsamroot, California poppies. In one spot grew a lovely luscious pink sidalcea ; in a low meadow was *Zygadenus venenosus* ; on roadbanks blazed *Eriophyllum lanatum*. One lovely thing was new to us, the limnanthes, which we saw in the dampish meadows north of Roseburg. Even the thickets were abloom with *Cornus pubescens*, *C. nuttalli*, *Sambucus glauca*, *Philadelphus lewisii*

and *Holodiscus discolor*, and, especially in the south, ceanothus in profusion and variety.

As usual we drove out to Flower Hill, where now the iris were in their glory. This apparently is the border line between the so-called *Iris tenax* growing northward, and other species to the south and west. The consequence is a complete variety of color and form. The display would do credit to any nurseryman. On the same south hillside were the tall steeples of *Xerophyllum tenax*, the foliage of which the Indians used for baskets; *Calochortus tolmiei*, which the children call Kitty-ears; *Aquilegia formosa*, common but always admired; clear pink *Phlox adsurgens* (see fig. 43); waxy *Anemone deltoidea*; glossy leaved *Linnaea borealis* and *Trientalis* with its little star flowers.

We finally pried each other away from this spot, recalling that there were also other fields to view. The afternoon was a busy time, with stops at showy spots along the highway. Along the Applegate River we found *Fritillaria recurva* still with a few scattered blooms. The erythronium were now with green seed-pods. On a steep rock slope Earl almost lost his footing—and his camera—as he photographed a lovely yellow brodiaea. Brodiaeas in this country are ubiquitous and variant.

Two charming plants we found everywhere. The pink fringed *Silene hookeri* flourished on the rocky flats (which give the impression of rocks which have been run over by a steam roller), where they bloom flat on the surface; and in more mellow situations, where they grow to several inches high. Wherever there is moisture available there is the lovely azalea (*Rhododendron occidentale*—fig. 44), full of pinkish or creamy blooms, usually with pink shadings. The perfume is heavenly, heavy but not cloying. Every rivulet on the mountainsides can be traced by these shrubs, and they line the streams in the valleys. This country is quite well watered until the summer drought comes, when all water has drained off among the rocks.

As usual that evening we took up quarters at Forest Lodge, with its clean cabins in a great fir grove. The Hubers are hosts with the instinct and training of their Swiss countrymen. They are always pleased to see us, no matter how much mud we carry in; always interested, always looking for specimens for us. If the day is hot, we find the cabins aired and cool; if a storm comes, they check to see that all belongings are under shelter and the house warm. In the three wonderful days which followed, we used this as a central point. In the evenings we expected to botanize and analyze the day's findings, but long before we had emptied our vasculum we would find it more desirable to take advantage of a comfortable bed. There never was time to identify all our unusual specimens.

From Forest Lodge we decided, being Sunday, that the first day's excursion should be down the Illinois River, as we did not relish meeting a mountainous chrome ore truck, or a long logging trailer on the narrow winding road. On the Illinois flat were tall white brodiaeas, perhaps *B. hyacinthina*, eriogonum both yellow and white; a

little bright blue penstemon; *Calochortus tolmiei*, yellow violets, Horkelia, and a rose coloured allium, which I presume may be *A. falcifolium*. As we drove on, many other flowers were noted; the big white sedum with pink markings; bright yellow erysimum; senecio; clarkia, which I admire more than some of the improved cultivated species; Blepharipappus, which appears like a small white clarkia; an attractive white convolvulus which may be *C. nyctagineus*; *Phlox adsurgens*; *Eriodyction californicum*; little *Viola ocellata*; the showy red *Cirsium occidentale*, and of course *Iris chrysophylla* in abundance. Why do so many beautiful things enjoy this rocky red clay soil upon which the very grasses are sparse?

One stop we made by a little creek netted us another plant new to us; *Peltiphyllum peltatum*. It shows its saxifrage blood, and is quite showy with its tall snowy panicle with bright red carpels. It was growing almost in the creek, but not a great deal of foliage was visible.

About 16 miles down this road there is a sort of truck road up the mountain across the river. To get to this, one drives down the hillside to the water level where there is a floating bridge anchored. This we manoeuvred with the Marshall car. Once across we stopped to search for the *Mimulus cardinalis* and *Zauschneria latifolia*, neither of which, apparently, were as yet in bloom. Along the banks of Rancherie Creek, which meets the river here, once years ago we found *Epipactis gigantea*. Alas, where this once flourished is now the embankment for our roadway. From the river it is about six miles to the top of the ridge, about 3000 feet above. About a couple of miles up we stopped at a swamp on the hillside covered with darlingtonia and azalea. Earl started photographing the fluttering yellow blooms of the darlingtonia, Don wandered off in search of an elusive Rein orchid, and I started taking stock of the iris, which here had apparently become *I. innominata*. Then I strolled up to where some old cedars heavily shaded a worn waterway. I suppose snow drainage made this. I noticed a strange foliage, and plucked up the trifoliate stalk. Then I discovered it had a pointed seedpod drooping from the center. I yelled. I had discovered plants of *Trillium rivale*! Now at last I could see what sort of a place these shy wildlings desired—primarily apparently a rocky hillside with shade.

For the peace of mind of the more timid, we did not attempt to drive all the way to the top, but we walked up, with our eyes practically dragging every foot of the ground. Part of this was in shade, part in hot sun, some distance in brushy ceanothus and manzanita. When we reached the summit we found it worth the climb, flowers or no flowers. Below was the valley of the Chetco River, wild and almost completely uninhabited. Down there grows *Kalimopsis leachiana* and *Lilium howellii* (*Bolanderi*) and little to take sensible folk there, unless miners are at times sensible. We searched the ridge, hoping to find lewisia, but found little but sedum and cerastium. Snow patches still lay under the summit, and probably we were early for other blooms.

That evening, on our return drive along the Illinois River, I called for my husband to stop. Something there above the road along the rivulet I thought might be a bog orchid and worth viewing. When we got out to look up, at the top of the bank fifteen feet above, was the saucy face of an *Epipactis* bloom calling, "Hi!" Earl climbed the bank, and called down excitedly, for there not only were the slender white spikes of bog orchids, but also a fine stand of *Cypripedium californicum* (see fig. 45). Needless to say, when we returned to the cabin that evening, we were glowing, and it was with happy smiles we set our attention to dinner, and warm baths and the usual search for the poisonous insects which are inclined to detach themselves from the outdoors here and attach themselves to your persons. We saw no rattlesnakes, which are not uncommon in the Siskiyou, but we did find sheep ticks, which here are sometimes infected with spotted fever.

Monday we drove to the Waldo vicinity, now thick with the blooming *Iris bracteata*. It grows in the uncleared land, on the roadsides and in the pastures. The soil here is inclined to the usual red clay, usually mixed with plenty of rock. (In growing this I have found the main requirement to be extra drainage). From old Waldo there is a forest access road which winds up the hill, across an old hydraulic mine cut, and wanders southward along parklike ridges into California. It is little travelled, but a decent enough forest road. On the rock nose of the hill which looks down on Waldo and Cemetery Hill beyond, grow the big red and white sedum, and *Lewisia oppositifolia*, with blooms almost as large as *L. rediviva*. The lewisia seem to flourish in the fractured rock ridges of shiny black serpentine. Above the road is phlox, perhaps *P. adsurgens*, perhaps a cross. On one dampish northwest slope, which was untimbered but shaded by nearby trees, grew the dainty little bicolored *Viola hallii*.

The drive several miles in this direction produced more a determination for future exploration than any new flowers. At some points we were high enough to find rhododendrons still in bloom and a few erythroniums. We reached a viewpoint from which we could look down upon a beautiful basin full of apparently virgin timber. The road beckoned on down the ridge to an exceedingly high peak, but our program for the day did not allow for longer in this direction.

After returning to Waldo, we continued eastward on the country road, past large old placer "diggings" to the settlement of Takilma. The country here is a small level valley with some cultivated land. Here grow wild roses, some of which are white. Whether the white are an importation from Europe, the dog rose, *R. canina*, or whether an identical native, botanists have no theory. If an importation, they came in many years ago. At Takilma formerly was a large copper smelter. We knew that in this locality years ago the *Delphinium nudicaule* grew in profusion. Intense search revealed in a brush heap but two pathetic plants, just going out of bloom. We then proceeded farther on to the east, where the mountains become well forested,

with much of the flora similar to that of the Cascades. A couple of years before we had found the road banks showy with mountain flowers, but now, whether due to the season or, more probably, due to work of the road crews, little of interest was showing.

Earl was anxious to spot the *Iris thompsoni*, which we had heard grew along the Smith River. Accordingly the next day we followed the beautiful Coast highway over the state line into California and down this stream. *I. bracteata* were plentiful on the Oregon side and on the Smith River we found a lavender colonred iris, whether *I. thompsoni* or not, I leave to the botanists to argue. We found also a few plants of the gorgeous red *Silene californica*, *Brodiaea laxa*, another plant of *D. nudicaule*, and, in another swamp, more darlingtonia and cypripedium.

A few miles south of our motel is the junction to the old road which preceded the present highway across to the north coast of California. Many still recall the difficulties encountered in travelling over Oregon Mountain. This route is steep, narrow and winding, and now used only by lumber trucks and workmen on the power line through here. Driving out this road hardly a half mile where we were still in the valley, we found azaleas so beautiful that we stopped to reconnoitre. Just below was an irrigation ditch, and below that a hollow probably enlarged to obtain dirt to build up the roadway. In this the *Sisyrinchium bellum* were so thick the grass was blue. And also here was scattered in profusion a tiny little calochortus with pearly pink upturned cups. Along the ditch were bright gaillardia. Above the road was a grove of firs. Prowling this we found one of the most curious flowers. The plants were mostly about eight inches high, somewhat shrubby, with rather small leaves. The flowers were rose-colored and pea-like, but the plant lacked characteristics of the legumes. After puttering with the botany books, we concluded it was *Polygala californica*, or a milkwort, which is curious in at times having cleistogamous subterranean flowers. As the road leaves the farmlands, it follows the river through casually timbered country. In the woods we found the silene and calochortus plentiful, and in a rocky and sandy dip, which appeared to have been washed by river overflow, were more *Lewisia oppositifolia*. What a different situation from the exposed ridges! But with very sharp drainage, and lots of water very early in the season.

As the road started climbing, though still near the river, the rivulets from the hill above formed swamps with more darlingtonia. Farther along, the scanty timber was cut for the power line, and here was spread a garden of xerophyllum and ledum and azalea. In the swamps with the darlingtonia was a profusion of *Cypripedium californica* and *Epipactis*. On the dryer ground were violets, paintbrush (*Castilleja*), precious little bright yellow *Vancouveria chrysantha* and a *Phlox* of the *speciosa* form. Needless to say, supper was late that evening.

Next day we were obliged to return to Portland. The Kroekers stayed over another couple of days, and reported finding *Brodiaea coccinea* and also *Cypripedium montanum*.

* * * *

The third trip south was in the middle of June. This was on a somewhat different route, as we drove from Roseburg directly to the Coast, and down to the lumber town of Brookings. The items along the coastal strip of special notice were a lovely planting of *Lupinus arboreus*, and, of course, plenty of *Iris douglasiana* in a variety of shadings. Near Brookings the Chetco River flows into the ocean, and there is a forest road leading inland. Several miles up this we crossed the Chetco on another floating bridge of logs. Here in the brushland was another iris, low growing, colour about like *tenax*, but of *I. innominata* form. For 38 miles we drove inland to get less than 20 miles from the ocean. Mostly we were on a brushy winding ridge, from which at times we could look miles below and beyond. The timber is indifferent, and travel along this route is almost entirely by fishermen and miners. The little purple iris stayed with us, but where it was well shaded it grew somewhat taller.

Night came on, and we made camp in a wide place in the road, with a little spring nearby. Later we found this was called Pollywog Camp on the map. As we approached Vulcan Peak, which was the main terminus of our road, we discovered an oddity. Among the Rhododendrons were plants with white blooms, very apparently a white sport of the species. The route swung along the north side of the ridge and we finally left the car at a rocky nook and walked on to where we could look over the Chetco valley, and perhaps nine or ten miles away to where we had stood three weeks before. We had been told that *kalmiopsis* grew in the vicinity, but neither the brush nor the exceedingly rough terrain gave us the encouragement sufficient for us to scout off our trail. As we retraced the road, we continually thanked lucky stars that we met no one on the narrow road, where it would have been exceedingly difficult to pass. One delightful surprise was to find on the steep north slope plants of *Trillium rivale*, again among the rocks, and with some shade.

From Brookings we drove south into California and circled back up the Smith River to where we had been the last trip. Immediately we went on the old road towards Oregon Mountain. Our cleared hillside was ablaze with color. The cypripedium were still in bloom, but added to the show were rudbeckia and sheets of the brilliant yellow *Nartheceium californicum*. On the dry hillside we found one of the most charming flowers of the Siskiyou now in bloom, *Lilium howellii* (*Bolanderi*). It is not large or tall, but it is of good substance, and a most elusive color, like a scarlet overlaid with a violet shading. The form is trumpet shaped.

On our return trip towards home we visited the erythronium beds along the Applegate. Now to obtain seeds we needs search to find any heads still upright and full of their precious harvest. The hot summer was now coming on, and soon all the flowering hillsides and coves would become baked and dry.

Campanulas for the Rock Garden — Part 2

By STEWART MITCHELL

I WILL now deal with the other Campanulas I grow in alphabetical order, as I have insufficient knowledge to do further grouping.

Campanula allionii, from the European Alps, is reputedly difficult in cultivation and requires scree treatment for its underground stolons, which wander about when it is happy. The scree should be rich enough so that those creeping roots do not get dry at any time. Given this treatment, you will be rewarded by its proportionately large Canterbury Bell shaped flowers, usually single, on one- to two-inch flower stems. Colour variation in blues, a white, and a pink form have been found. A 'grandiflora' form somehow seems out of proportion in the size of its flowers.

Campanula alpina. The plant I have is a collected specimen from the Alps, and has proved to be truly perennial, which makes me doubt its naming. It has a tap root, a rosette of smooth narrow leaves with slight toothing, a stiff stem of about 7 to 8 inches. The shape of the flowers is not unlike those of *C. barbata*, with much less beard, and a darker colour of blue. It is in deep, rather poor soil, and I hope for self-sown seedlings to get a clump of it.

Campanula arvatica from Northern Spain is a treasure, but rather spreading, its underground roots making a good clump when satisfied in light soil. I find it survives the winter best in scree, although it is said to grow in nature in narrow crevices in limestone. Here again I do not find lime essential. The smooth-leaved rosettes produce single stems each of 2 to 3 inches in height, with a delightful starry flower boldly erect and of good violet colour. This is one of the most charming of all the dwarfs, and is easily increased by division, cuttings, or seed. A white form is equally lovely, while a form called Bevan's variety has larger flowers and does not perhaps spread so quickly.

Campanula autraniana is another recent addition with me, but it has made a neat tuft of smooth foliage, with large open bells on wiry stems three to four inches tall. These flowers have wide reflexed lobes and make an attractive show, the colour being a good deep purple with a paler base. It is another Caucasian, blooming in mid June, and seems to do well in not too poor scree. As it increases by underground runners, division in Spring should be successful. I understand it is quite easy from seed.

Campanula barbata is a fairly widely distributed species in the Alps and as such is variable. Once you have it, self-sown seedlings will keep your stock going, for it is not long lived, though a perennial. Seedlings in places you do not want them to be should be lifted when young, as it forms a long tap root. A cluster of long rough leaves forms one or more rosettes, each giving rise to flower stems of anything from eight inches to over one foot in height, according to what they are growing in. The number of bells on a stem is also influenced

in the same way. These flowers are a nice bell shape, the lobes being slightly reflexed, showing the fringe of hairs which edges the corolla. This feature is more pronounced in this species than in any other *Campanula* and is the reason for its name. They bloom towards the middle of June with me. While my stock has gone on for many years from self-sown seedlings, I have never had any variation in colour from the original pale blue I started with. A white would please me exceedingly, for one I saw was delightful.

Campanula betulaefolia from Armenia I only got recently. It has wedge-shaped smooth leaves, with toothed edges. The flowering stems of five to eight inches flop over when loaded with their loose clusters in June. The flowers are wide bells with short lobes slightly reflexed. They come from pink buds, the deeper the bud colour the deeper the final flower colour. Some forms are a delicate pink which is very attractive and this species is sometimes referred to as the Pink *Campanula*. It is a crevice plant in nature and a similar position suits it in the garden. It is in such a place I have mine, but I understand a rich scree is also satisfactory, although I do not think it would show to so much advantage. Easily damaged by bad weather, a sheltered corner is helpful. Seed would seem to be the best method of increase.

Campanula collina is another species from Armenia. I had it many years ago and it did not attract me greatly. It looked best in the pot in which I bought it. The trouble, I think, was too good soil, and I eventually dug out about three square yards of it with much bother. I had not read Farrer's praise for it then, or I might have tried it in some poorer soil, with a restricted root run, when it might have produced a more reasonable proportion of flowers to its foliage. It has pointed oval leaves on fair length of stems; the flower stems grow up to eight inches with flowers, of good bell shape, on one side only. These flowers are a good purple-blue, and it can be quite attractive if grown to produce flowers as well as foliage. I think it bloomed in July, and from what I have said about its growth, division is simple.

Campanula glomerata is a native of this country, and is widely spread throughout Europe. It has rough, hairy, long-stemmed leaves of a heart shape with toothed edges. The flower stems can be quite tall in good soil, but mine only rise about one foot. The flowers are borne in a cluster at the top, up to twenty stalkless flowers in a bunch, of a deep violet colour, with narrow bells and long lobes not much turned back. Generally it lacks "class," and is hardly a fit companion for choicer rock garden plants. My clump forms ground cover of a sort for *Colchicums*, and has to take its chance with the coarse *Colchicum* foliage for a time each year. Variations in form are numerous, one called *C. glomerata acaulis* when purchased had one cluster of stemless flowers sitting neatly as an "acaulis" should, but since becoming established it throws stems of from 4 to 5 inches in poor soil. Division would appear to be a method of increase.

Campanula isophylla has been well known for many years as a house plant and one suitable for hanging baskets. From such a source

many rock gardeners try it out as I did, in the garden, where it will survive and be very lovely if given a sheltered spot, preferably in a wall, for it is not absolutely hardy, coming from Italy. It has a thick root stock, from which come the roundish leaves, notched and on fairly long stems. Long trailing stems with many branches have similar leaves along their length, and many open bells in fine clusters. The shape of the flower is good, open with reflexed lobes, and held erect or displaying themselves nicely in front of the foliage when hanging down in a wall. It would be at its best about July, but has a long flowering season with its many flowers which do not develop together, and I have seen it very beautiful well into August. There are various colours to white, the type being a good pale blue. Forms are also well known, a hairy one called *C. mollis*, and *C. isophylla* var. *mayi* with grey foliage and pale blue flowers—a charming combination. Propagation is by cuttings in early Spring, and raising from seed will show variations. Another species allied to it is *C. fragilis*, which I did not keep over its first winter, it being perhaps even less hardy.

Campanula lasiocarpa is found in Japan and also in the Rocky Mountains of North America. My experience with this species was from Club seed which germinated readily, and I had quite a stock. It was an attractive plant with dainty clumps of smooth leaves with jaggy edges. The flower stems were about three inches high, and the single upturned bells were of good size and a good blue. I only flowered a few, in July, if I remember correctly, plants which had remained in a box as pricked out. Those planted out in various positions in the garden did not bloom, and did not survive their first winter. They seem to need scree conditions or light sandy soil, and possible protection from winter wet. A species well worth trying to satisfy, when it should run about and be propagated by division as well as seed.

Campanula muralis (see fig. 36, p. 248), a Dalmation species which should rightly be called *C. portenschlagiana*, but, perhaps on the same reasoning that the school-boy wrote that a synonym is a word used when one cannot spell the word first thought of, most gardeners still use *C. muralis*. It is well known in gardens where it makes a fine wall plant, although it grows well in most positions. It forms a mass of strong stems, each with terminal clusters of bright green, toothed, evergreen leaves, with a few indentations. The flower stems, five or six inches long, are numerous and carry many flowers of purple-blue, with reflexed lobes. It is a very effective patch of colour and lasts for some time from June into July. Division is easy at most times of the year as it spreads by underground stems, but it is never a nuisance. It received the Award of Merit in 1927, and it should be in every rock garden.

Campanula nitida is a most interesting *Campanula* and has a look of breeding, in spite of its origin. Known also as *C. planiflora*, it is a pygmy form of *C. persicifolia*, a Southern European species, and is technically referred to as a Mendelian recessive. It makes a small

clump of rosettes of thick dark evergreen leaves, each of which put up a sturdy flower stem on which the large open flowers sit flat against the stem. The white form seems most common, but the type is a fairly good blue, and a double is also listed in a few catalogues. Division or cuttings are quite easy. From *C. nitida* seed I have only succeeded in raising *C. persicifolia*, whereas a friend of mine who has a big stock of *C. persicifolia* can obtain self-sown seedlings of the pygmy form, which are easily identified in a young state. It blooms with me in July.

Campanula petrophila is a recently introduced species from the Caucasus. I received a few seedlings from a well-known member of the Club three years ago, and they have got no farther than a pot so far. It is a charming, neat-growing plant, producing a group of stalked rosettes of broadly oval leaves, from each of which a number of thin flower stems grow three or four inches long. These stems carry small leaves along their length, and terminate in a single flower. This is large for the size of the plant, the stem bending over with its weight; I understand a thriving plant may carry more flowers per stem. The colour is a good pale blue, the broadly campanulate flowers having the lobes hairy at the edges and well turned back. I hope to try it outside in a cool place, as it grows in nature in damp rock crevices. It flowers in the alpine house in June, so July would probably be its flowering month outside. Seed would seem to be the method of increase. It reminds me a little of *C. tridentata* on a small scale, the floppy flower stems being possibly the result of inside cultivation.

Campanula pilosa from Alaska and Northern Japan soon makes a close mat of rosettes of broad ovate leaves. These rosettes send up erect flower stems with one or more deep purple flowers, a good bell shape, almost erect, with slightly reflexed rounded lobes. It varies considerably in colour forms and height of flower stems, and a form called "*dasyantha*" and another "*superba*" are offered in catalogues. Scree treatment should suit it well, and propagation is by rooting short runners in a cutting frame in Spring. Seed is also an easy method. It blooms in June to July, but in a greenhouse it can be flowered for May shows.

Campanula portenschlagiana has been referred to under *C. muralis*.

There is another with a somewhat similar name, *Campanula poscharskyana*, a more rampant grower than any I have mentioned, and not suitable for a small rock garden. It has the same type of foliage, and the same starry flowers that *C. garganica* has, but a more spreading habit, good for those who have room for it, when a wall is the place to show it properly. It can be a nuisance by running underground, and many choicer subjects could be grown in the space it occupies. Propagation is easiest by division.

Campanula pulla is often referred to along with the "Fairy Thimbles," and recommended as suitable for growing with them, for it blooms at the same time. I do not, however, find that it likes the same conditions, at least it prefers shelter from the hottest sun and a soil

enriched with leaf-mould, although it may be satisfied and bloom better in sun if in soil which does not dry out. It is about the same stature as *C. cochlearifolia*, but has deep purple bells, not quite so tubby, and with lobes less distinct and reflexed. It is not as frequently seen as it should be, the preference indicated being possibly a reason. Propagation is by division. Its good deep colour of flower has been inherited by various fine hybrids.

Campanula raddeana is a species from the Caucasus, with attractive smooth foliage with toothed edges, and runs too freely with me in a wall, where it is difficult to cope with. The rosettes each produce a rather long stem, about 8 to 9 inches, on which are a number of pendant flowers, which make it droop badly. A wall seems the best place for it to display itself. The flowers are distinctive, wide open, with pointed lobes reflexed, and showing the orange styles contrasting against the deep violet of the corolla. Division is an easy method of increase, and I have simply stuck pieces in where I wanted them to grow.

Campanula saxatilis, a charming crevice plant from Crete, which I grew from Club seed, has a thick tap root of some length, and four or five seedlings pricked out into six-inch pots soon filled them with entangled roots, preventing division. From tufts of smooth grey-green foliage rise arching flower stems of seven to eight inches. These have clusters of three or more flowers dispersed along their length, making a magnificent show in June-July. The bells are nicely proportioned, slim with reflexed, pointed lobes, and of good pale blue. I have not tried them outside, but understand a warm sheltered spot in a wall would be advisable. Seed seems the only method of increase.

Campanula tommasiniana comes from Istria. It has a tap root from which rises a clump of branching stems with a number of longish leaves and numerous narrow hanging bells of pale lavender. The flowers have short pointed lobes slightly turned back. A well grown plant can be a good patch of colour in late July, pale though the colour may be. The slim bells are interesting as a variation, and it is a non-runner. It requires a deep soil for its thick root, and some shade from hot sun is appreciated. Propagation is from seed or cuttings in Spring or Autumn.

Campanula waldsteiniana grows much like *C. tommasiniana*, but with me is neater in every way. The violet flowers on shorter stems have wider bells with reflexed lobes, and this colour and shape are more generally admired. It blooms in August and does not flop like *C. tommasiniana*, displaying its flowers well. Coming from Dalmatia, where it grows in rock crevices, a suitable place in a wall where it will not dry out should satisfy it. Propagate in the same way as *C. tommasiniana*.

These are the species I have tried with great satisfaction, comparatively easy no doubt, but with increased skill one can go on to the choice, rare and difficult. These are not so easily obtained, but the

chance to grow them should be taken as opportunity affords. For those who would like to try their skill, there are such as *Campanulas cenisia*, *excisa*, *morettiana*, *piperi*, *raineri*, and *zoysii*, all delightful and all as tricky as other proofs of cultural ability which appear on our Show benches from time to time.

Hybrids have been introduced in considerable numbers in recent years, some of considerable garden value, dwarfs with characteristics of larger growing plants, and intermediate forms have further added to the great diversity of the genus as found in nature. A further article will deal with these.



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Notes on an Anatolian Journey—Part II

By W. SCHACHT

University Botanic Garden, Munich

(Translated by Helen and Edward Kemp)

NEXT DAY we went down the valley towards Iskenderun, and from there, on 20th May, via Dolmusch, to Gaziantep (Aintab) 100 miles further to the north west. With others, we travelled by taxi and as we were all making for the same destination we shared the cost. Gaziantep is situated in Kurdistan and lies 3300 feet above sea level.

Our arrival in this provincial town coincided with the beginning of the great Beiram Feast, which is enthusiastically celebrated by Mohammedans at the end of the Ramadan Fast. The streets and squares were filled with people and there was noise everywhere. In the numerous coffee houses radios loudly played Turkish music, while pedlars with shining brassware clattered around with small metal trays to attract attention. Young and old were dressed in glowing, brilliant coloured silks and the smell of sweetmeats baked in hot oil wafted through the streets. In short, the Orient offered itself in all its diversity and colour. It was only through the friendly relations of my companion with the Director of Agriculture for the area that, despite four days of fasting, we obtained a jeep, with a driver, who took us straight through the richly coloured, high steppe.

Then we went further East where scattered tracts of cultivated 'Pistachio Nut,' *Pistacia vera*, looked like dark green dots on bare hillsides in the brilliant sunshine. The air over the undulating landscape was quivering with heat and the vegetation was powdered with chalk from the road. Here we saw *Rosa foetida*, one of the parents of the Pernetiana Roses, growing by the wayside, and the pure yellow of its flowers was indescribably beautiful against the dark blue sky. Other wild roses bordered paths and ridges; pink hedge roses, and overhanging Musk Roses, which spread out their large white flowers. We also saw orange-red Hypericums and mysterious looking green and black flecked Arums, and despite the dust and aridity there grew *Gentiana olivieri* which bore above lanceolate leaved rosettes clusters of slender stalked flowers reminiscent of the *G. pneumonanthe* of our marshy meadows. Travelling on we came to a canyon-like rocky gorge worn out of the land by a little river abounding in fresh-water crabs and eventually we arrived above Nizip on the banks of the Euphrates. The muddy yellow river, here and there bordered by pyramidal Poplars with light coloured bark, *Populus nigra* var. *thevestina* meandered its way through hilly land to the Persian Gulf. On the nearby mountains we found *Crocus cancellatus*, *C. zonatus* and species of Tulips which had their felt-covered bulbs, as large as walnuts, hidden about 8 inches deep in the stony soil. Then we went on in the opposite direction from Gaziantep to Duluk-Papa, a mountain summit 3280 feet

high. In the wonderful clear, dry air the view from here stretched far across the undulating steppe land with its rusts, yellows and greys, on towards the snow-capped horizon. Much of the steppe flora was still in full bloom and the summer sleep of nature, conditioned here by heat and drought, had not yet begun. There spread the white sceptre-like flowers of *Asphodeline taurica* appearing through the grass, and whole colonies of *Hypericum* species. In the open, *Astragalus balansae* outspread its pinnate leaves and compact rose coloured flowers which lay along the ground and the large flowers of *Linum orientale* gleamed bright yellow in the sun. We walked over many different species of *Salvia* and interspersed all around were silver plumes of Feather Grass, *Stipa pennata*, which waved in the wind. Yet the great surprise which awaited us on Duluk-Papa was *Eremostachys macrophyllus*, a bushy herb growing 3 feet in height with large, shining, dark-green pinnate leaves, above which rosy hoary candelabra of rose-coloured labiate flowers. At the foot of the mountain lay bare-looking corn fields and among the sparse stalks could be seen the odd-looking flowers of *Molucella laevis* seemingly peering out of their mussel-like calyces; also the blue-flowered *Asperula orientalis* which could be used more frequently at home as a summer flowering plant. We were also astonished to see as weeds in the fields the rare *Leontopetalum* with bushy mound-like tops and also *Bongardia chrysogonum*. These are two very interesting herbaceous members of the *Berberidaceae* with yellow flowers in spring. Their knobbly tubers, as big as one's fist, lay 12-15 inches deep in the stony clay soil and it cost much toil and sweat before we succeeded in digging out some intact specimens. Ridges and patches where cultivation of the ochre-coloured stony land became altogether too difficult on account of rock fragments, remained like islands, supporting the original vegetation of the countryside. It was here that I fulfilled a long dreamt of wish—I found *Iris sari*, an Iris of the *Oncocyclus* group. The local peasants called this plant 'kurkulak,' that is, brown Iris, because of its brownish or greenish yellow flowers which are streaked with reddish brown. Naturally the flowers were long since over and the characteristic shrivelled seeds, with white aril, were already ripe. We were told of the station of this Iris by Mr. Jisly, the Head of the American Hospital at Iskenderun. This plant lover has a garden full of flowers which includes a huge collection of Iris. He also told us where to find *Iris histrio* var. *aintabensis*, which is a light blue, very early flowering bulbous Iris of the *Reticulata* section occurring only in the neighbourhood of Gaziantep. As directed, our patient jeep driver drove on South West over rough narrow tracks, up and down over two chains of hills till the path became narrow and difficult and eventually indistinguishable. We had to go by foot over another range of hills and then we saw in the distance the characteristic dark stone formation of volcanic origin where the Iris should be growing, and there we found it. The awl-shaped leaves, about 9 inches long, had not completely turned yellow and tufts showed up well in the sparse cover. Some 4 inches

deep in the black crumbly soil, as dry as dust, lay the white-skinned bulbs about the size of hazelnuts. Full of astonishment, we confirmed that the ripening seed capsules lay under the soil, borne on short stems just above the bulbs. Doubtless the seeds with their bright coloured arils were disseminated by ants which, in summer, could easily penetrate the dry ground. We also admired, on the top of the ridge, a richly coloured *Phlomis* which grew between rocks, but unfortunately not as yet bearing seeds. As we made our return to Gaziantep, blessed with our rich booty, the sun was already sinking, and from the ground below, shadowed with the blue of the evening, came the clear long drawn out howl of the hunting jackals.

The next day we went by bus in a North Westerly direction to Marash, a little provincial town at the foot of Achr-Dag in the Anti-Taurus. The Beiram Feast was also being celebrated here. Young and old, especially the ubiquitous, thickly veiled women, crowded into the squares and in front of the numerous Mosques. We were astonished to find that many storks nested on the roofs in this small town, where they found in the neighbourhood plenty of food for their young in the extensive rice fields across the valley of the Seychan River. Then we wandered for hours on Achr-Dag through thick growth of *Gundelia tournefortii*, a strange prickly thistle-like plant with reddish-brown flower heads. This plant, about 18 inches high, had colonised whole hillsides, whilst higher up on the crest, the stony ground was beautifully dotted with the prickly hedgehog-like cushions of *Acantholimon*. As we were told, we found that the cushions of *Acantholimon*, after being slightly singed by fire, were used for feeding animals in winter and spring when food is scarce. Unfortunately there were no flowers left on these numerous prickly cushions. We were surprised, however, to find *Onobrychis cornuta* still in flower. Numerous cushions, up to 2 square yards and covered all over with carmine flowers, occurred on the limestone scree. The view across these flowering cushions to the snow capped Taurus was exceptionally beautiful. Naturally we also found various bulbous plants on Achr-Dag. *Ixiolirion montanum* with its blue flower-spikes was so easy to find, but in comparison a narrow leafed, charming Tulip, perhaps *T. chrysantha*, was most elusive in the stony ground. Only by chance and near the snow line at a height of 6570 feet, in quite open places, did I find several colonies of *Eranthis cilicica* which had long since flowered.

On the journey from Marash to Haruniye we saw patches of *Iris aurea* in full bloom. It is a beautiful plant of the Spuria Section, with large elegant dark yellow flowers and stalks about 3 feet tall. They were found on meadows near a dried up water course but would be flooded over towards the end of winter. The same applied to the Oleander which was to be found at times in the dry scree and at times surrounded by water at the edge of a little stream. The plants were just in full bloom and were bent down with the weight of their pink flowers.

Our next goal was the Taurus mountain which had enticed us from a great distance with its everlasting snow cap. We went through the

great fruitful plain of Adana where already on 5th June, with the help of modern American combine harvesters, the harvest was in full progress. Cotton was also cultivated in great quantity in the neighbourhood of the Seychan River, which supplies water to irrigate the fields. The dusty Agaves which grew along the ditches like weeds, the Eucalyptus trees with their pendulous grey-green leaves, and the banana trees which grew here and there near the peasants' huts were signs that we had arrived in a sub-tropical area. There was an oppressive humid heat and naturally this hot-house atmosphere suited many plants such as 'Bottle Trees' (*Brachychiton populneum*) from Australia which formed shady alleys and bore numerous brightly-coloured flowers. We stayed in the cool shade of date palms for a short mid-day rest and enjoyed fresh yoghurt before leaving this plain. The driver of a lorry with a load for Ankara offered to come with us to the Rilik Gate, the top of the pass on that ancient road over the Taurus that joins the North side with the South. We overtook some picturesque camel caravans laden with bright carpets, herds of sheep and angora goats, and were ourselves overtaken by wealthy Armenians in their elegant American cars. We travelled uphill, reaching the top in the twilight, and found accommodation in a newly constructed hotel and left very early next morning to climb the adjacent summit. In the sparse arid forest of *Juniperus excelsa*, *J. drupacea* and *Pinus pallasiana*, some attractive herbs were found—the silver-felted *Salvia argentea*, and *Centaurea urvillei* growing flat on the ground with rose-coloured flowers; *Haplophyllum boissieri*, a yellow-flowered dwarf member of the Rutaceae, and *Linaria genistifolia* with narrow spikes of yellow flowers. In higher areas we were delighted to find the scented rose-coloured little bushes of *Aethionema grandiflorum* and *Aubrietia deltoidea*, *Iberis sempervirens*, *Onosma albo-roseum*, *Stachys lavandulaefolia* with beautiful silken-haired whorls of rose-coloured flowers, also *Cyclamen cilicicum*, whose pale pink flowers would appear in September between mottled leaves, and the rose-coloured *Arabis aubrietoides*. *Allium zebdanense* grew profusely in the scree and still carried pale yellow flowers, while many other bulbous plants, *Chionodoxa*, *Muscari*, *Ornithogalum*, *Crocus*, *Iris persica* and various Colchicums showed their presence only by yellowed leaves. At the time of writing, in February, the Colchicum bulbs which I brought back are in full flower in a cool house and have been identified as *C. biebersteinii*, and *C. hydrophyllum*. The latter is especially valuable in the Rock Garden because of its early pale lilac star-like flowers.

Up on the limestone rock plateau I fulfilled one of the dreams of my youth, for I saw the Cedars of Lebanon in their native habitat. There they were characteristically shaped by wind and weather, their typical dense grey-green umbrella-like crowns covered with firm cones. We spent four eventful days on the Cilician Taurus, often watching eagles and vultures hovering around. Near Tchiftehan, a small town with a hot mineral spring, we admired the great cushions of *Convolvulus assyricus* with silvery leaves and white flowers, a wonderful plant

which should be introduced into our rock gardens. Unfortunately the plants I gathered did not survive the long journey and it would be more successful to introduce seeds if one could procure them. We also found *Pelargonium endlicherianum*, which grew on a scree not far from a little primitive mountain village whose inhabitants told us that they used it as worm medicine for cattle. *Pelargonium endlicherianum* is the only winter hardy representative of a mainly South African genus and at home we treasure it as an interesting rock garden or wall plant which we can put in very dry, stony places. It is a curiosity on account of its striking dark carmine striped flowers in which only the upper two of the five petals develop.

In still higher parts where *Abies cilicica* and Lebanon Cedars formed a belt of open woodland, dense clumps of *Arabis androsacea* were growing on the steep stony slopes. Also present were *Centaurea pulcherrima*, unfortunately not yet in flower, but striking because of its numbers and its silvery-grey leaves, and *Sedum sempervivoides*, whose beautiful pointed-leaved rosettes looked pale after the effective red flowers. On the sunless overhanging limestone rocks we found the yellow flowering *Saxifraga kotschyi* in narrow crevices where cushions, closely packed and as hard as stone, clung to the brightly coloured rock. Numerous rock swallows and flocks of alpine swifts flew around the mountain top, which offered a magnificent view over the Taurus Mountains. The Taurus express, which leaves from Beirut, took us to Ankara from Tchiftehan in 20 hours. Of the many impressions gained during the journey I should like to mention only two, namely the view of the 12,790 ft. high Erjias mountains, which rose up from the steppe like a giant pyramid gleaming like silver in the morning light, and the enormous drifts of ivory-coloured *Iris ochroleuca* which dominated the flats by the river.

Ankara, the chief town of the steppe, and the capital of modern Turkey, has two different aspects—an old oriental one and a modern European one. The government monumental buildings and the mausoleum of Attaturk are wonderful and impressive, but we romantic Germans prefer the old quarter, which clings to the sides of the old fortress mountain, and also the ruins of the ancient Temple of Augustus, now inhabited only by storks. The fez, once the compulsory headgear for all men, has on Attaturk's order disappeared and in its place are innumerable caps, but the veil of the women has disappeared only in the modern European quarters of large towns. Elsewhere, especially in the country, heavily veiled female figures would disappear along streets and attempting to capture such typical oriental scenes with a camera is not advisable. Ankara lies about 3000 feet above sea level on high steppe land which is picturesquely undulating and only seldom traversed by narrow valleys in which the special climates support quite a different kind of colourful vegetation. I write "colourful" intentionally, for the hot dry breath of summer had not yet (11th June) spread over the land. Storm clouds danced to and fro in the wide expanse of sky and suddenly a downpour would freshen the still green

and blooming steppe. How brightly coloured were the different shades of herb and shrub with the sunlight streaming down on them before the dark clouds again appeared from over the hills ! There were the silvery rounded bushes of *Prunus argentea* (*Amygdalus orientalis*), the orange-red *Glaucium corniculatum*, the pale yellows of the various *Onosmas*, the violet *Salvia horminum* and the lilac *Vicia tenuifolia*. Tufts of deep blue *Vinca herbacea* appeared here and there on the ground along with *Thymus squarrosus*, *Convolvulus lineatus*, *Teucrium polium*, *Centaurea urvillei*, *Scutellaria orientalis*, *Astragalus vulnerariae* and *A. microcephalus* ; *Globularia trichosantha*, *G. orientalis*, *Geranium tuberosum* and hundreds of other plants. *Iris acutiloba*, a very charming little representative of the *Oncocyclus* group, had naturally long since bloomed but still bore narrow sickle-shaped leaves and I was just as pleased to see it as I was to see *Morina persica*, which proudly carried its whorls of pink flowers above the oddly shaped leaves. I shall never forget the sweet, almost intoxicating, honeyed scent of *Elaeagnus angustifolia* which came over to us with the wind from the steppe. Dr. Camil Bilger of the Botanical Institute at Ankara who kindly showed me, for days on end, the many interesting sights of the steppe of his homeland, told me that in spring all the hills glowed with the gold of the Ankara Crocus (*Crocus ancyrensis*). It is also the first to flower in our garden, sending up its gleaming golden buds often at the end of February through the melting snow. Like giant balls of scented white flowers, plants of *Gypsophylla eriocalyx*, a beautiful annual about 3 feet high, occurred as weeds in fields which, near the small lake of Mogan Golu, were quite violet blue with *Delphinium orientale*. In an inlet of this lake grew giant bullrushes (*Phragmites pseudodonax*) which formed with its tall stalks, 18-24 feet high, a thick waving and rustling forest of reeds whose song rang out incessantly. We also visited another lake, actually an artificial reservoir, the Cubuk Baraji, which provides Ankara with water. This enormous reservoir, built in Attaturk's time, is a favourite place for outings of the people of Ankara. Below the dam, the overflow is used to fill decorative pools in which many exotic conifers are reflected, and roses and beds of flowers are planted around. Here you can walk along well cared for paths in this green oasis which lies in the midst of brown-burnt, thirsty mountain slopes. Above this and between the porphyry rock of the slopes, unnoticed by the crowds, bloom *Kentranthus longipes* in lavish rose-coloured beauty. The dense yellow umbels of a *Ferula* species appeared against the dark blue of the sky, and *Salvia recognita* greeted us with great pale pink flowers on tall waving stalks.

I took Dr. Bilger's good advice and travelled from Ankara to Istanbul¹ by the bus that usually goes daily to and fro on this run. The journey of some 300 miles lasted about 10 hours and offered unforgettable scenic impressions at the conclusion of my journey in the Middle East. First we travelled through steppe landscape, but the farther North we reached, the more did the well cared for roads wind through hilly landscape, and also did the vegetation strikingly change. At

times one was reminded of mountain landscape in Germany, so bright and fresh were the greens of the valleys and the wooded hills. Familiar plants greeted us from the meadowland on the roadsides—*Bellis perennis*, *Veronica prostrata*, *Genista pilosa*, *Helianthemum* and *Filipendula*, *Iris pseudacorus* and Dog Roses. Then we passed into woods—luxuriant, mixed woods of *Abies bornmuelleriana*, *Fagus orientalis* and *Ostrya carpinifolia*, as well as *Castanea sativa*, *Fraxinus oxycarpa* and the silvery Lime, *Tilia argentea*, Elms, Sycamores, and luxuriant Planes which arched across the road and clothed hillside and valley. This is the Pontic Mountain Chain that stretches from the south coast of the Black Sea right to the Caucasus. Veils of cloud were spread over the wooded hills and it was only rain that kept me from asking the bus driver to stop so that I could take photographs, for what the eye saw—*Rhododendron* flowers—was so fantastically beautiful that one wanted to stay for hours and enjoy them. *Rhododendron ponticum* grew thickly as undergrowth in the forest, the large leaves hardly visible under the rich lilac flowers. This *Rhododendron* sends up dense arching branches like advancing waves of growth suppressing everything and making it a hated weed by the foresters of the district. Wherever one looked there were the flowers of this *Rhododendron* in light and dark shades of lilac, with growth as luxuriant as it makes in a Scottish park. The big-leaved Ivy, *Hedera colchica*, peeped out here and there or climbed many of the trees with its thick network of growth, as did *Smilax aspera*. In a woodland meadow there were yellow Marguerites—the flowers of *Doronicum caucasicum*—and, at a spot where we stopped for midday rest, bear skins were hanging out for sale beside a shop. They reminded us that in these thick primeval forests Bruin is still at large, but unfortunately even here he is unable to live a completely undisturbed life.

On the other side of the mountain chain the hot dusty road led through fields of Maize, Vines, Tobacco, Paprika and Wheat; or orchards hanging with glistening red Cherries and ripe, sweet-smelling Apricots, and took us on to Istanbul, whose Mosques and minarets greeted us from afar, gleaming in the distance. A fantastic flight back over sea, land and mountain brought me home again on 19th June.

When I think back over the eventful days of this journey in the East, memories return of all the friends and colleagues in the state-owned and private establishments who, wherever I went, offered me friendly assistance. I remember the kind hospitality which I received among the peasants, also the many unknown and simple herdsmen and nomads who offered us carpets on which to stretch ourselves in front of their tents and who shared with us their yoghurt and jüfka.

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This and That

By "E. D. W."

IN WINTER one of my favourite pastimes is map reading, which helps to recall memorable days spent climbing and rambling over some of our Scottish mountains to find and learn something about our native plants.

During a stay in Fortingall in the early days of the war, my husband and I climbed Meall nan Tarmachan. Following a hard scramble up a little burn, my efforts were amply rewarded by my first sight of *Saxifraga oppositifolia* with its reddish purple flowers as large as six-pences. Until it is seen in bloom draping the rocks of a steep mountain burn on the edge of melting snow one has no idea how exquisite it is.

Then on my first outing with the S.R.G.C. to Ben Lawers what stood out was being greeted at the end of a long day of many thrilling scenes and sights of our mountain flowers by the delightful scent of the dainty greenish white spikes of Butterfly orchids. *Silene acaulis* gave me my most exciting day—the very first alpine I had ever found—perfect little pincushions studded with pink blossoms and growing in scree on a mountain top in Glen Feshie. What made it so exciting was that just before my find, on rounding a shoulder of the mountain, a golden eagle rose off the ground about 25 yards away and flew up and over us, circled two or three times before disappearing over the ridge into a huge wild corrie.

Another year a party of us made Inchnadamph our H.Q. for about six days—days of glorious sunshine—the despair of the anglers staying in the hotel—whilst "The Highland" at Aberdeen was flooded out that same week. Here were meadows of wild orchids of every shade from white to dark purple and on the mountain sides were sheets of the mountain Avens, *Dryas octopetala*. The moor in front of the hotel was tinder dry after weeks of drought in spite of which the two *Droseras*, *D. rotundifolia* and *D. anglica*, were perfectly fresh and healthy. On the mountain tops of this district I had my first sight of the tiniest creeping Azalea with its tongue-twisting name of *Loiseleuria procumbens*. I think the loveliest picture during that week was when we found the Oyster plant, *Mertensia maritima*, at Stoer near Lochinver. There, growing out of pure white sand, nestling between the red sandstone rocks, were clusters of china blue flowers on trailing stems with fleshy blue-grey leaves and in the background the sea sparkled in shades of deep blue and vivid green.

Another year I went with D. to Glen Clova. We weren't so lucky with the weather this time and had many weary miles to walk to reach our objective and often in pouring rain, but were fortunate that the rare *Oxytropis campestris* was found. What fascinating place names there are around this area : Glen Clova itself and Corrie Fee, a wonderful natural alpine garden where we found tiny creeping willows, *Salix*

reticulata with its pinkish stalks and dark green shining leaves with a very distinct network of veins, and *Salix herbacea*, the dwarf willow spoken of as "the smallest tree in the world," with its pods of vivid waxy red ; the moor of Little Kilrannoch on whose summit is the only home of the Campion, *Lychnis alpina* ; Craig Maud and Jock's Road by way of the never-to-be-forgotten Glen Doll. The first time we set out for Glen Doll the rain started to fall as we got out of the car at Braedownie and it was coming down in sheets by the time we reached our destination. With no shelter of any description we sat down on a huge rock at the head of the Glen to eat our lunch. Conscious of being watched, I looked up at the ridge above us to see two stags looking down at us. Whatever they thought of us, our one thought was a hot bath, so back we trudged again all those same weary miles.

We did return, however, and had a wonderful day, first passing through drifts of the little yellow heartsease and *Trientalis europaea* and finding dwarf cornel, *Cornus suecica*. Deep in a hollow below the place where we had eaten our lunch that wet day was a lovely golden patch of *Trollius europeus* which seemed to light up the shadows. Amongst other plants we found wood anemones, *A. nemorosa*, beside a burn near the top of Craig Maud and out on the bare hillside which seemed to me to be rather an exposed situation for this fragile woodland plant. Another fascinating name is Loch Brandy, which lies about 1200 feet above the hotel. There is a most extraordinary fault, a huge wide crack in the mountain above and behind the loch, as if the whole mountain side might break away and fall into the loch beneath. The finest centre of all is Caenlochan at the head of Glen Isla. Again the last few miles had to be done on foot, and very well worth it.

The very wet summer of a few years ago I had a week at Glenshee by myself with the intention of paying another visit to Caenlochan, and of course had to depend on "Shank's Mare" to take me there I had about five days to practice (and wait for a reasonable day) as I had nine miles of road to cover before I even started the three or four miles over the mountains. The day before I walked from the Spital to the Devil's Elbow to time myself and had to refuse lifts offered by Americans in the most luxurious cars and who obviously thought me quite crazy. Except for that experience of the Golden Eagle in Glen Feshie, I think I had my most thrilling experience that day. Coming up a long ridge towards the summit of Glas Maol from the north west I could see large herds of deer climbing straight up the almost perpendicular face of a corrie on my left. On reaching the top of the ridge I met them coming out of thick mist which had fallen by this time. It was really quite eerie, but I stood quite still and they just looked at me and walked slowly past, so close I could almost have touched them.

Next summer a party of us from the S.R.G.C. climbed from above the Devil's Elbow a shorter and steeper path and found it much easier to reach the plants from above. The view from the summit was breath-

taking—range upon range of mountains whichever way one looked. There were many lovely plants here and among them some lovely *Veronica* species.

Another totally different natural garden is found on the links at Dirleton which D. and I visited annually in September on the morning of the Autumn Show, where the Grass of Parnassus grows in company with the little pinkish annual gentian, *G. campestris*.

There were many other interesting days—of the visit to Durness, and *Primula scotica* with its dainty heads of royal purple growing on the windswept turf on the cliff tops—the shock of being ferried across at Kylesku free—of a lovely bush of our Burnet rose, *Rosa spinosissima*, near Lochinver, and drinking from a spring of crystal clear water in the sand near the high tide mark at Stoer, and of course the visit to that wonderful garden at Poolewe, in spite of the thought of going down that frightening hill at Gruinard Bay on the homeward journey.

These are some of the memories that have been recalled as I read my maps on this cold winter's evening and long for summer to come round again in anticipation of further outings in congenial company.

Thoughts on Screes

By F. CYRIL BARNES

PERHAPS THE greatest interest in rock gardening in its widest, and commonly accepted sense, is that it provides scope for the creation of features of landscaping, which are neither necessary nor desirable in more formal types of gardening. It is the freedom to plan the groundwork in three dimensions rather than two which is the whole essence of rock-gardening, though indeed we should postulate four dimensions, for time is of the essence of the contract, and if planning is carried out without reference to this factor disaster may well ensue. The various types of feature are now well known and widely used ; the bog-garden, the water garden, the stream, the peat-wall, the rootery, the drystone wall and, last but by no means least in importance, the scree and moraine (or is it perhaps now scree-moraine ?).

Whilst the scree and the moraine are in geological parlance very different entities, in gardening literature they have tended to become synonymous. This indeed may be the result of the empiricism of gardeners for essentially both scree and moraine consist largely of stone chippings, pebbles, gravel or similar inert material with a sparse leavening of organic soil : if there is any difference in the terms from a gardening stand-point it is that the moraine has water percolating through and under it, a factor which in the relatively moist conditions which these islands normally experience is not indeed likely either to differentiate it from or give it any overwhelming advantage over the scree.

In nature, the scree is formed of detritus broken away from the living rock by the natural forces of gravity, frost, water and wind. whatever is broken away must fall and hence the profile of a scree must be a sloping one : sloping down from the rock from which it is derived.

I have no wish to pontificate on these matters from a perfunctory knowledge but perhaps a description of two natural screes may be illustrative of the principles involved. I omit any reference to moraines in the geological sense, for all those I have seen here and abroad are singularly devoid of interest to the gardener, as they appear to support little plant life but grass and sedges.

The first scree lies some two miles north-west of Seefeld in Tirol, immediately above the railway line, and indeed it may owe something of its present form to engineering operations. It is perhaps 70 yards long and 50 feet high : of its steepness I am not perhaps the best of witnesses, for on one occasion engaged in its topmost reaches I heard a train approaching and turning "like a guilty thing surprised," lost my balance and hurtled, to the plaudits of the train-borne multitude, to a violent encounter with the wire fence which kept me from encroaching the territory of the O.B.B. But thrusting aside personal feelings the characteristic of this particular scree which impressed itself on the memory is its incredible uniformity of texture. The whole of this extensive area was composed solely of chippings of limestone which conformed without exception to the type sold at teens of shillings the hundredweight and classified as "1/8th-3/16th." Of smaller stuff there was little if any apart from a very fine muddy accretion which was presumably the only source of nutriment to the plants growing therein.

The plants, perhaps not surprisingly displayed a similar restriction ; perhaps 80% of the total area, that is all apart from the fringes, was monopolised by *Saxifraga caesia*, which grew in solitary, though not unmerited splendour, for the fringes were taken up by various dreary composites and certain members of the Caryophyllaceae whose merits could not be judged as they were showing merely the first growths of the season.

The second scree which attracted my attention lies in the Vallenga at the head of Val Gardena, Dolomites. Falling from a crag with an aspect towards the south-west this scree is composed of boulders which very nearly comply with the directions of Reginald Farrer in providing a home for *Geum reptans*, where he prescribes stones from the "size of a child's head to that of a man's coffin." If the latter were lacking there was indeed no shortage of the former, and intermediate sizes were not wanting : perhaps it is only the customary over-statement of Farrer which precludes us from including the larger category within our cognisance. But *Geum reptans* was missing, for this lay well below the usual levels : instead *Rhodothamnus chamaecistus* monopolised the territory. A thorough investigation of a few square yards occasioned by the necessity of following the long woody roots

of the *Rhodothamnus* selected revealed that of soil in any sense there was but the minutest quantity and that of a black greasy peaty nature which may well indicate a reason why this plant grows so much better in a peaty soil than a limy one : indeed I am convinced that this is one of the plants which gives of its best in captivity rather than in its native haunts.

From these two diverse natural screees what conclusions can be drawn ? The first is the well-known paradox that screees provide perfect drainage and yet are always moist underneath the surface. The second, and perhaps more controversial in its implications, is that the proportion of soil, silt and humus to that of inert material is a minute one. Not having the necessary equipment to hand I was unable to make any accurate computation of the relative proportions but I would be most surprised if in either case the proportion of plant food in the mixture was more than 3%. This, of course, is wildly different from the compositions normally advocated. To quote a recent example, our President in Vol. V, Pt. 2, p. 104, mentions three mixtures, the poorest of which contains at least 30% of soil and this without allowing for the undoubted feeding value of boiler-ash which he uses so liberally. In his general proportions, if not the ingredients, Major-General Murray-Lyon conforms to orthodox practice and from all accounts the results are rewarding as one would expect from so well-tried a procedure. But are we not perhaps becoming a little too rigid in our thinking ? Is it not now the time to experiment in a much more radical manner ? We know from experience that the accepted formulas work : if they did not they would not now be accepted. Let us for good or ill turn to Nature and study her ways. Let us construct a scree with a minimum of soil in any form and an overwhelming proportion of drainage material (but let boiler-ash be excluded from this category on account of its partly organic origins) and see what happens.

Fortunately, the completion of this paper need not await another two or three years for the outcome for my friend G. E. Selby of Durham has already reported in the *Journal* on this topic (*S.R.G.C. Journal*, Part 13, p. 225). I can now report that the scree in question is still in flourishing condition, though I must add (which may somewhat vitiate my contentions) that this year a generous top dressing of lime, bonemeal and boiler-ash (again) has been given to the scree and indeed the whole garden. Even so it is doubtful if even after fifty years, especially allowing for wastage, whether the soil content would even approach that of a "poor" standard mixture. But my own experience is perhaps more germane, inasmuch as the first scree I constructed five years ago comprised nothing but whinstone chippings and nothing has been added since except by natural forces. This scree is smallish, 4 feet wide by 8 feet long, facing due west and on a fierce slope of about 30° from the horizontal : on such a slope little but the essential minimum of soil could possibly be retained against the natural drainage. It is not to be pretended that all plants are equally happy in such



Photo—E. A. Marshall

Fig. 41—On the Applegate River, with *Arbutus Menziesii* in foreground
(see page 283)



Photo—E. A. Marshall

Fig. 42—*Iris chrysophylla* (see page 285)



Photo—E. A. Marshall

Fig. 43—*Phlox adsurgens* (see pages 286 and 349)



Photo—E. A. Marshall

Fig 44—*Rhododendron occidentale* (see page 286)



Photo—E. A. Marshall

Fig. 45—*Cypripedium californicum*, in the author's garden (see page 288)



Photo—D. Wilkie

Fig. 46—*Gentiana straminea* (see page 328)

conditions. *Geranium farreri* waxed modestly for three years but has since gone off to such an extent that transference to pastures new is essential. Oddly enough, Farrer's onion did so well it had to be divided every year and the surplus transferred to more loamy conditions where it continues to increase but at no greater rate. Some plants, including *Hypericum coris*, have disappeared completely, though this may well be due to climate than to soil starvation. *Androsaces*, *chumbyi* and *yunnanensis* still continue after five years, though with only moderate vigour: they have, however, between them furnished, with their progeny, many feet of more nutritious soil, and may therefore be regarded as having exhausted themselves in a good cause.

But undoubtedly the great success of this scree is *Potentilla nitida* which, installed as an original inhabitant, has gradually widened its silver mat and apart from furnishing its annual quota of ready rooted cuttings has bloomed ever-increasingly over the five years. This year there has been approaching 100 blooms on a mat less than a square foot in area.

The *Kabschia saxifrages* do well in this too, though they grow very slowly and are not likely in my lifetime to fill a 9 in. pan with their rosettes. A *Crassula* bought as "Basutoland," now presumably *sediformis*, has at last settled down, after migrating partly under its own steam and partly with the help of blackbirds, in a position six feet from that originally selected for it and now presents a somewhat opulent 6 in. rosette to all beholders.

The second scree I constructed was composed of the surplus whinstone from the first to the same ascetic formula and has from the first harboured little but *Sempervivums*. They flourish, but that is not remarkable, and we may therefore pass to scree No. 3.

A silly border between the house and the lawn 5 feet wide and 25 feet long consistently refused to harbour anything of horticultural interest, therefore three years ago it was dug out to the yellow clay about a foot down, and the resulting cavity filled with three tons of quarry waste. The local stone here is sandstone, and the waste consists of pieces the size of two hands at prayer down to sand. The larger sizes were considered too large, especially as they comprised the great bulk of the consignment, and therefore recourse was had to the 7 lb. hammer, a fine form of exercise but a poor substitute for a grading machine at the quarry. Over the heavily battered remains was strewn a bale (2 cwts.) of peat which was worked in with a pick (no other implement was of the slightest use). A deluge from the hose pipe ensued and all was ready for planting. The plants were in no sense specially selected, for the whole of my autumn acquisition of that year were without ceremony relegated to the new scree together with a number of plants of my own propagation.

The *Sarmentosa* varieties of *Androsace* have ramified and done well, but not so well as *Androsace lanuginosa*, which if permitted would

shortly swamp them all. Though it rarely sees the sun before 2 p.m., *Anthyllis hermänniae* does nicely and yearly produces a heavy crop of yellow blossoms. *Pentstemon* "Six Hills," though not perhaps the most estimable of plants, is singularly choosy in the garden. Of a dozen tried in various places the only one to survive (and it has spread handsomely into the bargain) is that in this scree. As might be guessed the Kabschias grow slowly but surely and bloom well. Heaths do well also ; in fact a seedling of *Calluna vulgaris* has appeared of its own volition from the peat and threatens to swamp a plant of *Aethionema* "Warley Rose" which truth to tell is not too happy in its acid and not too sunny surroundings.

And now to scree No. 4, the latest and most ambitious, and may it be claimed the most successful ? It is just over two years old, so at least an interim judgement may be offered. In its constituents if not its general principles it differed from its predecessors inasmuch as its main content was river gravel $\frac{3}{16}$ in. to $\frac{3}{8}$ in. five tons of which together with one ton of ordinary washed builder's sand provided the hardcore (so to speak).

The nutriment was furnished by six barrow loads of riddled but not too well rotted garden compost (for during the first twelve months I had quite a job with the weed seeds which had survived the composting process and which thrived on the novel conditions provided) and one bale of peat. These latter were spread on the surface and worked in with a spade. This was done somewhat unevenly to provide a variety of poor and less poor soil conditions. The great advantage of this formula is the ease with which it is possible to work. It is literally possible to lift an established plant without damage to its root system by use of the bare hands.

This scree is a fairly extensive one measuring about 15 feet in either direction and the number of plants in it now must exceed the thousand by a comfortable margin. It is not of course feasible to report in detail, so that a few generalities may suffice. I have not lost more than ten plants from all causes in the two years, though a number of plants perhaps a dozen species while growing and flowering are obviously pining to be removed to a place which provides easier living. Oddly, though, *Nierembergia rivularis*, planted according to the book in a position ideal for it, is one of these. Others have done too well, notably a *Potentilla* raised from S.R.G.C. seed which turned out to be a yellow-flowered strawberry which has since had its roving propensities severely curtailed. On the whole the great bulk of the plants, *Androsaces*, *Saxifrages*, *Campanulas*, *Drabas*, *Lewisias*, dwarf *Narcissi*, *Asperulas*, *Dianthi* and a host of other genera are settling down comfortably and promise to furnish an entire carpet before long.

In these notes I have endeavoured to be as candid as possible : it is very easy to forget our mistakes and to form too glowing an opinion of the successes, yet on the whole I think I have not given an altogether

untruthful picture except perhaps for omitting to mention two facts not without importance. In none of the screes except the first is any coarse drainage provided: the scree mixture is immediately superincumbent upon the levelled subsoil, the naturally steep levels obviating the need for this: and secondly, no lime in any shape or form has been used. Perhaps these notes may encourage further experiment—at least they may be provocative of further discussions.

Old Moyes

I likes ta be out cum rain cum sun,
 Ta be gittin' me bit a gaardenin' dun ;
 I'm glad a shumakker I di'nt be,
 What set on a bench continerally.
 I used to tend hosses an foller a plough,
 But I fisherates in a gaarden naow.
 There's narthun better'n wuk wi flowers,
 Catch me creatin' for shorter hours.

Lads dunt like wuk that seem ta me,
 Slow as the hod-me-dods*, they be,
 Girt okkud chaps what thinks they knaows,
 Plants things anyhap 'stead o rows.
 If onny my faather'd lived this daay,
 I'd like to a heard what 'e 'ad ter saay.
 "Row-tations" what he allus said
 Wus the waay to set a flower bed.

Now fowks is sayin' as stones dunt graow,
 But that they du, I surelie knaow,
 I'm whooly stammed with the new cum waays,
 They're suthin different to my young days.
 Then, gnats of an evenin' wuz a sign
 As the follerin' daay ud be warm and fine :
 My stars ! but it dunt mean that no more,
 If yer sees 'em naow, that'll whooly pour.

*Hod-me-dod = snail.

Remembrance

With what lithe grace you strode through brush and clearing ;
 How swift and sure you climbed the mountain way ;
 How often on some gloomy peak you waited
 To see the splendour of a newborn day.
 Keen-eyed you searched the uplands and the valley,
 The skid trail, forest, and beside the shore,
 Intent on finding seedpod, fern or flower
 That you had never chanced to see before.
 'Twas you who found the exquisite Calypso
 Cushioned in moss beneath a shady tree ;
 Found, too, the birdsfoot violet safely hiding
 And kept this precious secret faithfully.
 You knew about the silica in "horsetails"
 And gathered them to make your fish hooks clean ;
 Knew when the "shooting stars" would be appearing ;
 Where humming-birds were likely to be seen.
 You loved to feel the warm chinook wind blowing ;—
 The starry stillness of a Northern night ;
 To see swift moving deer amongst the brushwood ;—
 Hear the loud zooming of a nightjar's flight.
 But now fritillaries and erythroniums,
 The squaw's red paintbrush, and the golden rod
 Will bloom unseen by you—for you are learning
 Of greater glories on the hills of God.

R. M. H.

Books

By CHRISTIANA BOYD-HARVEY

IT HAS been suggested to me that I should draw up a list of books for beginners, but I am puzzled to know where a beginner ends and an expert begins. Many new members bring with them an extensive experience of other forms of gardening, and others have a good knowledge of mountain plants at home and abroad. Membership is based on a desire to find out more about rock garden plants and their cultivation, but the more one learns the greater the realization of how much there is still to be learnt. Very few of us would say "I am an expert and I know it all. I need neither books nor advice and I might as well hand in my resignation." I would therefore exclude very few gardening books as 'too difficult' for those who still recognize themselves to be beginners.

The book which I should imagine to have the greatest circulation throughout our membership is Mansfield's "*ALPINES IN COLOUR*

AND CULTIVATION.” This book does not offer to spoonfeed with a list of ‘the hundred best alpiners’ but for each plant it gives in concise form the derivation of both specific and generic names, the country of origin, brief notes on cultivation and type of soil, height and spread, month of flowering, and month and method of propagating.

When I prepared a book list for circulating in my own county last winter, ‘Mansfield’ was placed at the top of the list because it was the one book which I believed should be possessed by every new member and it is most unfortunate that it is now out of print. It is to be hoped that there are still shop-soiled and second-hand copies available. Although it has faults, I know of no other reference book which gives so much information about plants in so little space.

For a very practical book on the subject of building and planting a rock garden, I would recommend L. D. Hill’s “*ALPINE GARDENING.*” There are chapters dealing with alpine banks, dry walls, paths and alpine lawns, and also with the more conventional type of small rock garden with pond and waterfall. A plant glossary describes the best species in each genus for the beginner, and there are valuable propagating instructions. The charts giving lists of plants for different situations in sun or shade, together with the duration of their flowering period, are perhaps the most valuable part of the book. Suppose, for instance, that one feels that the garden lacks interest in November, then one only has to glance down the column for that month to find out that there ought to be two forms of *Cyclamen*, three varieties of *Erica*, three *Crocus* species, an early snowdrop and the last of *Gentiana sino-ornata* in full flower in that dull and dreary month.

It is difficult to know under which heading ‘Farrer’ should appear in the book list. Is “*THE ENGLISH ROCK GARDEN*” a text book or a bedside book gradually to be devoured from cover (Vol. I) to cover (Vol. 2) ? It is difficult to know how long the beginner may rest content without it, but there is no doubt at all that November is the month in which it should be acquired so that a whole winter of long evenings lies ahead.

Farrer says that one of the reasons why he wrote “*The English Rock Garden*” was to “boil down” botanical diagnoses into two or three essential unvarying points. Having boiled them down he then bubbled them up again into something like this :—

“. . . . an inch or two of stem, shaggy with fur of bronzy gold, a fluffy frill of the same, and then, almost sitting upon the moor, like some mystic water-lily, a great goblet-shaped flower, staring up to the sun, white as an opalescent pearl within, and tasselled with fire, while the outside of the pearl is a-shimmer with gold and violet silk, iridescent as it catches the sun in countless shifting shades of lilac and fawn and milk. . . .”

And here is our Club emblem :—

“*Dryas octopetala* is the sovereign of all shrubs for the rock-garden, with its hearty flat evergreen carpets of little oak-like

leaves, grey beneath, and snowed over in June with immense flowers like creamy and glorified versions of *Anemone baldensis* on stalks of 2 inches or so, that afterwards draw up to 4 or 5 inches to bear the hardly less beautiful silver fluff-whirls of the seeds The whole family is of a pedigree and antiquity so dizzying that *D. octopetala* is even found as a fossil in the frozen heart of the world."

'Farrer' is as quotable as the Bible or Shakespeare, and whenever two or three rock gardeners are gathered together, the words 'Farrer says' are inevitably heard.

In 1937, Dr. Sampson Clay's "*THE PRESENT DAY ROCK GARDEN*" was published as a complementary volume to revise and bring up to date "*The English Rock Garden.*" The Introduction and the photographs alone are worth almost the whole cost of the book. It is of great value to the specialist in South American plants, but in all honesty it must be said that quite a time must pass before most beginners reach the stage when 'Clay' becomes a necessity rather than a most desirable luxury.

The new beginner with a new rock garden will be impatient to clothe it in colour and at first anything and everything will be acceptable—Beginners Collections, Choice Collections, Connoisseurs Collections, plus anything which looks entrancing on nursery stands or sounds desirable in catalogues. With the passage of time, some of these may have died and others will have ramped, but perhaps one outstanding plant will have endeared itself to its owner by its beauty and good behaviour. This is the moment when the beginner may decide to specialize. Suppose the favourite plant should be *Fritillaria meleagris*. The specializing beginner will then ignore all other genera in catalogues and bulb lists. When the Club seed list arrives, all the *Fritillaria* species offered will be entered on the order form, and the need will be felt for a book about the genus. The snag of over-specialization will then become apparent—that most fritillaries are over by the early summer, and so then the new specialist may decide also to collect late-flowering gentians or the smaller lilies.

Some monographs are learned documents written by botanists for botanists. The specialist books in the following list all provide for growing the plants, as well as for identifying them, but they vary in the amount of previous knowledge which they assume the reader already has. Some of them include not only rock garden plants, but also taller species more suitable for the shrub garden or herbaceous border.

Dr. Taylor's "*AN ACCOUNT OF THE GENUS MECONOPSIS*" is the only book on the list which might be found 'difficult' by the novice with no knowledge of botanical terms, but together with the "*Notes on Cultivation*" by E. H. M. Cox it is a superb book for more advanced growers who wish to give their serious attention to the genus.

“*GENTIANS*,” written by our Honorary Vice-President, Mr. David Wilkie, is a good example of a book which is not only useful to the beginner but also to the advancing enthusiast.

The beginner not yet fully established as a specialist will find much information in back numbers of the S.R.G.C. *Journal*. Some of them are out of print, but the Treasurer from time to time receives copies back from those families where there is more than one member of the Club (see 1957 *Year Book*, page 6).

With so many members living with mountains almost on the doorstep, there is a widespread interest in native plants. A book for their easy identification is “*FLOWERS OF THE FIELD*,” written about a hundred years ago by the Rev. C. A. Johns. I find that a number of my friends were nurtured on it from early childhood and are still using it. My own tattered 1909 edition was revised by Clarence Elliott and in his introduction he refers to it as “the simple book in which for so many years keen unscientific amateurs have been wont to burrow and find quite successfully the names of the plants.” “*Flowers of the Field*” was revised again in 1949 by R. A. Blakelock, and brought into line with current botanical classification and nomenclature.

Dryas octopetala is described thus :—

“*D. octopetala* (Mountain Avens) : The only British species. *Stems* hard and thick, creeping ; *leaves* oblong, deeply cut, white with woolly down beneath ; *flowers* white, large, and handsome, borne singly on erect simple stalks 2-3 inches high ; *petals* usually 8. Not uncommon in the mountainous parts of England, Scotland and Ireland, and easily distinguished by its handsome white flowers which are an inch or more in diameter. Fl. June, July. Perennial.”

For more advanced students “*FLORA OF THE BRITISH ISLES*,” by Clapham, Tutin and Warburg, is now the Authority. This is the book which Show Judges like to carry under their arms when approaching the entries of Scottish Native Plants. Here is *Dryas* again :—

“*D. octopetala* L. ‘Mountain Avens.’ Much branched tortuous, creeping undershrub. Lvs numerous, blade 0.5-2 cm., oblong or ovate-oblong, obtuse, rounded or truncate at base, stalked, deeply crenate or crenate-dentate, dark green and glabrous above with impressed veins, densely white tomentose beneath ; stipules scarious, brownish, adnate. Fl.-stalk 2-8 cm., erect, tomentose with blackish glandular hairs above. Fls. 2.5-4 cm. diam. Sepals oblong, tomentose and with blackish glandular hairs. Petals oblong, white. Fl. 6-7. Homogamous or nearly so, visited by various insects, self-pollination possible. $2n = 18^*$. Chw. Native. Ledges and crevices on mountains of basic rocks, local ; ascending to 2800 ft., descending to sea-level in Sutherland and Clare. ?Stafford, Caernarvon (very rare), W. Yorks, Westmorland (?extinct) ; Perth to Orkney ; N. and ” Ireland from Antrim to Clare. 19, H IO.

Arctic and subarctic Europe, Asia, America ; high mountains of Europe south to the Pyrenees, Apennines and Macedonia ; Rocky Mountains, south to Colorado.”

“*MOUNTAIN FLOWERS*,” by John Raven and Max Walters, is strongly recommended for reading before and during a climbing holiday in the British Isles. It discusses the bearing which altitude, climate and soil have on the flora of a district, and the adaptations by which plants are fitted for special situations. The floras of different mountain ranges are examined in fullest detail—perhaps almost too fully for most of us. Rock gardeners do not usually share in the enthusiasm which a botanist feels for rare species of *Hieracium*. Those who are inclined to dismiss them all as ‘nothing but a lot of dandelions’ may skim lightly through those pages which are devoted to that genus and pass on to other chapters of very great interest. The beautiful photographs taken by Mr. Grant Roger include one of *Diapensia lapponica*—the ‘new to Scotland’ plant—in its native habitat.

It was Edward Forbes who, a hundred years ago, first offered an explanation for the wide distribution of certain mountain plants, and Charles Darwin acknowledged indebtedness to him in his “*Origin of Species*.” The authors of “*Mountain Flowers*” also refer to the earth-shattering changes of climate, land contours and coastline which have caused plants of arctic origin first to advance southwards before the oncoming polar ice, and then to retreat from incoming temperate invaders to take refuge in the harsher places of the northern continents. The recently published “*HISTORY OF THE BRITISH FLORA*,” by Dr. Harry Godwin, records the many years of patient research which have provided factual evidence to support Darwin’s theory. It appears at first sight to have little to do with gardening, but we, when weeding our small plots, are frustrating the natural return of the land to forest as surely as the primitive agriculturalists who cleared the land by burning trees. The book increases our respect for the antiquity and the resistance to adversity of *Dryas*, *Loiseleuria* and *Saxifraga oppositifolia* who do us the honour of growing in our gardens. The book is for those who already have a good knowledge of native plants, and desire to know more about them in the time before Man himself arrived by walking across the dry land which connected this island to the continent.

It may come as a shock to some members to know that our own precious, exclusive, undeniable endemic *Primula scotica* formerly grew where Cambridgeshire now is. Fortunately at that remote period of prehistory there was no Paleolithic botanist tactless enough to scratch ‘*Primula anglica*’ on a flat piece of stone, together with a description of the plant.

In conclusion I should particularly like to recommend for a bedside book or birthday present “*The Coming of the Flowers*,” by A. W. Anderson, Curator of the Timaru Botanical Gardens, New Zealand.

It recounts not only the heroism of plant collectors through the ages, but also the means whereby enthusiastic horticulturalists of the past have managed to secure plants by stealth and subterfuge. The second edition has the less euphonious title of "*HOW WE GOT OUR FLOWERS*," but in spite of this it remains a most delightful and amusing little book.

HOW TO OBTAIN BOOKS

NEW. In addition to the books here listed, further suggestions may come from reviews published in the *S.R.G.C. JOURNAL*, the *A.G.S. BULLETIN*, the *R.H.S. JOURNAL*, *THE GARDENERS' CHRONICLE* and elsewhere. Bibliographies at the end of books give valuable guidance for further reading on the same or similar subjects.

(Prize vouchers won at Shows may be used in payment but only with those booksellers who are members of the Club, attend the Club Shows, or advertise in S.R.G.C. publications).

SECOND HAND. The second hand shelves of booksellers may be searched or books ordered by post from specialists in rare books. Booksellers who have not the required book in stock will usually offer to obtain it from elsewhere or keep a watch for it at Sales.

(See advertisements in S.R.G.C. publications).

ON LOAN. Excellent facilities for borrowing exist all over Scotland. Application is made to the local City or County Librarian, and if the required book is not in stock it will be obtained through the agency of the Scottish Central Library. The request should give information as to the author, title, publisher and price. If there is any difficulty over obtaining this information, queries may be sent to the Club Advice Bureau. (See *Year Book* 1957, page 7, para. 1.)

BOOK LIST

GENERAL

- L. D. Hills : *Alpine Gardening* ; Faber and Faber ; 25/-
- G. K. Mooney : *Rock Gardening* ; Amateur Gardening ; 3/6
- T. C. Mansfield : *Alpines in Colour and Cultivation* ; Out of Print.
- F. Kingdon Ward : *Commonsense Rock Gardening* ; Cape ; 10/6.
- C. Elliott : *Rock Garden Plants* ; Out of Print.
- F. Barker, W. Ingwersen, A. T. Johnson : *Rock, Wall and Water Gardening* ; The Studio ; 18/-.
- C. F. Walker : *The Alpine Garden* ; Collingridge ; 15/-.
- L. D. Hills : *The Propagation of Alpines* ; Faber and Faber ; 25/-.
- R. Farrer : *The English Rock Garden* ; Nelson ; 2 Volumes, 90/-.
- S. Clay : *The Present Day Rock Garden* ; Nelson ; 50/-.

SPECIALISTS BOOKS

- D. Wilkie : *Gentians* ; Collingridge ; 25/-.
- G. H. Berry : *Gentians in the Garden* ; Faber and Faber ; 21/-.
- K. C. Corsar : *Primulas in the Garden* ; Bles ; 16/-.

- E. H. M. and P. A. Cox : *Modern Rhododendrons* ; Nelson ; 21/-.
 G. Taylor and E. H. M. Cox : *An Account of the Genus Meconopsis* ;
 Out of Print.
 F. J. Chapple : *The Heather Garden* ; Collingridge ; 21/-.
 A. T. Johnson : *Hardy Heaths* ; Blandford Press ; 10/6.
 R. E. Heath : *Shrubs for the Rock Garden and Alpine House* ; Colling-
 ridge ; 42/-.
 H. Clifford Crook : *Campanulas* ; Collingridge ; 25/-.
 W. Ingwersen : *The Dianthus* ; Collins ; 6/-.
 B. H. B. Symons-Jeune : *Phlox* ; Collins ; 6/-.
 R. Genders : *Anemones* ; Faber and Faber ; 12/6.
 N. L. Cave : *The Iris* ; Faber and Faber ; 21/-.
 W. Irving and R. A. Malby : *Saxifrages and Rockfoils* ; Out of Print.
 G. M. Taylor : *Lilies for Beginners* ; Gifford ; 6/6.
 A. C. Maxwell : *Lilies* ; Collins ; 16/-.
 H. D. Woodcock and W. T. Stearn : *Lilies of the World* ; Colling-
 ridge ; 35/-.
 C. Beck : *Fritillaries* ; Faber and Faber ; 30/-.
 E. A. Bowles : *A Handbook of Crocus and Colchicum* ; Lane ; 30/-.
 A. D. Hall : *The Genus Tulipa* ; Royal Horticultural Society ; 20/-.
 F. C. Stern : *Snowdrops and Snowflakes* ; Royal Horticultural
 Society ; 25/-.
 A. Gray : *Miniature Daffodils* ; Collingridge ; 15/-.
 E. A. Bowles : *A Handbook of Narcissus* ; Out of Print.

MINIATURE GARDENING

- A. Ashberry : *Miniature Gardens* ; Pearson ; 15/-.
 L. D. Hills : *Alpines without a Garden* ; Faber and Faber ; 12/6.
 C. F. Walker : *Miniature Gardens* ; Collingridge ; 4/-.

ALPINES HOUSES

- G. Anley : *Alpine House Culture* ; Collingridge ; 15/-.
 S. Boothman : *The Alpine House and its Plants* ; Rush and Warwick ;
 10/6.
 R. E. Heath : *Alpine Plants under Glass* ; Gifford ; 12/6.

NATIVE PLANTS

- C. A. Johns : *Flowers of the Field* ; Routledge ; 16/-.
 Clapham, Tutin and Warburg : *Flora of the British Isles* ; Cam-
 bridge, 50/-.
 Miles Hadfield : *Everyman's Wild Flowers and Trees* ; Dent ; 12/6.
 Gilmour and Walters : *Wild Flowers* ; Collins ; 25/-.
 W. E. Th. Ingwersen : *Wild Flowers in the Garden* ; Bles ; 15/-.
 Raven and Walters : *Mountain Flowers* ; Collins ; 25/-.
 A. E. Holden : *Plant Life in the Scottish Highlands* ; Oliver and
 Boyd ; 30/-.
 V. S. Summerhayes : *Wild Orchids of Britain* ; Collins ; 21/-.
 D. Poore and others : *Ben Lawers and its Alpine Flowers* ; National
 Trust for Scotland ; 4/-.
 H. Godwin : *History of the British Flora* ; Cambridge ; 90/-.

GUIDE BOOKS

- H. Roger-Smith : *Plant Hunting in Europe* ; Alpine Garden Society ; 4/-.
 H. S. Thomson : *Alpine Plants of Europe* ; Out of Print.
 L. and C. Schroter : *Alpine Flowers* ; Out of Print.
Guide to the Royal Botanic Garden, Edinburgh ; H.M.S.O. ; 2/-.

PLANT INTRODUCTIONS

- R. E. Cooper, A. O. Curle and W. S. Fair : *George Forrest* ; S.R.G.C. Out of Print.
 Sir William Wright Smith, E. H. M. Cox, J. McQ. Cowan and H. R. Fletcher : *The Plant Introductions of George Forrest* ; Oxford ; 30/-.
 E. H. M. Cox, E. A. Bowles and F. C. Stern : *The Plant Introductions of Reginald Farrer* ; Out of Print.
 F. Kingdon Ward : *Return to Irawaddy* ; Melrose ; 25/-.
 A. W. Anderson : *How we got our Flowers* ; Benn ; 15/-.

CONFERENCE REPORTS

- 1936 *Rock Gardens and Rock Plants* ; R.H.S. ; Out of Print.
 1951 *Rock Garden Plants* ; A.G.S. and S.R.G.C. ; 7/6.

SOME RARE BOOKS, FIRST EDITIONS, AND BOOKS OUT OF PRINT (in addition to those already listed as such above)

- E. A. Bowles : *My Garden in Spring, in Summer, in Autumn and Winter* ; and others.
 H. Correvon : *Rock Garden and Alpine Plants*.
 E. H. M. Cox : *Farrer's Last Journey, Plant Hunting in China, A History of Gardening in Scotland*, and others.
 R. Farrer : *The Rock Garden, My Rock Garden, In a Yorkshire Garden, Alpines and Bog Plants, The Dolomites, On the Eaves of the World, The Rainbow Bridge, Among the Hills*, etc.
 G. Jekyll : *Wall and Water Gardening*, and others.
 A. T. Johnson : *A Garden in Wales, A Woodland Garden*, and others.
 R. A. Malby : *The Story of my Rock Garden*.
 F. Stoker : *A Gardener's Progress*.
 F. Kingdon Ward : *A Plant Hunter in Tibet, Plant Hunter's Paradise, Burma's Icy Mountains, Assam Adventure*, and others.
 E. Willmott : *Warley Garden in Spring and Summer*.

I wish to express my thanks to the staff of The Edinburgh Bookshop (Brown's Bookshop) and to those members of the Club who have been kind enough to make suggestions to assist in the compilation of this book list. Corrections and further suggestions will be welcomed so that up-to-date book lists may be published in future *Journals*.

APPENDIX

Articles in previous *Journals* dealing with a single genus, or section or family, etc.

<i>Article</i>	<i>Author</i>	<i>Journal</i>
<i>Aquilegias, Some dwarf</i>	K. C. Corsar	12
<i>Astilbes for the rock garden</i>	A. L. Winning	8
<i>Brooms, Some dwarf</i>	J. L. Mowat	3
<i>Campanulas for the rock garden</i>	S. Mitchell	20
<i>Celmisias</i>	D. Wilkie	14
<i>Conifers, Dwarf</i>	R. Watson	16, 17, 18
<i>Crocus species, Spring flowering</i>	J. L. Mowat	12
<i>Cyclamens</i>	G. P. Porter	1
<i>Cyclamens, Some</i>	J. E. Steward	11, 12
<i>Cyclamens, Hardy</i>	J. G. Collee	19
<i>Daphne, Some, for the rock garden</i>	J. Keenan	10
<i>Dianthus, Some</i>	D. M. Murray-Lyon	15
<i>Erythroniums</i>	J. L. Mowat	14
<i>Ferns for the rock garden</i>	J. Macwatt	1
<i>Gentians, The best autumn</i>	D. Pape	12
<i>Heathers, Hardy</i>	N. Webster	14, 15, 16, 17, 18
<i>Iris, Some Northwest American</i>	J. Drake	10
<i>Iris, The Reticulata Section of</i>	W. G. Mackenzie	2
<i>Lewisias, Notes on</i>	D. Livingstone	4
<i>Lilies for the rock garden</i>	A. E. Smith	13
<i>Narcissi, Dwarf</i>	E. B. Anderson	10
<i>Narcissi, Some dwarf</i>	D. Wilkie	1
<i>Nomocharis</i>	A. Harley	3
<i>Nomocharis, The Genus</i>	D. M. Murray-Lyon	12
<i>Oxales, Some</i>	D. M. Murray-Lyon	14
<i>Orchids, Hardy terrestrial</i>	J. L. Mowat	19
<i>Penstemons, Rocky Mountain</i>	C. R. Worth	18
<i>Potentillas</i>	F. C. Barnes	15
<i>Primulas, European</i>	D. Livingstone	18, 19
<i>Primula, Petiolares Section</i>	D. Livingstone	6
<i>Primula, Section Petiolares</i>	R. E. Cooper	15
<i>Primulas, Petiolares, in the South</i>	D. E. Saunders	8
<i>Rhododendrons, Dwarf, in the rock garden</i>	E. H. M. Cox	11
<i>Rhododendrons, Some dwarf species of</i>	E. H. M. Cox	12
<i>Saxifraga, Kabschia Section</i>	D. Livingstone	9, 10
<i>Saxifraga, Among the Kabschias</i>	J. E. Steward	13
<i>Shrubs, dwarf, A selection of</i>	A. Evans	12, 13, 14, 16, 19, 20
<i>Snowdrops</i>	R. Ginns	10

Articles dealing with Scottish Native Plants

<i>Article</i>	<i>Author</i>	<i>Journal</i>
<i>Native Plants worth a place in the rock garden</i>	J. L. Mowat	5
<i>Ben Lawers</i>	J. C. Dundas	5
<i>A Garden in Salt Sand</i>	L. C. Boyd-Harvey	10
<i>Clova</i>	W. Robertson	12
<i>The Torridon Mountains</i>	J. Aitken	14
<i>The Incense Plant of the Western Isles</i>	'A. Macintyre'	14
<i>Mertensia maritima</i>	L. C. Boyd-Harvey	14
<i>East and West</i>	H. Tod	14
<i>In Search of Native Alpines</i>	W. Robertson	17
<i>The Scottish Mountain Flora</i>	J. Grant Roger	20
<i>New Scottish Wild Flowers</i>	R. B. Cooke	20

The American Rock Garden Society

Probably most members are aware of the existence in the U.S.A. of a Society comparable with our own. Some members may have wished to join this Society, but have been deterred by the apparent difficulty of transmitting their subscription.

We understand that this difficulty is not insuperable. Permission has to be obtained from the Exchange Control in the first place and evidence has to be supplied of the existence of the Society and its membership fees. Having secured sanction, the member obtains a draft from his Bank and forwards it to the Society. In practice it would probably be best first to consult one's Bank, which could supply advice and the appropriate forms.

The annual subscription is 3½ dollars, or 10 dollars for three years if paid in advance, and the Secretary, who will send further particulars, is Edgar L. Totten, 238 Sheridan Avenue, Ho-Ho-Kus, N.J., U.S.A.

In addition to its Quarterly Bulletin, the American Society has a Seed Exchange in operation.

The Discussion Week-end

THE DISCUSSION WEEK-END which was held in the Scotia Hotel, Great King Street, Edinburgh, on the 16th and 17th March 1957, was an innovation for the S.R.G.C. Such a week-end Conference was due in great part to the inspiration of the President, Major-General Murray-Lyon, D.S.O., M.C., and proved to be a highly successful meeting. Approximately eighty members attended, which included thirty from different parts of Scotland and England who were accommodated in the hotel for the week-end.

On the morning of Saturday, 16th, there was a conducted tour of the Propagating Department of the Royal Botanic Garden, which had been arranged by kind permission of the Regius Keeper. During the afternoon the Conference was formally opened by the President, and the first communication, "My Alpine House," was given by the well-known alpine house enthusiast, Mr. Roy Elliott of Birmingham. This was a valuable contribution illustrated on the screen by excellent colour photographs of his methods of cultivation, housing of the plants, and numerous examples of the plants themselves. A beautifully grown specimen of the rare and difficult *Acantholimon venustum* will long be remembered. One would have liked to have heard a little more discussion after this talk on the pros and cons of Alpine House culture.

After tea there followed a most comprehensive and instructive talk on Gentians by Mr. David Wilkie. This was well illustrated by lantern slides and everyone present fully appreciated, and learned much, hearing at first hand important facts regarding the botanical and horticultural aspects of the various members of this large family, from such a distinguished authority.

Dinner was followed by the showing of a colour cine film by Mr. John T. Renton, C.B.E., of his garden at Branklyn, Perth. The garden is outstanding for its beauty and the great collection of rare and difficult plants which are so excellently grown. The film in itself was a masterpiece of colour cine photography of plants.

On Sunday, 17th, the session was opened with an address by Mr. Edward Darling of Port Glasgow, entitled "Plants I grow and have grown." To begin with, the speaker apologised for his preventing members attending to their sabbatarian devotions, but the address was a sermon in itself! There was much given us upon which to ruminate. It was a horticultural autobiography of a long life extending from boyhood days, and revealed to us all what such a deep devotion to and love of plants and their cultivation really means. The talk was illustrated by a heterogeneous collection of good lantern slides, about many of which considerable argument arose with regard to their identification!

Mr. Roy Elliott very kindly added an additional item to the syllabus by showing a perfect cine colour film of his alpine house and garden. This was much appreciated.

The final talk was given by Mr. J. R. Aitken of Perth on "Scottish Mountains and their Flora." Mr. Aitken has climbed many of our Scottish hills, being interested in mountaineering, but fortunately, unlike the majority of mountaineers, he has a great interest in the alpine flora which may be met with during an ascent. The mountains and the plants were ably described by him and demonstrated on the screen by a collection of interesting colour photographs.

And so a happy, instructive and enjoyable meeting came to an end. It must not, however, be omitted to be said that not only were the papers and the discussions which followed of interest and value, but the opportunity which members had of meeting one another and discussing various problems amongst themselves was an additional and important advantage which can be obtained at such conferences.

The success of the meeting also greatly depended on the hard work and the efficiency of Mr. A. Bruce Auckland and Mrs. N. J. Murphy in their organisation, and to them our thanks are due. Nor must we forget the proprietrix of the Scotia Hotel and her staff who did so much to contribute to our comfort and well-being.

It has rightly been decided by the Council of the S.R.G.C. to continue these conferences and notice of the next meeting will be found elsewhere.

J. D.

The Alpine House

By ROY ELLIOTT

(A summary of a lecture given at the Edinburgh Discussion Week-end)

FEW ALPINE enthusiasts would deny that the most satisfactory place to grow rock plants is the open garden. The Alpine House is used by most of us to grow those plants which for various reasons we cannot manage in the open. The type of house is immaterial provided that it has fully adequate ventilation, because in these times few of us are able to start from scratch ; but if this were possible a personal choice would certainly be a wide house with a low-span roof, a brick base, doors at each end, and lever controlled operation of opening lights down both sides and the roof of the house. My own alpine house is devoted to plants in the following categories :—

- (1) Those which are tender. It seems almost a contradiction in terms that an alpine can be tender, but it must be remembered that we regard as alpines both those which grow on the sun-baked foothills of Spain, and those from the snowy heights of the Alps.
- (2) Bulbs—where control of watering and baking in summer are necessary for successful growing.

- (3) Rare plants—because the difficulty of propagating or acquiring them is such that they cannot be risked outside until more is known about them.
- (4) Difficult plants for the reason that they will not grow outside.
- (5) Plants which are grown for no other reason than that they are ideal show plants, and plants which are seen at their best in pots.

Many people will doubtless disagree with the various plants which are placed in the different categories, but it should be explained that I live in a sooty industrial town where many of the factors affecting cultivation are different from the clear air of the countryside. It should never be thought that an alpine house is a panacea against all ills, for plants are just as difficult to grow under glass as they are outside. It often means that instead of dying of frost, they die of extremes of temperature, over watering, under watering, or pests !

There can be little doubt that the secret of growing alpiners is the secret of watering, and unless one is retired and with time to spare, plunging is absolutely essential. A pot which is plunged up to its rim in some medium such as chippings or sand will not need watering with a quarter of the frequency of a pot which is standing on the staging. The golden rule of watering is "when in doubt don't," because a plant which is continually over watered will invariably die and although the yellowing of the foliage is sometimes an indication of distress, there is generally no remedy. An under watered plant will flag, but will generally recover, unless it is fibrous rooted like members of the Ericaceae family. Arising out of this it seems natural that one should recommend re-potting to be carried out in spring, because over watering is much more easy with over potted plants (whose roots are surrounded with soil containing water which the root tips cannot absorb). If plants are re-potted in the spring time, the pot is generally full of roots by the autumn, which is the start of the dangerous period for alpiners. In the same way, a plant which is pot bound can very easily be lost in the heat of the summer, and more plants are probably lost through being re-potted in this condition than through any other cause. This generally happens when the root ball is not "teased" or slightly broken ; if the ball is planted intact and surrounded by soil in a new pot, then the water will tend to run straight through the new soil and leave the old root ball dry in the centre. If the plants are plunged, the appearance of roots from the drainage hole of the pot is not always an indication that the plant needs re-potting and, except in the case of tap rooted species, it is often better to break away these roots as they appear, thus encouraging them to seek solace again inside the pot.

As alpiners in pots get older and larger, it becomes necessary to feed them, and the use of cow manure and bone meal in the potting compost is advisable. It would be very unusual in an article about alpiners in pots to avoid mention of soil mixtures, and judging by the

carefully balanced ingredients which well known authorities have used over the past fifty years and placed on record in numerous text books their potting sheds must look like laboratories. I admit with shame that I do not bother very much with special mixtures, and simply make it a matter of discretion on the general principle that the more difficult the alpine, the quicker the drainage through the compost must be. My essential ingredients are loam, Sorbex peat, sand and chippings, and I also occasionally use leaf mould, bone meal and cow manure. I must also admit with shame that I do not invariably use drainage in the bottom of the pot. Few growers would deny that quick drainage through the compost is one of the essentials for growing alpines in this way, and if there are sufficient chippings in the compost to permit this speedy drainage I cannot see what advantage is to be gained by speeding the drainage for the last one or two inches of its travel. One is always being advised to put an inch or two of broken crocks in the bottom of a pot, yet what a trouble this becomes when you wish to knock the plants out of their pots to examine the roots, check for root aphid or see if the plants need re-potting, the drainage invariably becomes dislodged, and it becomes virtually impossible to put the plants back in their pots without leaving air holes. Before mentioning a few of the plants which I consider typical of the various categories I have mentioned, I should like to refer to the constant problem of shortage of space in the average alpine house. Few people these days use shallow pans, and I suppose that the half pot is the most popular container. Those who are short of space (and we all are) should remember that it is possible to go from a half pot into a full pot, of the same diameter, and again if necessary into a "long Tom." People are apt to overlook this type of re-potting which can very greatly extend the amount of space available.

The following slides were shown to illustrate categories of Alpine House plants :—

(1) TENDER PLANTS :

Chrysanthemum atlanticum was a pre-war introduction by E. K. Balls from the Atlas Mountains, and is one of the finest Alpine House plants on account of its closely knit silver foliage and its habit of flowering for six months out of the twelve. It needs re-potting twice a year.

Gaultheria cuneata. A lovely berrying plant for the Autumn ; when describing it as tender, it was pointed out to the writer that it grew in the open at Edinburgh. Tenderness is not, however, merely a matter of climate—it is connected with atmospheric conditions, draughts and many other factors—and in any case Edinburgh has a comparatively mild climate.

(2) BULBS :

Calochortus maweanus major was shown as an example of a bulb which needed conditions of absolute drought after the leaves die

back. A little "Cats ears," growing some 6 ins. high with faintly violet coloured hairs inside the petals, it is one of the loveliest of bulbs and regrettably difficult to acquire.

Tulipa aucheriana, from Persia, is a soft pink tulip of dwarf stature, and somewhat dowdy until the flowers open like stars in the spring sunshine and it shows itself as one of the finest of all the dwarf tulips.

Asphodelus acaulis. This is not a bulb, but is included in the 'category' because, like *Weldenia candida*, it becomes much less of a problem to grow if it is treated as such. The large pale pink flowers are almost sessile, and it needs a starvation diet to prevent the flowers from being hidden by a mass of leaves. If dried out as soon as the leaves go brown, it should not be watered again until the first shoots appear in early Spring—the large fleshy roots will preserve it and feed it in the meantime.

(3) RARE PLANTS :

Leontopodium alpinum var. *crassense* is a superb plant which is now almost lost to cultivation—a selected form collected by Walter Ingwersen before the war. It is low growing, and its large flowers on short stems have a beauty which far transcends its dowdy—if popular—relative the 'Edelweiss.'

Sarcocapnos enneaphylla, this unusual Fumitory, together with its distant relation *Rupicapnos africana*, are plants so easy to grow from seed that it is surprising they should be so seldom seen. Both flower throughout the late spring and summer, and both have attractive lacy foliage. Both *Sarcocapnos*—with its white and yellow flowers, and *Rupicapnos* with its pink and green flowers, seem to resent a pot almost as much as they resent a cold wet winter, and the ideal place to grow them is a "scree frame," where they will seed about prolifically.

Amongst other slides shown in this category were two of Peter Davis's most beautiful recent introductions, *Linum olympicum* and *Trachelium lanceolatum*, but both plants are now difficult—if not impossible—to obtain. It seems a tragedy that so many of these newly introduced plants are so quickly lost.

(4) DIFFICULT PLANTS :

A dangerous category, this, for a lecturer, because there is always someone (and generally in the audience !) who finds a particular plant easy when others find it difficult. Here were illustrated :—

Anchusa caespitosa—the true plant, of course, and not the straggly 'un-caespitose' plant of nurserymen's catalogue to which the Joint Rock Garden Plant Committee misguidedly gave an 'Award of Merit' some twelve years ago—thereby bequeathing to posterity two different plants with the same name. There are plants in existence some ten years old growing in a scree garden in Kent, but most of us find the true *A. caespitosa* a difficult plant with a bad habit of rotting at the collar. It is a gross feeder, and there seems little doubt that one of the

best hints to successful cultivation is to re-pot it at least twice a year. It can be propagated by seed, root cuttings or the rootings of side rosettes. It appears to come true from seed, but *A. caespitosa* of gardens seems to present an ever present warning of the perils which can attend this method of propagation.

Androsace muscoidea is another plant of very great beauty which needs ample root room, and it is surprising how regular re-potting can keep it in good condition. Not, of course, that this is a treatment normally recommended for difficult plants, and certainly not for that delightful couple *Campanula morettiana* and *C. m. var. alba*. Here the opposite seems to apply, and a pot-bound condition seems to make the plants face the wet months of the year with greater equanimity.

Also mentioned in this category was *Boykinia Jamesii*—not because it is difficult, but because it is difficult to flower. Personal experience has proved contrary to accepted practice, as it has been found that a plant will flower satisfactorily if it is kept in a pot-bound condition, and fed with liquid manure. Both conditions together seem to contribute to free flowering—either condition alone, to failure.

That leaves one category alone unspecified—that of the ideal show-plants, or ideal pot-plants, and it is a category so large and so personal that it is best left to the individual, and certainly needs no mention by one who has heard of but never seen the wonderful pans of alpines of all the categories which are shown at S.R.G.C. Shows. It is said that pleasurable experiences should be enjoyed gradually, and if this be true, then the desire of at least one Sassenach to visit, and learn from, the S.R.G.C. Shows, will be the more happily fulfilled after so much anticipation.

Gentians

By D. WILKIE

THE GENUS *Gentiana* is one of the largest in the vegetable kingdom and contains over eight hundred species ; with varieties and hybrids the total today numbers about a thousand.

It has also a very wide distribution, in fact world wide, as there is no continent or country without its quota. It extends through Europe south to the Balkans, Caucasus and Asia Minor, through Mongolia, Manchuria, China and Japan, then into Tibet, Nepal, India, Bhutan to Burma, Siam and the Philippines, Malaya and Sumatra, Borneo and New Guinea. Australia and New Zealand have several species. The Americas are not left out as species are found not only in North America as far north as Alaska, but also in South America in Peru, Chile, Bolivia and Argentine.

In a genus of such a wide distribution a very great range of colour is to be expected. The blues, violet-blues and mauve-blues from Europe are well-known to most gardeners ; there are also yellows in *G. lutea* and *G. straminea* (see fig. 46). But it is to South America that one must go for the widest range. Here there are scarlets, scarlet and gold in the one flower, also blue and gold ; there are several here like the New Zealand species, almost white with faint mauve veining. Unfortunately, these S. American species do not like our climate and although several have been tried and reached the flowering stage, they did not seed or survive.

With the different climatic conditions met with in their distribution, there is bound to be a great diversity in size of plant and shape of the flowers. It is on this character together with seed characters that the genus has been divided into many sections and series. A remarkable point about these sections is that certain of them are confined to small areas of the world's surface.

Taking the *Acaulis Group* which most people know ; this is confined to Europe—in West, Central and East Europe and the Balkans. All the species have either blue or purple-blue flowers although an 'albino' form may be found.

The *Verna Group* covers a wider field ; it is found in Britain, Pyrenees, Central Europe, and extends eastwards into Asia Minor to East Siberia and Mongolia. Here, too, the flowers are blue or mauve or purple-blue, with an occasional 'albino,' but the remarkable thing about *G. verna* is that there is a yellow flowered variety found in the Caucasus.

The *Septemfida Group* has a wider field, first, in many parts of Europe, especially in the eastern half, and extending through Asia, China, Japan and North America. In colour, apart from 'albino' forms, they are all bluish, some pale blues in N. America and mauve-blues and the usual *G. septemfida* colour in most.

Differing very much in form from the foregoing is the *Dahurica Group*. This is a group inhabiting the drier parts of mid-Europe, Asia Minor, Siberia, Mongolia, China, India, Tibet and Persia. None of this group likes our wet winters, although they will stand quite severe frosts. They can be distinguished by the rosette of large strap-shaped leaves with the flowering stems radiating from the crown. All of them have long tap-roots which means early transplanting before the roots become too large. The colours are blues, but include also yellow and dirty white.

Until the first decade of this century gardeners in this country had only the foregoing sections to deal with, but when the new species from China were introduced, the numbers of species soared beyond our imagination. Many of the new plants come under what is known as the *Frigida Section*, which is again divided into a number of series. One of the most popular can be called the *Ornata Group*. The first found was in Nepal, and others are from Bhutan, S.E. Tibet, Kansu,

Yunnan and Szechuan and, strangest of all, one, *G. lawrencei*, was found at Lake Baikal, quite outside what might be termed the group's area. All are blues. Another series is found only in S.W. China, S.E. Tibet, Northern India and E. Siberia ; here they are in again different shades of blue.

The series to which *G. hexaphylla* (see fig. 47) belongs is only found in Kansu, Yunnan and the Burma-Tibetan frontier area.

There is one series of this *Frigida Section* which extends nearly all over the Northern Hemisphere, which the botanists call the *Uniflora* because there is only one flower to a stem. The various species are found in Europe, Siberia, China, Japan, Formosa, India, S.E. Tibet and on the North America continent. They are mostly plants forming a mat or cushion with flowering stems of a few inches in height.

The largest Section, as regards number of species, is known as *Chondrophylla*. With the exception of two or three species, all the members of this Section are annuals and many of them very insignificant. There are two lovely plants in this group, namely our native *G. nivalis* and the perennial species *G. pyrenaica*. This is the Section with the widest range ; they are found all over the world from the Arctic to the Pacific Islands. Apart from one or two small groups, the only one I need mention here is the *Lutea Group* which has flowers quite distinct from any other group and is confined to Europe, Asia and as far as Kamtchatka.

I think that summary of the genus will give you some idea of its range and diversity of form, and I will now tell you of some of the best garden plants among them. We are very fortunate up in the North as our climate is more suitable to most of them, and it is seldom that we are dried out as they are in the South. I would give a warning here. In many articles on the cultivation of Gentians, the writers recommend growing them in shade ; that may be necessary in the South, but such as *G. sino-ornata* becomes too drawn if grown in shade in the North. We never have that intense heat here which makes shade a "must."

In any lecture on Gentians one must start with the oldest known, namely, *G. lutea*. This species has been known since the 16th century and provides the *Gentian Root* of commerce. Found in Europe from the Pyrenees to Asia Minor, it was before the war imported from the Balkans into this country for medicinal use. It grows upwards to as much as four feet with huge leaves and flowering stems with bright yellow flowers and while of no use in a rock garden, it is suitable for a herbaceous border. During the season especially it likes plenty of water and is not particular as to soil, but a good rich mixture makes a difference to its height.

Also from Europe we have *G. purpurea*, one of a set of about four species with reddish-purple or yellow flowers on one-foot stems. The allied species are *G. punctata*, *G. pannonica* and *G. burseri*.

One plant no rock garden can be without is the lovely *G. verna* with its clear blue flowers. There is, of course, a white form and a pale blue form, but the ordinary *G. verna* is well worth any trouble. This, like most of the smaller species, is upset by disturbance and should be transplanted when young into its permanent quarters. There is a stronger plant known as *G. angulosa* which has larger flowers and leaves, but it is not so neat.

Now we come to the plant which has caused more trouble and headaches than any other, and that is *G. acaulis*. At one time I tried every type of soil and method but without success. It simply doesn't flower at the Garden. We get a few flowers but nothing like the number one gets within six miles of the City. I have known gardens where it was used as an edging in the kitchen garden and where it was trimmed with a spade and was a magnificent spectacle for several weeks in the year. There are one or two allies such as *G. kochiana*, a larger, wider flower with broad leaves from the Pyrenees, Jura, Carpathians and the Balkans, and *G. angustifolia*, with taller stems, narrower trumpets and narrower, stiff leaves which are widest near the apex of the leaf.

From the limestone areas in the Austrian Alps we have rather a neat species known as *G. froelichii* (see fig. 48). It is only a few inches high and bears a single flower to a stem. These flowers are a greenish blue. At one time this species was often seen in cultivation, but very rarely nowadays, which to me is a great pity.

In the same class is *G. pyrenaica*, a small plant like *G. verna* in habit, but with numerous flowers of a mauve or almost reddish-purple. *G. pyrenaica* has a very distinct flower, the folds between the petals are almost as large as the petals themselves, and owing to this fact it is often called the "Ten-petalled Gentian." It is not an easy species to grow, but if treated similarly to such as *G. sino-ornata* it will help; but it does not like lime in any form and is a native of peaty or heathy land.

Gentiana asclepiadea, while too large for any rock garden except the large ones, is an ideal plant for the herbaceous border or the woodland. This is called the "Willow Gentian" and is a native of mid-and South Europe and is also found in Asia Minor and the Caucasus. Apart from the white flowered form there is also a dwarf form and one or two different tall growers. There is one that flowers about July, a stiff erect type under two feet in height and the later flowering, slender stemmed form which bends over gracefully.

Probably the commonest of all Gentians is *G. septemfida*, a strong robust grower which never fails to flower each year. A very variable species, it has about twenty different forms and varieties, some nearly eighteen inches high with great clusters of flowers at the tips of the shoots and other dwarf sorts with six or nine inch stems. It is a species that one can always recommend for the beginner—easily raised from seed, and easily divided up. Sometimes given as a variety of this species is *G. lagodechina*. It is similar to *G. septemfida* but the flowers

are arranged separately and not in clusters, and it has long trailing stems which lie flat on the ground. Both are from Eastern Europe, Asia Minor, Persia and the Caucasus.

Now we come to the *Sino-Ornata* group. None of these are found in Europe, the nearest habitat being near Lake Baikal in Siberia. This is *G. lawrenceii* and was found about 1905 and is like a smaller *G. farreri* in colour and with a more slender trumpet. It has never been a vigorous grower, and I doubt very much if there is a true plant left, although a hybrid may have *Lawrencei* blood in it.

The next to come into cultivation was *G. veitchiorum*, first found by Wilson in Szechwan, but of more recent years it has been brought into cultivation from S.E. Tibet. Coming into flower about August, this has more slender trumpets than *sino-ornata* and they taper from the mouth down to the base. The colour is a deep purple-blue and the petals bend right open. If well grown, there are several flowers on a stem, which lies flat on the ground and does not sit up like its allies. Another characteristic of this species is the very marked central rosette of leaves.

G. sino-ornata was first found by Forrest in 1904 on one of the earlier expeditions ; it wasn't until 1910 that seed was sent to this country. To my mind, I think that *G. sino-ornata* is one of the finest of introductions, it is a good grower, easily divided and propagated, and makes a wonderful display right into late in the year. There is also a white flowered form. Following on this species came *G. farreri*, sent home by Farrer in 1914 as seed and flowered in 1916. It caused quite a sensation as no gentian had that particular greeny shade of blue. The original form seems to have disappeared and that plant grown today is just a pale blue. From the expedition to Kansu, Farrer sent home a very dainty plant known as *G. hexaphylla*. It differs from the rest of those in cultivation as it has six leaves to a whorl and six petals to the flowers. It has proved a reasonable grower but it must be split up about every second year otherwise it dies out. A plant that in some ways resembles our native *G. pneumonanthe* is *G. trichotoma*, a plant of a foot or more in height with several flowers of a bright metallic blue arranged in the axils of the leaves. It has a wider distribution than the last as it extends through Szechwan, Kansu, Tibet and Yunnan. Another introduction of Forrest's about 1914 was *G. stragulata*. Forming a hummock of deep green rosettes, its small tubular flowers sit upright. The colour is purple with white in the throat. While not one of the brightest from the point of view of display, it has a certain attractiveness of its own. A plant that has caused quite a deal of confusion was also collected by Farrer in Kansu. This is *G. gracilipes*. With a large rosette of strap-shaped leaves, the flowering stems radiate from the centre and spread along the ground. When just introduced the flowers were borne on long stalks which separated it from the commoner *G. dahurica*, but after years in this country the flower stalks became much shorter so that it looks almost the same as *G. dahurica*. There is a white form of *G. gracilipes* which is very pretty.

I think one of the greatest thrills was the introduction of *G. ornata*. It was first found in Gossain Than in Nepal over a hundred years ago and both specimens and descriptions were so meagre it was difficult to make out what *ornata* was—so difficult that both *G. veitchiorum* and *G. prolata* were supposed to be forms of *G. ornata*. It wasn't until the Nepal Expeditions of 1929 and 1931 that the plant was considered to be the correct *G. ornata*. There were various shades of blue among the plants grown, but the short barrel-shaped flowers were quite distinct.

G. prolata is a smaller plant with narrow trumpets which require plenty of sun to keep them open.

In 1926 Kingdon Ward found the very beautiful *G. gilvostrata* (see fig. 49) in Upper Burma and a few years later sent home seed. This is a very neat species forming rosettes of spoon-shaped leaves with the single-stemmed flowers just sitting upright on the hummocks. The flowers are pale blue with five bands of purple-brown both inside and outside the trumpets. It seems to like plenty of moisture during the growing season and is frost hardy. Some of the largest plants I have seen were in a garden in Fort Augustus.

Two plants often confused are *G. cachemirica* (see fig. 50) and *G. loderi*; the former, a native of Kashmir and Kumaon, was brought into this country about 1930. Unlike *G. loderi*, this has a definite rosette of leaves with the flowering stems radiating from the crown. This is really a cliff plant and makes quite a picture, with its grey foliage and bright blue flowers when hanging over a rock.

G. loderi has shorter stems, only about four to six inches in length, each bearing a single flower. It too has grey foliage and does best in scree mixture.

One of those species which has been sent into this country repeatedly over many years is *G. kurroo*. It is also native to Kashmir and N.W. Himalaya and the reason for its disappearance is, I believe, due to our winter wet. From observation, it stands the dry frost and snow better than our mild, moist winters. The same applies to a similar plant, *G. waltonii*. The section to which these two belong prefer drier conditions and will indeed withstand drought much better than the *sino-ornata* type. All of them have long tap-roots.

From the Himalayan regions we go on to Japan, where the large *G. makinoi* is native. It is a tallish grower, upwards to as much as two and a half feet in height, with clusters of dull grey-blue flowers at the top. The habit is similar to an erect growing *G. septemfida*. Very similar in outline but with more open flowers are the forms of *G. scabra*. These forms are deep blue, but in the North here they flower so late that the frosts usually damage the flowers and they, of course, never set seed. Fortunately they can be propagated by cuttings of the young shoots in the early summer. A few years before the War there was introduced from Japan a plant called "Kirishima-



Fig. 47—*Gentiana hexaphylla* (see page 329)

Photo—D. Wilkie



Fig. 48—*Gentiana froelichii* (see page 330)

Photo—D. Wilkie



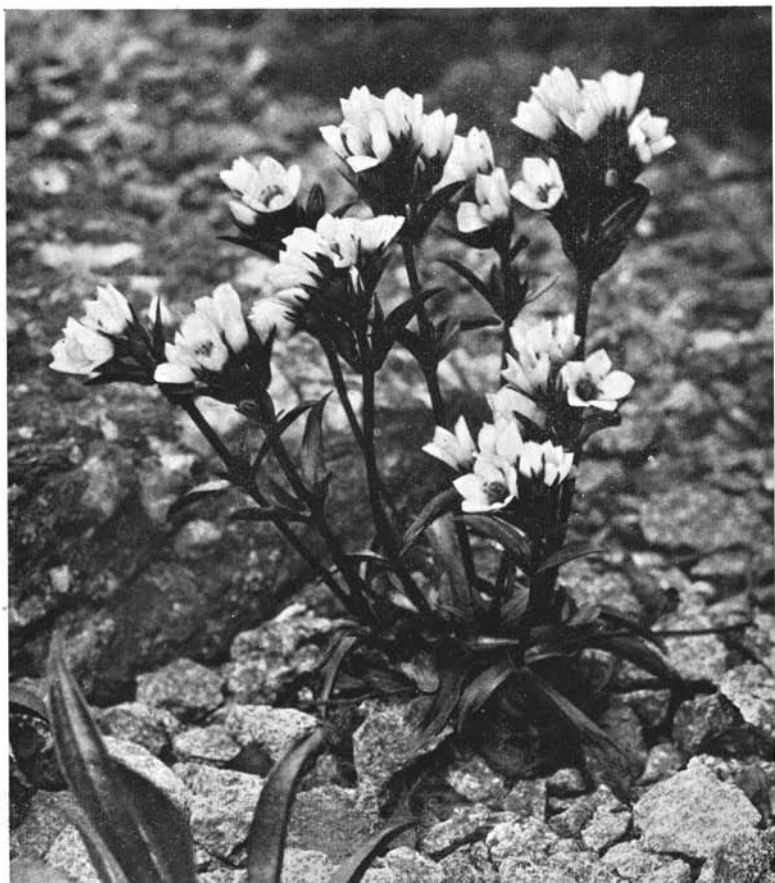
Photo—D. Wilkie

Fig. 49—*Gentiana gilvostriata* (see page 332)



Photo—D. Wilkie

Fig. 50—*Gentiana cachemirica* (see page 332)



Photo—D. Wilkie

Fig. 51—*Gentiana corymbifera* (see page 333)



Photo—W. A. Clark

Fig. 52—*Rhododendron ludlowii* (see page 347)

Now to describe the rock garden is rather difficult. One part has a good admixture of peat, leafmould and coarse sand, and growing therein are many of the dwarf rhododendrons, gaultherias, nomocharis, and asiatic primulas, and one or two beds, two square yards in area and filled with such Asiatic gentians as "Inverleith," "Bernardii," *ornata*, "Orva," *veitchiorum*, "*praecox*," etc. Another part has more or less the same soil as above minus the peat. Here are grown your lime lovers and plants that prefer a neutral soil, many varieties of saxifrages, European primulas and gentians, campanulas, daphnes, dianthus, etc., and here and there dwarf flowering shrubs such as cytistus, *Spiraea bullata*, *Philesia buxifolia*, satureias, and heathers in variety. I even have several clumps of *Dierama pulcherrima* in selected spots. These need no staking and when in bloom are beautifully effective and do not overshadow the nearby alpinas.

To sum up all, I have come to the conclusion that to work in the garden is the best remedy for age and melancholy, and no man or woman who is a real enthusiast of Nature turns old ; he or she enjoys life to the end.

Branklyn Garden, Perth

(Contributed)

MR. RENTON showed a cine colour film of Branklyn Garden throughout the seasons of the year. The film gave an excellent impression of the general landscape features of the garden and covered a wide selection of the numerous special shrubs, plants and bulbs with fine close-up pictures of many of the most interesting species.

In introducing his film Mr. Renton gave a brief description of the gradual development of the garden which covers fully two acres, and told how its original traditional layout had gradually been altered to provide a more informal home for the large and varied plant collection for which the garden is so well known. He referred to the great impetus which had been given to his and Mrs. Renton's enthusiasm in the mid nineteen twenties by the wonderful seed introductions by collectors such as Forrest, Ward, Rock and others and the film showed a large number of shrubs, rhododendrons, and plants now in full maturity from these original introductions.

Tribute was also paid to the collectors, Ludlow and Sherriff, whose wide and varied introductions had added so much to the beauty of the garden and collectors such as Greig, Worth, Lowndes and others had been responsible for sending home many fine plants. More recently the seed collections of Polunin, Sykes, Williams and Stainton had added their quota and numerous plants were shown as a result of the efforts of all these collectors.

The film showed, too, how peat blocks had been extensively used to form peateries and to build up the fronts of steep slopes or as an edging to borders.

The Garden is on a sloping site with a mainly South and West aspect and as the annual rainfall seldom exceeds 30 inches the situation is somewhat dry. It has been found that peat has assisted to retain moisture and appears to be beloved by all plants and shrubs. Granulated peat and leafmould is used as a general mulch throughout the garden and is usually applied in early spring before plant growth commences.

It is not possible in this Note to describe or detail the shrubs, plants, alpines, Lilies, etc., shown in Mr. Renton's film, but suffice it to say that it covered a most interesting collection of rarity and beauty and was tremendously appreciated by the members.

Scottish Mountains and their Flora

By JAMES R. AITKEN

THE TALK took the form of illustrated plant-hunting expeditions to various districts of Scotland and principally to the North West Highlands.

We started with some views around Perth, and from there to the Sidlaw Hills, the Ochils and to the Lomonds of Fife. In a woodland in Perthshire we saw the Bird's Nest Orchis (*Neottia nidus-avis*), the Twayblade (*Listera ovata*), *Pyrola rotundifolia* and the parasitic Toothwort (*Lathraea squamaria*).

From there we went to Ben Lawers, early in the season, to see *Saxifraga oppositifolia* among its native rocks, also the globeflower (*Trollius europeus*) and *Silene acaulis*.

The next place to be visited was Glen Clova in Angus, and slides were shown of the Butterfly Orchis (*Habenaria bifolia*), Cranberry, (*Vaccinium oxycoccos*), the Cloudberry (*Rubus chamaemorus*), and others.

Lochinver in North West Sutherland was the scene of the next set of slides, calling in at Inchnadamf on the way to look at *Dryas octopetala* flowering in profusion. The Torridonian Mountains of Stac Polly and Suilven were climbed and slides of various plants shown including *Arctostaphylos uva-ursi*, *Cornus suecica* and *Habenaria conopsea*. On lower ground near the sea we looked at the oyster plant (*Mertensia maritima*) and in shallow water the bogbean (*Menyanthes trifoliata*) and the water lobelia (*Lobelia dortmanna*).

Lastly came a series of slides of the district around Torrison in Wester Ross where the highest mountain Liathach was climbed, and also Ben Eighe, the native reserve mountain. *Loiseleuria procumbens* was shown growing on the slopes of Liathach and from the summit ridge a number of the views which may be seen from there of Skye and the Western Isles.

Ben Eighe is noted for its six miles long summit ridge, of which a few slides were shown, and mention was also made of a number of the wild flowers seen on this climb. After looking at the famous Coire Mhic Fhearchair of Ben Eighe and other views, the talk concluded with one of the West Highland sunsets.

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Plants and Problems

GROWING ROCK GARDEN PLANTS FOR EXHIBITION

Notes for Beginners

IN THE April *Journal* under the above heading there is a most instructive article by Mr. David Livingstone, one of our most skilled plantsmen. I think, however, it may be misleading, and perhaps discouraging to beginners, for it implies that a frame and plants in pots are necessary for exhibiting at shows. This is not so ; a very large proportion of plants exhibited at our shows are grown in the open ground and only potted up for the show. In fact, some of our best exhibitors grow practically no plants in pots. The great majority of Rock Garden plants are much easier to grow in the open ground than in pots, and most of them may with care be lifted, shown and returned to their original positions without damage.

Of course, plants with long tap roots, and those notoriously resentful of transplanting, such as brooms for example, are in a different category. These are probably better grown in pots if you wish to show them.

One tip which has been given before in these notes is, I think, worth repeating. In replanting a plant which has the reputation of being difficult, or one which is looking a bit "tired" after a show, use the Boiling Water Method. Dig your hole, pour a kettle of boiling water all round the inside of it, and when you can just bear the back of your hand in the soil, place your plant in the hole and fill it in. It works ; I suppose it is the same principle as bottom heat for cuttings.

This is also effective in dealing with the bit of plant with very little root which you are given at quite the wrong the season of the year.

Edinburgh.

M.-L.

GROWING ROCK PLANTS FOR EXHIBITION

"M.-L., EDINBURGH" kindly showed me his note to the Hon. Editor on my article "Growing Rock Garden Plants for Exhibition" and suggested that I might care to reply. That I am happy to do. My article was not intended to suggest that a frame and plants in pots were absolutely necessary for exhibiting at shows. Indeed they are not, as can be seen from the numbers of plants which are lifted from the open garden and potted up for the shows. The article was intended rather for those members who are setting out to grow rock garden plants with the specific intention of exhibiting. I feel that at first at least such members would do well to follow the advice I gave in the last *Journal* and leave plant lifting and potting up for exhibition to those who are primarily concerned with the maintenance of a decorative rock garden and only incidentally concerned with exhibition.

Of course I agree that many rock garden plants are easier to grow in the open than in pots, but it should be borne in mind that there falls to be added to the skill of growing plants two further skills (1) potting up the plants lifted from the open, and (2) getting them to settle back in to the rock garden again. At this stage it is perhaps right to remind readers that my notes were for beginners who for some time may feel that the one skill, that of growing the plants, is enough to cope with. Then there is the question of either the complete loss of a plant because of lifting or the partial failure to re-establish a plant. These things do happen and are disheartening. How often have I been told as I have gone round a garden so-and-so has never been the same since I lifted it for such-and-such a show. Those that failed completely to re-establish were, of course, no longer there. There is a further point which was brought to my notice at the Edinburgh Show. The plant which won the Forrest Medal, *Anacyclus depressus*, had been lifted from the open ground and had been expertly potted up, but the warmth of the hall (warm sunny June days can be trying for plants even when their roots have not been disturbed) caused the plant, which had been truly very well grown, to collapse. It was very miserable looking indeed when I saw it on the second day of the Show. Now what did non-member visitors to the Show think? Here was the best plant in the Show looking as sick as a piece of chick-weed dislodged by a dutch hoe in warm sunny weather!

There are other points in favour of pot-grown plants for exhibition which I should like to make :—

- (1) Pests are easier to control under frame or house conditions and therefore plants and flowers are less likely to show damage caused by them.
- (2) Inclement weather just prior to a Show will not affect plants in pots under cover as it may in the rock garden. Late frosts, too, are unlikely to damage young growths or flower buds under cover. Some early rhododendrons like *leucaspis*, *imperator*, *pumilum* and *pemakoense* are susceptible to frost damage even in the bud stage just before the flowers begin to unfold.
- (3) Plants in pots can be turned occasionally to ensure even opening of the flower buds. A plant with flowers open on one side only obviously must be down-pointed when compared with one which has its flowers evenly opened all over.

The views I have expressed are my own. When I exhibited I grew all my plants in pots in cold frames and an alpine house. Now that I no longer exhibit I grow almost all my plants in the rock garden and would not dream of lifting any of them for exhibition. This is a personal matter and each individual must make up his or her own mind on the subject either from actual experience or on the basis of evidence adduced from others.

ALLIUM SIKKIMENSE

THIS MEMBER of the Lily family comes from the Himalayas where it grows at a height of from 10,000 to 16,000 feet, and it is definitely hardy. It got an Award of Merit in 1937. It has rhizomatous roots covered in brown fibre. The grassy leaves are 9 or 10 inches long but not heavy enough to be a nuisance.

The nodding bell-shaped flowers are carried in clusters at the ends of the slender stems which hold them well clear of the leaves. They are bright blue with anthers of a darker shade of the same colour. It freely sets seed which germinate well if sown in spring, and clumps may be divided in September. Flowering in July and August, it is an attractive and dainty little plant which is easy in light sandy soil or scree.

Edinburgh.

M.-L.

DISPORUM OREGANUM

THIS MEMBER of the Liliaceae always seems to catch the eye of visitors when it is in fruit. It is a cousin of Solomon's Seal and likes the same conditions—part shade, and a soil with plenty of humus in it which does not dry out. It is a native of the coniferous woods of N.W. America. It gets its name from the fact that the berries contain two seeds each. The pointed lance-shaped leaves are about 2 inches long and are carried on slightly woolly stems of about 12 inches high. In late spring the flowers, creamy white flushed green, are carried in terminal clusters. It is the orange-yellow berries, about $\frac{1}{2}$ in. in diameter, which are the chief attraction however, and these are very showy in August. It spreads by suckers but is not invasive, and it seeds itself quite freely, though not so as to become a nuisance.

Edinburgh.

M.-L.

MECONOPSIS HORRIDULA

MANY PEOPLE say they cannot be bothered with monocarpic plants. If, however, a plant keeps itself going with self-sown seedlings without any help from the gardener, then, provided it is otherwise desirable, surely it is worth growing: *Meconopsis horridula* is such a plant. Its single stem grows to about eighteen inches in height. The flowers are an inch and a half across and cup-shaped, perhaps rather a shallow, flat cup. The colour varies from almost indigo to sky blue and including violet. The flowers open from the top of the stem downward and the petals fall off tidily, so there are no untidy messy flowers to disfigure the plant.

The leaves are up to six inches long, but smaller on the upper parts of the stem, and the plant is well named, for leaves and stems are very prickly indeed. It flowers in May and June, and is happy in scree or on a well-drained bank.

Edinburgh.

M.-L.

RHODODENDRON LUDLOWII

THIS is a very desirable Rhododendron for the rock garden, its pale yellow flowers with small reddish-brown spots being very attractive. They are borne singly, or in twos and, opening at the latter part of May, they are not liable to be damaged by late spring frosts. I received the plant shown in the photograph (fig. 52) in 1946 from Mr. Bentley, Quarry Wood. It was planted in a raised bed on the N.W. side of a hedge and there it has remained ever since. It is now about one foot tall and rather more across. It produces seed in abundance and all I have raised from this seed have come true, so this gives a ready means of increase.

Northumberland.

R. B. COOKE

SEDUM HOBSONI

THIS SEDUM, sometimes known as *S. praegerianum*, is a native of the Himalayas. On 31st July 1956 the Joint Rock Garden Committee gave it a Preliminary Commendation "as a flowering and foliage plant for the alpine house." Why not for the Rock Garden as well I do not know, as it is quite hardy. I raised two plants from seed (L & S 19626) in 1949; these spent their first two winters in a cold frame, but since then they have been out-of-doors. One is growing in richish scree, the other in a loamy gravelly border on top of a wall. The plant is herbaceous and forms a flat rosette five or six inches across composed of procumbent stems. The leaves are shiny, linear, with blunted ends and are dark green slightly tipped with red. The flowers are borne in terminal cymes on the upturned ends of the stems and are a rosy pink in colour. While not at all flamboyant, the plant is neat, tidy and attractive.

Edinburgh.

M.-L.

Letters to the Editor

A Query

May 1957.

Dear Sir,

I would like to ask whether any of your readers can give information about *Androsace umbellata* Merr. Is it available in this country as a plant or as seeds?

Some twenty years ago I found it when on a picnic with my family in Manchuria. From what was then the 'Japanese city' of Moukden, we had gone south in a very broken-down 'drosky' to the banks of the River Hun. It was early spring and on the sandy loess-like soil of the high river bank the first flowers were appearing after the long

winter-freeze-up. Walking along the bank the short loose turf was studded with *Lactuca chinensis* with here and there an odd clump of Manchurian violets. And then came the surprize—a large patch of *Androsace umbellata*, each plant with its neat rosette of fleshy heart-shaped scallop-edged leaves and slender reddish brown flower stalk some four inches high with a loose umbel of small white flowers with small yellow eyes. A sight I have never forgotten. The Chinese name is not inapt and means 'spotted earth plum,' descriptive of it as being like the fallen white wild plum blossom scattered on the ground.

Redgorton, Bearsden.

H. S. D. GARVEN

Dear Sir,

The April 1957 issue of the *Journal* of the Scottish Rock Garden Club has come today. I enjoy it greatly and always look forward to its arrival.

I have just finished reading Mr. Roger F. Watson's interesting article concerning Silver Foliage Plants and find in it a bit of taxonomic confusion which I hope he will let me help untangle. In using the name *Synthyris subpinnatifida lanuginosa*, I believe that he has in mind the species of *Synthyris* that occurs in, and is limited in distribution to, the Olympic Mountains of Washington.

There is a *Synthyris pinnatifida*, named in 1871 by Watson, which occurs in the state of Utah. It has nearly glabrous foliage and deep purple flowers.

On the other hand, the species of *Synthyris* that grows in the Olympic Mountains has white pubescent foliage and blue-violet flowers. When Prof. C. V. Piper named this plant he took into account its white pubescence and so named it *Synthyris pinnatifida*, subsp. *lanuginosa* in his *Flora of the State of Washington*, published in 1906.

When Dr. Francis W. Pennell published his monograph of the genus *Synthyris* in 1934 he considered the Olympic Mountain plant a valid species. Thus he raised it to specific rank under the name, *Synthyris lanuginosa*. It has been so treated ever since in our local floras and is the name considered by botanists of our country to indicate the acceptable interpretation of this plant.

So far as I can find, the name, *Synthyris subpinnatifida lanuginosa*, does not occur anywhere in botanical literature.

For the last thirty years I have been studying and collecting the various species of *Synthyris* and find them, indeed, an interesting group. Many of them I have growing and blooming in my garden. *S. lanuginosa* happens to be one of my favourites. Looking from Seattle out across Puget Sound we see its lovely Olympic habitat, relatively only a few miles away. Because this is such an admirable plant it seems proper and fitting that it should be listed in horticultural literature under its acceptable botanical name.

I hope you will please be so kind as to pass along my suggestion to Mr. Watson and assure him that these few words of botanical interpretation are offered, from one plant lover to another, in the true spirit of helpfulness.

Seattle.

CARL S. ENGLISH, Jr.

Extracts from a letter to the Editor from Mrs. Earl A. Marshall, Portland, Oregon, U.S.A., June 1957

.

We had a day or two in the Grants Pass area again this spring.

Our first day out from Grants Pass was at Easter time, when we drove down some distance along the Rogue River on a very narrow road. To me the high point of this was finding a fine stand of *Delphinium nudicaule*. The main bed was on a sort of shelf about 75 feet above us. As David said, "I could get up there myself, but how could I get the camera up and down?" One new flower we came upon was *Dicentra oregana*. It seems to have the habit of *D. formosa*, but taller, with a lovely bluish foliage, and larger creamy flowers, tipped with rose. On our second trip we brought some home, but doubt if the plant survived. It did not seem to be setting seed. It was growing among rocks, and somewhat under a log, with considerable sun exposure.

You seem interested in the habits of *Phlox adsurgens* (see fig. 43). Yes, it is a plant which enjoys some shade. We have tried repeatedly to grow this, without success, but know of friends who have been quite successful. It is so lovely, it is a constant challenge to try it again and again.

.

*Extracts from a letter from Dora E. Waterson, Indiana, U.S.A.
November 1956*

Dear Major-General Murray-Lyon,

.

When I sent the woodland bulbs to Mrs. Davidson, I thoughtlessly forgot to include information concerning their cultivation. On receiving kind letters of appreciation from various recipients of these bulbs, I discovered some of the Dunoon members were having trouble finding a reasonably dry spot in which to plant them. Miss Dickson of Dumfries wisely potted hers up, and sunk them in the cold frame for the winter on account of her grounds being badly water-logged at that time.

I hurried off notes to each of these members who wrote to me, and explained that the *Dicentras* (*cucullaria* and *canadensis*) grow in rich,

moist woodland, usually on the lower ground, whereas (in my woods at least) all erythroniums keep to the high ground and colonize freely up the steep, dry sandy-gravel sides of the ravine, gully and banks. I advised them to mound up the soil, to which a supply of coarse sand had been added for drainage, and replant these erythroniums (*albidum*). Otherwise, I believe their tubers would rot if left in low soggy ground this winter.

Immediately after erythroniums have finished blooming and seed-setting, the hot weather begins, and their various locations become parched dry as concrete. These little tubers must store up ample food and moisture to tide them over their dormant period. The mature (or flowering sized) tubers somehow work themselves down a foot or so deep in the soil amongst the matted roots of trees and shrubs, which protect them from grubbing animals, and from human collectors. The young tubers are to be found easily, only two or three inches below the soil. Unfortunately, these require several years to reach flowering stage—some botanists say eight years, and others four. Last spring three very unusual forms appeared in the colonies of these *Erythronium albidum* close up to the house, each being deeply flushed with purple-grey on the outside petals. One unopened bud measured 3 inches, the other two were of normal size. Down in the gully I found others softly flushed with pink throughout. The few seeds I collected from these special flowers I sent to Mrs. Davidson for distribution. Due to an illness at the time I failed to get my quota of both erythronium and mertensia seeds.

Regarding *Dicentra cucullaria* in my woods, I find I have three distinct shades: pink flushed, softest yellow flushed, and white ones. I don't think the soil has any influence over their colour, as all three are growing in happy confusion everywhere about the woods. These also bloomed during the above mentioned illness, which prevented me from marking off the various shades, so had to collect corms at random for sending to Mrs. Davidson. However, I hope they were assorted. I will try and do better next year. By the way, *Dicentra cucullaria* grow very shallow. It is quite easy to poke the corms out of the soft rich loam with the finger tips. *D. canadensis* anchor themselves a little deeper and wad their corms into tight clusters of "Indian corn," and do not propagate so freely as *Dicentra cucullaria*.

After reading your most interesting article "New to my Garden" in *Journal* No. 18, I wanted to write off post-haste to tell you about the *Phlox divaricata* in these woods, but being the season when garden work is on the rampage and the mad rush is on to beat the rapidly approaching summer heat, I failed to do so. During late April and early May, *Phlox divaricata* blooms profusely in all its various forms and colour shades, perfuming the woods with a light, delicate, sweet fragrance. Some of the blooms are deeply clefted, others only slightly so. Shades of colour run all the way through almost-white, washy-

blue-whites, good lavender-blues and reddish-blues (occasionally a true albino is to be found).

Due to the prolonged spring rains most of the *Phlox divaricata* became completely overgrown with an impenetrable growth of mosquito-infested rank weeds, so I was unable to collect seed from the various kinds, and had to content myself with a fair amount collected from the "invaders" growing merrily in my rock garden and flower beds. A good lavender form planted freely with *Tulipa sylvestris* makes a pleasing sight with the yellow blooms popping up between the soft masses of lavender. They also make a good "filler" for planting between the bold Dutch tulips in complimentary colours.

Sometime this winter I will try and write notes on a few of Indiana's choicer wild flowers. It seems senseless to be sending seeds over there to the seed-exchange and not being more helpful in supplying cultural directions gleaned from their natural habitats. I hope I may some day hear whether these Indiana flower seeds germinate and are successfully grown in Scotland and England. At times I wonder if they deteriorate by being kept into the following year before being sown. In commenting on the seeds received from the S.R.G.C. seed-exchange, I have had splendid germination with most of them. My greatest problem is in keeping the seedlings alive in our erratic climate. If it isn't a sudden hailstorm to beat them all to pulp, it's death from some other unexpected source. However, I have several plants of various kinds from my 1955 allotment, and a whole crop of *Corydalis wilsonii*, a pot of precious *Leucojum roseum* bulblets wintering indoors, and beside them one treasured *Thalictrum kiusianum* from this year's seed. (You see, I go in for all shade-loving plants as we have too many big trees surrounding us).

Yes! I am happy to say I find the S.R.G.C. very helpful, and through the medium of its *Journals* I am becoming more interested in rock-gardening than ever—to the extent that I tore down thirty odd feet of old walling (2 feet high) this fall and rebuilt and partly replanted it, whilst the temperature was soaring up in the 80's day after day, and the drought was so bad, instead of packing and ramming the soil in behind the rocks, I "poured" it down like sand and soaked in place with the hose. So maybe my wall will be like those of Jericho—come a'tumbling down! But I had to get on with the work before October suddenly decided to jump right into winter weather. All beds and borders, etc., have to be walled up on my home grounds, as our cottage is perched on the summit of a fairly high river-bluff with the land sloping away sharply in all directions.

A year ago I took the liberty of copying a section of the rock garden you built on the front lawn of your Edinburgh home (figs. 17 and 18 of our *Journal* No. 19). A local member of the American Rock Garden Society loaned me her *Bulletin* and I hurriedly went into action in getting this constructed on a tiresome swale of ground, that was a continual grass-mowing problem. Due to the lay of the land I had to

put my wall facing N.E. as I wanted the slope to run down S.W. in order to catch the sunshine and to display whatever flowers grew on it to the best advantage from the lower drive. There was no time to plant it last fall ; besides, I had no suitable material I wished to put in this garden. However, it is now fairly well stocked. If I had known there would be a reprint in the *S.R.G.C. Journal*, I could have saved myself much work by copying off all of your soil mixtures, etc. Well, I am sure you wrote this most informative article and supplied good clear-cut photographs in order to help the rock-gardeners on this side of the Atlantic, so I hardly think there is need for me to apologize for being such a copy-cat. I am really most grateful to you for the practical assistance I got from your article, and in return I too must try to pay off my debt of gratitude by being as helpful and active a member of the *S.R.G.C.* as time and distance will permit.

DUMFRIESSHIRE LATE NOTICE

The first Meeting of the year will be held on the 12th of October in the Caledonian Rooms of Messrs. Oughton's Restaurant, High Street, Dumfries, when an address, illustrated by Lantern Slides, will be given by our President, Major-General Murray-Lyon. The next Meeting which will be held on the 21st of November in the same Rooms, will again be addressed by our President, accompanied by Dr. Morrison, who will give an illustrated talk on Alpine Plants in their native habitat.

At both these Lectures there will be a small Sale of surplus plants in aid of local funds, and any Members who have anything to dispose of might kindly bring them along.

Further Lectures are presently being arranged, and details will be given Members through the "Dumfries Standard."

American Primrose Society

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Review of the Year

By THE PRESIDENT

DURING THE Club year now drawing to a close the membership of the Club has continued to go up, and today stands at a figure easy to remember—3,333.

This steady increase in membership, without any recruiting stunts or special campaigns, is very satisfactory. It is also very necessary, for with steadily rising prices, particularly in printing, we must either increase our membership or our subscription.

Our stand at the Royal Highland Show at Dundee brought in forty-six new members. Congratulations are due to Mr. Stewart Mitchell and his band of helpers, and also to Mr. James Aitken of Perth for his very effective construction of the stand. Thanks are due also to the members who lent plants to furnish it. The special lectures to groups in outlying districts were also responsible for quite a number of new members.

County activities have gone on very much as usual, but in more counties. It is hoped that these activities will be further stepped up in the coming year. Thanks are due to the lecturers who travelled far and wide throughout Scotland, although some lectures had to be cancelled owing to petrol rationing. Garden owners were again most co-operative in opening their gardens to county groups, which was very much appreciated.

The shows are reported upon elsewhere, but I would like to stress the importance of making every effort to get new exhibitors to enter for the novices classes. At some shows there was a large increase in the number of exhibitors in these classes, but at one or two others the reverse was the case. Shows are an important part of our activities, and show secretaries and their committees, and also the judges, are carrying out a most essential service, and one entailing much time and trouble. The number of plants put up before the Joint Rock Garden Plant Committee continues to be satisfactory. I would, however, remind members that even if a plant has received an A.M. or F.C.C. it is still worth putting it forward ; if a really good specimen, it may qualify for a Cultural Certificate.

The seed exchange was reported upon in the *April Journal* ; it was quite successful in spite of last year's very poor summer. I hope members are now busy collecting seed for the next distribution.

The number of slides in the library is increasing, but we can still do with many more. The Curator of Slides will be very glad to receive colour transparencies from members.

The *Journal* speaks for itself and is keeping up its high standard. This year there has been a gratifying increase in the number of new contributors and I hope this will continue.

I do not propose mentioning the office-bearers individually. They work as a team, and work whole-heartedly for the Club. The well-being of the Club is very largely due to their efforts.

Our new venture, the Discussion Week-end, held in March, proved very popular with those attending (over 80), so another one is being arranged. It will be held on 9th and 10th November 1957, in Edinburgh. Details regarding it will be found elsewhere.

D. M. MURRAY-LYON

Royal Horticultural Society

JOINT ROCK GARDEN PLANT COMMITTEE

THE COMMITTEE met at the Scottish Rock Garden Club Show at Edinburgh on 11th June 1957, and the following awards were made :—

Award of Merit :

To *Primula ioessa*, as a flowering plant for the rock garden. Exhibited by R. B. Cooke, Esq., Kilbryde, Corbridge, Northumberland.

Certificate of Preliminary Commendation :

To *Primula pusilla*, as a flowering plant for the rock garden and alpine house. Exhibited by Messrs. Jack Drake, Inshriach Nursery, Aviemore, Inverness-shire.

To *Hypochoeris* sp. (subject to the plant being named), as a flowering plant for the scree rock garden. Exhibited by Mr. and Mrs. D. Tweedie, Chapelbank, Dirleton, East Lothian.

Cultural Commendation :

To Major-General and Mrs. D. M. Murray-Lyon, 28A Inverleith Place, Edinburgh, for a well grown plant of *Lewisia rediviva*.

Show Reports

NORTH BERWICK, SEPTEMBER 1956

THE NORTH BERWICK SHOW was held in the Sun Shelter on Saturday, 8th September 1956 when, as might be expected at that time of year, the gentians were outstanding. It was fitting, therefore, that the Forrest Medal was won by *Gentiana* "Inverleith," a hybrid raised at Edinburgh Botanic Garden. This variety is very free with its deep blue flowers which are carried usually three to four but sometimes as many as seven to each trailing stem. The plant to which the award was made was grown by Mrs. Bell, Boltonmuir, Gifford, and was in excellent condition, showing no signs

of the straggling habit which is the one slight detraction in this variety. The two runners-up were also gentians, *G. gilvostrata* and *G. x Carolii*, which were included in the set of three exhibited by Mrs. Cawley, Alnwick, and which won the Peel Trophy. Mrs. Cawley also won the East Lothian Trophy in Class 1 for three pans of rock plants, each of different genera. Her three plants in this class were *Gentiana* "Inverleith," *Calluna vulgaris* "Co. Wicklow," and *Astilbe simplicifolia*, which was in very good condition. This is one of the very fine plants for the autumn, giving both flowers and autumn-tinted leaves. Mrs. Boyd-Harvey, Dirleton, won the Logan-Home Trophy for the best miniature rock garden exhibited by a member resident in East Lothian with a very tastily arranged trough which included a little pool. The Silver Cup for the best plant in the section open to members who have not won more than three first class prizes at any Club show went to another gentian, this time the white New Zealander, *G. saxosa*, exhibited by Mrs. Hannah, Drem. The Bronze Medal for the most points in Section 2 was won by Mrs. Hannah also.

The class for one pan of rock plants native to Scotland was won by the President, Major-General D. M. Murray-Lyon, with a very good specimen of the cowberry, *Vaccinium vitis-idaea*, which was in both flower and fruit. Mrs. Boyd-Harvey's *Parnassia palustris* was a very close second. Other plants noted in good condition were *Crassula sarcocaulis* (Mr. and Mrs. Baillie, Longniddry), *Kelseya uniflora* (Miss Pape, Berwick-on-Tweed), *Sedum dasyphyllum* (Mr. W. Gilchrist, Carluke), and *Chamaecyparis obtusa gracilis* (Miss Drysdale, Gifford).

Three nurseries supported the show—Mr. James Robb, Pathhead, Ford, who was awarded a Large Gold Medal for a built-up rock garden, Mr. J. R. Ponton, Pentland Nurseries, Edinburgh, who was awarded a Gold Medal, also for a built-up rock garden, and Edrom Nurseries, who were given a Gold Medal for a display of rock garden plants in pots. These exhibits made effective use of shrubs, heathers, gentians, sedums and astilbes.

Competition was keen and in the principal classes at least the awards were won by plants of outstanding merit. Those who failed on this occasion, with just a little extra care in cultivation and in some cases attention to cleanliness of plants, could be in the prize list in another year. The Sun Shelter proved an ideal place for the exhibition and whether because of the setting or because the plants were really much better, this show appeared to the writer to be the best of the autumn Club shows so far held. The show secretary and his assistants are to be complimented in their lay-out of the classes and the clear demarcation between each class. It made the task of the judges so much easier. Altogether a very good effort, North Berwick !

D. L.

PENICUIK

FOLLOWING on the Council's decision, this year the Penicuik Show became a full Club Show with the usual set of Awards, excepting the

Bronze Medal, as there is no Novice Section. As the Best Plant in the Show now receives the Forrest Medal (if of sufficient merit), the Midlothian Vase will be awarded to the Best Plant in Section I, restricted to members in Midlothian and Peeblesshire *whether or not* that plant also gains the Forrest Medal. This year the winning plant gained both awards ; it was *Primula cusickiana*, shown by Mr. Corsar of Mauricewood in Section I. This plant is, by now, seven or eight years old and seems to improve each year ; it was in perfect condition and very free flourishing, and its scent of violets could be noticed many feet away. Certificates of Merit were awarded to Mr. Henry Archibald for a magnificent pan of *Saxifraga lilacina* ; to the Edrom Nurseries for a plant of *Thlaspi rotundifolia*, which was so covered with flowers that the leaves were almost invisible ; and to Dr. and Mrs. Henry Tod for *Kelseya uniflora*, in flower for the third year.

We were delighted to have our veteran competitor and Vice-President, Mr. Henry Archibald of Ogscastle, competing this year—and even more so to see him at the Show in person. His total points were running close on the heels of Dr. and Mrs. Tod for the Midlothian Bowl, which they just managed to retain. In addition to his pan of *Sax. lilacina* he had many other fine plants, most notably a huge plant of *Helichrysum virgineum* fairly covered with flowers.

Gold Medals were awarded to Mr. James Robb and Mr. J. R. Ponton for Built-up Rock Gardens and to the Edrom Nurseries for Rock Plants in Pots. All three stands showed the early rock plants—and a number *not* so early, due to the somewhat fantastic season.

This same phenomenon had the result of almost wiping out the Bulb Classes as only one pan of Crocus appeared, and only one of Iris, while a number of pans of the later Narcissi and Tulipa were well forward, and the Saxifrages mostly belonged to the second half of the Kabschia and Engleria season rather than the first, as is more usual. Actually the Show was a fortnight later this year, and the season nearly a month early, these two factors combining to provide a number of headaches for the competitors.

The standard of exhibits was very high this year, the number of entries in the Open Section was particularly good and the competition keen. The number of both competitors and entries now show a three-fold increase on the figures for the first Show in 1954. The Judges were Mr. David Livingstone, Mr. James Robb and Mr. Stuart F. Hayes from the Bush Centre of Rural Economy. There was a large attendance of members and the weather was providentially favourable.

HENRY TOD, *Hon. Show Secy. and C.R., Midlothian.*

GLASGOW

THE GLASGOW SHOW was held in the McLellan Galleries on 9th and 10th April 1957, and was opened by Lady Lithgow, Langbank. For an early Show the exhibits were quite good, but one would have been

pleased to see more competitors, especially in the beginners section, where there was very little competition.

In Class I, for the Dr. William Buchanan Memorial Rose Bowl, that grand veteran, Mr. Henry Archibald, Carnwath, was once more successful, with well grown and flowered pans of *Helichrysum virgineum*, *Nomocharis mairei*, *Primula aureata*, *Cassiope selaginoides*, *Erinacea pungens* and *Daphne petraea grandiflora*. Mr. Urie, Turnberry, who was second in this class, was awarded the H. Archibald Rose Bowl in Class II, for good plants of *Cassiope lycopodioides*, *Bryanthus empetriformis* and *Daphne collina*. Mr. and Mrs. Stuart, Pitlochry, were second with nice plants in *x Phyllothamnus erectus* and *Draba polytricha*. In Class III our President was first with *Tecophilea cynocrocus*, *Romanzoffia unalaschcensis glabriscula* and *Fritillaria citrina*, and in the one pan class (No. 4) the Club Secretary was successful with the rare *Primula decipiens*. For a plant with silver-grey foliage, in Class 7, Mr. and Mrs. Stuart were first with an attractive plant of *Celmisia linearis*. The saxifrages were poor, and in the classes for European Primulas one expected to see better plants: the single pan class went to Mr. Lamb, Carluke, with P. "Linda Pope," and in the three-pan class Major-General Murray-Lyon scored with Pp. "Blairside Yellow," "Mrs. Wilson" and "Linda Pope." In the class for one Androsace, Dr. and Mrs. Davidson, West Linton, were first with *A. imbricata*, and for one pan Dwarf Narcissus Major-General Murray-Lyon was on top with the dainty *Narcissus rupicola*. In Class 25 Mrs. E. A. Jackson, Bearsden, was first, her pan of mixed Rhodohypoxis being particularly well flowered, and in the single pan class Mr. and Mrs. Stuart's *Pleione pricei* took the honours. For one pan Compositae Mr. Lamb was successful with *Helichrysum virgineum*. The Lewisia classes were poorly contested, the best plants being *L. heckneri* *hyb.* and *L. tweedyi*, shown by Mr. Archibald and Mr. Urie. For one pan Campanulaceae Mr. Urie took first prize with *Campanula pilosa*, a particularly good pan full of buds but unfortunately not in flower. In the classes for Sedums and Sempervivums Mr. Archibald scored heavily, taking the Sedums with *sieboldii* and *stahlii*, and the Semps. with "Jubilee" and *persicum*. In the single pan classes Mr. Urie was successful with *Sedum sieboldii variegata*, and Mr. Todd, Bearsden, scored with a well furnished pan of *Semp. arachnoideum minor*.

In the classes for dwarf Rhodos. Mr. Urie took the two-pan class with *Rr. impeditum* and *williamsianum*, and Mr. and Mrs. Baillie, Longniddry, the single pan class with the dainty *R. pumilum*. Mr. and Mrs. Baillie were again successful in Class 48 with *Cassiope lycopodioides*, and Miss D. Pape, Berwick, took the honours in the two-pan class with *Rhodothamnus chamaecistus* and *Cassiope lycopodioides*. The classes for dwarf conifers were well supported, the outstanding tree being Mr. Urie's *Pinus beauvronensis*. In Class 54 Major-General Murray-Lyon scored with nice plants of *Lithospermum oleifolium* and the prostrate Rosemary. In Class 54 Mr. E. Darling had a good win

with *Jeffersonia dubia*. For a miniature rock garden Mr. Archibald was placed first, and in the Cacti class Mr. Gilchrist, Carluke, was first, followed by Mrs. Kempt, Bridge of Weir.

In Section 1 the Crawford Silver Challenge Cup was won for the first time by Mr. William Urie, Turnberry, with the most first prizes.

As already noted the competition in Classes 59 to 83 was very poor. The following good plants were, however, noted.

Sedum spathulifolium purpureum and *Tulipa forsteri* var. "Fusilier," shown by Mrs. Allan, Strathblane; *Armeria caespitosa*, shown by L. Hawkins, Westerton; three very well grown pans of Asiatic primulas, *P. chionantha*, *P. rosea* and *P. denticulata* from Mrs. W. C. Brown, Milngavie; *Tulipa pulchella humilis* exhibited by Dr. J. C. A. Arthur, Milngavie; *Rhododendron pumilum* from Mr. W. McGregor, Milngavie. In the class for miniature rock garden, Miss Mackie, Milngavie, was first and Mrs. Kempt, Bridge of Weir, took first with her pan of cacti and succulents. Mrs. Allan, Strathblane, was awarded the Bronze Medal for the most points in the section.

There was a very good display of Narcissi, the chief honours going to Mrs. Noble, Strone, and Mr. and Mrs. Biggart, Kilmacolm. Mrs. Noble had good quality flowers in "Krakaroa," "Red Riband" and "Tenedos," and the best vase in the Show, in "Blarney," a beautiful smooth small-cupped flower. Mrs. and Mr. Biggart had good vases of "Golden Harvest" and "Carlton." In Class 107 Mr. A. B. Lamont staged Narcissus "Golden Orchid." and this attracted great attention, being a distinct break from the usual cupped Narcissi.

For one bowl rock garden flowers Dr. Gibson, Milngavie, was first with a very dainty arrangement, and Mrs. Garrick, Milngavie, was runner-up. A nice bowl of cut flowers for home decoration obtained first prize for Miss Mackie, Milngavie, the second prize going to Mrs. E. A. Jackson.

In the classes for primroses Mr. Lamont was first for two pans and one pan single primroses, and also first for two pans polyanthus, the first prize for one pan polyanthus going to Mr. Gilchrist, Carluke. Mr. Biggart was first with his pan of Alpine Auricula, and for two pans garden auriculas Mrs. E. A. Jackson was first.

The George Forrest Medal was awarded to *Cassiope mertensiana* grown by Mr. J. Drake, Aviemore,

TRADE EXHIBITS :

Among the exhibitors were two newcomers in Ponton's Pentland Nurseries, Colinton, and Tom Bowman of Glasgow. Dobbie & Co. of Edinburgh had a magnificent display of Narcissi, including "Peking," with very large yellow trumpet, and "Peeping Tom," with long

narrow and reflexed deep yellow trumpet, and also a display of freesias. For their floral display they were awarded a Large Gold Medal.

The Edrom Nurseries of Coldingham, Berwickshire, attracted much attention with a display of Azaleas for a background and many species Tulips and Narcissi and a trough of *Primula sonchifolia* and a very good colour form of *Primula gracilipes*.

Barclay Boyd of Barrhead worthily earned the Large Gold Medal for built-up rock garden with a display of Maples and Azaleas for a background and a large and varied selection of primulas, gentians, lithospermum, dwarf aquilegias, dodecatheons, etc.

A Gold Medal was awarded to George Murray, F.R.H.S., of Kippen, for his display of *Primula denticulata* and special selected strain of polyanthus in all colours, and his "Blue Riband" strain of the blue primula.

Jack Drake, Inshriach, Aviemore, was awarded the Large Gold Medal for rock garden plants in pans.

Bannatyne & Jackson, Hamilton, gained a Gold Medal for their built-up rock garden, featuring a bold out-crop of rock with a background of Azaleas and an excellent selection of primulas, narcissi and species tulips.

To the Knockdolian Gardens and Nurseries, Colmonell, Girvan, a Gold Medal was awarded for rock garden plants and plants in pots. "Jezebel" and "Blarney" among the daffodils were greatly admired, as was also a very well flowered plant of *Lewisia tweedyi*.

Last, but not least, was the stand of Lt.-Colonel J. H. Stitt of Blairgowrie. Dwarf rhododendrons predominated—a most varied collection, with *R. pemakoense* outstanding. He also featured many rare primulas and a well grown plant of *Jeffersonia dubia*.

In conclusion tribute must be paid to the Show Committee for any success obtained.

EDWARD DARLING

National Trust For Scotland

SCOTTISH RHODODENDRON SHOW

A TOTAL of 302 exhibits from 13 gardens were entered for the Scottish Rhododendron Show organised by the National Trust for Scotland in conjunction with the Scottish Rock Garden Club in the McLellan Galleries, Glasgow, in April. The Sir John Stirling Maxwell Rhododendron Trophy for the highest aggregate in all classes was awarded to the Earl of Stair, K.T., D.S.O., Lochinch, who gained 34 points; the Gibson family, Glenarn, Rhu, came second with 24 points, and

Mr. F. L. Ingall, Corsock House, Castle Douglas, was third with 20 points.

Competition for the National Trust for Scotland Rhododendron Trophy, for the best exhibits of Dwarf Rhododendrons, produced a dead-heat between Sir George Campbell of Succoth, Bart., D.L., J.P., Crarae, and the Gibson family, Glenarn, with 9 points each ; Mr. A. G. Kenneth, Stronachullin, Ardrishaig, was third with 7 points.

This year for the first time the Royal Horticultural Society agreed to make awards to Rhododendrons exhibited in Scotland. *Rhododendron mollyanum* from the Younger Botanic Garden, Benmore, was recommended for the Society's First Class Certificate, and Awards of Merit were made to *R. "Blue Tit" x russatum*, Lt.-Colonel J. N. Horlick, Isle of Gigha ; *R. ciliatum x racemosum*, Mr. M. A. C. Noble, Strone, Cairndow ; *R. arboreum x barbatum*, Gibson family, Glenarn, Rhu ; and *R. burmanicum x spinuliferum*, The Earl of Stair, Lochinch.

The Show in spite of being early in the year was favoured by the season. Among the outstanding exhibits was a truss of *Rhododendron macabeum* shown by The Earl of Stair. The Gibson family showed an interesting spray of a fine form of Sherriff's *Rhododendron cinnabarinum* var. *purpurellum*. Good trusses of *Rhododendron lacteum* were shown by both The Earl of Stair and Mr. F. L. Ingall, Corsock House, Castle Douglas, and Mr. Michael Noble showed an interesting truss of *Rhododendron parmulatam*. There were also a number of good trusses of *Rhododendron mollyanum*. The finest not for exhibition came from Benmore Gardens. The mild season had enabled gardens in the east of Scotland to send larger entries than had hitherto been possible.

The judges at this year's Show were Colonel The Lord Digby, Sir Eric Savill, and Mr. Charles Puddle.

The prize list is as follows :—

- The Rt. Hon. The Earl of Stair, Lochinch Castle, Stranraer, 34 pts., 1st.
- The Gibson Family, Glenarn, Rhu, Dunbartonshire, 24 pts., 2nd.
- F. L. Ingall, Esq., Corsock House, Castle Douglas, 20 pts., 3rd.
- Major Iain Campbell, Arduaine, Argyll, 17 pts., 4th.
- Sir George Campbell, Bt., Crarae, Inverary, Argyll, 16 pts., 5th.
- Colonel J. N. Horlick, Isle of Gigha, Argyll, 14 pts., 6th.
- Michael Noble, Esq., Ardkinglas, Cairndow, 12 pts., 7th.
- Messrs. E. H. M. & R. A. Cox, Glendoick, Perth, 10 pts., 8th.
- Miss Balfour, Balbirnie, Fife, 9 pts., 9th.
- Mrs. K. L. Kenneth, Tigh an Rudha, Ardrishaig, 7 pts., 10th.
- Trustees of the late Mary, Duchess of Montrose, Brodick, Arran, 6 pts., 11th.
- A. G. Kenneth, Esq., Stronachullin, Ardrishaig, 4 pts., 12th.
- Captain P. L. Mackie-Campbell, Stonefield, Tarbert, 2 pts., 13th.

DUMFRIES

OWING TO a late Easter and an abnormally early season, many of the Dumfries members had their usual alpines in bloom a month before the Show dates this year, but there was a wonderful display of exhibits in Section I. Numbers, over all, were down on previous years due to no entries in beginners' section.

Petrol rationing had an adverse effect on stand bookings and several firms had to call off at last minute, but two newcomers helped to fill the vacancies.

The local firm of Adamson & Longmuir were awarded a Large Gold Medal for a built-up rock garden, exhibiting choice Primulas, Gentians, Saxifrages and many flowering shrubs of which *Berberis lologensis*, "Orange King," and *Rhododendron* "Blue Tit" seemed to stand out. A Large Gold Medal for a display of Alpines in pots went to Crichton Royal Gardens, whose display has seldom been bettered; it included many double primroses, P. "Barrowley Gem," haberleas, cassiopes, and sedums and sempervivums by the dozen.

King & Paton, Dalbeattie, besides being a new trade exhibitor, were awarded the Forrest Medal for an exceptionally large pan of *Phyllodoce empetriiformis* in excellent condition. Their Reinelt polyanthus, *Dodecatheons*, *Gentiana verna*, *Primula* "Blairside Yellow," and *daphnes* were very fine, and they also contributed a table of dwarf conifers in pans, which included about twenty varieties. Their stand got a Gold Medal for a built-up rock garden. Ponton's Nursery, near Edinburgh, visited us for the first time and displayed several troughs and sink gardens, also primulas, tulipa species, gentians and phloxes. Sesame Products, West Calder, had a display of pot plants grown in their composts. Floral Crafts, London, had their usual display, and a young local member got a Certificate of Merit for a table display of cacti and succulents which included many unusual items.

In the competitive section the prize for the best hardwood plant was awarded to *x Phyllothamnus erectus*, for the best softwood plant to *Pleione Pricei*, while a huge *mammillaria* in bud was judged the best cactus in the show.

Some good items on view included *Primula clarkei*, *Gentiana coelestina*, a pale blue acaulis type, *Daphne collina*, a dwarf white *Andromeda polifolia nana*, *Campanula pilosa*, and *Arcterica nana*.

As there was no entry in beginners section, the Lewis Trophy was presented to the best plant from S.W. counties this year, and was won by Major and Mrs. Walmsley.

Colourful Narcissi and Amaryllis brightened the hall and we were indebted to Crichton Royal Gardens for the display of plants for the staging and doorways.

I wish to thank all donors of prizes, and all members who helped to make the Show a success in so difficult a season.

R. FORBES, *Hon. Secretary.*

ABERDEEN

THE STANDARD of exhibits, which were considerably in excess of last year, was very good indeed and elicited favourable comments from Judges and Officials. The Forrest Medal was won by a fine pan of *Asperula arcadiensis*, but as its owner, Mr. Harold Esslemont, has already won a Forrest Medal at a previous Show, a Bar was presented for addition to the existing Medal. The Bronze Medal went to Dr. Allan Garton of Cults for an exhibition of various plants in different classes which won him most points in Section II.

The display in the Hall was extremely colourful and pleasing and in addition to the many fine exhibits of members, two display stands, one from the Cruickshank Botanical Garden, and the other from the gardens of the North of Scotland College of Agriculture, did much to enhance this. Trade exhibits, too, were very satisfactory. Those members of the trade present were: Jack Drake, Edrom Nurseries, Mrs. McMurtrie, Ponton's of Edinburgh, and Springhill Nurseries, Aberdeen.

The Show was opened by Professor J. R. Matthews, Professor of Botany at Aberdeen University, and an Honorary Vice-President of the Club, who was introduced by the local Show Secretary. Major-General Murray-Lyon thanked the Professor for coming along and said a few words about the Club and its activities in general.

W. MITCHELL, *Hon. Show Secretary.*

DUNFERMLINE

FINE WEATHER greeted the Dunfermline Show, held, as always, in Pittencrieff Park. Mrs. Andrew Buchanan of Dunfermline, wife of the Vice-President of the Carnegie Dunfermline Trust, opened the Show, with Major-General Murray-Lyon in the chair.

The George Forrest Medal was won by *Lewisia x trevoseana*, a magnificent plant owned by Mrs. A. W. Wilson. Major-General and Mrs. Murray-Lyon won the Mrs. W. B. Robertson Challenge Cup, and also the Carnegie Dunfermline Trust Trophy. Mr. James Driscoll, Guardbridge, won the Club's Bronze Medal for most points in the novice class, and C. G. Halley, Esq., of St. Andrews, won the Institute of Quarrying Quaich (Fife members only). Special prizes for the Best Plant in Section 1 went to Mrs. L. C. Boyd-Harvey, in Section 2 to James Driscoll, Esq., and Section 4 to Mrs. A. W. Wilson. Some beautiful saxifrages were shown and the sedums and sempervivums stood out with their all-the-year-round good looks set off by immaculate pots. There was a number of attractive dwarf conifers, many in square pans which seem to set them off to peculiar advantage. Mrs. A. W. Wilson's *Pinus montana* "Gnome," bearing cones, was a particular treasure.

1st Prizes for Arrangement of Cut Flowers, and also of Cut Shrubs, went to Mrs. I. W. Thomson of Muckhart. Amongst the paintings of flowers in the non-competitive section Mrs. Wilson showed some exquisite sketches of flowers found by her in Switzerland, the background in each depicting its natural habitat. She also exhibited china painted by her with alpine flower motives.

The school children's entries were again many and full of enterprise. Some of the paintings were better than last years', but there is still a great gap between the richness and variety of wild flowers in the vase and the interpretation on paper. The little gardens showed greater ingenuity and imagination, perhaps, than good gardening, although quite a number, this year, were definitely working on the right lines. One child had a miniature line of washing hanging in his garden, probably more familiar to him than most rock plants.

Trade stands were Maryfield Nurseries (Large Gold Medal), J. R. Ponton (Gold Medal), Floral Crafts, and Macpherson's Book Shop, Dunfermline.

M. I. C. H.

EDINBURGH

IN SPITE of what must have been one of the most erratic spring and early summer seasons for several years, the quality of the exhibits was again of a high standard, but a June Show in near heatwave conditions is not conducive to the exhibition of plants from the open ground, so the number of entries was down—campanulas being notably absent from the Show bench. The trade exhibitors once again gave the Show wonderful support and provided the usual high standard of interest and colour.

It was appropriate that in the season of daisies the George Forrest Medal should be awarded to *Anacyclus depressus*, a magnificent specimen with more daisy flowers than I have ever seen on an anacyclus, cultivated to perfection by Mr. and Mrs. David Tweedie of Dirleton, and this was not the only honour to be associated with their name, for the Elsie Harvey Memorial Plaque was won by them. This is the first name to be inscribed on this new trophy, which was recently gifted by Mrs. N. J. Murphy in memory of a very dear rock gardener, the late Miss Elsie Harvey. It was indeed a worthy group of rarities that won the award, among them *Oxalis laciniata*, grown magnificently by Mr. and Mrs. Tweedie from tubers collected in 1955 by Mr. Tweedie in Patagonia at a height of 600 feet in stony places—latitude 58°-54° South. The foliage has a greyish sheen and the flowers are grey-mauve, but I understand that this plant is variable in flower and that many shades of mauve to purple have resulted from this collection. Mr. and Mrs. Tweedie also exhibited a rare Patagonian composite in flower, again collected by Mr. David Tweedie. I under-

stand it was judged to be *Hypochoeris* species, and was later given as *H. lanata* by Kew. Mrs. David Tweedie completed her success at the Show by winning the Carnethy Medal with a fine group of plants, among them an exceptionally well flowered plant of *Helichrysum marginatum*. The Corsar Challenge Trophy was won by Miss D. C. Pape with a very good group of plants beautifully exhibited and cultivated. The Bhutan Drinking Cup was won by Mr. R. B. Cooke with a very well grown plant of *Primula normaniana*, the best primula in the Show. This plant was also given an Award of Merit by the Joint Awards Committee. Major-General and Mrs. D. M. Murray-Lyon were awarded the Reid Cup for the highest number of points won in Section 1, and among their winning plants were fine specimens of *Phlox adsurgens*, *Lewisia rediviva*, *Saxifraga aizoides atrorubens* and a lovely rhododendron *R. brachyanthum* var. *hypolepidotum* of the Glau-cum series, well grown and covered with yellow suffused peach flowers. Mrs. N. J. Murphy won the Boonslie Cup with her miniature rock garden, a very excellent example of this kind of art and designed to give the fullest possible pleasure throughout the year. Miss Crawford won the Kilbryde Cup for a very charming and original display of cut rock garden flowers. Mrs. B. H. Murphy won the Henry Archibald Rose Bowl with a well chosen group of three plants lifted from the open ground. The Bronze Medal, awarded for the highest number of points in the novices section, was won by Mrs. J. Aitchison with a very fine collection of well grown plants. Notable were *Delphinium* var. "Blue Butterfly" and *Dicentra cucullaria*. Other outstandingly good plants were *Primula reidii* var. *williamsii* grown to perfection by Mr. K. C. Corsar, *Dianthus alpinus*, a large plant of good form exhibited by Mr. R. B. Cooke, and *Leptospermum scoparium* var. *nanum*, a beautiful dwarf shrub covered in minute pink flowers, exhibited by Mrs. Halley Brown of Skelmorlie—alas, this gem is not hardy, I am told, in the East of Scotland—*Globularia incanescens*, with pale mauve globes crowned with white, exhibited by Mr. R. Baillie, and *Geranium napuligerum*, a fine plant bearing many pale pink flowers with green centres and black stamens. Enough place has perhaps now been given to the Show bench, so one must turn for further interest to the trade exhibits.

Mr. Jack Drake's stand was awarded a Large Gold Medal. The display again was of the highest cultural standard, beautifully arranged and a wealth of colour and interest. I singled out *Primula pusilla*, re-introduced by Major George Sherriff from Bhutan, which gained a Preliminary Recommendation from the Joint Awards Committee. Among a collection of *Lewisia cotyledon*, a remarkable yellow form, an immense pan of *Iris tenax*, *Aquilegia caerulea*, *Primula ioessa*, and a host of nomocharis, among them *N. saluenensis*, *N. aperta* and *N. mairei*. *Celmisia spectabilis argentea* was outstanding, as was a group of *Meconopsis grandis* No. 600. Can one describe this blue? I think not. Messrs. Bannatyne & Jackson were awarded a Large Gold Medal for their very wonderful built-up rock garden, and outstanding

in their display were the asters in variety for the rock garden, such as *Aster pirinense*, etc. Other good plants I noticed were *Campanula rhomboidalis* with its dark purple bells and a dwarf rose, *Rosa* "Baby Masquerade." Messrs. Lawrie of Dundee were awarded a Gold Medal for their built display of rock garden plants. I was thrilled with a plant of *Rhododendron punctatum* and a really fine *Viburnum plicatum* var. *grandiflorum*. From beneath the higher shrubs peeped small plants of *Pieris forrestii*, whose red foliage was a beautiful contrast to the rich greens, and it was a surprise to see the re-introduction of an old-fashioned favourite, *Prunella* var. "Loveliness." The Edrom Nurseries provided a very fine display of primulas and meconopses. The meconopses were raised from seed collected by Messrs. Stainton, Sykes & Williams, and at this stage they had numbers only—how easy, I thought. I singled out a good pink, No. 7943. I liked the built rock garden display of Mr. J. R. Ponton. The massing and colour arrangement was good and the quality of the plants superb. I noted *Campanula glomerata acaulis*, *Potentilla nepalensis*, *Asperula suberosa* and *Anthemis rhodolephana* as being real gems. Mrs. Laing once again exhibited a collection of plants which one feels no rock garden should be without, all well grown and daintily arranged. I was delighted to see a beautiful white form of *Aster alpinus*, *Dianthus graniticus*—intense pink, and fine plants of *Saxifraga cochlearis*. Messrs. Young & Thomson had provided a very good stand. The orange coloured *Erigeron aurantiacus* was outstanding, as also was a bold planting of *Lychnis viscaria* var. *splendens*. Skill in landscaping was evident in the built rock garden exhibited by Mr. James Robb. The quality of the plants was of a high standard. Notable of these were *Olearia gunniana alba compacta*, *Helichrysum marginata*, *Halimium ocymoides*, a cistus with a yellow flower and chocolate blotch centre, *Aethionema pulchellum*, and *Aquilegia bertolonii*. As usual, the National Cacti and Succulent Society provided a magnificent display. Unique this year was a stage by stage example of propagation of cacti from seed to mature plants in flower in the second year, a most praiseworthy effort indeed. Messrs. Grant of West Calder, J. Thomson, Ltd., of Edinburgh, the Edinburgh Book Shop, Messrs. P. Nimmo & Co. of Newbridge, and Mr. Hart of Floral Industries, Ltd., completed the trade support, all with their excellent displays.

W. R. ADAMS

County Activities

ABERDEENSHIRE and KINCARDINESHIRE

THERE WERE good attendances at all five meetings held last session.

Major Knox Finlay and Dr. H. R. Fletcher delighted our members with their respective talks on "Autumn Colour" and "The R.H.S. Gardens, Wisley." I wonder if the ordinary member quite realised how much the continued success of the Club, even its continued being, depends on people such as our two lecturers. County Representatives have reason to be grateful to them.

Our other speakers, in contrast, are probably not known generally in the S.R.G.C. But to call them "local" would be misleading. Mr. Ben Fever is well known in forestry circles as an accomplished lecturer and photographer and our members enjoyed his colour film of the Rockies and his commentary. Mr. John Dalby, known in musical circles as an organ recitalist, has photography as a hobby. That he is respected as a photographer (and also trusted) was evident from his bringing along with him to our meeting a very large selection of cameras, lenses and other equipment—one might almost say "of every description and to suit all purses." Mr. Dalby's informative and witty talk was illustrated with coloured slides of general views and of rock garden plants. Mr. T. W. Harrow, a professional florist, very kindly spoke to us on "Flower Arrangement" in place of Lady Burnett of Leys, who was indisposed. His demonstrations of two arrangements using the same flower material were applauded. It is interesting to note that this called forth more questions from more members than usual. We are grateful to all these speakers for sustaining our winter programme.

Our members greatly appreciated a visit in June to the gardens of Glassel House through the kindness of Dr. and Mrs. C. G. A. Salvesen. The garden contained amongst other things a fine collection of shrubs, particularly of Acers.

Our meetings during this coming session will be held on the last Thursdays of October, November, January, February, and March in Provost Ross's House. The programme is not complete, but Mr. J. G. Rodger, B.Sc., F.L.S., of the Nature Conservancy, will speak on "Scottish Mountain Plants in their Habitats" on 28th November. His talk will be illustrated with coloured slides.

J. STIRLING, C.R.

ANGUS

THE WINTER session opened on 5th November with an illustrated talk by the President on "A Swiss Visit—Colour Records of some Alpine

Plants in their Native Habitats," the illustrations being transparencies by Duncan M. Morison, M.B., F.R.C.S.Ed., who was also present. This was of great interest and one member at least has since made a similar visit.

On 3rd December we had David Wilkie to give an illustrated lecture on "Gentians," a subject on which he is the acknowledged authority.

Our January meeting on 14th of that month was another successful Members' Transparency Night."

An eye-opener to many of us on 4th February was A. Kennedy Johnston's "Colour Slides from an Amateur's Garden," being his own slides of his garden at Invergowrie. Few knew that we had such a lovely garden right on our doorstep.

"Bulbs for the Rock Garden" was the subject of Alfred Evans' lecture on 4th March, and besides showing many colour slides of suitable bulbous plants, the general instruction on bulb culture given in Mr. Evans' interesting and authoritative way proved of great value.

The usual Members' Show was held on 1st April, with J. L. Mowat as the Judge and Commentator. This is our most crowded meeting, and great credit for its success must be given to Mr. Mowat's skill in handling this type of event.

Summer visits are becoming a problem owing to the size of the Group, but we had four visits and members divided up very nicely, seventy-four members taking part altogether.

An evening run to Major Neish's garden at Tannadice on 24th April was our first outing. *Iris chamaeiris cretica*, *Daphne retusa* and *Mertensia coventryana* were plants of interest amongst many others. We were too early for *Soldanella villosa*, and the ramondas and habereleas which promised well in bud.

The St. Andrews visit on 18th May took in Balgove (Mr. and Mrs. J. C. Weir), Grange (Mr. and Mrs. C. L. P. Grace), and University Botanic Gardens (J. L. Mowat, Curator). A few of the fine plants seen at Balgove were *Pieris forrestii*, *Daphne cneorum*, *Iris cristata* with more than the usual quota of bloom, and *Ononis rotundifolia*, a lovely bush. At Grange the unusual weeping beech tree drew admiring comment. A small *Rhododendron hanceanum* var. *nanum* was very charming with its pale yellow trusses of flowers. Especially noticeable on the Rock Garden were *Gentiana acaulis* and *Lithospermum diffusum*, both with masses of bloom. *Aquilegia canadensis*, *A. glandulosa* and *Anacyclus moroccanus* were others which took the fancy.

It is difficult to mention only a few of the plants seen at the University Botanic Gardens where there is so much. However, *Iris innominata* was in full bloom, *Meconopsis integrifolia* delightful in a very large grouping, *Rhododendron trichostomum* var. *ledoides* of the same

Daphne-like group of Rhododendrons we saw at Grange. Two others I liked were the native *Polygala calcarea*, and a parasite growing on a willow's roots—*Lathraea clandestina*. The new heath garden is taking shape and will be an all-the-year-round feature.

Mr. and Mrs. John T. Renton's garden at Branklyn, Perth, was visited on 29th May, and here again it is difficult to mention only a few plants, and my own particular interest on this occasion must therefore suffice. *Meconopsis* were generally superb, and there was much interest in the new *M. regia* from Nepal, with its variety of colour. *Lilium oxypetalum* and its variety *insigne* were most attractive. A number of small trilliums intrigued me, although *T. grandiflorum* was outstanding in mass. The collection included *Tt. luteum*, *erythrocarpum*, *undulatum*, and *stylosum*, which are all a neat size for the small garden, but I'm afraid rather rare so far.

We went to Ascreavie on 1st June to see Major and Mrs. George Sherriff's garden, which, although not very old, is fast becoming a show place full of interesting plants. *Meconopsis superba* was prominent, and also the Nepal *meconopsis* we saw at Branklyn. *Rhodohypoxis* in clumps had stood the winter uncovered. *Lewisia tweedyi* growing beside bog primulas and *Ranunculus lyalli* come to mind as outstanding amidst a host of other interests.

Once again we have been indebted to lecturers and the owners of these lovely gardens, for their kindness to us, and for helping to further the objects of our Club. All these activities must bring more and more people to realise the delights of our wonderful form of gardening.

The Royal Highland Show being at Dundee this year, the Group were responsible for the Club's Stand there. The C.R. was nobly supported by various local members, and James R. Aitken of Perth constructed a splendid bit of rock work which was very much admired by all visitors to the Stand, among whom were the Queen Mother and her party. A very pleasant feature nowadays is the large number of members who call and make themselves known to the attendants. **Many** of these members have no personal contact with other members and it is most useful to have this opportunity of meeting them.

STEWART MITCHELL, C.R.

ARGYLL and BUTE

LAST WINTER the President gave lectures in Oban and in Rothesay, each of which resulted in increased membership in that district. The bulk of the area membership is, however, in Cowal, no doubt because of the galaxy of star speakers who make the journey to take part in the winter lecture programme in Dunoon. Dr. James Davidson, Dr. R. B. Pike, Dr. H. R. Fletcher, Mr. David Wilkie and Mr. J. R. Aitken each provided an excellent evening of entertainment and instruction. Mrs. J. J. Boyd-Harvey visited the area twice. A lecture was also

delivered in Strachur to members of the local S.W.R.I. All these lectures were beautifully illustrated by coloured slides. A Bring and Buy Sale was held in the garden at Burnbank, Dunoon, by kind invitation of Mrs. McDiarmid, at which members were able to exchange plants at bargain prices and to set the local finances aright for next winter's programme. Thanks are due to all the lecturers and members whose efforts helped to make the year a success.

There will be lectures in Dunoon on 1st October and thereafter on the last Tuesday of each month from October to March, excepting December.

J. F. McG., C.R.

AYRSHIRE

THE AYRSHIRE branch has had an active and successful year and our membership has risen slightly. Meetings were held regularly during the winter months and three gardens were visited in the spring. I would like to take this opportunity to thank the lecturers for their great kindness in giving up so much of their time and taking so much trouble to educate and inspire us. We welcome our new County Representative, Mrs. Hamilton of Rozelle, and look forward to many happy meetings and excursions under her leadership.

We started last year's meetings in October with a lecture on "Gentians," given to us by Mr. David Wilkie of the Royal Botanic Garden, Edinburgh. We enjoyed his lecture and slides very much and many more of this lovely genus will appear in our gardens in due course. In November we had a lecture on "Primulas," given to us by Mr. Kenneth Corsar. Mr. Corsar is a great authority on primulas hardy in this country, and illustrated his talk with slides from the Club slide library. In December Mr. Wall came to talk to us on "Heaths and Heathers." His lecture was characterised by his great grasp of his subject and his ability to enthuse his audience. We were delighted to welcome to this meeting our President, General Murray-Lyon. It was the first time that this Branch has had the opportunity of meeting him, and we very much enjoyed his visit.

In February Mrs. Gairdner, one of our most valued members, showed us her lovely coloured film of her garden, and also one of her visit to the Chelsea Show last year. The film of her garden showed us many treasures in a lovely setting and we enjoyed it very much. In March Major Knox Finlay came to give us a lecture, and his lovely coloured film of "Keillour through the Seasons." Major and Mrs. Finlay's garden is famous throughout Britain and many are the awards given to plants from it, so to have the garden and the plants shown to us at first hand was a wonderful experience and thoroughly enjoyed.

In April we visited the gardens at Corsehill, which are looked after by one of our members, Mr. Hay. The garden was full of interest and,

being so sheltered by walls, was very advanced for the time of year. We were much interested in the new rock garden made by Mr. Hay this winter, and hope to see it again at the end of the season.

We next visited the delightful garden and grounds of Martenham, the home of Mr. and Mrs. Dunsmuir, where the delightful layout of flowering shrubs and trees made our visit most interesting. The whole setting is enhanced by the loch in the foreground and beautiful hills behind. Our host and hostess made everyone feel at home, answered innumerable questions and rounded off the afternoon with a lovely tea in the house.

Our last visit was to Mrs. Gairdner's garden, which I unfortunately was not able to attend. Everyone told me what a delightful garden it was and how very kind their hostess had been in entertaining them with lovely drinks in the cool of the evening. Our Annual General Meeting was held on 14th June in Young's Tearooms, Ayr.

As County Representative for five years, I wish to thank sincerely the many lecturers, garden owners, and members, who have encouraged me in my endeavours, and I look forward to playing my part as an ordinary member of the Club.

MARY S. FINDLAY, C.R.

DUNBARTON, GLASGOW and RENFREWSHIRE

THE BRANCH meetings during the winter were well attended. On certain occasions standing room only was available. This was not surprising when you consider the calibre of the speakers and their subjects. To our President who set the ball rolling in October, James Aitken of Perth, Major W. G. Knox Finlay of Keillour Castle, David Wilkie of Edinburgh Botanic Garden, David Livingstone, Mrs. Marion Henderson, and Robert S. Masterton of Aberfeldy, to one and all our sincere thanks are due for a successful winter session.

Our treasurer, Mr. Robert Biggart, reports that he has a healthy cash balance in hand and all augurs well for the coming winter.

The outings to gardens took place as arranged and again we were fortunate in having good weather.

Arrangements for next winter session are complete. The first meeting takes place on Monday, 7th October 1957, when Dr. Henry Tod will talk on "Adventuring with Plants."

Circulars giving all particulars for the winter session will be posted to members by their County Representative a fortnight before the opening meeting.

EDWARD DARLING, C.R.

EAST LoTHIAN

THE FIRST event of the Club Year was the Autumn Show at North Berwick. This was a joyful occasion with the Sun Parlour living up to its name, the tables blue with gentians, the sea sparkling in the sunshine and everybody in holiday mood. The glass walls of the hall afforded a grandstand view of East Lothian Yacht Club events, and some members were competing successfully in two places at once—on the show benches and on the sea. Competitors brought plants from as far away as Alnwick and Newcastle-upon-Tyne, and a number of holiday visitors became members of the Club, including one from New York. The full Show Report is published on page 354 in this *Journal*.

The winter lecture season started at Dunbar with a demonstration of rock garden construction by Mr. James Robb, who has built more rock gardens than most people. A really practical lecture of this kind can do so much to save beginners from having to learn the hard way through disappointment and wasted effort.

Mr. David Livingstone's lecture at Gullane was on plants for the small rock garden, and slides were shown of some of the plants which particularly interest him. Mr. Livingstone has had many years of experience in growing difficult plants in pans for exhibiting, and now that he has turned towards 'open ground' gardening, his plants still bear the stamp of the meticulous plantsman.

Dr. Henry Tod's lecture at Gifford was directed particularly to those members who have never before competed at a show, but many useful hints and tips could be picked up by more experienced members. Slides were shown of prize-winning plants and also of others which failed to find favour with the judges, Dr. Tod explaining where their owners had gone wrong in the presentation of the plants.

The County Annual General Meeting at North Berwick was followed by a talk on books by Mrs. Boyd-Harvey. Other members brought books which they wished to recommend for their value or interest, and copies of book lists were distributed.

The talk by Mr. Wallace on "Pests and Diseases" had to be postponed because it was felt that any petrol which members could save out of their ration should be expended on conveying plants to the 'Bring and Buy' sale. This was again held at Somnerfield House, Haddington, by invitation of Mrs. MacFarlane. Plants, garden produce, flower pots and surplus seeds were on sale in the garage and drive, and coffee was served in the drawing room.

It was difficult to arrange garden visits in advance because of uncertainty about the duration of petrol rationing. Mr. and Mrs. Sander-son, however, sent an invitation to those members who were visiting Biel in connection with Scotland's Gardens Scheme to have tea afterwards at Birnieknowes and see the rock garden. This has been built up between two stone walls on the slope of a hill facing south in a

particularly dry corner of this low-rainfall county, and Mr. Sanderson specialises in cliff and scree plants. He also grows successfully such shrubs as *Veronica hulkeana*, which are not usually considered to be reliably hardy.

Several members who live on the bus route between Edinburgh and North Berwick were 'At Home' to fellow members each afternoon during the third week in May. Miss MacGregor and Miss Cross in North Berwick have an excavated rock garden which does something towards slowing down the too rapid drainage of their sandy soil and also gives shelter from the gales which sweep across the garden. A new scree has just been built incorporating moisture-retentive material in which plants are doing miraculously well.

Mrs. Bailey, who lives just across the road, has solved the gale problem by a boundary of high fence and shrubs, and has thus made the garden into a cosy outdoor living room in which she spends most of the summer. The 'Plant of the Week' here was a magnificent specimen of *Lithospermum oleifolium*.

Mrs. Clark at Smiley Knowes Cottage has a high cliff which was made by blasting through rock to make the drive. A cliff would seem to be an ideal place for growing cliff plants, but when the cliff is perpendicular and has a deep pond at its foot, planting can be a hazardous operation, and most of Mrs. Clark's collection of dwarf conifers, shrubs and rock plants are grown in troughs and on small ledges near the house.

Miss Bowe, Rose Cottage, Dirleton, has a picturesque garden which includes herbaceous borders, a collection of old-fashioned pinks, a formal paved garden as well as a small rock garden. A large quantity of the raw material of rock garden construction was noted here and it is understood that an extension of considerable size is contemplated.

Sqdn./Ldr. and Mrs. Boyd-Harvey's garden at Boonslie is enclosed by stone walls and is sheltered by trees from north and east winds. As one visitor remarked: "The whole place is like a large frame. The only way to get all these plants 'in character' again would be to lift the lot and get them pot-bound." Another visitor who noticed *Geranium dalmaticum* asked: "Can you please tell me the name of that large pink shrub?"

Four enthusiastic members of the Club live at Grainfoot, Longniddry, and although the rock garden is shared between them, each plant has its owner and belongs either to Mr. and Mrs. Baillie, to Sheana or to Neil. Certain favourite plants such as *Primula aureata* and *Sempervivum arachnoideum* appear in quadruplicate with each owner putting into practice his or her ideas about its cultivation. At the time of the visit *Celmisia spectabilis* (Mr. Baillie) and *Celmisia argentea* (Mrs. Baillie) were particularly admired.

East Lothian members have this year sent entries to the shows at North Berwick, Penicuik, Glasgow, Aberdeen, Dunfermline and Edinburgh; in fact one third of the plants at Edinburgh were from East Lothian gardens. Two more Forrest Medals have come to the county—for *Gentiana x 'Inverleith'* at North Berwick and for *Anacyclus depressus* at Edinburgh. Other awards were:—

The Logan Home Cup (North Berwick).

The Club Bronze Medal (North Berwick).

Prize for best plant in Novice Section (North Berwick).

Prize for best plant in Open Section (Dunfermline).

Carnethy Medal (Edinburgh).

The Elsie Harvey Memorial Trophy (Edinburgh).

L. C. B-H. for CHRISTIAN NISBET, C.R.

EDINBURGH

A SYLLABUS covering the full winter season's activities from October 1957 to May 1958 will be issued to Edinburgh and Midlothian Group members in September 1957. It will give place, date, and times of meetings.

W. R. ADAMS, C.R.

FIFE—EAST

LAST WINTER members in the east and north of Fife made a break with custom by holding two of their evening meetings in Cupar instead of in St. Andrews, and attendances certainly proved the experiment well worth while, and new members were enrolled from the Cupar area. The first meeting of the season was on Thursday, 15th November, in Elder's Cafe, Cupar, when Mr. Stewart Mitchell gave, as always, a most delightfully illustrated talk on "Interesting Rock Garden Plants." On Friday, 8th February, another meeting was held in Cupar when the speaker was our President, Major-General D. M. Murray-Lyon. His subject—"Walls and Screes," well illustrated by slides and diagrams—evoked a keen response from members present and provided a talking point for weeks afterwards. Mr. T. G. Wilkie, of Cupar, with the help of other Cupar members, undertook the responsibility of all necessary organisation and arrangements for these meetings, and it is hoped to arrange similar meetings next winter.

At the first meeting in St. Andrews on Thursday, 13th December, the speaker was the ever-popular Mr. James Aitken of Perth, and the subject "More Scottish Mountains and their Flora." Mr. Aitken's incomparably beautiful colour transparencies of the Grampians and the plants which inhabit them are so well known—and indeed are so indescribable—that no more is needed in asserting that the evening

was something to be remembered by all. The meeting on 8th March brought us something entirely different but equally enjoyable, and at the same time instructive, when Mr. Masterton of Aberfeldy spoke on "Plants that I grow, with Notes on their Propagation." This talk, well illustrated by slides of both plants and methods of propagation, was followed with keen interest and close attention and fully merited the warm response it received. The usual "Judging Competition Night" was held on 12th April, and though the attendance was adversely affected by various causes outwith our foreseeing or control, the number and quality of plants presented was well beyond expectations, and all present engaged in the evening's proceedings with their usual enthusiasm and enjoyment. Mr. Neil Lyle, as in previous years, very generously provided prizes which were greatly appreciated.

On 11th May the Ladies Committee and many willing helpers organized a highly successful Coffee Morning and Bring and Buy Sale. In addition to the pleasure this social occasion annually provides for members and friends the income thus acquired ensures the financial health of the Group for the coming season.

The first of our garden visits was to the garden of Mr. and Mrs. Renton, Branklyn, on Friday, 24th May. We were favoured with a perfect evening and, of course, a perfect garden. If a garden can be said to have one particular "best time," then I think Branklyn must have been just coming to its very peak. The great drifts of meconopses, in their various species, were fresh in the beginning of their season's blooming, many primulas were the same, and a number of rhododendrons and other shrubs were at their best. A perfect evening was rounded off by the very generous hospitality of Mr. and Mrs. Renton before we left for home.

The evening of Friday, 7th June, was given over to visits to three gardens of local members, those of Mr. and Mrs. Weir, Balgove, Mr. and Mrs. Templeton, Carron Lodge, and Mrs. Tatton, Priory Acres. These three gardens follow three quite distinctive patterns and are all equally interesting in their own particular way. Mr. and Mrs. Weir are plant lovers whose enthusiasm makes them "have a go" at all sorts of plants, and the garden at Balgove is always full of interest and surprises. Carron Lodge is a wonderful example of garden planning at its very best, well established by time, and maintained and augmented without disturbance to the perfect harmony of the whole. The dominating impression is one of restful beauty and peacefulness. Mr. and Mrs. Templeton entertained the large party most generously before we left Carron Lodge for Priory Acres.

This garden must always strike the observant visitor as the work of an artist enthusiast who has great reason to be proud of her own handwork. How Mrs. Tatton, with her many interests, finds time and energy for all the barrowing of soil and manipulation of rocks always fills me with admiration. And quite obviously Mrs. Tatton also has a way with plants; they seem to do and respond just where and as she

wants them to fit into her scheme of design. And each time we visit, some new extension seems to be in planning or in progress.

East Fife members who were able to take part were again very successful at Dunfermline Show, and Guardbridge members particularly came out strongly ; Guardbridge seems to be establishing a habit of collecting Bronze Medals.

J. L. M., C.R.

FIFE—WEST

ON TUESDAY, 29th January, Mr. Stewart Mitchell, Dundee, gave us a lecture on "Some interesting Rock Garden Plants"—with some wonderful colour slides taken from his own garden and from other well known members' gardens from both sides of the border. It was good to see such well grown plants of some of the rare and unusual kinds as well as the more familiar varieties. Mr. Mitchell's photography was superb.

On Tuesday, 26th February, Mr. J. W. Ormiston, Secretary of the Carnegie Dunfermline Trust, took us far afield in his talk on "Gardens seen by the Visitor at Home and Abroad." His colour slides of gardens in America and the Continent literally took one's breath away with their beauty and intensity of colour, but, as he showed us at the end, the beauty of some of our own gardens and countryside was very hard to beat.

On Tuesday, 26th March, Mr. D. Livingstone of Edinburgh gave us a most interesting talk on "The Small Rock Garden and its Plants," illustrated with some lovely colour slides, several being of various kinds of miniature bulbs. His information on building a Rock Garden and the cultivation of various plants will be a very great help to us all.

The meetings were held in the Women's Centre, Abbey Park Place, Dunfermline.

We thank all those who so kindly gave up their time to give us these lectures and for answering all the questions put to them, which was very much appreciated.

We welcome, too, those members who came from as far as Kinross, Kirkcaldy, Aberdour and Leslie, and hope for more local members to come along as well.

E. D. WILSON, *Assistant C.R.*

KIRKCUDBRIGHTSHIRE

THE WINTER season started with our usual Bring and Buy Sale of Plants, which provides us with funds to see us through the year.

Owing to the rationing of petrol which followed, it was found necessary to revise our winter programme. Visiting lecturers being out of

the question, we were fortunate in being able to call upon speakers living within the county and we made Barnbarroch House our headquarters. Our meeting place proved a very popular one and had the advantage of saving overhead expenses.

The following meetings were held :—

December : Miss G. Biggar of Corbieton on "The Herbaceous Border : its Design and Maintenance." The herbaceous borders at Corbieton are famous and Miss Biggar gave a most interesting and informative talk to a packed room.

Dr. Mavis Paton, Barnbarroch, on "Some of the Smaller Flowering Shrubs." Dr. Paton's wide knowledge of this subject was obvious and her talk was illustrated by some of the newer miniature shrubs.

February : Miss V. Young of Castlehill on "Winter Flowering Shrubs for Decoration as Cut Flowers." This was illustrated by an incredible variety of material, all taken from Castlehill gardens, and Miss Young, who is an acknowledged authority, proved beyond any doubt to a fascinated audience that quite as many beautiful flowering shrubs and small trees flourished in the winter as in any other season.

Miss E. M. H. King, Barnbarroch, demonstrated the construction of a Portable Propagating Frame. This proved a popular subject.

March : Miss M. L. P. Watson, Horticultural Adviser for the county, on "The Control of Pest and Diseases." Members filled the room to capacity to hear Miss Watson give a highly instructive and often amusing talk, and afterwards answer many questions.

In May thirty to forty members visited the gardens at Brooklands by the courtesy of Mrs. Norah M. Jebb. Brooklands gardens are beautiful with rare, attractive, and interesting trees and shrubs grown as specimens in parkland. Few of the amazing collection of species roses were in bloom, but the long shady border of *Meconopsis* species included a magnificent form of *M. grandis* in full bloom.

Another visit to a very attractive garden is being arranged for July. Next season's programme will be advertised in the usual way. The Kirkcudbright members are deeply appreciative of the kindness of the lecturers and garden owners.

E. M. H. K., C.R.

MIDLOTHIAN

THIS WINTER the meetings will be held, as previously, jointly with the Edinburgh Section in the Scottish Tourist Board's Rooms, Rutland Street. The Syllabus will be issued to members again early in the autumn. The Penicuik Show will be held in St. Mungo's Hall, Penicuik, on 8th March 1958 ; the Show Schedule will be exactly the same as for 1957.

HENRY TOD, C.R.

PERTHSHIRE

ON 2ND OCTOBER Major Knox Finlay opened our winter session with a talk on Lilies and *Nomocharis* and members liked his illustrations and observations so much that his talk was followed up, on 26th June, by a visit to Keillour to see many of them in reality. As usual on a visit to Keillour, attendance was very high and several new members enrolled in time to make sure of joining the party and enjoying the immense interest of this famous garden. *Embothrium coccineum* was making a brave show in the east den where also, in rotten rock above the bridge, were five happy plants of *Jankea Heldrichii* which promise well.

On 6th November Major Sherriff showed us fascinating films of Tibctan plants, places and people, and the large number of members attending greatly enjoyed his commentary. He was followed, on 4th December, by Mr. Euan Cox, who gave us an illustrated talk on the gardens and plants seen by him on his 1956 summer visit to the United States, which was a very popular success to his previous session's talk on his 1955 autumn visit.

The discussion evening arranged for 5th February followed immediately on the announcement of petrol rationing and this probably was the explanation of the rather poor attendance. Many interesting questions were raised and views and hints exchanged, and the experiment appears worth repeating.

The final talk of the session, on 5th March, to a packed house, was given by Mr. J. D. A. Stainton on his plant collecting trip to Eastern Nepal in 1956. This was another exceptionally interesting talk, illustrated by splendid slides, and Perth members are very grateful to the above mentioned speakers for holding us enthralled on Club evenings.

As many Perthshire members live so far out from Perth that attendance is not easy—two very regular attenders do a round trip of over 80 miles—it was intended to hold occasional meetings at suitable outlying centres easily reached by Perth members also. Petrol rationing made it necessary to drop this plan but an earlier meeting was held in Crieff, on 13th November, when Mr. James Aitken showed magnificent slides of Scottish mountains and their plants and gave an entertaining and erudite commentary on them. Perhaps more such lectures may be arranged this winter, but members in the south-west of the county are now fortunately able to look to Stirling for club meetings.

A small party of members travelled to St. Andrews on 1st June to enjoy seeing, during the afternoon, the very wide selection of plants at Balgove and the delightful display of primulas in their splendid setting at The Grange. The evening was taken up with a visit to the University Botanic Gardens, where Mr. Mowat showed us so much to hold our interest that even the long June evening was getting rather dim by the time we returned to Perth.

R. G. Dow, C.R.

ROXBURGHSHIRE

OUR MEMBERSHIP keeps up in numbers, but I should like very much to be able to organize more outings such as the one we had on 19th June 1957.

Thirteen members visited the garden of Mrs. Cawley, Glen Alan, in Northumberland. Mrs. Cawley and her gardener showed us round. We were all very interested in the wonderful collection of plants, including many as yet unnamed, a white *Meconopsis* being outstanding. Also noteworthy were large clumps of *Rhodohypoxis baurei*, and *Phlox adsurgens*, to mention only a few.

The lay-out of the Alpine Garden with its peat walls was most attractive, and inspired many of us. We finished off a delightful afternoon with tea, so kindly given us by Mrs. Cawley.

E. D. S.

SELKIRKSHIRE

THE MEMBERS in Selkirkshire have had a most enjoyable session. On 9th November 1956 Mr. Mowat of the University Botanic Gardens, St. Andrews, came to Selkirk to give a lecture, with coloured slides, on "Rock Plants in our Botanic Gardens." This lecture was very well attended, not only by the members, but also by members of the Horticultural Society in Selkirk.

In February and in May Coffee Mornings were held in an effort to raise funds, and also plants were brought and exchanged. These ventures were both enjoyable and profitable.

Mrs. W. H. Ogilvie, of Kirklea, Ashkirk, invited members to visit her gardens on 24th April. The weather was perfect and we had a most enjoyable afternoon in beautiful surroundings. Members were asked by Mrs. Ogilvie for suggestions regarding a new rockery which is in process of reconstruction. Our hostess very kindly provided tea.

On the evening of 22nd May twelve members visited Mrs. Lindores' garden in Selkirk, which although recently constructed seemed to produce fine alpine specimens from every nook and cranny. The evening was rounded off with a hospitable cup of tea.

Our last outing for the summer was on 10th July to the home of Mrs. Milligan, Faldonside House, Galashiels. Eighteen members visited this ideally situated garden with spacious lawns and lovely herbaceous borders where we saw most attractive flowers and plants in perfect condition. Our thanks are due to Mrs. Milligan for a delightful afternoon and for a delicious tea.

PATRICIA F. EWART, C.R.

STIRLINGSHIRE

TWO MEETINGS for members and friends were held in Stirling this year, and an open meeting was held in Falkirk. At the autumn meeting in Stirling we had a most enjoyable lecture from Mr. J. G. Collee on the subject of "Colour in My Garden." The talk was illustrated by coloured slides. In the spring we were very happy to have an opportunity of welcoming Mr. Mowat to Stirling. Mr. Mowat lectured on "Some Favourites in the Garden," and showed by way of illustration a wide selection of beautiful slides.

On 27th April we held an open meeting in Falkirk, addressed by Major-General Murray-Lyon. The President's lecture on "Rock Garden Walls and Screes" was most informative and stimulating, and has inspired several members to plan extensive reconstruction in their rock gardens.

A garden visit to suit West Stirlingshire members was arranged this year, when Mr. W. Buchanan very kindly allowed us to see over his wonderfully stocked garden at "Douglasbank," Bearsden. We spent a most interesting and delightful evening with our host.

Autumn Programme :

The opening meeting of the season will be held on Monday, 14th October, in the Golden Lion Hotel, Stirling, at 7 p.m. Major G. Knox Finlay will speak on "The Garden at Keillour." The talk will be illustrated by coloured slides.

We hope to arrange for a lecture in November by Mr. J. A. Stainton, on the subject of "Tibetan Plants." Members will be notified of the exact date later.

J. McEWAN, C.R.

NORTH-EAST ENGLAND

OWING TO the great distances many members covered to attend meetings in Northumberland it was decided not to arrange any meeting or garden visits during the continuance of petrol rationing. When rationing was cancelled it was considered that rock gardens were past their best, and so the only meeting held during the summer season was the local Annual General Meeting at the Blue Bell Hotel, Belford, on Wednesday, 17th June. Twenty members were present. Mrs. Brunskill's garden was, as always, of great interest and her new scree showed great promise.

The arrangements made for the autumn and winter season are :
Tuesday, 17th September : Meeting with plant exchange.

Friday, 18th October : Lecture, "Adventuring with Plants," by Dr. Henry Tod, Ph.D., F.R.S.E.

Wednesday, 4th December : "Dwarf Shrubs," by Mr. Alfred Evans.

It is hoped that two more lectures will be arranged.

D. C. PAPE, C.R.

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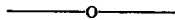
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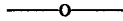
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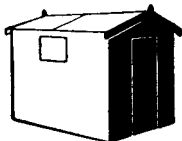


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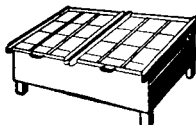
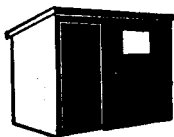


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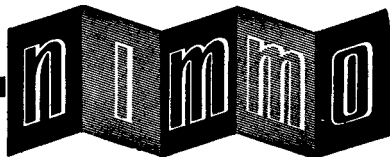


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