• Primroses

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In this issue

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On the cover

Primula auricula var. albocincta, one of the many species of the Auricula Section discussed by Alice Hills Baylor in her article The Auricula Primroses on page 14. Photograph by Larry Bailey.

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President's Message

May 1984 be a happy New Year for all!

Nineteen-eighty three ended in sorrow for me. After a four year battle with cancer my wife, Dorothy, died on November 26. It is because of our many plant oriented friends and our work with primroses and in the American Primrose Society that I can look forward to a full and enjoyable life. Plans are in the works to make the Spring 1984 issue of the APS Quarterly a memorial issue for Dorothy.

So far this has been a severe winter for the entire United States. Here in the Pacific Northwest we have a start for a typical bad winter with a week of zero temperatures before Christmas followed by warm and rainy growing weather. Daytime high's in the 50's and no frost at night. To complete the typical bad winter we sometimes have two more deep freeze periods after warm growing weather. These false springs confuse many plants into starting their growth in the midddle of winter. This adds to our definition of a hardy plant 'the ability to stay dormant until late spring and survive long periods of winter rain without drowining or rotting'. There are a lot of cold hardy primula species that are difficult or impossible to grow here without special protection. Each section of our country has its own problems for primula, mainly fluctuations of winter temperatures without a reliable snow cover and variations in summer heat along with its humidity.

Sometimes we can grow a species for a few years. We think we have learned the secret; then, one of these exceptional winters or summers happen and we lose them. That is when the great advantage of the seed exchange comes in. Since primula are easy from seed, we can get seed and start over if people have shared their harvested supply. Sometimes thru repeated efforts with seed saved from plants in captivity a species may adapt to cultivated conditions and become a reliable garden plant.

For this reason it is important to save seed from all species you grow, plant again and select. This is generally a slow process of change; but, not always. Drastic mutations occasionally occur. We should all be looking for the mutations that result in a more desirable garden plant and increase that plant by seed, division, or cuttings as circumstances dictate.

Don't just grow pretty flowers. Accept the challenge of taming new species by growing them from seed, selecting superior seedlings, sowing their seed and continuing the process. It will add a stimulating purpose to your life and maybe you will be able to contribute a new and better plant to the world.

Herb Dickson

The Origin of the Barnhaven Cowichan

by Florence Bellis Lincoln City, Oregon

The origin and development of the true Cowichan polyanthuses—that siren strain whose beauty lures and ensnares all who come within her range - has, in the last decade or so, became a matter of myth, hearsay and conjecture. As the originator I feel moved to go back over my records and pass on the true and, I think, interesting story of this strain popularly considered to be the most outstandingly beautiful in the hundred year history of the garden polyanthus. It is the story of a flower that put itself without reservation into the hands of its hybridizer.

Otherwise how could a hybrid be fixed to faithfully reproduce from seed all the caracteristics of a parent clone in a few generations? How could it then be expanded from its original dark garnet shade into lighter and deeper shades of garnet and amethyst and eventually on to blues deep enough to drown in? How, then, could it be cajoled into producing the most stunning and unforgettable of all polyanthus, in my opinion, the Venetian reds-pinktoned reds often with a black bee, that mysterious, unexplainable thumb print? And all of them, whatever the shade or color, bearing the singular stamp of the original Cowichan clone—no yellow eye to diminish the solid ground color glowing with the hot sheen of live coals, and a classic perfection of truss and stalk.

The polyanthus that sired all this beauty burst upon a gardening public with such impact that suppositions,

first as to its parentage and, later, the exact place of origin on Vancouver Island, eventually hardened into legend. That the plant became known as 'Cowichan', an Indian name meaning 'valley where the sun shines', was the one clear fact clinging to it. Now, by the rarest piece of luck, an accurate account of the exact origin of place and name has just been received, sweeping aside a mystery that has puzzled the primrose world for so many years.

Acting on my request, a British Columbia nursery friend of long standing sent out word to those who might be able to beam some light into the fog of origin. We have Mrs. David Barton of Nanaimo to thank for contacting Mr. and Mrs. Cedric Myers who, through a mutal friend, went to the very source—Beatrice Palmer of the widely known Palmer Gardens of that day. Miss Palmer's firsthand knowledge gives us, at last, an unclouded picture of the clone Cowichan's beginnings and my gratitude to her cannot be measured. The Myers forwarded to me this historic account:

"ORIGIN OF COWICHAN PRIMULA. It was first found in Major L. Knocker's garden on Old Koksilah Road, Cowichan Station, in the early 1930s. Major Knocker gave it to L. Norie on Old Koksilah Road, who then called it 'Norns' after the name of their home. It was also given to Joe Fall, Hillbank Gardens, by either the Knockers or the Nories. The Palmer Gardens, Cherry Point Road,

obtained it from the Nories. They increased it and showed it in their exhibits in Spring Shows in the old Willows Point Building in Victoria. The Palmers Garden was the first to distribute the Cowichan Primula commercially."

Others also arranged Cowichan exhibits at the Victoria Spring Shows "made up from plants and flowers collected in the Cowichan Valley". Visitors began asking the Palmers "where they could buy the Cowichan Primula, and it was in this way that the Primula received the name 'Cowichan'". We all can understand why "the Nories were not very happy over the change of name from 'Norns' to 'Cowichan' . . . ''. Cowichan Station, in the Cowichan Valley, is but a short drive into the countryside from Victoria. And Victoria! That lovely English-flavoured, flower bedecked city sitting on the very southern tip of Vancouver Island, was but a long day's journey by car and ferry from Barnhaven in Oregon.

After some ten years of busy propagation by numerous nurseries trying to keep pace with the ever growing demand, the clones—of necessity sliced thinner and thinner—became exceedingly frail. My struggling sterile mite bloomed only once in 1942 before passing on, but that one last gasp gave me enough pollen to start producing a husky, free-flowering, fertile replica of the clone. The foundation for the Cowichan strain was laid

But the riddle of the clone's parentage remains unsolved, and as I dig into my records I am convinced that it never will be. Because of its bronzetouched leaves, intermediate size and general appearance, the common assumption was that it carried Juliana blood. However, the only Julianas in general circulation prior to Cowichan's appearance were of cushion, or acaulis, form. Two magentas, 'Jewel'

(R.H.S. 1918); 'Wanda' (1919); and the violet-blue 'Bunty' (1926), were first generation crosses between *P. juliae* and red and violet-blue varieties of *P. vulgaris*. Because Wanda had found a place in everyone's garden and hung on to it, she and a red polyanthus were thought to have been bee-crossed to produce the original Cowichan clone. Later I will give my reason for now thinking this impossible.

But first, if we are going to consider the original clone a hybrid, the bronze-leaved 'Garryardes' should be taken into account. A letter from Dr. Brian Morley, National Botanic Gardens, Glasnevin, Dublin, states: "Professor Clarke (University College, Dublin) has written me about Garryarde primroses. So far as I can find out they began as a group in 1895 in the garden of Mr. Whiteside Dane, Garryarde, Co. Kildare with cv. Apple Blossom, a putative mutant of P. vulgaris, having pink flowers and bronze leaves . . . ". Then: "Could Apple Blossom have been a hybrid involving P. vulgaris and another primula available at that time with red genes for flower and foliage?".

Apple Blossom appeared exactly fifteen years before P. juliae was introduced into England from the Caucasus—a fact which disproves popular thought that the bronzed leaf is always inherited from the P. juliae line. More importantly to me, the Garryards I have seen, including Guinevere, were acaulis-polyanthus seemingly unable to shake off the acaulis form of Apple Blossom. Guinevere, with its soft pink flowers, yellow eye and bronzed foliage, was widely grown in British Columbia at the time of Cowichan's appearance. But, because of the flawed form, I doubt it could have been involved in producing Cowichan's inexorably straight-laced polyanthus posture.

The remaining conjectural possibility is that the strain's pollen parent, Cowichan, sprang full blown and perfect from the head of Zeus as did the seed parent, Kwan Yin. Both passed their proud carriage on to their offspring. In forty years of breeding not one plant has displayed a hint of acaulis form-with one exception. It took seven generations to breed out the last vestige of acaulis from the blue Cowichans—three or four generations after the eyeless blue came steadfast and true from seed. Fourteen years to breed out my mistake of using a blue acaulis simply because it had the smallest eye on the place. The time could have been cut in half had I used a blue polyanthus

regardless of eye. In the 1930s the best red polyanthus strain on the market was Sutton & Sons' Brilliance. There was one plant from my initial packet of seed that was truly brilliant—a flashing Chinese red with an exquisitely pointed gold star; almost black wiry stalk, tall and slender, and dark footstalks; compact, deep green foliage. The entire plant suggested the elegant form and line of the Chinese goddess of mercy, Kwan Yin, and so it was named. Sufficient stock had been built up to list it as a named variety in 1942. As I looked from this vigorously flowering plant to the weakly blooming Cowichan (knowing it to be sterile perhaps from overpropagation) I realized that the glorious British Columbian's years as a clone were numbered. It would have to be reproduced as a strain and, from among all the reds in bloom, Kwan Yin was chosen as the logical seed

After three generations of selecting out and cross-pollinating the progeny of this union, Kwan Yin's flame was extinguished, the precision-stamped star eliminated as though it had never been, the dark stem and happy con-

stitution transferred to the newly born Cowichan strain. It was listed for the first time in Barnhaven's 1949 catalog: "COWICHAN STRAIN—Three generations removed from the named variety 'Cowichan' but with the same smoldering lustre and almost absent eye. Colors are intense garnet to almost black garnet, oxblood ruby . . . clusters neat and compact on dark, wiry stems".

Kwan Yin continued to be listed off and on as a named variety throughout the '40s, but clonal propagation could not keep up with its spreading fame after it was mass-displayed at the American Primrose Society's first show (1942) in Portland (Oregon). Contrary to legend, it was Kwan Yin, not Cowichan, that Frank Reinelt (Vetterle & Reinelt, Capitola, California) first used in his Pacific Strainits "brilliant flame red" to brighten "our reds, up to that time a dull magenta". I well remember our sparring conversation as to the size of Kwan Yin's blooms, then and thereafter. Later he incorporated the Cowichan strain for a different purpose.

Kwan Yin's popularity made it apparent that it would eventually go the way of most primula clones, that if it was to persist it would have to be as a strain. A reciprocal cross was made by enlisting the clearest red polyanthus of faultless form, selecting and stabilizing the progeny for three generations and, in 1950, it was offered as a strain which continued into the '60s. It was then taken over by the sultry Little Egypt series named in a light moment for the belly dancer who stunned spectators at the Chicago World's Fair.

However, I am suddenly aware that this history is becoming detailed beyond casual interest and will finish the Cowichan story as briefly as possible. The amethyst shades can be passed over quickly since they began as by-products of the blue Cowichan program and later were segregated and fixed to produce the Amethyst series. But the Venetian Cowichans, based as they are on the New Pinks, will take a little longer because I believe that the authentic, firsthand account of the development of today's truly pink polyanthuses should be put on record for their sake as well as the Venetian's.

The first known clear pink in polyanthus history appeared in Miss Linda Eickman's garden in the little town of Dayton (Oregon) early in the 1940s from a packet of Toogood's seed. She brought this tiny scrap of ethereal loveliness to me in its maiden bloom with an equally forlorn but inferior pink (from the same sowing) in a little round wicker basket. Some things we never forget. She made the hundred mile bus trip to Gresham and back to ask, "Shall I self-pollinate the true pink, or cross-pollinate the two?". In all my years of hybridizing I have never self-pollinated a plant, so she cross-pollinated the two and began the process of selection and fixing her strain of true pinks. She named it Crown Pink for the fretted ridge circling the throat—known as the rose crown, a puckering caused by continued cross-pollination which thickens petal substance—and of course for the limpid, soft shade of wild rose pink.

After tracing her advertisements in the American Primrose Society's Quarterlies, I find the first offer of Crown Pink seed in the October, 1950 issue. In 1947 she brought me a few of her plants, not quite as frail as their founding parents but still in delicate health from which they never fully recovered. At the time all other pinks, so-called, carried a load of lavender that stuck like glue. By using the pollen of her pink princesses on my robust and hardy lavender-pink peasants. Barnhaven in 1954 offered: "PASTELS: Apple blossom, wild rose, mallow pink, peach, rose, coral, raspberry and maraschino". In 1958 these, with additional shades, were listed as NEW PINKS, all of which still come true from seed. By that time Miss Eickman had passed on.



Barnhaven P. x cowichan 'Strawberry'

bearer.

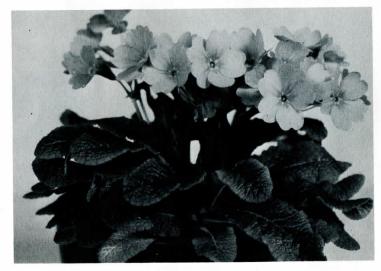
Her Original strains have long ceased to exist but they live on in health and hardiness in Barnhaven's New Pinks and Desert Sunsets. And she lives on for all who knew this self-effacing, gentle nurse who gave us our first sight of a truly pink-pink polyanthus.

These first wide-eyed New Pinks started me dreaming of an eyeless pink Cowichan strain. Light garnet Cowichans and raspberry and maraschino pinks fought it out for years, neither quite winning by 1964 when the first Venetian Cowichans were exhibited in a Portland show. They were as sensational then as they are now in shades of strawberry, Venetian and mandarin reds with the same hot sheen—are they pink-reds or redpinks?—eyeless, often with a black bee as though someone had been in the coal bin and then pressed a thumb on the base of each petal. Small wonder they are fancied by gardeners and by those who claim them as their own origination.

The first blue Cowichans of perfect form also made their debut at this same show. And as with the Venetians the deeply glowing overlay was often dramatized by the mysterious black bee. Where did this beauty patch come from, how did it get there? Perhaps we shall never know, any more than we shall ever know the bloodline of Major Knocker's Cowichan. In this connection I am struck by the reputed 18th century eyeless polyanthus 'Bartimeus', which Roy Genders describes (THE POLY-ANTHUS, pp/70 and 105) as having petals of velvety crimson-black with a more compact eye than the Cowichans and still extant.

So perhaps we should just accept without question the fact that another unusual polyanthus appeared out of nowhere in Major Knocker's garden and stop scrutinizing it like the foolish lover who examines his beloved's complexion under a magnifying glass. Perhaps we should just enjoy the glorious descendants of this plant which, for thirty-four years now, have brought so much pleasure and beauty and which could, just possibly, continue to do so for several hundred years more.

Reprinted from the National Auricula & Primula Society (Southern Section), England, Yearbook 1983.



Barnhaven P. x cowichan pink

Propagation of Some Genera in the Family Primulacaea

by Robert E. Straughen Belper, Derbyshire, England

The family *Primulacaea* consists of some 500 genera, mainly from the Northern Hemisphere; there are 28 genera in the Alpine flora including *Androsace*, *Cyclamen*, *Dodecatheon*, *Douglasia*, and *Primula*.

Androsace. These are mainly European with a few species coming from North America and Asis. The genera is divided into four sections according to habit and flower characteristics: these are as follows:

- 1. Pseudoprimula not of very great interest to the alpine gardener.
- 2. Chamaejasme This section includes such species as C. lanuginosa, sarmentosa, primuloides and villosa.

These are all rosette plants, producing runners which provide an easy method of vegetative propagation. Young plantlets produced on the ends of the runners are removed in June and rooted in trays of rooting compost in a closed cold frame. Seeds may be sown in January in trays placed in a shaded situation in the open.

3. Aretia - these are the gems of the genus, producing tufted cushion plants, many of which do not grow well in wet winters. The following are popular species—A. cylindrica, imbricata, hirtella, pyrenaica.

Flowers appear to be pollinated by flies and all set seeds freely. Seeds are best sown in January in trays and placed in the open where they germinate freely. Cold is not a requirement for germination, but high temperatures appear to suppress germination. Cuttings of shingle rosettes taken from the base of the plant, inserted in a sandy compost in an unheated propagating case in June root in four weeks. Care should be taken to keep rosettes dry at this stage and spraying with Benlate after inserting the cuttings is beneficial.

4. Andraspis - these are all annuals and have no appeal to the alpine gardener.

Cyclamen. The hardy species are all good garden plants and are very popular, e.g. C. hederaefolium, coum, europaeum, repandum, etc.

These are raised from seeds sown as soon as ripe (July-August). Seeds must be sown '4'' deep and the resulting seedlings overwintered in a cold frame. Old seeds are erratic in germination and should be soaked in water for 24 hours before sowing. In most cases ripening seeds must be protected from ants and mice.

Dodecatheon. All are North American found growing in the western mountains. Very popular plants, but somewhat disconcerting to the amateur gardener due to the foliage dying back early in the season. Popular species are D. clevelandii, hendersonii, media, and pauciflorum.

Seeds should be sown as soon as ripe in June and placed in the open when the seedlings emerge in March or April. Division of the crowns may be carried out as soon as the foliage dies back. They may also be propagated from root cuttings 1 ¼ " to 1 ½" long taken when the foliage dies back in June.

Douglasia. This genus is very closely related to the Androsaces. There are 5 North American and one European species. The most popular are *D. laevigata* and var. *ciliolata*, *D. vitaliana*, and var. *praetutiana*. These may be raised from seeds sown in trays in the open in January. Cuttings inserted in sandy compost in a closed, unheated frame in May or June root readily.

Primula. This is a genus of over 500 species, mostly European. Most species have long and short-styled flowers (pin and thrum eyed), therefore cross pollination is necessary to obtain seeds.

The genus is divided into 30 sections according to growth habit and flower characteristics. All are very good garden plants but many are extremely difficult to accommodate.

All may be raised from seeds, and light is a requirement for germination with most. It is generally accepted that seeds should be sown fresh as soon as ripe, but this is only true of the species in the *Petiolaris* section. Seeds of others may be stored until October or March.

Dried seeds often fail to germinate if exposed to low temperatures, but they will all germinate best when they are exposed to fluctuating temperatures between 10° and 20° C. Above 25° c seeds fail to germinate. In practice on our nursery we sow seeds in July or March and place in a shaded frame.

Some species need to have the seeds stratified. Imbibed seeds are stored for four weeks at 5°C then mixed with moist sand and placed in a polythene bag and stored in a refrigerator

for the required period. John Innes seed compost (minus calcium carbonate) is used for sowing. This is put into trays and covered with '4'' of 2 to 3 mm grit and the seeds are broad cast on the surface and washed into the grit with a fine-rosed watering can.

The following are popular nursery species:

Cortusoides section - mainly woodland species from Japan and eastern Himalayas. These do not require cold for germination but fresh seed and exposure to light is essential.

P. sieboldii, best sown in March or April.

Vernales section - European species including our native primrose, cowslip, and oxslip. These are easy providing they are not exposed to temperatures above 20° C.

Farinosae section - this is the largest section in the genus of which approximately 20 species are in cultivation. They are mainly Asiatic but some are from North Europe, North and South America.

P. Farinosa - very variable; cold treatment does not appear to be required and seedlings may take two years to emerge.

P. frondosa - very easy under all conditions.

P. modesta - Japanese species and very easy.

P. rosea - if seeds are sown as soon as ripe they germinate within a month.

Denticulata section - P. denticulata is the only species commonly found in gardens. Seeds require exposure to light and temperatures within 10°C and 15°C for germination.

Capitatae section - P. capitata and var. mooreana are easy and tolerant of freezing and temperatures up to 40° C.

Muscarioides section - the most popular species in this section is P. viali. This is easy if seeds are fresh when sown, or stored cold and sown in March in the open.

Nivales section - seeds of species in this section are relatively easy to germinate provided they are sown fresh. Seedlings need careful handling when pricking out, watering in with Benlate solution.

P. chionantha and P. melanops seeds benefit from cold storage.

Sikkimensis section - all species in this section do well under high moisture, producing copious seeds which germinate freely.

P. alpicola - seeds are best sown in March.

P. florindae - fresh and stored seed germinate well. Cold treatment is helpful.

P. ioessa - cold treatment is desirable for germinating seeds.

Candelabra section - this is a large section with 12 species in general cultivation. Seeds produce large plants and require moist conditions.

P. aurantiaca - stored seeds sown in March germinate well.

P. bulleyana - seeds germinate well under all conditions.

P. cockburnia - soak seeds for 24 hours before sowing.

P. japonica - 6 month old seeds germinate best. Seeds should be stratified and not exposed to temperatures above 15°C.

P. pulverulenta - seeds germinate best at temperatures between 10°C and 15°C.

Auricula section - these are all from the European Alps and seeds germinate best when exposed to cold.

P. auricula - fresh seeds germinate well without cold.

P. integrifolia, P. marginata, P. minima and P. pubescens all require exposure to light and cold.

VEGETATIVE PROPAGATION

Division may be carried out on all Primulas and is best done after flowering.

Plants in all the Auricula section may be increased by stem cuttings

taken either after flowering or in August, inserted in a peat and sand compost and placed in a shaded cold frame.

Root cuttings may be taken to increase P. denticulata, and is practiced to obtain good colour forms. Strong roots removed in June, chopped into lengths of 114" to 11/2", dusted with Benlate, and mixed with chopped sphagnum moss are placed in clear polythene bags. These are hung in a cool, well-lit situation until roots and buds can be seen, then the cuttings are removed and potted by individually. Alternatively, portions of root are inserted vertically in trays of sandy compost with the top of the cutting level with the surface of the compost and placed in a cold frame. Polarity of the root cutting is important; they should be inserted with the proximal end uppermost.

Leaf cuttings may be used to increase species in the Petiolares section, e.g. P. whitei, bhutanica, bracteosa, edgeworthii, gracilipes, and scapigera. Mature leaves at the base of the plant are pulled sideways in August or September. These will have a small bud present at the base of the petiole. Insert vertically in a sandy compost so that approximately ½4'' of the petiole is buried and placed in a cold frame. Rooting normally occurs within a month.

Trays of seeds which do not germinate in the first spring occasionally become covered with mosses and liverworts. Both of these pernicious "weeds" are controlled by watering with a solution of Algofen which, in my experience, is extremely effective and does not appear to be phytotoxic to any plants we grow.

Editor's Note: Reprinted from The Plant Propagator, publication of the International Plant Propagators' Society, Inc., by permission of the editor.

The Primrose from Garryard, Ireland

by E. Charles Nelson National Botanic Gardens, Glasnevin, Dublin, Ireland

In various past issues of Primroses, accounts have been published of some Irish primroses. Indeed, there is an abiding legend—and I stress the word legend—that Ireland is inhabited by little old ladies who hoard primroses of ancient origin. It is not true, absolutely not true. There are some keen primrose growers in Ireland but I could count them on the fingers of one hand. I am not a primrose fanatic myself, and so I declare my interest in Irish cultivars by saying that I am trying to compile a list of all the garden flowers (primroses included) that have been raised in Ireland since gardening began. Most recently I completed a book on Irish garden plants and while writing it, I tried to obtain information on some of our fine old primroses. As with so many other plants, I find that the histories published are often incorrect in minor, but highly significant details. What I present below is my information of the primrose from Garryard.

Cecil Monson provided many basic facts in his article which was published posthumously in Fall 1977 (vol. 35, no. 4). He stated that the first Garryard was raised by a 'certain Mr. Whiteside Dane' and he appeared to suggest a date about 1900. Mr. J. Whiteside Dane was a prominent citizen of County Kildare, a county lying west of Dublin, in the late 1800s and early 1900s. In 1896 he was a member of the Kildare Archaeological Society and resided at

Osbertstown Hill. About 1903 he moved to Abbeyfield near Naas, but it was not until 1912 that his address was given as Garryard, Johnstown, near Straffan in County Kildare—I stress again that Garryard is the correct spelling (see Cecil Monson's article in Fall 1977). At this time Dane was the deputy lieutenant for the County, but by 1922 he had retired and moved to County Cavan in the north of the country.

To date, I have been unable to obtain any further information about J. Whiteside Dane, but I am still looking.

The information provided by the records of the Kildare Archaeological Society suggest that the primrose he raised could not have originated before 1912. Strangely, I found some confirmation of this when I was looking through the records of the National Botanic Gardens. Mr. Whiteside Dane was obviously not a well-known gardener, for he only receives one entry in the Gardens list of donations. In May 1919 he obtained from Glasnevin the following primroses—Primula ciliata, P. 'Linda Pope', P. involucrata and P. ciliata 'Superba'. There is no record of any gift to the Gardens from Dane, but in March 1920, less than one year later, plants of "Dane's primrose" were sent from Dublin to a gardener in County Limerick.

I believe that this is the first record of the plant that was later known as Primula 'Appleblossom', which as pointed out by Cecil Monson, is the original and only Garryard primrose.

Confirmation of this date appears in a negative way. I have searched many British horticultural journals as well as the only contemporary Irish magazine (Irish Gardening published between 1906 and 1922) and can find no reference to any Garryard (i.e. bronze leaved primrose) before about 1930. Had such a remarkable plant as 'Appleblossom' been widely available it would surely have been mentioned. Indeed, several enthusiastic Irish writers, for example Miss Eda Hume, hardly ever noted these bronze cultivars before 1940.

With the passage of time, and a woeful lack of interest in recording the history of our garden plants until recent years, I fear we will never learn the true and accurate history of the original primrose from Garryard. But,

I am trying to put together what information is still available, and to trace any old records that may still survive. Perhaps in a future issue, I will be allowed to list our Irish primroses, plants like 'Guinivere', 'Kinlough Beauty', 'Tipperary Purple' and 'Our Pat'. The complete list is not too long, but the list of those which survive is very short.

It is sad that the little old primrose ladies of Ireland should have departed from our knowledge. I do not know when the legend began, but I was surprised some months ago to see a lady suggesting that perhaps some of the old-fashioned primroses might survive in the neglected gardens of Ireland. That is what Juliana Ewing wrote in 1884, one hundred years ago, in answer to an enquiry about hose-in-hose primroses!

The APS Open Door

To receive my first request through the APS Open Door was quite a thrill! Since the Fall Quarterly 1983, Volume 41, No. 4, I have been busy corresponding with potential sources (seedmen, nurseries, friends, etc.) and the response has been most gratifying. The notes of encouragement have been wonderful!

As a brief reminder to members of the APS, the APS Open Door is an ideal opportunity to locate, trade, sell, and share primula plants, seeds, resources, knowledge and related items with other members via the APS Open Door.

Anyone who would like to participate in the APS Open Door can either contact me or those who have already made a request.

Mr. Harry Melchoir, Str des 13, Januar 85, 6620 Volklingen 4, West Germany Wanted: P. x "Emily" (raised by Cyrus Happy) Mr. Gordon Emerson, 1850 Route 45, Rock Creek, OH 44084 Wanted: P. x polyanthus "Marie Crousse"

P. x juliana ''Edith'' P. x ''Red Hugh''

Can Trade: P. x juliana "Kinlough Beauty"

P. juliana "Apple blossom"

Miscellaneous request

Wanted: Pictorial Dictionary of the Cultivated Species of the Genus Primula, published by the American Primrose Society. (Fair price offered).

The door is open, please write to: Harriet Gurney 42 Water Street Fairfield, Maine phone (207) 453-2313

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The Auricula Primroses

by Alice Hills Baylor Stowe, Vermont

The European mountains are rich with those primroses that delight in calcareous crevices. They have distinct characteristics which differ from the meadow primroses. The foliage is smooth, thick, and leathery. The one from the Alps which takes the group name, P. auricula, is a fragrant yellow with a white eye, bearing six to nine open florets in a bunch on a stout stem. The leaf edges are smooth and without farina. This wilding has been hybridized for generations to form many types and in a large range of colors. It has naturally crossed with other members of this group in the Apennines and Carpathian Mountains. The most popular crosses have been with P. viscosa (blue to lilac) and with P. villosa (violet, rose and pink) to give some of the variations in toothed edged, leaves with powder on both stems and leaves, and many colors, pink, lavender, purple, one so dark as to be called Black Prince in such a wide range of colors as to defy description. These hybrids are called garden auriculas and are sturdy and need no pampering whatsoever. Some of its ancestors have given farina on leaves and stems to give a plant with silvery foliage. Others have deep green leaves, some toothed, some smooth edged. That is the fascination in growing auriculas for they are varied in color and foliage. All are good garden subjects because of the sweet scented, often ruffled flowers. from ten to twenty on the stiff stem; the ease with which they can be grown and the flourising colonies they soon develop. They will enhance a partially shaded portion of the rock garden or border with great beauty. Some gar-

deners shy away from a plant which suggests "an alpine" believing it will take special care or be short lived. Not so with the garden auriculas which need no coddling as they hail from rugged peaks and will endure cold and wind.

The double and semi-double *P. auriculas* are delightful plants for one's garden. The supply I have came from Ralph Balcom who worked tirelessly towards the true double. His are sturdy plants and multiply quickly from divisions. The first ones I had were semi-doubles, the next generation almost all came fully double. After that I separated the colors, pink; apricot; rose and a lavender, by cuttings.

In the early days of the eighteenth century the silk weavers of England grew and held shows for the auricula plants they hybridized. They fell into two classes, the show and the alpines. The shows are divided into two types: the edged and the selfs. Strict rules were observed which were as exacting as they are today in shows. The edged auriculas are sub-divided into colors: green, grey and white edged. The green edge takes the exact shade of the foliage in the petals; the grey edged are powdered to give that tone and the white edged is completely covered with powder or meal which rings the yellow center. This powder is referred to as paste and this band is circled by a body color which merges with the edge. The show auriculas are treated as pot plants and are kept in a cool greenhouse or alpine house as the rain ruins the paste.

The group termed alpine auriculas has no farina and is smaller in all its

parts. They do not need pampering and will readily grow in garden conditions, especially useful in the rock garden. The center is either deep or pale yellow with the petal color clear and true. The little one called Searchlight is a brilliant, glowing red. There are pink, lavender and deep reds. The soil should be porous with stone chips, enriched with dry cow manure, and wood ashes, and mulched with small stones. The auriculas in the subsection of the short bracted group (Brevibracteatae), are among the most beautiful and all make excellent garden plants, especially for walls or the rock garden. P. marginata may be the best loved of any in this group. Its native home is the Maritimes and also in the Cottians, usually in limestone but often in slate debris. There are many handsome forms of P. marginata with leaves three to four inches long edged with silver grey. One of the best of these has an umbel of French blue flowers held on two to three inch stems above the mat of many rosettes. It does best in a cool root run, between two pieces of limestone. The root is long for the size of the rosette. We put ours in the low stone wall edging the garden auriculas. The bloom is so early that often the delicate blue umbel will peek out from an edging of wet snow. All the forms are deliciously fragrant, one of the best is LINDA POPE. Then there is a near white one called, WHITE PEARL, that is nearer a cream colored. I have some deep lilac and purple hybrids from my good friend, Ivy Agee who had done splendid work in this group and especially with P. allionii.

P. carniolica is in the same subsection and is also very fragrant. Its native home is in the European mountains in sub-alpine meadows. Therefore it needs partial shade in a humus filled soil. It has long, narrow,

sharply pointed leaves that are a glossy dark green. The flowers are tubular in a pure soft rose color with a startling wide white eye.

P. vicosa is also in this group and has been often confused with P. hirsuta. It is a widely variable plant depending on where it is found growing in the Maritime Alps. The leaves are long, six to eight inches, and three inches broad. The flowers are a one sided umbel in lavender or violet. There is a rose colored one that has been known as P. viscosa var. latifolia. This form is different also as the foliage is a yellowish green, shorter and very glutinous. The scape is three to six inches on which it carries an umbel of many flowers which vary in shades of pink to rose with a white eye. The primrose called P. rubra may be a natural hybrid with P. viscosa. There is confusion as to its origin. It is one of the choice primulas for the rock garden or scree. The rosette is small, two to three inches across, with some stickiness on the dark green obovate leaves. It has an unusual appearance in that the leaves overlap somewhat to give a whorled effect. The short stem carries a rounded umbel with many red flowers. It should be planted where it can have sun for half a day, but so that the roots can go beneath a cool stone. It has been used as a parent for may hybrids, the only one I have grown is Boothman's which has ruby red flowers.

In the Arthritica subsection we have *P. glaucescens* often listed as *P. calycina*. The rosette is short, composed of stiff dark green pointed leaves, the margin slightly incurved. On the two inch stem are the large deep purple flowers. This is found in the Lombard mountains. It comes readily from seed and is long lived. I had it for three years where the path rounded the boulder to separate the paths which is a most conspicuous

site. It was beautiful in rosette but it did not bloom. I complained about this in a round robin letter. Carl Worth answered and told me to fill the soil with crushed egg shells. Then also to pour water over limestone chips and pour this solution around the plants. After this treatment they bloomed on April 28, making 1955 a banner year. Since then I have mulched the tiny plants with egg shells and limestones.

P. clusiana is a native of Austria and the Styrian Mountains. It is a plant of open alpine meadows. The foliage is dark green and pointed with upturned white cartilaginous margin. The flowers are large in a rich rose shade with a white eye. A few seedlings came in a pale pink which are not desirable. The soil should be extra rich in humus and although this is a small plant it will make a large mat.

P. spectabilis is a distinct and handsome species. It is a prolific bloomer in a clear rose-pink with a white eye. The foliage is bright green and forms a flat rosette with cord-like

margin.

P. wulfeniana forms dense mats and is a perfect rock plant. It comes from the Eastern Alps and it is said to completely clothe the cliffs there with rosettes of dark green leaves. In spring the plants are covered with immense purple flowers as large as an inch and a half across. Only two or three flowers on an umbel but the size of a single flower will hide a great deal of the rosette.

The subsection Erythrodrosum (red hairs) contains *P. hirsuta* which is abundant in the Alps. It forms rosettes of broad ovate leaves, always blunt, finely dentata and densely hairy; the red hairs being red enough to tinge the leaf rusty. The flowers are born on short stems, very close to the rosette, the umbel thick with many rich rose or red with a white eye. Of all the

auricula seed I have germinated only once did I have a white flowered seedling which came from a packet of *P. hirsuta*.

Another red haired primula is *P. pedemontana*, the leave margins heavily fringed. Seed and one plant of this primrose were given to me when I visited the garden of Mrs. A.C.U. Berry in Portland. It is a beautiful small species resembling *P. hirsuta* being smaller in all parts. The five inch stem rises with five to six violet blue flowers.

P. cottia bloomed for me in 1953 and then it disappeared. It was a lovely pink and velvet textured. I did not know why I lost it until I received ALPINE and ROCK GARDEN PLANTS written by Will Ingwersen, a gift from James Mitchell. Then I read that it grows in volcanic cliffs which are lime free. It left behind a very beautiful hybrid garden auricula in shell pink as a reminder of having been with me.

The Cyanopsis (blue flowered) subsection has the rare beauty, *P. decorum* which is only found in Bulgaria in marshy alpine meadows. It needs rich humus soil and has been the parent for many blue hybrids. The blue that is the most beautiful is *P. glutinosa* from the southern Alps. The tubular flowers are purple-blue, the rosette composed of narrow, straplike leaves and very sticky. It does not like too wet a position but does very well in the wall or rock garden.

There is only one member in the subsection Chamaecallis, which means stems on the ground. It is *P. minima* for the wee woody stems, rooting as it grows, terminates in a tiny rosette. The inch wide pink flowers are almost stemless and sharply toothed on the edges. It is an ideal scree plant preferring a granite rock to live against and likes to be mulched with stone chips in gritty soil. It is reported to



Primula glaucescens Edinburgh Botanical Gardens

have a white form which I have never seen. I had it for three years and it formed a mat about a foot across. Then one very wet spring it appeared but only for a short time and it died from too wet a position, I am sure. I do appreciate having had it for that length of time. It has been used as a parent for many lovely hybrids. The most noted may be *P. deschmanii* a cross between *P. minima* and wuffer-

iana which makes excellent cushions of short bright green leaves and tubular purple flowers in a close umbel on six inch stems.

There are so many hybrids, many named, which by selection have taken the best points from each parent, resulting in perfection and loveliness. The most prolific parents have given the widest range: *P. auricula, minimua* and *hirsuta*.



Primula rubra

photo by Larry Bailey

Primula Production

by John G. Seeley Cornell University, N.Y.

Primulas (primrose) are worth considering not only for their beauty but also because they are a low-energy requirement crop. Primulas make an excellent item for everyday sales in 4-and 4½-inch pots, and some types such as P. *malacoides* and *obconica* are excellent also as 5- or 6-inch potted plants. There is a wide range of colors giving the primula good sales appeal. Look at the color photos in the sales catalogs.

SPECIES, VARIETIES AND STRAINS

The principal types grown in the U.S. ARE *Primula x polyantha*, p. vulgaris, and P. malacoides.

There is considerable taxonomic confusion in the *Primula* group. the following may help you as you read the various seed catalogs.

- 1. Primula malacoides The "Fairy Primrose" or "Baby Primrose." Fragrant, compact with base branching, and flowers in successive umbels one above another. Non-irritating foliage. A popular primrose for 4-, 4½- and 5-inch pots. Usually grown for spring sales
- 2. Primula obconica "German Primrose." Umbels of half-dollar size flowers. A good winter pot plant in 5- and 6-inch pots. Not widely grown because of its reputation of causing a skin rash but some newer strains are reported not to cause this problem. General culture is similar to P. malacoides.
- 3. Primula vulgaris (P. acaulis) the true "Primrose" and a major crop in Europe. Many colors and shades. Excellent for spring sales. Generally considered hardy in outdoor gardens.

- 4. Primulax polyantha (P. veris elatior)

 "Polyanthus," perennial. A hybrid with parentage of P. veris, P. elatior and P. vulgaris. There are many strains. Stem length varies; some with tall stems are used for cut flowers in Europe. Others with shorter stems are excellent for 4-inch pots and as bedding plants in late winter and spring. Good in the garden. Primula elatior gigantea, a strain reputed to bloom early with rose and red flowers being useful for Christmas and Valentine's Day.
- 5. Primula sinensis "Chinese Primrose." Grown in England. Express strain is compact and self-supporting; thus doesn't require staking as does the species.

PROPAGATION

Seeds are very small varying from approximately 28,000 to 48,000 seeds per ounce for *P. acaulis* and *P. veris* to about 375,000 for *P. malacoides*. Sow the seed on the surface of a peatvermiculite or peat-sand mixture that has been watered thoroughly before seed sowing. Do not cover the seed. Some research indicates that light enhances germination but other research (1) indicates that light is not very important.

Keep the medium moist with light misting. OR you can put a sheet of glass or plastic over the flat, but do not put the flats in the sun because of excess heat. It used, remove cover as soon as cotyledons appear.

Keep temperature of the medium 60-68°F. Above 70°, germination is usually poor. A thermometer in the

propagating medium is essential especially if using bottom heat and mist. The temperature of the medium is the important temperature as contrasted to that of the thermometer on the wall. High temperatures cause poor germination in the greenhouse in summer. A special seed germination room is excellent.

Seed should begin to germinate in 10 days but we usually figure about 3 weeks for complete germination. Sprinkling the seedlings lightly with finely sifted potting material such as peat-vermiculite helps anchor the sprouting seedlings. Do not allow the germinating medium to become dry. Water deficiency stunts young seedlings.

Another approach is to buy started seedlings or small plants, thus by-passing the seedling step.

POTTING

Transplant when 2 to 3 true leaves appear (about 6-8 weeks after sowing). Can go into 2 × 2'' cell packs or 2-1/4 inch pots and later to 4- or 5-inch pots. For later plantings and sales in 3 or 3-1/2 inch pots, plant seedlings directly into the final pot. When potting, keep the crown above the surface of the potting medium to reduce chances of rot.

A loose, light, well-drained medium high in organic matter works well. A 1:1:1 mix (by volume) of perlite or sand, peat, and loam with a pH of about 5.5 to 6.5 and low to medium nutrient level is good. A standard peat-lite mix also works well. If regular superphosphate is incorporated in the mix at the rate of 2 pounds per cubic yard, then subsequent fertilization with a fertilizer solution of 150 ppm of nitrogen and 150 ppm of potassium at each watering should keep the plants growing well. Nitrate-nitrogen fertilizer, rather than ammonium-nitrogen, is recommended because of greater availability of nitrogen at the low temperatures.

Use 9 ounces of calcium nitrate and 5 ounces of potassium nitrate per 100 gallons. OR consider a 15-0-15 dark weather fertilizer at 9 ounces per 100 gallons; this gives 150 ppm of nitrogen and a little less potassium but will be adequate.

Many recommendations are to run pots on the dry side to avoid excessive leaf growth, but never allow to dry completely.

TEMPERATURE

Post (4) showed that cool temperatures favor growth and low temperatures favor flower bud initiation. During summer months, keep plants at 60°F at night or at least as cool as possible to get plant size. For P. malacoides, in fall and winter, reduce temperature to 45-50° NT to stimulate flower bud initiation and after 6-8 weeks you can raise temperature to 55° to speed up flowering. Above 55° gives weak flower stems. Research in Germany shows that varieties differ in temperature response (6). In spring 1983, the varieties Snow Cone, Red King, Lavender King, White King and Pink Ice grown in Cornell Greenhouses in Ithaca, New York, flowered in February, from an October 22, 1982 seeding, and grown with minimum NT of 60°F indicating these varieties do not need a low temperature treatment for flower induction and development.

Culture of P. obconica is similar to malacoides.

For polyanthus and P. vulgaris types, grow at 40-45° until 3-4 flower buds are clearly visible and then force (January to March) at 55°. Forcing usually takes 2-4 weeks after flower buds are visible. One can grow the plants continuously at 40-45 but this lengthens the crop time.

LIGHT

Intensity: Plants grow best with a

light shade in summer to lower light intensity and greenhouse temperatures. Hammer (3) recommends light intensity no greater than 3200 footcandles thus requiring some shade most of the year. For *P. malacoides* and *P. obconica*, give light shade in summer and early fall and full light in winter. For *Primula vulgaris* and *Primula x polyantha* types, give full sunlight except immediately after transplanting.

Daylength: P. malacoides initiates flowers at 50°F under either long or short days, and over the wide range of 41°-77° will initiate under short day conditions (4,5); at 60°, flowers may initiate but later abort, or if they develop, quality will be poor. Therefore, plants are grown cool.

PROBLEMS

Poor growth and chlorotic foliage - usually due to overwatering.

Chlorosis of younger leaves - usually due to lack of available iron due to improper pH or inadequate absorption due to poor root system. Watering with chelated iron such as Sequestrene 330 iron at 2 pounds per 100 gallons can alleviate the problem.

Browning of leaf margins - indicates magnesium or potassium deficiency, or root injury due to overwatering, excess fertilizer, high soluble salts, etc.

SCHEDULES

Primula malacoides - Some catalogs list it as a 6-month crop but sometimes it takes 7 to 8 months depending on season (temperature and light) and size of plant desired. June to September seedings flower in January to April. Several catalogs report that sowings after October 15 will be blind; studies on this problem are in progress.

For an early February crop, sow seed in early July and after transplanting to pots, grow at 60° until late October, then 48-50° to initiate flower buds. In mid to late December, raise temperature to 55°F to finish them off. Or keep the temperature near 50° and they will flower a little later.

Smith (5) in England sowed the variety 'Christmas Rose' in mid-August and 'Fire Globe' in mid-July and both were in bloom for Christmas marketing requiring only 4 and 5 months, respectively, from seed to flower. Plants were grown at 55°F with natural daylength, except for a month from mid-September to mid-October when the temperature was dropped to 50° and plants were given 15 hour nights (short days by blackclothing from 5 pm to 8 pm). Then back to 55° and natural daylength. Would be interesting to see how other varieties react to this type of schedule. His results showed that if you could be sure of getting the 50° night temperature in September (unlikely in New York State), the short day treatment would not be necessary.

Primula obconica - Some sources say that seed sown from January on provides plants for Christmas and early winter sales. Others report a late May seeding should give 5- or 6-inch pot plants for Christmas. Sow seed at 3 week intervals for successive bloom in spring, but because germination is not good in the heat of summer, use a controlled environment propagation room, or buy started plants produced in a cooler area. An October sowing makes good 4-inch pot plants for spring.

Primula vulgaris (acaulis and polyanthus types: Attractive plants in 4-or 4½-inch pots for everyday sales result from growing at 50-55°F after potting the seedlings; this requires 5 to 6 months from seeding to bloom. Sow seed July-August for February-April sales.

After potting the seedlings (5-7 weeks after sowing) in pots, grow as cool as possible during summer and fall. When the plants have a good

rosette of leaves, lower the growing temperature to 40-45°F at night to initiate flower buds. When flower buds are visible, raise temperature to 50-55° and plants should flower in 2 to 4 weeks.

A new Early Christmas series is reported to be ready for Christmas sales from a May to early June sowing.

Goldsberry (2) in Colorado flowered plants of the Jewel strain of the Pacific Giant series and F-1 P. acaulis hybrids in 5 to 51/2 months from seed. Seed were sown throughout the fall (September 15 to December 15) in a peatlite medium and when the second set of true leaves developed, seedlings were transplanted into "608" type cell packs and grown at 60-62°F nights and 60-70°F days, with natural photoperiod and 900 ppm CO₂. About 54 to 80 days later, depending on time of year, plants were shifted to 4-inch azalea pots for finishing. Flower buds were visible in many of the plants when shifted and finished off at 52-54° nights and day temperatures of 60-62° or 60-62° day and night. Cooling kept temperatures from going above 70° in both houses.

Both temperatures produced excellent plants but those finished at the lower temperature were approximately 10 days slower in reaching the salable stage. In this experiment low temperature was not given for flower bud initiaion.

Goldsberry suggested spacing of 4 plants per square foot or even pot to pot. As flowering often is not uniform, spacing results as flowering plants are sold.

The various reports and research show that because of the many types and strains in this primrose group and because of differences in climate in various geographic locations, growers should try several types and keep their own records of temperature, weather, and plant response for future reference.

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pages 14-19. (an interesting article about garden primulas.)

Editor's Note: John G. Seeley is Professor of Floricultural Science at Cornell University. This is the text of his presentation at Central New York Cooperative Extension minor crops seminar December 2, 1982. His talk was brought to the APS Quarterly staff's attention by Ms. Lee Nelson, Broome County Extension, Birmingham, N.Y.

1984 National Show

'Primrose Park' will be the theme for the 1984 National Primrose Show and Sale, to be held April 14 & 15 at the Pavilion Outlet Center in Seattle, Washington. Hours: Saturday 10 - 6 and Sunday 11 - 5.

New approaches for this show include: slide shows on Saturday; demonstrations during afternoon hours on both days; a park scene for the trophy area; photo displays; tearoom featuring a primrose decorated cake; and finally, an effort being made to have all the APS Chapters and members once again working together. While Washington State Chapter will act as coordinator, other chapters are being asked for their input of ideas and to volunteer for specific tasks. In the recent past, single chapters have acted as hosts for the Nat'l Show. And while it has been proven one small group can and has put on a fine show, the main objective here is to have as many involved as possible, making the 1984 Show and all future shows truly NATIONAL.

In order to make this weekend more enjoyable for those outside the Seattle-Tacoma area, local members will be opening their homes for other members to stay during the show. Those arriving by plane will be picked up at the airport and transported to their host member's home. Hospitality Chairman, Candy Strickland, will be doing the coordinating. Any member needing a place to stay and anyone willing to share their home, please contact Candy as soon as possible at 2722 E. 84th, Tacoma, WA 98445.

The Annual Meeting and Banquet will be held after show hours on April 14th at the Pavilion Cafe beginning at 7 p.m. Award presentations, guest of honor introduction, a short business meeting and guest speaker will be featured after a buffet dinner. Banquet Reservations, along with payment (\$11.10), must be made before April 10th. Make checks payable to Washington State Primrose Chapter and send to Show Chairman, Irene Buckles, 13732 45th Ave. S., Seattle, WA 98168.

Individuals not belonging to a specific chapter but interested in becoming involved with the show can contact the show chairman. Questions, ideas and suggestions, needed directions or trophy donations should also be directed to the show chairman.

Resource Directory 1984

The primary reason for providing a directory of resources is to serve and for the benefit and knowledge of the members of the American Primrose Society. Basic policies governing the selection for these dates and sources were only they be of direct interest to primula growers.

It is anticipated the directory of resources will be updated and published in the Quarterly each year. The editors hope members of the APS will continue to share their own 'special' resource throughout the year. If, at any time a member comes across an interesting item, source, date, etc., they will right then, drop a note to Harriet Gurney, 42 Water Street, Fairfield, Maine 04937, phone (207) 453-2313. Harriet Gurney is in charge of APS Open Door and could make good use of all information concerning the obtaining and growing of primula.

Dates to Remember for 1984

March 10th to 14th: Massachusetts Horticultural Society, 1984 New England Spring Garden and Flower Show; Bayside Exposition Center, Boston.

March 11th to 18th: Philadelphia Flower Show, Civic Center, Philadelphia.

March 25th: 1:00 PM to 5:00 PM The Rhododendron Species Foundation's Early Blooming Species Walk. On the property of the Weyerhaeuser Corporation Headquarters, Federal Way, Washington.

March 31st - April 1st: Oregon Primrose Society, Primrose Show; Milwaukie Community Center, 10666 S.E. 42nd Ave., Milwaukie, Oregon. Show co-Chairman: Etha Tate & Orval Agee.

April thru May: Sundays 1:00 PM to 5:00 PM, Wednesdays 10:00 AM to 3:00 PM The Rhododendron Species Foundation Weverhaeuser Corporation Headquarters, Federal Way, Washington.

April 7th and 8th: Valley-Hi Chapter, Primrose Show; Beaverton Mall, 3205 S.W. Cedar Hills Blvd., Beaverton Oregon. Show Chairman: Ann Lunn.

April 7th and 8th: Tacoma Primrose Society, Primrose Show; Tacoma Mall, Tacoma, Washington. Show Chairman: Flip Fenili.

April 13th to 15th: The APS will participate in the annual Daffodil Festival in Puyallup, Washington. APS members wishing to help should contact Herb Dickson, President APS. April 14th: Berry Botanic Garden Plant Sale; Miller Hall, Western Forestry Center, Portland, Oregon. Open to members of the Berry Garden 10-12 AM, public 12-4 PM.

April 14th - 15th: National Show. American Primrose, Primula and Auricula Society. Hosted by the Washington State Chapter; Pavilion Outlet Center, Southcenter Regional Mall, Seattle, Washington. Show co-Chairman: Irene Buckles and June Skidmore.

April 20th - 21st: Eastside Primrose Society, Primrose Show; Totem Lake Mall, Kirkland Washington. Show Chairman: Albert Ross Smith.

May 2nd - 3rd: University of Washington Arboretum Plant Sale; Arboretum grounds, University of Washington, Seattle, Washington.



May 5th: Doretta Klaber Chapter's Spring Visit. Sponsors: Edith and Bill Collins.

Mid May: Japan Alpine Rock Garden Society Show; Hyogo Prefectural Flower Center, Hasai, Hyogo, Japan. Show Chairman, Dr. K. Onoe.

July 6th to 8th: Hardy Plant Society Study Weekend, Western Forestry Center, Portland Oregon. Registrar; Kathleen Williams, 1205 SW Harbor, Lincoln City, Oregon 97367. July 14th: American Primrose Society, Annual Picnic; Chehalis Rare Plant Nursery, 2568 Jackson Highway, Chehalis, Washington. All APS members and friends welcome.

September 22nd: Berry Botanic Garden Plant Sale; Miller Hall, Western Forestry Center, Portland, Oregon. Open to members of the Berry Garden 10-12 AM, public 12-4 PM.

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Societies

American Primrose, Primula and Auricula Society

President: Herbert Dickson, 2568 Jackson Highway, Chehalis, Washington 98532; phone (206) 748-7627. Annual picnic second Saturday in July (14 July 1984); board meetings announced by President. Slide collection available for group meetings; contact Ann Lunn, Rte. 5, Box 93, Hillsboro, Oregon 97124. A list of the current APS Show Judges can be obtained from Etha Tate, 10722 S.E. 40th Avenue, Milwaukie, Oregon 97222. National APS Show for 1984 to be hosted by Washington State Chapter, Seattle, Washington; April 14 - 15.

Chapters and Affiliations

Doretta Klaber Chapter:

President: Claire Muller, 2001 Ridley Creek Rd., Media, Pennsylvania 19063; phone (215) 566-1995.

The Doretta Klaber Chapter offers Plant Sales, dinners, speakers, and garden tours. For further information contact: Ms. Dee Peck, 8813 Patton Rd., Wyndmoor, Philadelphia, Pennsylvania 19118; phone (215) 233-1076. Members of this Chapter will be participating in the Philadelpia Flower Show, March 11 – 18, 1984.

Eastern Chapter of the APS

Chairman-Pro tem: Fran Luber, East Hartford, Connecticut, 06118.

The Eastern Chapter usually has two meetings a year; a spring show with plant sale and a fall (October) seedling sale. The locations of the meetings are in various locations in the Northeastern States.

Eastside Primrose Society:

President: Lena D. Smith, 112 Kennedy Drive, Duvall, Washington 98019.

Meetings are held monthly on the first Monday, 7:30 PM at the University Federal Savings Bank, 6615 132nd NE, Kirkland; there is usually a plant exchange, study of a primrose Section, and special speaker. The Primrose Show will be at the Totem Lake Mall, Kirkland April 20-21, 1984.

Lewis County Primrose Society:

President: Mrs. Oliver Turner (Dorothy), P.O. Box 506, Rochester, Washington 98579; phone (206) 273-5129.

Meetings are held in members homes on the second Tuesday of each month at 11:00 AM; after the business and programs, a tour is usually taken in the afternoon. The date of the Primrose Show will be announced.

Olympic Peninsula Study Group:

Co-chairperson: Elizabeth B. vanSickle, 654 Marine Drive, Sequim, Washington 98382; phone (206) 683-4744.

Meetings are held on the 2nd Monday during the Spring and early Summer months, at 1:00 PM in members' homes and gardens.

Oregon Primrose Society:

President: Mrs. Frank Berthold (Nadine), 10722 SE 40th Ave., Milwaukie, Oregon 97222; phone (503) 654-3361.

Meetings are held on the 3rd Friday of each month, 8:00 PM at the Milwaukie Community Club. The Primrose Show will be on March 31 — April 1, 1984; also at the Milwaukie Community Club, 10666 SE 42nd Ave., Milwaukie, Oregon. The Oregon Primrose Society will be celebrating their 25th year in 1984.

Tacoma Primrose Society:

President: Esther (Candy) Strickland, 2722 E. 84th, Tacoma, Washington 98445; phone (206) 531-4449.

Meetings are held on the first Tuesday, 7:45 PM, of each month at the Tenzler Branch, Pierce County Library, Gravelly Lake Drive at Wildaire, Tacoma, Washington. A plant

exchange can usually be expected at the monthly meetings. The Primrose Show will be on April 7 — 8, 1984 at the Tacoma Mall, Tacoma, Washington.

Valley-Hi Chapter of the APS:

President: Irene Morris, 9610 SE 5th Street, Vancouver, Washington 98664; phone (206) 892-2688.

Meetings are held on the first Thursday of the month at 1:00 PM; Community Room, Beaverton Mall, 3205 SW Cedar Hills Blvd., Beaverton, Oregon. The Primrose Show will be April 7 — 8, 1984, at the Beaverton Mall, 3205 SW Cedar Hills Blvd., Beaverton, Oregon.

Washington State Chapter of the APS:

President: Margaret Van Dyke, 2105 S. 124th Avenue, Seattle, Washington 98168; phone (206) 242-8082. Meetings are held on the 2nd Friday of each month, 7:45 PM, Good Neighbor Center, 305 S. 43rd Street, Renton, Washington. A plant and seed exchange and guest speaker can usually be expected at the meetings. The Washington State Chapter will host the National Primrose Show on April 14 and 15, 1984 at the Pavilion Shopping Center (near the Southcenter Mall), Seattle, Washington.

American Primrose Society - Judges

Judging Schools were conducted last March by Dorothy Dickson for the certification of new judges, and recertification of those judges currently standing, so that all who wished to participate in the judging service would have the opportunity to do so. It was understood at that time all who passed the examination would be deemed a Student Primrose Judge. After serving as a student member of an APS judging team for three primrose shows or for one primrose show each year for three years, whichever comes first, each student will be eligible to become an APS accredited Primrose Judge.

Any previous APS judge not listed

below and who would like to participate in judging should contact Etha Tate, 10722 SE 40th Ave., Milwaukie, Oregon 97222, phone (503) 654-3361.

Accredited Primrose Judges

Orval Agee Rosetta Jones
Herb Dickson Jim Menzies
Rusty Gates Al Rapp
Thelma Genheimer Etha Tate
Cy Happy Ross Willingham
Ruth Huston

Student Primrose Judges

Edna Bailey
Larry Bailey
Linda Bailey
Margaret Breck
Dona Donahue
Flip Fenili
Albert Funkner
Ann Lunn
Jay Lunn
Viola Purple
Al Smith
Anita Stevens
Elizabeth
van Sickle

Alpine Garden Club of B.C.:

c/o Thea Service Foster, 566 Esquimalt Ave., West Vancouver, B.C. V7T 1J4, Canada

Monthly Bulletin, Seed and Plant Exchange.

Alpine Garden Society:

c/o E. M. Upward, Lye End Link, St. Johns, Woking, Surrey, England GU21 1SW

Quarterly Bulletin, Annual Seed Exchange.

American Rock Garden Society:

c/o Mr. Norman Singer, Secretary, Norfolk Road, S. Sandisfield, Massachusetts 01255; phone (413) 258-4486.

Quarterly Bulletin, Seed Exchange, and Slide and Book Library; affiliated regional chapters.

Hardy Plant Society:

c/o Mr. Marvin Black, 124 N. 181 St., Seattle, Washington 98133; phone (206) 546-4258.

Newsletter, Annual Study Weekend (July 6-8, 1984) Western Forestry Center, Portland, Oregon.

Japan Alpine Rock Garden Society: c/o President, Dr. Kochi Onoe, 142 Motoshio, Himeji, Japan.

Annual Show, Seed Exchange, Tours to apline areas of the world.

National Auricula and Primula Society - Midland Section:

c/o Hon. Secretary, 55 Elizabeth Road, Moseley, Birmingham, England B13 8QH.

Yearbook, Shows March and April (usually last Saturdays).

National Auricula and Primula Society - Northern Section:

c/o D. G. Hadfield, 146 Queens Road, Cheadle Cheshire SK8 5HY, England

Yearbook, Shows first Saturdays in April (April 7) and May (May 5).

National Auricula and Primula Society - Southern Section:

c/o Hon. Secretary Mr. Lawrence E. Wigley, 67 Warnham Court Road, Carshalton Beeches, Surrey, England.

Yearbook, Shows usually the latter Saturdays of March and April.

Rhododendron Species Foundation:

P.O. Box 3798, Federal Way, Washington 98003; phone (206) 838-4646 or (206) 927-6960.

April and May: Sundays 1:00 PM to 5:00 PM and Wednesday 10:00 AM to 5:00 PM for primary blooming season walks. March 25th: 1:00 PM to 5:00 PM Early blooming species walk. October 12th to 14th; 10:00 AM to 5:00 PM Fall Foliage Festival. Large groupings of primroses as companion plants will be displayed.

Scottish Rock Garden Club:

c/o Mrs. Rosemary Law, Kippielaw Farm, Haddington, East Lothian 4PH, Scotland.

Bi-annual Journal, Seed List, Publications.

Vancouver Island Rock and Alpine Garden Society:

c/o Secretary, P.O. Box 6507, Station C, Victoria, B.C. V8P 5M4 Canada. Show in April usually the Friday and Saturday following Easter. Meeting 4th Tuesday of month for lectures, Parlour Shows, plant sales, etc.

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Seeds

Societies

Alpine Garden Club of British Columbia, Seed Director: Vera Peck, 4875 Skyline Boulevard, North Vancouver, B.C. V7R 3J2

Alpine Garden Society, Seed Distribution Manager: H. Lill, 17 Newton Avenue, Newton Hill, Wakefield, WF1 2PX England

American Primrose Society, Chairman Seed Exchange: Richard L. Critz, 1236 Wendover Ave., Rosemont, pa 19010

American Rock Garden Society, Director of Seed Exchange: Mrs. D. Bruce Whittemore, 90 Ridgecrest Drive, Westfield, MA 01085

Scottish Rock Garden Club, Angus Group Seed Exchange Honorary Manager: Miss E. M. Halley, 16 Abercrombie Street, Barnhill, Dundee DD5 2NX Scotland

Commercial and other sources:

Aberchalder Alpine Gardens, Gorthleck, Inverness-shire, U.K.

Alpine Research, 630 S.E. Rene, Gresham, Oregon 97030

Barnhaven, Brigsteer, Kendal, Cumbria, LA8 8AU England Burpee, W. Atlee Seed Co., 300 Park Avenue, Warminster, PA 18991

Chambers, John, 15 Westleigh Road, Barton Seagrave, Kettering, Northants NN15 5AJ, U.K.

Chiltern Seeds, Bortree Stile, Ulverston, Cumbria LA12 7PB England

Drake, Jack, (Inshriach Alpine Plant Nursery), Aviemore, Inverness-shire, Scotland PH22 1QS

Douglas, Mr. Gordon, 67 Church Road, Great Bookham, Surrey, KT23 3EG England

Far North Gardens, 16785 Harrison, Livonia, Michigan 48154

Goodwin, L.S.A. and Son, Bagdad Sth 7407, Tasmania, Australia

Ghose, G. & Co., Townend, Darjeeling, India

Green, Jonathan & Sons, Inc., Box 9, Farmingdale, N.J. 07727

Howell, Major V. F., Fire Thorn, 6 Oxshott Way, Cobham, Surrey, KT11 2RT England

Jelitto, Klaus R., Horandstieg 28, D 2000 Hamburg 56, Germany

Kohli, P & Co., Park Road, Srinagar, Kashmir, India 190009

Kroner, Mrs. A., rue des Vernes, 16 CH 1217 Meyrin, Switzerland

George W. Park Seed Co., Greenwood, South Carolina 29647

Seeds by Rosetta, 6214 So. 287th., Kent, Washington 98032

Spring Hill Farm, P.O. Box 42, Gig Harbor, Washington 98335

Stokes Seed Inc., 737 Main Street, Box 548, Buffalo, New York 14240 Thompson & Morgan Inc., P.O. Box 100, Farmingdale, New Jersey 07727

W. F. Unwin Limited, Seedsmen Histon, Cambridge, England

Plants

Plants, Commercial Growers:

Before visiting any of the sources for plants, the editor's committee strongly recommends the person(s) make prior appointments.

Alpenflora Gardens, 17985 - 40th Ave., Surrey (Cloverdale), B.C. V3S 4N8 Alpenglow Gardens, 13328 King George Hwy., North Surrey, B.C. Canada

Baileys' (mail orders only), 209 Dayton Street, No. 106, Edmonds, Washington 98020

Bartoos Gardens, 6214 So. 287th., Kent, Washington 98032; phone (206) 852-0330 Brenda Hyatt, 1 Toddington Crescent
– Bluebell Hill, near Chatham,
Kent, England

Chehalis Rare Plant Nursery, 2568 Jackson Hwy., Chehalis, Washington 98532; phone (206) 748-7627

Cricklewood Nursery, 11907 Nevers Road, Snohomish, Washington 98290; phone (206) 568-2829

Dalilea Nurseries Limited, The Old Poor's House Dalilea by Acharacle, Argyll PH36 4JX, Scotland

Far North Gardens, 16785 Harrison, Livonia, Michigan 48154; Phone (313) 422-0747

Frank Shipston, 11 Harvey Close, Allesley, Coventry CV5 9FU, England

Grand Ridge Nursery, 27801 S.E. High Point Way, Issaquah, Washington 98027; phone (206) 392-1896; 222-7226

Darlene Heller (Wayside), 1711 B. County Line Rd., Stanwood, Washington 98292; phone (206) 445-3732 Lamb Nurseries, E. 101 Sharp, Spokane, Washington 99202; phone (509) 328-7956

Mori, Kazuo Alpines, Trinity Garden, 5-8, Matsushita, Nishinomiya, Hyogo, Japan, P.C. 662 Nature's Garden

Route 1, Box 488, Beaverton, Oregon 97007; (mail orders)

Oliver Nurseries, Inc., 1159 Bronson Road, Fairfield, Connecticut 06430; phone (203) 259-5609 phone (203) 259-5609

The Plant Farm, 11811 Northeast 73rd, Kirkland, Washington 98033; phone (206) 822-1124

Primrose Acres, 14015 - 84th Avenue East, Bothell, Washington 98011; (206) 823-8904

Daystar, Litchfield - Hallowell Road, RFD 2, Litchfield, Main 04350, (mail orders); phone (207) 724-3369

Siskiyou Rare Plant Nursery, 2825 Cummings Road, Medford, Oregon 97501, (mail orders); phone (503) 772-6846

Primrose Lane Nursery, 13631 - 196th S.E., Renton, Washington 98055; phone (206) 235-1277

Spring Hill Farm, P.O. Box 42, Gig Harbor, Washington 98335

Alda Stich, Freedom, Maine 04941; phone (207) 342-5796

Stonecrop Nurseries, Cold Springs, N.Y. 10516; phone (914) 223-3419

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Primula Names and Prefixes

by William G. Holt

Girvan, Ayrshire, Scotland

Why do we name Primulas and use prefixes? The reason is obvious you will say, but think further. Raisers of plants should select only those to be named that they feel worthy of distribution, are different and are of superior quality. It should be a customer's guarantee a particular plant be of, or very very near to the de scription given for that cultivar.

However it may be that someone, somewhere, by sheer coincidence is using or about to use the same name for a different cultivar or one perhaps somewhat similar. This is where a pre-

fix is of importance to define either of the plants.

Prefix and name given by the raiser of a plant should always be used, firstly to avoid any confusion and secondly as a token of acknowledgement to the raiser and propagator. It is not by any means always done in the U.K. This is particularly so at the shows and/or in show reports. (It is pleasing to note how the show reports are edited in the APS Quarterly.)

Then lastly prefixes and names will identify cultivars for all future generations of primrose lovers.

American Primrose Society Seed Exchange

Chairman: Richard L. Critz, 1236 Wendover Ave., Rosemont, Pennsylvania 19010.

Open to all members in good stand-

The left hand number identifies the variety. The letters in the right column identifies the donors of the seed and the number to the right of the donor key in parenthesis () is the number of seed per packet.

Packets are 25 cents each. Minimum orders are \$5.00. No postage is charged, but inclusion of a stamped (USA), self-addressed envelope will be appreciated. Please remit by personal check, bank draft, or money order. Overseas members must use international money order or bank draft on US funds. Make checks payable to: The American Primrose Society.

There will be no refunds of money and substitutes of desired seeds are encouraged to be indicated with orders.

col = collected

dk = dark

dbl = double

HP = hand pollinated

hyb = hybrid

Nfld = Newfoundland

NW = northwest ssp = subspecies

AURICULA

1. auricula	B2(8)
2. auricula alpina	U1(6)
3. auricula, red	X1(5)
4. auricula, mixed specie	es,
Garden, Show	G(10)
5. daonensis (oenensis)	U1-H2(5)
/ 1	T1 (()

6. glaucescens T1(6)
7. glaucescens ssp calveina U1(5)

8. glutinosa M1-U1-H2(20)

9.	integrifolia M1(8)
	pedemontana M1(8)
	x pubescens (15)
	rubra (hirsuta) T1-U1-H2(8)
	spectabilis U1-K2(5)
14.	villosa B2-K2(4)
15.	viscosa (latifolia) M1-K2(8)
16.	doubles-R W Balcom Strain K(5)
17.	Garden, blue shades T-I1(5)
	Garden, dark colors B(20)
19.	Garden, hair colors B(30)
20.	Garden, light colors B(30)
21.	Garden, white T(5)
22.	Garden, Edinburgh Strain,
	mixed colors $G(5)$
23.	Garden, mixed colors (10)
24.	Show Alpine, light center V1(5)
25.	Show Alpine, dark blue HP P(5)
26.	Show Alpine, pale blue HP P(5)
27.	Show Alpine, gold-flame, etc.
	HP K-P(5)
28.	Show Alpine, bright pink
	HP K-P(4)
29.	Show Alpine, pale pink HP P(5)
30.	Show Alpine, purple HP P(5)
	Show Alpine, dark red, HP P(6)
32.	Show Edged, green-black
	ground HP P-V1(5)
33.	Show Edged, green-red
	ground HP P(5)
34.	Show Edged, gray-black
	ground HP P(5)
35.	Show Edged, gray-yellow
	ground HP P(5)
36.	Show Edged, white-black
	ground HP P(5)
	Show Self, black HP P(4)
38.	Show Self, blue HP P-V1(5)

39. Show Self, old gold HP

40. Show Self, pink HP

42. Show Self, vellow HP

41. Show Self, red HP

43. Shows mixed

P(5)

P(5)

P(5)

P(5)

G-T1-B2(10)

A. Capitata NI-Wi-L2(15) St. chiomaths 12 A. Capitata springers Ni-Wi-L2(15) St. chiomaths Ni-Wi-L2(15) St. chiomaths Ni-Wi-L2(15) St. chiomaths Ni-Wi-L2(15) St. chiomaths Ni-Wi-L2(15) St. will Ni-W	CANDELABRAE (see PROLIFERAE)	86. vialii (50)	124. poissonii W1(10)	160. x polyantha 'Dwarf Jewel'
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8. deniculata, redsa	(/			
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FARINOSAE 101. burmanica H.I-N.1(25) 140. secundiflora (20) 141. sikkimensis (21) 150. cokburniana (20) 141. sikkimensis (21) 150. cokburniana (20) 141. sikkimensis (21) 150. cokburniana (20) 142. flaccida (nutans) N.II-L2(6) 143. reidii CI-TI(12) 144. reidii Williamsis X-TI(10) 145. r		(-/		
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105. helodoxa				
106. ianthina		,	144. reidii williamsii X-T1(10)	
66. Incana		(-)	VEDNATES	
108. japonica (wild) Czech K1(10) 146. elatior ssp cordifolia P1(7) 170. wpolyantha 'Premiere 72' 170. mpodesta groenlandica N(5) 170. modesta groenlandica N(5) 170. modesta matsumurae J2(15) 170. rosea 'Cigas' M1(15) 170. rosea 'Cigas' M1(15) 170. rosea 'Cigas' M1(15) 170. rosea 'Cigas' M1(15) 170. sea 'Gigas' M1(15) 170. sea 'Grandiflora' K1(5) 1		(-)		
69. luteola M-51(5) 69. luteola M-51(5) 70. mistassinica R-J2(5) 71. mistassinica R-J2(5) 72. modesta groenlandica N(5) 73. modesta matsumurae J2(15) 74. rosea x clarkei (Peter Klein) T1(5) 75. rosea x clarkei (Peter Klein) T1(5) 76. rosea x (Grandiflora' K1(5) 77. rosea (Grandiflora' K1(5) 78. yargonensis W1(5) 79. x kewensis I1-K1(5) 79. x kewensis I1-K1(5) 79. x kewensis I1-M1(5) 79. x kewensis I1-M1(6) 79.				
10. japonica 'Atropurpurea' 148. hybrida 'Julian' bicolor mix G1(6) 177. x polyantha 'Premiere 72' 178. x polyantha 'Premiere 72' 179. mistassinica, col NW Nfld J2(5) 179. modesta groenlandica N(5) 179. modesta matsumurae J2(15) 179. rosea (Grandiflora' K1(5) 179. rosea (Grandiflora' K1(5) 179. sponica, red HP Z(20) 179. x kewensis 11-K1(5) 179. x kewensis 11-K1(5) 179. x polyantha 'Premiere 72' 179. x polyantha 'Premier				
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From the mailbox

. . . Both my wife Pat and myself are Yorkshire born and bred and have lived in and around Doncaster all our lives, we moved to Haxey just five years ago. It is highly agricultural with the emphasis on cereal and root crops but very little in the way of livestock.

With regard to my own particular interest in Primrose, Primula and Auricula I must confess to a great love for the old named varieties of Primroses, particularly those of P. x julianas origin as listed by Mr. J. W. Martin on page 27 of the Summer Quarterly and also makes very interesting reading. As you might imagine these old varieties are very difficult to come by as indeed are many items of a bye gone era, most growers will only do swaps. As I have only a few varieties, I have to buy those that I want. Mr. Martin does sell a few varieties and I also have one or two other connections but it is expensive but I enjoy them so much that it is hard if not almost impossible to resist when I find something to add to my collection. The problem is that I lost practically every variety that I had in the severe winter we encountered and consequently I have had to start almost from scratch again. The plants that I lost were all growing in pots and as I do not have a greenhouse I'm afraid they did not survive. The one great favourite of mine Garryard Guinevere was growing in the garden and came through unharmed I'm happy to say. I have tried breeding with her but I'm afraid she has resisted all her suitors so far and is still as virtuous today as she was when I first obtained her. Still I'll keep trying and who knows one day she may set seed for me. I think the direct crosses with P. juliae are the most delightful and of course this fact has now been recognised by many of our large commercial seed houses who are introducing their own particular strain of Primula x juliae. Of course the most famous over here must be Barnhaven with their new Julianas. A wonderful strain, neat compact plants in truly magnificent range of colours. I must confess that I am particularly interested in the Double Primroses and obviously found the article by Rosetta Jones in the Summer Quarterly of great interest. I have not grown any so far or even seen any so I must get around to ordering some seed. My other great love in Primulas are the Section Petiolares of which I have about six or seven varieties so far. They are growing in a raised bed (rectangular) in pure leaf mould and were in deep shade under a large tree until the September gales damaged it so badly that I had to take it down completely and will now have to provide artificial shading next year. I have managed to keep the pests and diseases at bay to a large extent and in winter I cover with glass to protect the early blooms. I have not lost any plants so far but they do not seem to be overflowing with the health and vigour that I would wish for so I am going to have to consult the experts to find out where my cultivation is at fault. They are so delightful I do want to make a success of growing them.

. . . Northern Section Primula and Annual Show . . . all sections (of the schedule) are generally well supported but Class 13, P. allionii form has a very generous following and attracts many entries. There are now several named varieties and competition is very keen. There is also many of Marginata Hybrids or forms shown in particular at the April Show held at Bradford. Not surprisingly here are also lots of entries in Classes 28 and 29: Gold Laced Polyanthus, Red or Black Ground. Here Hubert Calvert usually does very well and of course he now has his own particular strain and is constantly working to improve it. Needless to say Class 15, Section Petiolares Primula goes from strength to strength each year and there are always magnificent plants of P. bhutanica to be seen. One point I have noted over the years is that if P aureata is exhibited it almost invariably gains the Best in Show Award, but it is of course a magnificent plant and when well grown it takes some beating.

... Autumn is surely with us and recently we have been enjoying some truly wonderful days. particularly warm for this time of year. The leaves are turning gold and orange, red and brown and beginning to fall, it is a most enjoyable time of year but the nights are short and little can be done in an evening.

Malcolm Birkett, "Brecklands". Graiselound Fields, Haxey, Nr. Doncaster, South Yorkshire DN9 2LN, England

We too had a hot spell in the main primrose season after a long wet and windy winter. Our July and August to recent date (August 17, 1983) have been very warm and dry. Together with the normal maintenance of the collection of primroses we have been very busy cleaning beds for outdoor plantings in what was virtually virgin soil.

The plants look very well considering the very hot weather. About five thousand double seedlings which were sown on Valentine's Day have commenced to bloom and are the best quality I have had. The next batch of seeds will be set this week! We also, thanks mainly to seeds from the USA, are building up a very nice collection of Hose-in-Hose.

August 18. We have had a night of gentle rain, the stream running through Tralodden Cottage lands, which had deteriorated to a mere trickle, has risen a little. Everything is cooler and fresher looking with the hills surrounding our little valley covered in mist, a real primrose morning with a variety of wild birds singing and desporting themselves in this brief respite after the hot dry spell.

November 6... Over many years I have, in turn, used the Laurels prefix for Ducks, Geese, rabbits, exhibition Fantail Pigeons, etc. so it was natural to carry it over to Primroses (Laurels Phillipa, Laurels Angelina, etc). It was derived from the Laurel wreath on the Royal Marine cap badge—I served for part of the '39-45' was in the Landing Company R.Ms.

The fall has been wet and windy here, mild except for 2 or 3 frosts. All the leaves have fallen, practically without colour, due to strong winds, still lots of primrose bloom though. We have at least some in bloom every day of the year.

William G. Holt, Tralodden Cottage, by Girvan, Ayrshire, KA26 OTX, Scotland

I began with Barnhaven in the late 30's and early 40's and then had to abandon them for many years. Recently going through some old flower magazines I came across 4 envelopes of the primroses developed by Linda Eichman of Portland. She was a retired nurse who had developed a pink primrose.

She called her seeds Majestic. The packets contain from 50 to 200 seeds and are dated 1954. I am afraid to risk trying to germinate them myself. I bought seeds a year ago from Far North Gardens and with freezing and thawing not a single seed germinated.

Please let me know if you know of anyone who would like to share these with me. I am surely anxious to see if after all these years the seeds are still viable.

Rachel S. Collings, 1944 S.E. Lund Avenue, Port Orchard, Washington 98366

Now I am going to tell you something you might find hard to believe. When we were younger, struggling to make ends meet and raising a family, we did not have time to grow flowers; but the wife always had a few. Now that we are retired, we try our hand at growing the ones we like (most of the time not very successful). Last winter we read an article in the paper about Primroses that aroused our curiosity. We asked friends what kind of flower it was, nobody really knew. In the spring we went to a Greenhouse and bought two plants. We did not expect them to survive the transplanting, but they did. Then we knew the wife had them as border plants for over twenty years. Her mother gave her the first ones. Now we are going to build a special bed for them. The original ones we have seem to be very hardy and require no special care.

Frank Krueger, Site 9, Box 6, RR 1 Enderby, B.C. VOE 1VO, Canada

I had red spider get on some primula in the greenhouse. Do you know anything that will kill the resistant ones? Temix won't or malathion or lindane, DDT, or anything else I can find. They are really a deadly thing in hot weather. I find primroses don't do well in the greenhouse very long anyway.

We have had the hottest summer ever on record. We have had no rain for 9 weeks now, until today. We had temp. of 103° F. and many days over 95° to 100° F. and 80-90 % humidity. If you think you can grow plants, well, you should try it here! I have had a few losses but not bad, but it has been a struggle and still is.

. . . I sprinkle temix on every pot, plant or flat in the greenhouse and find dead caterpillars, etc. all the time. We have Gypsy Moth, you should fear them, what a pest. This kills them too. I never leave a pot unprotected anymore . . . but be careful with these poisons and read the labels carefully.

Jimmy Long, Route 2, Box 1, Marion, Virginia 24354

When I visited Ireland this spring, I was anxious to stop at Dromahair, where Cy and I had spent a pleasant time with Cecil Monson and his wife, Jean. (Cecil died a short time after our visit—almost 10 years ago.)

Dromahair is a small village near Sligo on the west side of Ireland. I drove to the street, but could not be certain which was the Monson bungalow. A neighbor on the street jogged my memory, but she warned, "Lady Jean is gravely ill with cancer. She has been in the hospital and has been home for only a few days".

To my sorrow, I found the neighbor's warning to be quite true. The vibrant, active Jean Monson we had known had become a thin, pale invalid. I visited her only a few minutes, and we reminisced about the time we spent when Cecil was alive. She told me she was going to the hospital the following day, but clearly she did not expect to live long.

I photographed the few plants that remained in the garden. Only a few of his primula still grew there.

Cy (Happy) says that Dr. Molly Sanderson, 76 Charlotte St., Ballymoney, Co. Antrim, North Ireland still grows some of Cecil Monson's plants. Dr. Sanderson (a charming woman and fine grower) will be one of the featured speakers at the Rock Garden study weekend at the end of February in Port Townsend. Perhaps some of the primula growers will be able to talk with her then.

Rita Happy, 11617 Gravelly Lake Drive S.W., Tacoma, Washington 98499

What an absolutely engrossing issue of the Quarterly (Summer 1983) the gang put out this time! The letters were like mini-articles and gave such an overview of members gardens and the conditions under which they grow their primulas. There's a tendency to think of the membership as a homogenous mass, rather than considering the fascinating individuals creating it. The liveliness of the descriptions of their gardens by the writers points out the broadness of the differences and gives me more of an APS club feeling than ever before.

. . . I couldn't resist writing an item in the monthly bulletin of the Alpine Garden Club of BC about the win in the Washington State Show with Juliana 'Butterball' because of the AGC / APS connection through Susan Watson. She was a founding member of our Club (age of BC) in 1955 after she had been APS editor and compiler of the APS Dictionary of Primulas—still the most consulted book on the genus. Susan bred P. juliae × Butterball which is the most colourful and floriferous of all the P. juliae hybrids in my garden. 'Butterball' has not been entered in our AGC Pot Shows but you have inspired me to plan on grooming a plant for the 1984 Show season.

'Butterball is especially rewarding because of its rapid increase in crowns; a generous swath can be developed in just two or three years. In a small woodsy corner of our garden, near a pool, there is an area that is slightly raised by use of logs. A ribbon of pinky-lilac Primula darialica edges the bed. This is another free-flowering plant that can be divided annually to create showy drifts. Double primrose, 'Quaker's Bonnet', is matching lilac, is behind P. darialica. Then come the taller 'Butterball' plants as perfect compliment to them with golden-centred yellow blossoms. Erythronium tuolumnense joins the grouping to provide contrasting foliage form and flowers exactly matching 'Butterball's vivid centres. Another yellow touch is evident in the area, a small regional P. auricula raised from seed from Mount Schneeberg, Austria. Since I acquired 'Butterball' just over 5 years ago it has given enough divisions to make a drift approximately 2' by almost 10'. It thrives on being split into 2 to 3 crown pieces each early fall. Like most of the Julianas and other vernals, it resents being left in a congested clump.

Vickey Sauer, on P. capitata, was most interesting. Once in a while an especially vigourous plant of P. capitata or P. nutans will emerge from a crop. I suppose that, ideally, we should harvest seed only from those superior forms in hopes of their traits being passed on. The last seed packet I put in was P. capitata v. crispata. It is less mealy and possibly a bit deeper blue-violet than ones I have had from seed previously (usually v. mooreana). Very close planting seems to prevent heaving in the winter and plants losing their grip in summer when the soil becomes dry. Photos taken in nature seem to show plants growing cheek-by-jowel . . .

Claire Müller's story of the Northwest Shows was delightfully lighthearted and caught the hustle-bustle of the atmosphere so well. Members in the other parts of the world will have a clearer idea of the events now. Someone from 'elsewhere' was needed to write about it objectively (but through pleasantly rose-coloured glasses).

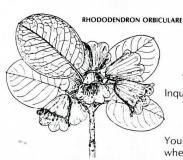
Thea S. Foster, 566 Esquimalt Avenue, West Vancouver, BC V7T 114, Canada

Enclosed are some pics taken in our woodland garden last spring—The picture of the velvety red with the tiny yellow eye are plants I got from Ruth Huston in 1982. I think they're just stunning . . .

It's been a fun summer—hard to believe it's on its way out. The Rock Garden convention at Cornell was exciting—beautiful country side I've not seen before—a chance to meet people with similar interests and just the chance to get away.

Didn't get around to dividing primulas this season—a normal state of affairs here. Filled some holes in the garden instead with last winters seedlings. Had bumper crops of seedlings this year, most of which are still in 6 packs. Think I'll bring some of them into the greenhouse later to see if they might bloom this winter. The auricula raised from your seed have grown tremendously—have lined many of them out, gave some to friends and still have a surplus. The cold frames are rapidly filling up, so flats of seedlings and plants in 2½" pots are strewn everywhere—will have to make some sense of them soon, as am sure winter will be upon us before we know it. Have been blessed with a delightful last few weeks—warm and sunny—more so than we could expect (Nov. 2nd, 1983).

Steven John Kelley, 2325 South Watertown Road, Long Lake, Minnesota 55356



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