

BULLETIN

of the

AMERICAN ROCK GARDEN SOCIETY

Vol.8

March-April, 1950

No. 2

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Published by the American Rock Garden Society and entered in the United States Post Office at Bound Brook, New Jersey, as third class matter; sent free of charge to members of the American Rock Garden Society.

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The American Rock Garden Society, incorporated under the laws of the State of New Jersey, invites you to join with its members in the pursuit of a better understanding of the problems of rock gardening. The annual dues are \$3.50. Address all communications to the home office, 19 Pittsford Way, Summit, N. J.

1950 SEED EXCHANGE SUPPLEMENT

of the

AMERICAN ROCK GARDEN SOCIETY

Since publishing the Seed List, which was distributed to the members with the January - February issue of THE BULLETIN, the following seeds have been received. Names of donor are separately listed with a key number assigned to each name; and that number appears next to the seed so donated.

In ordering seeds through the Exchange, list the species desired and indicate any preference of source, where more than one is given. Seeds will be sent out in plenty of time for the new growing season; however, if you wish seeds at any particular date, please so indicate when submitting your request.

Orders for scarce seeds will first be distributed among the contributors to the Seed Exchange, then in order of requests received.

Your request must be accompanied by a stamped, self-addressed envelope. Please also furnish 3c stamp for each seed request.

Direct your request to Mr. H. Lincoln Foster, RFD, Falls Village, Conn.

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| Alyssum saxatile citrinum -42- | Lachenalia juncifolia -50- |
| Amsonia ludoviciana -43- | Lachenalia pusilla -50- |
| Anthoxanthum odoratum -48- | Leontopodium alpinum -48- |
| Aquilegia glandulosa | Lewisia tweedyi -51- |
| Azalea lutea -49- | Lilium regale -44- |
| Azalea mollis citrina -49- | Lobelia cardinalis Giant Hybrids -48- |
| Baptista australis -48- | Lychis (Agrostemma) coronaria -48- |
| Bellis monstrosa (red) -48- | Matricaria eximia -48- |
| Bradburya virginiana -43- | Myosotis rupicola -42- |
| Buddleia Royal Red -48- | Nemastylis acuta -40- |
| Calochortus macrocarpus -45- | Oenothera lamareckiana -48- |
| Campanula barbata -44- | Omphalodes linifolia -45- |
| Campanula persicifolia Telham Beauty-48 | Papaver alpina -48- |
| Campanula pyramidalis compacta -48- | Papaver nudicaule The Empress -48- |
| Cogswellia triternata -45- | Penstemon confertus var. caeruleo-
purpureus -48- |
| Cistus albidus -45- | Penstemon digitalis & tubiflorus
mixed -43- |
| Cistus salvifolius -45- | Penstemon New Giant Flowered,
mixed -48- |
| Clarkia pulchella -45- | Penstemon nitidus -51- |
| Clematis columbiana -51- | Penstemon sp. coral -51- |
| Delphinium orientale Royal Purple -48- | Potentilla megalantha -42- |
| Digitalis ambigua -48- | Primula auricula -42- |
| Dryas octopetala -51- | Primula auricula Monarch mix. -48- |
| Enkianthus campanulatus -45- | Primula cachemiriana -48- |
| Epigaea asiatica -45- | Pyrethrum Tall Red -48- |
| Eremurus himalaicus -48- | Rhexia virginica -46- |
| Erica australis -45- | Rock Garden mixture -47- |
| Erica umbellata -45- | Statice linifolia -48- |
| Erysimum capitatum -45- | Sweet William Indian Carpet -48- |
| Erythronium grandiflorum -51- | Thalictrum rochebrunianum -48- |
| Eustylis purpurea -43- | Viola cornuta Chantryland -48- |
| Gaultheria wardii -45- | " " Spring Beauty -48- |
| Geum montanum -45- | " " lutea splendens -48- |
| Hebe salicifolia -45- | " " White Perfection -48- |
| Hypericum patulum var. henryi -45- | " " G. von Wernig -48- |
| Iris lusata Surprise -46- | |
| Iris versicolor -46- | |

ANNUAL MEETING

The annual meeting of the American Rock Garden Society will take place at the home of Mrs. Clement S. Houghton, Chestnut Hill, Mass., on Saturday, May 20. Members are expected to arrive between the hours of 10:30 and 11:00 A. M. to visit the rock garden before luncheon, which will be served at 12 Noon. Immediately after luncheon, the business meeting will be held and then the party will leave for South Sudbury to visit Garden in the Woods.

A dual treat is in store for members - the opportunity to view "an ideal rock garden", as the late Herbert Durand aptly described Mrs. Houghton's garden, and Garden in the Woods, a wild flower sanctuary and the home of its owners, Mr. Will C. Curtis, landscape designer, and Mr. Richard H. Stiles, horticulturist.

Mrs. Houghton started her rock garden in 1919. Nature endowed the property with a number of ledges of conglomerate rock or "pudding stone", as the English call this type of formation, boulder-strewn slopes and woodlands. Into this picturesque setting, Mrs. Houghton introduced a flowing stream, many different kinds of alpiners and rock garden plants, Rhododendrons and other ericaceous subjects.

Garden in the Woods comprises thirty acres of woodlands and meadows, hills and valleys, with a brook and ponds, swamps and open bogs. It is a dream in the realization, the dream of a landscapist especially interested in native plants, where everything is grown in as nearly natural environment as can be created. The collection consists of more than 2,000 ferns and flowering plants from all parts of the United States and Alaska.

It is assumed that most members will make the trip by automobile. However, for those who may travel by train, plane or bus to Boston, the following information is given. Chestnut Hill is seven miles west of Boston, South Sudbury twenty miles west of that city.

Take local bus from Park Street Subway Station, Boston; change at Kenmore Station to local surface bus for Chestnut Hill. This runs frequently and takes about half an hour. Members will be met at the bus stop in Chestnut Hill, if they will notify the secretary of their approximate time of arrival.

The Boston-Worcester Bus Line, via Boston Post Road, goes through South Sudbury; leaves Park Square, Boston, every hour on the hour, turn left on Raymond Road. Bus leaves Kaffee Stuka in South Sudbury for Boston ten minutes before the hour.

The following hotels in Boston are suggested for the convenience of members: Hotel Statler, Park Square, single \$5.00 up, double \$8.00 up, double with twin beds, \$9.00 up.

Copley Plaza, Copley Square, single \$5.50 up, double \$7.70 up, double with twin beds \$9.90 up.

Hotel Kenmore, 490 Commonwealth Avenue, single \$5.00 up, double \$8.00 up, double with twin beds, \$8.50 up.

Hotel Bellevue, 25 Beacon St. (well recommended and centrally located), single \$4.25 up, double with twin beds \$7.25 up.

Longfellow's Wayside Inn, South Sudbury, can accommodate fifteen overnight guests: single rooms \$3.50, \$4.50; double room \$6.00, with twin beds \$6.50, with connecting bath \$7.50. They also serve breakfast from 60c to \$1.35, luncheon from \$1.35 to \$1.75, and dinner from \$2.25 to \$2.75.

Reservations for hotel accommodations should be made directly with the hotel of one's choice, and well in advance of the meeting date. Members must, however, notify the Secretary of the American Rock Garden Society, 19 Pittsford Way, Summit, N. J., not later than May 6th, if they wish to accept Mrs. Houghton's invitation to be her guests at luncheon.

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Dorothy Ebel Hansell, Editor

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THE EUROPEAN SPECIES OF THE GESNERIACEAE

S. L. C. SOLYMOSEY, HATZENDORF BOTANIC GARDEN, AUSTRIA, AND
MURRAY HILL NURSERIES, ATLANTA, GEORGIA

Editor's Note: Doubtless some of the members of the American Rock Garden Society will wonder at Mr. Solymosy's dual address. He is presently in Atlanta, Georgia, and directing the Hatzendorf Botanic Garden by mail. In 1945, when he was obliged to leave his home in Hungary, he went to Hatzendorf where he worked with the great scientist, Dr. Lemperg. Upon the latter's death, Mr. Solymosy took over the whole direction of the botanic garden.

Mr. Solymosy has a very interesting background. After finishing high school in Hungary and Lausanne, Switzerland, he attended the University of Zurich and was the fellow of the famous Schroeter and, in systematic botany, of Prof. Jaccard. On receiving his degree, he traveled through Europe and the British Isles to study the climatic conditions and flora of the different countries. Returning to his own country, he developed five experimental stations on his estates in western and southwestern Hungary for acclimatizing trees and perennials, especially from China and America. He already had at his disposal a botanic garden and arboretum of about fifty acres, which had been founded by his great-grandfather and continued by his grandfather, and his father.

Because of the climate in Hungary, it is very difficult to keep rock garden plants alive. Mr. Solymosy sought plants able to endure the heat in summer, the dryness, and the cold of winter, and concentrated on the Balkan-Mountain flora, among which are *Haberlea* and *Jankaea*.

THE Gesneria family comprises about 1,100 species which are divided into approximately 100 genera. Most of the species of this remarkable family grow in the tropical and subtropical regions of the earth. Many well-known coolhouse, hothouse and indoor plants, for example, *Gloxinia*, *Achimenes*, *Smithiantha* and *Saintpaulia*, belong to it.

These and other beautiful representatives of the Gesneriaceae bring a rich reward for very little care and attention. The thickly set, dark, intensely green leaves of *Ramondia*, with its light violet-blue blooms growing out of a shady rock crevice, invariably attract the attention of the passerby.

The Gesneriaceae were amply represented in Europe during the tertiary period, but during the glacial period their number was reduced, as they could not resist the climatic changes. The few sorts which defied and survived the glacial period are in the genera *Haberlea*, *Jankaea* and *Ramondia*. Their nearest relative, *Saintpaulia ionantha* H. Wendl., is in East Africa in the mountains of Usambara. Further relatives are *Didissandria* in East India and China, and *Conandron* in the mountains of Japan.

The two European countries in which these plants are found are situated far apart from each other - on the Iberian and the Balkan peninsulas. Why these genera settled only in these two countries, which are not only a great distance apart, but also completely different climatically, is a question still to be answered.

Key to the Genera

- A. Corolla tubular-funnelform, limb 5-lobed I. *Haberlea*
 AA. Corolla campanulate or rotate, 3-5 divided
 B. Corolla rotate, tube 3 mm. long II. *Ramondia*
 BB. Corolla campanulate, tube 10 mm. long III. *Jankaea*

I. *Haberlea* Friv.

- a. Leaves pubescent on both sides
 b. flowers bluish violet 1. *H. rhodopensis*
 bb. flowers white 2. *H. rhodopensis* v. *virginalis*
 aa. Leaves glabrous beneath 3. *H. ferdinandi-coburgi*

Haberlea rhodopensis Friv. This species was discovered in 1832 by the Hungarian botanist Imre Frivaldszky and was named after Charles Constantin Haberle, a professor of botany in Budapest. The northernmost place where *Haberlea* is found is near Lovec in the mountains of the Balkans and the southernmost near Buk in the gorge of Mesta. This district is separated by the plain of Philipopolis, where *Haberlea* does not grow.

The leaves of *Haberlea rhodopensis* form rosettes. They are leathery, longish, spade-shaped, coarsely crenate, serrate, setaceous-hirsute. The peduncle emerges from the rosette and bears up to ten funnel-shaped, five-lobed, violet-blue flowers, the upper two lobes shorter than the lower three, the throat dark spotted. Stamens four, not surpassing the tubes. Blossoming time, end of May, June.

Haberlea rhodopensis v. *virginalis* Hort. Shining white blooms, yellow spotted in the throat. An extremely beautiful and valuable variety.

Haberlea ferdinandi-coburgi Urumov. This species was found in 1902 by the Bulgarian botanist, Urumov, at Lovec and was named after King Ferdinand of Bulgaria. It is very much like *H. rhodopensis*; the main difference is the lack of hairiness on the upper part of the leaves. The blooms are somewhat smaller, more dark-blue; the upper lip is twice as broad as it is long.

II. *Ramondia* Rich

The genus *Ramondia* was named after the French scientist, Ramond de Carbonniere.

- a. Flowers four-divided 1. *R. nathaliae*
 aa. Flowers five-divided
 b. Anthers obtusish 2. *R. serbica*
 bb. Anthers apiculate 3. *R. pyrenaica*

Ramondia nathaliae Panv. et Petr. This species was discovered in 1879 by Petrovic on the Suva-Planina in Serbia, and in honor of the queen, was given her name. It grows most frequently in Macedonia. The very short stemmed, thick leaves, forming rosettes, are broadly ovate, deeply crenate, serrate, notched, thickly covered with bristly hairs on both sides. The flat, quadripartite blooms are magnificent, lavender-blue with a light orange-red center. The apiculate anthers are longer than the filaments. There are several varieties with light to dark blue flowers.

Ramondia serbica Panv. This was discovered in 1855 by Panv north of Nis. It grows frequently in Serbia, Macedonia, Albania and in Bulgaria. The leaves are ovate-spatulate, not quite flatly touching the ground, rather turned up, showing a marked curve at the central nerve. The leaf stalk is somewhat longer

than in the other two kinds. The five-divided flowers are campanulate, light violet with light orange-yellow center. The filaments are always longer than the anthers.

Ramondia pyrenaica Rich (= *R. myconi* F. Schultz) *R. pyrenaica* was already known in the XVI century and was mentioned under various names. It grows in the eastern and central Pyrenees where it is to be found in great patches. The short-stemmed leaves are broadly ovate, dark green, bristly-haired above, brown felt-like beneath, coarsely notched, forming big rosettes up to 25 cm. in diameter. The blossoms are carried by the upright stem and appear singly or up to three. The corolla has an intensely violet-blue coloring, to which the brightly yellow anthers form a beautiful contrast. It has also some varieties, the colors of the blossoms ranging from light violet-pink to dark pink. Blossoming time: May, June.

Jankaea Boiss

Jankaea heldreichii Boiss (= *Ramondia heldreichii* Benth. et Hook.) This species was discovered in the Olympics of Thessaly in 1851 by Th. von Heldreich, who was at that time director of the botanic gardens in Athens. Boissier baptized it in 1879 after the Hungarian Balkan explorer, Victor Janka. It grows only in the Olympics, but there very frequently, and is seen in great numbers on shadowy rocks at an altitude of 800 down to 200 meters, where the plants form widespread lawns.

The small, short-stemmed, white woolly-haired, entire-edged, ovate leaves form small, dense, silvery rosettes. The peduncles emerging from the rosettes bear 1-3 nodding, campanulate, light blue flowers, which are 4 or 5-lobed, up to the middle. The very dark anthers and pistils are a pretty contrast to the light-colored inflorescence. Blossoming time: May.

Cultural Information

Propagation, directions for cultivation, and demands made on the soil:

Haberlea, *Ramondia* and *Jankaea* can be propagated easily by seed, by division and by leaf cuttings. Care is recommended in seed sowing. As the seeds are very fine, they should not be covered with soil. If seed sowing is done outdoors and not in the glasshouse, the pots should be covered with a glass plate until germination has taken place, to avoid premature dessication.

The soil mixture should consist of one quarter loam, one quarter fine peat moss and one half fine sand. The best method is to sow in flat pans or pots and to provide good drainage. Germination proceeds slowly and in the first year the seedlings grow so little, that transplanting can usually be carried out only in the second year. The young plants are treated further by keeping them in pots in the coldframe.

In propagating by division, the side-rosettes of strong plants are taken, put in pots with a soil mixture of one third sand, one third good compost, and one third peat moss, keeping them under a glass plate in a coldframe in a shady place till they are rooted.

Leaf cuttings are made in the usual way as with related plants, such as *Saint-paulia* and *Gloxinia*. The leaves, which are taken from the mother plant in the spring, are put at an oblique angle in pots filled with three quarters sand and one quarter peat moss or peaty soil. They are kept moderately moist. The pots are then placed in a coldframe under a glass plate in a shady place or in the house. The rooted leaves are treated the same as the rosettes after division.

Both *Haberlea* and *Ramondia* have similar demands as to site and soil. According to my experience, the best results can be obtained by planting in flat rocky crevices filled with humus and facing westward. No other cultivation is necessary. The leaves curl up during extreme drought and the whole plant forms brown, dry clumps; but after comparatively little rain, the leaves uncurl and the plant thrives again.

Both of these genera are fully hardy, but *Jankaea* is in this respect somewhat more particular, requiring, if possible, a perpendicular rock crevice. This does not need to be deep. As with *Haberlea* and *Ramondia*, the crevice must be filled with humus. On the European continent, it prefers an eastern site, or at least a place where it can lie in the shade at noon. *Jankaea* is capable of hibernating very well and has even passed through the most severe winter without any covering.

DECIDUOUS SHRUBS FOR THE ROCK GARDEN

HELEN M. FOX, BEDFORD, N. Y.

FOUR years ago, I wrote an article for this BULLETIN, entitled "Low Shrubs for the Dry Sunny Exposure". I mentioned both evergreens and deciduous shrubs. Among the deciduous were Hypericums, Potentillas, Cytisus, Genistas, Indigoferas, *Spartium junceum* and *Spiraea bullata*. Since these rightly belong in the present classification, they will be included in the appended list but the reader will be spared a repetition of descriptions.

Always sought after and welcome when found are low deciduous shrubs, for they are suitable for the back of a wide perennial border, for a low border along the edge of a terrace, as background material or individual specimens in the rock garden. When planted as an intermediary between high shrubs and the lawn, they act as a mask to stems of tall shrubs, such as Lilacs or Philadelphus, and also soften the severity of the angle between these perpendicular shrubs and the horizontal line of the lawn.

Though the native Sweet Ferns, Fothergilla, Clethra, Itea and Bayberries are low and attractive to cover banks and fields, they are not suitable for gardens because they spread too rapidly and in no time take up space preferred for choicer specimens.

Blooming in early spring when Pussy Willows, *Cornus mas*, *Lonicera fragrantissima* and *Jasminum nudiflorum* are flowering, is *Abeliophyllum distichum*, native to Korea. Although introduced into cultivation twenty-five years ago, it is still not well known to nurserymen, and, consequently, to most gardeners. It is reputed to grow three feet high but in my northern garden has remained much lower. The drawback to this lovely shrub, in the north, is that the white Forsythia-like flowers come so early they are likely to be browned by early frost. The short flower stalks and calyces are very dark brown, the branches wand-like and square while the leaves, which come after the flowers have bloomed, resemble those of Abelias, whence the name. The open flowers are faintly tinted with rose, are fragrant and grow in clusters with cream-colored buds.

A spring bloomer, oddly enough, also difficult to locate in nurseries, is the single form of *Kerria japonica*. The branches are smooth and green, and with few side branches, and bear the single, five-petalled, golden-yellow and scentless blooms before the leaves are out. These are toothed and heavily ribbed. *K. japonica* grows to five feet but can be kept low by pruning.

A low shrub, known as Flowering Almond, comes with white flowers when it is called *Prunus glandulosa albi-plena* and with pink, when it is called *P.g. rosea*. In mid-May, in the white form, the branches are laden with flowers resembling tiny, fat, pompon-like Roses one inch across, with the buds and outermost petals dabbed faintly with pink. This shrub grows three to five feet high.

Attractive because of its spicy fragrance is *Ribes aureum*. The branches are twiggy and bear pendulous golden racemes of three to seven flowers, before the palmately-lobed leaves are fully out. This shrub, too, can be kept low by pruning. With me, it never grows higher than three feet, but it is said to reach six.

Some of the Cotoneasters spread wide and far, though they remain low. One of the best of the low group, to my taste, is called "*decora*". The very dark brown branches are thickly covered with leaves shiny above and woolly on the underside. The white flowers open way out with the petals not touching and have greenish filaments and brown anthers. The buds are tinted pink, the flowers followed by bright red fruits. "*Decora*" has a way of snuggling against rocks most becomingly.

There are several low Deutzias. One called *candida*, with white flowers in loose panicles, is exceedingly graceful. A group of three-foot-high Deutzias are attractive hybrids created by Lemoine. Among them is *D. Rosea* var. *campanulata*, which has campanulate-shaped white flowers growing on rose-tinted stalks, with sepals tinted rose over green; and *D. carnea* with rose-tinted flowers. An unusual Deutzia is *D. discolor*, raised from seed, which slightly resembles a blackberry, for



Elscholtzia stauntoni

Photo by Gottscho—Schleisner

the flowers tinted lavender-pink over white, are borne in rounded, somewhat flat clusters on long branches. The branches trail along the ground when the shrub is planted on a slope.

Not as delicate as the foregoing, but belonging to the category of low deciduous shrubs, is *Spiraea margaritae*. Its perpendicular branches rise to four feet and bear umbels of flowers at their apex. The color of the flowers is a prettier rose than the magenta-tinted and frequently planted Anthony Waterer, which it closely resembles.

In some sections of the northeast, *Ceanothus pallidus roseus* is hardy and blooms in early July, producing rounded, frothy, white umbels on pink stalks and smelling slightly of Privet.

Where a grey note is desirable, *Caryopteris incana* is recommended. The shrub is not always hardy, but I had one planted on a dry slope amid rocks and facing west, which came through the winter, year after year, unprotected. It is readily increased from cuttings and with its filmy grey-blue clusters coming early in October is a worthwhile addition to the garden. *C. mongholica* is said to be hardier. The leaves are more lanceolate than those of *C. incana*, from which it differs further in having the lower lip of the flower longer than the floral tube. Its fragrance, too, is pleasanter, being decidedly resinous and slightly reminiscent of Rosemary.

A second member of the Labiate which also blooms in late summer, is *Perofskia atriplicifolia*. It also smells similarly to Rosemary, but not as sweetly. It has finely divided grey-green leaves and thin spires of lilac bloom. If planted in a sunny, dry position, where it is not crowded or shaded by other plants, it will sucker and increase.

A third late-blooming member of the Labitae is *Elscholtzia stauntoni*. The variety *farquarhi* has deeper, more roseate flowers than the type. It, too, is a greyish shrub and the foliage has a pleasant smell of mint. *Elscholtzia* combines well with Hostas, Buddleias and Altheas to form a picture in the late summer garden.

List of Dwarf Deciduous Shrubs

<i>Abeliophyllum distichum</i>	<i>Genista pilosa</i>
<i>Cotoneaster dammeri</i>	<i>germanica</i>
<i>decora</i>	<i>Hypericum moserianum</i>
<i>Cytisus albus</i>	<i>patulum</i> var. <i>henryi</i>
<i>kewensis</i>	<i>calycinum</i>
<i>scoparius</i>	<i>Indigofera kirilowi</i>
<i>andreas</i>	<i>pseudotinctoria</i>
<i>multiflorus</i>	<i>geraldiana</i>
<i>praecox</i>	<i>incarnata alba</i>
<i>elongatus</i>	<i>Kerria japonica</i>
<i>supinus</i>	<i>Potentilla fruticosa mandschurica</i>
<i>Caryopteris incana (tangutica)</i>	<i>dahurica</i>
<i>mongholica</i>	<i>leichtlini</i>
<i>Deutzia candida</i>	<i>agyrophylla</i>
<i>rosea</i> var. <i>campanulata</i>	<i>Prunus glandulosa albi-plena</i>
<i>discolor</i>	<i>rosea</i>
<i>carnea</i>	<i>Perofskia atriplicifolium</i>
<i>Elscholtzia stauntoni</i>	<i>Ribes aureum</i>
var. <i>farquarhi</i>	<i>Spartium junceum</i>
<i>Forsythia (dwarf)</i>	<i>Spiraea margaritae</i>
<i>Genista hispanica</i>	<i>bullata</i>
<i>tinctoria</i>	

SPECIES CROCUS IN MY ROCK GARDEN

EDITH C. LAWTON, PLAINFIELD, NEW JERSEY

MY first acquaintance with Crocuses occurred when, as a child on my way to school across New York's Central Park, I came upon a little clump tucked under a small outcrop of rock. Each year, I watched with anticipatory thrills for its appearance. When the deep violet flowers did show, I felt that spring was really at hand. Are there any Crocuses left in today's automobile-infested park, after a half century, I wonder?

Those Central Park Crocuses were, undoubtedly, of the Dutch type. My first sight of species Crocuses came when I was a young girl, spending a summer in the Engadine. There, after the hay was harvested, the meadows became a fairyland of delicate lilac-pink cups. My mother and I with infinite labor (our only tool a borrowed kitchen knife) dug down through the tough sod and excavated a couple of dozen or so bulbs. They seemed to be buried at least a foot deep but, perhaps, I exaggerate. We wrapped the bulbs carefully and soon thereafter attempted to cross the Italian border with them. It did not occur to us to declare them, so when the custom's house official discovered the bulbs while rooting around our belongings, he dragged them forth in triumph. He had no idea what they were and our limited knowledge of the Italian language did not enlighten him. We vainly tried to explain that they grew everywhere in the fields. He repeated over and over "Cro-cus. Cro-cus", very suspiciously and ran his grubby fingers down long lists of items in a great book. Finally, he shrugged his shoulders hopelessly and let us through.

After a month or more of travel, we reached home. Our New York apartment provided no place for Crocuses, so we planted them in a corner of my grandfather's Westchester garden. They never appeared again.

Through many gardenless years, I remembered those autumn Crocuses. I was determined, when I finally acquired a garden of my own, to have some. The perennial border did not seem an appropriate place. I decided a rock garden would be the place for them. This was the start of my rock garden - a little corner, a few rocks, and autumn Crocuses. The rock garden is still very tiny and is the grave of many hopes and alpines, but occasionally a plant or so prospers and the species Crocuses of early spring and fall take over the area, recompensing me for any failures.

I have tried many of them. In late February or around March first come *Crocus sieberi*, of a lovely blue; *C. chrysanthus*, Snow Bunting, a rich creamy white; and golden *C. susianus*. *C. imperati*, also very early, seems a sparse bloomer and does not persist for me.

The real glory comes a few days later with *C. tomasinianus*. Of all the species, this is the loveliest and most prolific. Each tiny bulb forms many bulblets and all bloom at a very early age. I now have sheets and drifts of them. On dull days, they stand unopened, pale and ghostly; but with the sun, the slopes are aglow with vivid violet flame. Rain and snow flurries batter them, but new flowers soon open to take the place of broken ones.

Fairly recently introduced are two varieties of *C. tomasinianus*, Whitewell Purple and Barr's Purple. Both have dark outer segments instead of the pale ones of the type - even on a cloudy day, they are colorful.

There is a tremendous number of other species. One of the Dutch firms lists thirty different kinds flowering in the spring and fifteen of the fall bloomers. If I had the space, I would get all of them for trial and comparison.

Fall is given a freshness and a "breath of spring" by the autumn Crocuses. *C. zonatus*, opening in early October, has the nearest approach to pink in its coloring. It is a pale lilac with a light orange zone. Unless grown in dense masses, *zonatus*

needs a green setting to give it character. *C. speciosus*, however, has plenty of color, being a clear, bright blue with orange anthers and stigmata. The flower is long and stands six to eight inches above the ground so it, too, is benefited by close association with plants of a low tufted habit to furnish support. Seedling Forget-me-nots are excellent for this purpose. In the spring, when they flower, they help to hide the maturing foliage of the Crocuses. *C. speciosus* looks especially well with the pink of *Sedum sieboldi* and the yellow and dark hues of Johnny-Jump-Ups (current year's seedlings). If it were not rank heresy to mention annuals in connection with a rock garden, I should confess to finding the single yellow or single white *Portulaca* a lovely companion. *Sternbergia lutea*, although flowering rather earlier than the *Crocus*, often overlaps with it.

Several varieties of *C. speciosus* are available from commercial sources. The pure white one, *C. s. albus*, with orange anthers, is especially charming. *C. s. aitchisoni*, *C. s. Artabir* and *C. s. Pollux* are paler and somewhat later flowering. This past year one firm introduced a new variation, *C. s. Oxonian*, of a rich deep violet-blue, which sends up a succession of flowers, as do the others, from one bulb.

To get away from *C. speciosus* and its varieties, one has wide choice. *C. longiflorus melitensis* is moderately early in flowering, and its reddish violet bloom, possessing a delicate fragrance, is a distinct acquisition. *C. salzmannii*, a native of Tangier, sends up its foliage at the same time as its long-pointed flowers. It is said to "delight in a damp spot", so I placed it with *Cypripedium hirsutum* in a soggy depression. It flowered well the first year, but only leaves came up this year and it remains to be seen if that marks its last appearance or if it will build up enough strength to flower next year.

I have tried *Crocus medius*, also *CC. ochroleucus*, *pulchellus* and *salivus* but they do not last long in my garden.

Last of all to bloom is *C. asturicus atropurpureus*. Early December brings the rich red-violet of its rather small but numerous flowers. They continue for several weeks, unless the cold becomes too intense. This year's unusually mild conditions kept the succession of bloom unbroken until well after New Year's.

All the species Crocuses seem to enjoy the gritty soil of the rock garden, even prospering mightily in practically pure chips. However some, more or less by accident, have appeared in the ordinary soil of the perennial border and they flourish there, too, if not dug up by too zealous cultivation. There is not one, in my estimation, which is not precious and desirable, wherever it may spring up. Their delicacy and apparent fragility are no indication of lack of robustness and hardiness.

MOISTURE LOVING PLANTS OF THE NORTHWEST

FRANCES KINNE ROBERSON, SEATTLE, WASH.

AN early spring visit to wild flower fields of the northwest may encourage the belief that most of the wildings there are bog or near-bog plants, because the upland hillsides run with melting snow, or the spring rains wait soggily on the prairie land for the sun to take back to the sky the moisture which the ground cannot absorb readily. Thus we find swampy ground, later baked and hard, supporting acre upon acre of *Sisyrinchium douglasi* whose flowers are known variously as Oregon *Crocus* or Grass Widows. The open cups are usually purple but may be any lighter shade or, rarely, even pink and sometimes white. The grassy foliage may be passed by as a sedge if no flowers billow in the wind, which is sure to be blowing when they should be opening.

Yet this is not as truly a bog plant as is the similar foliaged sedge, which may grow in the least well-drained portions of such fields where moisture remains throughout the summer.

The same plains which are so lavishly filled with Grass Widows, may also be crowned with *Dodecatheon campestre*, a very squat form of Shooting Star with almost purple flowers, which harmonize strangely with the more dominant hue of *Sisyrinchium douglasi*. Set close to the ground among these royal purples may be the pure white flower of *Hesperichiron pumilus*, known also as *Capnoea pumila*. This is a fascinating little member of the Waterleaf family. I have had no experience with it in cultivation, but I suspect that it would soon be crowded out by any rampant neighbors with which it might be associated in any suitable garden location. It is sufficient thrill to come upon it in bloom in the spongy half-bogs of the central Washington plains.

A nearby attraction may be evanescent patches of blue, made up of the tiny labiate flowers of *Collinsia blowing*, even on their short stems, in the customary spring wind of that region.



Photo by Marcine Williams

Saxifraga rivularis inhabits the northern portions of North America — a dwarf, tufted plant with kidney-shaped leaves and white flowers.

Other moisture-loving plants fill the level stretches and slight depressions of land with their interesting and divergent leaf and flower forms.

The Heaths do not rightfully classify as bog plants and yet we may wade through a veritable quagmire in order to reach plants of *Phyllodoce empetriformis* for close examination of their vari-hued bells, hanging from the stiff branches.

There may be among the Heaths a clump of *Gentiana calycosa*, such as we once saw in a Heather meadow at the 5,000 foot level on Red Mountain near Salmon La Sac in the Wenatchee Mountains. It was late summer by the calendar, but only early spring at that elevation and location. The blue of the Gentian glowed from a hundred yards away like a mammoth, many-faceted gem of cobalt. This Pleated Gentian really likes to have its feet in stagnant water and so is much more of a bog plant than the Fringed Gentian of the eastern states, which thrives along stream banks.

The moisture-filled humus, which accumulates along woodland streams at fairly low elevations, provides suitable environment for some ferns and many flowering plants. The flat sterile fronds of the Deer Fern press close to the ground, while the spore-bearing fronds rise perpendicularly to their full height of ten to fifteen or more inches. The huge, gracefully arching fronds of the Lady Fern, unlike the smaller thicker ones of the Deer Fern, are deciduous and dry to paper thinness in the fall of the year. Also deciduous are the Maidenhair and the Oak Fern, both of which have fronds of exceptional delicacy. The circularly borne, verdant tresses of the former need no introduction to plant lovers from any part of North America, but the Oak Fern's tri-partite triangular fronds are less well known. This little fern seldom grows to a foot in height, has a wiry stem, and is very light green in color.

Closely associated with these ferns in their moist habitat will often be Piggy-back Plant, also known as Youth-on-Age, both names being derived from the fact that a new little plant develops at the base of the old leaf. Not only are the common names of the plant unusual, but the scientific name is also out of the ordinary in that it honors two botanists, both of whom played noteworthy roles in early plant explorations in the northwest. *Tolmiea menziesi* pays its respects to Dr. W. F. Tolmie, who served, beginning in 1832, as medical officer to the Hudson Bay Company at Fort Vancouver, and to Archibald Menzies, who was the surgeon and naturalist with Vancouver during his explorations on Puget Sound from 1790 to 1795. Other members of the Saxifrage family, such as Mitrewort (*Mitella*), Foam Flower (*Tiarella*) and Fringe Cup (*Tellima*), grow in close association with Youth-on-Age.

Mimulus occurs in the soggy islands of sprawling mountain streams as well as in damp woods, with many variations in size but few in color. Most of them are yellow, but *Mimulus lewisii* is a notable exception, with its rose-colored flowers.

The western Marsh Marigold (*Caltha leptosepala*) fills large areas of open bog land with its shiny leaves, but only at fairly high elevations. Its white sepals look strange to the easterner accustomed to the bolder yellow coloring of *Caltha palustris*, but each has a charm of its own.

So rare is the occurrence of Butterwort (*Pinguicula vulgaris*) that it has become almost legendary. The only place that I have chanced to see it in bloom was at a high elevation in the Olympic Mountains. The rocky hillside, on which it grew, was awash with melted snow. The fat leaves felt as though they had been oiled, and they had more yellow and brown than green coloring in them. But the violet-colored, two-lipped flowers completely captivated me. They were large enough to be joggled on their short stems by the mountain breezes and gave the appearance of a host of elfin beings capering in gay abandon.

Still smaller in leaf and flower is the Creeping St. Johnswort (*Hypericum anagalloides*), often found in similar locations. The individual leaf and flower each have a diameter of less than half an inch. Some of the pale green leaves change to red as winter approaches. And, best of all, this diminutive creeping plant, with its yellow pincushion flowers, is amenable to propagation and cultivation.

THE SAINTED VERONICA

STEPHEN F. HAMBLIN, LEXINGTON, MASS., BOTANIC GARDEN

MORE and more, I am impressed with the value of evergreen perennials, whose basal foliage stays green all winter among our rocks. One of the groups of plants of definite evergreen foliage is Veronica. But some species are little weedy annuals or perennials and others are far too tall for the rock garden. One does not know what he is getting when checking off names in an alphabetical list, but the little flowers are usually blue and the plants of easy culture. Which are evergreen at the base?

A tiny weed in lawns is Thymeleaf or St. Paul's Speedwell (*Veronica serpyllifolia*). It is too persistent to be killed and too tiny to be admired. *V. apennina* is a similar alpine, but no seeds are listed.

Moss Speedwell (*V. armena*) is the best evergreen species usually seen. The leaves are deeply divided, in effect of *Sedum rupestre*, but not fleshy; green to all cold. Short racemes of deep blue arise in May and June.

Comb Speedwell (*V. pectinata*) is very woolly, somewhat like Woolly Thyme. The flowers blue, or rose in the variety *rosea*, are quite large for a little plant.

Veronica filiformis and *V. filifolia*, whatever these may be, are little tangled mats, too slender to keep out larger weeds.

Veronica fruticans, or *V. saxatilis*, is a tiny evergreen tree to three inches; its dark blue flowers have a white eye. *V. fruticulosa* or *V. frutescens*, is a larger plant to eight inches, the flowers violet to pink. These are from the Alps of Europe.

Veronica satureioides is erect; its leaves, in fours, like a Savory. The dull blue flowers are borne in little racemes. The last three Veronicas have much the appearance, in a small way, of the famed but tender Veronicas (Hebe) of Australia.

Drug Speedwell (*V. officinalis*) has escaped as a field weed, with round, opposite, toothed leaves unharmed by winter, but the flowers are pale blue and too small to be showy. Its foliage is admirable. *V. allioni* is very like *V. officinalis*, with deep blue flowers and wide evergreen leaves. Not in this country?? And there is a *V. pyrolaefolia* from China, whose name makes a pleasant picture.

Veronica teucrium, which is now *V. latifolia*, grows a foot or more tall, but its form *rupestris*, Rock Speedwell (*V. rupestris* of dealers) has wiry, narrow, oblong leaves, a bit like those of *Daphne cneorum*. The erect racemes of deep blue, pale blue, rose or white appear in June. This is a decidedly valuable plant on ledges and in the wall garden.

Creeping Speedwell (*V. repens*) makes a mat an inch deep of small, round, shining leaves and pale blue or white flowers, mostly solitary, but of large size for a Veronica. As a crevice plant, it is excellent. *V. nummularia* is a creeping evergreen to the height of one inch in the Pyrenees, where it still remains.

This can't be the end of the list, but it is as far as I can go. *V. armena*, *V. fruticans* and *V. latifolia* have good foliage as well as effective flowers. These one can buy. *V. repens* has large flowers, but foliage of little note. *V. officinalis* has the best foliage, but the flowers are pale and few. The other species are rarely seen, even in foreign lists. How about hybrids made by man, as *V. repens* X *officinalis*? Evergreen foliage and ease of culture are the beginning of a good rock garden plant.

THE ENGAGING *PENSTEMON HUMILIS*

CLAUDE A. BARR, SMITHWICK, SOUTH DAKOTA

IN the early days of my special plant interests, a number of distinctive species and forms slipped by or away from me and indefinitely beyond recovery, due, it would seem, to an assumption that they were typical or universal and could be obtained merely at the thought. Further experience has taught me to place a far higher value on these plants that carry a particular appeal.

Such a one was my first acquaintance with *Penstemon humilis*. Though said to be frequent along the foothills from Boulder, Colorado, north and, therefore, a relatively close neighbor, two hundred miles or so, seeds of *humilis* came to me fashionably from a foreign country in a gift of seeds from Winnipeg.

The lone seedling that grew and in time made an eight or nine-inch low mat of small, glossy, dark green leaves upon a many-rooted crown, flowered happily for a number of years, then suddenly disappeared. Doubtless there was robbery by roots from a cedar row which encroached until many flowers failed in that bed - Penstemons showing a strong preference or an inescapable need for reserves of moisture and sustenance, to each alone a bit of the world for itself. The plant in its heyday bore a bevy of stems of bloom, five or six or, perhaps, eight inches high. The color, that soft lovely blue of velvet forget-me-nots on an old-time Easter bonnet, near to copenhagen-blue. The color tone and the freedom of blooming endeared *P. humilis* to me.

My present plants of this Penstemon, many of them now, are of stock directly from Colorado. They regularly attain a foot in height. Deeper color in the corollas, together with a reddish tone in the calyces, provide a purple-blue mass effect. The same great freedom of production, the appearance of neatness and well-being show well in the accompanying illustration, in a group of plants that have thrived in heavy soil for quite a number of years.



Penstemon humilis

Sand, heavy clay loam or a medium soft loam are acceptable footing for *P. humilis*, granted good drainage. The past season with steady moisture and never any excess nourished a number of strong chance seedlings in the heavier type soil. However, a sandy medium would probably be safer for mature plants in the average garden.

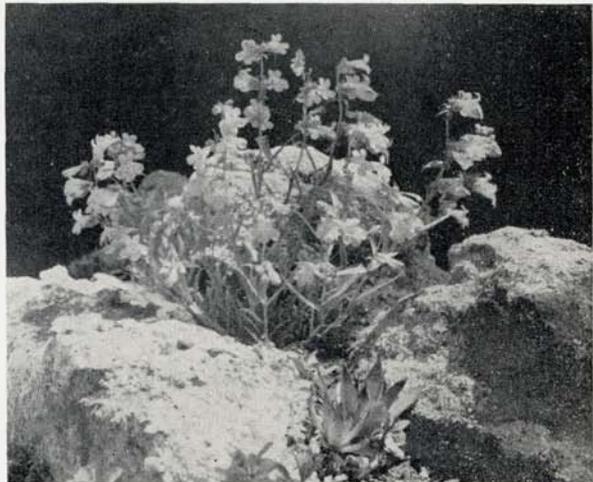
PENSTEMON ARIDUS

A Gem from the Montana Rockies

CLAUDE A. BARR, SMITHWICK, SOUTH DAKOTA

GROWING Penstemons in gardens seems, with many species, to be a matter of discovering a suitable medium and treatment. *P. aridus* from its first season in my garden displayed a resistance to drought - not always to be circumvented in a Great Plains garden - a willingness to persist by such means as were afforded it, and a general appearance of permanency.

Penstemon aridus is a tiny thing, a close cushion of very narrow darkish leaves, two inches or so high. It raises several dainty stems of four to, possibly, seven inches well filled with lovely florets of deep lavender, light lavender-blue or medium purple-blue.



Penstemon aridus

Trying numbers of my seedling plants in a rather rich, slightly sandy soil, in a heavy loam, and in a quite sandy soil in small pockets in much heavier soil, I have found no position served the freedom of growth and bloom of which I felt *aridus* capable. In its native home, it is said to grow in dry, quite sandy places. But that footing in any mountainous region is obviously not the same as a dry, sandy place on the prairie plains where evaporation is speedier. I spent considerable thought upon the problem.

Where watering cannot be done freely - and watering is sometimes a detriment in the desert atmosphere of a plains July or August, a means of providing more moisture and more frequent moisture from light showers is to have expanses of rock which convey run-off to the plants, a good wetting for the roots when direct penetration from the shower might not be as much as an inch, and when atmospheric humidity is right.

For the spaces between the rocks, perhaps equal parts of sand, fine gravel, rich humusy soil and heavy clay loam. I have lots of faith in clay, excellent for very many plants in moderation.

Penstemon aridus has now responded beautifully through two seasons, and I am encouraged to enlarge the rock-drainage environment—for *aridus*, for a number of creeping Phloxes, and for certain other plants which I wish to see at their best.

LETTERS FROM MEMBERS

A LETTER FROM TUCSON, ARIZONA

Today I had fun! The sun shone warmly; we could drive along with open windows and without the swaddling of winter wraps. I packed a lunch and we were off—first across the mesa that is now Tuscon, and as we reached the outskirts, we drove through the shrub and cactus-covered desert and into a thick forest of Saguaro, *Cereus giganteus*. We had begun to climb and were soon in the Sabino Canyon of the Santa Catalina Mountains.

The steep sides of the canyon walls are somewhat stratified and limey, with much rocky debris and little soil. Here, also, the Saguaro penetrates with many, tall shrubby cacti as well. Water flows sluggishly through the canyon - it is unusual to see water in Arizona, at least at this season (February 6th). The vegetation is open and park-like: beautiful old Live Oaks, Poplars, Desert Willow, handsome Sycamores with smooth white trunks, branching from the base in the most picturesque manner, as well as many shrubs with rounded tops and fountain-like habit.

Wedged into the cracks of the ledges and not far above the water's edge, we found two lovely rock ferns - *Cheilanthes covillei* and *Pellaea longimucronata*. The *Cheilanthes* is silvery blue-gray; the somewhat deltoid blade is so thickly covered with small overlapping scales that it appears almost velvety. The plant grows about five to seven inches high in a very dense mat. *Pellaea longimucronata* is twelve inches or more tall and grows in a tuft. The segments of the pinnae are blue-green, distant, and vary in size and shape from round to oval. These two ferns we had met before, but not in such flourishing colonies.

The first specimen of the third was a young plant and reminded me so strongly of *Ceterach officinarum*, that I hoped it was the rare *Ceterach dalhousiae*, which occurs only at a few stations in Arizona and in Abyssinia and the Himalayas. But it was not. Instead, it proved to be another very handsome fern, *Notholaena sinuata*. This grows in a close tuft of erect lanceolate fronds that may reach fourteen or more inches. The pinnae are oval, three-quarters of an inch long and coarsely lobed. The upper surface is covered with stellate scales which drop away as the season advances. The stipe and the lower surface of the pinnae are covered with densely imbricated, cinnamon-brown scales. That and the peculiar green contributed a great deal to the beauty of the fern.

We found another member of the fern family which I think would add much to any rock garden - *Selaginella arizonica*. It covers wide areas among the rocks with a soft carpet. Just now, it is dry; but with a little moisture, it uncurls and becomes a lovely dark forest green.

It was fun to be exploring again!

Else M. Frye, Seattle, Wash.

AN INVITATION FROM THE SOUTH

I just finished re-reading the January-February issue of THE BULLETIN. I do enjoy it so much. Its pages are filled with plants I've never even heard of, and I know that there are still many more to learn about.

I have been growing native plants all my life and I have lived a good many years! Our four hundred wild flowers are planted in a large rock garden with some alpine. I wish you could walk through it with me, it is so very beautiful.

Two years ago, I had the pleasure of hearing Mrs. J. Norman Henry, of Gladwyn, Pa., talk on the wild flowers which she had collected on her trips to Georgia. I grow all that she showed, with the exception of the white *Iris verna*. I have never found it. I do have the white *Iris cristata*. *Shortia galacifolia*, or Oconee Bells, was found in northern Georgia last year.

Saxifraga virginensis grows on limestone rock with the Ebony Spleenwort, *Asplenium platyneuron*, and *Sedum ternatum*. *Thalictrum dioicum* hangs on limestone rock with *Hydrophyllum virginianum*, and it is a beauty.

I have about fifteen species of Violets and hope to get all their names straight one of these days. I am partial to *rostrata* which is white, or I should say creamy, and runs about twelve inches. Also have *Gentiana andrewsi* and Grass of Parnassia, and *Geranium maculatum* and *Phlox divaricata* are everywhere!

Right now (February 9th), many little things are blooming. One of the prettiest *Phlox subulata* I call *subulata* Blue, and it is in bloom with a pink form from Kennebec Mountains.

I have never had the pleasure of seeing a real alpine garden, but I am sure such gardens must be very beautiful. I love my rocks as much as I do my plants and we do have wonderful ones, here. If any members of the American Rock Garden Society are ever in this locality, I hope they will stop in to see my garden—and me.

Carrie Hitt (Mrs. Robert) Campbell
"Camelrest", Cave Spring, Georgia

RE GENTIANA FARRERI

Perhaps it is just as well that I expressed a doubt as to the exact identity of the plant I raised from seeds sent to me under the name of *Gentiana farreri* - see my article in the November - December issue of THE BULLETIN. I sent some seeds to Mr. Jack Drake, of Inshriach Alpine Plant Nursery, Aviemore, Inverness-Shire, Scotland, also the drawing, and he writes to me, as follows:

"From your drawing. I would say that you got hold of *G. cachmerica* or *G. loderi* (both very much alike). On the other hand, the leaves look rather too narrow for these Gentians. Still the flower seems identical in size and shape. The color you describe as violet-blue; *farreri* is never that, but a dazzling, pure, greeny cold, deep ice blue, with very pronounced violet and green stripes on the outside of the flower. The color is quite unmistakable and once seen, is never forgotten.

"Unfortunately, it seems to have been lost in this country. Many botanists say this is due to hybridization with other Asiatics, while others say that it has lost its color in cultivation. Someone should go out and collect it again. I well remember my first sight of this Gentian - it fairly bowled me over. The color is unlike that of any living plant I have ever seen. It is the greeny tinge which has this strange effect, giving it a sort of unreal look.

"The seeds, too, are not of the same shape as seeds of *G. farreri*."

According to Farrer's description of *G. cachmerica*, my plant is not *cachmerica*, either. Maybe I have a hybrid, *G. Cloud Hill*???

I have had quite a bit of correspondence with Mr. Drake, with whom I first became acquainted through Dr. C. R. Worth, of Groton, N. Y. It would appear that he grows many of our prize native Americans better than we do ourselves. Among other plants, he has a complete collection of *Lewisias* with which he wins awards at the shows.

Doretta Klaber, Quakertown, Pa.

THE BENEFITS OF A ROUND ROBBIN

In the January - February issue of THE BULLETIN, Dr. Scorgie mentioned in her article, "Going Forward", that a few of the members of the American Rock Garden Society were enjoying the benefits of a round robin. Since this robin was started in January, 1945, I have had the pleasure of serving as the director of the

group. Its main purpose at that time was to form a closer contact between members of the Central States Group of the Society. Distance between us was too great to make it possible for a meeting to discuss our problems or our pleasure in growing rock plants.

As time passed, we lost members for various reasons and to hold our group to ten or twelve, and thus give the robin more interest, a few from outside our region were invited to join. Invitations were also extended to several who were not members of the Society, but who had experience in growing rock plants and should make good members. It was gently stressed that we expected them to join the Society and it is gratifying to know that two members were obtained in this way. They have made fine additions to our group.

I feel that we have all progressed a great deal in the culture of rock plants during the five years we have been studying together. Some of our members have collected plants in the Rocky Mountains. Several have import permits to obtain plants outside the United States, when we fail to locate certain plants from our own growers. Each spring finds us searching for new things to try out in our gardens. Snapshots of choice plants or of the rock garden as a whole are included at times in the fat packet of letters. Kodachrome slides are included occasionally, so that others may see the garden in color.

Here, in Wisconsin, we visit each other's gardens, when it is possible, usually planning to make the trip to Mrs. Walter Dakin's lovely garden during the Primrose bloom season in spring. We always return home with new inspiration for improving our own plantings.

All in all, I feel that the round robin has been worth while. For those who find it impossible to attend the regular meetings of the Society and who fail to find a fellow-gardener in his or her local vicinity to share enthusiasm, I would say the round robin method of gaining contact with folks of like interest is a great help. It not only sustains your enthusiasm, it increases it!

Subjects of interest to all of us are discussed, such as: soil mixtures, certain exposures that have proved successful, rooting of cuttings, or growing plants from seeds. Plants not fully hard are listed, protection for those which need it and what method is used for protecting, combinations of plants that prove satisfying, and lists of plants blooming during the more difficult months.

Books on rock garden construction and the culture of alpiners come in for their share of discussion. The author is given and source where the book may be obtained. Most of us have added several fine books of this type to our shelves during the past five years.

As Dr. Scorgie stated, the friendship we have gained is another pleasant part of the round robin, and it is no small part, either. After five years of writing about our beloved plants and exchanging good information as to their most successful culture, there is bound to be a close tie between us. It is worth a great deal in these strenuous days of our times.

Eunice (Mrs. Glen) Fisher, Oshkosh, Wis.

The round robin circulating among a small group of the members of the American Rock Garden Society here in California has been most stimulating to those of us who are lone rock gardeners in our respective vicinities. Mrs. Oscar Nelson has collected the result of our first robin and suggested that I send it to you.

We are going to try to hold our first meeting next fall, probably at our home, if everyone agrees to its being the most central spot!

Virginia (Mrs. Coulter) Stewart, San Anselmo, Cal.

SHRUBS IN CALIFORNIA

EDITOR'S NOTE: *The following material has been compiled from information circulated among California members of the American Rock Garden Society, who are participating in a round robin, under the direction of Mrs. Oscar Nelson, of Orick, California.*

Mrs. Nelson started the robin on its way, with a discussion on shrubs. "The *Abies* and *Picea* mentioned in the current issue of THE BULLETIN of the American Rock Garden Society may not thrive in southern California - and again they may, with water. The low-growing forms of *Juniper* are excellent; use them at an angle or at the base of or on a low shelf in your rock garden as accent plants. In moist climates they need to be trimmed to curb their spread. They should be slower growing in hotter climates. *Procumbens nana* is probably the best.

"*Daphne cneorum*, a lime lover, is good as is *D. mezereum*. The latter is taller and the blooms come before it leafs out. The bright red berries of summer self-sow. Many of the dwarf Brooms are excellent, for they are neat and evergreen in winter and are sheets of bloom later. The dwarf *Cotoneasters*, *adpressa* and *dammeri radicans* are rock-hugging kinds.

"For background evergreens, I know of no lovelier ones than *Abies lasiocarpa* and *Tsuga mertensiana* - if one can find them. I hope to have seed by spring which is, I guess, the only way to get these true alpine fir and hemlock. But it will be a slow process.

"In the gardens I have seen in California, there seems to be no use of the Heathers. They do well in northern California, but perhaps the southern part of the state is too hot for them. Heathers can be had to bloom the year round - some color in fall and give excellent foliage contrast. Blooming dates of a few follow: *Calluna vulgaris mckayi*, *minima* and *nana*, June; *foxi nana*, July; County Wicklow, August; *Erica ciliaris*, July; *Erica Domino*, August; *Daboecia polifolia*, September; *Erica carnea*, King George, December; Springwood White, January; Vivelli, January; Springwood Pink, February; *tetralix mollis*, May."

Mrs. Coulter Stewart, of San Anselmo, California, states that the dwarf Heaths would probably be more widely used in central California, if they would bloom. "We have *Erica cinerea* x C. D. Eason, the Cornish Heath, *vagans Lyonesse*, and Mrs. D. F. Maxwell; also *Calluna vulgaris* J. H. Hamilton. We saw all of these blooming proficably in Carl Starker's Oregon garden. Alas, in our garden, they grow and are green, but will not bloom. Does anyone have the answer? We water well.

"We are also puzzled by our inability to grow and bloom *Cytisus* or *Genista*. They are, according to growers, suited to hot, sunny locations and we have exactly that - but unhappy plants."

Harry E. Jacobs, of San Carlos, California, has used "the glaucous-leaved *Veronica glauco-phylla* (I believe it is now known by another name) and the dwarf form of *V. buxifolia*; also *Rosmarinus prostrata* and *corsicus*, semi-prostrate. The latter like our drier areas. *Agathosma ventenatiana*, the Blue (?) *Diosma*, which does so beautifully in the Golden Gate Park arboretum, has not quite decided to thrive here, although it does bloom. It likes a cool situation in light soil. Among the few dwarf conifers I have grown, *Chamaecyparis nitida variegata* also enjoys a situation a little on the cool side, to keep its golden foliage from burning."

Edward K. Balls, writing for the Rancho Santa Ana Botanic Garden, Anaheim, California, contributes some interesting comments on the subject of shrubs: "Their choice and placing is of primary importance in the construction of a rock garden. For many of us, the choice of plants is governed by the plants we wish to grow, but within that restriction we should also be able to place those plants to the

best advantage, as well as to suit them for growing conditions. Unfortunately, I have as yet a very limited personal experience with growing plants in this delightfully varied state of California, but some things I have been able to piece out, in conjunction with experience in other parts of the world.

"If it is possible to keep them from violent, desert winds and too direct baking from the sun, many of the non-California shrubs under discussion are worth trying in the southern part of the state. The *Abies* and the *Picea* species would probably thrive only with special treatment and conditions. Watering alone would not be the answer. *Daphne cneorum* usually needs a good deal of humus over its lime. *D. mezereum* is a "cottage garden" plant in England and needs both shade and water, if it is to be well grown in the warmer parts of this state. The smaller leaved Cotonasters, such as *C. adpressa*, *C. horizontalis* or *C. microphylla*, would probably do better than the large-leaved *C. humifusa* (*dammeri*), which is apt to burn in hot weather where exposed to sun and wind. *Ericas* and *Rhododendron* species are difficult in southern California but northward, along the coast, there should be less difficulty in providing both the acidity and moisture which most of them need. Many of the South African Heaths are easier to grow in drier conditions and do well at least as far as Santa Barbara.

"In the northern counties, it should be possible to grow the native shrublets, such as *Kalmia polifolia* and its very small variety, *microphylla*. Also *Phyllodoce breweri* and, perhaps, some of the dwarf mountain Willows. Some of the *Diplacus* species should be used; in the north, they would probably require all the sun you can get for them and would have to be cut back pretty hard most years. Unfortunately, few of the *Diplacus* will stand any amount of frost.

"It is possible that too much water is the real reason for *Ericas*' failure to flower. Periodical watering is the sound plan. In Carmel, a group of Heath is watered perhaps twice in summer (when there is no rain) and there is profuse bloom after the rains and after the fall soaking. The colony is on a very dry, exposed hillside open to the full force of the winds from the south. The Brooms usually like a fairly good soil, with ample drainage. Perhaps their roots should be somewhat sheltered so that they do not get too dried out in summer."

GERANIUM SANGUINEUM LANCASTRIENSE

In a recent article in THE BULLETIN, the writer referred to *Geranium sanguineum lancastriense* as "near magenta". The author must have had in mind the type or some other form as *G. s. lancastriense* is of an ethereal soft pink. I cannot pass it in my garden without Farrer's vivid description coming to mind, "of the tenderest and truest rose-pink, veined with deeper lines and each dancing in delight at its own loveliness".

I have never compared the petals with a color chart, but from memory the color seems near "porcelain rose" 620/3 of H.C.C.

Dr. Helen C. Scorgie, Harvard, Mass.

ANNUAL MEETING — MAY 20, 1950

For full details, see back of Seed List which is enclosed with this issue. Remember, notify the secretary if you plan to attend.

BACK ISSUES

Space being at a premium, we had to omit the announcement regarding back issues of THE BULLETIN from this number. But they are available—\$2.50 per volume, or 50c per single copy—from the Office of the Secretary, 19 Pittsford Way, Summit, N. J.

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