THE PICTURE ON THE COVER: Again we are indebted to Mr. T. C. Church of Ascot, Wood, Berkshire, England for this photograph of a plant which has been prepared for us by Mr. James Stuart McLees, Editor Emeritus of the American Primrose Society. This plant is of a variety called "P. Redii," which is not too common and, as all the soldanelloid section are seedling annually, it is less than other varieties. Grown mostly as an alpine house plant because of the need for drying out in winter, it can be grown out of doors whereever P. Redii of the same section will grow.

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My Breeding Efforts With The Genus Primula

Excerpts from George Arends “My Life As Gardener and Plant Breeder”

Translation by ROBERT LUSCHER

George Arends with his beloved Primroses

Ever since I can remember, all Primulas were my favourites, and I grew, while a student in my father’s greenhouses, seeds of the best P. sinensis varieties, “Kermesia splendens” and “alba magnifica” with many others. I selected from among the hardy garden Primulas, the best and largest flowering plants to obtain seed for reproduction. P. japonica, little known at the time, received, as a potted individual specimen, my special care for resale purposes.

It was soon after forming the partnership with my brother-in-law Pfeifer in 1888 that we had a fair collection of double flowering acaulis with some colour varieties in larger quantities. All were kept in cold frames under glass during the winter. In early spring many of these were used as cut flowers, which, when bunched into small bouquets like violets, sold on the market quite readily. They comprised the varieties alba plena, double white; lilacina plena, light lilac; lutea (sulphurea) plena, cream-yellow; aurea plena, dark yellow; papurea plena, purple-red; Croussei plena, lilac-red; negro-plena, black-red; sanguinea plena, brilliant-red; Crimson King, crimson-dark red. All were purchased originally in Holland and England. However, their doubtful hardness made the cold frame treatment necessary, and only the white, the sulphur, and the brilliant red withstood the rigours of our winters in the open ground under the cover of evergreen branches. A particularly cold winter destroyed the entire collection however, and any future attempt to grow doubles was temporarily discontinued.

I gained renewed encouragement in the growing of Primulas by the regular attendance at the Royal Horticultural shows in 1903 and 1904. Some growers exhibited marvelous Primula hybrids from elatior, vulgaris, and auricula. Results obtained from the seed I purchased proved to be very discouraging. Only a very small percentage reflected their parentage in colour, flower form, and size. Nevertheless, these few plants gave me a fair start and by reselection and hand pollination I was able, during the course of years, to bring forth good varieties which could compete anywhere.

At this time the yellow Polyanthus form with the name of “vierlander-primula” (vier = four, lander = plural of “land,” country, primel = primula) was much in demand as a cut flower. Their size and colours were lacking in merit, so I paid increased attention to their further improvement. These Polyanthus were introduced later under the name P. elatior aurea grandiflora improved Vierlander. This constantly improving variety is still demanding my full attention in the production of seeds.

To retain my P. elatior grandiflora mixture on its high level and to improve it, all the best and separate colours were hand-pollinated in the greenhouses and only their seeds were used to grow subsequent seed parents.

I believe it was the particularly cold winter in 1908-09 which brought all my work to a sudden end. The entire collection of P. elatior hybrids froze and were lost, when previously they had endured cold without protection. Since then all are covered every fall with pine and fir branches from the year before, branches bare of all needles. This permits the air and sunshine to penetrate, but prevents the dry cold east winds to blow the thin snow cover off. During the same winter I lost all Candelabras and yet most acaulis remained undamaged. This fact was astounding because this species is a native of the more southern parts of Germany and neighbouring countries where the climate is less severe.

I must mention here that all the garden hybrids of the acaulis type were much inbred with P. vulgaris, Sibthorpia, and like kinds, giving rise to very rich colour variations.

The relative hardiness of the acaulis, I thought, could infuse this quality to give me a harder race of doubles, therefore furnish us with a prolonged flowering season. I bought all former mentioned varieties and was fortunate to discover among a few plants traces of pollen of which I made full use. The resulting seeds gave us several hundred plants. My astonishment was great indeed when the F1 generation produced only single flowers despite early emasculation of the female flowers, and pollination by insects in the glass houses this early in the year was unthinkable. Every seed of this first generation was collected, and I raised about 1500 seedlings. The ensuing results were astounding. A few hundred plants flowered completely double in every possible colour variation, from a delicate rose to dark yellow, dark purple to carmine. But no whites. Pollinating the best single flowering plants of the F2 generation, the seeds gave me more doubles, if less in proportion. Repeating this procedure, cultivating and pollinating the single offsprings, I always found in them fewer desirable doubles. The best of them were propagated asexually. The first World War made me lose thousands of plants. Lack of personnel and care were to blame. All I had left were memories.

It was only years later, in 1925, that I played with the notion of starting over again with double acaulis, introducing this time in my work P. juliae and P. x Helenae, both propagating most readily and being very hardy. The first and repeated pollinations gave me hundreds of promising seedlings which were vigorous and hardy. The second World War reduced my stock again with bombings and subsequent lack of care.

In spite of all losses, my selected assortment increased in time to its former size through constant selection and careful pollination. Among the seedlings was one small flowering specimen with dark brown flowers which lacked the gold center. It took me years of intensive cross-pollination to produce a medium size flowering type, which I offered to the trade in 1939 under the name “Arends Gold-
lackbraune,” (Arend’s cheiranthus brown).

My experiments with polyanthus type primulas to obtain doubles were not successful, despite the occasional metamorphosis of stamens into petals (petalogy) among my plants. Nevertheless the possibility does exist of growing double polyanthus types as with acaulis and P. x Helenae. One nice red double with more elatior than acaulis characteristics grew a few years ago in a garden in Cologne, and was known in the trade as Primula elatior “olga menden.”

Some time before the turn of the century I received a delightful alpine primula from England which was labeled P. viscosa. It was, however, classified by my friend Wocke as P. arctotis, variety alba, now known as pubescens alba. The nice dwarf growth and global inflorescence encouraged me to pollinate it with other good alpine primulas from the Auricula section. The subsequent seedlings resembled the mother plant (pubescens alba) showing the same dwarf stature and attractive low, almost round flowerheads. The colours included white, lilac–rose, rose to crimson purple. I offered them in 1901 as P. arctotis hybrids.

I bought my Auricula types from the foremost specialists in England, where various societies exist, and their cultivation was of the highest order. The growing conditions in England were more favourable than ours so my aim was to acclimatize them to our raw winters. In this I was most successful, without detriment to size, colour, and beauty of the flowers. I paid small attention to the rigid English rules as far as circular or angular tube, paste, and other particularities were concerned. My concern, besides extreme hardiness, was to obtain flat, saucer-shaped flowers with small eyes, erect inflorescences in delicate pure colours; qualities, I am glad to say I have fully achieved.

A white and delicate cream Auricula was of great interest to me as a cut flower. Discovering the offer for sale of a P. pubescens alba “grandiflora” elsewhere, I was of the opinion some other grower had reached this purpose already. This proved to be false. The flowers were relatively large and of cream colour; the plants, however, rather weak in constitution, the umbels lacking in sufficient florets. By repeated pollinations with good large yellow Auriculas, a satisfactory variety was eventually produced. Large quantities were finally obtained by vegetative propagation. In 1905 it was described and offered to the public as x Germania.

On and off one may find in the trade double Auricula types. All the specimens I have experimented with were very mediocre and disposed of at once on the compost heap. The small flowers lacked that nice doubling, obliterating the velvet colouring of the florets and tube. A double form would only be welcome if clear colours in yellow, blue, red, or brown shades could be had similar to acaulis with their perfect double forms.

Offspring of the Auriculas are the beautiful hybrids—Primula x oliven-sis and Primula x Wockeana, both x marginata hybrids. (Named after the originator, Wocke, a gardening friend of mine.) A very nice hybrid of similar origin, (P. marginata x P. auricula alpina) but distinctly different from the above two was produced here and sold under the name in the trade as x Rhenania.

I received in 1908 from the world renowned nursery firm in St. Petersburg (Leningrad), Regel, and Kesselring, P. auricula, which claims its home in the highlands of Persia, (Iran). Belonging to the Capitatae section, it resembles a strong growing denticulata, flowering however, four weeks later. I thought it possible to prolong the flowering season of P. denticulata, so, pollinating both, I had good results. What I sold as “denticulata late flowering hybrids” bloomed two weeks later. The market did not want my late capitate primulas. I discontinued their culture.

P. cashmeriana and P. denticulata are classified as one species by many botanists, ranking the second one as a variety of the foregoing. I differ. P. cashmeriana has the underside of the leaves covered with a yellow farina, also the peduncle, and varies so much in its growth and peculiarities compared with denticulata that I call the second one a good species, despite their close relationship and ease of hybridizing traits.

P. cashmeriana possesses in our climate a very disagreeable quality. The flower heads develop in the fall enough only to freeze during the winter. Rot sets in and destroys the inflorescences, so no flowers can be had in the spring. The plants recover, either from the crown or roots themselves, but one has to wait another year for either no flowers at all or only deformed ones. P. denticulata, on the other hand, terminates the growth cycle in the fall and forms fat, round winterbuds. No cold weather of any kind can do them the slightest harm. Very early I began to improve this species by a most rigorous selection of the largest flowering types, pollinating all very carefully, attaining the desired results, which enabled me in 1905 to introduce to the trade my Primula denticulata grandiflora “Ronsdorfer” hybrids. Hybrids they were, as I made full use also of various P. cashmeriana forms to get a richer variety of colours. My first ob-

This is one of the pictures sent to the Quarterly from Germany and shows a field of Astilbe which Mr. Arends did so much to improve.

AMERICAN PRIMROSE SOCIETY
ject was the retaining of the strong healthy growth of *denticulata*, and the large individual florets of *cashmeriana*.

During the following long years the breeding work continued. The near relative, *P. purpurea* (Royle = *macrophylla*) which I received in 1908 from Regel and Kesseling, was included with the aim in mind to obtain more colour variations which would include a range of clear rose and dark violet shades. I tried the infusion with *P. rosea* as a parent without getting results. Continuing hand pollination and selection, I finally succeeded in giving to the public in 1925 pure, clear colours with the varieties “delicata” and “Rosamunde,” and soon after “rosea” which from then on were propagated vegetatively. In 1928 the dark violet forms atroviolacea and violeta appeared, and in 1932 the most vigorous growing, largest flowering of all my *denticulata* hybrids “Juno” with beautiful light lilac flowers, made its debut. The hybridizing work continues. The colours improve and the next years shall prove that my labors will not have been in vain.

Before concluding my notes on *Primula denticulata*, I may mention the crossing of *P. rosea* and *P. denticulata* in Saalfeld (Germany) by Supritz. I did not care for the light lilac rose flowers. Nevertheless, I was convinced this was a true hybrid between two species because they yielded neither good pollen nor seeds.

The hybrid emanating from *P. denticulata* x *P. frondosa* was of little importance to gardeners. It was a weak grower and disappeared, but from a scientific point of view it must be classified as a most interesting hybrid between two true species.

In the fall of 1913 I purchased in England the newly introduced *P. juliae* which flowered with me in the spring of 1914. I recognized the close relationship with acaulis, and pollinated every flower with all the various acaulis colours, collecting an abundance of seeds, which in turn gave me hundreds of seedlings. They had the growth characteristics of *P. juliae*, with much divided stoloniferous root crowns. The flowers were larger and better in every way so I included them in my list in the fall of 1920 as a mixture. The name given to this hybrid was *Primula x Helenae*, in honor of my wife and life companion.

A similar cross between *P. juliae* x acaulis coerulea was made by Mr. Zeeman in the experimental garden of the dendrological society of Austria in Pruhonitz, and described under the name *P. x pruhoniitiana*. Many other hybrids have originated since in England and elsewhere. Out of my first pollination I selected some of the best types and propagated them by divisions. In 1921 I presented “purpurteppich” (Purple Carpet), in 1925 “edelstein” (Gem) and “juwel” (Jewel). Using more acaulis blood later in my pollination work created in 1931 “blaukissen” (Blue cushion) with an almost blue colour and “schneekissen” (Snow cushion) in white, which flowers very early. In the meantime other hybridizers did not remain unnoticed. W. Dorn gave us the violet blue variety “March Joy.” And my salmon-red variety “Flower cushion” made its debut in 1949. The future for the *P. juliae* hybrids is bright. They divide readily, without suffering a lack in florescence.

*P. luteola* looked very desirable for hybridizing purposes. Many pollinations with other species did not give me seeds; hybridizing only *P. luteola* x *P. rosea* “grandiflora” was successful, and Professor Pax called it primula “hoelscheri” in 1908, but it was entirely sterile. The vegetative propagation being too slow, and despite repeated good crossings I finally lost it.

*P. rosea* is the gem among the early flowering primulas with its brilliant rose flowers. I worked with it for some time, but got no results with other species, except with *P. luteola*. The degeneration of some seedlings of *P. rosea* in gardens as evidenced by inferior small flowers may be caused by a very dry climate and a fast-drying soil. Shortly before the second World War a very robust form of *P. rosea* was described in the magazine “Garden World” which emerged from the garden of a primula grower along the lower River. This may possibly be a hybrid, or a chance polyploid. Seeds were offered under the name *P. rosea* gigas Wasserme’s giants.

In 1910 I could name about seventy to eighty varieties in my collection of *P. Sieboldii*, and I still have some with me today. By repeated selection and pollination I improved the size and colour of the flowers, flower stalks, and umbels. Introduced in 1905 were the varieties “robert herold,” “werner,” “gardendirektor stefen,” “else bayer,” “elke” and many more. Goose and Koenemann worked with *P. Sieboldii* also, and their large flowering “Petunia” is remarkable. *P. Sieboldii* has not found favour in German gardens because it disappears during the summer months, leaving bare spots. Unless ferns or other shade-loving plants are interplanted to fill the gaps, the *P. Sieboldii* can be unwittingly destroyed. However, they are highly regarded in the trade as cut flowers.

A very rare hybrid between *P. Sieboldii* x *P. Veitchii* (now *P. Polyneura*) was grown in the town of Nancy, France, by the famous French nurseryman Lemoine. The hybrids “la lorraine” and “nancy” have beautiful crimson flowers and retain their bright green leaves during the entire summer months. Being sterile, they must be propagated by divisions.

As far as the Candelabra type primulas are concerned, the available number of species permitted me to try my hand with *P. japonica* x “Red Hugh,” and I was offering the resulting hybrid...
in 1932 as a beautiful plant with the name “Meteor.” My stock of “Meteor” was lost later during a severe winter. New species arrive constantly from the high altitudes of Asia, each more interesting than the one before.

In the spring of 1909, on the occasion of an exhibition in London, I saw P. Littoniana (Vialis) for the first time. I was astounded by its beauty and the fact that it did not resemble a primula at all! At once I entered a notation into my book: “Pollinize with capitata.” The experiment was executed soon after but the resulting hybrid was of scientific value only. Camillo Schneider sent me large quantities of seeds of P. Beesiana, P. Bulleyana, and P. Littoniana (Vialis) while collecting in China, and the flowering seedlings, thousands of them in frames, were breathtaking in their magnificence. Most disappeared soon after ripening their seeds and I have also found P. Littoniana (Vialis) to be rather difficult in cultivation and of short existence.

Similar, but weaker in constitution is P. muscaroides. It would be a gratifying, but difficult, task to produce from this beauty a stronger growing, more resistant strain, perhaps with polyploid characteristics. With a beauty all its own is P. Winteri (P. Edgeworthii), resembling a slightly farnose acaulis with delicate lilac flowers. It is not hardy here, but may be grown successfully for years in an alpine glass house. The best known bell flowering primulas, P. sikkimensis and P. Florindae are the representatives of other beautiful species within this section. The MacWatt hybrids from England are a good example with their orange colours in light and dark shades, even in violet.

I cannot conclude my notes on primulas without telling something about two failures. The first P. grandis, a remarkable strong growing, winter-hardy plant, has only negligible small bell shaped flowers. I tried all available species in my work on this one to no avail, and finally gave up. The second one, a rather promising species, is a greenhouse plant, P. mollis. Numerous inflorescences emerge in the spring with small purple flowers from the large woolly leaf masses, which resemble small leaved cinerarias. All experiments to better this type were fruitless. I starved the plants, others received extra special care, producing monster plants. I disbudded and expected by chance to get a variation, or mutation. Nothing happened. With the hope that someone will find a relative species compatible with the foregoing among the numerous species in the spacious Chinese territory, I discontinued all further efforts.

Numerous are the Chinese, Japanese, Siberian, and American Primula species I obtained for cultivation during many years in the hope that I might find something not only of botanical interest, but rather of value to the gardener. Many possibilities among the new and beautiful species and varieties are still present for the inquisitive plant breeder.

A certain difficulty with the primulas is their heterostyly, and with few exceptions all have flowers differing in the length of styles; some plants have flowers with long styles and others have short ones (thrum and pin). Cross pollination and subsequent seed production usually takes place when pollen from a short-styled plant is transmitted to the long-styled one, and vice versa. This applies not only to pollination within the species, but also among the various species themselves.

Editor's Note: Permission to translate excerpts from George Arends' book was given Mr. Luscher by Mr. Leo Jelitto and C. F. Rudloff, editors, and by Mr. Arends' oldest son. The book "My Life as Gardener and Plant Breeder" was published in the Spring of 1951 in Wuppertal-Ronsdorf. Incorporated in the book is a list of plant creations by the late George Arends.

Test Garden To Be Established At Steilacoom

The long delay in establishing an official test garden is compensated for by the fact that the site at Western State Hospital is ideal and will be in the charge of an accredited horticulturist.

Permission has been given by the Western State Hospital to establish a testing ground for the whole range of the species of Primulaceae. The importance of this event is self-evident. The gardens will be under the personal supervision of Mr. Leonard Rigby, the horticulturist now in charge of the Hospital grounds and greenhouses, thus ensuring expert data and reports.

Reports will be made to the American Primrose Society membership from time to time in the pages of the Quarterly whenever such reporting seems of interest. The call is hereby sent out for any species material, plants or seeds, to be sent to Western State Hospital, Steilacoom, Washington, c/o Mr. Leonard Rigby.

Hybridizing Award

The Hybridizing Committee announces that the American Primrose Society's Premier Award for Outstanding Achievement in Hybridizing goes this year to Maude Hannon for her work with the beautiful candelabra hybrid "Fujiyama." The award is to be presented at the banquet during the National Show in Chehalis and pictures and description of the plant will be covered in the Summer issue of the Quarterly.

Editor's Note: See Hannon Acres ad on page 82.
Primroses In My Garden

By MRS. J. DORMAN SEARLE

For I dipped into the future, far as human eye could see,
Saw the Vision of my garden, and all the wonders that would be
(with apologies to Tennyson)

Of course there are Primroses in my garden. There are so many places where only primroses can supply just the right note to make the planting a complete harmonious symphony.

Earliest of all to bloom is that glowing flower known to some as the "ubiquitous Wanda." Wanda makes a carpet to welcome Spring herself to my garden — a low spreading carpet at the foot of the pale grey trunks of the balsam poplar. This is one of Nature's favorite color harmonies, soft grey and glowing magenta. It gives the gardener a "lift" in those interminable grey days before real spring.

The deservedly popular polyanthus bid the visitor welcome to my garden. To the right at the foot of the brown woven board fence are the biggest flowered browns, oranges, and yellows that I can find in a narrow planting by the road. To the left are softer tones of the same colors blending to dainty pink in vast drifts that echo the color of the azaleas that give them shade in summer.

In the farthest corner of the magnolia garden blue primroses extend the season of "sky on earth" that Muscari, Brodiaea, Camas, Chionodoxa, and Campanulas complete. This grouping of blue gives an illusion of even greater distance.

Close to the house at the foot of a large (strictly for the birds) cherry tree is a planting of huge velvety red polyanthus. These are my husband's favorites and the rather coarse texture of the tree and primroses is most harmonious.

In a sunny spot in the open woodland there is a rather large group of auriculas selected for the grey green of leaves and the greyest-greenest possible flowers because the crumbling grey stump that is the feature here is covered with grey and green-grey lichens. The total effect is pleasant and gay in spite of the muted tones.

Along the little brook, at the foot of the bank where Wanda reigns earlier in the season, stand the stately candelabras: Fujiyama and Primula pulmonaria, Bartley strain, in frosty white and delicate powdered pink. The shafts of sunlight through the canopy of leaves overhead make this planting truly sing.

Here and there throughout the garden there are primroses. Dorothy is especially at home under and between the Pieris japonica and floribunda. That "oldest" of all red and yellow "toughie" blooms faithfully at the foot of an ancient gnarled apple tree.

Since they are so often associated in nature, Edgeworthii alba, with a little extra protection from the winter rains, is being established by the rhododendron path for close viewing and enjoyment. Tucked in a pocket on the bank is Clusiana, that gem so loved by the connoisseur, and a pubescens alba to keep it company.

Primulas, in season, in pots bring beauty to the patio and add that something extra to gracious living in the Pacific Northwest. This is a favorite method, too, to show off my pets to best advantage and to a greater number of people, for here on the patio they show even at night.

Yes — there are primroses in my garden. See—you can read it there on the plans.

Mrs. Searle is Director of the Cascade District, Washington State Federation of Garden Clubs and is the mother of Nancy Hagerman, Chairman of the National Primrose Show at Chehalis, Washington.
1958 National Primrose Show
Chehalis, Washington - April 26-27

BY NANCY HAGERMAN

The National Show of the American Primrose Society will be presented this year by the Lewis County Primrose Society and will be held at the Southwest Washington Fairgrounds April 26-27. There will be classes for arrangements featuring primroses, as well as those for every kind and variety of primrose. The Show Theme is Primroses in My Garden.

Entries will be accepted April 25th from 9:00 a.m. until 9:00 p.m., and Saturday morning, April 26th, from 8:00 until 10:30. This show will be open to the public from 2:00 p.m. until 9:00 p.m. Saturday, and from 12:00 noon until 9:00 p.m. Sunday. Admission is free.

There will be many additional displays of horticultural, commercial, and educational interest, including a plant sale put on by the American Primrose Society, with many plants of outstanding value offered for sale.

Besides the coveted Bamford Award, other trophies will include those presented by the American Primrose Society, the Cascade District of the Washington State Federation of Garden Clubs, the Lewis County Garden Club, and several individual garden clubs affiliated with each society, as well as by commercial concerns.

A banquet will be held at the St. Helens Hotel in Chehalis, Saturday, April 26th, at 7 p.m., in conjunction with the Show. One of the outstanding events of the evening will be the presentation of the American Primrose Society's annual award for outstanding achievement in the field of primrose hybridizing. This banquet will be open to all who are interested and reservations may be made by writing the banquet chairman, Mrs. Louis Pemler, Sr., 1299 1st St., Chehalis, Washington. Banquet tickets will cost $2.25.

President of the sponsoring Lewis County Primrose Society this year is Mrs. Henry Lucas. For further information about the show, or for show schedules, write the Show Chairman, Mrs. William L. Hagerman, 1006 Washington Ave., Chehalis, Washington, or the Secretary, Mrs. Louis Pemler, Sr., whose address is given above.

Show Schedule

Inasmuch as the Show Schedules from year to year are similar, the schedules are not printed in the Quarterly this year. The Chairman of any Show you are interested in will gladly send you a schedule for that show.

1958 Show Dates . . .

NATIONAL PRIMROSE AND AURICULA SHOW
Lewis County Primrose Society
Chehalis, Washington
Southwest Washington Fair Grounds, between Chehalis and Centralia
April 26-27
Theme: Primroses in My Garden
Admission Free
Food available
Plant Sale
Show Chairman:
Mrs. W. L. Hagerman
1006 Washington Ave., Chehalis

JEFFERSON HIGH SCHOOL PRIMROSE SHOW
Sponsored by the Klatawa Club
Boy's Gymnasium,
Jefferson High School
5210 North Kerby Avenue
Portland, Oregon
April 1
11:10 a.m. to 4:30 p.m.
Show Chairman:
Jeanette Butts and Sally Peets

EAST BREMERTON GARDEN CLUB
Sheridan Park Community Hall
Lounge
April 10, 1:30 - 8 p.m.
Parlor Show - no commercial growers
No admission
Theme: Shower of Flowers
A silver tea
Show Chairman: Mrs. Robert Murphy
Rt. 3, Box 370, Bremerton

FRIDAY HARBOR PRIMROSE CLUB
Friday Harbor, Washington
Friday Harbor Study Club
April 11-12
Theme: An English Garden
Refreshments
Silver Offering
Plant Sale
Show Chairman: Mrs. B. F. Hannah

TACOMA, WASHINGTON
14th and A Streets, Tacoma
April 12-13
Theme: Primroses Around the World
Coffee Bar
Admission Free
Plant Sale
Show Chairman: Dick Backeberg
11811 S. Sheridan, Tacoma 44, Wn.
Co-Chairman: Wesley Bottoms

CLARK COUNTY PRIMROSE SOCIETY
Vancouver, Washington
Experiment Station - N.E. 78th St.
April 12-13
Theme: Primroses at Home
No Admission
Plant Sale
Silver Tea
Show Chairman: Mrs. Lucille Tippit
Assistant: Mrs. Harriet Wallace

MT. ANGEL PRIMROSE SOCIETY
Mt. Angel, Oregon
Mt. Angel Memorial Hall
Sunday, April 13th
Admission Free
Plant Sale
Coffee and Cookies (Free)
Show Chairman: Mrs. Victor Hoffer

AMERICAN PRIMROSE SOCIETY
Letter from the Editor

Dear Members:

Ivy Agee receives many requests for more practical articles and we wonder why these requests could not be sent to the editor in the form of questions for the Question and Answer Department. If a question requires an answer involving more space than allowed in the Q. & A. Dept., it will be answered in the form of an article.

Although some of you may be experts, most of us are not, and it is for the most-of-us-are-not that the Dept. was started. Questions and answers are printed in the Quarterly so the whole membership may benefit. No names will be used so you need not even sign your question if you prefer. This letter is written with the hope that more of you will share your experiences with the rest of us. If you have an "answer" to what was once a "question", pass it along so that other gardeners may share in your added knowledge.

Thank you.

THE EDITOR

Choosing Auricula Varieties

Is Your Favorite Show or Alpine Auricula on This List?

JAMES STUART MCLEES

The cult of the florist's auricula originated in Europe more than two hundred years ago and reached its greatest development in England, where growers and admirers of this beautiful flower are associated in societies devoted to its exhibition and culture, and where a considerable body of literature dealing with its study has been built up. The cult spread to America only within recent years, and would-be devotees here are handicapped not only by regulations limiting or preventing the importation of plants, but also by a lack of knowledge of the qualities of the various named sorts that are offered abroad. American dealers have only a few of these to offer; adequate descriptions of the others are lacking even in the catalogs of foreign dealers, and the writer knows of no source of colored illustrations that covers the field with even a suggestion of completeness. Short of going abroad to see them for himself, what guidance can the Amer-

Auricula Bookham Star is a daffodil yellow with a white eye.

ican novice find to assist him in his choice of varieties?*

One approach that suggests itself is that he be guided by the relative popularity of the varieties among fanciers in England. Exact knowledge of this may be impossible to obtain, but a useful approximation might be had by making a statistical study of the varieties exhibited at the shows of the National Auricula and Primula Societies of England. In the Year Books of the various sections, most completely in those of the Northern Section, are published the names of the varieties placing first, second and third in each of the competitive events at the primula shows put on by these societies. Indeed, in the report of the Manchester exhibition in 1954, the names of all the varieties entered in the single plant categories were given, an innovation for which the Editor of the Year Book should have our thanks, coupled with a request that the practice be extended to all classes and all exhibitions.

Accordingly a list was prepared showing the names of the show varieties of auricula exhibited at the 1954 exhibition at London and Manchester, as reported in Part 2 of the Northern Section's 1954 Year Book, together with the number of times each name appeared in the lists. The result was disappointingly inconclusive. One hundred twenty citations were noted, divided among eighty-one names. No variety was named more than four times and the vast majority were named only once or twice. A partial list of the varieties exhibited in 1953 indicated the same sort of result. The conclusion seemed to be that there were no definite favorites among the show varieties in England.

When the same technique was applied to the alpine varieties the results were very different. In the reports of the 1953 exhibitions one hundred sixty-three citations were noted, divided among fifty-three named varieties; an average of 3.1 times per name. The top six names, together with the number of times each was cited and its percentages of the total follow:

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<thead>
<tr>
<th>Variety</th>
<th>Citations</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joy</td>
<td>22</td>
<td>13.5</td>
</tr>
<tr>
<td>Gordon Douglas</td>
<td>21</td>
<td>12.9</td>
</tr>
<tr>
<td>Joy</td>
<td>19</td>
<td>11.7</td>
</tr>
<tr>
<td>Bratley</td>
<td>9</td>
<td>5.5</td>
</tr>
<tr>
<td>Verdi</td>
<td>6</td>
<td>3.7</td>
</tr>
<tr>
<td>Kingcup</td>
<td>5</td>
<td>3.1</td>
</tr>
</tbody>
</table>

Clearly the top three were definitely favoured over all the others, each being exhibited more than twice as often as Bratley in fourth position, and this in turn was exhibited more than twice as often as the variety in seventh position, not shown in the table. The top three were light-centered varieties, the next three being gold-centered. Apparently in 1953 the light-centered alpines were much more popular kinds.

In 1954, the results were somewhat similar. The light-centered varieties still held the first three positions, but in a different order and coupled with indications of a changing tide of popularity. Argus no longer enjoyed the commanding lead over the light-centered group. Bratley and Verdi both had disappeared into the undistinguished remainder, being replaced by new gold-centered favorites. One hundred seventeen citations were noted of forty-two varieties. The top six were:

<table>
<thead>
<tr>
<th>Variety</th>
<th>Citations</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joy</td>
<td>18</td>
<td>15.4</td>
</tr>
<tr>
<td>Gordon Douglas</td>
<td>13</td>
<td>11.1</td>
</tr>
<tr>
<td>Argus</td>
<td>8</td>
<td>6.8</td>
</tr>
<tr>
<td>Basuto</td>
<td>6</td>
<td>5.1</td>
</tr>
<tr>
<td>Golden Chalice</td>
<td>5</td>
<td>4.4</td>
</tr>
<tr>
<td>Kingcup</td>
<td>5</td>
<td>4.4</td>
</tr>
</tbody>
</table>

The popularity test, interesting although it was, failed to provide the hoped-for guide to choosing auriculas. Among the shows there was little indication that any variety or group enjoyed special favor among the exhibitors. Among the alpines the results served only to emphasize the outstanding qualities of three varieties already well known in America, and to suggest a certain fickleness of taste with respect to the lesser favorites. A different approach was required. If varieties could not be chosen on the basis of popularity among exhibitors, choice might be possible based on their standing as prize winners at the exhibitions. Most collectors would consider a variety desirable that was consistently judged a winner by the most competent connoisseurs in England. Generally speaking, its desirability would be correlated to the number and ranking of the awards it won.

The weighting system used for this was of the simplest, but it was judged impractical to apply it to any of the exhibition classes calling for the display of more than a single plant. This restriction, however, had the advantage of permitting the classification of results by edged and self groups among the shows, and by light- and

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*Editor's Note:

Many of these choice plants may be obtained from Alpenglow Gardens as advertised on page 75.

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From: C. G. Haysom's "Florists' Auriculas and Gold-Laced Polyanthus"
gold-centered groups among the alpines. A count of three was given to the plant placing first in each class, a count of two for second place, and a count of one for third place. The Year Books of the Northern Section reporting the exhibitions held in 1951, 1952, 1953 and 1954 were the source of the data used, and all exhibitions reported therein were included.

The results of the test were quite definite. Out of a list of ninety varieties scored, nine names stood out well above the others, and these were followed by fifteen names enjoying lesser degrees of distinction. All varieties scoring less than five were considered to be also-rans. This limit, arbitrarily set, might better have been six, i.e., the equivalent of two awards of first place, but was set at five in order to show the current position of George Rudd, one of the great producers of an earlier generation of growers. The results are tabulated here-under:

<table>
<thead>
<tr>
<th>Class and Variety</th>
<th>Class Total</th>
<th>Variety Score</th>
<th>Percent of Class Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green-Edged Class</td>
<td>51</td>
<td>16</td>
<td>31.3</td>
</tr>
<tr>
<td>Tinkerbell</td>
<td></td>
<td>8</td>
<td>15.7</td>
</tr>
<tr>
<td>Longdown</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grey-Edged Class</td>
<td>54</td>
<td>21</td>
<td>38.8</td>
</tr>
<tr>
<td>Lovebird</td>
<td></td>
<td>6</td>
<td>11.1</td>
</tr>
<tr>
<td>Marmion</td>
<td></td>
<td>6</td>
<td>11.1</td>
</tr>
<tr>
<td>Sway</td>
<td></td>
<td>5</td>
<td>9.3</td>
</tr>
<tr>
<td>George Rudd</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White-Edged Class</td>
<td>54</td>
<td>18</td>
<td>33.3</td>
</tr>
<tr>
<td>Wilverley</td>
<td></td>
<td>9</td>
<td>16.7</td>
</tr>
<tr>
<td>Harvestlade</td>
<td></td>
<td>5</td>
<td>9.3</td>
</tr>
<tr>
<td>Sheffield</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yellow Self Class</td>
<td>56</td>
<td>18</td>
<td>32.2</td>
</tr>
<tr>
<td>Mary Winn</td>
<td></td>
<td>12</td>
<td>21.4</td>
</tr>
<tr>
<td>Ower</td>
<td></td>
<td>9</td>
<td>16.1</td>
</tr>
<tr>
<td>Bookham Star</td>
<td></td>
<td>8</td>
<td>14.3</td>
</tr>
<tr>
<td>Willowbrook</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Self Class</td>
<td>55</td>
<td>12</td>
<td>21.8</td>
</tr>
<tr>
<td>Mikado</td>
<td></td>
<td>9</td>
<td>16.4</td>
</tr>
<tr>
<td>Harrison Weir</td>
<td></td>
<td>8</td>
<td>14.5</td>
</tr>
<tr>
<td>Alice Haysom</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gold-Centered Alpines</td>
<td>60</td>
<td>11</td>
<td>18.3</td>
</tr>
<tr>
<td>Bookham Firefly</td>
<td></td>
<td>9</td>
<td>15.0</td>
</tr>
<tr>
<td>Verdi</td>
<td></td>
<td>8</td>
<td>13.3</td>
</tr>
<tr>
<td>J. W. Gardner</td>
<td></td>
<td>5</td>
<td>8.3</td>
</tr>
<tr>
<td>Golden Glory</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Light-Centered Alpines</td>
<td>60</td>
<td>21</td>
<td>35.0</td>
</tr>
<tr>
<td>Gordon Douglas</td>
<td></td>
<td>19</td>
<td>31.7</td>
</tr>
<tr>
<td>Joy</td>
<td></td>
<td>7</td>
<td>11.7</td>
</tr>
<tr>
<td>Argus</td>
<td></td>
<td>5</td>
<td>8.3</td>
</tr>
<tr>
<td>Lady Daubrey</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It should be kept in mind that a table like the above can seldom reveal all the truth about the data it seeks to interpret. In it some very beautiful varieties may be given a low rating because they have had their day. They are becoming old and difficult to grow in the perfection required for winning awards, and growers and exhibitors tend to discard them, preferring to rely for success on younger and more manageable material. On the other hand, varieties that are likely to dominate the award lists in the years to come may be given scant recognition in the table. They have not yet been multiplied to the point at which they can be exhibited with the freedom necessary to accumulate high percentage ratings. The table is an imperfect substitute for individual judgment based on examination of the living and blooming plants or, failing this, of accurate descriptions and color illustrations. Nevertheless, it does reflect, with a fair degree of accuracy, the relative frequency with which exhibited varieties were selected for awards by the most competent judges in England during the period under review. As such, it is hoped that it will prove useful not only to the prospective purchaser of auricula varieties but to the dealers who must find the materials with which to satisfy the demand.

(Reprinted by permission of the author from the 1956 Yearbook of the National Auricula & Primula Society, Northern Section.)
On Pollinating

The thrill that comes with creating something that but for you would otherwise not have been, is one of the greatest that one can experience, the more so if what you create is a flowering plant. This little lesson from the April 1944 Quarterly is reprinted to show you how. Why don’t you try it?

By Florence Levy

The function of reproduction in plants is interesting not because of its difference from that of the animal kingdom but because of the marked similarity. A brief outline of the process is all that is feasible here and so much of interest is necessarily omitted. The pollen grains, containing the male cells, are developed in the anthers and are transferred when ripe by various agents to the stigma which is coated with a sticky fluid to hold the pollen grains and provide nutrition for their development and germination. From its position on the surface of the stigma, each pollen grain develops a long, slender tube which penetrates the stigma and grows down the style in order to carry the two sperm cells into the ovary. (See diagram showing these parts of a primrose floret.) Once in the ovary, each tube approaches and enters an ovule, reaching the embryo sack which harbors the egg cell. When one of the male cells fuses with the egg cell, fertilization is complete and the prime mission of the plant’s flowering has been accomplished. Blossoms then wither rapidly and the plant devotes itself to maturing the seed.

Plants are pollinated either by natural means or artificially, the most usual agents in nature being the wind for inconspicuous blossoms and insects for the more conspicuous, equipped as they are with such attractions as color, fragrance, and nectar. Artificial pollination, of course, is accomplished by individuals who select certain plants and place the pollen from one on the stigma of another, unless a plant is to be fertilized with its own pollen. The reproductive organs of the majority of plants are complete in each floret, that is, each blossom carries both stigma and anthers and is therefore potential-

ly independent of other plants for its fertilization. All Primroses are of this type and present these organs in two different arrangements depending upon the length of the style, the long style projecting the stigma above the anthers and the short style keeping it below.

Although this is not meant for an article on breeding Primroses, the season is at hand for pollinating and there may be those who wish to embark on this simple and fascinating venture for the first time. For those, the following abbreviated procedure is offered as one method of pollinating by hand. Taking the polyanthus as an example, the first step is to select the parents for form, color, and size for the eventual attainment of all three. Those plants exhibiting all three characteristics at the beginning of hand pollination produce outstanding results in one or two generations.

When the blossom first unfolds from the bud is the ideal time to pollinate. The stigma is receptive, the pollen is still green, which means that it has not self-pollinated, and there is a small likelihood that bees have had a chance to probe for nectar thereby introducing undesired pollen. Emasculation, or removal of the anthers from the plant, is simply accomplished by taking hold of the blossom with both hands, tearing it in half and pulling the floret, with anthers attached, from the calyx. This act also removes all attraction for insects.

The blossoms of the plant supplying the pollen, which are necessarily more mature to allow time for the pollen’s ripening, are pulled apart in the same manner and each half of floret held so that the anthers spread apart like fingers. It is then very easy to rub the anthers over the stigma of the seed-bearing parent when held in this position. In this way the stigma is completely coated with the pollen of the intended cross with small chance of foreign pollen finding a foothold. However, in truly scientific work, the pollinated plant is bagged in cellophane or wax paper. Since there are five pollen-loaded anthers to one stigma, an excess of pollen always exists. If the pollen-bearing parent is outstanding enough to warrant its use in fertilizing many plants and there is need to hold it over, the pollen remains potent for days when put in a tightly covered jar and stored in the refrigerator.

It is unnecessary to remark that pollination should be done on a clear day, but even the clearest days in April develop sudden showers, in which case bagging will prevent the rain washing the pollen. Each plant that is pollinated should be labeled according to the cross made. In this way the identity of the seedlings is kept for future breeding purposes.

One of the marks of a well-bred Primrose is the thrum-eye, the short-styled type of bloom that has the stigma hidden in the tube and the anthers in full view at the entrance. When crossing a thrum with a thrum, a very large percentage of thrum-eyed children is a natural result. This is called “illegitimate” pollination. Two other illegitimate forms of pollination that are possible but have little or nothing in their favor are a cross between two pin-eyed or long-styled types, and self-pollination. The first would be flying in the face of good form and the second, if continued for any length of time, would result in inferior blooms and, eventually revert to the original species. “Legitimate” pollination is the crossing of the long-styled with the short-styled, the pin with the thrum, or vice versa.

As pointed out by a keen student of plant breeding, this latter type of pol-
Proposed Changes In The Constitution

The Constitution of the American Primrose Society was written at a time when the National organization was, in actuality, a local society in Portland, Oregon, with members all over the world. The local society members met regularly, put on an annual show, published a Quarterly, and kept alive the enthusiasm of primula growers in the United States and Canada as well as other parts of the world.

About a year ago, officers and a Board were elected to run the Society on a national basis. Although the majority of officers and board are still located in the Pacific Northwest because of the center of interest in that section of the country, it is the hope of the organization that it may become increasingly more representative of the entire country and the following proposed changes are made largely with that idea in mind.

The Board has approved the following changes which emphasize the national show and the annual meeting. The Board believes the recommended changes will give a more effective national organization and encourage continued growth on a national basis. Most of the constitution remains the same as published in the 1955 Spring Yearbook with amendments as published in the Fall 1956 Quarterly (page 144) and in the Winter 1958 Quarterly (page 12). Only the specific articles or sections proposed to be changed are listed; all others remain the same. The recommended changes follow:

Article III

Section II (Add) and one duly elected representative from each affiliated organization shall, when registered with the Secretary of the National Society, be entitled to one vote for the Society plus one vote for each ten members or fraction thereof whose affiliate dues have been paid.

Article IV

Section II—Terms of all officers, except directors, shall be for one year beginning at the close of one annual meeting and ending at the close of the next annual meeting. Terms for Directors shall be for three years. Two directors will retire and two new ones be elected at each annual meeting.

Section V—The President shall appoint a nominating committee not later than two months after the annual meeting. The nominating committee shall submit their nominations to the President within four months after the annual meeting. Nominations will also be accepted from the floor at the Annual Meeting, with the consent of the nominee.

Article V

The Annual Meeting of the Society shall be held during and in the same vicinity as the National Primrose Show each year. The local affiliated society sponsoring the show shall be host to the National Society for the annual meeting. The Board of Directors shall conduct the business of the Society between annual meetings with full power to act under the provisions of this Constitution and By-Laws to carry out the policies and projects of the Society that have been agreed upon by the members at the annual meetings or special meeting.

Article VI

The Constitution may be amended at any annual meeting by a two-thirds majority vote of the members present providing amendments have been approved first by the Board, and notice of such amendment has been published in the Quarterly, or otherwise given...
to all members at least twenty days preceding such meeting; or, by a two-thirds majority of a ballot by mail provided that within three months from date of notice or proposed amendments with instructions for voting, ballots from fifty percent or more of the entire membership have been received by the Secretary.

**ARTICLE VII**

The Board of Directors may each year, upon application, designate one of the general primrose shows staged by an affiliated society as the National Primrose Show. Every effort will be made to secure a truly national representation at the national show. Within the Board's discretion a special type primrose show, when staged by an affiliated society, may be designated as the National Show for that type of primrose. Never more than one show for a particular type of primrose shall be designated as the national show for that type of primrose in any one year.

**BY-LAWS**

**ARTICLE I**

Section I—The officers shall be elected by ballot at the annual meeting of the Society. Voting shall be by members and duly elected representatives of affiliated societies present at the meeting. Absentee ballots received by the Secretary prior to voting time at the annual meeting will be counted the same as if the member were present.

**ARTICLE II**

Section I—Delete this section.

**ARTICLE III**

Section II—Active membership dues shall be $3.50 per year, and shall be due November 15th for the following year and considered delinquent as of January 1st. A family membership, with one copy of the Quarterly but with full rights for each member, will be offered as follows: $3.50 for the first member and $1.00 for each additional member.

**Section VII**—An affiliated organization membership shall entitle the organization to receive one copy of all bulletins, reports, and publications issued by the American Primrose Society; representation by duly elected delegate at all meetings of the Society; free rental of slides or any other program aid maintained by the American Primrose Society.

**ARTICLE IV**

Section I—The Board of Directors shall consist of the President, Vice-President, Treasurer, Recording Secretary, Corresponding Secretary, the retiring President for one year, the Editor of the Quarterly, and six elected Directors.

Section II—The Board of Directors shall direct the business of the Society within the limits of the provisions of this Constitution and By-Laws and according to the general policy laid down by the members at the annual or special meetings.

Section III—Delete this section.

Section IV—Delete this section.

Section VI—The Board of Directors may designate and constitute certain geographical areas as official regions of the society and appoint a Regional Vice-President to represent the Society locally for each region. The Board of Directors may vacate, rescind or change the designation of official regions whereupon the appointment of such Regional Vice-Presidents shall be vacated. Regional Vice-Presidents shall be appointed annually by the Board of Directors for one-year terms starting and ending with the terms of elected officers.

**ARTICLE VI**

Delete this article.

**ARTICLE VII**

These By-Laws may be amended in exactly the same manner as the Constitution.

---

**American Primrose Society**

**CASH REPORT**

**Calendar Year 1957**

**Cash on hand January 1, 1957** ................................................... $758.21

**Receipts**

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dues</td>
<td>$996.50</td>
</tr>
<tr>
<td>1957 and advance</td>
<td>1037.00</td>
</tr>
<tr>
<td>Commercial listing</td>
<td>10.00</td>
</tr>
<tr>
<td>Libraries</td>
<td>21.30</td>
</tr>
<tr>
<td>Sustaining</td>
<td>125.00</td>
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<tr>
<td>Affiliated</td>
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<tr>
<td>Family</td>
<td>8.00</td>
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<tr>
<td>Total</td>
<td>$2285.05</td>
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**Total incom e** ................................................................. $2735.45

**Total** ................................................................. $3493.66

**Expenses**

<table>
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<tr>
<th>Category</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Quarterly contract</td>
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<tr>
<td>Quarterly extras, mailing, roster, etc.</td>
<td>165.98</td>
</tr>
<tr>
<td>National expense, charts, mailing tubes, etc.</td>
<td>170.69</td>
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<tr>
<td>Stationery</td>
<td>78.54</td>
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<tr>
<td>Membership expense, Treasurer</td>
<td>37.65</td>
</tr>
<tr>
<td>Show expense, trophy</td>
<td>14.44</td>
</tr>
<tr>
<td>Advertising</td>
<td>89.55</td>
</tr>
<tr>
<td>Slide rental turned over to custodian</td>
<td>10.00</td>
</tr>
<tr>
<td>Check charges</td>
<td>-10.00</td>
</tr>
<tr>
<td>Loan repaid</td>
<td>100.00</td>
</tr>
<tr>
<td>Total disbursements</td>
<td>$2600.71</td>
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</table>

**Balance on hand December 31, 1957**

<table>
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<tr>
<th>Category</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Ivanel Agee, Treasurer</td>
<td>$892.95</td>
</tr>
<tr>
<td>Norman Lawfield (England)</td>
<td>81.86</td>
</tr>
<tr>
<td>Dorothy Stredicke (Slide Exchange)</td>
<td>6.85</td>
</tr>
<tr>
<td>Chester K. Strong (Seed Exchange)</td>
<td>77.77</td>
</tr>
<tr>
<td>Total balance</td>
<td>$1059.43</td>
</tr>
</tbody>
</table>

**American Primrose Society**

1958 SPRING QUARTERLY
Roster of Members

Affiliated Societies

Canadian Primula & Alpine Society
C/o Mrs. R. Boyes, Sec., 573 W. 22nd St. N., Vancouver, B. C., Canada

Clark County Primrose Society
C/o Mrs. Seth Barnett, Sec.-Treas., R. 6, Box 270, Vancouver, Wash.

East Side Garden Club of Kirkland
C/o Mrs. R. E. Hammond, Treas., 1431 10th St., W., Kirkland, Wash.

Friday Harbor Primrose Club
C/o Mrs. T. J. Drummond, Treas., Friday Harbor, Wash.

Levis County Primrose Society
C/o Mrs. Louis Pemerl, Sr., 1229 1st St., Chehalis, Wash.

Onondaga Primrose Society
C/o Mrs. Darwin N. Camp, Treas., 7010 So. Salina St., Nedrow, N. Y.

Tacoma Primrose Society
C/o Mrs. Pauline Guimette, Treas., 4719 S. Union, Tacoma, Wash.

Vancouver Island Rock & Alpine Garden Society
C/o The Secretary, 5021 Prospect Lake Rd., Royal Oaks, P. O., Saanich, B. C., Canada

Washington State Primrose Society
C/o Mrs. Ruth E. Smith, Corres. Sec., 12936 72nd Ave. N. E., Kirkland, Wash.

MEMBERS 1957 AND 1958 UP TO PRESS TIME

* Indicates Sustaining Members
** Indicates Life Members

Acker, Mrs. Edward G. ....................................................... Box 843, Chico, California
Acme Peat Products, Inc ........................................... BLUE WHALE, 789 Pender St. West, Vancouver, B. C., Canada
Adams, Mrs. Ernest L .................................................. 11112 S. E. Wood Ave., Milwaukie 22, Oregon
Adams, Mrs. Richard O. ............................................. 11112 S. E. Wood Ave., Milwaukie 22, Oregon
Aguilar, Mrs. Orval .................................................... 417 Wesl Liberty, Ohio
Albright, Mrs. Althion D ............................................. 337 Thames St. S., Ingersoll, Ontario, Canada
Allman, Mrs. Helen ................................................... 2514 Collegiate Avenue, Berkeley 4, California
Allen, Mrs. John H .................................................... 2001 N. 12th St., Yakima, Wash.
Allen, Mrs. Alphonson D ............................................. R. 1, Meadow Breeze Farm, Washington 51, N. J.
Alfond, D. ................................................................. Rt. 1, Madison Street Extension, Barre, Vermont
Allumbaugh, Dr. H. R ................................................... 2265 Coburg Rd., Eugene, Oregon
Allison, Mr. David .................................................... 6101 W. Main, St. Louis, Oregon
Althaus, Mrs. E. H ...................................................... 151 Rhode Island Avenue, Detroit 3, Michigan
Althouse, Mrs. Harry L ................................................. 1515 King St., Lauderlaw, Penn.
Anderson, Mrs. H. E .................................................. 126 N. 4th Ave., Rovers, Pennsylvania
Anderson, Mrs. Hilga ................................................ P. O. Box 424, Aberdeen, Washington
Apgar, Mrs. E. C. ........................................................ 6603 Varna Avenue, Van Nuys, California
Arnett, Frances ........................................................... Box 211, Mulkiteo, Washington
Auer, Mrs. Herman ..................................................... 365 E. 266th Street, Euclid 32, Ohio
Baker, Mrs. Margaret .................................................. 902 Cascade Avenue, Hood River, Oregon
Bagent, Mrs. Virginia .................................................. North Industry, Ohio
Bailey, Mrs. Cassie C .................................................. 608 West 3rd, Aberdeen, Washington
Bailey, Edward .......................................................... 120 Walnut Street, Natick, Mass.
Bailey, Florence ........................................................ 608 West 3rd, Aberdeen, Washington
Balkcom, Mr. Ralph W ................................................ 6216 N. E. 8th Ave., Seattle 4, Washington
Baldwin, Mr. Elmer C ................................................ 400 Tecumseh Rd., Syracuse 10, New York
Baldwin, Mr. Elmer C ................................................ 400 Tecumseh Rd., Syracuse 10, New York
Ball, Miss Elizabeth ................................................... Oakhurst, Muncie, Indiana
Ball, Mrs. Wallace J .................................................... Stonehedge Dr. North, Greenwich, Conn.
Bamberger, Mrs. Alice Marie ....................................... P. O. Box 447, West Point, Georgia
Bamford, Mr. Dan ....................................................... 194 Manchester New Rd., Mount View, Middleton, England

Barry, Mrs. W. H. ....................................................... Rt. 12, Box 712, Tacoma, Washington
Barrett, Mrs. E. .......................................................... 520 5th N. W., Puyallup, Washington
Bartlett, Mrs. Carl E .................................................. SPRING HILL FARM, Gig Harbor, Washington
Bartol, Miss Dorothy .................................................. 1514 Canton Avenue, Milford 86, Mass.
Barton, Mr. David G. P .............................................. R. 2, Royal Oak, B. C., Canada
Batchelor, Mr. Ralph W .............................................. 400 Tecumseh Rd., Syracuse 10, New York
Bayes, Mr. Fred W ..................................................... Gen. Delivery, Fort Erie, Ontario, Canada
Bayley, Mrs. Elizabeth ............................................... Rt. 1, E. Bayville, Wisconsin
Beach, E. Chandler ................................................... 110 Akensee Rd., Riverside, Illinois
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1958 SPRING QUARTERLY

AMERICAN PRIMROSE SOCIETY
Spring is a collection of many things, of poetry, mysteries and witcheries, a time when fancies run wild and free and all the world goes slightly mad while the "fairies and elves foot it merrily in the moonshine." Perhaps this is part of that indefinable charm surrounding primroses — this along with their rich past. For one of the names the Cowslip carried translates into "practical use to man," used as it was for everything from easing pains in the joints, palsy, and headaches to salad greens and wine. This ancient and honored ancestor of the modern glamorous Polyanthus was also known as Palsiewort, Arthritica, Petty Mullein, Culverkeys, Our Lady's Keys, Lady's Fingers, Fairy Caps, and Paigles, the last said to have its roots as i as "paigled," meaning drooping or cow droppings. Have any of you noticed, while walking in pastures, how daintily the cow is in her eating habits? The English of those early days evidently took note of the way Cowslips dotted their pastures and how often they were absent from the pastures otherwise. So they must have reasoned that this plant grew only around such happenings rather than the fact that the plants grew wherever the seed scattered and were cropped off by the cattle except close to their droppings where, left alone and embracing one of their favorite items of diet, the plants grew luxuriantly.

Speaking of cows and Cowslips and olden days, one of the important uses to which the plant was put was warding off witches. Witches, in those days, were especially bothersome during the twelve days from Christmas to Twelfth Night, the Eve of St. George, Midsummer Eve, and the Eve of May Day, or Walpurgis Night. And one of the witches' targets was invariably the countryman's cow which could be bewitched by such curses as "The cheese to me, the milk to me, but the cowhide to thee!" and the only remedy was washing the cow in dew and the only preventive was strewing the threshold of the animal's shelter with Primroses or Cowslips — Cowslips if the season was normal, for Primroses would have come and gone by May Day. There was reason behind this anti-witch measure, particularly if a sod of fresh turf from the meadow was laid on the threshold along with the Cowslips, for no witch could bring herself to pass over the sill without first counting...
every blade of grass and every petal. In those days witches were not as good at figures as in these days and dawn caught them still counting. Everyone knows a witch's power disappears with the night. The Cowslip was additionally a protection to cows, not so much in filling the udders as preventing them from being drained by the witches who made every effort to steal the milk. And it was worse in Scotland where a witch could not be distinguished from a hare and a Scot had to be doubly cautious and canny, traits that still persist today because of this very thing.

With the dawn of May Day, Walpurgis Night safely past, came the preparations for the annual battle of Summer and Winter. The youths of the village trooped off in the morning to gather Cowslips for twining around wands used in the mock battle. This custom undoubtedly came to England from Sweden whose version was somewhat different. There, on May Day, two companies of young men on horseback met as if for mortal combat, one clad in furs who threw snowballs and ice in order to prolong the cold weather, the other covered with fresh leaves and flowers. Summer, of course, always came off victorious and the whole thing was forgotten in a feast.

There were many more uses to which Cowslips were put in those days. It was an invaluable aid in the discovery of hidden treasure. It could be used in retaliation to put a hex on setting hens so that only one of a clutch would hatch. It was considered by Culpepper and Gerard to be in the Dominion of Venus which, when crushed and made into an ointment “taketh away spots, wrinkles, and freckles as our city dames know well enough and restores beauty when it is lost.” It cured the phrensic and it purged the brain. In creams, puddings, conserves, candies, and syrups it was delicious. This list, setting forth but a few of our heroine's many virtues, is offered in the hope that she will not be prized for her beauty alone.

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We Use and Sell Blue Whale — We Have Lifetime Plastic Plant Markers

SPRING HILL FARM
P. O. Box 42  On the New Highway
Gig Harbor, Wash.

NATIONAL AURICULA AND PRIMULA SOCIETY
(Northern Section)
The Society's Year Book will be available on March 30th and will contain articles by growers specializing in the culture of these flowers as well as the Primrose and Polyanthus. A full list of Prize-winning exhibits at the 1957 Shows of the three sections of the Society will serve as a guide to those wishing to start—or augment—a collection. A special feature of the issue will be the inclusion of a Coloured Plate of Premier Auricula "Lady Baresbury" from a painting by Alan Coupe.

Price 6/—p.pd.—USA and Canada $1.

HON. SEC. R. H. BRIGGS
"Springfield," Hastingsden, Rosendale, Lancs., England

AMERICAN ROCK GARDEN SOCIETY
(Organized 1934)
Its objectives have been to encourage and promote:

a) the cultivation and knowledge of rock garden plants, their value, habits, and geographical distribution,
b) interest in good design and construction of rock gardens,
c) to hold meetings and exhibitions,
d) plant exploration and introduction of new species and forms,
e) study of history and literature on the subject,
f) acquaintance between members and groups with the resultant mutual exchange of experience and knowledge.

In order to further these objectives, the following are available to members:
Our Quarterly Bulletin, a Seed Exchange, and the free use of Colored slide collections.

Single Membership $3.50
Three Years for $10.00 if Paid in Advance
(Limited to two in a family)
Family Membership $5.00
Sustaining Membership $10.00

Edgar L. Totten, Secretary, 238 Sheridan Avenue, Ho-Ho-Kus, N. J.

THE ALPINE GARDEN SOCIETY
Has Over 160 Members In The United States Of America

Its Quarterly Bulletin, of over 100 pages, is generally recognized as one of the best specialist horticultural publications in the World.

Its Seed Distribution Scheme offers a choice of well over 1,000 kinds from which Overseas Members can annually select 15 packets (donors, 20 packets) of seed which in many cases not otherwise procurable. In the last two lists there were between 75 and 80 kinds of Primula offered.

The Annual Subscription, dating from the 1st of January, is £1, payable to the Secretary, C. B. Saunders, Husseys, Green Street Green, Farnborough, Kent, England, but American members may find it more convenient to send $2.80 to Dr. C. R. Worth, Groton, New York, the Society's Hon. Assistant Secretary in the U. S. A., who is empowered to receive subscriptions and to issue receipts on behalf of the Society.
LIQUINOX
THE ALL-PURPOSE BLUE RIBBON FERTILIZER
Contains Yuca Extract
10-10-5
0-10-10
Pint .85
Quart $1.50
Gallon $3.95
KEIFFER’S NURSERY
Kirkland, Washington
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PRIMROSES AND SLUG-FEST
GO TOGETHER

- The New Liquid Control Developed by Regional Chemical
- Safe for Pets, Children, Plants, and Lawns
- Leaves no residue; no unsightly piles
- Kills on contact
- Applied with sprinkling can or hose applicator
- Liquid formula allows treatment of large areas.

At all better garden supply houses
A product of Regional Chemicals
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Of the many new products offered, few are chosen by conservative growers. Slug-Fest has become one of the few horticultural aids we will always use. Last year we had an invasion of slugs. One application of Slug-Fest killed the army over night. The reason? Slug-Fest is 50% metaldehyde, 50% inert ingredients, both non-injurious to plants, as against the usual 5% or less metaldehyde content of dry baits.

Florence Levy, Barnhaven, Gresham Oregon

PEST CONTROL THE EASY WAY

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 BUG-GETA 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 pre-measured dusters with economical refill packages, such as BOTANO Deluxe or ORTHO Rose Dust.
Spray for economy and efficiency. Saves money—you use 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.

Pellets Make Baiting Easy. For snails and slugs, simply toss BUG-GETA Pellets around your garden and get results overnight. It’s better 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 Groom or WEED-B-GONE. For Brushy Weeds (Psalmon Oak, Brambles, etc.) ORTHO Brush Killer does the job—contains 2,4,5-T. For clean Weed-Free Sidewalks and driveways use TRIOX . . . kills all vegetation and prevents regrowth up to 2 years.

California Spray Chemical Corp.
Liquid WHALE Solubles Fertilizer

In Canadian BLUE WHALE Brand Liquid WHALE Fertilizer we have a Nitrogen-Rich Organic water soluble liquid with available nutrients which is not reinforced with artificial stimulants such as the much-publicized pseudo-organic urea.

After a great deal of research Liquid WHALE was produced from organically processed Whale Solubles which are not a waste or by-product but contain the concentrated non-fatty nutrients from the whole Whale.

Liquid WHALE* IS AN AMAZING TOTALLY ORGANIC HORTICULTURAL STIMULANT, of great benefit to plant life, as all the nutrients, vitamins, trace elements, and minerals contained in it are balanced by NATURE. Liquid WHALE* SURPASSES ALL OTHER LIQUID FERTILIZERS because it answers the natural needs of the plant and can be assimilated easily showing subsequent results which will delight the beholder.

Liquid WHALE* is a worthy complement to BLUE WHALE which for several years has proven itself the outstanding leader as a Soil Builder and Conditioner. Liquid WHALE will always prove its superior quality over all other Liquid Fertilizers in its fast action and continuing benefits to plants, flowers, vegetables, or lawns.

Acme Peat Products, Ltd.
Vancouver, B.C.