

Primroses



SUMMER 1979

Vol. 37, No. 3

**American Primrose Society
Quarterly
Summer Issue 1979
Vol. 37, No. 3**

Copyright 1948
Entered 2nd Class
Tacoma, Wash.

Editors:

Cyrus and Rita Happy
11617 Gravelly Lake Dr. SW
Tacoma, Wash. 98499

ISSN 0003-0619

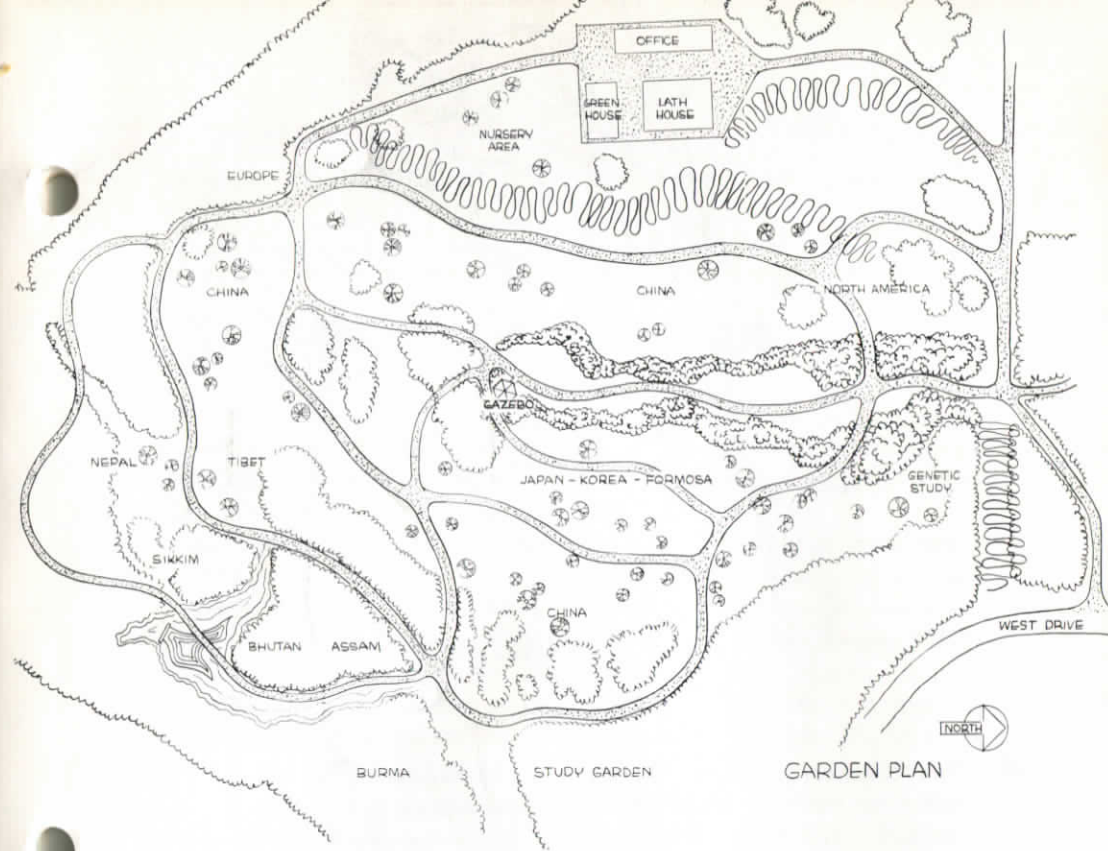
In this issue:

- 3 Species garden
5 Eastern chapter
6 *P. denticulata*
by Elizabeth vanSickle
8 Planting seeds
by Marion Espin
10 Beginner's Luck
13 Florists' flowers
by Hubert Calvert
15 Bygone age—saved
by Jack Wood
16 Warriner's Wonder
by Bernard M. Smith
17 Peter Klein
18 1731 encyclopedia
21 Back issues
22 Japanese primulas
by Margaret Mason
26 Questions/answers
by Alice H. Baylor
28 Mailbox
30 Nivales primulas
by Alice H. Baylor
34 Marketplace
36 Diary



On the cover

"P. tosaensis," grown by Margaret Mason of Portland, Ore., won editor's award at the national show as choicest plant. An article in this issue asks, "Is it named correctly?" This charming plant features pale pink flowers. It comes from the alpine cliffs and ravines of Hokkaido, Japan.



Geographic plan of Rhododendron Species Foundation garden

In woodland setting

Primroses enhance species garden

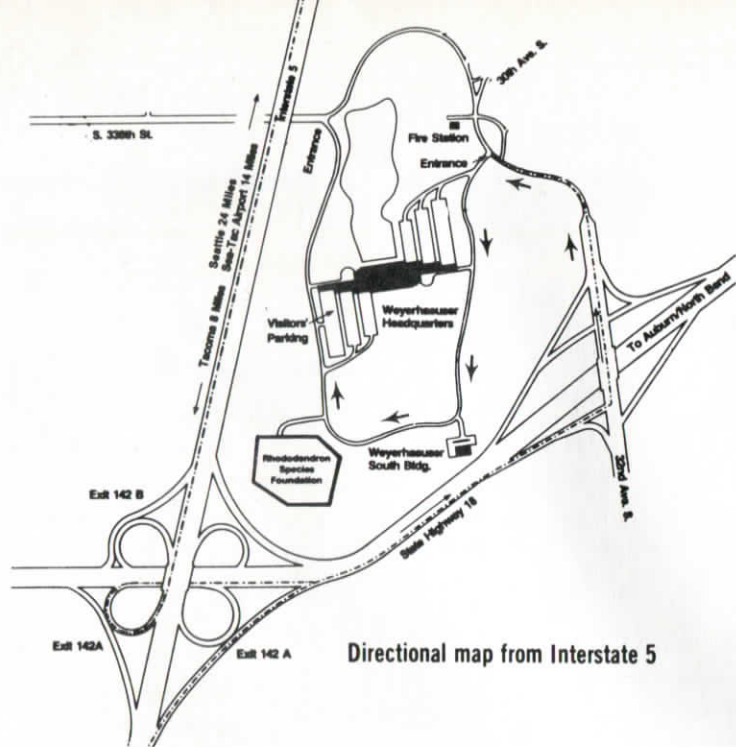
Primroses are sharing the spotlight with rhododendrons in a charming woodland garden established by the Rhododendron Species Foundation near Tacoma, Wash.

The garden at Federal Way is the permanent home of a collection of the best forms of rhododendron—already more than 10,000 plants from around the world. More than 350 species and additional subspecies and botanical varieties

are now included.

The 23-acre garden site was offered to the foundation by Weyerhaeuser Company in 1973. It is adjacent to the company headquarters.

Weyerhaeuser has cleared, graded and contoured the grounds. Company workers added soil enrichments, built footpaths, service roads and fences and erected propagation and maintenance buildings. The



Directional map from Interstate 5

4 firm continues to provide electricity, water and road maintenance for the facility.

Primulas carry theme

APS was asked to participate in the garden by providing companion primulas to carry out the geographic concept of planting. Members of Tacoma Primrose Society have spearheaded the project.

A foundation representative said the first primula plantings "wintered well and are seeding themselves."

Fall openhouse

Visitors have been invited to attend a fall openhouse on Oct. 19 and 20 from 10 a.m. to 3 p.m. Spring tours are scheduled for April 13 to May 14 on Sundays and Wednesdays. Hours are noon to 4 p.m. Sundays and 10 a.m. to 3 p.m. Wednesdays. Out-of-town guests may arrange to tour the garden on other days by telephoning 927-6960 in Tacoma.

Memberships, gifts and endowments are welcomed by the foundation to assure future development and maintenance. Foundation members enjoy the privilege of obtaining many of the superior forms of rhododendrons at cost, and they may use the garden for study and enjoyment. Information on membership may be obtained by writing to Rhododendron Species Foundation, Box 99927, Tacoma, WA 98499.

Getting there

The Puget Sound "living museum" is 24 miles south of Seattle city center and eight miles north of Tacoma—just off Interstate 5. Visitors turn into the east entrance of the Weyerhaeuser campus, keep to the left, follow the road past the headquarters building and past the south building, continue past the foundation sign and park in the designated parking lot. Please do not drive up the road to the garden.

For chapter activities

Easterners gather in New York for show, discussion, tours

by G.K. Fenderson

Some 45 primula enthusiasts from a wide area of the northeast gathered at Cold Springs, N.Y., on May 12 for the sixth annual meeting of the Eastern Chapter #1 of A.P.S.

Quality and diversity of plant material exhibited continues to grow with each passing season. This season we had nine major classes. For the first time we had sufficient entries to separate various categories of auriculas.

Liked auriculas

Show and alpine auriculas were well represented for the first time and seemed to generate considerable enthusiasm among the observers. A collection of European species of the section auricula was also of considerable interest.

First prizes were earned for plants shown by Ethel Balla, Linc Foster and Kris Fenderson. Best in the show was deservedly awarded to a magnificent cowichan polyanthus shown by Mrs. Balla.

Much enthusiasm for the genus was evident in the number of new national members, the interest shown in old quarterly bulletins which were being sold and in the rewarding amount of fine material available at the sale tables.

Discussion and tours

Before an indoor picnic style lunch Kris Fenderson led an illustrated discussion on

the cultivation of the species of primula. Much of value was again evident in the sharing of past experiences and present cultural methods.

After lunch we visited the interesting and beautiful garden and nursery of Frank Cabot, primula enthusiast and ardent plantsman who had exhibited a *Primula nivalis* subspecies *Bayernii*, a handsome plant with deeply farinose leaf margins, which he had collected in the Caucasus.

We ended our day with a visit to the attractive small garden of Edith Young, who has the advantage of gardening along a handsome stone-embanked small stream. Trees of *Cornus florida* made a truly memorable display and provided a handsome and appropriate backdrop for a horticultural meeting.



Learn about the plants of Nevada through

monthly newsletters
seed distribution
annual journal

Annual dues \$7.50 (\$5.00 for students and retired persons). For more information write to:

Northern Nevada Native Plant Society
Box 8965, Reno, NV 89507



Lollipop *P. denticulata*

by Elizabeth van Sickle

The first time I saw the *denticulata* primrose it was love at first sight.

A friend had a bed along the east side of her house and was most prideful of these lollipop like flowers. She called me when they were in full bloom. They were a sight to behold with King Alfred daffodils

among them. This bed featured all the blue-lavender colors.

I purchased some seed from her and two off-shoots, wee little fellows. She didn't want to sell plants and was miserly with them. I'm sure now after I've grown them for eight years that the species was new to her too.



P. denticulata at Skupen garden, Tacoma

I have found the *denticulata* to be one of the easiest of all primroses to grow — if you give them what they like. Begin with good garden soil. I like to add compost, tilling it in deeply. *Denticulata* have a deep root run and need plenty of room in which to grow.

Give them room

When you plan your bed of these beauties, allow for the plant's doubling in size each season you don't divide it. I like to divide every two or three years. Sometimes I take off side shoots in between years.

When I divide a large plant, I hose the root off after digging it to make it much easier to divide. Each piece will grow. I plant the largest ones in the bed to give a good show next bloom season. The little ones go into a growing bed to mature. (A piece left in the old bed by oversight will grow just as well as one you plant where you want it.)

Watering needs

When I replant, I give all plants a half-strength drink of Rapid-gro or a similar

nutrient. If you divide in the late summer, chances are that after the watering in rains will take care of the watering needs in the Pacific Northwest.

If it is a dry year, water well. Deep root zone watering is best for these plants all through the growing season.

Spring show

Denticulatas put on an outstanding show in the early springtime. There are many colors and shades from white through blue, lavender, rose and a near red. (I've not seen a true red, but I'm not saying there isn't one.) The best red I've seen was a deep rosey red.

This beautiful primrose comes to us from the Himalayas and mountains of northern Burma, western China, Nepal, Tibet and several other equally far away places. The plants were found on many expeditions from 1848 onward, according to Walter Basdale in "The Cultivated Species of *Primulas*."

Elizabeth van Sickle, Rt. 3, Box 308, Sequim, WA 98382, lives in a great place to retire and raise primroses. Mountains shelter the Sequim area, providing the mildest and sunniest weather in the Pacific Northwest.

Planting seeds guarantees Christmas in springtime

by Marion Espin

In my childhood, Christmas presents were made and wrapped in a great aura of secrecy and hidden away until the three was put up. Then they appeared full of mystery under the tree.

Not until after the midday Christmas dinner and after the dishes were washed and everything tidied up did the suspense that had been building in me all those weeks reach its climax when my father very slowly and methodically examined the labels on the presents and handed out one parcel at a time to be opened and admired by all before the next person was given a present.

Seeds like Christmas

A packet of seed is to me like those childhood Christmases all over again. The prolonged suspense: will it germinate? will it live? And the waiting: will it be what you hoped? Then, finally, the surprise or disappointment when it blooms.

So then to Feb. 12, 1977, which was the day I unwittingly sowed the seed of delight and joy. The packet was innocently labeled *Primula pedemontana*.

It germinated in two weeks from the sowing. The tiny plants grew very slowly at first and at different paces. I managed to carry them through their first winter with no losses.

One bud opens

By the spring of 1978 I wondered at the variation in size of the plants, and with

great anticipation I watched a bud begin to form on one of them. It produced a cluster of lovely pinkish mauve, velvety, cream eyed, flat faced flowers atop a slim but steady six-inch stem.

I was enchanted. I took it to our Rock and Alpine Garden Society meeting for "show and tell." Like an anxious mother hen I brooded over the others in the nest until several more primulas began to show buds.

Special white blossom

Then on a one-inch stem there opened one only large white blossom. No resemblance to the other flowering plant could be seen.

This and several more little ones I put into a trough garden where they were perfectly suited for my admiring glances. Of the others that bloomed, all were under four inches in height, of differing shades of mauves and purples and varying flower types.

That was enough excitement for that year. The rest showed no inclination of satisfying my curiosity. Several of the bigger plants, including the first to bloom, I kept in pots. The rest went into a special place in the rock garden.

Didn't lose any

I didn't lose any in spite of our miserable winter that took the life of many other residents in the garden. By April 1979 buds were showing on many. By the time of our Rock and Alpine



Garden Society show I had one large plant with three eight-inch stalks, one of them carrying 17 purple, white eyed blooms.

Another was a four-inch high, pale mauve with blooms similar in their shape to *Primula marginata* (but no leaves are toothed) plus the ones in a trough to exhibit. They all won prizes.

I raised 21 plants from that one little packet of seed. Seventeen have bloomed, of which only three were similar. They were white or cream and very short, under two inches high.

Real variety

The other 14 were all different heights, flowers flat faced to almost a bell shape, varying sized blooms. One at only five inches high had blossoms that measured one and three quarters of an inch across each bloom in the cluster.

The colours run from white through the palest mauve to a rich purple that closely

resembles the picture Mansfields' "Alpines in Colour and Cultivation" named *P. pubescens purpurea*. The last to bloom this year was the aforementioned first to bloom last year and is the only one with pinkish cast. It is now seven and one half inches tall with two stems, one stem carrying 24 blooms.

Still more Christmas

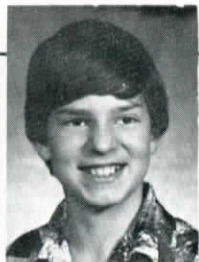
There are still four plants that have not yet bloomed, so I still have more Christmases ahead.

Today I transplanted more than 40 seedlings grown from a seed packet labeled "alpine auriculas." Will they be alpine auriculas? Or do they contain more surprises?

Are you a calm buyer of plants or are you a sower too? If you plant seeds, you too may have Christmas in April!

Marion Espin, 570 Prince Robert Dr., Victoria, B.C., V9B 1C8, is a knowledgeable rock gardener who literally gardens on a half-acre boulder.

Beginner's Luck —with Tony



How about growing from seed? Can all species be treated alike?

Tony, perhaps I can simplify things a little. Moisture-loving primulas generally germinate best if sown fresh. That includes *P. rosea*, primulas of the petiolares and candelabra sections to name a few. In nature they drop their seeds into their bog, streamlet or scree, where some of the seeds germinate immediately. Other seeds will remain dormant until the following spring to insure perpetuation of the species.

Plants of alpine areas usually drop their seeds in gritty soil, where they remain dormant until spring. Plants of lowland woods and grasslands drop their seeds in late summer, often a dry, warm time of the year. Germination commences with cool moist weather in the fall and following spring.

What does all this mean? First, learn all you can about native habitat of the species. Then try to duplicate the conditions.

Light: Primula growth periods are during times of equal day-equal night. Primula seeds germinate better in light as opposed to total darkness.

Moisture: Always necessary for germination. Young seedlings and many older plants don't appreciate water on the leaves. Soaking is better than spraying.

Temperature: Except for seed that will germinate only when fresh (virtually green), I am a firm believer in cooling seed, right in the packet, for at least five weeks. Mind you, I said cooling, not freezing. I put it in a jar and store it with the milk in the refrigerator. After that it seems to be ready to germinate in a 50 to 60-degree F. range.

Of course, I would not do this to hothouse primula seed. They should be started at 65 to 75 degrees when needed. The big hybrid polyanthus seed seem to germinate whenever planted. If that does not germinate in four weeks, you might try cooling the seed pan for a few weeks.

When: I'm reminded of the old gardener who, when asked when he planted seeds, said, "When I've got the time." Baer's Agricultural Almanac for 1980 (Box 328, Lancaster, PA 17604, \$1.25) says Jan. 2, 3, 9, 10, 29, 30, Feb. 5, 6, 7, 25, 26, etc., based on the phases of the moon. Late summer is a good time for germination. With a light set up seedlings can be kept growing through the winter. However, in this climate February is a favorite month for starting seeds.

Soil: Herb Dickson plants his seeds in four-inch square pots filled with very gritty soil. The seed is sprinkled on top and covered with a small square of bed sheet cut to fit and weighted down with pebbles. The pots are left to weather in the open. A half-inch of milled true sphagnum moss can be substituted for the square of cloth. When the seedlings are up, the sphagnum is removed and the pans are taken into a frame for normal raising. Pans should never dry out.

Dad

SEEDS BY ROSETTA

New Crop

Double Vernales

30 seeds \$2.50

Plants Available at Nursery

ROSETTA JONES—6214 So. 287th St.—Kent, Wash. 98031

NATIONAL AURICULA AND PRIMULA SOCIETY — *Northern Section*

Invites all Auricula and Primula Lovers to join this Old Society
Membership of \$4.50 per year includes Year Book

Hon. Sec. David G. Hadfield
146, Queens Road, Cheadle Hulme, Cheshire SK8 5HY England

The endless summer. Garden Domes make it happen.

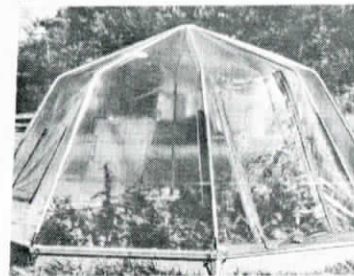
Add months of summertime to your garden in just one hour, the time it takes to put up a Fabrico Garden Dome. Long after the growing season has passed, your vegetables and flowers will continue to

flourish in the warmth and sunshine gathered under the clear polyvinyl enclosure. And, happy thought, you'll be free of nibbling rabbits and pesty bugs and insects.

Keep sowing a good three months longer each year. All because summer never ends under a Fabrico Garden Dome. **Write or phone for information and a free brochure.**

Fabrico

It's not a miracle. It's a Garden Dome.
1300 W. Exchange Ave., Chicago, Illinois
60609
312/254-4211





Preserving the florists' flowers

by Hubert Calvert

Most people will describe a florist as one who deals in, raises or studies flowers. That is the definition given in the Oxford Dictionary and is derived from the Latin "flos-oris," which, translated into English, would mean "flower-ist."

Florists' flowers



Auricula

In the florists era of the 18th and 19th centuries a florist was usually an amateur who raised, grew and exhibited certain flowers favored by members of specialist societies. There were some societies which covered the whole range of flowers and plants throughout the year. Such was the York Florists' Society, which recently celebrated its 200th anniversary.

Popular flowers

The flowers most popular in this era were double hyacinths, show auriculas, laced polyanthus, tulips, double anemones, ranunculus, pansies and violas, laced pinks, pom-pom dahlias,

bizarre and flaked carnations and picotees. These were described in a magazine called "Floricultural Cabinet," dated 1834.

All of these are grown today. Apart from double hyacinths, anemones and ranunculus, they are grown mainly by amateurs and exhibited by them in competitions organized by specialist societies.

The Wakefield and North of England Tulip Society, established 1836, is probably the oldest and certainly the only one specializing in the old English florists' tulips, some of which were raised originally before 1850 and are still grown and exhibited exclusively by members.

Primula fanciers

There are three sections of the National Auricula and Primula Society—Northern, Midland and Southern—whose members grow and exhibit show, alpine and border auriculas, a large and colorful variety of primulas and primroses and laced polyanthus, all of which are shown also by members of American Primrose Society. In this and in many more things, in spite of time and distance, there is still a close affinity between our two countries.

I understand there are five sections of our Pansy and Viola Society. Each holds separate shows and issues a yearbook. They show named varieties of pansy and viola of traditional standards and in the traditional manner. These can be obtained only through the society. No commercial firms supply them. This also applies to our florists tulips and most show and alpine auriculas.

Amateurs preserve plants

A great variety of carnations and pinks are to be seen at shows of the British Na-

tional Carnation Society. Some of these may be obtained from commercial growers, but many of them are grown only by amateur specialists.

In a 1952 catalog of carnations, pinks and dianthus issued by Allwood Gros., there are bizarre and flaked border carnations, picotee border carnations and laced pinks, including Dad's Favourite, John Ball, Murray's Laced Pink and Victorian—all good oldies—in addition to eight newer varieties. Unfortunately, most of these are now unobtainable, although some people are still devoted to them.

Dahlias are, of course, available in abundance. Commercial growers are the main source of supply and must find them profitable. It must be admitted, however, that growers have spent a great deal of money in research and breeding and but for them the pom dahlia, beloved of the old florists, would probably have gone out of existence.

Florists set standards

In the florists era an enormous amount of literature was published to set out the standards of excellence for all these floral gems. Such men as John Glenny in the South, Richard Headley of Cambridge, William Harrison and John Slater in the North of England each had his own ideas and expressed them so forcibly that their contributions nearly caused a literary war in the horticultural press. There are even now differences of opinion, but generally the same standards are accepted.

In the 19th century flowers, like the people of those days, were expected to conform to strict rules, though these rules were not artificial. They were suggested by the flower itself and required only man to combine by selection and breeding the most pleasing shapes, colors and propor-

tions.

There is much to admire in the disarray of nature, but what man can resist the allure of a perfect shape?

Illustrations survive

Many illustrations of the old flowers were painted by famous artists. Perhaps the most famous are in Dr. Thornton's "Temple of Flora" of 1798. He beggared himself in the process of producing this memorable volume, but his work still lives.

One of the best known and respected of British artists, Rory McEwen, has a great love of old florists' flowers. This was shown as early as 1955 when he illustrated C. Oscar Moreton's "Old Carnations and Pinks" and in 1962 the same author's monograph "Auriculas." At an exhibition of his paintings in 1962 in Durlacher Gallery in New York a painting of one of the Wakefield tulips was bought for the White House.

In 1977 the Basilisk Press, London, published "Tulips and Tulipomania" by Wilfrid Blunt with 16 color plates from paintings by Rory McEwen of old florist tulips grown and exhibited by the Wakefield Society. This book in a strictly limited edition is unique. The publishers used only the very best quality materials. The whole work is superb, and with its former companions, "Carnations and Pinks" and "Auriculas," preserves the cream of British florist flowers for posterity.

Hubert Calvert, a former secretary of the Wakefield and North of England Tulip Society and expert hybridizer of gold laced polyanthus, florist tulips, laced pinks and alpine and show auriculas, lives at 7 School Crescent, Lupset, Wakefield, West Yorkshire WF28LX. He advises that "Tulips and Tulipomania" is available through Basilisk Press, Ltd., 32 A, Elizabeth News, Hampstead, London, N.W. 3 4U.

A bygone age—saved forever

by Jack Wood

A small council house garden at Lupset, Wakefield, is the setting for some of the oldest and most beautiful of British florists' flowers. This is the garden of Hubert Calvert, a man dedicated to the preservation of flowers that go back hundreds of years. Auriculas, English tulips, laced pinks, primulas and polyanthus are some of the gems which bloom in the former school gardener and groundsman's well cared for plot.

Show secretary of the world famous Wakefield Tulip Society, internationally recognized for their shows of English tulips, Hubert is better known for his painstaking work in cultivating that most British of old florists' flowers—the gold laced polyanthus.

30 year effort

Hubert first became interested in this lovely plant nearly 30 years ago—the same time as he became involved in the florists' tulip and the Wakefield Society. His first attempt to produce a gold laced was through selecting polyanthus that had a trace of lacing.

Hubert says, "After several attempts I was getting no nearer to my gold laced polyanthus and the flowers that I had seen in the old gardening books, with varieties such as 'Craiggy's Bertram,' 'Craiggy's Britannia' and 'Bernard's Formosa' that were a feature of gardens during the 1840s."

In 1963 Hubert bought a packet of what was described as 'gold laced polyanthus' seed from a commercial seed firm,

but from 50 or so plants raised not one was of the standard he had been looking for. However, he retained four of the plants which he considered the best to give him a chance to have something to work on.

Let bees work

Hubert left the selected plants for the bees to work on. "I did not know which to cross so I decided on nature taking its course and a good job was done with seed giving me over 300 plants to go at the following season."

These turned out a fair old mixed bag with colours ranging from washy orange to almost black, and very few came close to the gold laced he had in mind and the qualities of the old unobtainable named varieties of the past.

From the batch of plants Hubert kept 10 to breed with. After several crosses using open pollination, Hubert decided on self crossing; and from these, after a bad year for seed setting, he managed to produce just six plants.

Found qualities

It was in this half dozen that Hubert found the qualities he had been looking for. "A pin that had a good yellow centre on one plant and another with the laced markings but a little dark in the centre—but I was on the right road."

Using the same hybridising programme, a further 100 seedlings were produced from which Hubert selected once again the best six. This was 1972 and since then Hubert's gold laced polyanthus have



M. Warriner with 'Warriner's Wonder'

Bygone age . . .

arrived at a stage when he is satisfied, although his dedication work still goes on.

He has named three of his gold laced polyanthus "Pennington Gem," a dark ground; "Pennington Lady," dark ground named after the name of the road to Rothwell Secondary School where he worked; and a red ground, "Allanbert."

Other successes

Hubert has also had success with the English florist tulip, his "Abrig" a bybloemen tulip with a white ground and almost black markings—the hallmark of a good bybloemen.

Also at Wisley on trial is one of Hubert's laced pinks, a more vigorous seedling from the variety "Prudence." In his cold greenhouse Hubert grows alpine and show auriculas. Most of the seedlings are his own, which before satisfying his own critical assessment will remain nameless.

Leaving Hubert on his "golden" patch, I could not fail to envy a man so dedicated whose aim in life is to try to keep for posterity these little floral gems of ours.

This article appeared in England's "Garden News" on May 19, 1979. It was forwarded to us by Bernard Smith. We trust Mr. Wood will look kindly on our reprinting this article about our article writer.

'Warriner's Wonder'

by Bernard M. Smith

In the early 1960s M. Warriner of Kingston-on-Thames, England, received some of the gold laced polyanthus seed that Dr. E. Lester Smith had brought back from his visit to Peter Klein in Tacoma. This was from the same source as the early Barnhaven strain.

In 1970 Warriner gave some of his reselected seed to Lady Drury, who in turn passed a few seedlings to J.M. Barlow of Leigh-on-Sea.

Shows promise

In 1972 one of those seedlings showed great promise, and at the National Auricula and Primula Society (Southern) show in London it was awarded a first prize.

On seeing the plant, Warriner kept "wondering about that plant" and why it seemed so attractive to him. It was not until later that he realized that Barlow's plant had three pips, each with six petals. It reminded him of Burnhard's "Formosa." As a result, Barlow honored Warriner by naming the plant "Warriner's Wonder."

Prize winner

The plant later was divided and shared among Barlow, Warriner and Lawrence Wigley, the southern section secretary. Over the next six years Warriner's Wonder took many prizes. In 1978 it was awarded a certificate of merit.

By 1979 only Wigley still possessed a plant of it. The accompanying photograph, taken at the NAPS (Southern) show in London in 1979 shows Warriner with what well may be the last remaining plant of Warriner's Wonder.

Peter Klein

Peter Klein, a self-trained Tacoma, Wash., gardener, changed the course of horticultural history before his death 22 years ago.

Gardeners who knew Klein remember that he had a limited education. Searching for information in scholarly horticultural journals was difficult and tedious for him.

When he did read the information, he didn't always believe it.

British experts wrote that double primroses were infertile and could not be used in breeding programs to develop consistent strains of double-blossomed plants. Klein didn't accept that.

Studied double blossoms

He watched mutations in his own garden. He studied those double blossoms with a magnifying glass during every stage of development.

At the end of the blooming season he found what the experts hadn't discovered. There was a tiny amount of pollen in the spent blossom.

Armed with this knowledge, Klein developed healthy strains of double plants and proved that they could be used in hybridizing programs.

Klein also developed his own strain of green auricula. He couldn't afford to buy plants from the famous British growers, so he purchased seed. By crossing two varieties of British seedling greens, he produced his own strain of stunning green-petaled plants. They are the ancestors of today's American prizewinners.



Peter Klein

Klein also recognized that two species of primulas should cross because they have similar genetic qualities. By using tiny *Primula clarkei* and larger *Primula rosea*—both from Kashmir—he developed *Primula x Peter Klein*, a modern favorite with a cluster of clear pink blossoms atop a six-inch stem.

Klein seemed to know good plants by instinct. Florence Bellis shared with him a small portion of British gold lace polyanthus seed sent to this country after World War II. The English garden had been bombed, and only plant fragments had remained.

Selected qualities

With this precious seed Klein grew superb plants. He reported that he got best results from blending qualities of the second-best plants to create characteristics he wanted.

Klein was a sweet, quiet, unassuming man—totally dedicated to the perfecting of his chosen plants. He was rather like the florists of old who, as C. G. Haysom wrote, "sought no financial reward" but desired only "to produce one or two outstanding varieties during their lifetime."

Extract from 1731 encyclopedia

In 1731 Philip Miller's "Garden Encyclopedia" was published in the second edition. Miller's encyclopedia was the first one to use the Linnaean system of binomial nomenclature.

Carol von Linne, a Swedish botanist who lived from 1707 to 1778, developed the botanical naming system.

The following material is reproduced from a photocopy of the 1731 volume. The pages were provided by Pat and Thea Foster of West Vancouver, B.C., who own and enjoy the old garden book.

AURICULA URSI; [*i. e.* Bear's-Ear; so call'd, because the Antients fancied it resembled the Ear of a Bear] Bear's-Ear, or Auricula.

The Characters are;

It hath a perennial Root; the Leaves are smoother and thicker than those of the Primrose; the Cup of the Flower is shorter, so that the Tube appears naked; the Flower is shap'd like a Funnel, the upper Part is expanded and divided into five Segments; this is succeeded by a globular Seed-Vessel, containing many small Seeds.

To enumerate the Diversities of this Plant, would be almost endless and impossible; for every Year produces vast Quantities of new Flowers, differing in Shape, Size, or Colour of the Flowers; and also in the Leaves of these Plants, there is as great a Variety, so that the skilful Florist, is oftentimes capable of distinguishing the particular Sorts thereby.

But as it seldom happens, that such of these Flowers as are at one Time in great Esteem, continue to be regarded a few Years after (there being still finer or larger Flowers produced from Seeds, which are what the Florists chiefly seek after) so it would be needless to mention any of them: Wherefore I shall proceed to give the Characters of a good *Auricula*.

1. The Stem of the Flower should be lofty and strong.
2. The Footstalk of the Flower should be short, that the Umbel may be regular and close.
3. The Pipe or Neck of each Flower should be short, and the Flowers large and regularly spread, being no ways inclinable to cup.
4. That the Colours are very bright and well mixed.
5. That the Eye of the Flower be large, round, and of a good White, or Yellow, and that the Tube or Neck be not too wide.

All Flowers of this kind, that want any of the above-mention'd Properties, are now

rejected by every good Florist; for as the Varieties every Year increase from Seeds, so the bad ones are turn'd out to make Room for their Betters; but in some People the Passion for new Flowers so much prevails, that supposing the old Flower greatly preferable to a new one, if it is of their own raising, the latter must take Place of the old one.

In order to obtain good Flowers from Seeds, you must make choice of the best Flowers you have, which should be expos'd to the open Air, that they may have the Benefit of Showers, without which, they seldom produce good Seeds; the Time of their Ripening is in *June*, which you will easily know, by their Seed-vessel turning to a brown Colour, and opening; you must therefore be careful lest the Seeds be scatter'd out of the Vessel, for it will not be all fit to gather at the same Time.

The Time for sowing this Seed, is commonly in *August*; but if it be sown any Time before *Christmas*, it will be Time enough.

The best Soil for this Seed, is good fresh, light sandy Mould, mix'd with very rotten Neat's Dung, or Tanner's Bark; with this you should fill your Pots, Boxes, or Baskets, in which you intend to sow your Seeds; and having level'd the Surface of the Earth very smooth, sow your Seeds thereon, covering it very lightly with rotten willow Mould, then cover the Box, &c. with a Net or Wire, to prevent the Cats, Fowls, &c. from scratching out, or burying your Seeds too deep; let these Boxes, &c. be placed so as to receive half the Day's Sun, during the Winter Season; but in the Beginning of *March*, remove them where they may have only the Morning Sun till ten of the Clock, for your young Plants will now soon begin to appear, which if expos'd to one whole Day's Sun only, will be all destroy'd.

During the Summer Season in dry Weather, often refresh them with Water, but never give them too great Quantities at once: In

the *July* following, your Plants will be large enough to transplant, at which Time you must prepare a Bed, or Boxes, fill'd with the above-mention'd Soil, in which you may plant them about three Inches square, and (if in Beds) you must shade them every Day, till they are thoroughly rooted, as also in very hot dry Weather; but if they are in Baskets or Boxes, they may be removed to a shady Place.

When you have taken all your Plants which are now come up out of your Boxes or Pots, level the Earth gently again, for it often happens, that some of the Seeds will lie in the Ground two Years before they appear, especially, if they were cover'd too deep when sown.

The Spring following, many of these Flowers will shew, when you may select such of them as have good Properties, which should be removed each of them into a Pot of the same prepar'd Earth, and preserved until the next Season, at which Time you will be capable to form a Judgment of the Goodness of the Flower; but those that produce plain-colour'd, or small Flowers should be taken out, and planted in Borders in the out Parts of the Garden, to make a Shew, or gather for Nofegays, &c. the others which do not produce their Flowers the same Year, may be taken up, and transplanted into a fresh Bed, to remain till you see how they will prove.

The Manner of propagating these Flowers when obtain'd, is from Off-sets, or Slips, taken from the old Roots in *April*, when the Flowers are in Bloom; these Off-sets must be planted into small Pots, fill'd with the same Sort of Earth, as was before directed for the Seedlings, and during the Summer Season, should be set in a shady Place, and must be often refresh'd with Water, but in the Winter should be shelter'd from the violent Rains; the Spring following, these young Plants will produce Flowers, tho' but weak; soon after they are past flowering, you must put them into larger Pots, and the second Year they will blow in Perfection.

But in order to obtain a fine Bloom of these Flowers, you must observe the following Directions.

1st. Preserve your Plants from too much Wet in Winter, which often rots and spoils them, but let them have as much free open Air as possible; nor should they be too much expos'd to the Sun, which is apt to forward their budding for Flower too soon; and the frosty Mornings which often happen in *March*, do thereby destroy their Buds, if they are not protected therefrom.

Secondly, In the Beginning of *February*, if the Weather is mild, you must take off the upper Part of the Earth in your *Auricula*s Pots, as low as you can without disturbing their Roots, and fill up the Pots with fresh rich Earth, which will greatly strengthen them for Bloom; as also prepare your Off-sets for

transplanting in *April*, by causing them to push out new Roots.

Thirdly, You must cover your Pots with Mats in frosty Weather, during this Time of their budding for Flower, lest the sharp Mornings blight them, and prevent their blowing.

Fourthly, When your Flower-Stems begin to advance, and the blossom Buds grow turgid; you must protect them from hafty Rains, which would wash off their white mealy *Farina*, and greatly deface the Beauty of their Flowers; but at the same Time, observe to keep them as much uncover'd as possible, otherwise their Stems will be drawn up too weak to support their Flowers, (which is often the Case when their Pots are placed under Walls) and give them gentle Waterings to strengthen them; but let none of the Water fall into the Center of the Plant or among their Leaves.

Fifthly, When your Flowers begin to open, you should remove their Pots upon a Stage (built with Rows of Shelves, one above another, and cover'd on the Top to preserve them from Wet; this should be open to the Morning Sun, but shelter'd from the Heat of the Sun in the Middle of the Day) in this Position they will appear to much greater Advantage, then when the Pots stand upon the Ground; for their Flowers being low, their Beauty is hid from us; whereas when they are advanced upon Shelves, we see them in a full View; in this Situation they may remain, until the Beauty of their Flowers are past; when they must be set abroad to receive the Rains, and have open free Air, in order to obtain Seeds, which will fail if they are kept too long under Shelter. When your Seed is ripe, observe to gather it when it is perfectly dry, and expose it to the Sun in a Window upon Papers, to prevent its growing mouldy, and let it remain in the Pods till the Season for sowing it.

PRIMULA VERIS: [This Plant is so call'd, because it is the first Plant that appears in the Spring.] Primrose.

The Characters are;

The Flower consists of one Leaf; the lower Part of which is tubulose, but the upper Part expands it self flat in Form of a Salver, and is cut into several Segments; from the Flower-cup (which is fistulous) arises the Pointal; which, when the Flower is decay'd, becomes an oblong Fruit or Husk, lying almost conceal'd in the Flower-Cup and opens at the Top, in which is contain'd many roundish Seeds fasten'd to the Placenta.

The Species are;

1. **PRIMULA VERIS**; *vulgaris*. Park. Common Primrose.
2. **PRIMULA VERIS**; *Constantinopolitana*, *flore albo*. Tourne. Primrose of Constantinople, with a white Flower, commonly call'd The Paper White Primrose.
3. **PRIMULA VERIS**; *Constantinopolitana*,

florē dilutē carneo. Town Primrose of Constantinople, with a pale Flesh-colour'd Flower.

4. PRIMULA VERIS; *Constantinopolitana*, florē dilutē purpureo. Town Primrose of Constantinople, with a pale-purple Flower.

5. PRIMULA VERIS *Constantinopolitana*, florē alio duplici. Primrose of Constantinople, with a double white Flower, commonly call'd The Double Paper-white Primrose.

6. PRIMULA VERIS; *vulgaris*, florē dilutē purpureo. Common Primrose, with a pale-purple Flower.

7. PRIMULA VERIS; *vulgaris florē pleno*. Common Primrose, with a very double Flower.

8. PRIMULA VERIS; *vulgaris, florē pleno, dilutē rubente*. Common Primrose, with a double pale-red Flower.

9. PRIMULA VERIS; *pallido florē, elatior*. Cluf. Common Pagils or Cowslips.

10. PRIMULA VERIS; *umbellata, odorata, pratensis*. Great Cowslips or Oxslips.

11. PRIMULA VERIS; *geminato florē, H. Eyst.* Double Cowslip, or Hofe in Hofe.

12. PRIMULA VERIS; *caulifera, florē luteo pleno, odorato*. J. B. Cowslip or Pagil, with a very double Flower.

13. PRIMULA VERIS: *hortensis, umbellata, caule & florē foliis, coccineo majore*. H. L. Garden Primrose or Polyanthos, with a large red Flower.

14. PRIMULA VERIS; *umbellata, odorata, hortensis, simplicis, varietas uberrima pro varietate jucundissima coloris multiplicis*. B. Herb. Ind.

There are a great Variety of the Garden Primroses or Polyanthos's, which are annually produc'd from Seeds; the Flowers of which are so beautifully strip'd, and some of them have a great Number of Flowers upon a Stalk, so that they equal the Auricula's in the Beauty of their Flowers; and as they require but little Culture, so they have, in many Gardens, obtain'd the Preference to most other Spring Flowers.

The first Sort of Primrose grows wild in Woods and other shady Places in most Parts of England, from whence their Roots may be easily transplanted into the Garden; where, if they are placed under Hedges, and in shady Walks, they make a beautiful Appearance early in the Spring, when few other Plants are in Flower.

The best Time to transplant them is at Michaelmas, that their Roots may have Strength to produce their Flowers early in the Spring. These delight in a strong, rich Soil, but will grow in almost any sort of Earth, provided they have a shady Situation.

The sixth, seventh, and eighth Sorts are Varieties of the first, which have been accidentally produc'd from Seeds: These may be propagated by parting of their Roots at Michaelmas, and must be treated as the common Sort.

The ninth and tenth Sorts, do also grow wild in the Meadows in divers Parts of England, the Roots of which are often transplanted into Gardens; where, if they are in-

termix'd with other early flowering Plants, they afford an agreeable Variety.

The eleventh and twelfth Sorts are Varieties which were produc'd from Seeds of the former; but the last is, at present, very rare in England. These may be propagated by parting their Roots at Michaelmas, and should be planted on a strong Soil, and expos'd to the Morning-Sun.

The several Varieties of Polyanthos's are produc'd by sowing of Seeds, which should be sav'd from such Flowers as have good Properties, i. e. such as have large upright Stems, producing many Flowers upon a Stalk, the Flowers large, beautifully strip'd, and that open flat: From the Seeds of such Flowers, there is room to hope for a great Variety of good Sorts.

These Seeds should be sown in Boxes fill'd with light rich Earth, in December, being very careful not to bury the Seed too deep, for if it be only cover'd with light Earth it will be sufficient: These Boxes should be plac'd where they may receive the Benefit of the Morning-Sun until ten of the Clock, but must by no means be expos'd to the Heat of the Day, especially when the Plants begin to appear, for at that time one whole Day's Sun will intirely destroy them: In the Spring, if the Season should prove dry, you must often refresh them with Water; and as the Heat increases, so you should remove the Boxes more in the Shade, for the Heat is very injurious to them.

In May these Plants will be strong enough to plant out; at which time you should prepare some shady Borders, which should be made rich; upon which you must set the Plants about four Inches asunder, observing to water them until they have taken Root; after which they will require no farther Care but to keep them clear from Weeds, until the latter End of August following; when you should prepare some Borders, which are expos'd to the East, with good light rich Earth, into which you must transplant your Polyanthos's, placing them six Inches asunder equally in Rows, observing, if the Season proves dry, to water them until they have taken Root. In these Borders your Plants will flower the succeeding Spring; at which time you must observe to mark such of them which are fine, to preserve, and the rest may be transplanted into Wildernesses, and other shady Places in the Garden; where, although they are not very valuable Flowers, they will afford an agreeable Variety.

Those which you intend to preserve, may be removed soon after they have done flowering (provided you do not intend to save Seeds from them) and may be then parted and transplanted into a fresh Border of the like rich Earth, allowing them the same Distance as before; observing also to water them until they have taken Root, after which they will require no farther Care, but only to keep them clear from Weeds; and the following Spring they will produce strong Flowers; and

if the Kinds are good, will be little inferior to a Shew of Auricula's.

These Roots should be constantly removed and parted every Year, and the Earth of the Border changed, otherwise they will degenerate and lose the greatest Part of their Beauty.

If you intend to save Seeds, which is the Method to obtain a great Variety, you must mark such of them, which, as I said before, have good Properties: these should be, if possible, separated from all ordinary Flowers, for if they stand surrounded with plain-colour'd Flowers, they will impregnate each other, whereby the Seeds of the valuable Flowers will not be near so good, as if the Plants had been in a separate Border where no ordinary Flowers grew; therefore the best Way is to take out the Roots of such as you do not esteem, so

soon as the Flowers open, and plant them in another Place, that there may be none left in the Border, but such as you would chuse for Seeds.

The Flowers of these should not be gathered, except such as are produc'd singly upon Pedicles, leaving all such as grow in large Bunches; and if the Season should prove dry, you must now and then refresh them with Water, which will cause their Seeds to be larger and in greater Quantity, than if they were intirely neglected. Towards the latter End of May the Seeds will be ripe, which may be easily known by the Pods changing brown and opening; so that you should at that Time look over it three times a Week, gathering each time such of it as is ripe, which should be laid upon a Paper to dry, and may then be put up until the Season of sowing.

Ordering back issues

It's a long way from the print shop and the storage boxes to New Hampshire. That's why members are now asked to order back issues of the quarterly from Ann Lunn, secretary, instead of treasurer G. K. Fenderson.

Please note that requests for old issues should be addressed to Ann Lunn, 3040 N.W. Parkview Lane, Portland, OR 97229.

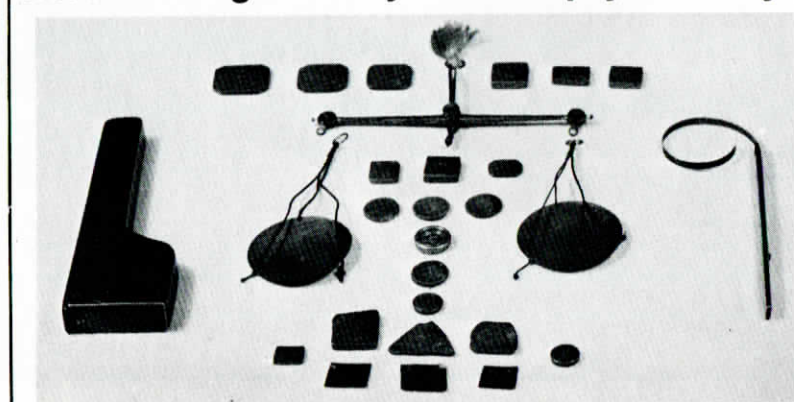
Ann has agreed to provide photocopies of specific articles from issues that are no longer available. There will be a small

charge— something like 10 cents (or less) for a double page.

Quarterlies no longer available include the following: Vol. 2, No. 1 and 2; Vol. 3, all; Vol. 4, all; Vol. 5, No. 1 and 2; Vol. 6, No. 3 and 4; Vol. 12, No. 2 and 4; Vol. 14, No. 1; Vol. 25, No. 3; Vol. 33, No. 1; Vol. 34, No. 1 and 3; Vol. 35, No. 3.

Articles from 1943 to 1976 are listed in an index compiled by Hilda and Elmer Baldwin. The index costs \$2 and may be ordered from Mrs. Lunn.

Read about gooseberry scale trophy in 'Diary'





P. takedana



P. tosaensis

Japanese alpine primulas

by Cy Happy

Margaret Mason, Portland, Ore., member provided a rare treat at the national show this year. She displayed some choice alpine primulas from Japan.

During several trips to Japan Mrs. Mason visited growers of alpine plants and primulas and was able to import plants and seeds. Lacking an alpine house, she makes do with a cold frame. The plants seem to approve of the treatment.

Primula takedana was discovered in 1927 in subalpine meadows in Teshio

Province, Hokkaido. Ascribed to section *reinii*, it is a slender perennial with a short stout rhizome. From a four-inch scape come umbels of one to five fragrant white flowers. A good alpine house subject, it should be grown in a soil containing much humus in the form of leaf mold or neutral (non-acid) peat and coarse grit. Shade in summer is strongly advised.

The plant labeled *P. tosaensis* (section *reinnii*) is absolutely charming. It is pictured on the cover of this quarterly. In comparing this photograph with descriptions and drawings of *P. tosaensis*, I am



P. sorachiana

not sure that it is named correctly. Pale pink flowers on single-flowered scapes fits *P. hidakana* better. It also seems quite close to *P. reinii*. I would like comments on this.

Be that as it may, this plant is a jewel from the alpine cliffs and ravines of Hokkaido.

P. sorachiana, a dainty member of the *farinosa* section, comes from Kanayama at the foot of Mt. Yubari in Hokkaido.

Leaves just 1-2 cm. long and only half as wide and relatively large flowers on inch-high stalks make it an exceptionally fine alpine house subject. It must be seen close up to be appreciated.

Flowers are a soft purple-rose. Flower stalks are covered with meal, and the undersides of the leaves are powder white. Like most members of the *farinosa* section, it is best raised and renewed regularly from seed.

Your flowers and shrubs need more than just sunshine and rain. They need ORTHO.



ORTHENE Insect Spray—a new *biodegradable* systemic insecticide for use on roses, flowers, ornamentals and trees. Gives fast contact kill of a broad range of insects, with up to 3 weeks residual protection on Aphids. 1 pt. makes up to 32 gallons of spray.

ORTHO Rose & Flower Jet Duster—a new and easy way to control insects and diseases on flower foliage.

ORTHO Rose Food—an 8-12-4 formulation to provide all the nourishment needed for luxurious foliage and a minimum number of beautiful rose blooms; for new plantings and established plants.

Gardening shortcuts—invaluable information on frost protection, raised beds, vertical gardens, pruning, containers, and lots more.

ORTHO Lawn and Garden Sprayer—a convenient and accurate sprayer that works with your garden hose.

TMs—ORTHO, CHEVRON AND CHEVRON DESIGN—ORTHO. REG. U.S. PAT. OFF.

AVOID ACCIDENTS: FOR SAFETY READ ENTIRE LABEL INCLUDING CAUTIONS AND WARNINGS AND USE ALL CHEMICALS ONLY AS DIRECTED.

Who knows more about gardening than ORTHO.

I have a question!

Answers by Alice Hills Baylor

Q. Will you give the growing conditions for *P. sieboldii* and what fertilizers to use and when.

A. This is a most willing primula and will give display with little or no attention but responds with a wealth of bloom with an early spring top dressing of manure compost and again after blooming. It enjoys a rich soil. (It should be marked as it does not show growth as early as the vernaes.)

Q. What treatment do you recommend for primula root aphids?

A. Lift plant, wash in a solution of Cygon 2E and pour solution around plant after it has been planted in renewed soil. Repeat by pouring solution around roots again in two weeks. Watch.

Q. Is it possible to grow *P. clarkii* in a hot dry garden?

A. It would be difficult to try. Use a companion plant for shade in a heavily composted soil and mulch. It is said that Union and Carbide has a product known as VITERRA II which holds particles of water in the soil. Have never used it.

Q. Is it possible to grow any of the Asiatic primroses in dry conditions?

A. Not with much success, but one might try the above treatment.

Q. How does one keep the seedlings of *P. parryi*? Germination is excellent.

A. The native western primrose grows at the edge of melting glaciers with the cold water running below the roots. I grew it for two years by planting them at the runoff of my spring in a shaded ravine here in Vermont. That was as long as I could keep them.

Q. Are the *farinosa* primulas short lived? How does one keep them healthy?

A. These miniatures can be kept by seeding often. The roots are so hair like that the plant needs to be lifted and reset so it can obtain the plant food in the rich soil which is needed. *P. darialica* can be kept for years by dividing every two years. In a lime-free, manure-filled soil they will endure a bit more sun than half a day. Mulch well with compost.

Q. I have had difficulty in germinating *P. rosea* seeds. Why?

A. They need to be very fresh. I was sent a packet of fresh seed this year in June. Now I have a little flat filled with seedlings, which I have under lights. Now in second leaf, but will wait for third to transplant into a larger flat which I shall sink into the garden, cover with screen and spruce branches for over-winter. If one wished to keep rosea for long, he needs to divide them directly after blooming in spring, which is early. If divided later, they may heave as it takes the wire-like roots more time to take hold. Place small stones around plants to hold firm. Rosea belongs to that delightful group known as the bird's-eye but is very difficult from most. It is pegged as a good bog plant, but I have found it enjoys cool, rich soil and good drainage.

Q. Does *P. chionantha* require heavy feeding? Mine have never flowered and do not seem to be as large as they should be. What fertilizer?

A. I have grown the fragrant *P. chionantha* for years as a background plant for *P. polyanthus*. Many say they should be in lime-free soil. Mine are in rich manure-filled soil and are at the top of the low (one foot) retaining wall so the drainage is excellent. I make a solution of any regular fertilizer in early spring and give them all a good soaking. They receive the same plant food as the vernaes. They are mulched after that feeding with compost or well rotted sawdust (which is black) or the same of bark. The bark comes from the local lumber mill where both hard wood and conifers are sawed and used for paths for at least three years before using as mulch.

Q. What do you suggest for making *P. rubra* bloom? I have lovely plants.

A. It likes stony, gritty soil in which one has put plenty of compost, peat. It does not like to be dry. Granite may be used, but it will tolerate limestone. Good drainage is the most important requisite.

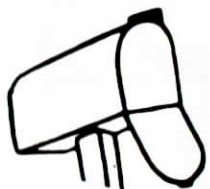
Q. What is the best source of seed for show auriculas?

A. Gorden Douglas, 76 Church Road, Great Bookham, Surrey, England.

Do you have a question? Ask Alice Hills Baylor, corresponding secretary, by writing to her at Stage Coach Road, Rt. 2, Stowe, Vermont, 05672. She will select questions to be discussed in her regular column.

Borrow a slide show
on primulas.
No charge to members.

Write to:
Dorothy Dickson
Slide Chairman
2568 Jackson Highway
Chehalis, WA 98532



From the mailbox

I have not lost my interest in the primrose, despite the extreme difficulty I encounter in trying to grow them here in the South. I would still like to see more "how to" articles, not only for myself but for others who are as "novice" as I am.

Auriculas and acaulis tolerate conditions here better than anything else. I visited Mr. Balcom in May of 1975 before he entered the nursing home. I carefully hand carried the plants he gave back to Nashville, refusing to allow them to be X-rayed at the Seattle and Chicago airports. In spite of this only one plant survived the change in climate, and it is growing in my cool greenhouse, cooled by an evaporative cooler.

Primroses do not survive outdoors long here. Dry summer heat is the worst offender, and artificial watering causes rot. We get very little snow but temperatures down to zero to 10 degrees in January. Auriculas produce only two or three pips— never anything like those shown in the bulletin. I am going to increase the use of lime and see if that helps.

Alvin Bolt
325 Fieldcrest Dr.
Nashville, TN 37211

I have started the auricula seeds, and it will be most interesting to see what comes up. I have lost interest a bit in auriculas, but your packet of seed may start me again.

I retired from general medical practice just three months ago and we have moved from a rather big garden to a bungalow in Bangor, which is a seaside town of about 25,000 inhabitants. I can be keen on the garden, and we still have quite a big garden which I hope will keep me happy. My garden interests are varied and are more general than particular.

Dr. Sam P. Millar
41, Kensington Park
Bangor, Co. Down North Ireland

I keep my auriculas at my lake home on Flathead Lake, which is north of Missoula. The temp is much warmer around the lake, and they seem to do very well. I have mostly garden and alpiners. Someday I'd like to pollinate and raise plants for other collectors and the general public, but guess that will have to wait until I retire, which will be quite awhile.

I plan to attend the shows next year. Have missed the last two. I somehow feel isolated living in Montana and not being able to participate with a group in our hobby. My plants, of course, bloom much later than on the coast.

Gary Eichhorn
525 McLeod Ave.
Missoula, MT 59801

Specializing in the world's most famous strains of
P. acaulis with beautiful, vivid colors.

Many other primroses, alpiners, rare plants,
dwarf irises, rockery plants, grafted evergreens.

Quality plants • Quantity discounts • Mail order welcome

OPEN WEEKENDS AND HOLIDAYS ONLY

Alpenflora Gardens

17985 - 40th Ave., Surrey (Cloverdale), B.C. V3S 4N8
6 miles north of U.S. border, off Pacific Highway

THE SCOTTISH ROCK GARDEN CLUB



offers you . . .

Its twice yearly journal, well illustrated in black & white, and containing authoritative articles on all aspects of rock gardening, rock plants, and their worldwide haunts. Its excellent annual scheme for the distribution of rare and unusual seed amongst its international members.

For \$5.00 per year

R.H.D., Orr, C.A., 70 High St., Haddington, East Lothian, Scotland,
will be glad to send particulars

NATIONAL AURICULA AND PRIMULA SOCIETY — *Southern Section*

Invites all Auricula and Primula Lovers to join this Old Society
Membership of \$5.00 per year includes Year Book

Lawrence E. Wigley

67, Warnham Court Road, Carshalton Beeches, Surrey England

NATIONAL AURICULA AND PRIMULA SOCIETY — *Midland Section*

Invites all Auricula and Primula Lovers to join this Old Society

Hon. Sec., Mr. P. Green

Primrose Hill, Bell's Bank, Buckley, Worcs., England

APS has a new treasurer!

Please pay
your dues to:

G. K. Fenderson
Grout Hill
South Acworth, NH 03607



P. stuartii

by Alice Hills Baylor

The nivales section contains some of the most beautiful primulas, but they are rarely grown.

Reginald Farrer found the one named for him and described it in glowing terms. However, it did not endure its home away from home in England and is no longer in cultivation. Some members in this section are found in the Caucasus, Siberia and Aleutian Islands but the majority are in the primula belt of the Himalyas and would seem to prefer to remain there.

P. chionantha succeeds

Smith* lists 40 specific and more than 60 subspecific names. I have only been successful with a few. P. chionantha has proved its tractability. I have had it since 1952.

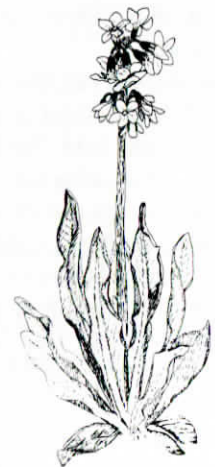
Forest discovered it in Yunnan at 13,000 feet. Its crown is composed of large glabrous leaves, the lower surface dusted with yellow farina. The scape is sturdy and bears many whorls of large fragrant pure white flowers in late May.

It is vigorous and so beautiful I have it planted at the rear of a bed of pastel polyanthus at the edge of a low stone wall which forms one side of a sunken bark path. The crown may become buried with the many leaves so that perfect drainage is required.

Lovely P. melanops

P. melanops is another lovely species discovered in southwest Szechwan, China by Kingdon-Ward in several stations near Yunging at 18,000 feet. Some consider this the purple form of P. chionantha, but the flowers have a very dark eye and the farina is white instead of yellow. It was later collected in the Litang valley near

Nivales primroses



P. chionantha



P. sinopurpurea

Muli and named *P. leucochnoa*. According to W.W. Smith, the two are synonymous.

I had seed sent to me from India in 1963 which germinated at once, and it flowered a year later. The base of the plant is not as attractive, for the old leaves form a mass of scales above which the new foliage forms. It carried a great mass of purple flowers in whorls with yellow eyes. It stayed with me for three years of flowering. Then suddenly all plants disappeared.

Taller one

P. sinopurpurea is prominent on the list in stature. The flower stem was measured as 15 inches high when it bloomed in June. Twelve to 14 nodding purple flowers topped the stem. The leaves are

narrow and toothed, one half to two inches across and from three to four inches long. The flowers are a solid color, rich blue-purple.

Some authorities place *P. sinopurpurea* as the purple form of the exquisite white *P. chionantha* from western China. Among the purple *P. sinopurpurea* in my garden appeared one of clear butter-yellow and nodding flowers nine to 12 to a stem in exact replica of the purple. Dr. Blasdale has separated the yellow form from Nepal and northwest Himalaya into the species *P. stuartii*, as does the A.P.S. Pictorial Dictionary. Both plants came from the same packet of seed from Jack Drake's nursery and are treasures.

Difficult to grow

There is a subsection *Maximowiczii*, the flowers of which are reflexed as those of dodecatheon or cyclamen, which I have never seen. *P. Elizabethae* is in another subsection, *Agleniana*. According to Ingwersen, it had large solitary yellow white mealed eye flowers. It was discovered in southeast Tibet but succumbed from the wet English winter.

Many members of the *nivales* section grow in what is known as "the wet summer and dry winter" zone of the Himalayas, eastern Tibet and western China. This explains why they are so difficult to grow. The primula enthusiast might try to carry them over in the alpine house in winter, keeping them dry. That is the advice of some writers.

*The Genus *Primula*: Section *Nivales* by Sir W. Wright Smith and H.R. Fletcher Ph.D., D.Sc. Transactions of the Royal Society Edinburgh Vol. LX-Part II 1941-1942.

Alice Hills Baylor, our "Question/Answer" writer in Stowe, Vt., received several requests for information about the *nivales* section. She hopes this will be helpful.

American Primrose Society

Officers

President: James Menzies, 765 Tenth Ct., Fox Island, Wash. 98333
 Vice president: Ethel Balla, 189 Taconic Rd., Greenwich, Conn. 06830
 Recording secretary: Ann Lunn, 3040 N.W. Parkview Lane, Portland, OR 97229
 Treasurer: G.K. Fenderson, Grout Hill, South Acworth, N.H. 03607
 Corresponding secretary, east: Alice Hills Baylor, Stage Coach Rd. Stowe, Ver. 05672
 Corresponding secretary, west: Gus Arneson, 1004 NW 179th Pl., Seattle, Wash. 98177
 Editor emeritus: Florence Bellis, 2835 N. Oar Ave., Lincoln City, Ore. 97367

Directors

Mildred Washburn, Aloha, Ore. 1977	Ruth Huston, Gig Harbor, Wash. 1979
Helen Clarke, Tacoma, Wash. 1977	Loie Benedict, Auburn, Wash. 1979
Alice H. Baylor, Stowe, Ver. 1978	Presidents of affiliated societies and chapters
Elizabeth Van Sickle, Sequim, Wash. 1978	Cyrus Happy, Tacoma, Wash., editor, ex officio

Membership

Dues of \$7 a year are payable Nov. 15. Membership includes four issues annually of the Quarterly, cultural chart and seed exchange privileges. Three years for \$20. Life membership, \$100; garden club affiliated societies, \$7 a year; library and horticultural societies, \$7 a year; second member in family, \$1 a year. Overseas members, \$7 a year; please send by international money order. Send dues to the treasurer.

Publications

Back issues of the Quarterly are available. Order from the treasurer.
 Manuscripts for publication in the Quarterly are solicited from members and other gardening experts, although there is no payment. Please send articles and photographs to the editor's office. 11617 Gravelly Lake Dr., S.W., Tacoma, Wash. 98499.
 Advertising rates per issue: full page, \$60; half page, \$30; quarter page \$15; eighth page and minimum, \$10. Submit advertising to the editor.

Seed Exchange

Ross Willingham, chairman, 2248 S. 134th, Seattle, Wash. 98168.

APS Quarterly Index: 1943-1976
 Compiled by Hilda and Elmer Baldwin • Only \$2.

Now you can order the articles you need.
 Irreplaceable old quarterlies: • \$1 each.

Order index from the secretary:

Ann Lunn • 3040 N.W. Parkview Lane • Portland, OR 97229

Market Place

SPRING HILL FARM

P. O. Box 42
GIG HARBOR, WASH. 98335

Fresh Seed of
Polyanthus, Acaulis, Juliae
\$1.00

Double Vernais,
\$3.00 for 50 seed

Transplants after August
RUTH BARTLETT HUSTON

Species and Cultivar Primulas

*Ericas, Callunas, Phlox, Saxifrage,
Dwarf Conifers, Container Plants
and Alpines*

Precise Catalogue 40c
THE ROCK GARDEN
R.F.D. #2
Litchfield, Maine 04350

Classified

TRY JOE'S BULLETIN — our nation's oldest flower-garden magazine. Buy, sell, exchange *nationwide*. **Save!** Make new friends. Samples 25¢ postage. Write Box 144, Lamoni, La. 50140.

**Share the fun.
Introduce a friend
to A. P. S.**

34

The ALPINE GARDEN Society

The Quarterly Bulletin known in 27 Countries throughout the World for its illustrations and technical standards.

ANNUAL SEED DISTRIBUTION LIST, with preferential treatment for overseas members, of some 5,000 varieties, including new introductions otherwise unobtainable

ANNUAL SUBSCRIPTION \$7.50 — payable to the Secretary:
E.M. Upward, Lye End Link, St. John's, Woking, Surrey, England

— Send for fully descriptive folder —

A place to visit and browse. All plant lovers are welcome at **CHEHALIS RARE PLANT NURSERY**

We grow a large selection of primula, alpine and rockery plants, dwarf trees and shrubs and many, many more unusual plants, mainly in containers.

Halfway between Portland and Seattle just off I-5
2568 Jackson Highway, Chehalis, Wash. 98532

Sales at nursery only. No list. No catalog.



PACIFIC NORTHWEST NURSERIES, Inc.

Let us help you plan now for a beautiful garden. Our selection is now at its best.

GL 4-7173

11030-N.E. 6th • BELLEVUE

Choice Double Auricula Seed

Hand-pollinated
Balcom strain
\$5 a packet

Cyrus Happy
11617 Gravelly Lk. Dr. SW
Tacoma, Wash. 98499

Plan ahead. Pollinate and share seed.

APS Seed Exchange
2248 S. 134th
Seattle, WA 98168

35

OLIVER NURSERIES, INC.

1151 Bronson Road, Fairfield, Conn. 06430

*offers choice rhododendrons, dwarf conifers,
collector's alpines and companion plants for primulas.*

Open 7 days a week during spring • Sorry no mail orders

Telephone: (203) 259-5609

Make friends.

Learn about primroses
Join a "round-robin."

(That's a letter-writing circle with a few growers who share your interests.)

Write for information:
Ruth Bartlett Huston
Spring Hill Farm - P.O. Box 42
Gig Harbor, Wash. 98335

"Schultz-Instant" LIQUID PLANT FOOD
10-15-10
Concentrated, High Analysis — All Purpose — 10-15-10 "Starts and Feeds" all Plants indoors and Outdoors.
Available at your store or send \$1.25 for 5 1/2oz, \$2.50 for 12oz (includes mailing).
7 DROPS PER QUART WATER

"Schultz-Instant" SOLUBLE FERTILIZER
20-30-20
Concentrated, High Analysis — All Purpose — 20-30-20 crystals. Grows Vegetables, Flowers, Roses, Trees, Shrubs, Lawns, Etc., in Yards, Gardens, Greenhouses.
Available at your store or send \$7.95 for 5 lb (includes mailing).
1/4 TSP PER GALLON WATER

SCHULTZ CO. — St. Louis, MO 63043
SEND FOR OUR FUND RAISING OFFER

Diary of a Primroser

by Cy Happy

Dwarf primroses, two and a half inches tall, that excited everyone at the national show came from seed from Sakata Seed Co., C.P.O. Box Yokohama, Japan 220-91. They may be ordered in colors or mixed. They are called julianas, but they look more like miniature primroses. Helen Clarke's first question was, "Do they have julie roots?" A good question. Julies have rhizomatous roots. They make many divisions, survive weevil attacks. Swanson's Land of Flowers, 9701 - 15th Ave. NW, Seattle, WA 98117, will have plants available early 1980.

Two readers report unexpected progress in war on weevils. Plagued with fleas inside and out, they sought the aid of commercial spray services to have their yards and houses sprayed with FICAM W. Not only the fleas were eliminated. Ants, earwigs and weevils disappeared too. The manufacturer, Fisons, Inc., has just marketed a dust, FICAM D, for household use against fleas. \$22 and 5 pounds. You may want to eliminate fleas in the primrose bed. It has a duration of about two months' effectiveness. Keep it away from food crops.

Getting rid of aphids

At a grower's meeting in Canada, Cygon 2E was the recommended treatment for primula wooly root aphids, other aphids and mites. In Canada it is marketed by Niagra Brand Chemicals, division of FMC Corp. In the U.S. American Cyanamid distributes it as Cygon 267. A commercial spray service can apply this material or perhaps sell you a bottle. Treat wooly aphids several times about two weeks apart until they stop reappearing.

The 1980 study weekend at Victoria, B.C., on Feb. 29 to March 1 will feature, among others, Alfred Evans, assistant curator of the Royal Botanic Garden, Edinburgh, Scotland. He is author of "The Peat Garden." His lectures are sure to interest primrosers. Reservations are care of Mrs. Sybil McCulloch, 5021 Prospect Lake Rd., Victoria, B.C., V8X 3X3.

Dry, warm summer on Puget Sound

Summer in Puget Sound country has been dry and warm, except for early July. For the first time the little greenhouse is not too hot. A single layer of old bed sheets all over the top does the job. The auriculas like it. Primroses that lost foliage to a sudden infestation of spider mite are sending out new leaves, and a few of the Pacific Giants are starting to bloom again.

The double auricula seed is harvested and in the refrigerator. A few precious edged auricula seeds were collected. Mrs. Berry's 45-year-old Snow Lady provided the pollen. Pistils are receptive just as the flowers begin to open—a terrible time to have to tear apart edged auricula blossoms for pollinating.

Successful APS picnic

Annual APS picnic at Dickson's Chehalis Rare Plant Nursery brought visitors from Oregon, Washington and British Columbia. Herb said he lost many plants during the winter. Benches and beds seemed full to me. Where would he have put these plants if he hadn't lost so many others? Herb has hundreds of varieties of primula. There is no time to mourn the losses. Watering takes three hours every day.

Occasionally someone receives more than one copy of the quarterly. Pass it on to wherever it will do the most good. The local library would be a good depository for current or back issues. Please remember to send change of address to the treasurer. Returns cost us all money.

Took in the early summer garden show in Victoria, B.C. The eye-catcher was the non-competitive display of mixed perennials set up by David Barton. He staged several primulas, including *P. florindae*. I'm afraid his dianthus allwoodii var. Doris, delightful soft salmon pink with three-inch double blossoms, upstaged the rest.

Growers show gigantic gooseberries

Of special interest to the old florists was the gooseberry competition between Dick Koepence and Rodger Whitlock. They brought in old varieties ranging from pink to green, big as ping pong balls. Traditionally the old auricula growers strove for the perfect gooseberry too. A gooseberry scale sent from England as a trophy with the copper kettle seems to have vanished. Anyone have it tucked away somewhere?

A note from Mrs. Roland Gurney, 42 Water St., Fairfield, ME 04937, asks help collecting juliae hybrids, price no object. She also wants *P. abschasica*, *P. kisoana*, *P. heucherifolia*, *P. spectabilis* and hybrids Linda Pope, Marvin and Mrs. J. H. Watson. Maine members should get together for a meeting and plant exchange. Plenty of members there.

World floral exposition

The Paris-based International Bureau of Expositions has granted special recognition to Les Floralies International de Montreal 1980 as a special category world exposition. APS members can enjoy indoor Floralies at the Velodrome of Olympia Park May 17-29, 1980, and outdoor Floralies from May 31 to September at the 100-acre Ile Notre-Dame. Previous Floralies have been held in Europe. If Quebec members would contact John Bradshaw, 119 Hazelton Ave., Toronto, Ont., Canada, M5R 2E4, perhaps APS could be represented by a booth or display.

Hybridizer Orpha Salzman was the creator of the lovely *P. polyneura* x *P. sieboldii* hybrids shown by Ross Willingham at the Seattle show this spring. Congratulations, Orpha. They have the charm of the wildling plus hybrid vigor.

Think seed exchange — now!

Ross Willingham badly needs seed of specific color polyanthus for the seed exchange. Time to send in your seed. Don't wait too long this year. Ross will sponsor eastern European memberships in exchange for primula seed. Ross Willingham, 2248 S. 134th, Seattle, WA 98168.

President Jim Menzies called a meeting of the APS show committee July 14. Agenda included certification of judges, rules and regulations for APS shows and scope of committee responsibility.

Discussion emphasized the following points:

1. Judges must be given a point score.
 2. Top prizewinning plants must be point scored and scores turned in with judging sheets.
 3. There need not be a best-in-class if no plant warrants it.
 4. Proper classification of plants upon entry and accurate placing on the benches is essential for good judging.
 5. If we are to continue having seedling classes, they must be placed where they can be judged as groups within their respective divisions.
 6. Rules for totaling ribbons toward the sweepstake award should be standardized.
- Suggestions from the membership would be appreciated. Send to James Menzies, 765 10th Court, Fox Island, WA 98323.

Pictorial dictionary needs revision

The "Pictorial Dictionary of the Cultivated Species of the Genus Primula" is about gone. The time has come to do it over with corrections and additions. Many corrections, made by readers, have been noted and filed by Susan Watson. I am asking our readers to send in corrections and suggestions that will help in this tremendous task.

The dictionary was published serially in 1954 and in its final form in summer 1967-108 pages plus cover. Susan Watson, Vancouver, B.C., has offered free room and board to anyone who could turn the material into typed manuscript. A concentrated week should do it. When the material is in semifinal form, it could be published serially in the quarterly for further corrections and additions from the readers. In many cases new photos would be needed.

Friends, sponsors, double delights

Thea Foster of W. Vancouver, wrote flatteringly of Herb Dickson's ability as a grower. She was delighted with his deep red P. rubra and amazed to find he had P. minima in bloom July 14. She also wants it known that the Alpine Garden Club of British Columbia was a study weekend sponsor and that the club was started by APS members in Vancouver—Jim and Susan Watson, George Boving, Grace Conboy, Lance Taylor among others.

Just came in from the greenhouse. Ralph Balcom's D229 has just opened—a daffodil yellow double blossom. Fragrance like anise and lemon. What a thrill it must have given Ralph more than 20 years ago!

38

Rare Dwarf Slow Growing Conifers

Flowering shrubs and unusual rock plants suitable for
Bonsai culture are listed in our catalogue, **Alpenglow Gardens.**

ALPENGLOW GARDENS

13328 King George Hwy.

North Surrey, B.C., Canada

The American Rock Garden Society

(founded 1934)

cordially invites you to join its growing
list of enthusiastic members

Annual Seed List • Quarterly Magazine

Family Membership — \$10.00

Overseas Membership — \$8.00

Single Membership — \$9.00

Patron Membership \$25.00

Life Membership — \$250.00

Donald Peach
P.O. Box 183
Hales Corner, WI 53130

39



LIQUINOX

THE ALL-PURPOSE
BLUE RIBBON FERTILIZER

Contains Yucca Extract

10-10-5

17-7-0

0-10-10

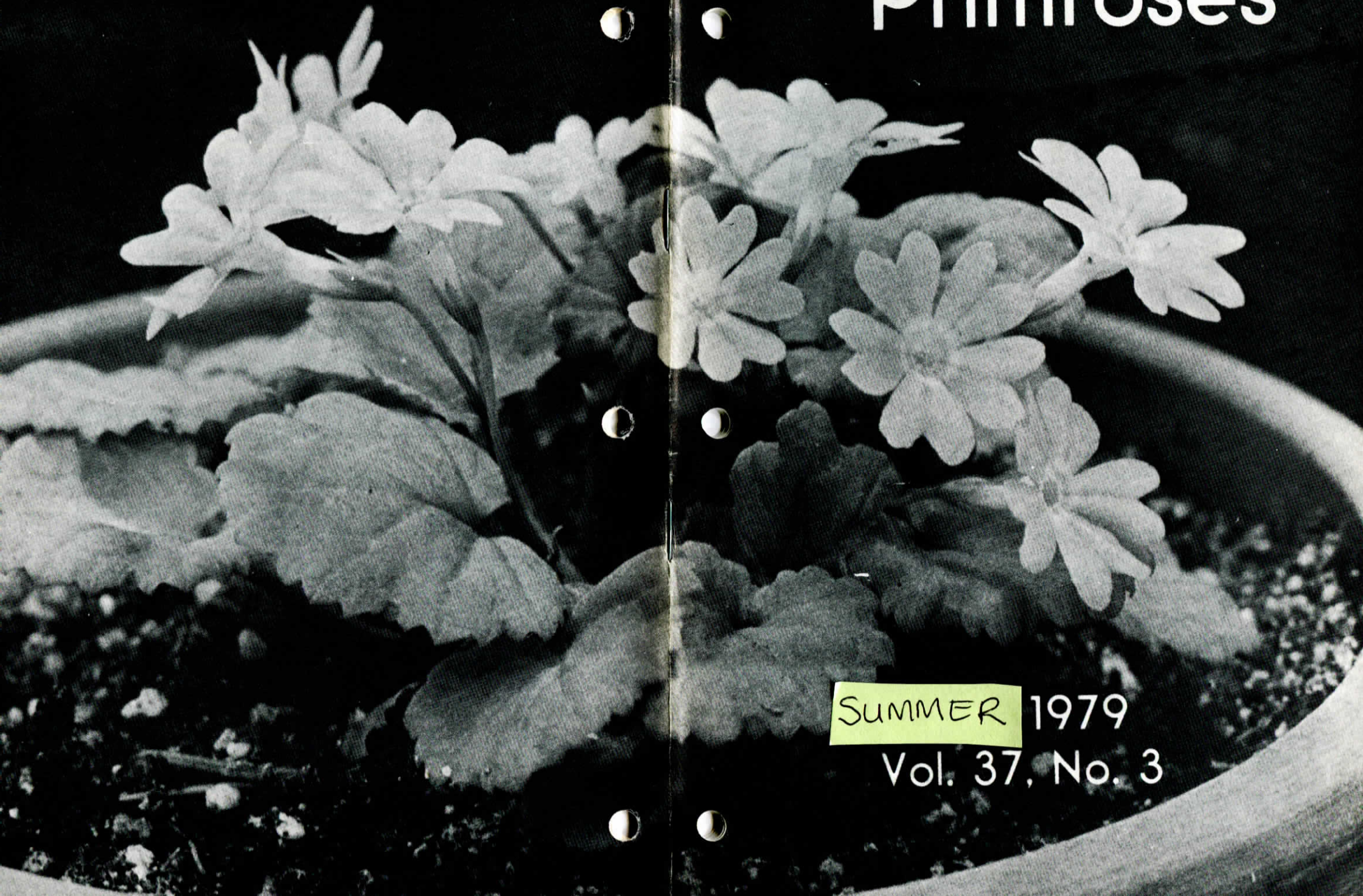
KEIFFER and SMITH

Seattle, Washington

10324 - 44th NE

525-7007

Primroses



SUMMER 1979

Vol. 37, No. 3