Quarterly of the American Primrose Society

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Volume XII April, 1954 Number 2
Dan Bamford—an Old Florists' Friend

By C. G. Hay nom, Totten, Southampton, England

What manner of person is Dan Bamford? He is perhaps the last remaining Old Florist of Lancashire, one who has been associated with the Textile Industry all his life, a leading Consultant Engineer of that Industry and who is without doubt the greatest authority on the Auricula in England today. To know Dan well, one has to spend an appreciable time in his company, whether it be at a Flower Show, in the garden or round the fireside. Before heavy and responsible war work impaired his health he was an inventor and technical expert in the service of a vast textile machine producing firm. Today he devotes his time to growing his treasured plants and writing about them. He has a most appealing style, and I can testify to his ability as a Journalist. A man full of passion for that beautiful flower, the Auricula, he is essentially a specialist and a die hard for form and character and will go right off the deep end should be come across an Auricula with a "Jazzy" effect. When in the mood he loves to describe a fine piece of material from the Looms or a good Auricula, Orchid, or Rhododendron. On many occasions I have listened with interest to his stories of the Old Hand Loom Weavers and their wonderful craftsmanship and to their growing in their spare time such remarkable Tulips, Carnations, Auriculas, Gold Laced Polyanthus, and Gooseberries. One of them, he naturally had their ideals, growing many treasures and at one time he had a wonderful collection of Lilies and Camellias, many of which he imported from Japan. He has also a fine collection of Orchids. On a number of occasions I have visited fine Gardens and Nurseries with him and he has oft times surprised those in charge by his knowledge of a wide range of subjects. Everywhere we went he had the facility for making friends and often I have been asked "When is Dan Bamford coming down again?" I shall never forget the first time I met him. It was at
Chelsea Flower Show in 1929. A friendship sprang up between us which has grown dearer each year, and no man could have a better friend than Dan Bamford. He has been my inspiration during the years I have been raising new Auriculas. His knowledge and guidance of the ideal Auricula has always urged me to still greater efforts to produce the perfect flower. Whether he be an old grower or a young beginner Dan is always willing to give his advice on the finer points of the Auricula or Gold Laced Polyanthus. At the Show in Manchester last spring while he was taking around a lad, who happened to be the son of an Auricula exhibitor, he instilled into him the points of a good flower with the result that on the following day, when the youth was looking over his father’s collection he advised him to throw this one and that one away, as they were not worth keeping. The father told his friends that the lad now knew more about Auriculas than he did himself. That’s typical of Dan Bamford. Surely his motto must be “SERVICE TO OTHERS.”

I know Dan’s greatest ambition would have been to visit America and to see for himself what progress was being made in the United States with the Auricula, but alas, I am afraid his health now would not permit such an arduous journey. May he long to be the son of an Auricula exhibitor, he instilled into him the points of a good flower with the result that on the following day, when the youth was looking over his father’s collection he advised him to throw this one and that one away, as they were not worth keeping. The father told his friends that the lad now knew more about Auriculas than he did himself. That’s typical of Dan Bamford. Surely his motto must be “SERVICE TO OTHERS.”

In the words of the old song he is "A fine old English Gentleman."

The Bamford Trophy

Mrs. O. Miller Babbit

Through personal correspondence with English Primroses and Auricula growers in England, Canada, and elsewhere we have found many wonderful friends who have been truly helpful in aiding the development and cultivation of our Primulas. Just how we could have made such rapid advancement without their knowledge and help there is no way to determine. But we enjoy the encouragement of these new-found friends and we are thankful for them. Among these is one who is outstanding for his love of the Auricula and for his determined sponsorship of a high point system. He wants to preserve all the old traditions and ideals of what a Show Auricula should be. He has paraphrased a wartime statesman when he wrote, "We will give you the tools, now show us what you can do!" Mr. Bamford has written to the Editor of the Quarterly as follows: "I have had it on my mind for quite a time to do something permanently for the American Primrose Society. I have been on the look out for one of the genuine old copper kettles, the much coveted trophy of the Lancashire florists well over a generation ago. These are now extremely rare but at last one of my friends has managed to discover one and acquire it. I do not know the age of this, but judging by its construction, I would say certainly well over a hundred years. I have had this at the works where it has been buffed or polished and it is now certainly a fine specimen. I have found an engraver to engrave a little description on one side. You will notice the bottom has been brazed in and it has been brazed down one side, which shows that it has been made by hand by an old craftsman.

"If this trophy is competed for annually it might give some stimulus to your Auricula Growers, and that is what I hope it achieves. I would like you to do just what you like with the trophy. It is just a friendly gesture from me, hoping that it will keep green the memory of the Lancashire florists long after I have departed.

"If I may offer a suggestion, I think the best way to award it would be: To the one who has done the most to further the culture of the Auricula in America and Canada. The kettle should be engraved with the name of the first winner and given over to his custody for the remainder of the year. I give the kettle over to you for safe keeping and I know that you will see that it is awarded as it should be. We must respect the traditions set down for us by those Old Lancashire Judges. I remember the faces of some of the old Veterans with their flowing beards... Their unerring skill and accuracy with a look on their rugged faces like a judge trying the most intricate case on earth. Nothing but perfection counted. Their judgment was final, sound and just. What was the reward for one of the exhibitors whose gaze had been focused on the veteran judge during his judging? A well burnished copper kettle as seen in the accompanying photograph.

The enthusiasm of Mr. Bamford should be sufficient to simulate in America the culture of the Show Auricula — yes, by every admirer of this wonderful flower. As late as 1951 he said: "It might be well that in some parts of America the Auricula will take on a new lease of life." From the progress reported from these shores, he is quite certain the prediction has already come true. In the National Auricula and Primula Society, Year Book 1951-52, Mr. Bamford says: "The article captioned "Auriculas in the U.S.A." by T. M. put me in a speculative mood. There must be quite a few Show Auriculas in America, and I wonder if the growers are making many seedlings. It would be interesting to know if they have laid down rigid rules for the properties of this flower as we have done here. What are their rules, and are they being strictly kept? Let them not be tempted from producing a flower of perfect symmetry, ordered beauty and refinement by a massive flower with a brilliant splash of colour but rough in outline; away with such monstrosities to the bonfire. If they must worship at the shrine of beauty, let it be a flower with circular outline, round centre, round eye, smooth level paste, and with the colour zones of equal width. They will then be in the company of the angels!!!" You may be assured that dear Mr. Bamford was delighted about the culture of the Show Auricula in America when in the Quarterly of the American Primrose Society, July, 1952, Mrs.

(Engraving courtesy of the National Auricula and Primula Society of England, Southern Section).

"To the one who has done the most to further the culture of
The Auricula in America and Canada."
Karnopp reassured him in her excellent article "Our Heritage and Our Trust" that "we will carry on the old tradition."

Our ardor and zeal must not be dampened by the remarks of Mr. Bamford when he says that around Manchester the Show Auricula will never be grown again as in the days of Robert Lancashire. Further commenting on the changing times, he adds: "Yes, the hand loom which produced wonderful fabrics has vanished, the spinning mills and weaving establishments have swept most of the old florists gardens and the overspill from the adjacent city have covered the rest. Smoke and fumes have added their quota, such is the price we pay for progress. Yet here and around this dense industrial area, perhaps the most dense of any in the country — the old generation indulged in their craftsmanship and their breeding, yet their very instinct seemed to triumph over science. Think of their achievements in developing the Auricula, Gold Laced Polyanthus, the Bizarre and Flake carnations — I have seen one old man take twenty minutes to lay the petals even and symmetrical with small tweezers ready for the show table. Those old florists handed down to us a glorious heritage. How have we used it?

My friend, Mr. John Ogden, of Bagslade Manor Road, W. Rochdale, who spent a quite a lot of time searching around, discovered by an amazing stroke of good fortune, a set of the old gooseberry weighing scales. As you know, the old florists grew not only Auriculas, Gold Laced Polyanthus, Edged Pinks, etc., but also gooseberries. These were grown to an enormous size and the competition on them was quite as keen as for the Auriculas. The scales are particularly accurate and all the bits and pieces of hand made weights shown in the photo, were used to weigh to a fraction of a penny-weight. If two berries apparently weighed the same, they were weighed against each other, one in each pan. If they still showed the same weight, the whip like object on the right, known as a gauge, was used to measure the circumference. Judging was on a weight basis, but size,
shape, smoothness and transparency of skin and the smallness of the eye, all entered into the judging.

The scales are extremely old, some of the weights were stamped in the reign of King William. These I propose to send you along with the kettle and I think it if these two old relics are placed at the end of your show bench, they will attract considerable attention. They will waft your members over the water to the county of Lancashire where the nature of these folks is gentle and hospitable, where strangers are received with kindness and where many a Good Samaritan is still to be found.

I suggest that you don't put these up for competition, but put them on display at your show. My friend Mr. Ogden and myself allowed one of our newspapers to photograph them and they were pictured in the paper along with a short description of them. It created quite a sensation and there was some clamouring for them to be placed in the Museum, but you will take care of them quite as well over there. Mrs. Worthington may I appeal to you, that should your Society ever cease to function you will not allow them to be lost or neglected, but forward them to your leading Horticultural Society in America to be placed in their Museum along with the description I give of them. You will not find such another set in the whole of America and indeed I do not know where there is another set over here.

Now, I send you all my very kindest regards,

Dan Bamford

Labels

Mrs. J. J. Boyd-Harvey, Dirleton, Scotland

I hate labels. I dislike their appearance in the garden. After weeks of planning, and months of back-breaking toil, one creates a garden which is intended to represent the mountains of Nepal, falling away to Swiss meadows, a New Zealand dry river-bed and a Szechuan bog, and then the natural appearance of the whole thing is ruined by the artificiality of labels.

I dislike the nuisance of writing labels. Perhaps more methodical gardeners than I am, keep their label blanks, their waterproof ink and a pen all in the correct places in the potting shed, but do they never need to go indoors for a reference book to check up on correct spelling? Do they always wash their muddy hands and change out of their gardening shoes before visiting the drawing-room bookcase? Perhaps others may wait until gardening is over for the day, but have they not sometimes forgotten by the following morning which plant is which, and put the labels in the wrong places? Very methodical people probably write their labels before planting, and I envy them their strength of mind, even though the poor plants may be gasping after a long journey in a postal package.

I dislike the suggestion which labels give that I do not know my own plants by name. I know that even humans sometimes have to wear name labels at big Conferences, but imagine asking personal friends to wear their names pinned to their clothing at a private dinner party!

I dislike cheap wooden labels which do not survive the two or three years which some alpine plants require for germination. I dislike the costly permanent lead labels which outlive their plants and are an everlasting reproach to the gardener for having lost something precious and rare which may perhaps be impossible to replace.

I dislike the attraction which labels have for visitors who pull them out to read them and then thrust them back diagonally so that the plant is decapitated. Labels out of range from the paths may entice visitors to scramble over the rocks to decipher them, causing tragic damage when those visitors have a sense of balance inferior to their thirst for knowledge.

There are however two sides to every question. My husband says that he can remember faces (floral and human) but forgets names, so when we are expecting visitors to the garden, he implores me to name everything with the largest and most legible labels obtainable. I myself have to confess that, though I do not like disfiguring our own garden with labels, they are essential for the full enjoyment of Botanic Gardens and Alpine Plant Nurseries, and the larger and more informative they are, the better I like them.

I also feel the need for labels against those plants which go to ground for a rest in the winter. Many a plant have I murdered in early spring through missing its unlabelled site for a nice piece of bare ground for a new plant. I have some delightful friends who are willing to spend up to fifteen minutes in the depths of winter admiring a nothingness labelled Primula Reddit. If one were sure that the visitors would not be returning later in the year, what a reputation one could acquire with a few dozen labels of Primula Cusickiana and a few Ruth Draperisms—"My dear, you should just have seen them flowering last summer. Great drifts of colour."

Seed pans must be labelled, of course. I have optimistically told myself, 'I'm sure to remember that one because it's a funny shape' or, 'That chip on the edge of the pan will remind me,' but it is surprising how being called away to the telephone for five minutes can make one forget, and then a pinch of seed of a different species may be sown on top of the first one. I prefer anodised aluminium labels for seed pans because they can be bent over flat while the pan is covered with a slate, and then restored to the erect position as soon as the seeds germinate. They also have the advantage of taking a quick scribble with a pocket lead pencil, and the reverse side may be used for the date of sowing, the date of germinating, etc.

Labelling is compulsory at Flower Shows. Permanence is unnecessary but visibility and legibility are most important. A beautifully written card or white plastic label should be made in clear of the foliage on a piece of wire. One end of the wire is given a couple of turns round a pencil, taken off and trodden underfoot. This makes a firm clip for holding the label and may be any length. I feel strongly that all labels at shows should be horizontal. Vertical writing (amateurs facing east and professionals and left-handed people facing west) may produce symptoms of the painful Flower Show variety of Tennis Spectators Neck.

Although my plantless everlasting lead labels remind me of mishaps which I would wish to forget, they may eventually become of great historical interest to posterity. Those bearing the names Primula Winteri and Primula Lottoniana are already on their way to becoming museum pieces, and doubtless many more names will become obsolete in the next hundred years or so. I do not know when plant labels were first used, but what a thrill we of the twentieth century would feel if we had the luck to excavate a pre-Linnaean carved stone label bearing the inscription "Primula veris flore rubro," particularly if some of the descendants of the plant were growing nearby under the name of Primula farinosa.

The mention of stone labels reminds me of an article by Mr. W. W. Bishop in the Report of the Second International Rock Garden Plant Conference. He recommends the method used in the Llandudno Public Rock Gardens where the name of the plant is painted on a small piece of smooth stone placed near the plant. The "label" blends in perfectly with its background, the lettering may be large, clear and horizontal, and the weight of it frustrates mischievous birds. When I have time and patience I hope to collect together a thousand or so suitable stones to paint. I wish I knew a bedridden plant enthusiast in need of interesting occupation, with a kind nurse who welcomed a pile of stones and a pot of paint in the sickroom. In the meantime I must rest content with the mixed assortment of shabby and inadequate labels which now disfigure the garden.

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THE NATIONAL AURICULA AND PRIMULA SOCIETY (Southern Section).
Membership, $1.50, (Yearbook only, $1.00). Please write to the Hon. Sec. R. H. Briggs, "High Bank" Rawtenstall, Lancs., England.
Pictorial Dictionary Of The Cultivated Species Of The Genus Primula

(Continued from page 18 of the January 1954 Quarterly.) The valid species are indicated in this text with italics. The numbers in parenthesis indicate the section to which each plant belongs. The key for the sections immediately precedes the dictionary. The letters which follow quotations indicate the names of the authors and the name of the publication in which the matter was originally published. This key may be found on page 59.

The sections into which the genus has been divided are (1) AMETHYSTINA, (2) AURICULA, (3) BULLATAE, (4) CANDELABRA, (5) CAPITATAE, (6) CAROLINELLA, (7) CORTUSOIDES, (8) CUNEIFOLIA, (9) DENTICULATA, (10) DRYADIFOLIA, (11) FARINOSAE, (12) FLORIBUNDAE, (13) GRANDIS, (14) MALACOIDEAE, (15) MALVACEAE, (16) MINUTISSIMAE, (17) MUSCARIOIDES, (18) NIVALEAE, (19) OBCONICA, (20) PARRYI, (21) PETIOLARES, (22) PINNATAE, (23) PYCNOLOBA, (24) REINI, (25) ROTUNDIFOLIA, (26) SIKKIMENSIS, (27) SINESEIS, (28) SOLIDANELLIDAE, (29) SOULIEI, (30) VERNALIS.

denticulata (9) Most abundant in the W. Himalayas at 7-12,000'. It is said that this species, which has been in cultivation over a hundred years, is one of the best "propaganda" agents in the genus. It has captured the interest of people who have seen it in the market place, for it is easy to procure, it is not expensive, it is easy to grow and keep, and rewarding in being both hardy and handsome. Mr. F. H. Fisher writes that "The thrill of seeing the lavender-flowered, heavily powdered cachemirian form of this Primula started one beginner collecting every species of Primula to be obtained in nurserymen's catalogues and paved the way in turn to a collection of Meconopsis, and later Gentians." (AGSB: Vol. IV, p. 79) The leaves are narrow and crinkled 6-12" in length. The crowns are very large and the leaves wither after flowering and leave a winter bud consisting of rudimentary leaves and scapes. Flowers appear before the leaves and are braced up by their large "rufous-coloured" scales, and a few young erect leaves. The scape may reach 20" at flowering time. The color of the inflorescence varies from pale lilac to a bluish mauve in the type. The variety alba and all the lovely colors which have been developed into the crimson by careful selection and breeding are well worth space in the garden. Jellitio advises that we sow the seed immediately when it is ripe, or not later than the following winter. In the N.W. U.S. the experts try to sow the seed at a time which will not allow fall blooms to form.

decorum (2) Called "The Primula of the Gods." Jellitio writes it is found in Bulgaria in peaty grass, in marshes along creeks; often in ice cold water. He cautions that it must be planted in lime-free soil. In an old Flora and Silva, W. T. Hindmarsh, who flowered decorum for the first time in cultivation, writes, "my plant had one flower spike 8" high, bearing 20 blooms. The surrounding leaves were only 2" shorter than the spike. Its color, a fine purplish-violet, is very striking, assuming in different lights a redder or a bluer shade, which is due in part to the transparency of the petals. . . . I planted it in sandy loam upon the open rock garden, in a pocket facing due North. . . . By planting at the base of a stone with a broad top sloping toward the plant, it receives more moisture than would otherwise be the case. It has passed the winters practically without protection, save for a month or two during the dampest time when I tilted a pane of glass against the stone to ward off heavy rains. . . . Its leaves are slightly fleshy, covered upon the upper surface with minute glands, and with viscid gum upon the dark-coloured flower stem, bracts, and calyx." The stem is ordinarily 5-8" tall and bears a generous umbel of slightly nodding flowers, whose corolla measure about 1½" across and are funnel-shaped with slightly notched, heart shaped lobes. In good form the flowers may be almost blue and at worst a rich magenta purple. (Fine illustration AG, Vol. IV, p. 197).

Dickieana (1) George Taylor writes that the species of this section are exacting for in nature they enjoy cool rain or constant mist baths for several weeks during the growing season and are wrapped in a deep blanket of snow in the winter. "Dickieana does not drop as do others in the Amethystina Section. The narrow corolla-tube expands slightly beyond the calyx and the cleft corolla-lobes spread in a slightly oblique plane. The throat is more or less closed by hairs. The specimens which flowered in Perth for Mr. and Mrs. J. Renton of Branklyn, had lavender-violet corolla lobes, each with a chocolate brown spot near the base and the center of the flower was a five lobed orange-yellow 'eye.'" Mrs. Crewdson in Kendal had the good luck to flower Dickieana in a peat wall which faced due west and which enjoyed a good deal of shade from nearby trees. The flower was creamy white with a yellow eye and "very pretty, and one can imagine that masses of them in the Alpine meadows of Tibet and Bhutan must be very lovely. It is evidently very variable as to color ranging from white, cream and yellow to orange, and even mauve and purple." The illustration is one which George Taylor used with his fine article in the RHS Journal of March, 1950. It was taken in the Doshong La in S.E. Tibet where "it was possible to pick out four distinct colour forms." Perennial; has tuft of leaves which are elliptic, ovate or oblanceolate, subentire or minutely and remotely denticulate at the margin; 2-3" long; smooth and fairly thin in texture. Flower stem slender, 3-8" tall, bearing 1-6 blossoms in loose umbel. Corolla up to 1" across, consisting of 5 broadly heart-shaped segments; tube cylindrical, twice as long as the calyx. Fletcher writes that "Though clearly within the section it is the most aberrant member. The lobes of its corolla are patent and not in line with the tube; the throat and inner part of the corolla-tube
are markedly hairy; the flowers show great variation in colour, but without suggestion of hybridity; both heteromorphic and homomorphic conditions occur. It would therefore offer material for an interesting study." (GT)

dictyophylla (19) "... appears to be confided to Upper Burma in the neighborhood of Myitkyina where Kingdon-Ward discovered it in 1914 growing on mossy shale at an elevation of 6-8,000',—too low for hardiness in Britain. Ward collected seeds in 1938 and plants flowered in a cool house in Edinburgh in 1941. The bright green, shining and beautifully reticulate leaves—which appear to lack that irritant effect upon the skin which some gardeners experience with P. obconica—form a handsome rosette from which arises a sturdy scape carrying a congested subcapitate second umbel of 20-30 white non-fragrant flowers." (F. 1928 Conf) A fairly robust hairy plant with a short stout woody rhizome. Leaves, 2-12" long, 1/2-4" broad. Scape 4-10" tall.

didyma (26) Nepal. Very similar to reticulata varying only in the colour of the corolla which is mauve-blue. It lived and flowered at Edinburgh from Nepal seeds in 1931 and persisted until 1936 but left no successors.

Drummondiana (21) "it is surprising that a fairly accessible part of the Himalaya (pass above Namik, Kumaon and Naini Tal) has not yielded more specimens of it." (F) Farrer writes that Drummondiana is a plant "very close indeed to wonderful P. Winteri (Edgeworthii) from which it differs in having smaller flowers not fringed, and with the segments of the corolla bi-lobed."

Dubernardiana (3) Yunnan & S.E. Tibet. A rock Primula. In the darker and damper crevices of the high limestone cliffs where these species are found in nature, they form magnificent cushions of fresh green foliage without flowers; those on a sunny cliff-face, though stunted in appearance, were a mass of bloom. Like P. Henrici and different from P. bracteata in that it is a farinose hairy plant. Leaves, including the petiole, 1-4¾" long, less than ½" wide. Scape almost obsolete and hidden among the foliage or up to 2" long carrying an umbel of 2-5 flowers. Corolla, ¾-½" wide, is rose, with a yellow or orange eye, or white flushed rose or blue to mauve. This little cushion forming species seems to prefer, like P. Forrestii, a situation on a retaining wall planted in a good calcareous loam, 'facing West with a stone projecting overhead, or in a cleft between rocks where it joins up to the soil behind. The chief requirements are to maintain moisture at the roots and the foliage kept more or less dry." (J. Adamson, 1928 Conf.) "... the beautiful plant which forms great round cushions studded with yellow-eyed rose flowers, and which commemorates the name of Forest's martyred companion and friend, Pere Dubernard of the Roman Catholic French Mission at Tseku, the little town in the valley of Mekong in N.W. Yunnan, in the vicinity of which Forrest collected the type specimen in 1904." (F.G.F.J)

eburnia (28) This beautiful species resembles 'a white flowered nutans.' It is also said to bear a resemblance to both Reitii and Wigramiana and has light green tufts or rosettes of elliptic to oblong or ovate basal leaves 1 ¾-4" long (to 8") and ¾-1¾" broad which are free from farina but the 4-8" high scape may be more or less farinose and bears a compact head of from 6-12 funnel-shaped, ivory white flowers which are dusted with farina on the outside." (WT) "The noddingompact flowers measure ¾ across and are creamy white and delightfully fragrant. The back of the flower and the calyx lobes are powdered with white farina." (AG No. 82 p. 355). An excerpt from GARDENING ILLUSTRATED, July 1950, follows: "A fine plant of Primula eburnea was sent all the way from Perthshire (Scotland to London) by Mr. John Renton, whose name engaged the attention of the editor of TRAT

Herbimium specimen of P. dryadifolia, a recalcitrant little shrub Primula from Yunnan for which Farrer held high hopes.
becomes spathulate to obovate-spathulate. As can be seen by the illustration the petioles are at times long enough to extend out beyond a flower head. "The leaves in the winter disappear and are reduced to winter buds which are like those I have seen in the Himalayas at 8-10,000'; they are compact and remain so in the winter, and it depends on conditions under which origination begins in the spring whether they will develop and flower early or late. (Dr. Stapf: FPC) Edgeworthii is probably the most popular and most easily grown of the Petiolaris Primulas. It has many color forms varying from a pale mauve into a lilac blue. By selecting the best and most blue of these forms and crossing them year after year it is possible to get ever increasing beauty of color. It is also a thrill to cross Edgeworthii on icapigera and get the Pandora cross which is pictured so beautifully in AG No. 56, p. 79. The petals of the flowers have sharply dentate lobes. The flower stem is absent or up to ¾" long. "They are daintily fragrant and appear in Scotland during winter and earliest spring. We have seen the flowers actually encaised in ice, from which they emerged, when thawed without harm." (WI) Leo Jellito advises us to be very careful to provide drainage and overhead protection during the winter.

If the plant has been subjected to stagnant moisture and the roots are found to have rotted away but the heart is still sound, it is easy to get new root growth if it is planted in clean, pure sand. "It is recorded that Edgeworthii has been growing outside at Wisley for many years in a crevice between two large rocks, where it is shielded from sun and rain, and where its roots always have access to water supplied by a natural spring. In this position it never fails to flower freely in midwinter, and is for a period the brightest plant in the garden. It is also grown in pots in the alpine house, and here its silvery foliage can be seen in perfection. Seed is produced by artificially pollinated flowers." (N. K. Gould: FPC)

efarinosa (11) "A pretty neat sort from Central China." (RF) Found at 7,500-10,000' in moist grassy places.

... a stout perennial plant, surrounded at the base of its leaf rosettes with membranous unpowdered leaf-scales. Leaves to 2" long; ¾-½" broad, oblong or narrow obovate, rounded or blunted at apex; margin crenulate-dentate, green on both surfaces. From the rosette rises a scape 4-8" high at flowering time, 18-20" when in fruit, which bears an umbel of 2-20 rosy-purple flowers." (WI)

elatior Hill (30) Due to the tendency of elatior to cross with others in the Vernale Section it is hard for the contemporary botanist to find a true elatior—that is, the old 'elatior subspecies genuina' of Pax. We are turning to the description by Syme published in 1865 in his book ENGLISH BOTANY.

Good types of wild elatior

¾-¾" long; bracts 1/5" long, lanceolate. March to May. The leaves have an ovate blade which is rounded at the apex, margin irregularly dentate and crimped, softly hairy beneath, abruptly narrowed to winged stalk of varying length. There are many forms and subspecies of elatior and the subject is covered in the fine Vernales monograph by Smith and Fletcher which is advertised on page 70 of the October 1953 Quarterly. The accompanying photographs illustrate that elatior, known as the Oxlip, shows some pleasing variations. The generally accepted view that the flowers of the Oxlip are horizontal is not borne out by comparison of many true Oxlips, as some of them have the bloom dropping more or less after the manner of the Cowslip. The Bardfield Oxlip, found in quantity in the Bardfield district of Essex, from whence it derives its name, and the Normandy Oxlip, both geographical varieties, may be taken as good types of the wild elatior... The leaves of the Bardfield are darker in colour and more crinkled, and the pubescence is much shorter both on leaves and stem. The flowers are deeper in colour, and flatter." (MacW) "We can find this plant in marshy soil along creeks and meadows permeated by spring water, provided the soil is not sour. It wanders to the high altitudes, often bypassing 6,000'. It flowers two weeks after vulgaris (acaulis)." (J.L) Subsp. carpathica has the calyx inflated and the short petioled leaves are ovate or oblong, crenulate and very wrinkled. It is found, as indicated by its name, in the Carpathians. Subsp. cordifolia: calyx very narrow-tubular, leaves recurved, rounded-obovate, scarcely wrinkled, stalk usually not winged. Found in the Caucasus and Armenia at 4,300-7,000'. Subsp. intricata is smaller in growth habit than the typical elatior. It has been in cultivation for almost a hundred years and is found in S. Europe. The calyx is tubular, the lobes triangular, acute, the scape short. The leaves are smaller, edges reflexed, ovate
P. elliptica, scarcel y wrinkled, and are narrowed to a winged stalk. Subsp. leucophylla differs from elatior in that the leaves are thicker in consistency — which becomes even more noticeable when the plant is cultivated. It is known as the Caucasian Oxlip and is found on limestone formations in Austria "in the land of the beech trees," in the Carpathians and in Transylvania. Specimens cultivated at Edinburgh were longer-lived than other species in this section. It is considered a desirable garden plant. The umbel is many flowered, flowers yellow and almost 1” in diameter. It loves lime. Seeds are available. Subsp. Lofisbôisei is a native of the Sierra Nevada in Spain at 7,000’. Difficult to separate from subsp. intricata, but has been recognized as an entity since 1925. The corolla is not flat but funnel-shaped. Experiments by Harrison definitely indicated that it will cross with Juliae and vulgaris, but no successful crosses were made with elatior or with subsp. intricata. Subsp. Pallasis collected first by Pallas in Altai; the Golden Mountains of Central Siberia where any field botanist should be happy, strongly resembles subsp. intricata. The calyx is very narrow-tubular with recurved lobes. The leaves are oblong to elliptic and are scarcely wrinkled. It ranges from the Urals and Caucasus through parts of Turkey, Persia and E. in the Altai area. It has long been in cultivation and Howard Lynn of Tacoma states, "this plant warrants listing as a separate species for it is extremely different in culture from its allies. It blooms from January to March and is a highly desirable plant for a sheltered spot in the garden. It needs summer protection from the sun. Three useful criteria for differentiating between the true Oxlip (elatior) and the true Cowslip (veris) are: 1) The calyx lobes of the Oxlip are triangular, finely haired, and pointed; those of the Cowslip are less hairy and blunt. 2) The capsule exceeds the calyx in length in the Oxlip; it is inferior to the calyx in the Cowslip. 3) The throat of the Oxlip is smooth; that of the Cowslip contains distinct folds." (DO)

**Elizabethae** (18) Beautifully pictured and described in the Bulletin of the Alpine Garden Society No. 37. The flower is primrose yellow, the eye densely covered with white or pale sulphur colored farina; tube of corolla cylindrical. The base of the stem is bulbous and covered with handsome over-lapping reddish scales as much as 3/4”-2” in length. (The ones found by Ludlow and Sherifff were reported to be only 3/4” long.) Flowers open before the leaves fully expand from the basal scales; blade of leaf 1-2” long; half as broad, ovate to sub lanceolate, quite pointed at tip; semi-heart-shaped, rounded or wedge-shaped at base; finely toothed at margins; without farina, dark green on upper surface, pale greyish-green below, with broad midrib, lateral veins less obvious; in mature leaves stem is longer than the blade, and up to 4” in length. The flower stem is stout; 4/3-4” tall; generally carries a single flower but there may be two in a cluster; in which case they are borne on short pedicels 3½-5½”; calyx cup-shaped, green, faintly tinged with red. It grows in S.E. Tibet on “open slopes which on the Lo La were covered with snow on the 16th of May. . . Species flowered this summer (1939) from plants lifted in the field and sent home (England) by air.” (L&S. AG No. 37)

**Elliptica** (11) Discovered by Royle in Kashmir in 1851, was in cultivation in England prior to 1886, and although grown since it remains rare in gardens. "Sands quite close to rosea but its flowers are purple instead of pink, and its leaves are elliptic on long stalks." (RF)

**Ellitiae** (20) First found in the Sandia Mountains of New Mexico at 9-12,000’, Cultivated at Boulder, Colorado, and grown by MacWat in England from seeds received by Balfour through Professor Cockerell of the University of Colorado, who flowered this species in 1919. Clifford Creswell writes that Ellitiae is one of the comparatively few American species which is worth growing. The flower stem is 4-6” high, sturdy and upright, covered with stalked capitate glands, sometimes with white farina at tip; bearing a somewhat one-sided umbel of 4-8 flowers, pale mauve to rose-magenta with a yellow eye and a yellowish tube. The root is short and stout. The dull green leaves, including petiole 2½”-6” long; blade 1½-4”, 3½-1½” broad; elliptic or oblong-elliptic to oblanceolate, oblong or ovate at apex; tapering to a bluntly denticulate at margins, marginals teeth being organs for the discharge of moisture; texture somewhat leathery; thinly covered on both surfaces by glands; midrib conspicuous both above and below; the blade arises from a sheathed crown. Not as difficult in cultivation as most of the Parry Section.

**Elongata** (18) was flowered in Britain in 1937 by Mr. Ronald Smith from Sikkim seeds. Ludlow and Sherifff sent home both seeds and resting buds in 1949-50. It is suggested that elongata be grown in rather congested groups in a rich, well drained mixture, being careful to provide abundant water during the growing period, but being doubly careful to withhold it almost completely when the plants have died back. "The corolla is a sulphur yellow; the tube is very narrow and cylindrical, three times as long as the calyx in thrum-eyed flowers and twice in pin-eyed flowers and then widened from the middle . . . The plant has a short stout rhizome; at flowering time there is little evidence of the imbricate farinose scales of the resting-bud which in autumn is comparatively small and slow to develop at the base of the fruiting scape.” (F) The leaves are “membranously winged down the petiole, 3-5” long, 3/4-1½” broad and increase in size towards autumn. They have a crenate margin and are covered below with a pale yellow farina. The scape reaches up to 1’ and carries 5-10 flowers which have a distinct annular ring around the throat and are 3/4” in diameter.” (W1) The umbel either is single or may be superposed. The pedicels seldom measure over 1/2”.

**Erratica** (11) Collected by Farrer in S. Kansas and described as Loczi i (Farrer, not of Kanitz) called sertulum (of gardens, not Franchet). Perennial, stoloniferous (sending out or propagating itself by runners), low growing. The 6½ wiry runners develop leafy terminal plantlets which have been leafless during dormancy but which actually develop to the point of flowering in the spring. The leaves are oblanceolate, 4/4-2” (or 3”) long, ¾” broad, obtuse, denticulate or entire, sparingly farinose beneath tapering to a very short, winged petiole. The flower stem is 1½-4” long and bears an umbel of 1-8 flowers which are rose colored and ½” across with obovate, deeply notched lobes. The calyx is cup-shaped and is ¼” long. The pedicels are almost 1” long. "... Emerging from this wood, you pass a little cozy monastary tucked undiscoverably into a bay of the hill, and find yourself on a moorland down of shrubby Potentillas and such like leading up to the final ridge, and dlimped with myriads of tiny hummocks, round the turfy slopes of which grows the rose-pink heads of a dhar little Primula, so close akin to our own bird-e-en that you need go no farther than P. farinosa for its picture, though this pretty thing has no meal, is perhaps a trifle shorter in the stems and larger in the flowers and has the very curious habit of running about with bright green fleshy runners till it often

(Courtesy Country Life)

P. elatior subsp. leucophylla

The flower is primrose yellow, the eye densely covered with white or pale sulphur colored farina; tube of corolla cylindrical. The base of the stem is bulbous and covered with handsome over-lapping reddish scales as much as 3/4”-2” in length. (The ones found by Ludlow and Sherifff were reported to be only 3/4” long.) Flowers open before the leaves fully expand from the basal scales; blade of leaf 1-2” long; half as broad, ovate to sub lanceolate, quite pointed at tip; semi-heart-shaped, rounded or wedge-shaped at base; finely toothed at margins; without farina, dark green on upper surface, pale greyish-green below, with broad midrib, lateral veins less obvious; in mature leaves stem is longer than the blade, and up to 4” in length. The flower stem is stout; 4/3-4” tall; generally carries a single flower but there may be two in a cluster; in which case they are borne on short pedicels 3½-5½”; calyx cup-shaped, green, faintly tinged with red. It grows in S.E. Tibet on “open slopes which on the Lo La were covered with snow on the 16th of May. . . Species flowered this summer (1939) from plants lifted in the field and sent home (England) by air.” (L&S. AG No. 37)

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forms into an intricate mat, with the effect of some questing vegetable octopus.”

(RF “On Eaves of the World.” p. 197) Farrer’s comparison with *farinosa* is justified.

... apart from the cytological data, the long stolons and basal bud-scales preclude it from that association as *f. flexicaulis*. Noteworthily is the variation in the bracts even in the one and same collection; they may be without any basal appendage, may be only thickened or may be pouched or even slightly auricled (eared). (F)

*eucydia* (9) Bhutan, 5-10,000’. Nearest ally *atrodentata*. Closely related to *deutonculata*. The flowers are mauve (“red-to-purple-to-blue” J.L) with a yellow eye, the scape is 12-42” high, (10-55 cm. tall [F]), 1-4 to each plant and bearing a few to a many flowered head. Corolla is a delicate blue-violet with an orange eye. The leaves are oblongulate, somewhat farinose beneath. “Found on damp meadows in heavy loam and on dry pastures as well, where the plants do not grow as large. The scapes are red and the leaves are red-green.” (J.L) “... it produces flowers later in the season than *atrodentata*. ... it is larger plant, its leaves are scarcely farinate. It also lacks the bud scales which distinguish *deutonculata*. I have several reports from English growers who find it easy to grow; they describe as pleasing its fragrant, yellow-eyed flowers, which are borne on foot-long scapes.” (B:CSP)

eucydia* (7) (Pictured B: CSP p. 169) “... growing in crowded colonies (at 14-15,000’, Tsarong, Tibet) forming mats many yards in extent sheeted with bloom, in stony alpine meadows, and also on cliffs.” (RF) Ward considered that the normal range of the species is 10-11,000’, however Rock reported the plant as growing on limestone outcrops and crags at 15,000’, and at 15,000’. The plant received and Award of Merit in 1950 and is still in cultivation. The flower stem is 1½-2½” tall; slender, usually bearing 2 flowers. Corolla pale shell-pink to dark-mauve with yellow or reddish eye. It is low growing with long trailing rootstocks by which the plants may be propagated by division. Leaves include petiole 3½-3½” broad; orbicular, deeply heart shaped at base, palmately cut in center into 7 deeply toothed rounded lobes, dark green, finely hairy above, pale green below, haired at margin; midrib and certain of the lateral nerves are prominent below. “I found mossy banks of *P. eucydia* starred with lilac and violet flowers, the petals fringed, the eye yellow or red as in an allied species, *P. Normanniana*. It is a delicate dwarf, bearing its flowers in pairs or occasionally in three, on crimson threads. Coral red runners radiate from the plant and throw up sprigs of chubby leaves which take root; their cuttings strike easily. The tiny leaves borne on crimson stalks are deeply cut after the manner of a geranium.” (George Forrest) Grown at Wisley in the cold house.

*exigua* (11) Velenovsky was the first to record this species from the moist meadows of Bulgaria and he separated it from *farinosa*, which it closely resembles, because of its much more slender habit, by the smaller leaves always obviously petioled, by the longer pedicels and by the acute lobes of the glabrous calyx, by the fewer flowers, and by the shorter corolla tube. He regarded *exigua* as resembling *stricta* rather than *farinosa*.

*farinosa* (11) This is the beloved “bird’s-eye” of Reginald Farrer and is called “The Bird’s Eye Primula” because the flowers, which vary in colour from light purple to lilac, pink and even white, always have a distinct yellow eye. As its true name indicates it is farinose and the meal is densely powdered over the undersides of the leaves and the flower scapes to give the plant a silvery appearance. The scape, about 1½” high, carries a few or many flowers in its compact umbel, the erect farinose pedicels are almost ½” long. It is a gregarious perennial plant and develops numerous crowns. The leaves, including the leaf stem are ¾-4” long and up to ¾” broad; oblongulate, elliptic or ovate, base of blade tapering gently into a winged petiole which may be almost absent or equal in length to the blade. Upper surface of leaf deep green and shining; midrib conspicuous, lateral veins less so. Distribution extends through all the European countries (except Greece and Ireland), N. Asia to Altai and the N. Pacific shores, through S. Scotland. Will Ingwerson writes that “it is one of the few rock plants found wild on our own Island (England.) Parts of Teesdale and Yorkshire bear woods which are pink with millions of flowers of this dainty plant in June... it is always a most delightful plant, although too often short lived. It is easily raised from seed however, and there is no need ever to be without it. It likes a not too dry position, and prefers the drainage to be not too sharp. It is usually a native of moist meadows at fairly low elevations, and must not be regarded as a true alpine plant. It makes an excellent sink plant, planted in company with Gentiana vernica it will make a delightful picture in the early years. (AGS: Vol. II, p. 161) Seeds of *farinosa* germinate in a week or two after sowing if planted as soon as the seeds are ripe. It is hoped that great areas will be naturalized to this primula which is such an effect in masses as “Acres are stained with its purple colouring, and a visit to the Lake District at the time it is in bloom will reward the Primula lover for the journey, not only because of the exquisite effect of the flowers in a mass, but also from their appearance as they raise their umbels of bright little flowers above the surrounding grass. Such a visit will also afford useful hints respecting the cultivation of the plant, which some find rather difficult, although the writer succeeds with it in the open ground in ordinary soil. It is found in many different soils and positions in its native habitats, where it varies much in stature, owing to these varying conditions. In its native home it is most amenable, owing probably to the fact that the plants are self-sown seedlings which have from the seedling stage accommodated themselves to their surroundings. Brilliant sunshine seems to suit it as long as it is moist at the roots. I have observed it (in cultivation) flourishing in a compost of one part loam, one part of, and about a fourth of sand and grit, and in a low-lying, sunny position, where it was assured of plenty of moisture during the growing and flowering season. I have also met with it thriving in a stiffish, rather heavy sticky loam, which did not dry up readily in summer.” (MacW) P. *farinosa* bloomed at Barnhaven, Gresham, Oregon, about April 1st and seeds were gathered in June. The plants grown in limed soil had as many divisions as those grown in acid soil. Within a species as broadly distributed as is *farinosa* it is not surprising that numerous geographical varieties have developed. *Var. albiflora*, a plant bearing white flowers, and known since the days of Clusius, is found chiefly in Switzerland. Var. *echyropa* differs from the type in having golden-yellow, rather than white farina on the underside of the leaves. It is believed to be restricted in its range to the watershed of the Amur River of eastern Siberia. Var. *denudata* has no farina, found in Central Europe it extends E. to the Amur River. It was exhibited during the first Primula Conference in London in 1886, but has rarely been in cultivation. Var. *flexicaulis* is restricted in range to parts of Switzerland, and differs from the type in forms of scape and corolla. Var. *bitteralis* is found in limestone formations on the Durham coast of England. Differs not only in form of leaf, but in the corolla and the corolla lobes. Var. *pygmaea* is a dwarf form found both in Sweden and Switzerland. Var. *xanthophylla* is found in Szechwan, Mongolia and Kamchatka. A correspondent from France writes that it shows its preference for a coarse potting compost by twining its roots into particles of wood and compost and about coarse grit and mortar rubble. "In Germany it blooms from May to July, in Edinburgh during June, in London during April and May, in Italy in April and May, in Canada in June and in the...
Fasciculata (11) Yunnan, S.W. Szechwan, E. Tibet, Kansu. This charming miniature has been in cultivation for many years but is not so widely grown as to fall into the class of popular garden plants. It bears a distinct resemblance to tibetica. It grows in tufts like grass. The leaves have a small blade \( \frac{1}{2}-1 \frac{1}{2}\)” long and \( \frac{1}{2} \) as broad, oblong to elliptic, rounded at the tip, unthoothed, tapering to a winged stalk up to \( \frac{1}{3} \) as long as the blade, fleshy in texture, with prominent midrib. The scape is usually entirely lacking in which case the flowers are solitary, but occasionally, when it is present, the plant may throw a scape which measures \( 1\frac{1}{2} \)” and which may bear as many as 6 flowers. The calyx, although tubular, is noticeably five nerved so as to appear almost 5 angled, on ridges, and lighter between. The corolla, \( 3/5 \)” across, is pale rose to bright pink with a white yellow eye. This is the same plant which Farrer named Reginella and called his “Little Queen of Crest Royal.” . . . the blossoms were big for the tiny plant, they were carried on footstalks of an inch or two from a scape so close to the ground that it looked as if each gay little round-faced gold-eyed brightness was springing solitary on a thread fine stem of its own, and, finally, the plant did not grow in cushions, but in quite small tufts of two or three crowns at the most.” (RF: The Rainbow Bridge) . . . Each petal is deeply cut into 2 rounded lobes. In cultivation it should have a moist vegetable soil during the growing season, but should be kept fairly dry in winter. Like many in this section it tends to die after flowering, seed should be saved and sown as soon as possible after ripening.” (AG: Vol. II, p. 82)” . . . a real treasure for pans in the alpine house and for stone troughs in gritty, well-drained soil rich in humus.” (WI)

Firminia (11) This species has been confused with two others, modesta and Matsu- murae, although each is distinct as indicated by the material grown and flowered at Edinburgh from seeds from Japan. Firminia is a dwarf plant, bearing yellow farina over the lower leaf surfaces, the bracts, tip of scape, calyx and pedicels. The leaves are ovate or sub-orbicular, 2-3” long, obtuse, finely crenulate, narrowed to a winged stalk. The margin is finely crenulate or subentire. The scape is \( 1\frac{1}{2}-4\frac{1}{4} \)” tall, bearing an umbel of 2-9 flowers, which are rose or purplish in color, with yellow tubes. “It is not a very exciting plant and just misses being a beauty. . . . it may need to be seen in drifts and colonies to be fully appreciated but, even so it is likely to lack the brightness of our own native farinosa with whose charm it cannot compete.” (WI)

Firminia (19) A small delicate plant, sometimes developing stolons, whose flowers are not as attractive as the leaves. “This little plant grows on rocks in Bhutan at no great elevations and resembles a smaller version of obconica. Like that species it is not hardy.” (F)

Firminia (26) SE Tibet, NW Burma, Assam, Himalaya syn. flexilipes. . . . a graceful and slender plant with pale-yellow and sweetly scented flowers like those of dipicola and the foliage is as rounded and deeply cordate as that of Florinade, but is a much better proportioned plant than Florinade ever was. . . .

(Author's Name and Publications)

INFORMAL BIBLIOGRAPHY AND KEY TO THE ABBREVIATIONS OF AUTHOR'S NAMES AND PUBLICATIONS

ACUB Mrs. A. C. U. Berry, Portland, Oregon
AG Bulletin of the Alpine Garden Society (please turn to page 64)
B Walter C. Blasdale, Berkeley, California, author of Cultivated Species of the
C Kenneth Charles Corsar, Midlothian, Scotland, author of Primulas in the
DB David Livingstone, Edinburgh, Scotland
DO Donald O'Connell, Cambridge, Massachusetts
FL Florence Levy, Editor Emeritus, Cresham, Oregon
FPI Fourth Primula Conference, 1928, published by the Royal Horticultural Society
G.F.J. Journeys and Plant Introductions of George Forrest, Oxford University Press
JSR Journal of the Scottish Rock Garden Club
JL Leo Jellito as translated by Robert Luscher
L&S F. Ludlow and Major G. Sherriff, Angus, Scotland
MacW John MacWatt M.B. The Primulas of Europe
RHSJ Journal of the Royal Horticultural Society
SRGC Second Rock Garden Conference, published jointly by the Alpine Garden Society and the Scottish Rock Garden Club. (please see page 64)
ST Major George Sherriff and Dr. George Taylor
WI Will Ingewson, Sussex, England

THE NATIONAL AURICULA AND PRIMULA SOCIETY (Southern Section). Membership, $1.50. (Yearbook only, $1.00) Please write to the Hon. Sec. Edwin C. R. Hill, B.Sc. % G. L. Hearn & Partners, King's Head Yard, Borough High St., London, SE 1, England.
There is supposed to be quite a mystery about how to get seeds of the rarer species. There are those whose reaction to questions as to the source of their "P. dryadifolia" would be the same as if some oat asked them for their heirloom recipe for fruit cake. There are others, however, who brave dreadful discomforts with subsequent ill health, spend all their own capital and hunt for subsidies, leave their own beloved gardens and comfortable positions to go out into rugged, untamed, and dangerous country to find new species, so they can distribute their seeds to gardeners. Such men are KINGDON WARD, GEORGE FORREST, REGINALD FARRER, DR. ROCK, GEORGE SHERIFF, GEORGE TAYLOR, F. LUDLOW, and many others. Each seemed to get a splendid reward from the sights of species in bloom, and each returned to write poetry in prose about their discoveries.

We rather take the plants in our gardens for granted, nor realizing that many of them were not in cultivation in the nineteenth century. *P. pulverulenta*, the easily grown and beautiful candelabra is of our own century, Primulas *aurata* and *huttonia* were described for the first time in 1941, and the many of the new introductions are beautifully described by CORSAR in the revised edition of his book *PRIMULAS IN THE GARDEN*, and by Fletcher in *THE JOURNEYS AND PLANT INTRODUCTIONS OF GEORGE FORREST*.

There are many growers who stock seeds which bring them little or no profit because they are aware of the need to popularize unknown species. They are so interested in the recent developments that they help to subsidize many of the plant hunters. They seldom sell seed which comes to them direct from the field. The seeds which they list in their catalogues are the results of their own plantings and is, to a certain extent, more acclimatized. The first thing on the agenda for the would-be collector is to arm himself with catalogues. The following have lists of rare and unusual seeds: ALPENGLOW GARDENS, 1504 Trans-Canada Highway, R.R. 10, New Westminster, B.C.; FRANK H. ROSE, 1020 Poplar Street, Missoula, Montana; THOMPSON & MORGAN, Ipswich, England; RALPH CUSACK, Uplands Roundwood, County Wicklow, Ireland; REX PEARCE, Moorstown, N.J.; W. E. TH. INGWERSEN LTD., Gravetye, East Grinstead, Sussex, England; Jardin Alpin, FLORAIRE, Avenue Petit-Senn 50, Chene-Bourg, Geneva, Switzerland; BLACKWELL & LANGDON, Bath, Somerset, England; THE SCOTTISH ROCK GARDEN SOCIETY, 1124 Pennsylvania Ave., Washington, D.C.; THE AMERICAN ROCK GARDEN SOCIETY, 19A Pittford Way, Summit, N.J.; G. GHOSE & COMPANY, Townend, Darjeeling, India; THE NATIONAL AUERICULA AND PRIMULA SOCIETY, c/o Mrs. Clara Noce, President, Rt. 4, Box 6420, Vancouver, Washington.

The seed exchanges are an exciting and an inexpensive way of getting many of the rarer seeds. Instructions are put out by the following Societies for their members: THE ROYAL HORTICULTURAL SOCIETY, Vincent Square, London, S.W. I, England. (A petitioner must have a recommendation from a Fellow of the Society.) The dues for Overseas Fellows are about $3.00 per year. This includes a monthly Journal which contains the latest scientific horticultural information. THE ALPINE GARDEN SOCIETY, please see page 64. THE SCOTTISH ROCK GARDEN SOCIETY, please see page 65. THE NORTHERN SECTION OF THE NATIONAL AURICULA AND PRIMULA SOCIETY, please see page 47, and the SOUTHERN SECTION OF THE NATIONAL AURICULA AND PRIMULA SOCIETY, please see page 59, have other arrangements by which members trade directly. All these Societies welcome overseas members and their Bulletins and Year Books make very pleasant and informative reading. The American Rock Garden Society has a fine seed exchange, please see page 61.

Each seed exchange has its own directions, but if a good choice of seeds is desired it is well to send the Seed Exchange Director the equivalent of an airmail stamp (An International Coupon can be purchased at any U.S. post office), so that your list will arrive not more than three days after mailing. The Seed Exchange Director is a much overworked and never paid member who has more complaints than compliments for all his work and good intentions. He seems to be held responsible for not having enough of the rarer seeds in the Exchange. It is obvious that this responsibility belongs to the members.

There are many other ways by which the avid collector goes about fulfilling his dreams. Friendships are made where the prime motive is international understanding but the ulterior motive is to acquire otherwise unobtainable seed. Our own meadows and forests are rich with seeds which could fulfill the needs of a foreign correspondent. The rosters of the different Societies and the lists of names granted awards for growing fine specimens of Primula have provided collectors with names of people who might appreciate exchanging seeds. A gift membership is often a fine opening wedge in friendship.

By the time the amateur has exhausted all these sources of supply he will be ready to start trading with Botanical Gardens and Commercial Growers. The mystery of how to get seeds of the rarer species can be solved by a good plant detective.

**The Clark County Primrose Society Project**

**At The Battle Ground High School**

MRS. WALTER A. ROE

We of the Clark County Primrose Society (an A.P.S. affiliate), with the help of the Future Farmers of America and their leader, Mr. Phillip Scheafer, are going to introduce our school and community to the growing of Primulas. The Horticulture Department of Battle Ground Consolidated Schools has been most cooperative in matters such as supplying the location and water. The school has a natural wood lot 460 by 81 feet, which we will use for our project. On it there is a large number of trees and natural ferns to which we are going to add wild flowers, shrubs, and ferns with as many species and hybrids of Primula as we can gather and plant. We will bring in lava rock to make a natural rock garden. We will also teach the young people how to pollinate, propagate, and care for their Primulas so that they can eventually do most of the gardening. We are going to try to get books for the school library which will aid them in the study of practical botany.

We are planting Polyanthus, Candelabras, *vulgaris* and Julianas as part of our landscaping project for the flower beds in front of the Agriculture building at the School.

We will report on the project as it progresses to the point where "before and after" pictures are effective. It is a great reward for our efforts that the interest of the students is so vital, and that they are so willing to learn about Primulas and at the same time to work to make their school grounds beautiful. We have many willing workers as the community is getting interested, and there are 5100 students in the school, but our supply of Primula species and hybrids is very limited. We will gratefully accept any donations sent to us. We are also soliciting books on the Primula for the School Library. All inquiries and donations may be made to THE CLARK COUNTY PRIMROSE SOCIETY, c/o Mrs. Clara Noce, President, Rt. 4, Box 6420, Vancouver, Washington.

**Broaden Your Knowledge of Plants**

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An Appreciation Of Reference Material
And Library Facilities

The A.P.S. is building a library within the facilities of the Portland Public Library. One copy of each book we buy or have donated is being put in the Reference Room for safe keeping. Other books are put in the Circulating Department as memorial copies for members who have passed away. All these books are available all over the United States, to anyone who has a public library card, through inter-library loan. A full list of these books will be published in the October issue. In the meantime, almost any book on the Primula is available to the members through this accommodation.

As stated in our Introduction to the Pictorial Dictionary of the Cultivated Species, the MONOGRAPHS OF THE GENUS PRIMULA by Sir William Wright Smith and Dr. H. R. Fletcher were used as the basic reference material for the Dictionary. There is a monograph for each Section and these may be ordered by inter-library loan from the Reference Room of the Portland Public Library. Due to Library Procedure these volumes can only be ordered by number. These numbers will be given in our complete bibliography in the October 1954 Quarterly. Some of them are listed in the advertisement of the Royal Society of Edinburgh in the October 1953 Quarterly, page 70. These monographs contain a complete description of each species, whether it is in cultivation or not, as well as information about where each is found in nature, the plant hunters involved, some cultural hints, and source material. In spite of the fact that the monographs are scientific, much of the writing is very well done from a literary point of view and is interesting to the non-botanist. They have all been published in Edinburgh with the exception of the Soldanelloides Section which is now out of print.

The A.P.S. Quarterly owns a complete set of the ALPINE GARDEN SOCIETY QUARTERLY and these will soon be turned over to the Reference Room of the Library Association of Portland. The Library is very anxious to get them, as many numbers are entirely out of print. There are many of the finest articles ever written on the Primula and some of the best illustrations of Primulas in these Quar ters. The Volumes I-XV are doubly valuable because they have been indexed so well that the Quarterly Staff uses them in the same way as they use the very fine four volume ROYAL HORTICULTURAL SOCIETY DICTIONARY OF GARDENING. The R.H.S. Dictionary contains a good deal of general cultural information as well as a botanical key to the different Genus including the Primula. It was published at the Clarendon Press at Oxford and is the most up-to-date and comprehensive work of its kind. The ALPINE SOCIETY BULLETINS are now edited by C. C. Mountfort who is the acknowledged Dean of Editors for this type of publication.

THE SCOTTISH ROCK GARDEN CLUB publishes two JOURNALS a year. These have made a very fine addition to our library in the Reference Room of the Library. The Editor, Mr. Mowat, of the Botanic Garden at Edinburgh is both capable and discriminating and has given a good bit of space to the Genus Primula and some of the contributing members are the finest growers and photographers of Primulas in the world today. Very few Primula enthusiasts are interested exclusively in their favorite plant and this Journal can help the reader to fill in the garden with companion plants which are both rare and hardy.

The most necessary and most easily accessible reference is a good dictionary. By referring to a dictionary for unfamiliar words, one can build up a practical botanical vocabulary which has the power truly to enrich a gardener's reading. A good dictionary, such as WEBSTER'S COLLEGIATE, properly used, is the student's best friend. Most good gardeners are students as long as they live. The gardener "who knows it all" fools no one except possibly himself. If only one book on gardening can be afforded, that book should be a dictionary, because it can never be replaced by current reading in periodicals. (to be continued in July)

The President's Message

I am very grateful to be a member of the A.P.S. I have enjoyed the Quarterly and the friendships I have made with members. Now that I am a "working member" I realize how much many members miss who do not help with the functioning of the Society. A group of us have worried along together about the financing, about the judgments which have to be made on short notice without enough information, about the work which must be let go because there are not enough people who realize the joy of working together with other people whose interests are similar. Strangely, the ones who do the most for the Society are the very busiest people who have little or no time for the obvious forms of entertainment.

It is our business as a Society to help everyone to know and enjoy Primulas as we have learned to do. We have a universal interest which is above all political and geographical differentiations, and it is our mission to speak to the people of every country about this peaceful pursuit. This idea was brought to my mind quite forcibly by a story in the NATIONAL GEOGRAPHIC of July 1947, entitled, "The World in Your Garden." The author visited the head-hunting Jivaros Indians in the Ecuadorian Andes. One tribe had made "museum specimens" out of a group of gold miners who had gone through their territory. The author was not reassured as to his fate when he observed a "rather fresh relic with a magnificent set of red mustaches." However, when he met the chief, he turned the aloof old man's thoughts to the garden and thus illuminated from the chief's mind any possible consideration of doing art work on his head. When the old chief realized that the author's interest was in studying the plants of the territory, he became a welcome guest. He found that the Jivaros were excellent gardeners, and that as such, they had a great deal in common.

If we can establish relationships with other human beings and learn to know them as they naturally are, underneath all the layers of traits imposed upon them as peoples, by propaganda and political bias, we will be surprised how we can live in harmony and learn to share our regional knowledge of horticulture. We, as a Society, have not as yet reached out to Ecuador, but we do have members in South America, Europe, The British Isles, Australia, New Zealand, Alaska, Canada, as well as in almost every state in the Union. A great deal of "trading" is going on in the Society and seeds are being exchanged for memberships in countries where it is almost impossible to export money. We have seeds planted fresh, which were ripe in January, because they came from Australia. We have friendships through correspondence, which we started before we were officers in the Society, which have been rewarding in friendliness and interest.

We are proud to announce that Honorary Life Memberships have been granted to the following persons who have distinguished themselves by their work with the Genus Primula: Sir William Wright Smith, Dr. H. R. Fletcher, Mr. Cyril G. Haysom, and Mr. Dan Bamford.

A glance at the Treasurer's report will show that the Society is in a prosperous condition. This is due to the early response of members in paying their dues and to the untiring efforts of our Treasurer, Mr. C. Y. Griffin. The membership, particularly in the outside areas, is rapidly increasing. The three Spring Shows are under the efficient leadership of Mrs. T. W. Blakeney, and everything points to a spring season that will be unusually successful. A basic need of the Society is being cared for by the Study Group under Mrs. John Karnopp's kindly guidance. We must also gratefully acknowledge the help of the commercial growers who have allowed us to stimulate interest in the Society by placing membership leaflets in their display, and we must all bear in mind the three-fold interests of the American Primrose Society. The stimulation and help to our working members, the cooperation of affiliated groups with the Society as a whole, and the integration of our membership throughout the U.S. and other countries. Even at this early date, it is not too optimistic to look forward to a most successful year.
Report from the Show Chairman

2572 S.W. Watson
Beaverton, Oregon

Dear Fellow Members:

The American Primrose Society will take part in the SECOND ANNUAL SPRING GARDEN FAIR at the Fairgrounds at Gresham, Oregon on April 22nd, 23rd, 24th, and 25th, this year. Our display will be a Garden scene, and Primroses and companion plants will be planted in a space of 12 x 34 feet. We hope that the setting will be even more beautiful than it was last year. The American Primrose Society will hold their annual sale in another building and we hope that you will all come and see the display and support the sale. Mrs. Jerry Harthorn and I are co-chairmen for this event.

The 13TH ANNUAL PRIMROSE SHOW will be held Saturday and Sunday, April 10th and 11th, 1954, in the Visitors Information Center of the Portland Chamber of Commerce, 1020 S.W. Front Avenue, Portland, Oregon. Gen'l. Chairman—Mrs. T. W. Blakeney; Asst. Show Chairman—Mrs. Fred E. Butt; Publicity—Mrs. Boyd Myers; Property—Mrs. Daniel Gee; Entry—Mrs. C. Y. Griffin; Classification & Nomenclature—Mrs. Florence Levy; Placing—Mrs. Boyd Meyers; Judges & Ribbons—Mrs. T. W. Blakeney; Judges Clerks—Mrs. Jerry Harthorn; Hostess, Information, Trophies & Awards—Mrs. O. J. Zach; Commercial—Mrs. Lindsay G. Miller; Educational—Mrs. J. L. Karnopp; Membership & Registration—Mrs. Edward Paulsen and Mrs. C. Y. Griffin; Tally Chairman—Chas. E. Scott, Dale Worthington, Mrs. Jerry Harthorn, Miss Madge Ellis; Clean-up—All members.

We as lovers of flowers, should never allow the glamour of a prize card to come between us and the beauty of a flower. There are no secrets in successful culture. To your final love of Primulas, give all your heart, learn all you can, love your plants and give them every attention. Help the small grower to the show table. Go out to win, but in defeat, always be gracious. Let the shows be the means of promoting fellowship. Our program has been directed to cover the greatest interest of our membership and to unite their efforts to create a more beautiful place in which to live. There is no greater satisfaction for work well done than to know that our homes, our community and our State have benefited because of it. This year has been a challenge to each member to make it our most successful one and may each of us be inspired to greater activity. We invite one and all to come and enjoy the show with us; also enter your plants so that they too may have a part in our show. This is a date. Meet us at the Information Center, April 10th and 11th. We will be most happy to greet you and help you with your Primrose culture and invite you who are not members to join us to better enjoy this hobby.

Mr. T. W. Blakeney, General Show Chairman

THE JEFFERSON HIGH SCHOOL students are holding their Fifth Primrose Show in conjunction with their usual May Day celebration. Their show was very beautiful and well managed last year. Although Mrs. Boyd is the A.P.S. consultant the Show is staged by the students. The Klat-a-wa Club will sponsor the show which will be held April 30th. The Show Chairman is Miss Nancy Wyley.

THE SCOTTISH ROCK GARDEN CLUB

Annual subscription $1.50 personal check or bank draft. Two journals a year.

Frequent articles on Primula. Liberal used exchange. Seeds of 72 varieties of Primula distributed last year. Write for membership form and for information to—Major-General D. M. Murray-Lyon, Honorable Publicity Manager, 28a Inverleith Place, Edinburgh, 4, Scotland.
STOP DAMP-OFF QUICK!

Learn How for a Dollar . . .

1224 Growers Stop Damp-Off, Mildew, Stem Rot & Blue Mold. Get High Seed Germination & Full Stands With Natriphene . . . .

IOWA: “Natriphene is working wonderfully in our greenhouse. We found nothing to do away with damping off of plants until we started using Natriphene. Results have been overwhelming.”

So we let them write our advertising —

Oregon: The premier grower of primroses throughout the U.S.A. used your product and was successful in mailing out over 120,000 seedlings this year.

Calif.: A friend gave me a Natriphene sample for control of fungus on my begonias. I have sprayed twice at one week intervals and cleaned up sordid conditions. The Horticultural inspector was here today and marveled at results having seen the plants before.

Wonderful for Pre-emergence Damp-Off

Oregon: Your Natriphene has solved a very acute problem in our seed benches by cleaning up bread mold which gits the seed just as germination begins. We have found it safe and entirely effective.

Calif.: 100 precious hybrid gladiolus seeds, soaked in Natriphene 48 hours before planting, up in 16 days with 100% germination where we expect and are satisfied with 50%.

Mich.: Natriphene saved more plants for us than all products we ever used.

Ohio Rose Nursery: Have been getting good results keeping “Die-Back” in check on our rose plants during storage from fall to spring.

Fungus moves fast. Have a can of Natriphene on hand when fungus starts so you can stop it quick.

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Ship Natriphene Fungicide checkee below:

Trial box makes 16 gals. fungicide for.........$1.00
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Title

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Red and Pink forms—$2.00 each. Mixed—$75

POLYANTHUS
Crown Pink and Warm Laughter—$2.50 to $5.00 each
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Blues, Golds, Midas Yellows, and Cowichan Strain $50

Orders being accepted now for Polyanthus seedlings to be ready for delivery in June, prices listed in catalog to be had for the asking. “Crown Pink” and “Warm Laughter” seedings at $6.00 per dozen.

AURICULAS
(for summer delivery)
A few fine plants of Green Edged Auriculas will be available at $10 each

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WHOLESALE
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is a charter member of our Society. He recommends the white celluloid plant label because it will take either a common lead or a waterproof pencil and retain the marking indefinitely. Later they can be scoured and used again.

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Perennial and annual plants, seeds, bulbs, flowering shrubs, and pet supplies.

Mr. Allen W. Davis, Manager of the PORTLAND SEED AND PET SHOP

Signed
Title
Alpenglow Gardens News

We have just mailed our supplementary lists containing many rare Primulas including named Show, Alpine, Garden and Species Auriculas (please see our advertisement in the October 1953 Quarterly, page 69). We also have many other fine Alpine Plants; Border Carnations, dwarf Shrubs and Seeds in our list and if you have not received your copy, please ask for one, it is free.

Although Show and Alpine Auriculas can be shipped at almost any time, we suggest shipping the first few months of the year before the plants are in full growth.

Alpenglow Gardens — Michaud & Company
1504 Trans-Canada Highway, R.R. 10, New Westminster, B.C. Canada

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The last few years have brought some amazing new multi-purpose sprays and dusts for easy, dependable plant protection.

You no longer need to recognize the insect or the plant disease... just two good sprays! ISOTOX AND ORTHO-RIX, a multi-purpose dust (BOTANO) and B Ug-G ETA pellets for snails and slugs will protect your garden all season.

Should You Dust or Spray?

Dust if you are looking for the easy way. It's faster, cleaner; saves dilution mixing. Use dusts that come in handy pump-action flasks with economical refill packages, such as BOTANO Deluxe or ORTHO Rose Dust.

Spray for economy and efficiency. Saves money—you less. Sprays last longer, stick tighter, give better coverage. Use ISOTOX Garden Spray, either alone or mixed with ORTHO-RIX Spray. This combination controls both insects and plant diseases. For handy home spraying you'll like the ORTHO SPRAYETTE—attaches to your garden hose; mixes water and spray material automatically as you spray.

Pesticide Make Baiting Easy. For snails and slugs, simply toss BUG-G ETA Pellets around your garden and get results overnight. It's best to start baiting regularly at the start of planting season.

Ortho Weed Killers Give Complete Control. If you're after: Lawn Weeds, use ORTHO Lawn Green or WEED-B-GON contains 2,4-D.

For Brushy Weeds (Poison Oak, Brambles, etc.) ORTHO 2,45 Brush Killer does the job—contains 2,4,5-T. For clean Weed-Free Sidewalks and driveways use TRIO-X... kills all vegetation and prevents regrowth up to 2 years.

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"Too Beautiful for Words"

Seed—Colors unlimited ........................ $1.00 Pkg.
Midas, pure Gold and Orange ............... $5.00 Pkg.
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Plants for sale at Garden in blooming season
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Cardinalis (Red) .... syphilitica (Blue) ... Vedrariensis (Purple) ... alba (White)
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Reasonable prices.

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Originators of
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Quality Pansy and Primrose Plants and Seeds

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Polyanthus Primroses, all shades in bloom.
Pansies beginning to bloom, both mixed and separate colors.
At our Garden on S.E. 82nd St., or sent Postpaid by Mail
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Seasonal Notes from Barnhaven

The peach orchards of Georgia, full-blown in the snow, could have been no more beautiful than the blue, pink and lavender primroses, just bending with the storm, then straightening above the white blanket. Or the white Denticulatas, like snowballs dropped upon the glistening surface, for February's promise, so warmly given, proved false, and March has been testing the vigor of primroses and those who work in them in temperatures dropping to 24 degrees. This, the easterners may say, is only bracing weather, but to plants coming into full bloom, with freshly cut roots, waiting to be benched in the pollinating sheds, it is a real test of vitality.

Even the pinks, raspberry shades and other new tints, yet to be identified by color charts, stood the test, so we know these parent plants are healthy. The many new color breaks, especially in the Pinks, Desert Sunset and Victorian series, and the sparkling, bright quality of tone, even in the pastel range — are so differently beautiful this year that we think back about twenty years ago when Barnhaven's strain of polyanthus started with a few packets of Sutton's seed. With the exception of the incorporation of Miss Linda Eickman's pinks and corals into our Pastel and Desert Sunset series several years ago, resulting in a wide range of pinks and related shades, we have used no other strain. The great whites, golds and ivories are direct descendants of Miss Gertrude Jekyll's Munstead strain, begun the latter part of the 19th century at Munstead Wood near London. Sutton's Brilliance was the forerunner of our Indian Reds, Kwan Yin and, in part, the Cowichan strain. This last eyeless, high-lusted strain was developed here from a sterile clone originating in British Columbia, thought to be a garden hybrid between a plant of Sutton's Brilliance and a Juliana. Named for Lake Cowichan, the district of its origin, this named plant was crossed with our original clone of Kowichan, at the beginning of our eyeless red shades. A few years later, a small-eyed blue Acaulis was found which bore down the form temporarily since rebuilt but which broke into the deep amethyst shades. This year we expect to produce eyeless pink Cowichans by crossing various shades with some of our new yellow Miniatures.

The primrose wheel is completing its first revolution, for the Canadians, with whom our strains are exceedingly popular, are building private gardens. English and Scottish use. Some have gone to nurseries where they are being grown for the British trade — and probably for eventual American sale — some to private growers who are planting competitive entry in the R.H.S. shows and others, and some have been sent to several large Scottish estates, complete with castles and appurtenances, and there! It was of especial interest to see these estates in the collection of kodachrome slides belonging to Mr. and Mrs. Kollowratek and shown by them at the February meeting of the Society in Portland.

Growers are not only interested in seeing where their plants are grown but how they are grown by others. Here at Barnhaven we start shipping in February as soon as color shows, accelerating with the season, so that we seldom have any great mass of color in the fields. Nor do we see much color on those plants selected for seed bearing, except the first few blossoms, as the petals are removed before pollinating, as must be if they are actually cross-pollinated by hand. So we occasionally take time to go to the spring primrose shows as we did last April in Kirkland, Washington, to see them in the mature flowering stage. We were greatly taken with the display of Mrs. John M. Barber (Pudgin's Primrose Gardens, Anacortes, Wn.) whose showing of Spiced colored Polyanthus originating at Barnhaven was outstanding. Giant cossas and coffee colored blooms grown to such perfection we asked her method, particularly since some thought the plant had been unduly sheltered. But Mrs. Barber says she has no greenhouse, and, at that time, no lath house, having grown them in the open under fruit trees. Her soil, being poor, was built by tillling in barnyard manure followed by a thick layer of sawdust which was thoroughly soaked before turning under with about three pounds of nitrogen crystals to fifty gallons of water. Unless sawdust is thoroughly rotted before turning under, or treated with nitrogen, it will lock your soil by robbing it of the nitrogen which is necessary for the rotting process. Incorporating this humic material, and before planting out her seedlings, Mrs. Barber used one part super-phosphate to two parts organic manure.

And so, another spring and other shows. In fact, everyone who gardens has his own show to delight himself and his friends. Primroses, of course, come when the gardening year is still in its infancy. They are not only harbingers of spring but of the beautiful year lying ahead filled with flowers, books, music and all the other good things of life.

Truly and Logic

- Many gardeners have wasted a lot of money on fertilizer — criticized the seed dealer and manufacturer of the fertilizer. TRUTH of the situation could be that soil insects had destroyed so much of the root system that the fertilizer couldn't help the plants.

What to Do?

- Treat the soil around the stems of your plants or trunks of your shrubs and trees with Carco-X solution according to directions, three weeks later fertilizer.

- Many garden suppliers have been cursed for selling seed that would not give a good percentage of germination. The possibilities were that the soil insects ate the seed before it had a chance to sprout out of the ground.

- Treat your seed beds with Carco-X solution according to directions before planting.

Get Carco-X from your nearest seed dealer and get the booklet, too. If he doesn't have Carco-X send your order directly to us and it will be shipped immediately.

Be Prepared . . . Order Carco-X Now

Carco-X is shipped postpaid to your home at $1.35 for one-half pint, $1.85 for pints, $2.50 for quarts and $7.75 a gallon. Direct all orders to GETZUM PRODUCTS, Box 37 P.A., Sumner, Washington.

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Enclosed find □ Check □ Money Order for $ ______

For ½ pintss pintss quarts gallons of Carco-X.

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Sincerely, your good friend,

The Blue Whale

P.S. I am proud to tell you that something new has been added to the BLUE WHALE BRAND Sphagnum Moss. Blue Whale has always been rich with the vital elements for which I am famous for my ability to produce, but now the baleen and bone have been added by a process which renders them immediately and continuously available to the plants which are planted in Blue Whale. The Baleen Soluble might be termed the "essence of the whale," the Baleen is equivalent to Horn and Hoof found so beneficial in famous English potting composts. Just think, if you use Blue Whale you are giving your plants a complete diet of what they need or by nature's own balanced bacterial method without the laborious and unpleasant duty of working with barnyard manures. Blue Whale is a complete compost free from weeds and disease. This Blue Whale Organic Compost is almost 100% potential Humus and provides ideal conditions for the life in the soil which is the answer to the growing of healthy Plants, Flowers or Vegetables.

This Blue Whale Organic Compost is almost 100% potential Humus and provides ideal conditions for the life in the soil which is the answer to the growing of healthy Plants, Flowers or Vegetables.

I am happy in the knowledge that I have the ability to be of the utmost service to you.