Quarterly of the American Primrose Society

PRIMULA PLANTING GUIDE

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Volume XI October, 1953 Numbers 2, 3, and 4
Experiences of a New Jersey Amateur in Growing Hardy Primulas

BY EDWARD O. BIRCH

Over and over again, we hear and read that it is easy to grow primulas on the Pacific Coast, but difficult to grow them here in the East. Thus many gardeners, discouraged from the start, never attempt to ascertain what the really hardy primroses will do for them. What follows is written with the hope that it may help to interest those who have not as yet tried primulas, or who have tried and failed.

I have seen vigorous plants growing on their own in abandoned gardens of old homes and vacant estates, large clumps sometimes taking possession of open ground around them. Therefore, I think that, despite what is heard and read, we should put out of our minds the idea that primulas are difficult to grow in the East, and at least have the satisfaction of finding out for ourselves.

Here is my experience in Short Hills, N. J., with various forms and varieties of *P. acaulis* and *P. polyanthus*.

### THE FIRST PLANT

Some years ago I was given a single plant; a yellow hose-in-hose, or duplex type. In two years, this developed into a nice clump. The soil in which it grew was a good friable loam to which peat moss and manure had been added a year or so before. Under pressure of hand the soil felt spongy; it would absorb and hold water well; drainage was good and the soil never soggy; it would not bake hard when dried by the sun. Under foot it felt similar to soil you would find at the edge of a woodland or in good turf. That is, the soil was solid but *not hard*; rain would not wash it away, but instead would be absorbed.

Anyone can have such a soil with the aid of peat moss or leaf-mold, if available. It is soil of a texture in which azaleas, mountain laurel, and rhododendrons grow best. One need not worry about chemical analysis, or pH, but only about texture. When the plants are established all that will be necessary is an annual, early spring sprinkling of dry manure or perhaps cottonseed meal.

### HUNDREDS OF PLANTS FROM ONE

The clump previously referred to was, at the end of its bloom, separated into eight or ten divisions, and the top half of the foliage was cut off before replanting. Dividing it this time enabled young plants to become established before winter set in. By continual division of the older clumps, I have had hundreds of plants from this one original yellow hose-in-hose. I used them to edge three borders, facing south, east and west, the one facing south being in full sun all day. In August, when the plants all withered somewhat...
before starting fall growth, those facing south withered more than those facing east and west, but outside of that they were identical at all times of the year.

The ruggedness of this yellow hose-in-hose stirred my interest in primroses. I began raising other varieties, including P. polyanthus, from seed, and had equal success. Now my plants are in all possible locations; naturally in the partial shade of shrubs or filtered shade of trees, the foliage holds up better during summer months.

WINTER AND SUMMER CARE

While writing this in November the foliage is full. I will soon cover the ground between plants with about one-half inch of peatmoss, which will be allowed to remain in spring. Young plants going through their first winter will, in addition to peatmoss receive a light covering of salt hay, about three inches, not packed, but loose enough so that a bit of green shows through here and there. This will keep young roots from heaving with the thaws. Hay is removed early in spring. Peat, when allowed to remain, will act as a mulch in spring, assist in keeping down weeds, help conserve moisture, and in addition be a top dressing as an aid to new crown growth. It will also make artificial watering safer as mulch will prevent the soil from being washed away from roots.

During the hot weather of June, July and August, the soil must not be allowed to dry out. If rains do not occur at this time of year, soil of the texture described should be watered about once a week. At least, that is my experience, but in other sections conditions will vary and one's own judgment will have to be used. 

SEED SOWN IN SOIL

When propagating from seed, I sow in soil, and think it the best medium for a home gardener or amateur growing for his own requirements. Sphagnum moss, vermiculite, etc., are all right for professionals who are prepared to fertilize properly at all stages, but for amateur distribution (soil) is used until it will carry seedlings to the time of transplanting without fertilization, which is always a danger to young plants.

Seed is sown in flats, or preferably wide shallow pots. If the depth from the bottom of the container to the top of the soil is about three and one-half inches, I use one-half inch of drainage material. Equal parts of peatmoss and coarse sand or gravel will drain the soil and also hold moisture. For the soil itself I use equal parts of good loam, leafmold, and sand, thoroughly mixed and screened. If leafmold is not obtainable, pulverized peatmoss can be substituted. I tamp it down gently, without letting it pack, then water it thoroughly by setting the container in water that comes to within an inch of top, leaving it there until moisture shows at the top of the soil. Then I scatter seed thinly on the surface so that seedlings will have circulation of air when they show up, and barely cover the seed with sand or fine dustlike soil. The pane of glass with which I cover the container is removed as soon as the seedlings show. As they shoot up, I carefully lift a light covering of sand or soft, fine soil between them, being careful not to cover leaves. This is important; the seed was sown on top of the soil and this light covering will give added support until the roots really get down.

HANDLING THE SEEDLINGS

I generally transplant after the second leaves appear in order to get more plants, and place them about an inch apart in similar soil and containers where they remain until placed in a nursery bed in open ground.

If one does not have facilities for additional flats or pots, the seedlings can merely be thinned to about one inch apart. Transplanting is easy. I formerly used a knife or match stick to prick out seedlings, but finally made a gadget which works to perfection; roots are not damaged and soil does not stick to it. Take an old tooth brush, cut off the brush end and grind a point to that end about twice the length of a pencil point. This readily lifts the seedling and also makes a hole to receive it. The rounded end of the handle is used to tamp soil around the transplant. A small bulb sprayer such as is used in the laundry is good for watering the seedlings after transplanting. They must not be beaten down. Seedlings in containers outdoors should be protected from late morning and afternoon sun, also from heavy rains.
Of Interest To Members

You will note that this "Growers Manual" is described on the front cover as Volume XI, Numbers 2, 3, and 4. It was decided by our Board that our Quarterly volumes should correspond with our business year because of the difficulties encountered by the treasurer. Now, each year's membership will include the subscription of a complete volume of the Quarterly.

The Society is anxious to build up a fine library of books which deal with the Primula. The Library Association of Portland, Oregon, has offered to take care of our books in their Reference department where they will be available to the general public. Anyone with a library card and a membership card from the A.P.S. could borrow them. However, our number of volumes is so small at present that such a scheme is barely feasible and not very serviceable. We do own a volume of "The Primulas of Europe" by Macwatt, and all the volumes of the Quarterly, "Primulas in the Garden" by Corsar, "Rock Garden and Alpine Plants" by Correvon, some of the monographs of Sir William Wright, Dr. H. R. Fletcher, but we need volumes of "The English Rock Garden" by H. R. Fletcher, "The Rainbow Bridge" and other books by Farrer, a completion of our set of monographs by Smith and Fletcher, "Cultivated Species of Primula" by Blasdale, the new edition of "Primulas in the Garden" by Corsar, "Primulas for Garden and Greenhouse" by Cox and Taylor, and then certainly we should own The Royal Horticultural Dictionary, The Royal Horticultural Society and British Colour Council's "The Horticultural Colour Chart." There are many other books which are owned by the Quarterly and by members of the Staff which would make valuable additions to the library. It has been suggested that a book be added in memory for each member who passes on. Two libraries have been offered to the Society by good members, but they wish to keep them during their lifetime. In either of these instances, book plates would be provided which would perpetuate the name of the donor or the one to whose memory the book is dedicated. Any member who wishes may send donations of books or money with which to buy them to our treasurer, Mr. C. Y. Griffin, 2946 N. E. 58th Avenue, Portland 13, Oregon.

We are going to begin the New Year's Edition, Volume 12, with a Dictionary of Cultivated Primulas. This will in all cases be as pictorial as possible and to this purpose members are asked to loan any shiny black and white prints of Primulas that they may have. We will have to reprint many pictures which have appeared in other publications. If our plans go forward as contemplated the material in Volume XII will simplify the problem of ordering plants and seeds. We will try, by including line drawings, to bring out the differences in related species. The definitions will not use a botanist's vocabulary unless the term is fully explained. We are always amused and enlightened by the writings of Pedicularis. In the September 1953 issue of the Quarterly Bulletin of the Alpine Garden Society he has an article which expresses our sentiments very well, "Too often by far does one hear the gardener exclaim, "thank Heaven I am no botanist"! He might as well be proud of going into battle unarmed: for the life of the gardener is one long battle against the wiles of Catalogues, and in that battle botany is the only weapon that can serve him. Our need of knowledge grows with the lack of it; and the cultivator who has begun by being happy with the commoner plants is soon beginning to widen his ambitions and his collection ... Unfortunately, however, botanists are themselves responsible in great measure for the dread and hate in which the simple-minded hold their art. For our enthusiasm in search of knowledge now goes to some museum shelf and looks up his purchase, after long search, in some learned tome. He there reads that it is glabrous, or glaucous, with more or less pilose eglandular appressed cinerose pubescence, and leaves that are deeply runcinate, imparipinnatifid and lobulate, in crenulato-serrulatate mucronate lobules. What is he to make of this cruel jargon, the apt short-hand of the botanist, but worse that Cuneiform to one who has not got the key? He closes the book in a fury of despair, and, though ignorance is by no means bliss, he decides that it would be far more arduous folly to grow wise."

Florence Levy, Editor Emeritus

The mails bring recurrent questions, "How is Florence Levy? What is she doing with her time these days? Why doesn't she write more for the Quarterly? What is it really like at Barnhaven? What are some of the goals toward which she is working?" It is our policy to be direct, so we asked Mrs. Levy to answer these questions herself. She says that she is using the time she used to spend editing the Quarterly to systematize a business growing almost too rapidly. Her part in the production of 120,000 seedlings (representing the main crop, and the one or two secondary sowings necessary to maintain catalog listings the year around) is the seed planting with two other workers, daily observation, and finally the restful chore of watering she called by everyone, whose 8th grade interest in studies, sports — and clothes — will have a larger share of her mother's attention.

When asked about hybridizing plants, she thought a moment and said that "new primroses originated in the imagination, that 'bringing them into existence was a simple thing since their behavior under a pollinator's hand is now fairly well known.' For example, royal and navy blue Julianas she produces in a fixed strain, but feels the need for light and bright medium blues. The Cowichan strain with its glowing depths of strong colors and red-bronce leaves has stirred her imagination and she visualizes a range of pink shades which will retain the absence of eye and other characteristics of the strain.

Work at Barnhaven, for the first time, is ahead of schedule, and the fall and winter months are full of plans for the development of the residence-barn as originally planned, but which has heretofore, of a necessity, taken third place after the business of Barnhaven and the Quarterly.

Physical activity comprises only half of Mrs. Levy's work, she is even now planning a catalog still more different from the distinguished ones she has written in the past. She expects to continue, when not occupied with painting and decorating, with her study of the technique of the short story. There is also a 13-year-old daughter, Millicent, or "Penny" as she is called by everyone, whose 8th grade interest in studies, sports — and clothes — will have a larger share of her mother's attention.

The gift of extra hours a retiring editor receives is, as yet, inadequate for the work at hand, but her gratitude is frequently voiced for the pleasure she has known in her contacts with all the wonderfully generous people who contributed to the building of the Quarterly. She sends each of you her affectionate greetings.

"The pleasantest work of human industry is the improvement of something which we can call our own." Cowley
Mr. K. C. Corsar was born at the beginning of the present century near Arbroath in the County of Angus in Scotland.

Educated at the Edinburgh Academy, the University of Edinburgh and the East of Scotland College of Agriculture, where he studied law and agriculture, he became an Advocate at the Scottish Bar. Here he specialized in Peerage Law and the Law of Succession to Arms, on which subjects he has contributed articles to the leading legal publications.

Mr. Corsar's writings cover many subjects and on the plant side, he has contributed papers on rock garden plants to all the leading horticultural journals; he will, however, always be remembered by his timely work 'Primulas in the Garden' which has just come out in a new edition and to which he has added a chapter entitled "Recent Primula Introductions." This book was the result of years of work and the methodical recording of the likes and dislikes of the many species he has grown. For a number of years Mr. Corsar acted as Editor of the Journal of the Scottish Rock Garden Club. From a very early age he showed interest in Primulas, an interest which was enthusiastically fostered by his father and the photograph of a group of Auricula seedlings raised and flowered by him when he was only eight years old testifies not only to his interest but also his ability as a cultivator.

Mr. Corsar, who was married in 1925 and has one son and one daughter, now lives in the county of Midlothian where he continues to pursue his hobby of gardening preferring as always the cultivation of Primulas. The rock garden, which he has largely built himself provides a home for a considerable number of species as well as for members of other genera of rock garden plants.

**General Cultural Directions**

**FOR THE MORE WIDELY GROWN SECTIONS OF PRIMULA**

Louise Gee, Portland, Oregon

(2) **AURICULA** *e.g.* auricula, rubra, glaucescens.

Many species of the Auricula are happy in the Rock Garden or in a scree. The differences in cultural information from the expert growers indicate that for the most part they will tolerate a variety of conditions if they are given a rich gritty compost, which will provide perfect drainage, and a half inch collar of fine gravel to keep their crowns dry.

A safe rule to follow with all Primulas is to keep their crowns free of every minute particle, and their quarters free of fallen leaves which have a tendency to mold.

(3) **BULLATAE** *e.g.* Forrestii

Crevic and cliff growing plants — long lived and hardy. Roots are scanty and penetrate deeply making it impossible to divide large plants. Old leaves linger on plant several seasons and should not be removed. Two distinct types; the erect growing species typified by P. Forrestii which form robust long scapes topped by many flowered umbels of yellow flowers, and the cushion forming type such as P. Dubernardiana bearing short few flowered scapes of white, yellow or lilac flowers. Leaves are unlobed, wrinkled and evergreen; flowers long-tubed.

Culture: Well-drained gritty soil. Will stand more sun than most. Good for vertical crevice in rock garden protected by overhanging rock from winter wet.

(4) **CANDELABRA** *e.g.* japonica, pulverulenta (see p. 43).

Requires moist, spongy soil in cool half-shaded situation.

(5) **CAPITATAE** *e.g.* capitata

Deep purple pendant flowers in round heads borne on strong 12" scapes. Leaves resemble common primrose but are powdered on both sides with white farina. The flowers also are powdered with farina. Particularly valuable for its late blooming season — August or September.

Culture: Well-drained soil in shade. May be propagated by division, but plants are short-lived and should be started from seed each year to be sure of keeping them.

(7) **CORTUSOIDES** *e.g.* Sieboldii

Long slender scapes of 1 to 3 gracefully borne whorls of white, magenta, pink, purplish or rarely yellowish flowers. Leaves pinnately or palmately lobed on long petioles, often covered with hairs. The broad leaf blades are entirely free of farina.

Culture: Most of this Section are woodland plants and need a moist well-drained leaf-mould mixture. Leaves disappear after flowering.
(9) DENTICULATA e.g. denticulata

Tight round heads of small erectly held florets on stout 12” scapes. Flowers lavender, pink and white. Leaves narrow and crinkled in rosettes. In some types leaves and stem are covered with farina.

Culture: Rich, fairly moist soil with light to moderate shade. Increase by division or seed which is freely produced. Do not plant seed too early in season as malformation may result if flower buds develop in late fall. Easy to grow and will stand dryness, but prefers rich moist soil. In winter should be protected from standing moisture. Best in large clumps.

(11) FARINOSAE e.g. farinosa, frondosa

Most numerous of all the Sections and widely distributed over the North Temperate zone and South America. Dainty open flowers in umbels, usually pink, lavender or rosy purple shades. Underside or crinkled leaves often covered with farina.

Culture: Plant in well-drained loam and leaf mold and give constant moisture. They prefer light shade but it is not a necessity if moist conditions are present. Some of smaller species will not at crown if given overhead watering in winter. Roots are very fine and must be carefully handled. Propagation by division is possible but there should be more than one crown to a division. Seed should be sowed thinly so plants can remain in seed bed until they have developed appreciably; thereafter prick out singly into thumb pots in which they can grow till large enough to plant out. In transferring from pot be careful not to break root-ball. Best planted in masses. Variation in the rarer Farinosae will be given in the Dictionary.

(14) MALACOIDES

Greenhouse species with dainty pink, lavender, white and carmine flowers borne in tiers. Leaves rounded and somewhat hairy with dentate edges. Artificial heat is required of 45 to 50 degrees during flowering season. For winter bloom sow seed in July and cover pots with glass and paper until germination. As soon as possible prick out into 3” pots and later into 5” pots in which they are flowered. The final potting should be either the John Innes Compost, or on the West Coast, a mixture of 7 parts medium loamy soil 3 parts Blue Whale Sphagnum Moss, and 2 parts coarse sand. To achieve maximum bloom, a comparatively cool temperature with adequate ventilation and careful watering is necessary.

(17) MUSCARIOIDES e.g. Vialii

Flowers in close heads or spikes, pedicels almost entirely absent. Flower scapes long and slender. Quite hardy and survive any kind of winter until they have flowered after which they seem to be susceptible to damping or winter and few survive. Because of this trait they should be raised each year from seed. Flowers are usually lavender, purple or blue.

Culture: Rich porous soil in half shade with plenty of moisture during growing season and as little as possible during winter. Seed germinates well and there is usually enough to keep a supply of fresh stock on hand in spite of the fact that the flowers in this Section often have little seed. If two or more crowns are made the second year before flowering, as sometimes occurs the non-flowering crown may be divided from the flowering one and re-planted.

(18) NIVALES e.g. chionantha

Some of the finest of Primulas, but tantalizing to grow. Flower trusses large and rather loose — the leaves rather thick, fleshy and approximately the same width throughout and more or less covered with meal.

Culture: Rich heavy soil which should be heavily enriched. They like moderate shade. They must have moisture during growing season and an almost complete lack of it during the resting period. A bay in half-shade at the foot of a rock garden or a well-drained stream bank is a good location. Increase mainly by seed and raise each year to maintain stock.

(19) OBCONICA

This Section can very well give a bad name to the whole genus Primula, due to glandular hairs found on the undersides of the leaves which cause an irritating and dangerous rash to many people. They are barred from many hospitals because of this and there is one case in Portland, Oregon, due to the handling of obconica subspp. Werringtonensis, which has lasted for months and has not responded to treatment prescribed by leading skin specialists.

Culture: Members of this Section are best grown in cold greenhouses. They are not seriously injured by several degrees of frost. They make most pleasing plants if grown at fifty to sixty-five degrees. They have brilliantly colored open flowers of shades of rose, carmine, lavender and white. It is best to grow fresh plants each year. In mild climates such as California, they are used as porch decorations. They are florists' plants and are extremely beautiful.

(20) PARRYI e.g. Parrii, angustifolia, Cusickiana, Ellisiae

North American Primulas with different requirements for the different species, but all require a rich, gritty, well-drained soil whether grown in shade or sun. P. angustifolia needs a half shaded spot and is found in damp, rocky places amongst short herbage in alpine zones. Cusickiana should dry out completely in summer. In its native state it is completely saturated with water when the snows melt, and yet is parched and baked by sun all summer. These plants may be increased by division or from seed. Ellisiae grows in open places among short herbage. Culture is still in an experimental stage.

(21) PELTILOAKES e.g. scapigera, tonchfolia, Edgeworthii

Attractive open flowers of rose to violet shades, leaves in rosettes large and crinkled and dentate. Covered with white meal. Short scapes. These plants form a winter bud at end of season and this must be protected from winter dampness. The seed of this Section germinates only in an apparently unripe condition so one must watch carefully for seed and sow immediately.

Culture: Cool, moist open leaf soil, well-drained position in spot protected from direct sun and wind, hard rain, heavy frost, and snow, and especially winter drip. Give plenty of light and good circulation of air. The plants must be kept moist but never waterlogged and a top dressing of peat and sand should be applied with a final surfacing of coarse sand or chicken gravel to protect basal leaves from rot. Pull off all leaves and flowers and watch closely for pests or mold, especially in damp weather. May be reproduced from seed or cuttings. Seed should be planted as soon as gathered and may not germinate till following April or May. Some types produce offsets in leaf axils and these may be planted in 1/2 sand and 1/2 peat and kept shaded and slightly moist till rooted.
Candelabras, My Floral Treasures
Mrs. John P. Hannon

The first Candelabras I remember seeing were *japonicas* growing in Mr. and Mrs. Banks’ garden on the Willamette. I thought, “Oh, a flower Pagoda,” because they were shaped like the Pagodas I had seen and admired years ago in China. I was to learn later that they were indeed Asiatic and that they and other Candelaburs were to be found wild in both China and Japan. I had visited incredibly lovely gardens in China but I do not remember seeing these starry flowers. I must have visited during seasons when they were not in flower, for a Candelabra is too strikingly beautiful to be overlooked.

The *japonicas* in the Banks’ garden were planted in a wet marshy spot which was covered with water when the river was high. Like so many people, I thought of primroses as “edge of the border” plants, and had never realized that there was so much variety of size, color, and form.

This gave me the idea to use the bog below our springs. I set forth to get a start of Candelabra plants (thinking only of *japonicas* for the bog). I was directed to Barnhaven where I met Mr. and Mrs. Levy who took two or three hours of their time, which was so valuable, to point out the different Candelabars and to tell me about their history and where they were found in Asia. They also explained how to grow them from seed. I had never grown anything from a seed but vegetables and was rather skeptical of my ability to grow such exotic flowers.

The plants I bought are still surviving together with an incredible amount of off-spring. It has been a great deal of work but so worth while. I find myself being irresistibly drawn to the bog where amid wild fern, astilbe, vine maple, species of fuchsias, rhododendron, and azaleas I see groups of Bartley Hybrids (the lovely silvered blush pink *pulverulentas* with yellow or red eyes), the *japonicas*, (red and pure white), the *bueranicas* (purple with a yellow eye), the *Bulleyanas* (buff with red gold buds), the aurantiacas (russet orange with mahogany stalks), and the variations which have occurred as the result of my own hybridizing. These treasures, dear to me because they represent hours of planning and hoping, I call my “Pagodas.” I am crossing exceptional plants which have a tendency toward opalescence and the off-shading shade from lightest pink to glowing tangerine and yellow gold. The seeds I sow are all carefully hand pollinated with chosen plants and the buds are protected by pliofilm bags from interference from bees and other insects. I try to separate the varieties which cross readily so that the seedlings which come up, even in the paths, are worth keeping.

Spring has a wonderful new meaning now that I am getting such beautiful color breaks in my Pagodas. It takes years however of careful selection to fix a strain so that one can say “these are pinks” and not “these are pastels.” I visit the bog in the early evening and watch the various colors change and deepen and disappear and later, if there is a moon, the flower pagodas have a charm I cannot resist. They are beautiful in the sunlight which filters down through the high growing trees to make lace patterns of the ferns and polynomphyium. They are also beautiful, if not so large, out in my front border where they live in average soil and depend on overhead sprinklers for their watering. They are lovely as cut flowers and three or four stalks, together with a little foliage, make a bouquet which needs little arrangement.

I have other Asiatic Primulas and many of the fragrant belled types, and I have over a thousand feet of the little *vulgare* in the front gardens which I use as an edging. I started with just a few plants many years ago, and now there are so many of these thrifty little yellow scilla (I cannot get used to the name *vulgare*) that I have given them away by the hundreds. Now, all up and down Oatfield road, the gardens are famous for the borders of these hardy early spring beauties. Even before these are past my interest focuses on the bog. Each spring will bring its new surprises, anything can happen, and so far my anticipations have not exceeded the realizations.

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Annual subscription $1.50 personal check or bank draft. Two journals a year. Frequent articles on Primulas. Liberal seed exchange. Seeds of 72 varieties of Primula distributed last year. Write for membership forms and for information to—Major-General D. M. Murray-Lyon, Honorable Publicity Manager, 28a Inverleith Place, Edinburgh, 4, Scotland.
R. H. Briggs

Honorable Secretary, N.A.P.S. of England
(Northern Section)

I have been invited by your Editor to tell you something about the indefatigable Secretary of the National Auricula and Primula Society of England. Mr. R. H. Briggs, whose photograph, which has just been taken, appears opposite. Since I have had the privilege and pleasure of acting as his assistant for six years I feel that I have sufficient justification for accepting that invitation.

Mr. Briggs has been connected with the Society for over forty years, being second only in years of membership to Mr. Arnotius. For five years he acted as assistant to Mr. Riddle and for the past ten years has been Secretary of the Society.

At the time he took over that office the Society had sunk to the lowest ebb in the 72 years of its existence, two major wars had taken severe toll of its members and unfortunately no effort was made to attract new members to replace those who had fallen by the way. There were less than forty names on the register and few of those were really active. Many were the occasions when funds were insufficient to allow of prize monies being paid in full. There seemed every prospect that unless immediate steps were taken to improve the situation the Society would in a few short years sink into desuetude.

Thanks however to the zeal and energy which Mr. Briggs applied to the task in hand there has been a remarkable transformation. The Society has now three times as many members and three times as much in the way of funds at its disposal as it enjoyed even in the heyday of its youth.

A letter received last year from a new member perhaps affords some clue as to how this transformation has been achieved, he wrote, "I am a member of four floral Societies but have never had the same kindness and courtesy shown to me nor received such encouragement from any as from the Secretary of the National Auricula and Primula Society."

One of the first steps Mr. Briggs took in his efforts to rejuvenate the Society was to replace the brief Annual Report — which was circulated to members only — by a Year Book, and by advertising it hoped to create a wider interest both in the Auricula itself and in the Society. The result the first year exceeded his highest hopes. Mr. Briggs is the first to admit his first Year Book cannot compare with the recent ones issued under the editorialship of Mr. Meek. However, he can justly claim it to be the forerunner of a series which has been instrumental in giving the Society an honored place amongst the Floral Societies of this country today.

Nor content with spreading the gospel of the Auricula at home, he set about to create an interest abroad, particularly in America, and particularly among the members of the American Primrose Society. He fondly cherishes the many letters of appreciation he has received, these, he says, more than compensate for whatever work the effort entailed. I know that there are few who have done more to stimulate interest in the Auricula in your country.

(Continued on the Next Page)

Using Bricks To Germinate Primrose Seed

Mrs. Denna M. Snuffer, Bay City, Oregon

I found that seeds in a flat had to be kept damp at all times, but not wet. That meant in hot weather that they must be moistened several times a day. If I missed and the soil dried just the least bit, I was lucky to get any plants at all. I also had to put up with doing all the watering by hand and no matter how careful I was the seeds would be disturbed or I would get just a little too much dirt on them and they just would not sprout.

I will try to describe the method we use at the Bay City Primroses Gardens. We select a common red brick and place it in a pan that will permit the brick to stand in water about one half inch deep. When the brick is well saturated we cover the top of it with one quarter inch of garden soil. We do not sift this soil but we are careful not to have it lumpy. We smooth the soil gently by light pressure and let it stand until the soil is well moistened. We use as many as one hundred seeds per brick or just a few to sprinkle on the top of this damp soil. After we have placed the seeds we sift sharp sand very lightly over them but we do not cover them with sand or soil. Then we place this pan in some part of the house where the sun will not get at it. As soon as the seeds start germinating the pan should be moved to get more light near a window or in the greenhouse.

We do not cover these seeds with anything at any time. By this method we get faster germination and more plants per packet of seeds than any method we have ever used.

As soon as the third leaf shows we transplant to flats. We lift any of these plants by just taking hold of a leaf and lifting it off. If the root does not seem robust enough for transplanting we stick the plant back on the brick in a tooth pick hole. In case we cannot not be with these plants every day it does not matter for our pan will hold several days supply of water, and water does not have to be added except when it gets low. If we have to leave the plants on the brick longer than the three leaf stage we add some liquid fish fertilizer to the water in the pan to feed the plants so they will not get too leggy. This should be about the same strength that one uses to water young plants in flats. Most of our bricks will show sprouting in seven days. We use fresh soil for each planting, but the same brick is as good as new after a good scrubbing with soap and a brush. At Bay City we have Primrose plants from seed every month in the year. We produce fifteen hundred plants from five bricks.

I hope I have not made this method sound complicated because it is the "lazy easy way" to start your Primrose plants.

During his period of membership Mr. Briggs has carried off at one time or another all the trophies the Society has to offer including that coveted award "Premier." This award is given for the best plant in the Show. He considers the brightest jewel in the Auricula crown to be the green-edge and it is his one regret he has not so far been able to raise a really good green. When it was suggested to him that he ought to feel satisfied having raised "Seamew" a good gray-edge, his reply was, "Possibly, but it isn't green!" However, like many another in both our lands, he is hoping that from a batch of seedlings to bloom in Spring the elusive green will at last emerge.

It is with gold-centres his greatest successes seem to have come for his introductions, "Florence Levy," "Golden Glory," "Robert Waddington," "Mildred Howson," are four which figure prominently on our Show-benches today.

Mr. Briggs never misses an opportunity to express his thanks for the unsunning support accorded him by the officials of the Society. Although Mr. Briggs has passed the "allotted span" we fondly hope he may long be spared to carry on the good work which, from the day he accepted office, he seems to have regarded as an almost sacred trust.
Mrs. Ben Torpe n

With the compost made and moistened, pots cleaned, and plenty of crocks ready, the potting may begin. Gently knock the plants from the pot and remove the old worn out soil. Investigate the roots and the carrot of the plant for insects and decay. If insects are present dip the plants in a mild solution of Carco-X after the roots have been thoroughly washed. Black Leaf 40, in solution, may be used as an alternative. If there are any decayed spots on the carrot remove them with a sharp knife and always disinfect the wound with flowers of sulphur or charcoal. All dead roots should be removed before the plant is reported.

The offsets may be taken off at this time; those with roots of their own can be potted up and labeled while those without roots can be taken off with a sharp knife. All wounds should be sterilized and the offsets placed in sand around the edge of a pot until the roots are formed, or they may be left on the parent plant and taken off at a later date. The latter insures success for those who lack confidence in taking off the unrooted offsets.

The plant is now ready to repot. Put several pieces of broken crock in the bottom of the pot to insure good drainage. Cover the crocks with a small amount of potting soil hold the plant in the center of the pot, and fill around it. Gently tap the pot to settle the soil if necessary so that the crown sets firmly on the soil, not more than a half inch below the top of the pot. The new roots form at the crown, just under the leaves, and the plant is soon anchored in the new soil. We like to water the newly potted plants immediately to eliminate any voids in the pot and to firm the soil around the roots. The pots are then allowed to dry until the leaves show signs of the need for water.

All of the newly potted plants are set in a shady well ventilated house until they have fully recovered. Our cold house glass is painted inside with Kalsomine to prevent the rain from washing it off. This may be removed whenever desired and the ventilators and doors left open to give a good circulation of air. The pots are set in peat moss to keep the roots cool and moist in the summer and warm in the winter. During the winter months the peat moss is kept moist so that the pots may draw the moisture from the peat. This, together with the moisture from the air, usually supplies all the watering necessary.

After the repotting has been done the floors and benches are sprayed or dusted with fifty per cent D.D.T. to eliminate any lurking insects. The plants are dusted occasionally with Botano DeLuxe to keep down infestations of aphids. A regular fumigation is also very easy and effective in pest control.

JULY

Seed should be gathered now and may be sown immediately or stored in the refrigerator to wait the favorite planting month, usually January or February. whichever month is chosen the seed must be sown with care. Here at Woodland Acres the seed is gently pressed into the oil with the hand. It is very easy to cover Auricula seed too heavily which retards germination or prevents it altogether. The seed pans should be watered gently with a rose spray. A pane of glass placed over the seed pan holds moisture and protects the seeds until they germinate. Seed pans must be kept in the shade and should never be allowed to dry out.

Seedlings may be transplanted as soon as they are large enough to handle and should always be kept moist during the hot weather.

AUGUST

There is little to do in August except to keep the plants watered and the insects in check.

SEPTEMBER AND OCTOBER

Plants will require less water now. Here in the Northwest we have heavy dew at night which will supply sufficient moisture now that the plants are less active. Remove all dead and yellowed leaves from the base of the plant and watch for aphids. If aphids are found either dust or fumigate.

NOVEMBER, DECEMBER, AND JANUARY

Little can be done during these months except to keep the plants free from decayed leaves. Here in Oregon a green moss covers the tops and the sides of the pots. We remove this moss as it is a breeding place for small snails and slugs. Close the ventilators and doors at night to protect the plants from heavy fog or frost. This is the time when the bed of peat moss is most effective for the plants are kept warm enough without artificial heat.

FEBRUARY

February usually gives us some warm sunny days and the Auriculas respond quickly. A great change may be noticed in the plants during this month. Almost over night they take on a new color and the meal seems whiter and heavier. This is a good month to take offsets that have been left on the mother plant. They should have roots of their own by this time and may be detached and potted up. Never permit the plants to become too dry for they are starting to grow now.

Seeds may be sown now, in fact, this is my favorite month for sowing seeds because all plant life is awakening and seeds seem to germinate more quickly at this time.

MARCH

March is the beginning of a wonderful dream, the flower stalks are beginning to appear and anticipation is at its height. Never let the plants dry out and be careful when watering not to spot the foliage. The foliage must be in perfect condition for the show. Keep ventilators closed at night.

APRIL

The plants will begin to flower now. Those that are coming into bloom too quickly may be set under the benches to hold them back a little. Those that are slow may be given the lightest, sunniest position in the house.

PREPARING THE PLANTS FOR THE SHOW

If the trusses are too crowded remove some of the pips to give the flowers more room to expand naturally. This can be done with a small fingernail scissors or tweezers. Small pieces of cotton pressed between the flower stalks of the pips will spread the pips and prevent overlapping. Small stakes should be used when the plants are transported to the show. A small piece of cotton between the flowers and the stake will be helpful to protect the plants during transportation. Be sure to remove all cotton before the plants are placed on the show table, otherwise the plant will be disqualified. Care must be taken to see that all pots are cleaned before entering the plant in the show.

HYBRIDIZING

One of the greatest joys that a grower can know is to see his own seedlings bloom for the first time. Children of his own imagination, some good, some bad, many to be thrown away. But if there is one seedling with better points than either of its parents the grower has gained a point, and what more could be desired. We are all working toward perfection and if one plant comes closer to perfection than its parents the whole primrose world benefits.

Choose the parents carefully. It has been generally accepted that this is considered that green must be crossed with green, Selfs with Selfs. This is the true procedure with Alpines also, cross gold centers with gold centers, and light centers with light centers. Have a goal in mind and choose plants with the characteristics that make it possible to reach that goal. For the best results always choose the strongest and most vigorous plant as the seed bearer. Always bear in mind that the best in Auriculas is everybody's goal.
MAY

May is the month when the dream comes true. The plants will all be in bloom and the fruits of our labor stand before us in all their glory. The work and long months of waiting have not been in vain as we view our glorious plants and count the blue ribbons well earned.

The satisfaction felt in work well done inspires the Auricula enthusiast on to better things. Therefore May is a good time to weed out those plants that do not come up to standard. The joy of Auricula growing lies in the fact that the grower is always looking ahead with hope in his heart and perfection in mind.

“The creation of the powdered beauty of the Show Auriculas is the culminating point of centuries of skilled plant breeders, who, sparing neither time nor trouble, have evolved a most fascinating flower altogether different from anything else in the floral world.” This statement is reprinted from the Yearbook of the National Primula and Auricula Society of England (Northern Section), and was written by its Editor, Mr. Tom Meek.

**Instructions for the Seed Exchange**

Chester K. Strong, Box 126, Loveland, Colorado

Only when a gardener has planted seeds and observed the minute plants come to maturity does he come to a complete appreciation of a full-bloomed specimen. Certainly he gains a deeper understanding of a common miracle and enlarges his knowledge of the difficulties and pleasures of actual propagation. It is possible for a number of pleasant surprises to come from a single packet of seed — particularly this true of color breaks. Unusual seedlings from the seeds of species are not unknown. A belief is held that that the greater the number of primula growers there are scattered about the land the stronger will be the Primrose Society, this being the chief reason for a seed exchange. Those responsible for the success or failure of the venture ask for the cooperation of members.

Seeds intended for distribution should be forwarded prior to December 15th, or a list of such seeds submitted. Seeds sent for exchange after that date are liable to become orphans for then it would be too late for listing in the January Quarterly, although such seeds might be listed in a subsequent number of the Quarterly and seeds used for late spring sowing.

Those requesting seeds from the list in the January Quarterly, should provide an addressed, stamped envelope, and such requests should be accompanied by 25 cents in stamps, (3c preferred.) This charge is made to meet the slight cost of packaging, the remainder of the amount going into the treasury of the Society. If more than six packets are requested an additional amount at the rate of 5 cents a packet should be included.

It is necessary that each kind of seed be clearly labeled by the sender as members of the Society handling seeds are reluctant to assume responsibility for misingabeling.

Requests for seeds will not be filled as received, but contributors will be given first choice so far as possible. All requests will be filled if amounts of seeds are sufficient.

Those requesting seeds should indicate more than one choice if possible, that is first or second, or give the dispenser permission to substitute.

Seeds need not be from rarer plants, although these are truly appreciated, for there remain many gardeners interested in the Polyanthus and similar older types. Seeds should be reasonably clean and ready for sowing.

Mail contributions to Chester K. Strong, Box 126, Loveland, Colorado.

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Ella Torpen’s Blue Alpine

* * *

We owe several apologies to Mrs. B. E. Torpen, our Horticultural Advisor. First, we omitted the asterisk which denoted the fact that she is, as she has been in the past, a sustaining member. Second: We did not mention the fact that she was the winner at the Kirkland Show of the 'Trophy for the Best Commercial Display.' The commercial displays as a whole were excellent but there was no doubt but that her display of Auriculas exceeded anything else shown from this Section of the genus. Third: We gave her address in her advertisement as Portland, when it should have been Beaverton. She is a good friend of the Society and has excused our errors in spite of the fact that orders, with checks enclosed, have been returned to the senders. The Auricula pictured on this page is the Blue Alpine, raised by Mrs. Torpen, which won the Mrs. Ben Smith Trophy for the best Alpine raised from seed by the exhibitor.

In some cases our growers have not been able to collect for plants which they have sent in good faith to people well able to afford them. For this reason many growers have been forced to ask for payment to be enclosed with the order. We have refused advertising to growers who are not living up to our sense of ethical business practice. What shall we do about members who order plants and will not pay for them and will not return the plants?

"I never heard her exchanging idle gossip with anyone, but she talked often about this particular plant and that, how each varied according to the aspect of its own slope or niche or hollow, of changes she had noticed in dry seasons and wet — of mannerisms in bol and seed and runner, of variations in color, of increase or decrease over a number of years in one species or another . . . She gave me my first experience of living whole pieces of life, as it should be lived, arranging things in such a manner that the small necessities and duties of existence do not interfere with freedom. (Lady Clara C. Vyvyan, from an issue of MY GARDEN).
The Treasurer Would Appreciate . . .

It should be the member's pleasure to make as little work as possible, for the Officers of the Society who work without remuneration. The Treasurer would appreciate the thoughtfulness of any member who sends in dues for 1954 before statements must be mailed on November 15th.

Due to the next year's publication of a Pictorial Dictionary of the Cultivated Primulas, which will be complete in Volume 12, no January Quartlies can be sent out until dues are paid. These sets which comprise Volume 12 should remain intact. New members will be presented with a copy of this Quarterly, which is Volume XI, Numbers 2, 3, and 4. It will be used as a reference for the Dictionary.

It is hoped that no one will be offended by this change of policy which seems so business-like. It is a necessity, if we are to improve the Quarterly, as the cost now far exceeds our Membership returns. We have had quite a bit of outside financial assistance. Several members have been very thoughtful in providing memberships for overseas members who find it difficult to send currency out of their country.

The Society has been fortunate this year in acquiring a new Life Member, this together with the extremely successful plant sale at the Gresham Show, conducted by Mrs. C. Y. Griffin, and the advertising returns, have made it possible to publish the Quarterly, maintain our offices, pay the debts for last year, and still have a small surplus. We have not used the money in the saving account. However, our financial condition leaves much to be desired as our surplus does not yet amount to as much as the money for one Quarterly.

The advertising rates are low, but they are still high enough so that membership dues will not have to be raised. This is due to the fact that Mrs. Griffin has been a great success as Advertising Manager. She wishes to thank all the members who have so thoughtfully mentioned the Quarterly when they have patronized the advertisers. In an organization such as A.P.S., where all officers and members of the Quarterly Staff give their services, every cent is used for the pleasure and profit of the members.

APPLICATION FOR MEMBERSHIP

AMERICAN PRIMROSE SOCIETY
Mr. C. Y. Griffin, Treasurer
2946 N. E. 58th Avenue
Portland 13, Oregon

Hereewith I enclose dues, as checked below, which will include membership in the American Primrose Society and a subscription to the Quarterly for the year indicated.

Annual Sustaining Life

( ) First member of the household $2.50 ( ) $5.00 ( ) $100

( ) Second member (no subscription) $1.00

Amount enclosed $ . For the year 19.

Name .

Address .

Kindly make checks payable to the American Primrose Society.

The Culture of Double Primroses

Captain C. Hawkes, M.B.E., M.C.

I am told that my article which I wrote on the subject of the Cultivation of Double Primroses in 1949 is in a Quarterly which is now out of print. The Editor has asked me for another article on the same subject. I was asked to repeat the essential in what I wrote before and to add any information I had gleaned since.

Double Primroses are reputed to be difficult subjects but, in reality, their culture is much easier than is generally supposed. My first advice is never to attempt to grow these plants in a hot or sunbaked border, as failure is as certain as night follows day. If your district has a moist atmosphere, then you are pretty certain to succeed with them.

In Ireland, and some parts of Scotland, where these conditions obtain, they grow with little or no trouble, but we are not all blessed with such a climate. If our district has not this climate, then we must try to make conditions as near like it as we can, with regards to soil and position.

In my own case, the soil is a very light and hungry sandy soil where it would be almost impossible to grow these plants; so I have tried to make the soil as much like the rich damp soil of Ireland as possible. This has been done by making the beds slightly lower than the surrounding ground so that when watering has to be undertaken in dry weather it does not run off but soaks to the roots of the plants. Much as Primroses love moisture the bed should never be waterlogged. The soil is then brought into condition by incorporating plenty of well rotted leaf mould and some very old manure. This seems to suit the plants.

When making the bed, if you have any rotted lawn mowings these should be mixed with the soil. With a heavy clay texture soil, add peat, leaf mould and sharp sand in...
Growing Primroses from Seed

Florence Levy, Gresham, Oregon

TESTED METHODS OF PRE-TREATING SEEDS

Pre-treating seed by artificial freezing and hot water applications has revolutionized the growing of Primroses and other hard-coated perennial seeds. Seeds can now be germinated to coincide with the best seasons to bring on the seedlings. Seeds of all highly developed plants are somewhat slower to germinate than ordinary seeds. Without pre-treatment Primroses germinate unevenly; with pre-treatment this is practically overcome except that some colors and some varieties are not as quick as others.

Primrose seed can be sown and germinated at any season of the year using these methods but the best planting season for each area is dictated by your particular winter conditions and your particular gardening facilities. An outline for seasonal sowings follows the explanation of the freezing and hot water methods.

Method No. 1. Artificial Freezing. Hardy Primroses, being cold climate and alpine perennials, have hard-coated seeds which, when dropped in their native state, either germinate in a few weeks or lie dormant until spring, freezing and thawing throughout the winter. Artificial freezing duplicates this action in a brief time.

Step 1. Open inner packet and put several drops of water on seed, or amout necessary to mass seeds together.

Step 2. Close seed packet and fasten, replace in outer envelope, wrap envelope (or envelopes together) in wax paper and put in freezing unit of refrigerator.

Step 3. When freezing fresh seed in mid-summer, freeze for one day before planting, taking out of unit two or three times during that day for an hour or two.

Step 3A. When freezing seed for spring planting, freeze from two to four weeks before planting depending upon your convenience or when your spring planting season opens. Thaw several times a week, or when remembered. Be sure seed is always moist before replacing to freezing unit. When checking on the moisture, also look for possible signs of germination (seeds have germinated in the freezing unit when left too long). If any seed has cracked and white sprouts appear, sow at once.

Step 4. When you wish to plant, remove seed from freezing unit, thaw and allow to dry just enough to roll free from packet and plant immediately.

Method No. 2. Hot Water Applications. Watering the seed with hot water immediately after sowing (or in the spring if seed is sown in late fall and early winter) and repeating once a day for several days following, is effective and especially so when seed has been frozen before planting.

Step 1. Use sprinkling can with fine rose so soil will not wash. Water that is hot but not burning to the hand ranging from 110 to 120 degrees is used. Place bulb of ordinary thermometer in the water and regulate to this temperature.

Step 2. Thoroughly water the newly planted seeds which have had no soil covering, and place wire protection over flats or pots. Over the wire mesh, place material such as glass cloth or paper for best germinating conditions.

Step 3. Repeat the hot water application (110-120 degrees) once a day for two or three days after planting, replacing screen and paper or glass covering each time. Warm water is used thereafter if needed before germination is well begun.

Step 4. When the green seed leaves appear, lightly sprinkle with fine sand, replace wire protection but remove glass cloth or paper cover and use unwarmed water to keep moist, not wet. Watering and care of seedlings explained under PLANTING INSTRUCTIONS WHICH FOLLOW.

Method No. 3. Artificial Freezing and Hot Water Combined. At Barnhaven we now use this combined method on all types of Primroses when sowing fresh seed in the sum-

Sufficent quantities to make the soil friable. On the question of manure, opinion is sharply divided. One school favors "Quaker's Bonnet" or "Ladies' Delight," the other is bitterly opposed to its use. A well-known Scottish grower uses hen manure, but, perhaps if a fertilizer is used, there is nothing better than a light dressing of very old and well rotted cow manure given in the early spring. Then the position is important and the site should be where they get shelter from the full blaze of the mid-day sun. An excellent place to grow them is under gooseberry bushes, as they get their thin protection from the sun in the summer and yet plenty of air and what little sun there is in the winter when the leaves have fallen.

Double Primroses certainly do not like to be alone and should be planted fairly close together, in fact one amateur advocated to the writer the growing of annual weeds amongst. While one hesitates to recommend this method there is no doubt that shelter and part shade are essentials. The late W. Robinson in his book "The English Flower Garden" says, "it enjoys the shelter, not merely of tall objects around but also of the long grass and herbaceous plants growing near."

Some people think that they should be grown in shade, but this is entirely wrong, as they like plenty of air and light. Double Primroses should not be coddled and will stand the most severe weather. The Double White, known and mentioned by GERARDE (1595) and RAE (1665), is known today. If they were such "miffs" as they are reported they would have disappeared years ago.

It is suggested that the beginner should start with the easier kinds first and thereby gain experience. In this class there are Double White (alba plena). Double Mauve or Lilac, some people favor "Quaker's Bonnet" or "Ladies' Delight" (filacina plena), and "Our Pat" which is purple. Possibly the easiest of all the doubles to raise is the Polyanthus type, Bon Accord "Lilac."

After experience with these the following varieties may be tried: "Marie Grousse," rose purple, lace white, "Red Paddy," rose red edged white, "Arthur De Moleyns," deep violet, Bon Accord "Purity," white with the base of its petals tinged with green, and Bon Accord "Gem," rose shaded purple. I have given up trying to raise "Madame Pomador," although she grows well in Ireland, she does not last long with me.

In very hot weather Double Primrose should be well sprinkled with water both morning and evening. The beds should be well soaked at least three times a week and not just merely sprinkled.

Double Primroses should be divided about every two or three years, otherwise their crowns will become congested.

One correspondent asks why suddenly a healthy looking plant will wither and die, and suggests disease. To answer this question it would be necessary to examine the plant, but the writer is of the opinion that more often than not, the trouble is caused by slugs or some root eating insect. The Grey Field Slug is a most troublesome and destructive pest to the foliage and buds, while the Small Black Garden Slug is even worse as it feeds both on the surface and underground, attacking the roots. Soot is the best remedy for these pests.

A pane of glass, or a cloche is much appreciated by the choicer kinds in winter as it does protect the plants from the attention of the birds and heavy winter rains.

There are serious attempts being made on this side of the Atlantic to produce a stronger type of double primroses. There is great scope in the hybridizing of Doubles, but that would make an article in its own right.

**GARDEN AURICULAS** are accorded the same treatment as the Shows until they are ready to be transplanted the second time. At this time they may be planted out to edge the border or in a bed of their own. They should be divided in August and be kept down to not more than three crowns to a division. They appreciate a good mulch of leaf mold about the first of March, and need no other fertilizer if they have been planted in a good well drained loam. They are fascinating to grow because their foliage is almost as interesting as their flowers are beautiful, and that is saying a great deal.

Alice E. Bettington
PLANTING INSTRUCTIONS

Seeding Medium. Use your favorite medium or the standard seeding compost made up of equal parts peat, coarse sand and loam, well mixed. We use the latter with the thinnest possible skin of shredded sphagnum moss on top to keep seed in place and to ensure constant moisture to the seed.

Drainage. A layer of coarse material should be placed in bottom of flats or pots without obstructing drainage holes before filling to the top with compost.

Seeding. Level off compost in filled container and tamp down. If compost compresses below ¾ inch from top of container, add more compost and tamp again. (Seed should be planted thinly near the top of container for good air circulation around seedlings.) Water compost thoroughly. Now sow the seed very thinly. Do not cover seed with soil. Follow your chosen method of treatment and place protective wire and glass cloth or paper over container as in Step 2, Method No. 2.

Watering. Seeds, before and during germination, are kept very moist, but when seed leaves appear (see Step 4, No. 2) avoid frequent light sprinklings. The better method of watering seedlings is from below by placing container in tray or pan of water and allowing moisture to come to the top.

Protection. Seeds and young seedlings should be kept from hot sun, heavy showers and safe guarded from birds and pests. Air circulation should always be good.

Pest and Fungus Control. For fungus note No. 4. Catworms may hatch in your young seedlings shortly after the seed leaves appear, and aphids shortly after transplanting. Apply insecticide or insecticide-fungicide dust ALWAYS MIXED WITH TECHNICAL TALC which can be bought at any drugstore. This is a safety measure against chemical burn. We always use in approximate proportion of ½ chemical dust to ½ talc mixed in the duster.

Transplanting. Transplant when first true leaf develops or larger if seed was sown thinly and you prefer to handle larger seedlings. Our transplanting compost consists of ½ loam, ½ sand, and ¼ dry peat packed tightly, ¼ Blue Whale which is peat with whale emulsion fertilizer incorporated under pressure for steady, organic food supply (put out by Lilly’s). In flats which have had a number of additional holes bored for good drainage, a thin layer of barnyard fertilizer is spread, the above compost filled to top of flat, leveled off, transplanted and watered in with Rapidgro or some other tested organic booster. Planted flats are never placed on a solid surface but elevated a few inches on 2x4s for drip-away and air circulation which is of the greatest importance.

Never use chemical fertilizers in the culture of seedlings and avoid lumpy manures in direct contact with newly transplanted, tiny seedlings.

When seedlings begin to grow (in about a week) lightly cultivate soil surface and repeat occasionally.

Keep Containers. If seedling yield is less than expected, disturb surface as little as possible when transplanting, water container using Method No. 2 after transplanting and start the germinating process again.

SEASONAL PLANTING GUIDE

A. Mid-Summer Sowing of Fresh Seed. Mid-summer sowing of seed (see Method No. 3) will produce seedlings ready for planting out by late September. In regions with severe winters and short falls, September seedlings may not establish sufficiently to winter out successfully and should not be sown at this season unless cold frame, greenhouse or cool, light house is available in which to hold seedlings until spring. In climates comparable to the Pacific Northwest and coastal California, September seedlings become well established by winter especially if planted in rich soil with a mulch of humus such as barnyard fertilizer around them after planting. During severe freeze or sudden temperature drops, a covering of evergreen boughs gives adequate protection.

Allow limited amounts of sun to young seedlings on very hot days but gradually accustom them, as they develop, to increased sun. Avoid burning through extreme exposure and avoid luster by too much shade.

Watch for appearance of fungus (see No. 4) after three or four days and if found, follow instructions. Toothpicks inserted alongside fungus mark it for observation.

B. Late Fall. Early Winter Sowing. In cold winter areas, seed are sown to advantage without pre-treatment, allowed to freeze naturally outdoors, protected from beating rains but keep moist. Snow is beneficial. In the spring, when hard freeze is past, use of hot water (see Method No. 2) brings germination quickly.

C. Late Winter and Spring Sowing. For all areas. See Method No. 3.

Seed Storage. Unplanted seed should be kept cool. Place packets in jar fitted with lid and store in refrigerator but not in freezing unit.

Keep seed boxes cool in summer and safe guarded from bird and pests. Air circulation should always be good.

Protection. Seeds and young seedlings should be kept from hot sun, heavy showers and safe guarded from birds and pests. Air circulation should always be good.

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REPORT FROM THE TREASURER

MORE NEW AND REINSTATTED MEMBERS

BAMFORD, Mr. D. ...104 Manchester New Road, Middleton, England
BEAM, Mrs. R. E. ...119 East 7th Street, Port Angeles, Washington
BERG, Mrs. Anna S. ...4814 St. John Road, Vancouver, Washington
BOWMAN, Mrs. Ernest ...5127 East Main St., Waterbury (12) Conn.
CROMPTON-SMITH, Miss Anne ...46 Clark St., Kandahal, Wellington, N. Z., N.Z.
DOWD, Mrs. Francis M. ...4812 S. 164 St., Seattle, Washington
DRESS, Mr. Wm. J. ...386 Downing St., Buffalo (20) N.Y.
FRANCE, Jr., Mrs. E. J. ...6532 N. Bothwick, Portland (3) Oregon
FRANKLIN, Mrs. George R. ...425 N. Tacoma Ave., Tacoma, Washington
FURE, Mrs. Harold ...East Stanwood, Washington
GROSCH, Mrs. H. R. ...191 Compton Rd., Cincinnati (13) Ohio
HART, Mrs. Philip ...12606 S. W. Edgecliff Road, Portland (1) Oregon
HARVEY, Mrs. G. Roger ...517 Valley Lane, Ravenswood, Falls Church, Va.
HENG, Mrs. Charles H. ...2907 Marker Street, Harrisburg, Pa.
JELITTO, Mr. Leo (14a) Stuttgart - N, Hoferstrasse 2, Germany
KLEF, Mrs. Wm. B. ...960 Fairway Drive, N.E, Waren, Ohio
LANDEWEER, Mrs. Harry ...P.O. Box 76, Mt. Vernon, Washington
MacPHERSON, Mrs. Murdoch J. ...3049 East 90th St., Seattle (5) Washington
MCCIL, Mrs. W. H. ...39 Harding Avenue, Ertion, New Jersey
MURRAY, Mrs. C. E. P. ...2516 Chestnut Street, Camp Hill, Penn.
PATTEN, Mrs. R. A. ...116 E. 56 St, Tacoma (4) Washington
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WALLICK, Mrs. F. H. Rt. 1, Box 461, Kirkland, Washington
WEST, Mrs. Ray Sumas, Washington
Table of Contents for A. P. S. Quartelys
VOLUMES 1 TO 11 INCLUSIVE

Indexed below are the main contents of the American Primrose Society's publications to and including October 1953. In addition to articles on the successful culture of hardy Primroses in all parts of the United States and Canada, almost every issue includes seasonal growing tips and care. There are authoritative articles on the history and development of hardy Primroses, scientific articles, and articles of romance and adventure. The genus Primula contains some of the oldest and most loved Primroses as well as some of the newest species in the plant world. Articles are by authors of international repute, amateur gardeners and professional growers.

Each issue is illustrated. Primroses as specimen plants, in the garden, at the national Primrose shows, in corsages and arrangements are shown. Advertisements from American, Canadian and British growers offer quality seeds and plants, often of a rare or unusual nature which are seldom, if at all, advertised elsewhere.

Quarterlies indexed below may be purchased at 75c the copy, unless otherwise stated or by the volume (four copies) at $2.50. Send cash, money order or check (no stamps, please) to Mr. C. Y. Griffin, Treasurer, 2946 N. E. 58th Avenue, Portland 13, Oregon, for the copies you wish for your garden library or gardening friends.

An active membership in the American Primrose Society (2.50 annually) entitles you to the four Quarterlies currently published that year, choice seeds, and admission to the Annual Primrose Show held each spring in Portland. An interest in Primroses is the only membership requirement.

VOLUME I

Three Quarterlies in one issue, Nos. 1, 2 and 3 July and October, 1943, January, 1944.......

They are: Asia's Wild Flowers...Root Weevil Damage to Primroses...Large Crowded Plants Need Dividing...Border, or Garden, Auriculas (History, development and culture) ... Summer and Fall Sowing of Seed...Fall Division of Polyanthus Primroses...Problems in Primroses...Hardy Primroses in Northern New Jersey...Primulas That Flourish in Western Ontario...Death to the Weevils (Larva, pupa and beetle figured)..."Thrum-eyed" and "Pin-eyed" (explained and figured)...Scarifying Seeds for Immediate Germination...Primulas for Indoors...Adventures with the Candelabras...Sweden's Cowslips...More about Weevils...A Standard of Excellence for Polyanthus (With judging score) ..."How Dear to My Heart"...P. Florindae (Tibetan Cowslips)...Proper Storage of Seed and Why and How of Artificial Freezing for Quick Germination...Primrose Growing in Wyoming...Reviews of Shows and Meetings.

No. 4, April, 1944 (Sold Out)

Suggestions for Primula Settings...The Primrose Path...Wild Flowers of Cotswold Hills...Color in the Auricula...Growing Primula Auricula in Maine...Primulas of Switzerland...Juliae Hybrid Primroses...On Pollinating...Seeding Mediums...P. scapigera...Primulas on Kiska.

Vol. II, No. 1, July, 1944 (Sold Out)

Some Moisture-Loving Primulas from Seed...Mulches and Primulas...The True Primrose in Scotland...P. amoenia (Caucasion Oxlip)...Summer Water, Broadleaf Trees and Primulas (transplantation figures given)...Summer Seeding...Show Reviews and Meeting Reports, (Sold Out).

Vol. II, No. 2, October, 1944

North American Primulas...The Nature of Farina (Silver meal or bloom characteristic to some Primulas)...Winter Care of Primroses...Nocturne (Cowslips and

Nightingale) ...Primroses in Alaska...P. margarita (Silvered beauty of the Maritime Alps)...Report from Wisconsin...Notes from Members.

No. 3, January, 1945

Primula Juliae and Hybrid Juliana Forms (History, development and culture with descriptive list of named varieties)...Growing Polyanthus as Annuals...A Grower's Stand Against Over-Fertilizing...In a Primrose Wood (Epilogue)...Blue Primroses (History and Development) ...Fall Meetings Reviewed.

No. 4, April, 1945 (Year Book Number)

"A Goode Flowre: The Primrose" (Primroses figuring in early prints and plates: To be continued)...The Chemistry of the Farina Produced by Certain Primulas...A Few Companion Plantings for Primulas...The Preparation of Herbarium Specimens...Seedling and Summer Care of Primroses...Primula Reports from Quebec, Nova Scotia and Maryland...Hot Water Method for Quick Germination of Seeds...The Landing of the Primrose...Reports of Officers...Membership Roster.

Vol. III, No. 1, July, 1945

"A Goode Flowre: The Primrose" (The Golden Age of Prints and Engravings: To be concluded)...Hunting for Primulas with Capt. F. Kingsdon Ward (Concluded in No. 2) ...Understanding the Asiatics (Climate and conditions and elevations of Asiatic Primulas as guide to successful garden culture)...Tips on Summer Seeding...P. aurantiaca (A brilliant orange Candelabra with mahogany stem from Yunnan)...Reviews of Show.

No. 2, October, 1945

Primula Allionii (A glorious alpine Primula localized in Maritime Alps off the Italian Riviera)..."A Goode Flowre: The Primrose" (Concluded with the Decline and Fall of the painters' and engravers' art, with list of plates from Curtis, The Botanical Magazine)...Hunting for Primulas With Capt. F. Kingsdon Ward (conclusion)...Hybridizing for Double Primroses...Reports of Six Meetings.

No. 3, January, 1946

Growing Primulas in New York...More Hybrids of Primula Juliae...Primroses in Quebec...The Hardy Primrose in Tennessee...Early American Primroses...Standards of Excellence for Garden Polyanthus, Garden Auriculas, Acaulis and Juliae Hybrids (with judging scores).

No. 4, April, 1946 (Year Book Number)

Primroses as They Grow in Wisconsin...The Use of Primroses in Flower Arrangements...Acaulis in the East...Sawdust Culture for Primrose Seeds...Gold and Silver Laced Primroses...I Knew Mr. G. F. Wilson of Wisley, England (Credited with originating the first blue Primrose)...P. Sieboldii (the indestructible, fragile-appearing Oriental Polyanthus)..."Come Buy My Pretty Primroses" (call of the London flower-seller)...Pest and Fungus Controls...One Day Germination of Auricula Seed...Reproduction of old engraving—"Primrose Gatherers"...Reports of Officers...Membership Roster.

Vol. IV, No. 1, July, 1946

An Early Book on the Auricula (Review of M. Guenin's Treatise on the Auricula published in Paris, 1738. To be continued) ...Site and the Part It Plays in Plant Survival...P. intercedens (An American species discovered along the northern shore of Lake Huron and through the Bruce Peninsula)...Red Spider (Description and control)...Growing Asias: Mistakes Nos. 2 and 3...Notes on Primulas in New Hampshire...The Auricula Chart of G. H. Dalrymple (Show and Alpine types explained) ...Year Book of National Auricula Society (Northern Section) of England, 1946. (Review)...Review of Annual Primrose Show.

Vol. IV, No. 2, October, 1946

An Early Book on the Auricula (Review of M. Guenin's treatise (1738) concluded)
Vol. X, No. 3, January, 1953


No. 4, April, 1953


Vol. XI, No. 1, July, 1953


Numbers 2, 3, and 4, October, 1953


Numbers 2, 3, and 4, October, 1953


The Alpine Garden Society

Members of the American Primrose Society would find much of interest in the Quarterly Bulletin of the Alpine Garden Society. The genus PRIMULA is of outstanding importance to all rock gardeners and new introductions (of which there have been several in the last few years) are fully described, usually with photographs.

In earlier volumes there have been numerous articles on European and Asiatic Primulas and the separate numbers are mostly available.

The subscription is One pound per annum, payable on the 1st of January but American Members can, if they find it more convenient, remit $2.50 to Dr. C. R. Worth, Groton, N.Y., one of the American Hon. Secretaries of the Society, who is empowered to issue receipts on the Society’s behalf.

Apart from shows and meetings in which Overseas Members are unable to take part, the Society has recently inaugurated a Seed Exchange in which Overseas Members have certain priority, whilst such Members can utilize the services of the “panel of experts” and are welcomed on the Society’s Continental tours.

Subscriptions should be sent to the Secretary, C. B. Saunders, Husseys, Green Street Green, Farnborough, Kent, or to Dr. Worth as above.

Index of Volumes I-XI
According to the Species

Compiled by Wilbur Green, Roy, Washington

A complete list of the species and their synonyms is to be found, together with the Sections to which they belong, in Vol. X, No. 4. (Corrections to be found in this list.)

Some of the references to follow may be meager as to descriptive content, but this index does not contain references from lists, but only those which give some definite information. The Table of Contents (page 36) will generally indicate the placement of subject matter such as horticultural varieties, cultural directions, etc., which are not covered in this index. The Volume number is indicated by Roman numerals. When necessary, as in Volume X, the issue numbers are given and the page numbers follow.

Synonyms are indicated by an asterisk. Illustrations are indicated by italicized numbers.

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this nature.

This Blue Whale compost is complete.

Keep moist when planting — use no fertilizer at any time.

Directions for Use on Folder and Bag.

Ask Your Garden Store or Nursery

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