

# BULLETIN

*of the*

AMERICAN ROCK GARDEN SOCIETY

*including*

## SAXIFLORA

Vol. 4

January-February, 1946

No. 1

### CONTENTS:-

*Page*

1—Carl Purdy .....	Elmer C. Purdy
3—A day among Alaskan alpiners .....	Ira N. Gabrielson
5—Two primroses of the St. Lawrence region .....	H. H. M. Lyle
6—Some small members of the Iris family .....	Elizabeth Lawrence
7—Editorial notes	
8—SAXIFLORA: <i>Primula vulgaris</i> .....	T. H. Everett
11— <i>Pachysandra procumbens</i> .....	E. T. W.
12—Companion planting in the rock garden .....	A. C. Pfander
13—The prairie trout-lily .....	A. F. Priest
14— <i>Rydbergia grandiflora</i> .....	Francis O. Libby
15—Rock Garden Quiz	
16—The American Rock Garden Society	

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

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### CARL PURDY

**D**URING the past half century and more every gardener who has essayed to grow California bulbs and other native plants has become familiar with the name of Carl Purdy. It is now our sad duty to record that this eminent plantsman has passed away, at the age of 84. Accounts of his life and work have since appeared in various horticultural journals, of special note being his autobiography in the *Flower Grower* for November, 1945. His contributions in the field of rock plants and rock gardening were so important that an appreciation should appear also in this Bulletin.

Carlton Elmer Purdy was born at Dansville, Michigan, on March 16, 1861, his ancestors having come from Connecticut, New York, and ultimately Holland. When he was three years old his parents travelled by covered wagon to Virginia City, Nevada, and later built the first house in the settlement which came to be known as Reno. Setting a fashion which has persisted there, they separated and his mother married again; in 1870 the stepfather brought the family to California, where they developed a ranch from the wilderness near Ukiah. It was here that Carl, as he was called for short, spent most of his long and fruitful life. In 1888 he married Vesta Moore, and they had three children, Elmer C., Mabel (now Mrs. Mahurin), and Mary. He died at Ukiah on August 8, 1945.

Rock gardeners will be glad to learn that his children are carrying on the business of supplying plants.

It is always interesting to find out how people become directed toward their chosen fields, and in this case a record is available. A sister, whose name prophetically was Flora, became during a stay further east an enthusiastic horticulturist, and on returning to Ukiah called on young Carl to help her construct a flower garden on their bare hillside. Even though it meant hard work for him in carrying buckets of rich soil and manure, and in drawing water from a deep well, the floral beauty which resulted instilled his life-long love of flower growing. At the age of 17 he was also helping a neighbor, a Scotch horticulturist named Alexander McNab. One



COURTESY OF THE FLOWER GROWER

day Mr. McNab received a letter from an eastern nurseryman, expressing an interest in obtaining some California native plants, and handed it to Carl to answer. He sent a pressed specimen of a local wild flower, the name of which he did not know,—years later it was named *Calochortus amabilis*—and received an order for 100 bulbs of it, for the sum of \$1.50. When in reminiscent mood, in later years, he liked to recall how it took him three weeks to fill this order; and then later on was able to fill an order for 75,000 of them in a single season.

From the age of 18 to 22, Carl Purdy taught school in remote sections of the state, and for several years sold insurance and acted as agent for the Wells-Fargo Express Co. The first bulb order which he filled led to an ever growing volume of others, and he spent vacation periods as well as early mornings and late evenings digging native plants for shipment all over the world. By 1888 he had so many orders that he made this his life work.

Unable to ascertain the names of many of the showy native plants of the region, he sent specimens to the Gray Herbarium, where they were identified by Sereno Watson. Finding that many of the species he came upon were new to science, he undertook taxonomic studies, and published articles on several of the Liliaceae genera of California, notably *Brodiaea*, *Calochortus*, *Erythronium*, *Fritillaria*, *Lilium*, and *Trillium*. Other families did not escape his attention, however, and members of the American Rock Garden Society will recall the vivid account of the *Lewisia* which he contributed to the first volume of our Bulletin. No complete bibliography of his writings has been compiled, but it must comprise hundreds of titles. He wrote numerous notes on California flowers and trees for *Garden and Forest* from 1889 to 1897; studies of various genera of rock garden interest for English publications, such as the *New Flora and Sylva*, from about 1900 on. The *Journal* and the *Lily Year Book* of the Royal Horticultural Society included many articles by him. Our *American National Horticultural Magazine*, *Horticulture*, *House and Garden*, and others also published several of his contributions.

About 1900 Carl Purdy took up landscape architecture and garden planning, making extensive use of native plant material, and was eminently successful along this line. In 1915 he was Superintendent of Horticulture at the Panama-Pacific Exposition, designing many of the gardens and floral displays. For some years he also organized, installed and managed exhibits in county fairs.

His plant business was carried on most successfully; his office files (which he designed) contain a systematic record of every transaction since 1890. He bought the first typewriter in northern California, and personally typed all his own correspondence and writings. Yet he somehow found time for numerous other activities. He became widely known as an amateur ornithologist. Studying Pomo Indian basketry, he learned to speak four languages of this tribe. As a boy he had become proficient in Spanish, and at the age of 78 learned to read French. A life-long member of the Presbyterian church, he became an authority on the history of the Bible. Taking an active interest in political questions, he contributed for 20 years to the rival local newspapers. The writers of the Democratic and Republican columns used to denounce one another in no uncertain terms, and it was not until years later that he disclosed that he had been the author of both columns.

Several of the numerous new species of native plants which he discovered were assigned the species name *purdyi* in his honor, those of most interest to rock gardeners being *Calochortus*, *Lewisia*, and *Sedum*.—Compiled by the Editor from data submitted by ELMER C. PURDY.

## A DAY AMONG ALASKAN ALPINES

IRA N. GABRIELSON, Washington, D. C.

THERE has been little opportunity for me to see mountain flowers in their natural homes since the war began. So, a trip which enabled me to spend most of July 28 above timberline on the Chugach Range, some 30 miles north of Valdez, Alaska, provided a welcome opportunity to see again in life many interesting alpine.

The complete list of plants seen would be long, but as usual certain ones were outstanding because of their dominant part in forming the floral display and others, less abundant, for the perfection of their blossoms. There had been a heavy snowfall the previous winter and great drifts still remained far below the permanent snow and ice fields. About their melting edges it was early spring, with the stems of *Caltha leptosepala* pushing up



BY EDGAR T. WHERRY

*Caltha leptosepala* pushing up through the thin edge of melting snow

through the newly exposed ground or even through the thin edge of the melting drifts, exactly as I have seen *Erythronium* doing in the Cascade Mountains far to the south. Often only a few feet away, but two weeks away in the time of exposure to the sun, the plants were in full bloom or had passed their prime.

On steeper slopes or areas that were more directly exposed to the sun, vegetation was far advanced. For example, on a steep, rocky slope, *Saxifraga oppositifolia* had well-formed seed pods while less than ten feet away it was still in full bloom in both red and purple color forms. Along with it on the rocks was another of this family—*S. bronchialis*, in a white flowered form, and on the wetter spots a northern beauty which was more common than anywhere else I have happened to see it—*Saxifraga flagellaris* with large breath-taking golden-yellow flowers.

Along with the saxifrages and at times fairly tinting the meadows were the huge bells of *Campanula lasiocarpa* and the smaller and daintier blossoms of tiny *C. uniflora*.

*Silene acaulis* was everywhere—the plants on the sunnier slopes displaying only an occasional flower in a myriad of seed heads. Those in the shadier sites were solid masses of pink, which seemed more vivid by contrast to the lovely white and yellow blossoms of *Anemone narcissiflora* growing in fine clusters among and around them.

Close to the ground *Dryas octopetala* formed great ground-covering mats. It did not have its own way without competition for there were many other shrubby mat-forming plants: *Potentilla fruticosa*, prostrate here (though growing in lusty bushes a few hundred feet down the slope) and all with bright yellow blossoms; *Phyllodoce glanduliflora* sporting the same nodding, yellow flowers as it does in the northern states; *Cassiope tetragona* with white blossoms; several species of dwarf willows; and of course, the ever-present crowberry, *Empetrum nigrum*, were among the chief competitors of the *Dryas*.

The most enchanting of all, perhaps because I have been fortunate to see it but rarely, was wee pink-flowered *Primula cuneifolia*, which was at its best. I have seen scattered plants before but on this occasion was lucky enough to be there at the height of its bloom. The shape and habit of the flower are exquisite, even though the magenta pink color leaves something to be desired. Occasionally a clear pink blossom is found, and these are always especially appreciated and enjoyed.

A little below, a tiny mountain pool showed splotches and patches of color that intrigued our fancy and after several hours of wandering over the ridges and cliffs, always looking for a more perfect specimen than any previously seen, and noting the constantly changing combinations of colors and plants, we worked our way down to the margin of the pool.

We were delighted to see the massed banks of *Epilobium latifolium*, in a dwarfed and compact form, displaying showers of its large, lovely pink and red blossoms along the rocky margins of the pool. Here too we found a particularly good form of *Polemonium pulcherrimum*, with exceptionally large flowers of soft, clear blue; and also nice, healthy, and well-flowered clumps of *Lutkea pectinata*, that queer-looking member of the spirea clan that appears to be on the verge of joining the vast saxifrage tribe. A small, shrubby, true spirea, *S. stevenii*, grew just above the water's edge at one end of the lake, its pinkish, flat flower heads resembling several of its more southern cousins.

Many of the more familiar things were there also—violets of deepest blue, Valerian, a tiny, dwarfed form of *Cornus canadensis* in great profusion, *Pedicularis* of several species, *Claytonia* with extra large flowers, *Trientalis*, the star flower, *Arnica*s and *Senecio*s to furnish yellow on the upper slopes, with goldenrods taking over the task lower down. These and many others we searched out with great delight. The day was gone before we knew it. It was only 30 miles to the boat and we were aboard it and settled for the evening before we realized how tired we were from a long day of scrambling up and down cliffs, over rocks, and wet meadows. In other words, it was the kind of a day to bring joy to any nature lover's heart with an extra thrill because so much time had passed since the last such day in the alpine meadows.

## TWO PRIMROSES OF THE ST. LAWRENCE REGION

DR. HENRY H. M. LYLE, New York

LISTS of plants of northeastern North America published in the earlier years of botanical exploration ascribed *Primula farinosa* to this region. However, while it's true that many of the primulas native here are "farinose,"—have parts of the herbage covered with a mealy deposit—close examination shows our species to be quite distinct from the European one so named by Linnaeus. In 1928 Professor M. L. Fernald discussed this matter and proposed the name *Primula laurentiana* for what had earlier been called *P. farinosa* var. *macropoda*.

*Primula laurentiana* is taller, stouter and more sturdy than the European *P. farinosa*. Both are said to prefer calcareous soil but grow for us equally well in acid soil. Its stem rises from a basal rosette of spatulate dentate petiolate leaves from less than one to four inches long. Their under surface is usually mealy white, though rarely lacks this coating. The inflorescence is a broad umbel of 1 to 17 flowers on erect or ascending pedicels. The flowers are rose to lilac in color, varying markedly in different stands of the plant. Their tube extends somewhat beyond the calyx; their throat is a good yellow, the styles and anthers being all included. Their gentle fragrance bears some similarity to that of the Narcissus. They appear in late spring and continue into early summer.

This species is found on calcareous ledges and river shores along the St. Lawrence river from Kamouraska to the Gulf, northeastward to Labrador, and southward through Nova Scotia to north-central Maine. The author's best blooming plants were obtained on June 21, 1943 from stands which lay between high tide mark and neighboring snow banks. Growing well up the river, this represented the typical variety; several other varieties are developed around the Gulf.

*Primula laurentiana* is an adaptable species, only requiring that its roots be supplied with adequate moisture. We grow it in the shade, by the pool-side, in woodland and on exposed rocks. It is a cheerful plant which can take considerable punishment from the wind and come up smiling. We find too that it increases readily from seed. The wide range of color displayed in the flowers suggests that breeding and selection might result in the development of some striking color-forms or varieties. It is sometimes offered in the horticultural trade, often under the mistaken name (as pointed out in Hortus) of *P. farinosa* var. *gaspensis*.

Another species, *P. mistassinica* Michaux, bears a superficial resemblance to the preceding, but differs in many details. It ranges from Labrador southwest to central New York, though not in maritime situations; instead it is to be found in mountains and gorges, growing on mossy banks and ledges. It is a delicate, slender plant with an umbel of 1 to 8 flowers. The leaves are efarinose and green, and the corolla-tube more elongate. This has a "variety" or form *leucantha* (also called *alba*) and is occasionally offered in the trade. It is reputed to be difficult to grow, although plants of the diminutive variety *noveboracensis* survived in seemingly rather unfavorable situations in Mrs. Wilder's garden for several years (they had been collected for her by the Editor in a middle New York gorge.)

## SOME SMALL MEMBERS OF THE IRIS FAMILY

ELIZABETH LAWRENCE, Raleigh, North Carolina

IN SEARCHING for rock garden material I have come upon some delightful southern irids that are new to me. They came from Mrs. James Dormon's garden in Shreveport, Louisiana, where the three natives, *Nemastylis*, *Herbertia* and *Eustylis* bloom in succession from March through June, and *Cypella herbertii*, from South America, blooms all summer. These bulbs have not been in my garden long enough to tell whether they can be permanently established, but all have come through one winter, and even if they do not prove to be permanent they are not too expensive to renew from time to time.

The pine woods lily, *Eustylis purpurea*, is like a small dark violet *Tigridia* on stems two feet tall. It has the shell-like sheen and texture of the



BY EDGAR T. WHERRY

The heavenly blue color of *Nemastylis acuta* suggested the name "Celestial"

*Tigridia*, and like it is fleeting, the flowers coming out in the morning and shrivelling before night. With me it blooms for about a month beginning late in May or early in June, but Mrs. Dormon finds that with moisture it will bloom through the summer. She also says that it will stand drying off if left in the ground, but not if taken up. This may mean that it cannot be taken up and stored where it is not hardy, but I should think that any gardener who likes new things would be eager to try it for a season. Bulbs set out in early spring bloomed for me the same summer. The pine woods lily is native to Louisiana and Texas where it grows in sandy soil, or sometimes in clay. It will bloom in sun or half-shade, and the bulbs should not be more than two inches deep.



*Nemastylis acuta*, so closely related to *Eustylis* that they are sometimes placed in the same genus, has not bloomed for me so far. I mean to keep trying it in various situations, for it is native as far north as Tennessee, and I can see no reason for it not to flourish in North Carolina, though it is not very hardy. In Louisiana it blooms in March, and from Miss Caroline Dormon's illustration in her book *Wild Flowers of Louisiana*, it must be as heavenly blue as its local name, which is "Celestials." In cultivation, Celestials require good garden soil in sun or part shade, and deep planting, six to twelve inches.

*Herbertia drummondiana*, listed by Mrs. Dormon as *H. caerulea*, is said to come from "wet prairies," but it did not do so well for me in a wet place, and I did not get the enchanting blue flowers until I planted the bulbs in light soil in a slightly raised border. The flowers are what I call blue, very blue; but according to Ridgway's classification they are deep lavender. That is, the showy outer segments are of this hue, while the small, pointed inner segments are a deep rich violet. With me it is quite a bloomer, coming in April and lasting until June. The bulbs are small and dark and firm like those of *Zephyranthes*, and will stand drying in summer if they are left in the ground, but not if they are taken up. Hortus Second gives the *Herbertia* a height of up to one foot, but with me the stems were not over five inches, and the leaves are like those of nut-grass. This is one of the prettiest little bulbs that I have ever had, and worth a great deal more trouble than it has required so far. I think it is going to require some coaxing to get it established.

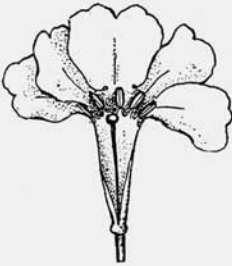
The fourth of these little irids is *Cypella herbertii*, imported to England from South America in 1823, according to Mrs. Loudon, and named by William Herbert in honor of his brother George. It looks like a yellow *Tigridia*, and has indeed been classed by some as *Tigridia herbertii*. The wide outer segments form a triangle that measures two inches from point to point, and they are indented at the base to form a cup in which the small, curled, inner segments form another triangle. The flowers are a deep golden yellow with shell-like markings of maroon. They are produced in quantity, although they last only a day. With me they bloom from early May through the summer, with periods of rest in between. The fugitive flowers are borne on wiry eighteen-inch stems. The slender plaited, ever-green leaves are like the foliage of the pine woods lily. The flowers are similar except in color, and both are without fragrance. The bulbs can be lifted in the fall, and stored over the winter in regions where they are not hardy outdoors. I have them in full sun in a place where the soil is light.

## EDITORIAL NOTES

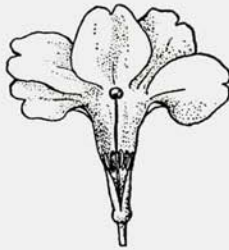
As it is proving difficult to obtain new *Saxiflora* treatments, President Osmun suggests the republication of the 16 numbers issued in leaflet form during 1938 and 1940, before we had a Bulletin. Many of our present members have joined the Society in more recent years, and so did not receive these leaflets. Moreover, loose folders are likely to become scattered and lost. This plan is being put into effect beginning with the present issue. The subjects will not be republished in the same numerical sequence originally assigned them, but will be selected with a view to their appropriateness in connection with some feature of a given issue of the Bulletin. Accordingly, on the following three pages there appears an account of a species which begins to bloom at the earliest touch of spring,—something which no doubt all of our members will be looking forward to as they receive this number of the Bulletin.

## SAXIFLORA

No. 27



Thrum-eyed flower



Pin-eyed flower

*Primula vulgaris*  
PRIMULACEAE

## PRIMULA VULGARIS

### *Primrose*

In most American gardens, the genus *Primula* can never assume the importance it enjoys in Britain, for over large areas of our country the summers are too hot and dry to suit these lovers of cool, moist conditions. Among the easiest of the primulas to grow are those belonging to the *Vernales* section, a group which includes the cowslip, oxlip, and common primrose of Europe. It is the last-named which is the primrose of song and story and which is figured here. *Primula vulgaris* is the botanical name of this plant and it is distinguished, together with *P. Juliae*, from their near relatives in that they are the only two members of the group which have sessile umbels and thus appear to produce their flowers singly rather than several together on top of distinct scapes. From *P. Juliae* our plant differs markedly in that its leaves are not heart-shaped or kidney-shaped and do not have cordate bases, but rather are oblong or oblong-obovate and at the base taper very gradually to a short petiole. In its native state, *Primula vulgaris* is widely distributed throughout the greater part of Europe. It favors moist grassy banks, streamsides or light woodlands and blooms over a long period in early spring. In its typical form the flowers of the common primrose are pale yellow, but variants are sometimes found with flowers ranging from nearly white to purple, reddish-pink or occasionally green.

Under cultivation, many distinct varieties have been produced and some of these have been named. They differ considerably in color and in size and shape of flower and some have double flowers. Of the color forms the blue primroses are perhaps the most noteworthy. These were originated by the late G. F. Wilson of Wisley, Surrey, England and with some slight variation reproduce themselves reasonably true from seed.

Many natural hybrids between *P. vulgaris* and related species have been recorded and it is usually considered that the garden polyanthus has resulted from a cross between the common primrose and *Primula officinalis*, the cowslip.

The cultivation of the single primroses presents no particular difficulties. They may be propagated by seed or by dividing the old plants either immediately after flowering or in September. If the former method is used, the seed is sown in a light, humusy soil in a cool greenhouse in February, and the young seedlings are kept growing along until they are large enough to be, and the weather permits, of their being planted out in rows in a sheltered and lightly shaded nursery-bed where they complete their first season's growth. In the fall or following spring, they are transplanted to their flowering quarters. An alternative method of seeding is to sow thinly in a carefully prepared bed in a cold frame in April and to keep the resulting plants growing along where sown until September when they are transferred to their permanent quarters. The soil into which primrose plants are set should be rich and moist and fat with humus. They enjoy a liberal

dressing of well-decayed manure. It must be remembered that while moisture is appreciated, a waterlogged condition of the soil is to be avoided. A partially shaded situation sheltered from the bleak winds of spring suits primroses best and in the colder parts of the country a light winter covering is beneficial. The double-flowered primroses have a less robust constitution than the singles and need more attention and care to ensure their permanence in the garden. The general environmental conditions described above suit them well and they benefit from feeding with dilute liquid manure at intervals through the growing season. Every second year they should be lifted and divided. This forms the readiest means of increase but root-cuttings may be used to effect the same purpose. For use in rock garden exhibits at early spring flower shows, primroses are well adapted. Strong plants potted in the fall and carried along in a cold frame force readily in a cool greenhouse.

*Primula vulgaris* is a tufted herbaceous perennial having many membranaceous, more or less wrinkled, obovate-oblong or oblong obtuse leaves which are sessile or shortly petiolate. The leaves are pilose or glabrescent and are crenulated at the margins. The petioles are winged. The flowers are formed in sessile umbels on softly pubescent pedicels which are to four or five inches long and approximate the leaves. The five-ribbed, softly pubescent calyx is ovate-tubular with narrow-lanceolate, acuminate lobes. The corolla has a cylindrical tube and a flat spreading limb measuring one to one and a half inches across. The lobes of the corolla are heart-shaped and the throat of the flower is somewhat narrowed and has a circle of scale-like folds. As in all species of *Primula*, two types of flowers occur in the common primrose. In one the style is long and the stamens are inserted part way down the tube and well below the stigma, and in the other the style is short and the stamens are inserted in the throat of the flower and well above the stigma. Gardeners refer to the former type of flower as "pin-eyed" and the latter as "thrum-eyed." The seed capsule is ovate and is included in the persistent calyx.—T. H. EVERETT

*Primula veris* var. *acaulis* Linnaeus, Sp. Pl. 143. 1753.

*Primula vulgaris* Hudson, Fl. Angl., ed. 1. 70. 1762.

*Primula acaulis* Hill, Veg. Syst. 8: 25. 1765.

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This Saxiflora article was originally published as a separate leaflet, designated Plate 7, on December 31, 1938. The illustration was drawn by Margaret Sorensen.

## PACHYSANDRA PROCUMBENS

PROBABLY every horticulturist in the non-arid parts of the United States who has the problem of developing a shady-place ground cover is familiar with the Japanese *Pachysandra*, *P. terminalis*. Yet few indeed have ever even heard of the American member of the genus, *P. procumbens*. This striking species survived the geological changes of the past few million years in the limestone plateau country of central Tennessee and adjoining states. It is hardy in winter well north of its native range, and amenable to cultivation, preferring humus-rich loam and partial shade. Unlike its Asiatic cousin, it does not spread rapidly by rootstocks, so is safe to plant near delicate alpenes. We present a portrait of it here as another "harbinger of spring" for our 1946 midwinter number.



BY EDGAR T. WHERRY

Four pinkish stamens characterize the upper flowers of *Pachysandra procumbens*

*Pachysandra procumbens* is a subevergreen perennial with a slowly expanding rootstock system. In early spring it produces, from the base of stems clothed with more or less withered leaves of the previous season, flower spikes a few inches high. There are no petals; the calyx is bronzy green. The upper flowers bear 4 pinkish stamens, the lower 3 carpels with diverging stigmas. They last several weeks, developing a curious rancid musky odor, which however does not carry far. The leaves have a thick elliptic few-toothed blade; at first they are light green, but during the season become darker, and ultimately take on, especially in sunnier situations, a distinct bronze mottling. Though no substitute for the Asiatic species if rapid occupation of a barren spot is desired, the American is so much more attractive that its wider use is to be recommended.—E.T.W.

*Pachysandra procumbens* Michaux, *Flora Boreali Americana* 2: 177, pl. 45, 1803.

## COMPANION PLANTING IN THE ROCK GARDEN

A. C. PFANDER, New York

**W**HY ARE so many rock gardens spotty in appearance?

There are several reasons for this fault in decorative value. First and probably the most outstanding reason is that many of the plants demand special care in soil mixture, in exposure and other cultural requirements, which are not always easily provided in our gardens without considerable amount of experimentation.

Second, most rock garden owners are by nature collectors and admirers of many plants and the habit of constantly adding merely one or two plants of a given species to a garden is not conducive to a well rounded and decorative picture.



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Companion planting in the rock garden of W. E. Th. Ingwerson (England)

× *Aquilegia stuartii* and *Saxifraga lingulata lantoscana*

Being aware of these difficulties, how best can we offset or overcome them?

Planting some of our showy, easy to grow, plants in large colonies helps somewhat to draw the eye and minimize unsightly spots, but this is not the entire answer.

Let us retrace the steps of the early pioneers in rock gardening. Where did their inspiration spring from? The answer is obvious. There are very few of us that have not seen (at least in beautiful photographs) pictures of alpine meadows dotted with exquisite flora. But these colorful gems do not stand singly or in threes on a bare spot of soil; they grow in happy companionship with each other, and more often than not, *in a dense cover of green.*

We all know that to make an exact replica of the conditions in nature would be both hopeless and undesirable, but we can in many cases, have a *serviceable imitation of natural appearance.*

Looking over any fairly well furnished rock garden we cannot help but find a goodly number of proven ground covers with habits ranging from the daintiest to the aggressive. By carefully sorting these plants for usability we can certainly find enough variety for a considerable number of different carpets. Great care must be taken to avoid those with overaggressive habits, otherwise we may find that our choicest possessions may be smothered. Many of our better alpine and rock plants will not be able to hold their own against rampant growth or excessive root competition.

Let us take as an example a sizeable drift of *Muhlenbeckia nana*. In a well drained, fairly sunny spot, this (one of the daintiest mat-plants, in my opinion) will make an open covering which will permit interplanting with some of the more difficult plants and certainly will show them off to good advantage.

There are quite a few varieties of *Thymus*, most of them very shallow rooted, which again lend themselves well to the same treatment. *Mazus rugosus* will cover large areas with good growth and still permit existence to many of our rock plants.

But even some of the coarser ground covers may be used with good results if the companion plants are properly selected.

I am very fond of our native Bearberry (*Arctostaphylos uva ursi*); for an evergreen cover in full sun it has no superior, in my opinion. Interplanted with some few Asters, or a colony of *Viola pedata*, perhaps some of the better Narcissi for spring, and some *Anemone japonica* for Fall, we can get quite a few good pictures during the season and a well kept appearance right up to snow.

Some extraordinarily pleasing pictures can also be achieved with the smaller bulbous plants, planted in such a manner that the ground cover acts as a foil for natural drifts.

The rock garden has such a wealth of interest and possibilities that there is no end to new pictures and constant trying for improvement is well rewarded in the personal satisfaction following an honest effort.

## THE PRAIRIE TROUT-LILY

**I**N A FEW of our mid-western floras *Erythronium mesachoreum* is listed, but it seems to be little known and I have never seen it offered commercially. It grows here mostly on the tops of ridges or hill sides facing south, east, or west. Although occasional in grassland in full sun, it generally grows in lightly wooded places, among oak or hickory trees which are slow to leaf out in spring, so the plants receive sun during the blooming period. In the garden it seems to grow equally well in a partly clay soil or in ordinary rich loam, and either in full sun or partial shade.

This Trout Lily—or Easter Lily as it is commonly known hereabouts because so often in bloom at the time of that holiday—is apparently more related to the western than to the eastern species. The latter spread by offsets from the bases of the bulb, producing numerous leaves but few flowers. *E. mesachoreum* increases slowly by bulb-division, and is a dependable bloomer. Annually every bulb greets the spring with a lavender-tinted white lily, slightly larger but with less recurved tepals than *E. albidum*. The leaves are not so showy, being relatively narrow, dull light green and lacking the handsome mottling of *E. albidum*. A ridge covered with hundreds upon hundreds of these little lilies is really a sight to be remembered.—A. F. PRIEST, Peru, Iowa.

## RYDBERGIA GRANDIFLORA

THE COMPOSITE to which the above name is often assigned is a true alpine from the Rocky Mountains. Despite Reginald Farrer's slighting characterization of it in the English Rock Garden (under the heading *Actinella grandiflora*) as being "amongst those in cultivation," it is actually a most striking rock plant.\*

From a cluster of attractively cut velvety-hairy leaves there arise stocky flower stems several inches high. These are crowned by great golden flower-heads somewhat suggesting garden Gaillardias, although the stalks and bracts are a lovely soft silvery gray. After the snows of their alpine heights melt in June, the flowers soon open, and persist for several weeks, seeming almost to grow larger day by day.



BY EDGAR T. WHERRY

The great golden flower-heads of *Actinea* (*Rydbergia*) *grandiflora*

Sampson Clay, more favorably disposed toward the plant than his predecessor, wrote of it in his Present-day Rock Garden that when it "does condescend to come it should be treated as the honoured guest, with the best bed-room in the enriched scree." He noted that the seed is rather infertile, as is the case with many of the untamed composites.

The writer planted a fine clump in the scree in his rock garden, which is situated on the coast of Maine, within reach of salt spray. Although the prospects could not be viewed without a certain amount of anxiety, the plant at first seemed to thrive in amazing fashion. But the winter came; and when it passed, alas, the *Rydbergia grandiflora* had gone to that heaven peopled by so many splendid alpine plants which give promise of ornamenting the garden, but fail to make good.—FRANCIS O. LIBBY.

\*In reference to the nomenclature of this plant, the genus name here used seems a fitting commemoration of the late Per Axel Rdyberg, who did such outstanding work on the flora of the Rocky Mountains. Unfortunately, however, the characters used to distinguish this species from the well known members of the genus *Actinea* are scarcely sufficient for generic segregation. In Hortus the plant is correspondingly termed *Actinea grandiflora*.



# ROCK GARDEN QUIZ

**Ques.**—Can *Eritrichium aretioides* be grown in eastern rock gardens?

**Ans.**—The exquisite Alpine Forget-me-not of the northern Rocky mountains is extremely difficult. It resents moisture in the air during hot weather, and as a rule passes out shortly after being transplanted into low-altitude rock gardens.

**Ques.**—Please advise as to the more desirable *Dicentras* for the rock garden.

**Ans.**—*Dicentra eximia*, the eastern Wild Bleeding Heart, is especially good. Its western relative, *D. formosa*, has rather coarse-lobed leaves and duller pink flowers. In both there are striking pale pink and white variations from the type. Unfortunately, both of these species spread rapidly from self-sown seed and crowd out more delicate plants. From the serpentine barrens of the northwest comes the lovely *D. oregana*, its foliage being silvery and its creamy white flowers appearing over a long season. Anyone who likes real miniatures should try the smallest member of the genus, *D. uniflora*, which produces solitary dull pinkish flowers.

**Ques.**—Is the Japanese Skullcap hardy in the eastern states?

**Ans.**—*Scutellaria indica japonica* has come through many winters at "Cronamere" when the temperature has not fallen too low. Even in those seasons when the adult plants have been winter-killed, there are always self-sown seedlings to be found in the spring.

**Ques.**—What exposure is best for a rock garden?

**Ans.**—It depends largely on the plant material used. Full sun is best, for example, with all species having grayish, felted-hairy foliage. A northern exposure is best suited to those with thin smooth foliage, for dwarf Rhododendrons, and for high altitude dwellers which are likely to be adversely affected by summer heat. Plants which are placed on an eastern exposure should be protected during the winter from the direct rays of the early morning sun.

**Ques.**—Are there any special rules to be observed in planting alpiners?

**Ans.**—There are several principles which should be borne in mind when placing alpiners in the rock garden. One of the most important is to see that the plants are set firmly. Lime-loving species should be separated from those that require acid soil, and granite or sandstone chips be incorporated in the soil of the latter sorts. Rosetted plants are preferably placed in crevices or on sloping surfaces. As pointed out in the Bulletin, volume 3, page 33, the roots of alpiners must be kept cool in summer.

**Ques.**—Is it possible to have bloom in the rock garden after spring has gone?

**Ans.**—Yes indeed. With the right selection of plant material, there will be some color through the year, except when ice and snow cover everything. This may be accomplished, too, without resorting to annuals, which never seem to belong in the rock garden. Summer-blooming species have been discussed in many of the past numbers of the Bulletin.



# THE AMERICAN ROCK GARDEN SOCIETY

## GROUP MEETINGS

The Northern Group of the Society continues to hold the interest of its members by its various activities; this group recently joined the Montana Federation of Garden Clubs and at their convention June 12—13 Mrs. Warder I. Higgins, chairman of the Northern Group gave an illustrated talk on "Montana Alpines and Rock Gardens"; at their Annual meeting on June 26 Mrs. Daniel J. Mooney talked on "Alpine Treasures for Rock Gardens" and through the summer this group has held three meetings in members gardens.

Despite the worst winter's day in years a goodly number attended the luncheon meeting of the North Atlantic group and were rewarded with a splendid presentation of the "Alpine Plants of the Colorado Rockies" by Dr. John A. Jump of the University of Pennsylvania.

## SEED EXCHANGE

The following fresh seed are ready for distribution; please enclose self addressed, stamped envelope with your requests for seed to Mrs. Hildegard Schneider, 1751 Seminole Ave., Bronx, N. Y.

From Robert M. Senior, Cincinnati, Ohio

<i>Abronia villosa</i>	<i>Anemone hysehensis</i>
<i>Aquilegia rubicunda</i>	<i>Coreopsis auriculata</i>

From Elmer C. Baldwin, Syracuse, N. Y.

<i>Hypericum patulum</i> Henryi	<i>Ligularia divorum</i>
<i>Penstemon digitalis</i>	<i>Primula polyanthus</i>

From R. W. Burnett, Arlington, Va.

<i>Aconitum uncinatum</i>	<i>Aster concolor</i>
<i>Chrysopsis mariana</i>	<i>A. grandiflorus</i>
<i>Hemerocallis minor</i>	<i>A. patens</i>
<i>Lilium Grayi</i>	<i>A. undulatus</i>
<i>Liatris graminifolia</i>	<i>Lobelia cardinalis</i>
<i>L. scariosa</i>	<i>L. siphilitica</i>
<i>L. squarrosa</i>	<i>Penstemon digitalis</i>
<i>Platycodon grandiflorum</i>	<i>P. hirsutus</i>
var <i>Mariesii</i>	<i>Rudbeckia maxima</i>
<i>Rhexia virginica</i>	

From Mrs. H. P. Magers, Mountain Home, Ark.

<i>Eustoma Russellianum</i>	<i>Silene armeria</i>
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From Mrs. Mortimer Fox, Peekskill, N. Y.

<i>Lilium regale</i>	<i>L. Henryi</i> x <i>auratum</i>
<i>L. amabile</i>	<i>L. concolor</i>
<i>L. regale</i> hybrids	

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