President’s Message

It is with mixed feelings that I write this, my last, President’s message. I welcome the relief from responsibility and frustration of not being able to do the job as it should be done. For the most part I have enjoyed the job. I have made many friends and possibly a few enemies. I have tried to keep in mind that the purpose of the society is to promote knowledge and enthusiasm in growing Primula to more people and encourage cooperation and team work among our members to achieve the primary purpose.

I'm sure a new and different person in charge will be beneficial for the society. Primulas and the Primrose Society have been my main interest in life since 1955 and will continue to be until they close the lid on me. We must continually strive for more members to keep up with competition in the fast changing world of today.

I am sorry I did not get to know more of the members personally and visit their gardens. Running a nursery with little or no help keeps one tied down; but, I am happy to report that I am finally getting results in bringing a wide spectrum of good vibrant colors to the garden and rock garden types of Auriculas.

So; farewell and give your support to the new officers who donate countless hours to the business of keeping the Society running.

Herb Dickson
A.P.S. President
Orpha Salsman

With much sadness we announce the passing of longtime APS member Orpha Salsman. She died unexpectedly at her Seattle home on January 15, 1985 at the age of 68.

Although Orpha belonged to many different plant societies and grew all types of flowers, vegetables, shrubs and trees, primroses were among her favorites. Two of her ongoing projects were hybridizing julies for color and hardiness, and garden auriculas for bright colors along with good leaf form and size (she didn’t like them to look like big “cabbages”).

In recent years Orpha had been on the APS Board of Directors and on the Editor’s Committee. She had also worked on the 1984 Quilt Project. In past years she had helped with the APS Seed Exchange. She pitched in whenever help was needed. A hard worker, Orpha was also generous with her time and knowledge and in sharing her plants and seeds.

Planting seeds and hunting plants in their native habitat were two of Orpha Salsman’s passions. She filled her yard and new greenhouse with plants she had collected and plants she had started from seed. Her primrose seeds were always planted right after Christmas and set outside to allow Mother Nature to take over.

Orpha's presence will be most deeply missed by the Washington State Chapter members. She was a staunch supporter of this Chapter and was Secretary for the past few years as well as Education Chairman at the Chapter’s Spring Shows. Her enthusiasm and knowledge about primroses encouraged many newcomers to enter the world of primrose growing and to join both the Chapter and the American Primrose Society.

She genuinely cared about people and about plants — a wonderful combination. A plaque on the wall says ‘Friendship is feeling comfortable with each other’. This was how Orpha made you feel.

Primroses And Maine

by Harriet Gurney

Winter in Central Maine can be very unpredictable. In 1979, I picked primulas for my Thanksgiving table. But the very next spring we lost 75% of our plants. It was an open winter: first spring-like, then winter winds and freezing temperatures — not our usual weather. The devastation was great. Come spring I replanted, and tried to replenish the primula beds.

But then came the winter of '82. There was a January thaw, then it rained for a week. The Kennebec River and I have lived side by side for some thirty-seven years, and I have had water up to the back cellar door a couple of times, but that year the river rose and stayed high for four weeks. This was devastation itself. The water washed out our retaining banking, destroying much of the back yard where most of our primulas were planted. The damage has slowly been repaired, but to this time, not replanted. Due to personal illness, the year '84 was a total loss to me, as far as gardening is concerned. So I am looking forward to a new spring, hoping to put it in the cool basement under other lights to germinate. By the second or third week in February, all flats are brought indoors to thaw for two or three days; and then returned to the out-of-doors for two more weeks of freezing. In the meantime, all seed not needing to be frozen is planted, watered and put under lights to germinate. Of course, I do purchase some primroses are insidious . . . they are devastating . . . growing them becomes a habit . . .” Truer words were never spoken.

My primrose year starts with poring over the Seed Exchange list. I order as much as I can plant under my fluorescent light set-up. (This is on the book shelves in my living room.) I also buy seed from other fine sources. I keep the seed in tightly closed jars in the refrigerator. The first week in January I plant all seed that needs to be frozen. These go outdoors in large flats; are covered with snow; then placed in a sheltered area; left out for two weeks; brought indoors to thaw for two or three days; and then returned to the out-of-doors for two more weeks of freezing. In the meantime, all seed not needing to be frozen is planted, watered and put under lights to germinate. By the second or third week in February, all flats are brought in and placed under lights. Meanwhile, seed germinated under the lights is growing well and some are ready to be transplanted. After transplanting, these seedlings are put in the cool basement under other lights. I have about three successive plantings, since some seeds arrive late. But the last week in March I am finished sowing seed and transplanting is well underway. I like the challenge of growing my plants from seed. Of course, I do purchase some
plants, from the many fine growers here in Maine as well as elsewhere. Since Maine’s weather is so unpredictable (one year perfect snow cover and another very little — and we are always sure of a January thaw), only the most hardy primulas will survive. With some of the old stand-bys (such as P. denticulata), you know when you see their silver buds coming forth that spring has truly arrived. I so enjoy the beautiful white! It looks like a big snowball and it’s such fun to watch the stems elongate until they are about a foot high. I plant at least six plants to a grouping.

Next to bloom are P. rosea, from the Himalayas. Their flaming buds and little pink leaves are a joy to behold! My plants grow happily on a foot-wide shelf at the edge of our man-made sphagnam bog. If this were the only primula I could grow, I would feel blessed!

Spring is in full swing when the dainty P. farinosa blooms with its coating of meal on the underside of tiny leaves, stems and buds. P. frondosa is lovely too, and like so many growers, I am hard-put to tell these two apart. Both are very hardy and reseed well. P. dariaica is a fine plant for our winters. P. halleri (longiflora) has lovely deep pink petals around a violet-colored tube. This plant stayed with me only three years. But, I enjoyed it, even though it was just not as hardy for me as some others.

P. luteola grows like a weed. It needs plenty of peat incorporated into its soil — also abundant water. Should winter turn out to be very cold, with little snow cover, I cover most of the Farinosae with fir branches. This helps to protect their silver buds.

Over the years I collected seed and plants of the older P. veris. The seedlings have been chosen with care for the best colors and forms. We now have a nice assortment. I am always looking for the old ones — to me bigger is not always better. If we do not collect and keep some of the older forms, they will soon be lost. The cowslips and ooxslips have a beauty all their own.

I have tried the lovely Pacific Hyb. polyanthus to no avail. They grow and bloom all summer and fall, are cut down by a hard freeze in late fall, and then go on to primrose heaven. I have tried several times with these lovely things; they are just not hardy in Maine. So I plant the beautiful blues and soft yellows as bedding plants, for display only.

The Carryards are beautiful beyond words. They need protection, but I feel they are worth any amount of coddling to keep them. The seedlings are especially tender. If you can protect them until the second year, they seem to be happy and fairly hardy. So I try for a protected area.

P. polyanthus hose-in-hose are happy in Maine. The choice ones are hard to find. I must search for new seed.

We have a very nice white Jack-in-the-Green, and also a red. These came from a seed mixture. These like us just fine.

Now let’s talk about the prima donnas — P. polyanthus, the laced forms — both silver and gold. The dark ground colors, deep reds to almost black, are very choice. Some look almost as if they had ten, even twelve petals. My seeds were purchased from Thompson & Morgan. I only have a few. They grow luxuriantly after the first year — then they really shine! P. juliae and its hybrids are extra-ordinary. What beauty they bring to the primrose path! My collection is small but growing. I add something new every year. I raise seed from Far North Gardens (their seed is very good). Also some choice seedlings came from Rosetta Jones. Rosetta has done a fine job of hybridizing. Other and older ones are on my wish list. P. juliae is one of the most hardy, and grows abundantly in my garden.

I am puzzled by P. abschasica. I ordered it from two different growers and one is a much deeper color than the other. They tell me abschasica is a form of P. sibthorpiii. However, in my
garden they are very different.

Some years ago I was given a gift packet of garden Auriculas, a mixture. It took me five years to sort out what I had. One was P. x pubescens alba and it was lovely. At that time I was not sure how to care for auriculas, and so I lost this lovely primula. P. clusiana, a three-inch beauty with glossy rosettes from the same packet, stayed with me for two years and went on its way. I began to read about these fine primulas and tried again — this time with P. marginata. I planted it in my rock wall, and then have four named hybrids. All are very hardy. I interplant with Gentians, and it makes such a beautiful wall planting.

The alpine and garden Auriculas are hardy, and I plant seed of both every year. I keep seedlings for three years, then discard the weaker colors and plants. This way I have a fine collection of strong plants, of superior color. These are given a good, gritty soil with an abundant supply of egg shell. Adding a stone mulch makes for fine healthy plants. My best plants are from Rosetta Jones' and Herb Dickson's seed. I can't wait for spring to see the first blooms.

P. sieboldii is the most delicate of all primulas. My seed came from a Barnhaven mixture: white, blue, rose, the reversed colors; (white/pink, rose/blue) and from my own seedling. "North Star" is a deep rose-red with a white star. I have both "Snowflake" and "Southern Cross" too. I am looking for a true red.

P. saxatilis is a good primula for Maine as is P. cortusoides. P. kisoana is beautiful even if grown only for its leaves. P. heucherifolia has been grown from seed and plants bought, but come spring and it is not there. I guess the wine-colored bells just cannot stand our winters. They are so beautiful that I kept trying. Finally after four years I gave up.

I do not have a natural bog or meadow to grow the Candelabras. So I read and applied the instructions given in "Candelabras Like Artificial Bogs": Winter 1980, Vol. 38 #1, page 20. This works wonders for those of us who do not have ideal conditions to grow these beauties. P. helodoxa is very hardy, as is P. japonica. However, here in Maine if you want long life for these lovely things, do not (and I repeat do not) let them go to seed. It seems to weaken the plants. I find two years is their lifespan. I let only a select few go to seed and cut the spent bloom stalks as soon as possible. P. florindae is growing by the artificial sphagnum bog and seems to be happy. (So far. Another spring will tell the story.) The Capitata primula sounds so hardy (and coming from the Himalayas one would think it would be happy in Maine), but I just have not found the formula yet. I am going to try P. chionantha again. I like this one; wish the feeling were mutual.

This year I am hoping to have some nice double Auricula (my seedlings are just beautiful. The seed was from Cyrus Happy!); a fine batch of seedlings of double Vernals from Ruth B. Huston; also some fine plants from Bailey's. This year I ordered only primula I have not tried before. This way I can test something new for our Maine gardens.

We have some fine primula-growers and gardens in Maine. Hope to write you about them sometime.

Up On My Library Shelf

by Janet E. Henson

A treasure-trove of information blended with nostalgia may be found in past issues of the Primrose Quarterly. These slim volumes are a saga of the plants and the people who made our Society successful.

Early issues were heroic achievements, considering the small membership and wartime hardships. The first issues are now collectors' items. They served to spark increasing interest in the genus, and Volume 3 reported a 60% membership gain in one year. Concurrently, with increasing resources, both financial and human, the Quarterly blossomed.

Florence Bellis served as the inspiration as well as the editor. The magic of her pen equalled the magic touch she used to create her world-famous Barnhaven strains. Detailed knowledge of species, often with excellent pictures, appeared regularly.

Clearly, the seed was sown which was to become the incomparable "Pictorial Dictionary of the Cultivated Species of the Genus Primula" in Volume 25, No. 3. This priceless issue has been unavailable for many years. However, most of its contents can be found in earlier issues. Volume 12, Nos. 1 through 4, and Volume 13, Nos. 3 and 4, will serve as an adequate substitute. Other excellent, if brief, references are "Notes on the Sections of the genus Primula," Volume 4, No. 4 and Volume 5, Nos. 1 and 2.

For the less experienced member, several articles are valuable as introductions to understanding and appreciating the genus. Highly recommended is "A Primula Manual for New Members," Volume 7, No. 2, reprinted in Volume 17, No. 1. "The Garden Primulas," Volume 14, Nos. 2 and 3, although a translation from the German, contributes much information on many species in an easily readable fashion.

A most charming little book, "Concerning Primulas," by Grace Dowling, is serialized in Volume 20, Nos. 3 and 4, Volume 21, Nos. 1 through 4, and Volume 22, Nos. 1 through 3. Written for the average gardener, the book covers all groups of the genus, and presents the reader with a delightful and beautifully illustrated account of plants and people involved with them.

Adventures and new discoveries are to be found in each issue. Truly outstanding is the scholarly work, "Seven Aspects of Color," Volume 8, No. 4, reprinted in Volume 32, No. 2. Equally fascinating is "Primulas Seeds," Volume 19, No. 1. After seeing the magnified drawings of species seeds, we realize what an amazing genus is the primula!
Open Door

by Harriett Gurney

Mr. Sylvia Kelso, 1448 Farmer's Loop, Fairbanks, AK 99701

Can you help Mr. Kelso with information for his doctoral dissertation on northern species of primula particularly in Arctic Alaska, including alpine and boreal species of North America. Mr. Kelso is interested in hearing from members growing wild species in gardens or greenhouses. Will exchange plants or seeds.

Marjorie Zaitlin, 111 Northview Road, Ithaca, NY 14850

Marjorie wishes to expand her collection of primulas. Can you help? Will exchange seed or seedlings — trade or buy.

Arlene Perkins, RFD #1, Box 765, Montpelier, VT 05620


Wanted: name of red-stemmed, white acaulis which was on the sales table at the joint APS-ARGS meeting held in the spring of '82 at Hinkley School, Shawmut, Maine. If you remember, write to Janice Anthony, RFD #1, Box 810, Brooks, Maine 04921.

Wanted: names and addresses of growers of the older P. juliana hybrids. I'm collecting. Please state prices or send list to Harriett Gurney, 42 Water Street, Fairfield, Maine 04937.

Have a glorious spring!

Primula Pamirica

by Norman C. Deno

The occasion for this article was the flowering of five plants of P. pamirica from seed from Khorog Botanical Gardens. Khorog straddles the border between N. E. Afghanistan and the Soviet Republic of Tadzhikstan. The Pamir Mountains lie to the east and the Karakorams to the south.

Primula pamirica is in the sibirica section of Primula. Despite the absence of farina, Smith and Fletcher placed the sibirica and auriculatae as subsections of Farinosae. The fact is that sibirica could well be a section of its own characterized by the glabrous, fleshy, entire, efarinose leaves. The closely related section auriculatae is distinguished by the lobing of the leaves. However, there are traces of lobes on the older leaves of P. pamirica so that the distinction is more of a trend than an absolute difference. In the limited number of species that I have seen, the fleshy leaves of the sibirica is a better distinction, but fleshiness is hard to quantify.

Primula pamirica is described by Federov in "Flora U.S.S.R." This flora is in the Pennsylvania State University library in both the original Russian and a complete English translation. The descriptions contain horticultural comments, distribution data, distinctive characteristics, and often excellent drawings. "Flora U.S.S.R." is more horticulturally oriented than most flora. There is a drawing of P. pamirica on page 125 and a key to the sibirica section on page 92, volume 18.

"Flora U.S.S.R." lists four members of the sibirica section (P. sibirica, P. iljinskii, P. knorringiana, and P. pamirica), providing P. finmarchica is merged into P. sibirica as suggested. Smith and Fletcher list ten species of which only P. sibirica is duplicated in "Flora U.S.S.R." This lack of duplication is probably real since the other nine species in the Smith and Fletcher monograph are species from Tibet, Western China, and the Eastern Himalayas, plus the Canadian P. egalikensis.


Now, to turn to my own experience with P. pamirica. Germination was equally divided between immediate germination in 2-3 weeks and delayed germination (after vernalization for several months at 30-40°F.) Whether this division is normal, or a result of storage is not yet known. The first true leaves are reniform, but the more advanced leaves become ovate. All show the fleshy character that makes the plant resemble a Claytonia or a Montia.

Flowering plants develop a loose rosette of leaves that are initially...
upright but become flattened by the time of flowering. Petioles are typically 1-3 cms. (3/8" to 1 1/8") long and the ovate blades are 2 x 5 cms. (3/4" to 2") One plant had leaves that were severely rolled up along the axis of the leaf. The cause if unknown.

The scapes ranged from 8-13 cms. (3" to 5") which placed the flowers well above the foliage. The scapes were 2-6 flowered and terminated in an involucre of several clasping bracts. These bracts were a uniform 7-8 mms. (5/16" to 3/8") long and were auricled at the base, which is typical of the sibirica group. In contrast to the uniform size of the bracts, the pedicels ranged from 6-30 mms. (1/4" to 1 1/4") in length and were nearly upright and only slightly spreading so that the flowers were nearly upright. The calyx was a uniform 5-7 mms. (1/4") long and split into five adpressed teeth.

The flowers were 15 mms. (5/8") in diameter and were a light pink. The corollas was irregularly lobed, which would have made for a somewhat unkempt appearance were it not for the overlapping of the lobes. A prominent yellow annulus was present in the corolla throat. Two added features were (1) a pronounced fragrance, lily-like but light, and (2) the persistence of the flowers, which stayed in good condition for 7-10 days. Three plants were pin-eyed and two were thrum-eyed.

The plants agreed with the description of P. pamirica in “Flora U.S.S.R.” with one exception. P. pamirica is described as having abundant minute black glands on the bracts and calyx. In our plants, four showed no trace of this and the fifth had red-brown dots in the clefts of the calyx, abundant and minute but hardly glandular.

Seed was sown in February using our standard procedure. This involves pouring boiling water over the surface of the soil just prior to sowing the seed. Agway potting soil was used along with standardized rectangular plastic pots and standardized trays. The pots were enclosed in polyethylene bags. These were gradually opened after several true leaves had formed. The pot was not covered, and as a result occasional seeds had to have their roots tipped into a hole made by a nail point and tamped in with the head.

The plants grew steadily until fall when they were allowed to be cut down by frost and go dormant. The two pots of young plants were left outside and went through -15 deg. F. so that the hardiness of P. pamirica was well tested. In January the two pots were brought into 50 deg. under fluorescent lights. They broke into growth after only a few days and started flowering seven weeks later. The flowers were hand-pollinated. Several capsules swelled, but only one proved to contain viable seed.

The root system of P. pamirica is dense and shallow like many of the Farinosae. Plants were grown in 1984 in the zero-drainage, wet-sand beds which have been so successful with P. rosea and many other Primulas. Now, in March 10, 1985, growth is showing. Vegetative reproduction is easy from side growths that detach naturally. One problem is that P. pamirica has been more attractive to slugs than any other Primula grown here.

The photograph gives a general idea of the appearance of P. pamirica. Finally, it may be helpful to members to remind them that Smith and Fletcher’s monumental monograph on Primulas appeared in sections in three different botanical journals. Blasdale in “Cultivated Species of Primulas” gives a complete list of these references.
I have continuously reviewed low energy crops to see what the benefits can be for Growers. In my review, I always come up with the Primrose family. As a whole, this family consists of many bright and delightful colors, large masses of bloom and they can be grown as 3½ to 6” pot plants under cool house conditions.

We now have many growers producing the hardy Primulas as flowering pot plants from Christmas through April. However, most of the other Primroses are much neglected in this country, although widely grown in all of Europe and Japan. With this in mind, I have decided to write cultural instructions for Primula Malacoides and Primula Obconica in order to aid interested growers. Primula Malacoides, generally referred to as "Baby Primrose", freely produce lovely fragrant flower umbels on dense spikes that are nicely placed just above the rough, attractive, bright green foliage. The varieties we offer in our seed catalog are the results of a "world-wide" search for the best varieties from plant breeders and have uniform compact habits, lending themselves well to both large and small-scale producers. The "Baby" class are earlier, more quickly grown, than any other Primulas and their delightful, long lasting, delicate blooms produce a fine textured effect, and because they are non-irritating species, they meet with immediate customer approval.

Primula Malacoides is similar in culture to Primula Obconica in many ways. Cool temperatures, a steady moisture and humidity supply, and protection from direct sunlight are essential. Primula Malacoides varieties have been steadily improved in the last several years, and we can now offer new colors, including a deep coral red with a touch of orange in the petals, a bright ruby red with scarlet undertones, beautiful Carmine rose. The variety Fruede is a beautiful pink with a tremendous number of bright pink flowers with tiny yellow eyes. Pink Ice is a rose pink with gold centers and also a fine pinkish-lavender is available and from all these varieties, we blend a new mixture. European and Japanese growers know that separate colors only should be produced, as each variety or color blooms at slightly different times and with some variation in habit, thus a display bed of separate colors placed side-by-side is a breathtaking display that the public can hardly walk by without packing a plant or more. All varieties mentioned above are now available, but there will be more improvements as time goes by.

SOWING: Seed should be sown from mid-May to mid-July. Sowings can be made until late September, but
When transplanting, care should be taken to handle seedlings very carefully to avoid root damage. Water thoroughly and place them in a well-structured peat-based mix. Careful attention to hygiene is most important and will result in a high germination stand. Do not cover the seeds, as the air is fine and should be lightly pressed into the soil rather than covered. Cover the seed flat with glass or poly, plus 1 layer of newspaper. Germinate at above temperature (no warmer than 60°F.). Once the first sprouts just start to emerge from the seed, cover very lightly with compost. Place the tray back in the germination area and remove the flat cover once seedlings emerge. Grow on in a well-shaded cool area until transplanting time (under a shade tree with protection from rains, that will closely meet this condition. As with all Primrose and other (approximately 8 weeks from transplanting), if you are potting 3 per pot, carefully grade seedlings for size so all plants are very near alike in each pot, or pots will not be uniform. Do NOT firm media, but use a "soft pot" technique and allow the first watering to settle plant in. Drench plants with Botran for disease prevention. Grow in a cool house under shade cloth, have shade about 2 feet over the plants so air can circulate freely. REMEMBER, grow as close as possible to 50°F. A greenhouse is not conducive to the low temperature during the heat of summer, so again, grow under temperatures.

GERMINATION: Germination temperature must not exceed 60°F., a soil temperature of 55°F. to 59°F. is near perfect. As with all Primrose and in fact, all crops, a soil thermometer is a necessity and the bulb should be placed at the seed level. May to mid-July sowings are easier to control seed flat temperatures.

SOWING: Sow in a well-structured peat based mix. Careful attention to hygiene is most important and will result in a high germination stand. Do not cover the seeds, as the air is fine and should be lightly pressed into the soil rather than covered. Cover the seed flat with glass or poly, plus 1 layer of newspaper. Germinate at above temperature (no warmer than 60°F.). Once the first sprouts just start to emerge from the seed, cover very lightly with compost. Place the tray back in the germination area and remove the flat cover once seedlings emerge. Grow on in a well-shaded cool area until transplanting time (under a shade tree or an open-sided shed with protection from rain is fine!) Seedlings must be continuously shaded from direct sunlight until about Oct. 1st.

TRANSPLANTING: A peat-lite mix or peat-lite type plus 20% or so soil added, which does not have a high nutrient content and has good drainage properties, as roots are very sensitive to poor drainage. Handle seedlings very carefully to avoid root damage. Water thoroughly and place in cool shaded area. Mix should not exceed pH 6.5. Transplant to D 809 or similar tray with about 1½" x 1½" cells. When transplanting, care should be used that the crown is just above the soil, too low will invite rot and too high gives a "toppled over plant". Drench transplants with Botran for the prevention of any diseases.

Before the plants overcrowd themselves in the 1½" containers, repot into the market container — 3½", 4" or 5" pots. Use the same type of media as used when transplanting from the seed flat. Avoid overwatering at any stage during the growing period, as the crop can't stand water-logged conditions. Open type benches are most suitable for this crop.

POTTING AND GROWING ON: Before the leaves start to touch each other (approximately 8 weeks from transplanting), if you are potting 3 per pot, carefully grade seedlings for size so all plants are very near alike in each pot, or pots will not be uniform. Do NOT firm media, but use a "soft pot" technique and allow the first watering to settle plant in. Drench plants with Botran for disease prevention. Grow in a cool house under shade cloth, have shade about 2 feet over the plants so air can circulate freely. REMEMBER, grow as close as possible to 50°F. A greenhouse is not conducive to the low temperature during the heat of summer, so again, grow under temperatures.

FEEDING: Feed occasionally with a high nitrogen (3:21 - N.P.K.) during the summer months and change to a balanced 1:1:1 - N.P.K. as soon as light levels decrease in September. GROWING ON TEMPERATURES: During the winter and early spring months, maintain a night temperature as close as possible to 45°F. - 50°F. Keep the humidity as low as possible by maintaining frequent ventilation.

PRIMULA OBCONICA CULTURE

PRIMULA: This genus contains over 500 species of mostly alpine perennial or Monocarpics. Today the large flowered F-1 Hybrid P. Obconica are gaining in popularity as winter flowering pot plants. All year around production is possible in Northern areas of the United States, from North of the 40th parallel, and is successfully carried out by some of the larger potted plant growers. We have some growers that produce these plants for County Fairs in September - October, by growing in cool houses. Sowings are made every 5 to 6 weeks, with often a double sowing made in May for the Christmas and early January market. For Mother's Day, sowings can be made in late July - early August. P. Obconica flowers throughout the cool months of the year. It is one of the best plants for growing under home conditions. Un-
Fortunately, some people are allergic to it, due to the hairy underside of the leaves and develop a rash similar to poison ivy. If this occurs, wash in hot water for an hour or so with the addition of a teaspoonful of Epsom or table salt per pint of water and rub in Boric Acid or zinc ointment.

SOWING: Follow good hygiene - everything should be sterilized! Take Benlate, about one half the amount represented by the head of a kitchen match, place in seed envelope and shake thoroughly. Seed is not to be snow white, only a slight trace is to show on the seeds; too much will injure germination. Place sterile media in flat and water thoroughly the day previously. After making certain flat is wet throughout, place to drain overnight. Sow thinly and evenly on top of media. Seed must not be covered, as it requires light for germination. Cover tray tightly with white plastic or a clear plastic with one layer of newspaper over flat and place seed flat where a temperature between 55°F. to 59°F. can be maintained at all times. Sow January 1 for large specimens for Christmas; March 1st sowing makes 5" for Christmas; a June sowing will flower in early spring; an October 1st sowing makes nice 4" for May sales.

TRANSPLANTING: As soon as large enough to handle (4 weeks from sowing) transplant into approximately a 2½" cell (A D-804 serves well), use a soil with good drainage, a peat-lite mix at pH 6.0 to 6.5 is fine. It is important that the soil give good drainage, as all Primulas require it. Their roots are very sensitive to water-logged conditions. Handle very carefully to avoid root damage.

POTTING: Pot before the plants overcrowd each other (approximately 8 weeks from transplanting). Experienced growers know that once a Primula is pot bound, it may as well be dumped, so watch root development closely and move to a large pot before this happens. Use same type media as used for transplanting, but with the addition of some slowly available fertilizer, or use Superphosphate followed by Peters 15-15-15 after plant leaves reach side of pots. Some growers pot directly to the finishing pot. However, this requires a lot of extra care and a most observing grower when watering, but time can be saved and make it worthwhile, if potting 3 per pot, carefully grade your plants for size before potting in order to produce uniform finished pots. DO NOT firm the media around the seedlings, but use the "soft pot" technique and allow the first watering to settle the plant in. Grow in a cool house under shade. During the winter and early spring months, maintain a night and day temperature as close to 45°F. to 50°F. as possible. Keep the humidity as low as possible by frequent ventilation. Space the crop as required or "leggy" plants will be produced. Feed 2:1:1 - N.P.K. after potting but change to 1:1:2 when the first flower buds become visible. Some growers prefer to summer their Primulas in cold frames, if shaded sash are set over them and about a foot or so above the frames, the plants will respond well, as they have the ideal combination of shade, cool temperature and lots of air circulation (very important). This will result in healthy stock plants when you bring them into the greenhouse in the fall. This crop is relatively trouble free, the main cultural problem arises from overwatering, inadequate drainage in potting mix or incorrect feeding which results in iron deficiency, seen as chlorosis of the younger leaves and stunted growth. If this problem arises, drench or spray with Kelaid iron. It will generally rectify this deficiency. After potting, as soon as growth starts, apply Temik for insect control. F-1 hybrids are a big improvement over the old open pollinated varieties offered for so many years. They are earlier, with a much more uniform and improved plant habit, and with smaller leaves that will result in nicely rounded-shaped plants. They are free flowering, flowers are large and upward facing, thus adding to the attractiveness of the flowering plants. Height is about 12 inches.

I recommend the new hybrids that are now available, but this list will change as improvements come on the market:

BLOIS, bright rose.

Red: CHANSON D'AMOUR & JUNO

Sincerely yours,
Ronnie German

Notice

Will any of you who have (1) manuscripts to share with our readers, (2) good black and white (or color) slides or prints of primulas in gardens, pots, or the wild, or (3) drawings of primula species (a la Doretta Klaber's illustrations for "Primroses and Spring" or Thea or Tommy Foster's cover drawings) please send them to this editor. A continuing flow of good material is essential if we are to have readable, interesting journals. Thank you so much for this help.

SEED of DOUBLE ACAULIS

NEW SEED CROP IN AUGUST

Minimum Order — 50 seed — $5.00

Send S.A.S.E. for list of other seeds.

Rosetta Jones
Phone: 852-0330

RED, both velvety crimson shades.
Salmon orange: MARLY & JUNO ORANGE, beautiful salmon orange.
Blue: JUNO BLUE & SAMBRA.
ROSE & WHITE, a magnificent variety; the flowers open almost white and turn upon opening from light rose to dark rose.

SENILIS, rosy mauve.

I hope this will be beneficial to you!

Sincerely yours,

Ronnie German
Diary of a Primroser

by Cy Happy

Spring, spring, beautiful spring!

We traveled to Vancouver, B.C., for the 10th annual rock garden study weekend. What a wonderful way to leave winter behind. Good company, beautiful plants and fine speakers covering a wide range of subjects, including selected primulas.

The Vancouver group did a good job. Next year it will be at the Empress Hotel in Victoria, B.C. Send your $40 (Canadian) registration to Carmen Varcoe, 5450 Old West Saanich Rd., Victoria, B.C., V8X 3X1. The main speaker, John Main, is coming from the Royal Botanic Garden in Edinburgh, Scotland. The charming old Empress Hotel and Victoria itself will delight the non-gardening spouse. Make your reservation early.

You might call Carmen at (604) 479-7629 for information on this year's rock garden show April 26 and 27 and the early summer show in June. There are great gardens in Victoria.

Flower Show Tips.

True Temper, the garden tool people, have a fun folder, "Visit a Flower Show." Filled with good advice, it suggests you dress comfortably, go late afternoon or early evening to avoid crowds, study the program or schedule and floorplan and then take a quick spin around the entire show. This may take an hour.

Then you retreat to the cafeteria or tea room. Decide where to spend more time. Intense periods of looking followed by stops for rest or snacks will give maximum pleasure. This is fine advice, but it seems wasted when shows are held in noisy aislesways of big city shopping malls.

Larry Bailey says, "A mall show is no place to contemplate the fine points of a near-perfect show auricula. I will make an exception to that when the mall is small and in a semi-rural area. Even then lighting is usually inadequate. Judges, carry a magnifying glass and a flashlight!

Spring Care.

The Puget Sound country has had some spells of heavy frost with little or no snow covering this winter followed by three weeks of sunny, dry weather in March. Primroses have quickly made new leaves and sent up flower buds.

Now is the time to give them a feeding of all-purpose liquid fertilizer. If they are already on the lush side, give them 0-10-10 through the blooming season. The 0-10-10 brings on the flowers (and roots). Take off all damaged and yellow leaves and all spent blossoms. The plant will increase its effort to put forth pristine new growth.

Modern Wonders.

The wonders of modern science have invaded the garden in many forms. This year I'm trying a microbial insecticide on the primrose pests. It's sold as ATTACK, Dipel or Thuricide and puts a bacterium into the soil. The bacterium is harmless to humans and pets but devastating to a wide range of grubs and beetles. Once established in garden soil, the bacteria last for many years.

What do you do for cracked skin on your hands? A bleeding crack on my thumb has been a painful annoyance every time I get down to serious gardening. Creams, greases and lotions had little effect. Finally I bought a square green can of Bag Balm. It's a little greasy, but the cracks went away. Our local Pay 'n Save has it on the shelf with petroleum jelly, not with the veterinary supplies.

Primroses have to get out and work in the cold spring weather. I'd appreciate any tip on how to make the job a little more comfortable.

Early Bloomers.

Just took a quick look around the primroses to see what's in bloom. A tiny brilliant red julian hybrid from Sakata seed is starting. Only 1½ inches high, it has a spreading habit but not round leaves like P. juliae. I have had this plant for about eight years. It is very hardy and multiplies nicely.

Some of the julie hybrids are showing color. My favorite yellow julie was too crowded. Had to chop them apart! They didn't mind a bit. Lavender Cloud is a pleasing early bloomer of part Garryard ancestry — a cloud of pale purple.

APS had a display at the annual garden fair in the Tacoma Dome. Herb Dickson used auriculas, P. marginata, P. rubra and gold-laced polyanthus in the planting. It attracted the more serious and informed gardeners.

Found a great weeding tool. Good for a show trophy. It is like a hand adz on one side and a three-pronged weeder on the other. It's called Hoe-matic and is made by Village Blacksmith.

Fascinating Garryards.

Garryard Guinivere is a fascinating plant — red stems, reddish bronze leaves and very pale pink flowers. The flowers are borne in a rather poor polyanthus habit and have little substance. To me, the strange thing about Guinivere is an apparent color-inhibitor gene.

When crossed with a normal (non-julie) bright-colored polyanthus, most of the offspring have washed-out versions of the bright-colored parents' flower. Even the cross with P. elatior (oxlip) turns out flowers of softest cream on reddish stems. The color-inhibitor gene usually — but not always — is overpowered by the color-intensifier gene of the julie hybrids. Perhaps a requirement of the Garryard group should be soft colors over dark leaves.

As plants start into growth, they can be divided with the best of results. They will look sad for a day or two but quickly put out new roots and leaves. Their best and strongest roots come from just below the leaves, so don't try to save much of the old fibrous root system. Save just enough for an anchor. The plants crave fresh soil and, except for the Julies, have no way of spreading out into fresh ground.

Supermarket Primroses.

Great things continue to happen in the world of the supermarket primrose. Sakata of Japan continues to distribute superb seed, marvelous range of colors and sizes. I noticed one store had giant primroses (one flower to a stem) with superb, clear colors. This was labeled "Aalsmeer" and was from The Netherlands.

My awareness of primroses goes back almost 60 years when we had yellows, brownish reds and the purple Pembroke primrose from South Wales. Veterle and Reinelt displayed the first Pacific Giants at the Treasure Island exposition in San Francisco Bay in 1939. Gradually blues, pinks and salmon shades became available. Now superb colors flood the market.

By the way, when planting supermarket primroses, be sure to break up the block of soil and root ball. Those roots have to be forced to move out into their new soil.
Does Pretty Polyantha Deserve A Shady Reputation?

by J. Howard Cook

I will begin by giving a very brief resume of my credentials. I have no formal schooling whatsoever in either Botany or Horticulture. I am a carpenter by trade and before retiring was involved in building construction for fifty years. Horticulture is my hobby and what I pass on to you, unless otherwise noted, is an actual review of my experiences during twenty-five years of growing primroses, especially polyantha, in the area of Corning, New York.

It is somewhat difficult for me to understand why P. polyanthus are not more widely grown as an outdoor bedding perennial. Few garden flowers have such a wide range of brilliant colors and combinations thereof. They also bloom at a time of year when outdoor flowers are scarce, so their presence is a most welcome and aesthetic sight.

The traditional cultural instructions for growing primroses are simple. Light to medium shade and a moist, well-drained soil that is rich in humus. Plant on the north or east side of a building or structure where they do not receive direct midday or afternoon sunshine or under trees or high shrubs so they receive dappled sunlight. If the soil is heavy clay, add sharp sand and humus such as peat moss, compost or well-aged manure. If soil is too light or sandy, add humus. Always provide the plants sufficient moisture during dry weather.

Personally I would add the following recommendations. Mulch the plants with evergreen needles, shredded bark, shredded leaves or suitable materials that are readily available. If the planting area is level, elevate the bed at least six inches above the surrounding area to assure good drainage. This practice can also cut winter losses of many other perennials. Incidentally, inadequate drainage may be the cause of more gardening failures than any other single factor.

Also common sense is probably the least expensive and most productive element in your gardening program. So use it generously!

Does that sound complicated? Still some growers insist on planting primroses at a location that gets far too much direct sunshine — a southern or western exposure, and in soil that bakes as hard as concrete — then complain that it is the plant's fault.

Like most plants, primulas respond best to favorable conditions and habitat. However, they are not exactly fragile either. For example, the past twelve months have been as unfavorable as I have seen during twenty-five years of growing primroses. The blooming period was very hot, dry and windy, so the planting needed soaking every third day. A canvas soil-soaker was used to prevent the blooms from being knocked down from overhead watering. The same weather pattern prevailed throughout the summer, then changed to a wet autumn. December and January were extremely cold with a 22°F. below zero reading in late January with very little snow. The scarcity of snow continued through February but sleet storms were frequent as temperatures changed drastically to much above normal for the month. In spite of this abnormal weather pattern, no serious damage to the primula planting has occurred. However, I will closely monitor a group of polyantha plants I divided and replanted during late September and early October, as an experiment.

During the first several years of my primula-growing endeavor, I encountered some problems, but now I know they were due to lack of experience. During that time I discussed the difficulties with a professor from a nearby agricultural college. He chided me by commenting, “A person would have to be crazy to expect to grow good polyanthus in this area’s hostile environment.” However, a short time later, a singular but quite unintentional incident, completely changed my attitude toward the hardiness factor, while greatly increasing my admiration for polyanthus.

Twenty-five years ago, when my first planting of polyantha seeds bloomed, five plants were much superior to anything I had seen grown by others. The seed was obtained from Vetterlee & Reinelt, originators of Pacific Hybrid strain. (Many sexual and asexual offspring of three of these plants continue to thrive in my garden.)

An American Beauty rose-colored seedling was my pride and joy but it was somewhat slow to propagate vegetatively. However, it finally reached the stage where it could be divided into five single plants. Two of these plants were given to Bill Nelson, a close friend who also grew primroses.

To accomplish hardiness, I had expected to sacrifice some beauty, color value and floret form. It was a very pleasant surprise when there was a definite improvement in these desirable characteristics also. However, one must not overlook the importance
of reasonable care and habitat. Thus far I have depended on nature to cross-pollinate the blooms and the results have been excellent. In my case, I doubt if the extra work of hand-pollinating would have greatly improved the results.

Please understand it is not my intention to imply that this review reveals previously unknown information or dramatic horticultural enlightenment, which I know it does not. It is highly probable that selective propagation began soon after human beings became involved in growing plants as a necessity for survival.

It was a long time before I forgave Bill for what he termed "a stupid thing to do," but in retrospect, it was I who gained the most. Had he not provided the catalyst, I may not have pursued this fascinating and rewarding endeavor.

My experience with the blue shades of polyanthus has been very disappointing. What makes it frustrating is that the deeper shades of blue, together with their bright yellow centers, make a strikingly beautiful combination. While they appear hardy enough, they are not dependable. The blues are among the earliest to bloom, but they have a tendency to produce too much bud development during the autumn season. If weather conditions are favorable, some may bloom in the fall, but most will suffer severe bud and stem damage during the winter. Consequentially, what normally would be spring bloom is killed. Once this particular blooming cycle is established, it may continue year after year.

I have been trying to get a good late-blooming blue, but so far no success.

The dwarf strain of Pacific Hybrids have not been as hardy for me as the regular Pacific Hybrids. This is unfortunate as the dwarf strain has a wide range of excellent colors. The shorter, huskier stems are also a plus factor if the blooming period happens to be rainy. They were introduced for pot culture, so perhaps that is how they should be grown.

P. Cowichan, an eyeless strain of polyanthus, is not as tall nor the florets as large as the regular Pacific Hybrids. However, they are very hardy and easy to grow. Those of you who like velvety, unmarked, deep colors will enjoy growing Cowichan.

If your success with P. polyanthus has not been up to expectations, why not try some of the other Primula species? Considering there are more than five hundred Primula species grown throughout the world, surely there are a few that are suitable to your liking and environment.

Due to the small area of suitable growing space, my experience has been limited to but five species. Some relative comments are as follows:

P. acaulis and P. auricula are early blooming and have a wide range of colors. Both are very hardy and easy to grow.

P. japonica is taller than most primroses, reaching a height of two feet or more if growing conditions are good. It blooms a few days later than P. sieboldii. Japonicas make an excellent medium-height background planting, especially when combined with Woodland Phlox. Very good color range. Plant losses can be high if soil condition becomes very dry.

P. sieboldii, the star primrose of Japan, blooms in midseason. The color range is somewhat limited, to white and various shades of rose and lavender, but the numbers of different individual floret forms and color combinations are unbelievable. Flower fanciers rate the lacy, snowflake-like floret form of a pure white Sieboldii among the finest of all flowers for beauty and artistic form. It is also an excellent cut and arrangement flower. Foliage may disappear in midsummer but reappear the following spring.

If fertilizer is needed, try Liquid Sea-weed, Fish Emulsion or Dehydrated manure (Seaborn, Atlas, etc). Control snails and slugs with Metaldehyde pellets (Snarol, Bug-getta, etc). For spider mites, use a miticide or an insecticide that contains one, such as Isotox. (The use of a trade name does not in any way imply my endorsement of that product over another similar product.)

It is my conclusion that insects are more attracted to plants that are poorly grown or suffering from stress due to lack of moisture or other factors. During drought periods, soil-borne insects can severely damage new divisions developing root systems to the extent that the plant may not survive the following winter. It is possible the insects are seeking moisture from the new growth. While an insecticide may help, I would consider a thorough soaking first.

Spider mites can be a menace to some Primula species during hot, dry periods. Fortunately they are not a problem during the blooming period in this area. During midsummer, try frequent hosing with cold water. Use enough water pressure to dislodge the mites from the foliate. If the infestation is severe, remove and destroy the mature horizontal foliage. On new upright foliage the insects are exposed to either water or spray material.

Last but certainly not least: It's easy — simple — enjoyable — completely sums up my philosophy on gardening. That's the way it can be. That's the way it should be. However, it's up to the individual!

Happy gardening!
Dear Richard,

Welcome to the strange world of editors! The rewards are great when you see an issue come out and you know you’ve done your best — but unless you are very fortunate praise will be scant and all errors will be almost gleefully pointed out. I know you are no newcomer to editing, but our sort of club journals are a strange breed of cat. Our January Bulletin went to the printer at 8:30 a.m. today after an all-night scissors and paste-up session. My final page was done while friend husband stood with hand on door knob, waiting to sprint for the car. Ah me! But we learn to be philosophical. When issue time comes our house seems like a factory. We live in a shower of debris — a fall-out of paper clippings after paste-up that is rarely cleared completely before the next issue is due.

The new PRIMROSES was most interesting. Since I don’t own a Blasdale, the reprint was WELCOME. It, along with the “APS Dictionary,” is among my top five. Alf Evans’ “The Peat Garden” is another — magnifi cent illustrations!

Hope you can get some new material from Florence Bellis. Her recent articles on Cowichans and gold & silver laced Polyanthus were absolutely marvelous! She is so meticulous in her growing information, and in her writing about it.

Good luck with your editing. Your first issue bodes well for future. Have a happy ‘85.

Thea Foster, 566 Esquimalt Avenue, West Vancouver B.C., Canada, V7T, 1J4, 2/85.

I certainly found you couldn’t count on “send-ins,” but it takes a lot of letter writing to get good articles. Yours is a particularly difficult task with only one genus as subject matter and a rather small membership to draw from.

The very best of luck, and my best to Carolyn. Timmy Foster, Falls Village, CT 06031, 1/21/85.

Dear Richard Critz,

My copy of the Fall 1984 Quarterly arrived today. May it be the first of many under your editorship. The idea of serializing Walter C. Blasdale’s book is an excellent one and although it will take a while to complete, it will no doubt bring it within the reach of many members who may otherwise never read it.

It may interest you that in 1977 when I read Blasdale’s “The Cultivated Species of Primula,” and in the section on auriculas read “the most luxuriant specimens I have ever seen were growing in fishing villages of the Norwegian coast, both above and below the Artic Circle,” I wrote to the Royal Norwegian Embassy in London and, on their advice, to the State Agricultural College in Norway asking for information as to where the auricula growers obtained their seed. In the fullness of time came a report from their Field Officer in the Area concerned to the effect that “the most interested Primula growers and most private Primula growers obtain their seed from ENGLAND.”

With best wishes to you and your committee, Bernard M. Smith, ‘Wind ways’, 35 The Drive, Gravesend, Kent. DA 12 4BY. England 1/19/85.

Dear Mr. Critz,

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Of the “Primrose Culture” article by Mr. German, one assumes he writes of the more modern types using indoor culture; when he says “minimal heating — frost protection is essential.” While this is true for many specimens intended to be grown as pot plants only; I feel that with the Vernalis types in general, it cannot be stressed too much or too often, that by nature they are hardy outdoor plants resenting more than the minimal coddling; which often results in their early death and thereby give the primrose an undeserved bad name regarding hardiness, the very thing that serious breeders have worked to maintain over the years.

I thoroughly enjoyed the interesting and well written article, “Primulas of the U.S.S.R. Native Flora,” also the “Silver Laced Revival” by Mr. Bernard Smith.

Thea Foster, 566 Esquimalt Avenue, West Vancouver B.C., Canada, V7T, 1J4, 2/85.

Dear Dick,

The latest issue of PRIMROSE arrived the other day and Linc and I would like to congratulate you on a fine job. I do like the new format — much cleaner and pleasanter to read with the new typeface.

I have never objected to good reprints as long as they are not too recent. As an ex-editor I am well aware of the problem at getting material.

Thea Foster, 566 Esquimalt Avenue, West Vancouver B.C., Canada, V7T, 1J4, 2/85.

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Auriculas (and I speak here of the whole Section AURICULA of the genus Primula) are perhaps the best known and certainly the most highly developed of all the groups of Primulas. They first became known in Europe in the mid-1500s, and in England by 1600. After that date they rapidly became and remained one of the most prized of all plants, both in England and on the continent.

Besides being the best known, the Auricula is the largest Section of the Primulaceae, including 24 species and more than 1000 excellent hybrids. As a Section Auriculas differ markedly from other primulas in at least 8 significant ways:

1) In many the smooth, leathery leaves — semi-succulent describes them well — have a greyish or silvered look, due to the presence of farina. Because of this they have long been called Dusty Millers.

2) In general, the plants thrive in drier and sunnier conditions than any other Primulas.

3) Unlike nearly all other Sections, auriculas prefer an alkaline soil.

4) All of them have thick cord-like roots growing from a carrot-like tap.

5) The expanding leaves are folded involutely, and the stamens appear on the upper leaf surface.

6) The flowers are solitary, or borne in umbels — each flower on a separate foot-stalk.

7) There are 9 chromosomes in all species on which cytological studies have been done.

8) Unlike most primulas, nearly all auriculas hybridize freely, both in cultivation and in the wild.

All the auriculas are found in the mountains of Europe. All are long-lived, fleshy perennials forming a mat of foliage on an underground stalk which branches repeatedly at soil level, each branch turning up and producing close-packed foliage and flowers.

The flower truss, growing out of the branch tip, produces a whorl of leafy bracts which set off a group of florets, just like a nosegay of violets. There may be one to 50 florets on a stem, each with a tube or pipe, and a flattened disc or corolla of petals. If the stigma reaches the top of the tube and the stamens are down inside, the flower is called pined-eyed. If the stamens (brush, thrum, chives) are clustered at the mouth of the tube and the stigma is hidden down inside, the flower is called thrum-eyed. The thrum-eyed form is generally preferred by florists.

Auriculas flower mid-March to mid-May, and some throw a few blooms in the fall. Individual flower petals are sometimes pointed, sometimes quite round and sometimes notched or indented on the end. These petal types give the florets a star-shaped, a round,
hairs, whose function is quite un-
known, give a frosted appearance to
the surface. Smaller, close-matted
hairs make a smooth, non-shiny,
enameled-like mat. In the so-called paste
around the tubes of the Show auricu-
las, every cell has its hair. This meal
develops late in a plant's life. All auricu-
la seedlings are quite devoid of it.

CLASSIFICATION OF CULTIVATED
AURICULAS

From its earliest introduction into
cultivation in the 1500s the auricula
developed along two distinct lines. One
of these is much like that of most
cultivated garden plants, but the other
is unique in horticultural history. For
immediately, there began a course of
selective breeding by a great many
amateur florists designed to produce a
flower conforming to a series of ideals
or 'properties' — qualities which the
perfect flower should possess — ideals
almost fully formulated by 1630 and
consistently maintained right up to
the present day. The result is an ab-
solutely unique flower, with a beauty
and charm all its own — like no other
flower in existence. These are the
Florists Auriculas.
Florists Auriculas were divided into
two main classes as early as the 1600s —
the Alpines and the Shows.
The Alpines are the easiest to grow.
They may be single or double —
usually the former. They possess no
meal or paste on leaves or flowers. They
usually have a more or less promi-

nent ring or eye around the tube
opening. Alpines are further divided
into Gold-Centered or Light-Cen-
tered, depending on the color of this
ring. The petals of Alpines may be all
one color, but the most prized ones
are shaded. This usually means that a
very strong color immediately around
the eye shades our uniformly to a
much paler color at the edges of the
petals.

(to be continued)