BULLETIN

of the

AMERICAN ROCK GARDEN SOCIETY

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CONTENTS:-

Vol. 2

-		
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	100	

33—The genus ActineaE. T. W.
35—Whiplash daisiesClaude A. Barr
38—Arctic-alpine GentianMark and Claire Norton
39-A Rhododendron for NE. rock gardens
41—Cultivating Pyxidanthera barbulataMarcel Le Piniec
43-Some attractive New Mexican plants
44-Botanical names in selecting plantsRalph W. Bennett
46—Euphorbia cyparissiasE. T. W.
47—In a Maine rock gardenMrs. Edward M. Babb
48-Seeds are funElse M. Frye
49-64—Year-Book, 1943-44

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No. 3

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#### BULLETIN

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## THE GENUS ACTINEA

IN THE Rocky mountains and adjacent high plains there is a group of low-growing daisies with narrow leaves or leaf-lobes and bright yellow rays notched or scalloped at the end, as in the more familiar *Helenium*, to which they are indeed closely related. The nomenclature of these plants is rather confused. In both Hortus II and S.P.N. II the name *Actinea* is accepted for the group as a whole, but attention is called to the fact that some authors have used for it, or for segregates, at least six other names: *Actinella, Hymenoxys, Macdougalia, Picradenia, Rydbergia*, and *Tetraneuris*.

The species illustrated in the frontispiece of this issue has been distributed in the horticultural trade as "Tetraneuris stenophylla," for which the reference works cited give the valid name as *Actinea fastigiata*. The correctness of the identification can not be vouched for here, in the absence of actual specimens, since distinction between species requires in many cases study of plant parts under the microscope. But whatever their names, many of the members of the group are highly desirable rock garden subjects.

In the article on New Mexican plants published in this issue of the Bulletin, the notable development of the genus *Actinea* in that state is pointed out. And when the plants represented in the Maine rock garden pictured on a later page were being listed, it was found that one of them was *Actinea* (*Rydbergia*) grandiflora.—E.T.W.

33



BY FLORENS DE BEVOISE

Actinea fastigiata, a golden daisy with silvery green foliage.

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Some stoloniferous plants overwhelm a rock garden, but fairly safe are:----

## WHIP-LASH DAISIES

CLAUDE A. BARR, Smithwick, S.D.

**THE FORM**, air and habit of a little daisy of certain rugged portions of the Great Plains and of the Rockies are at once charming and intriguing: a flower with a nice balance of golden disc and white (sometimes pinkish) rays borne on a scape-like stem seven or eight inches up, with a well proportioned rosette of small oblanceolate, slightly gravish leaves at the ground, and a few smaller leaves about the lower part of the stem. Whether in a gladsome colony in a sunny short-grass meadow or more sparsely in the thin duff of a shady slope, at the time of the first blossoms there are usually to be noted one or two longish nearly horizontal branches from the axils of the stem leaves. Their purpose is apparent perhaps two weeks later when the whip-like growths have lengthened and tiny rosettes have formed at their tips. Branches and rosettes may be swaving airily an inch, two inches, or more above the ground, which is often dry and uninviting at the surface, and the relatively small mother plant is capable of carrying them indefinitely so, awaiting the time of rain. When the earth is wet and the slender branches are depressed by a load of adhering moisture, the terminal plantlets find contact with the soil and, so to speak, strike root over night.

Here is the mechanism for going places and this is our plant of charm, *Erigeron flagellaris*, the type Whip-lash Daisy. In the wild this elf usually continues in character, setting a plantlet here, a plantlet there, with becoming modesty, and is content. Not always thus.

Let the lot of *E. flagellaris* be cast in an old field not yet grown over or, say, in a garden, where some of nature's mild but firm restrictions are in abeyance, and the mother plant becomes luxuriant, doubles in scale, multiplies her stem leaves to a crowd and sprouts strong runners from every axil. If food and drink continue unfailing, each questing branch carrying scattered leaves of its own branches at the axils, these in turn repeating, until the original crown is shown as prolific as an insect, and a four foot circle is covered with a dense web of arching runners and mat of plants. Not so good. Unwanted height also has been gained, perhaps twelve inches or more. By late season, as well they might, grayish leaves and browning runners may appear sad and very weary.

In any but the choicest spots. E. *flagellaris* is still not an impossible personage for the runners are readily sheared away and an excess of plants, shallow, tender rooted at any stage, is very easily destroyed; indeed, the

runners can be clipped before they have rooted. In a suitable roomy place the entire bounty may be left for next year's blooming when the perfect showers of dainty blossoms, at their tide in June, will be a month's delight; and casual bloom will follow through the season.

At the sunny side of a roadway through dense pine forest in the heart of the Black Hills appear constellations of tiny daisies. At a glance there was a vague difference about them, a community character perhaps, something at any rate to cause one to turn aside to investigate. Set rather thinly and scattered they were, as neighboring minor star groups or some unimportant nimbus bordering the Milky Way. Apparently the little plants



Whiplash Daisies spread into clumps which bear numerous white heads.

were at that impasse with other competitive inhabitants of the road border so often noted in the dry country, in which none makes headway. Or perhaps it was the effect of a series of dry years or of too much trampling and close cropping by deer or woodsmen's horses.

This was a Whip-lash Daisy with a world of difference. The leaves were spatulate, shallowly three-lobed toward the tip in a distinctive pattern, a pleasing deep green—they are evergreen, never grayish—the rosetted plantlets were set so closely as to form a complete cover, perhaps an inch and a half high. This daisy is smaller than the other at any phase and remains so, seemingly incapable of stepping out of its character of daintiness and refinement. Dr. S. F. Blake has identified specimens as *Erigeron flagellaris*, but in the field, and for horticultural purposes, it is wholly distinct. In the garden partial shade and moderate moisture are of more importance than quality of soil. The delicate and bewitching blossoms are borne at the height of six or seven inches, galaxies of them through the month of June, a few along until October.

Though the road was in the back country I was conscious of breaking a rule when I took a small sod of six or eight little plants, from among the few hundreds—only to be justified, as it chanced, when the next year the road was regraded and widened and the colony of daisies destroyed. This variety must be very rare for never again have I seen it in the wild, though searching many times in the same vicinity and elsewhere. The typical *E. flagellaris* is met with in many and varying situations.

A reported purplish color in *Erigeron flagellaris*, as a variant from the white, remained a puzzle for many years, all the purple I could discover being a faint tint on the reverse of the rays in the bud, no trace remaining when fully opened. But at last an extensive colony was come upon in a remote spot, with reddish buds and considerable coloration in the expanding rays—a color that might be "purplish" in a botanist's dried specimen, but a very pretty pink in the fresh blossoms.

These plants and flowers were small for the species, and they carried a promise that if E. flagellaris has sometimes been found too rampant in gardens better luck may still be waiting in the wilds. Misfortune overtook my first trial at cultivating this form and so, in a freer future, the long trip back to its native place is held in contemplation.

Under the name of *Bellis integrifolia* there came from the southern plains an intriguing plant that was no sooner established than it began to send out whip-lash branches with dismaying freedom. A little later came an abundance of blossoms, carried at nine or ten inches, a brilliant carminecrimson shading to lighter in the bud and with more or less color showing in the opened rays, which are otherwise white. The ray-flowers are set in a very dense fringe and the heads average about three-fourths of an inch, a trifle wider than those of *Erigeron flagellaris*. The disc flowers have unfortunately a greenish cast, detracting from their effect, while the leaves are quite grayish.

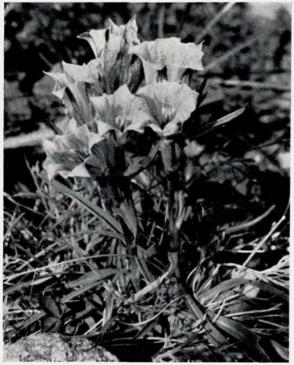
That first performance was in response to a wet season. Since then expansion has been more restrained, and many of the smaller plants set by the runners have proved not to endure. The species is perennial however by means of some of the off-set plants. Dense mats have not been made, and there is no tendency to evergreenness. By fall, instead, there remains an almost invisible bit of green at the rosette center.

I have little doubt that my plant is the true *Bellis integrifolia*, an identification arrived at by elimination. Available references—Rydberg, Bailey, F. C. Gates—are all woefully incomplete as to description, not to mention disagreements. No one of them notes the whip-lash character. They do agree as to range—several of the more southern of the central states—and as to its habitat in moist ground—doubtless moist only at a certain season, for the plant has survived test droughts in my garden. To one who finds it impossible to assume a prejudice against "Composites," the recurrent spring show of gay blossoms of these various "daisies" meets a welcoming eye.

If your rock garden is not too hot in summer, you may extend a welcome to:----

## **ARCTIC-ALPINE GENTIAN**

A RCTIC-ALPINE Gentian, Gentiana romanzovi Ledebour (syn. G. frigida Gray), is a neat, prim little lady of a plant, and once its few requirements are met, well behaved in the garden as becomes a lady. In its native home, high on the wind-swept tundras of the Rockies and in the true arctic regions far to the north, however, it does not lead a lady-like existence. For this is a plant that ventures 'way beyond timber, and may be met with near the summits of the 14,000 foot peaks, wherever there is enough rather barren soil to support the roots of rescue-grass with which it likes to keep company, and where the conies pipe and put up hay during the short summer days. It is at its best, however, on the grassy slopes around 12,000 feet, making here good sized clumps in rather sparse colonies, and has even been known to slip down from the higher elevations to grow gracefully in open grassy situations below 11,000 feet.



BY MARK NORTON

Arctic-Alpine Gentian makes a tuft of narrow. linear, gray-green leaves, thickish to the touch, and with a prominent mid-vein. From this tuft come up flower stems, two to six inches high, with paired clasping leaves, topped with one to three dainty open cups. The coloring is off-white, marked with dark blue-purple or green-blue dots arranged in vertical lines in the plaits of the corolla, sometimes running together into streaks on the exterior. Blooming comes from late July until September. In our garden at Silver Plume, Colorado (el. 9200 feet), we grew it both in the humus-filled soil of a prepared bed and in the rock garden where it had a somewhat leaner diet.

In low-level gardens it will no doubt require detailed preparation and special care to make it happy. The moraine would probably offer an ideal position for it. Lacking this type of rock garden construction, we would suggest a north-facing, well drained slope where the soil is made up of rock rubble, garden loam on the sandy side which has not recently been enriched, and peatmoss or leafmold to insure an equable moisture supply and a cool root run during the summer. A mulch of stone chips drawn up around the crowns for the winter would be a further recommendation. —MARK and CLAIRE NORTON, Laporte, Colo.

Though most species are difficult to grow, anyone should succeed with:—

# A RHODODENDRON FOR NORTHEASTERN ROCK GARDENS

G. G. NEARING, Ridgewood, N. J.

A MONG the couple of hundred natural species of Rhododendron which do not grow higher than two or three feet, perhaps only one, *R. racemosum* from western China, can be called entirely satisfactory, as it stands, for rock-garden planting in northeastern United States. It is reasonably hardy if slightly shaded and sheltered against the worst winds, requiring, of couse, an acid soil and permanent mulch (which may be of pebbles if preferred). A low, broad shrublet with evergreen leaves no larger than a thumbnail carried jauntily all winter on stiff twigs, in early May it breaks into a profuse mass of small pink azalea-like blossoms.

But no wild species of any plant group is likely to be satisfactory, as a whole, for cultivation. And in this case there are various races, some not hardy, some shooting up to a height of three feet or more. If superior strains have not been selected and propagated by professional growers, then the gardener himself must select. Ailing plants are best rejected, because probably subject to some hereditary defect which invites disease. Certain individuals will have better color than others, some will show a superior growth habit, some will flower much more profusely than others, some grow with more vigor or withstand lower temperatures, some propagate more readily. One can soon recognize the superior types.

The very least that should be done for *Rhododendron racemosum* is to select from a number of plants three or four of the finest, set them in an isolated group where they can cross; the strain of seedlings from their seed is bound to be better than the average of the species. Such stock plants must be renewed frequently, replacing them with the finest of their offspring, for a plant permitted to set large quantities of seed will sicken after two or three years. So prolific is this little species that I have known a plant hardly bigger than a man's two fists, to bear 75 flowers (estimated, for being so densely crowded, they could not be counted accurately).

Such selection can be practiced most efficiently by an amateur, because the professional plant grower is besieged with customers for his best plants, and human nature being what it is, usually parts with the best, leaving only inferior ones to breed from. Collecting seeds from plants nobody wants to buy is sure to result, after a couple of generations, in a race of culls unfit for cultivation; yet unthinking growers are guilty of just this degenerative practice. When an exceptionally good plant is recognized, it can be propagated from cuttings. However, since these do not strike root very readily, nor the plants they produce ever attain quite the vigor of the best seedlings, it is not worth while to take cuttings of any individual which yields seedlings approximately as good as itself. As seedlings often flower in their second year, almost always in their third, little is gained, much lost by indiscriminate cutting-propagation of plants no better than very good.

To raise seedlings of *R. racemosum* requires some care, because in the first year these are extremely sensitive to cold, often killed outright under glass in a well protected frame. One-year seedlings have thin, hairy leaves more like an Azalea, and do not become hardy until, in the second year, they put forth the utterly different, rigid, smooth, leathery leaves of maturity. The following autumn some flower buds will usually form, so that the color and size of bloom can be judged in May of the third year, a little more than two years after sowing; floriferousness and neatness of habit can hardly be evident however, until two or three years later.

For sowing, I place a quantity of soft brick broken to gravel size in a standard 4-inch pot, filling the pot about two-thirds or three-quarters, on top of this a layer of half sedge peat, a quarter rich top-soil, a quarter sand, well mixed, filling the pot. By pressing down this mixture, a quarterinch or so of additional space is made for a top layer of three-quarters sand, one-quarter sedge peat. On this, after thorough soaking from below, the seed is sprinkled very thinly, and barely covered or merely anchored with a sifting of sand. These seed pots are placed in pans in a cold frame from which all direct sunlight is excluded, but as much north sky and reflected light as possible invited. Keeping a very little water in the pans, the pots remain moist, and if the sunlight is shut out, require no ventilation or other care. I sow about April first, and leave the seedlings intact for a year, when they are potted off. If sowing is too thick, the seedlings must be moved after two or three months. All Rhododendrons can be handled in this way.

One bad trait clings to even the most desirable strains of *Rhododendron* racemosum. When well cared for, shapely little plants will suddenly shoot up coarse, straight stalks at an ugly angle just out of the vertical, spoiling their artistic character, and carrying such an abundance of flower buds that no one likes to cut them back. In another year these shoots will branch, restoring to the specimen some of its original shapeliness, but other such shoots soon appear, reaching a length, in some strains, of two feet in a single season. One of the chief aims of breeding in this species is to produce races which will remain dwarf without pruning, and for this trait Forrest 19404 is probably our best foundation. It should be kept in mind, however, that seeds from any good plants grown in the open here are, in adaptability to our climate, far superior to foreign seeds.

Because not much is gained by selection among individuals of a species which differ but little from each other, plant breeders try to promote variation. Cultivation alone, with favorable soil conditions and protection against the competition of weeds or overcrowding, seems to encourage breaks in the uniformity of any plant race. But to bring important changes within the breeder's lifetime, other methods are almost universally employed. While the new techniques of inducing giant growths with colchicine, or monstrosities by irradiation, may find some application in other fields of horticultural endeavor, hybridizing will probably remain the chief reliance of those who breed woody plants for ornament. If your garden includes a sand barren you will like to see how to go about:—

# CULTIVATING PYXIDANTHERA BARBULATA

MARCEL LE PINIEC, Bergenfield, N. J.

I N HER splendid article on "Plants of the New Jersey Pine Barrens" which appeared in an earlier number of this Bulletin, Miss Elizabeth C. White gave such a true characterization of the Pyxie ("Pyxiemoss" S.P.N.) that even a single added word would spoil the picture. I have had so much pleasure is growing it, however, that I would like to set forth an account of my failures and successes; it is certainly not an easy wild plant to tame!



WILD FLOWER PRESERVATION SOCIETY

The first lots I fussed with had been obtained from commercial collectors, and my poor luck with them was no doubt due in part to my ignorance of their soil requirements and in part to the conditions under which they had been collected and shipped. After failing for two years in succession with three different plantings, I decided to go to the Barrens and collect the plants myself. Those obtained were young clumps 3 to 4 inches in diameter. Of the two plantings that I made, one lasted for a year, until during a mild winter it was cut to shreds by earthworms working under the leaf much which had been applied. The other prospered and bloomed for 3 years, until the branches of a cherry tree extended above it, both the

In late April the white stars of Pyxie nearly hide the foliage.

shade and the drip from the branches during rain storms injuring the plants.

Another planting made last year shows greater promise, the plants becoming well budded after being set out. As to planting procedure, the soil was dug out to a depth of 18 inches, the bottom thoroughly tamped, and broken flagstones placed in so as to cover the subsoil completely. Sphagnum was then added in such amount that it was compressed to a solid batt 3 to 4 inches thick when covered by a heavy layer of mixed stones, pebbles, and gravel. The 10 inch hollow then remaining was filled by a mixture of 1 part finely screened *acid* leaf-mold^{*}, and 3 parts of sand. This was tamped down firmly, and wetted down, and the plants were then set in. They were screened from the direct rays of the sun for a few days, and watered every day for about two weeks. Then for a month they were given a good soaking about once a week, and finally were left to take care of themselves.

The fact that the plants have developed abundant flower buds, and to all appearances are thriving, indicates that this treatment is suitable. But the condition of the plants when set out also had much to do with their succeeding. As already noted, I collected only small clumps, so that it would be possible to obtain essentially complete root systems. Pyxie develops a single hard twisted tap-root not unlike that of Epigaea, with only a few side branch-roots; these give off numerous fine hair-like roots, as do also the stems wherever they touch the soil or become buried in it. In order that these rootlets should not be disturbed, the clumps were carefully and tightly packed in a flat so that they would not shake loose while in transit. The soil was quite moist when I dug the plants, and when separated for planting each was well surrounded by its own solid little ball of sandy soil.

Excellent results have been obtained with cuttings made from these collected plants. Some were taken in late June, others in September, and both lots rooted readily and successfully in damp sand. They were potted twice, in  $1\frac{1}{2}$  and then in 3 inch pots. By way of experiment, one lot was potted in the same mixture of acid leafmold and sand which had been used out of doors, the other in a richer mixture, with equal parts of this leafmold and sand. No essential difference between them could be detected, both lots growing well and proving even more floriferous than the plants set out in the garden beds.

^{*} The term "leafmold" is widely used for the products of decomposition of leaves, whatever their condition and chemical reaction. Actually, as pointed out by the late Dr. Frederick V. Coville, the stage of decomposition reached is very important in connection with plants sensitive to such factors. At an early stage, the material is brown in color and shows many leaf-fragments; its reaction is more or less strongly acid. For this Coville suggested the term "upland peat," but this has not been generally accepted, so "acid leafmold" is a good substitute. Later on the material becomes black and no longer shows separate leaf-fragments; the reaction is then circumneutral. This may be termed leafmold, without any prefixed adjective. Horticulturists wishing to attain success with acid-soil plants should carefully distinguish between the two sorts, and make sure that what they use has indeed an acid reaction. EDITOR.

Even in low-altitude eastern gardens you can hope to succeed in growing:----

# SOME ATTRACTIVE NEW MEXICAN PLANTS

**ROBERT M. SENIOR, Cincinnati, Ohio** 

**E** ASTERN readers who have brought home plants from the Rockies know how difficult it is to keep many of them alive, particularly those inhabiting the higher mountains. The writer has tried to raise plants from seed, collected all the way from the Canadian Rockies to New Mexico, and has generally been more successful with those from the latter area.

Frequently we read about delightful western plants that some writer describes in glowing terms, and we hasten to scan our catalogues to see if these plants can be purchased. Here in southwestern Ohio they often perish the first year. The writer has been particularly unsuccessful with those native to the Pacific northwest, where the relatively moist climate differs so markedly from that of the central States.

If we were asked why New Mexican plants can often be raised more successfully here than those growing further north in the Rockies, we should be inclined to say that there is a greater similarity of climate, since in the southern Rockies the summers are both longer and warmer than further north, and the winters not so severe.

Nearly all the plants mentioned in this article were secured in mountainous country, running northward from central New Mexico to the Colorado border. Most of them are low growing, and particularly suited to the rock garden. All of them are distinctly worth raising. They are all planted in a light rocky soil, which in contrast to that in which our border plants grow, would be classed as rather "lean."

A delightful rock plant that anyone in the central States could probably grow is *Malvastrum coccineum*, which, as its name indicates, belongs to the Mallow family. It is a plant that only grows about six inches high, with grayish leaves, and flowers that I can only describe as delicate brick red. It is rather widely dispersed in the Rockies, and inhabits the dry hillsides and valleys rather than the high mountains. Correspondingly, it can apparently endure any amount of heat.

Western Penstemons grown here are generally short lived, but there are two from New Mexico that have persisted for several years. *P. unilateralis*, which was secured in northern New Mexico, is rather tall for the small rock garden being generally about two feet high. It has numerous good sized flowers of a deep bluish violet color, and as its name indicates, the flowers tend to grow along one side of the stalk. It is also very widespread in Colorado, and anyone driving along those mountain highways in midsummer is almost certain to encounter it, and be struck by its beauty.

Penstemon linarioides, (especially in the subspecies coloradoensis) is on the other hand an excellent rock plant, with numerous, almost prostrate stems, sometimes over a foot long, and with tiny linear leaves. Its light blue flowers are not particularly large, but nevertheless very attractive. Presumably because it is usually found on hot dry hillsides, it also seems to endure our summer heat in southern Ohio. This species has been in my garden for many years. The low yellow daisy-like *Chrysopsis villosa* is a rock plant that I imagine anyone in the central States can grow successfully. It also inhabits dry hillsides and valleys, and is widely dispersed throughout the Rockies.

One of the most attractive of all low-growing New Mexican composites is *Crassina grandiflora*, which is rarely seen in eastern gardens. Wooton and Standley, in their "Flora of New Mexico," described it as "a handsome plant—with large bright yellow rays." The flowers have a long period of bloom, starting in midsummer, and continuing almost till frost. They are of a rich butter yellow, and the petals, or rather the rays, as they fade, do not drop off, but gradually turn dark straw colored. This plant is not difficult to grow east of its native region, and if you succeed with it, it will afford you much pleasure. Best of all, it will brighten your garden in the Fall, after most rock plants have lost their flowers.

I have mentioned just a few plants from New Mexico that have proved to be fairly long-lived. Naturally there are many others in that State that are attractive and not too difficult. Among these should be mentioned the beautiful golden yellow Aquilegia chrysantha, the rather tall Penstemon secundiflorus, the yellow Drymocallis glandulosa, the attractive pink Phlox nana, the delightful, large white-flowered Pachylophus macroglottis and several Eriogonums, Talinums and Sedums. And, to return to the subject of yellow-daisies, the State Flora lists (under four different genera) no less than 25 species of Actinea. Of these, I have had the greatest success with A. linearis, which has a dense tuft of small linear leaves, with showy heads on long slender leafless stems.

# BOTANICAL NAMES AS AIDS IN SELECTING ROCK GARDEN PLANTS

RALPH W. BENNETT, Arlington, Virginia

THERE are a number of botanical species names which, when their meaning is known, will aid rock gardeners in selecting suitable species of plants. Such are the adjectives indicating low growth, trailing habit, or cushion shape; those denoting plants which grow naturally in rocky places, high on mountains, or near snow lines; and so on. With reference to the spelling of the names in the following lists, it is to be noted that the endings often change from one genus to another because of the rule that the species name must agree in gender with that of the genus. A name given here with the masculine ending "us" will end in "a" when the genus is feminine, in "um" when neuter. Those ending in "is" are the same in the feminine but change to "e" when neuter. Finally, a few endings, such as "ans," "ens," and "cola" remain unchanged throughout.

Species names for rock-loving or covering

lithophilus	rupicola	saxatilis	
petraeus	rupestris	saxicola	

#### AMERICAN ROCK GARDEN SOCIETY

#### Species names indicating more or less low growth

acaulis — stemless	minimus — smallest
caespitosus — tufted	minor — smaller
compactus — compact	minutus — minute
compressus — pressed together	nanus — dwarf
concinnus — neatly formed	procumbens — lying down
condensatus — condensed	procurrens — stretched out
confertus — crowded	prostratus — prostrate
decumbens — prostrate at base	pulvinatus — cushion-like
depressus - depressed	pumilus — diminutive
explanatus — spread out flat	pygmaeus — pigmy
horizontalis — horizontal	repens — creeping
humifusus — sprawling	reptans — crawling
humilis — low-growing	supinus — lying flat

#### Names for mountain-dwellers

alpestris	andinus	monticola
alpicola	glacialis	saximontanus
alpinus	montanus	scopulorum

Terms related to flowering habit are likely to be helpful in planning a rock garden (and indeed any other kind). Then, since most rock gardeners like fragrant flowers, names referring to this feature are also worth listing.

#### Names concerned with flowering (or fruiting)

aestivalis-summer-blooming (fr't's	g.) noctiflorus — night-blooming
autumnalis — autumn-blooming	semperflorens — everblooming
floribundus - profuse-flowering	serotinus — late-blooming
hyemalis — winter-blooming	vernalis — spring-blooming

#### Names describing fragrances

aromaticus — aromatic citriodorus — lemon-scented fragrans — fragrant fragrantissimus — very fragrant gratus — pleasing inodorus — scentless moschatus — musk-scented odoratissimus — very strong-scented odoratus — scented suaveolens — sweet-scented

#### - and smells

ingratus — unpleasant olidus — rank foetidus — foul graveolens — heavy

Warnings to the rock gardener, as to size

altissimus — tallest altus — tall arboreus — tree-like elatus — high exaltatus — very tall excelsus — extending up giganteus — giant grandis — large procerus — lengthened rectus — upright

#### - or behavior

diffusus — loosely spreading proliferus — offshoot-bearing radicans — freely rooting sarmentosus — brushy stoloniferus — stolon-bearing surculosus — suckering You'll have to remake your rock garden before long if you don't keep out:—

# EUPHORBIA CYPARISSIAS



I NONE of her pleasant essays, the late Mrs. Louise Beebe Wilder confessed a kindly feeling toward "the airy Cypress Spurge," and told how she allowed it to linger along the edge of the woods—from time to time pulling up handfuls—though excluded it strictly from the rock garden. For it is one of those plants which can only be classed as beautiful but dangerous, offered by many dealers and garden friends as desirable, but once given a chance spreading by pervasive rootstocks through every crevice and crowding out all the more delicate species. There is actually a place in a Philadelphia suburb where this spurge is competing with Japanese Honeysuckle! All southeastern gardeners will know from sad experience the spreadability of the honeysuckle, and will certainly wish to keep out of the rock garden any plant able to keep up with it—E.T.W. Polemoniums, Phloxes, and various other plants thrive together: —

# IN A MAINE ROCK GARDEN





BY GRACE F. BABB

A FTER growing Pole-moniums for several years,-some obtained as plants, others raised from seed-I became almost hopelessly confused as to their proper naming, for there seemed to be no rhyme or reason to the names under which they were distributed. But now the first number of this volume of the Bulletin brings the welcome news that their nomenclature is being straightened out.

In the center of the accompanying photograph of a portion of my rock garden there appears one of the western mountain species. This has lovely inchwide pale violet flowers with vellow centers, borne on four-inch stems over a compact mass of tiny dark green leaflets, and appears to correspond best to the description of Polemonium pulcherrimum. All three plants in the group have blossomed each successive spring for four years, so are evidently well acclimated.

Other plants in the picture comprise: *Phlox subulata*, a pale pink seedling, in the foreground; *P. procumbens* and *P. subulata* rosea toward the right; *Armeria juniperifolia* (also known as *caespitosa*) from Spain toward the top; and just beyond the Polemonium a rosette of *Actinea* (*Rydbergia*) grandiflora from the Rocky mountains.—MRS. EDWARD M. BABB, Portland, Maine.

## SEEDS ARE FUN

A side from the excitement of seeing seeds germinate and the seedlings thrive there are things that we can know about them that will add to our pleasure and even our ease in gardening.

For instance, if we recognize weeds when only the cotyledons (seed leaves) are present it is a very quick and easy process to eliminate them. Also, if we do recognize the cotyledons we can sometimes protect and save young plants that we desire to keep and increase. Many a stray seedling has been gathered up in my own garden in this way. Another case of the usefulness of such knowledge—I had several flats of *Anemone pulsatilla* (sinensis) Robert Hibberson. A friend sent me a package of one akin to A. p. Farreri. Later, in my reading I came across a colored picture of A. p. Farreri and was concerned—it appeared to be identical with the one I had and I do not like too many flats of a kind. When the first two leaves appeared I was set at rest; in no case were they alike. The cotyledons of this last lot were much longer and a little wider. I had two different plants.

There is also the element of surprise when one begins to be seedminded. I have had in the cold house for the last six months a small flat of *Cassiope lycopodioides* just for the sake of seeing the flowers every day. A short time ago I noticed an ashy encrustation, the tiniest imaginable, all over the flat. It was young seedlings just up. It is interesting that often seedlings of shrubs are much smaller than those of perennials. This is especially true of the Ericaceae.

Seeds are among the great mysteries and miracles. Why do they act as they do? Why must some be planted immediately and why should some not be planted till spring or till two years have elapsed? A few things we do know. Seeds are usually thought to be ripe when they become separated from the parent plant, but not always. Somewhere I have read that *Primula nutans* sheds its seed while green. I rather suspect that *Polygala calcarea* does the same. Although many seeds will germinate the moment they are ripe or when they are shed, many others will not. These latter must undergo a period of *after-ripening* before germination can take place. Involved in this are all sorts of chemical changes such as changes in the acidity of the seed contents, development of enzymes and ability to digest the stored foods. The time involved varies with these factors. Often it is only a short period but sometimes it is very long.

Among the seeds I like to plant as soon as they are being shed are species narcissus, primrose, gentians, hardy cyclamen and rhododendrons. The narcissus will be planted late in spring or early summer; primroses and gentians in mid-summer and rhododendrons in January or February —their capsules do not open till the turn of the year, a little before or a little after—in most cases. Weather is also a factor in this case.

Just now it is important that we should harvest our rare seeds and watch our seedlings since former channels and usual sources from far places have been shut off.

It is a great pleasure to watch seeds and seedlings—the perfect little corm that a cyclamen forms before the first single blade is sent up; the spear-like leaf from the narcissus seed; the various shapes of primrose cotyledons, etc., etc. And so I say that seeds are fun!—ELSE M. FRYE, Seattle, Washington.

# YEAR BOOK

BEING A REPORT OF THE OFFICERS TO THE MEMBERS OF THE

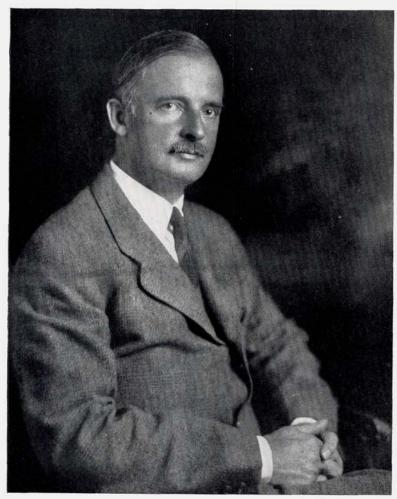
# AMERICAN ROCK GARDEN SOCIETY 1943-1944



Unlimited in species and varieties, the assembling, propogation and care of alpines and rock garden plants is a specialized and essential branch of horticulture; to the botanist it is an intriguing field for study and research, to student or tyro or for limited space it is the ideal form of gardening; to gather and disseminate knowledge of and encourage the general practise of rock gardening is the object of our Society and that we may the more successfully fulfil our mission the officers of the American Rock Garden Society will welcome the enthusiastic cooperation of all our members.

49

#### WALTER DABNEY BLAIR



KAIDEN-KAZANJIAN

The American Rock Garden Society has been extremely fortunate in the personnel of its presidencies; while we have always come to the end of their term with deep regret for their going, in each case they have retained an active interest in the affairs of the Society, and so, while in Walter Blair we shall lose a much beloved president we shall still retain that infectious smile, the congenial presence and the wise counsel that have endeared him to us.

Walter Blair was born June 14, 1877, the son of Lewis Harvie Blair and Alice Wayles Harrison, at the Wigwam, the ancestral home of his mother in Amelia County, Virginia. He was educated at Richmond College and at The University of Virginia, where he received a B.A., M.A. and a Phi Beta Kappa Key; he graduated from the University of Pennsylvania with a B.A. in Architecture; and from the Ecole des Beaux Arts in Paris with Architect's Diploma and the Miller Prize; in 1903 was Professor of Architectural Design at Cornell University.

Mr. Blair married Ethel Gould in 1907 by whom he has one son, Harrison Westbrook Blair; in 1932 he married the novelist and poet, Elizabeth Hollister Frost.

Mr. Blair has designed many notable edifices including the library at Charlottesville, Va., the Warner Library at Tarrytown, N. Y., the Gould Foundation in New York City and a number of the buildings of the University of Virginia; he is a Fellow of The American Institute of Architects and served with the Coast Guard U. S. Artillery in the First World War.—A.H.E.F.

#### **REPORT OF THE PRESIDENT FOR 1943-1944**

For four years the American Rock Garden Society has given me pleasant and inspiring companionship with members versed in horticulture and more skilled than I in growing the plants that belong in a rock garden. This has been a privilege that I shall prize and shall always remember, for it has been fun. The path that I was to follow had been outlined by my charming and able predecessor, Mrs. Houghton. She projected it over time's reaches. I had but to continue and all would be well for me and my successor who, I am confident, will lead us to new achievements and pleasures in rock gardening.

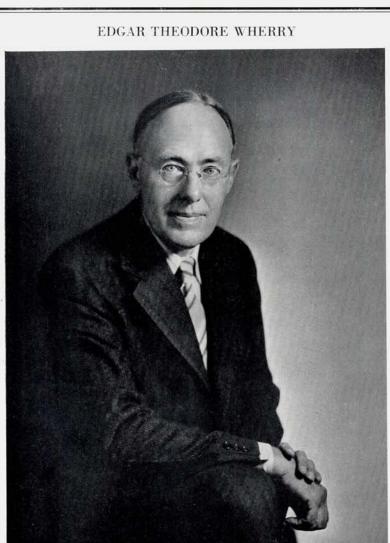
The reports of our secretary and treasurer will apprize you of the society's activities so I shall not relate them. To these two devoted members we owe much. Always willing they have carried great burdens. They have been the motive power that has made our society function.

To the chairmen of the various regional groups and to our board of directors I extend my thanks for manifold benefits they have conferred upon our society. They are the captains who have planned and reported our activities. To Dr. Wherry, editor of our Bulletin, which has attained eminence in its first year of existence, our society is especially indebted. Its success in his work. Our debt to him is enormous, as quietly he has given his time and knowledge to its fruition. We should aid him with articles of our own authorship and by soliciting articles outside our membership. The world can not dispense with the comfort of beauty and so rock gardening with its distinctive charm will have a rightful place in the equilibrium of our activities that will, after the war, mark the era of peace to which we look forward with hope.—WALTER D. BLAIR.

#### **REPORT OF THE SECRETARY FOR 1943-1944**

Notwithstanding the unsettled and parlous conditions under which we are living this has been a prosperous year for the American Rock Garden Society; there has been a manifest increase in interest in all things pertaining to rock gardens, we have had an increase of attendance at our meetings and a substantial increase in membership.

A number of important measures have been adopted, chief of which is the publishing of our own journal; it is generally conceded that the Bulletin has more than justified its existence; the various member groups have been rearranged and the groups increased and we expect the new arrangement to more adequately contact our scattered membership; we have so far been unsuccessful in organizing a national membership committee and while no special effort has been made we have enrolled 88 new members this fiscal year; an effort was made to organize an "every member bring in a member" campaign and a number have done so, some two or three, but there are 342 members still in debt to the Society for that one member; our Seed Exchange has been reorganized and under the able management of Mrs. Schneider is doing well; the healthy interest evident in all our activities augurs well for the future and if every member will try and be not just a member but an active one and help to spread the gospel of rock gardening we shall succeed in being of the greatest help to the greatest number of our cult.—ARTHUR H. OSMUN.



BACHRACH

Rarely has any journal begun its career as auspiciously as the Bulletin. Dr. Wherry has brought to its editorship the accumulated knowledge of a full life of travel and research and the instant approval universally accorded the Bulletin is a deserved personal tribute to him. Dr. Wherry was born in Philadelphia and graduated from the University of Pennsylvania with B.S. and Ph.D.; he is a former president of the Mineralogical Society of America, of the American Fern Society and of the Pennsylvania Academy of Science; he is a former Editor of the American Mineralogist and is now Professor of Botany at the University of Pennsylvania.

Dr. Wherry is a man of great energies and a tremendous capacity for work; he has traveled widely and his field knowledge of plants in the Eastern States is unsurpassed, with a special emphasis on Polemoniaceae and Ferns; endowed with a deep love for his work his enthusiasm for some certain plant will lead him far afield and one of his outstanding characteristics is his generosity in imparting knowledge and aiding students; as a lecturer he appeals to both botanical and horticultural audiences and his unrivalled collection of over five hundred lantern slides of native plants all hand-colored by himself is famous.

In 1914 Dr. Wherry married Gertrude Smith of Philadelphia.

In addition to being a distinguished botanist, Dr. Wherry is a noted geologist and authority on soil chemistry. M.G.H.

#### **REPORT OF THE EDITOR FOR 1943-1944**

One day in the latter part of 1942 Secretary Osmun of the American Bock Garden Society called at my office in the University of Pennsylvania and told me that the Board of Directors had decided to publish a Bulletin and had commissioned him to invite me to serve as its editor. Had I known what a heavy teaching schedule war conditions were soon to bring. I might have declined: but wishing to help the Society along. I agreed to take over. Material for the Year-book for 1942-43 had already been assembled by Mr. Epstein: and I was able to start off the regular bimonthly series with the number for March-April, 1943, and to keep this series going on schedule. This would not have been possible, however, had it not been for the enthusiastic support and activities in obtaining articles on the part of former president Mrs. Houghton, President Blair, Secretary Osmun, Exchange Editor Epstein, Editorial Committee Chairman Mrs. De Bevoise, and other members. In addition, Secretary Osmun has attended to all the details of seeing the Bulletin through the press and getting it out on time,a real achievement these days. Such success as the Bulletin may have had is due chiefly to the interest and devotion of these active officers and members of the Society.

In the first volume, for 1943, there were some 40 articles with 35 illustrations, contributed by 25 authors. The second volume is now under way, and we have a fair amount of manuscript on hand for future issues. However, our members are urged to keep sending in accounts of their ideas and experiences for the instruction and enlightenment of all.

A few words may be added as to editorial policies. It is held that every effort should be made to bring horticultural nomenclature into accord with that of the professional botanist, and to this end, the technical names in manuscripts are checked against Hortus, S.P.N., and botanical manuals, and changed around when necessary.

While articles on rock plants from any place on the earth are acceptable, such specific requests as the editor may make are likely to concern native North American plants. The romance associated with plants from far Cathay or other remote and mysterious regions has led to overstressing their rock garden value, and to ignoring the merits of our own natives. Yet not only are many of these attractive and desirable, but also they are as a matter of course better able to withstand the climatic conditions of their own homeland. Bringing such plants into successful cultivation is the only way to save many of them from extermination by the activities of civilized man.

The ecologic viewpoint will also be stressed. Ecology (which comes from the same root as the more familiar colony) is not, as is sometimes felt, the "telling what we already know in words we can not understand;" as, terming a rock-plant a lithophyte or a saxicole. Nor is it the grouping of plants which chance to grow near one another into imaginary "associations." It is the study of plants and animals in relation to their environment,—heat, light, moisture, and the physical and chemical features of the medium supporting them. The better these factors are observed and interpreted, the more success is likely to be attained in the maintenance of the rock garden.

# THE REPORT OF THE TREASURER

for period October 31, 1942 to May 1, 1944

Bank Balance Oct. 31, 1942 ......\$ 359.49

#### INCOME:

Meetings	\$ 118.30
Saxiflora	6.30
Year Book	232.92
Dues	1,832.55
Sale of binders	7.00
Sale of Bulletins	60.05
Gifts	200.00
Miscellaneous	83.50

\$2,898.11

#### **EXPENDITURES:**

Clerical	\$ 55.75	
Telephone & Telegraph	6.19	
Travel	21.94	
Subscription to Chronicle	214.01	
Printing	128.00	
Lectures & luncheons	281.11	
Postage	88.74	
Legal	60.00	
Regional Apportionments	45.00	
Year Book	224.79	
Insurance	11.90	
Bank Service Charge	20.38	
Miscellaneous	14.51	
Bulletin	1,073.31	
TOTAL		\$2,245.63

BALANCE ON HAND MAY 1, 1944 ...... \$ 652.48

MRS. GEORGE F. WILSON, Treas.

# REPORT OF THE SEED EXCHANGE OF THE A. R. G. S.

Soon after the seed lists were sent out to the members, requests for seed came pouring in and to date 536 packages of seed have been sent to 49 different persons; this seems to be a pretty good response to a venture which formerly had not been too successful. Many varieties on the list are still available and I wish that members who did not ask for seed up to now, and possibly think that there isn't anything worthwhile left, would send their requests to me now that I can get cleaned up for a good start next fall; the seeds exhausted on the list are:—

Aethionema grandiflorum Aquilegia glandulosa Arenaria laricifolia Draba lactea Draba sibirica Onosma stellulatum Primula cortusoides Saponaria caespitosa

Of some of the choicer things, enough for only one or two packages are left, but of the rest there is still a quantity; since the list was issued the following seed have been sent in and are ready for distribution:—

From Mr. F. Cleveland Morgan, Montreal, Canada

Allium albopilosum Penstemon glaber Allium Nuttallii Penstemon hesperius Anemone montana Penstemon Newberryi Aquilegia ecalcarata Penstemon sepalulus Aquilegia viridiflora Polemonium elegans Clematis tangutica (vellow) Rydbergia (Actinea) grandiflora Salvia Jurisicii Erigeron compositus Iberis gibraltarica Scabiosa caucasica Oenothera triloba Sedum pulchellum (annual) Sedum sempervivoides (biennial) Allium odorum (ramosum) Allium pulchellum Silene alpestris Anemone clarae Silene Wherryi Townsendia Worth B Aquilegia flabellata Campanula saxifraga Townsendia Worth #103 Clematis troutbeckiana Townsendia Worth white Gentiana lutea Verbascum Chaixii Iris sibirica (caesar strain) Verbascum phoenicium Penstemon alpinus

From Mr. James E. Mitchell, Mitchell Nurseries, Barre, Vt.

Alyssum idaeum Arenaria verna caespitosa Chrysopsis villosa Gormania (Sedum) Watsoni Scabiosa graminifolia

These splendid contributions should inspire other members of the A.R. G.S. to save good seeds from good plants and send them in to the Seed Exchange to the end that it may flourish and become a permanent institution.—HILDECARD SCHNEIDER



55

#### TEN GROUPS FOR SEVEN

When the American Rock Garden Society was organized it was divided into seven groups, each group under the management of a chairman, in order to keep better contact with a much scattered membership; changes in centers of population, hence changes in groups of members, an enlarged membership together with the experience gained in ten years of usage have demonstrated the necessity for a more comprehensive division of the country; on October 27, 1943 the Board of Directors provisionally approved a new set of ten groups; this new plan was approved by the various group chairmen and passed for final action by the Board on March 16, 1944. The new plan is not perfect but does provide for better contact with more member groups and will probably be changed as changing conditions and further experience makes necessary.

The Northwestern Group consists of the states of Washington and Oregon; Burton J. Wheelon, Chairman, Warren Wilson, vice-chairman in charge of the Oregon sub-group.

The Western Group consists of California and Nevada, Frank J. Richards, Chairman.

The Northern Group consists of Montana, Idaho, Wyoming, North and South Dakota, Mrs. Warder I. Higgins, Chairman.

The Rocky Mountain Group consists of Utah, Colorado, Nebraska, Texas and Kansas, Mrs. G. R. Marriage, Chairman.

The Central Group consists of Minnesota, Wisconsin, Illinois, Iowa and Missouri; Mrs. M. A. Kovachoff, Vice-chairman in charge of the sub-group in Missouri.

The Lakes Group consists of Michigan, Ohio, Indiana and Kentucky, Robert M. Senior, Chairman.

The Middle Atlantic Group consists of Pennsylvania, Maryland, Delaware and the counties of Gloucester, Salem, Cumberland and Cape May in the state of New Jersey.

The South Atlantic Group consists of all those states lying south of Maryland and east of the Mississippi. Chairman, Mrs. Charles W. Mason, Saluda, North Carolina.

The North Atlantic Group consists of the State of New York, all that part of New Jersey north of the county of Gloucester and that part of Connecticut west of the Housatonic river, Harold Epstein, Chairman.

The New England Group consists of all the New England states east of the Housatonic river, George Graves, Chairman; Vice-chairman, Francis O. Libby in charge of the Maine Section.

It will be noted that no Chairmen have as yet been found to lead the activities of the Central, and Middle Atlantic Groups. We hope that members residing in these regions will discuss this situation with one another, and try to induce some one of their colleagues to accept the Chairmanship of the respective group. Let us see if by the time the next Year-Book comes along we can not have our local organization complete.

# THE ANNUAL MEETING

A perfect day, perfect hosts, a perfect rock garden and a goodly number of perfectly congenial folk, all were contributing factors to one of the most enjoyable annual meetings in the history of the Society, held at "Tumbling Waters" the home of our President and Mrs. Blair in Tarrytown, N. Y., Saturday, May 20, 1944; the following officers were elected for the ensuing two years:—

President-ARTHUR HUNT OSMUN, Plainfield, N. J.

Vice-Presidents— MRS. C. I. DEBEVOISE, Greens Farms, Conn. DR. IRA N. GABRIELSON, Washington, D. C. ROLAND D. GAMWELL, Bellingham, Wash. MISS ELIZABETH GRECORY HILL, Lynnhaven, Va. DR. H. H. M. LYLE, New York City MRS. G. H. MARRIAGE, Colorado Springs, Colo.

Secretary-WALTER D. BLAIR, Tarrytown, N. Y.

Treasurer-Mrs. George F. Wilson, Easton, Pa.

Directors-Kurt W. BAASCH, Baldwin, L. I. LEONARD J. BUCK, Far Hills, N. J. A. C. PFANDER, New York City

IMPORTANT — A number of projects have been started during the past year and until these are consummated Mr. Osmun feels that he can best serve the interests of the Society as Secretary, consequently for the present Mr. Blair although nominally Secretary will serve as acting President and Mr. Osmun, although nominally President will serve as acting Secretary until it is considered that the proper time has come to make the change in office.

The address of the home office will continue to be 57 Sandford Avenue, Plainfield, N. J.

# **ROLL OF MEMBERS**

# HONORARY MEMBERS

Mrs. Dorothy E. Hansell	19 Pittsford Way, Summit, N. J.
J. Horace McFarland	Harrisburg, Pa.
Lady MooreWillbrook House, Ra	thfarnham, County Dublin, I.F.S.
Sir Frederick MooreWillbrook House	Rathfarnham, Co. Dublin, I.F.S.
Lord AberconwayB	odnant, Tal-Y-Cafn, North Wales
Viscountess Byng of Vimy Thorpe Hall	Thorpe le Soken, Essex, England
E. J. Alexander	

#### LIFE MEMBERS

Mrs. C. I. DeBevoise	Greens Farms, Conn.
Mrs. Clement S. Houghton1	52 Suffolk Road, Chestnut Hill, Mass.
Mr. Clement S. Houghton1	52 Suffolk Road, Chestnut Hill, Mass.
Mrs. R. C. WetzelTulpehocken H	arms, R.F.D. #1, Sinking Spring, Pa.
Mrs. Geoffrey G. Whitney	Winter Valley, Milton, Mass.

#### SUSTAINING MEMBERS

Barnhard, Mrs. George	Ipswich, Mass.
Case, Miss M. R.	Hillcrest Gardens, Weston, Mass.
Chandler, Mrs. C	East 80th Street, New York City
Crowninshield, Mrs. F. B.	Montchanin, Delaware
Hall, Mrs. John H. Jr.	Nunataks, Hartsdale, N. Y.
Hay, Clarence L.	1 Sutton Place, New York City
McCool, Mrs. William P.	
Riley, Miss Mabel L.	93 Bellevue Street, Newton, Mass.
Swan, J. R	
Teagle, Mrs. Walter C.	Lee Shore, Port Chester, N. Y.
Wilcox, Mrs. T. Ferdinand	
Truitt, Mrs. R. MarshallSt.	

### ACTIVE MEMBERS

#### NORTH ATLANTIC GROUP

Adams, H. S.	
Averett, Mrs. Elliott	Dixiedale Farm, Chatham, N. J.
Baasch, Kurt	
Baker, Mrs. John C.	Box 436, Great Neck, L. I.
Beck, Walter	Box 436, Great Neck, L. I. Innisfree, Millbrook, N. Y.
Bevin, Newton P.	
Billstein, Mrs. A. K.	Wincoma Drive, Huntington, L. I.
Blair, Mrs. Elizabeth Hollister	Cobb Lane, Tarrytown, N. Y.
Blair, Walter D.	Cobb Lane, Tarrytown, N. Y. Rutherford, N. J.
Bobbink, L. C.	Rutherford, N. J.
Brace, Donald	
Brooks, Roland E10	07 Farrington Ave., N. Tarrytown, N. Y.
Buck, Leonard J.	
Buffalo Cardon Contor Instituto	Dolawaro Park Buffalo N V
Church, F. E	Mill Neck, L. I.
Cox. Dernard	SKVIAIIOS, SIOAISDUFG, N. I.
Creighton, William S.	
Dache, Lilly	
DeVine, W. E. B.	
Eder, Phanor J.	.29 Washington Square, New York City

Fearing, Mrs. Joseph Lea ......Butler Hall, 400 W. 119th St., New York City Free, Montague ......Brooklyn Botanic Garden, Brooklyn, N. Y. Frylink, Adrian ......Box 666, Babylon, L. Í. Fuller, Mrs. Samuel L. .....Knob Hill Farm, R.F.D., Portchester, N. Y. Hay, Mrs. William O., Jr. ......Round Hill Road, Greenwich, Conn. Hodson, Mrs. J. M. ......Rock Ridge, Greenwich, Conn. Jackson, Mrs. B. A. .....Lake View Avenue East, Bright Waters, L. I. Jenkins, Dorothy H. ......P.O. Box 114, Sta. H., Flushing, L. I. Johnson, Mrs. J. B. ......Box 151, Pompton Lakes, N. J. Loven, Carl Kemm ......119 Rock Road, Glen Rock, N. J. Mejia, Mrs. Edwin J. .....Lakewood Drive, Stamford, Conn. Mouquin, Mrs. Jeanne L. ......Sparkill, N. Y. Neumann, Dr. Theodore W. .....Central Valley, N. Y. Nomer, Mrs. Harold A. .....Friends Academy, Locust Valley, L. I. Nuberg, Bror ......N. Y. State College Forestry, Syracuse, N. Y. Pfander, A. C. ......New York Botanical Gardens, Bronx, N. Y. Richardson, Don ......F. & F. Nurseries, Springfield, N. J. 







Robbins, Wm. J. ......New York Botanical Garden, Bronx, N. Y. Spears, Miss Ethel D. .....Catrock Road, Cos Cob, Conn. Sutcliffe, Clarence D. .....N. Grand Ave., Poughkeepsie, N. Y. Todd, J. Herbert ......Club Road, Rye, N. Y. Van Melle, P. J. ......Box 1178, Poughkeepsie, N. Y. Verplanck, Mrs. Bayard ...... The Spook Field, Fishkill on Hudson, N. Y. Wood, Mrs. L. Hollingsworth ......Braewold, Mt. Kisco, N. Y. Woodard, M. P. ......Short Hills, N. J. Wyatt, Edwin T. .....Columbus Ave., Valhalla, N. Y. WESTERN GROUP Blake, Mrs. Anson S. .....Arlington Ave. & Rincon Rd., Berkelev, Cal. Murray, W. A. .....P. O. Box 704, Palo Alto, Cal. MIDDLE ATLANTIC GROUP Barnes, Mrs. A. C. .....Latch's Lane, Merion, Pa. 

Tingle, L. G. .....Pittsville, Md. Wysor, Mrs. Henry .......Upper Shawnee Ave., Easton, Pa. CENTRAL GROUP Fisher, Mrs. Glen ......Box 168, Rt. #3, Oshkosh, Wis. Harkness, Bernard .......Garry nee Dule, Baraboo, Wis. Priest, Amel F. .....Peru, Iowa Midgley, Thomas N. .....Penticton, British Columbia Tomlinson, A. H. ......Dept. of Horticulture, O.A.C., Guelph, Ont. ROCKY MOUNTAIN GROUP Burnett, Mrs. C. L. ______Box 207, Ft. Worth, Texas Hall, Mrs. J. Goodwin ______1900 Spanish Trail, Ft. Worth, Texas Marriage, Mrs. G. R. ......Upton Gardens, Box 46, Colorado Springs, Colo. 

#### AMERICAN ROCK GARDEN SOCIETY

#### NORTHWESTERN GROUP

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