Quote, Unquote

The auricula is one of our oldest florists' flowers. It was the skilled craftsmen of the north of England who, when it first reached their hands as a crude undeveloped flower, quickly laid down standards for what they considered a perfect flower and then set about achieving it in a most determined manner.

In the whole history of British floriculture and horticulture there is nothing more touching than the sacrifice many of our worthy forbears made to achieve their object. One hundred and fifty to two hundred years ago many of those florists began their careers at the early age of fourteen and carried on without a break until their death! They sought no financial reward; their reward—the only one they desired and worked for—was to produce one or two outstanding varieties during their lifetime.

Nothing was ever erected to perpetuate their memory, but many of their creations will remain as their monuments, long after many in stone or granite have crumbled away. Their monuments are living entities, which will carry on through the ages.

-From Florists' Auriculas and Gold-Laced Polyanthus by C.G. Haysom

London: 1957

Editorial . . .

Two years ago Anita Alexander stepped in as American Primrose Society president. Her charm and gracious manner plus well-expressed good judgement have attracted many gardeners to the world of primulas.

Even the old growers recognized the infectious air of excitement in new enthusiasts. Membership is increasing. New contacts are being made in the horticultural world.

We join all of you in expressing sincere appreciation to Anita for sharing two busy years with APS. The effects of her service will be felt in the society for many years to come.

All about voting

Absentee ballots to elect society officers for 1978-79 are included with this quarterly. They must be returned promptly so they can be tallied and results announced at the national meeting on April 8.

Nominated this year for president is James Menzies, a retired soil scientist, who lives at Fox Island, Wash. Menzies has served as president of the Tacoma society and currently is assisting in the development of primula plantings for the Weyerhaeuser Company's Rhododendron Species Foundation.

Ethel Balla of Greenwich, Conn., currently is serving as vice president. She has been asked to complete another term in that position.

Lois Nelson of Tacoma, Wash., has been asked to serve another term as secretary of APS.

Edward Pincus has resigned as treasurer. The nominating committee has asked Mary Speers of Steilacoom, Wash., to serve in this critical post.

Alice Hills Baylor and Gus Arneson have been asked to continue in their positions as corresponding secretaries. Mrs. Baylor is a resident of Stowe, Ver., and Arneson lives in Seattle, Wash.

Mrs. Baylor also has been asked to serve as a director. The committee also proposes that Elizabeth Van Sickle, Sequim, Wash., serve as a director.

These directors will replace All Rapp and Dorothy Springer, whose terms of office have expired.
Primula cusickiana has bloomed for the last two years on March 15. It's going to do it again.

The collector said the plants we have were growing in shallow gullies where water would be running during melting snow. The plants grew up the sides of the swale in a scree situation with a layer of three or four inches of soil made up of decayed vegetation, rocks and some sand. A soil test at home showed that it is a bit on the acid side, under 7 pH.

**liked plastic pots**

We have used both clay and plastic pots, 6½ inches wide by 5 inches. The plants that bloomed best were in plastic. They have about two inches of pea gravel in the bottom. The soil is a commercial potting mix that has a nice black soil. It's an organic soil of decayed vegetation and some fine sponge rock. We mix this with about a third of rather coarse sand, the kind used in concrete. This is not critical. Sand around the collected plants felt like a fine silt.

**try alpine plant mix**

Roots seem to go into soil. A 4-inch pot does not hold a mature plant. The larger size gives the plants side room. In nature the plants we've seen didn't go deep. We'd suggest a grower use his own alpine plant mix because he is used to watering similar plants.

P. cusickiana dries during the summer months, and it is under snow during the winter. The only time it is quite moist is during its brief growing period. We keep the pots on the north side of the house, where they are protected from rain. Our storms come from south and west. The plants are seldom watered after they die down—just a wee bit so they are not dust dry. Perhaps about three tablespoons of water at a time.

**weather and slugs**

Cusickiana seems quite hardy, but we have covered them during freezing weather with fir boughs. Slugs are too plentiful here near the woods, and they seem rather fond of this plant. We set the pots on boards—so a slug will at least get a splinter on his way to dine!

We've made a few mistakes in growing cusickiana. One started to show a bloom bud, so we took it under the plastic for a little sun. That blighted the rest of the buds.

We put some in the alpine house for a wee bit of sun when it was first starting—no buds started. They seem to need light and air here, but they don't like our muggy sun.

**stay-at homes**

Another apparent mistake was taking plants to shows for others to see. When we tried to pollinate them later, we had no luck.

The plant with seven bloom stalks is a lighter shade than we like. The deeper purple shade is charming.

We never over-fertilize these plants—just enough to keep them healthy.

**we'll try dividing**

In time we will try to divide the largest plant. One does divide the plants as they come in, and this is usually while seed is ripening. Plants seem to die—at least for us—if they are left in the original soil.

We'll try to keep all of you posted as we progress or regress on this growing project.

The collector planted quite a few of the cusickianas in his rock garden. They baked in summer sun and got drenched in the rain. The plants had a few blooms the next year, and then they vanished.

Ivanel and Orval Agee are dedicated APS workers and fine hybridizers and photographers. Their garden is at 11112 S.E. Wood Ave., Milwaukie, Ore., 97222.
Cowichans are changing.
The original cowichan was found at an old farmstead near Cowichan Bay, Vancouver, Island. Presumably it was a natural hybrid of a polyanthus and P. juliae.
If memory serves right, the original plant did not set seed, but the pollen was good. Barnhaven used it to develop the original strain which produced rich maroon, red and amethyst, mostly eyeless polyanthus.
This is a great plant for the amateur grower. The Agees and the Clarkes have had some real success. Other growers are developing luxuriant browns. Their adventures should encourage a host of hybridizers to get busy.

*Julie hybrid "Red Head." Rich true red cowichan type, 3-4" tall. Dickson will distribute in a year or two. Very desirable.*
Gus Arneson's *P. venecian cowichan*. Fine form, sturdy stem, flowers eyeless like rich red velvet—the original type.

Barnhaven's "Strawberry" cowichan, a pink with red center.

Elmer Baldwin's polyanthus x cowichan.

The Fred Clarkes' apricot cowichan with a touch of red in the eye.
Beginner’s Luck

—I want to cross P. juliae with a gold laced polyanthus. What should I do? What would the seedlings look like?

Our main clump of P. juliae is under the cherry tree. It is a mat more than a foot wide and will be in full bloom very soon. Being so small, P. juliae makes a better pollen parent than a seed parent—at least that has been my experience. But don’t let that stop you from trying to get it to set seed.

All our gold laced polys are thrums—the pollen-bearing anthers are at the top of the tube and the stigma waiting to be pollinated is way down inside. Before the blossom to be pollinated is old enough to have ripe pollen, tear and remove the petal tissue and tube. The stigma and the undeveloped seed capsule should be exposed and undamaged. If the stigma (resembles a pinhead on a very short pin) is sticky, it is ready to receive pollen.

You might have to wait several days before the pistil looks receptive. As soon as it is sparkling with moisture, transfer the pollen. I usually use the moistened tip of a penknife.

It is easier to work with potted seed parent plants and easier to protect them. They do demand daily attention. Seed will not form if the plant gets too dry.

Your pollinating efforts should be tagged. I use jewelers’ tags and waterproof pencil.

Nearly three months will pass before seed will ripen. As capsules turn brown—and they can do this overnight—snip off the pods. Drop them into envelopes with their tags and store in a dry place for a few days. Then empty the seed pods, getting all the seed. Store seed in the refrigerator in a loosely capped jar.

Oh, yes. What do I think gold laced polyanthus x P. juliae will look like? Some bits of gold lacing may show up but probably just flecks around the edge. The polyanthus form should prevail.

Flower colors will range from dark purple and maroon to lighter shades with the chance of an odd yellow. Flowers will tend to be small, and the eye will be small—in a few cases non-existent.

Take a look at variety Buckland Wine. Your cross may look similar but a bit more upright. That is about what I would expect in the first generation. By crossing the best of the seedlings with each other, you are more likely to realize your hopes in the second generation.

However, if you should, in the first generation, get a smashing red, stalk-form Julie with a dash of bright lacing, I would not be at all surprised.  

Dad
Boyd Kline hopes to save P. capillaris

Boyd Kline went with Margaret Williams, a Nevada plant collector, to find a long-lost American primula. They hiked three miles to the base of the Ruby Mountains in north central Nevada. Mrs. Williams pointed to a spot some 10,000 feet up the mountain and said, "It's up there.

Kline went to look. He climbed and climbed.

Guess what!
Finally he staggered to a stream to get a drink from a melting snow bank. He threw himself down and found himself face to face with the precise object of his search—P. capillaris.

P. capillaris, a rare and endangered species, was discovered in 1946 and hadn't been seen since 1950. Kline, a partner in Siskiyou Rare Plant Nursery, made his trek in July 1975.

P. capillaris — but not many
He found a total of 200 plants growing in peat (decomposed vegetation) along the top of a ridge at the 10,000-foot level. He photographed plants and brought back two or three.

P. capillaris has a long, line leaf and dark lavender-purple blossoms. The plants had started to form seed, but it was not ripe enough to harvest.

Tiny seed heads
"The plant has tiny seed heads and seed as fine as snuff," Kline said.
P. capillaris was growing alone on the ridge. Companion plants in the area included Silene acaulis, which grew in gritty gravel "a little ways away on a slope facing east."

Kline's plants did not survive. Now he knows he must return to the site in late July or early August to get seed.

'Must be saved'
"It is ridiculous to let it sit there where no one can see it, where it could die or be destroyed," Kline said. "It must be saved — one way or another."

Boyd Kline, 522 Franquette, Medford, Ore. 97501, is a personable man, a determined—and lucky, some would say—collector and fine photographer.
Abnormal plants

Erect flowers, long pedicels, flat corollas and a varying orange tinge on the petals indicated a possible former polyanthus admixture. This was more noticeable on plants growing near the central part, the site of the former farmhouse, than on the outskirts of the patch.

During late summer seeds were collected and sown in flats, left outside for the winter. This resulted in an abundant crop of seedlings that were set out among the shrubs and in the perennial border of our garden.

They grew — everywhere

In marked contrast to various polyanthus and garden primulas of commercial origin, which usually slowly sat and died, the Speyside cowslips grew profusely nearly everywhere and began to seed themselves in the lawn and raspberry patch. Only Wanda could match these in survival under our growing conditions.

Skinner (1967) mentions eastern forms of the cowslip (var. uraleensis and macrocalyx) besides P. pallasii and P. carpatica as being of promise in the Canadian prairies because they are winter-hardy and tolerate hot summers.

Check-up time

I began to acquire seeds and plants of primulas to see what further species and varieties would be of promise in the long run. Of these, P. pallasii and P. leucophylla, one vigorous seedling with pale yellow flowers selected from among Barnhaven New Julianas and P. sibthorpii from Mrs. Baylor in Vermont survived in the perennial border without further ado and were used in crosses.

The cross cowslip x Wanda gave a poor seed set and yielded seedlings with flowers on short scapes, long pedicels, with flat corollas of a dirty orange color, largely sterile. At about that time we decided to move to Victoria, and no further seedlings were raised from several crosses.

Victoria garden

Our garden in Victoria is on acid, sandy soil. After turning and burying sods, removing numerous stones and roots and filling in with loamy top soil, lime and manure, we established a reasonably good foundation for a garden. The original garden contained a few Wanda primulas, infected with a mosaic disease and differing from the Toronto Wanda in having thrum type flowers, while the latter are of the pin type.

A primula bed was prepared in the dappled shade of a plum tree, new seedlings were raised from several batches of hybrid seed and new primulas were obtained locally, notably P. acaulis and its hybrids, not winter-hardy in Toronto. The Wanda from Toronto soon became infected with the mosaic disease of the Victoria Wanda. Partly because of this, it lost some of its former vigour and adaptability.

Disaster! Weevils!

Then disaster struck. The root weevils in our neighbor's strawberry patch found their way to our plum tree. The consequences were catastrophic.

Most cowslips and cowslip hybrids were destroyed within a short time. The other primulas suffered a more lingering death.

Hybrids flowered

Many hybrids flowered, and the mosaic disease did not spread beyond the Wandas. Several promising plants were selected from among the Barnhaven New Julianas, the Speyside cowslips and their hybrids with P. leucophylla.

Interesting seedlings were obtained from the cross P. pallasii x Wanda, made in Toronto. All have flowers of varying shades of mauve on scapes varying much in height, erect as in Wanda and on longer pedicels than in P. pallasii. The flowers have the narrow petals and open funnel shape of P. pallasii.

Remarkable form

The most remarkable feature is the variation in growth form. Some of the seedlings have the creeping stems of Wanda; others are tufted. A few are as low, dwarf and mat-forming as the most extreme julianas and should be suitable for rock gardens. Others are as tall as P. pallasii. As in other julianas, seed set is poor and thus far only two F2 plants have been obtained.

The pollen is quite good, however, and the back cross P. pallasii x (pallasii x Wanda) gave several seedlings. Some have the one-sided umbels and nodding flowers of P. pallasii. Besides yellows and mauves there are a few of a new shade — pinkish yellow.

From Toronto to Victoria . . .

Speyside cowslips and other survivors

by C. Heimburger

My interest in primulas began about 15 years ago. I was then living in North Toronto, and we had a garden on heavy calcareous soil and a fairly open situation.

A friend of ours, member of the Ontario Federation of Naturalists, drew our attention to a recently discovered patch of cowslips (P. veris) on the Niagara escarpment. One day we drove there together to explore it further.

Carpet of cowslips

The patch was about half an acre in size, part of an abandoned farm near Speyside, Ont. The soil is shallow clay resting directly on limestone bedrock, very wet, almost swampy in spring and dry in summer. The open area is surrounded by the usual badly bitten trees and neglected fruit trees.

The ground was covered with a thick carpet of cowslips resembling a good crop of dandelions. The cowslips were mostly of the usual type, with dark yellow, somewhat nodding, flowers having bell-shaped corollas.

Abnormal plants

Among these were some abnormal plants. Erect flowers, long pedicels, flat corollas and a varying orange tinge on the petals indicated a possible former polyanthus admixture. This was more noticeable on plants growing near the central part, the site of the former farmhouse, than on the outskirts of the patch.

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Most cowslips and cowslip hybrids were destroyed within a short time. The other primulas suffered a more lingering death.

After about a year of frustrated application of various insecticides. I realized that
Left: P. uralensis  
Right: P. leucophylla

prevention is better than cure and prepared another primula bed. This is along the north side of the house where the grass is shaded in the morning and difficult to cut.

'Medicine chest' plot

The new bed was supplied with peat, rotted sawdust and lime and liberally spiked with insecticides. The surviving primulas were then moved into this bed after careful screening for root weevils. The bed at times smells like a medicine chest, but it works. I can now grow even the most sensitive cowslips in it.

It seems that weevil resistance in this case consists mainly of the ability of some primulas to grow faster than the weevil can eat them. *P. acaulis* and its hybrids are probably resistant because of a lack of summer dormancy found in cowslips, ox-lips (*P. elatior*) and some polyanthus. The Wandas seem to be able to survive, in spite of moderate summer dormancy, perhaps due to poor palatability.

How to survive

The situation is less critical on clay soils, and many old-timers in Victoria maintain numerous primulas in their gardens without much care. In most cases the primulas are derived from a few plants that possibly survived weevil attack on mixed populations and were later propagated and maintained by crown division. In all such cases the primulas are of the *P. acaulis* type or close to it or Victoria Wanda and some Juliana with mauve flowers. These could be a source of weevil resistance.

Recently the primula bed has been doubled in size to accommodate new seedlings, many of hybrid origin. Two such hybrid populations are flowering for the first time this year and are worthy of comment. They are *P. acaulis* x Victoria Wanda and *P. acaulis* x (pallasii x Toronto Wanda). In both crosses the same *P. acaulis* was used as the female parent.

Hybrid features

The hybrids having Victoria Wanda as their male parent all have red or mauve flowers, some on scapes up to two inches and do not differ appreciably from a commercial mixture of hybrid *P. acaulis*. Their value is chiefly to indicate weevil resistance.

The second cross yielded seedlings with white, yellow, red and mauve flowers in umbels on scapes up to three inches, or without scapes. They include several whites and pale yellows with somewhat fringed petals that are worthy of pursuing further.

Reference:

Mr. C. Heimburger, a pleasant gentleman and capable gardener, now lives at 2060 McNeill Ave., Victoria, B.C. Canada, V8S 2X8. We can share his distaste for weevil migrations and the desire to grow resistant plant strains.

Show calendar

The following dates were reported by local societies by press time:
April 1-2, Washington State Primrose Society; Lutheran Church of Atonement, 740 S. 128th St., Burien, Wash.
April 1-2, Valley-Hi Primrose Society, Beaverton Mall, 3255 Cedar Hills Blvd., Beaverton, Ore.
April 8-9, National show, Pacific National Bank of Washington, Villa Plaza (Lakewood area south of downtown), Tacoma, Wash.
April 8-9, Mt. Angel Primrose Society, Mt. Angel, Ore.

Colored paper mosaic of cowslip by Mrs. Delany, Windsor Castle, reproduced from Blunt's book. Mrs. Delany was a "woman of fashion who moved through the great salons of the 18th century and was at ease in the courts of the kings." She began making the cut-paper flowers at age 72 and ended at the age of 85 when her eyesight faded. She died in 1788 at age 88.

Art + science equal botanical illustration

Is the botanical artist the servant of science or art?
That is the question Wilfrid Blunt asked when he published "The Art of Botanical Illustration" in 1950. He answered his own question.
"There can be no doubt that he must learn to serve both masters," he wrote. "The greatest flower painters have been those who have found beauty in truth; who have understood plants scientifically, but who have yet seen and described them with the eye and the hand of the artist."

Traces development
Blunt's comprehensive book traces the development of plant illustration from the earliest efforts of cave dwellers to the beautiful and highly technical paintings printed in modern publications. Almost all the processes of reproduction have been described—woodcutting, etching and metal-engraving, many combinations of aquatint, mezzotint and stipple, then lithography and photography.

Blunt says watercolor on vellum was one of the earliest methods used. It has remained "one of the most excellent for recording delicate detail." He notes that pencil is "invaluable for quick notes, and pen and ink is used for reproduction by line block."

Not so easy
Landscape artists, Blunt says, may think the flower painter has an easy task. He doesn't have to worry about shifting skies and changing light.
"But only those who have attempted to draw flowers can appreciate what restless models these can sometimes be," Blunt points out, "how quickly petals open and..."
Edith Hilder's detailed study of cowslips in soft pencil, using a '4B' for the leaves and an 'H.B.' for the flowers.

Stems curve.

He adds, "Further, the color of many flowers is so dazzling that at the best it can only be approximated in paint."

**Passion for flowers**

The author claims that a botanical artist must have a "passion for flowers." A good draftsman can make a precise study, but "unless he loves what he is drawing, unless he knows the flower in all its moods, in all the stages of its development, there will be something lacking in his work."

Blunt says that anyone who wants to study flower painting should first study flowers.

**Observe one plant**

"It is not enough to enjoy the bright tapestry of the herbaceous border, to walk with pleasure through primrose woods in spring," he stresses. "To get a deeper understanding and a fuller joy, you must observe the individual plant. If you will also try to draw it—however badly—so much the better."

He urges the beginner to notice the texture of the petal, the veining of the leaf, the structure of the seed pod, to watch the bud unfold, the flower mature and the petals wither and fall.

**Study, look closely**

"A little knowledge of botany—by which I mean some elementary understanding of the structure of a plant, the functions of its various parts—is obviously of value," he says. "Anyone who studies a flower will soon feel the desire to know why it thrives, how it keeps its enemies at bay, how it is fertilized and by what means it propagates itself."

He advises, "A small magnifying glass is of great assistance in the appreciation of plant structure and will reveal undreamed-of beauties in the humblest flowers."

**'If at first . . .'**

Another writer, Edith Hilding, says, "Constant observation and drawing trains both eye and hand; style grows with confidence and conviction. One learns to draw by constant practice; the best way to learn is to carry a sketch book and to make drawings and sketches whenever possible."

Her small paperback book, "Drawing Wild Flowers," includes simple diagrams showing the basic structure of plants. She also discusses leaves, silhouettes of flowers, collecting wild flowers, materials, drawing a wild flower, drawing with a brush, simplified tone, conveying texture, pattern and local color, drawing on black paper and on a grey background, counter-change and composition.

Both books were acquired from Wheldon and Wesley, Ltd., natural history booksellers and publishers, Codicote, Hitchin, Herts., England.

**Getting insight**

Study and practice can provide insight. Blunt concludes his books with this statement:

"A careful study of the best botanical drawings will open our eyes to the endless variety of nature and train them to enjoy, not merely the obvious charm of bluebell woods in spring, but the subtler beauties of color, rhythm and texture, the structural miracle of cell and tissue, which are to be found in each individual flower, however humble."
How about drawing your own primroses?

by Karen Morris

After you learn the basic technique you can fill in your drawings with colored pencils or water colors.

Do your first drawings in pencil lines - be prepared to erase a lot.

Be patient with yourself!

1. Practice these lines and shapes first:

2. Draw an irregular circle.
3. Then a small 5 pointed star.
4. Draw a larger circle the size of a quarter in fine pencil line, fit your small circle with the star into the center.
5. Between each star point draw a straight line.
6. Draw a notch where line comes from star.
7. Draw a notch where line comes from center.
8. Draw another line from next star point to meet circle edge.
9. Do this with each star point until you have 5 petals - alas! you have just drawn your first primrose bird's eye view.

Now go on to next page!
HOW ABOUT A FRONT VIEW?

1) DRAW YOUR OUTER CIRCLE WITH A PENCIL AND DRAW A SMALLER CIRCLE INSIDE IT.
2) FROM CENTER CIRCLE DRAW TWO FINE PENCIL LINES TO CIRCLE EDGE. 
3) DO YOUR PETALS AS BEFORE, THEN CONNECT THE TWO LINES TO CENTER CIRCLE EDGE AND FILL IN THE SPACE BETWEEN.
4) ADD TWO LINES FOR STEM AND LEAF.
5) THERE IS YOUR PRIMROSE FRONT VIEW.

LETS DO A LEAF!

1) PRACTICE MAKING WAVY LINES LIKE THIS.
2) DRAW A SLIGHTLY CURVED LINE LIKE THIS.
3) ADD ANOTHER CURVED LINE ON EACH SIDE AND CONNECT TO CENTER.
4) NOW MAKE A WAVY LINE LIKE THIS. YOU PRACTICED ON YOUR THICK PEN LINES. ERASE THIN PENCIL LINES.
5) ADD SOME VEINS AND THERE IS YOUR PRIMROSE LEAF!

LETS PUT IT ALL TOGETHER!

1) FIRST OUR FLOWER VIEW FROM FRONT WITH A STEM.
2) WITH THIN PENCIL WE WILL DRAW OUR CENTER CURVE FOR LEAF AND OUTSIDE CURVES.
3) NOW DO YOUR SMALL WAVY LINES AND VEINS OF LEAF AND ERASE THIN PEN LINES.

NOW HAVE FUN AND PRACTICE HOW YOU CAN PUT DIFFERENT FLOWER HEADS AND LEAVES TOGETHER.
In cold areas should one mulch heavily after frost?

The time to mulch primulas in cold areas is late fall before the ground freezes. One should remove all dead foliage at this time and mulch with compost or well-soaked peat around the plants. NEVER allow any mulch to be on the crown of a plant; that will cause rot. After several hard freezes one should walk around the garden and press around each plant with the foot. That will keep the ground from heaving. At least it will help. It is always wise to watch in late winter or very early spring if there is any heaving and "step it down." After the last fall check evergreen branches should be placed over the primrose beds.

-Alice Hills Baylor
Altaica. What’s in a name?
The name is derived from the Altai Mountains of north central Asia. Plants bearing the name are usually part of the Caucasian Siberian flora.

Confusion
It has been used on several species of plants of different generic origins; but, more confusing, it has been used to name several species of primulae genus—in more than one section. It has been used as a synonym for P. fannosa var. demidata and var. intermedia.

Only the plants of the vernales section will be considered here. Two are described by Smith and Fletcher in "The Genus Primulae." They are P. amoena on page 408 and P. elatior ssp. pallasii on page 424.

Third type
I am sure we are dealing with a third type—a hybrid. This may have evolved from the first or second type with the introduction of P. juliae. This is the type that is often written about in former issues of the quarterly.

In fact, the article "Time to call a Garyarde a Garyard" by Cecil Monson speaks of "altaica with its heart-shaped leaves and creeping form." Other authors in Ireland also have spoken of this form in the breeding of juliae hybrids.

Solving the mystery
In my garden we've tried to clear up some of the mystery of the "altaica" over the past 10 years. We have raised 12 lots of P. altaica from seed we got from several exchanges and commercial sources.

From two to 25 plants grew from each lot. One lot resembled P. amoena, type one. Two lots produced plants close to elatior ssp. pallasii, type two. The other nine lots were type three.

How type three grows
Type three plants were medium to small in size. They had heart-shaped leaves and creeping roots that resemble the growth of P. juliae. However, in all cases they had various shades of purple flowers—from two to four of them in a polyanthus-type cluster.

All three types of plants are very early bloomers.

Need two-thirds juliae
We found that after several years of hybridizing we could produce this third type of plant by back crossing any of the juliae hybrids carrying P. elatior or amoena blood if the plants carried at least two-thirds juliae blood. By crossing these together, we get the third type to set.

The name "altaica" definitely has applied to three types of vernals in the past—as well as now: type one, P. amoena; type two, P. elatior ssp. pallasii and type three, P. juliae 2/3 x P. elatior, P. amoena or P. other vernal.

Enough experimentation?
Approximately 200 plants were raised over a period of 10 years to bring about these comments. Some may think that's not enough. I would be most happy to hear from anyone about this subject.

The name "altaica grandiflora" often is used to describe the plants or seeds. This would mean it should be a large flowered form. Usually this wasn’t the case. These also had small purple flowers.

Reference:
The Genus Primula: Section Vernales Pax. by W. Wright Smith and H.R. Fletcher.

Dr. Ralph Benedict, our friendly Michigan grower, reports 30 inches of snow on March 1 and temperatures 15 degrees below normal all winter long. He keeps warm by clearing a quarter-acre of woods so he can plant 75 dwarf fruit trees—mostly old varieties. (Also keeps warm by burning the cleared wood to heat his house!) He lives at 14 Alpine Dr., Hillsdale, Mich. 49242.

Where’s the membership list?
Dues are still coming in.
It is difficult to compile a complete list while renewals are slogging through the mails. Therefore, publication of membership will be postponed until the dormant season—the fall quarterly.

The membership list should be used to locate fellow members in each area. APS officials urge local clubs to invite national members to attend local club meetings. Share plants and seeds with them.

If you find a few members in your area where there is no local club, get together for a garden visit or meeting. Write to foreign members. Find out what their specialties are. Foreign members should write to specialists in the United States.

The main function of APS is to spread plants, information and friendship. Each member will benefit by paying dues promptly so his name can appear in the 1978 list.
Still waiting?
So are we.
American Primrose Society dues are past due!
If you've paid, great.
If you haven't, we hope to hear from you very soon.
Send dues to:
Edward Pincus
11813 100th N.E.
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I have a question!

Answers by Alice Hills Baylor

Q. I have several primulas in the bird's-eye group and have heard about P. darialica. Is it among the more difficult ones to grow?
A. P. darialica is one of the charmers and is a robust member of the little ones in that group. It is long lived and a profuse bloomer. The heavy farina on the underside of the foliage is attractive. The color of the flowers is a good shell pink. This one, like some other of the smaller types, needs to be divided often as the roots become entwined and packed so that the plant cannot take up enough plant food.

Q. Will you kindly give me some information on P. edgeworthii?
A. This is a very beautiful primula and has over the years become confused with P. winterii. They are synonymous. This true miniature is sky blue and was discovered in Kumaon by Commissioner F. Winter in 1911. It blooms very early in spring and should be in a site which is sheltered but not too moist. I had it for three years and it bloomed but did not set seed. It grew in a crevice above a low stone wall in the garden where drainage was sharp. There is a record of some plants having many flowers on the short stem, but my plant did not have more than five. Alas, it did not throw any side shoots. It is but a beautiful memory.

Q. Will you tell me which are the nicer and more reliable members of the candelabra group?
A. My favorite is P. pulverulenta. The Bartley strain is a lovely shell pink. It stands straight and has full stem of tiers, so it is an eye-catcher. P. silva-taroucana Unique is a startling hybrid from a cross of red pulverulenta and the tiny P. cockburniana, which is turkey red. Then the cross of cockburniana and Pink Lady japonica gave me all the sunset and sunshine blends. P. fujiyama is a large flowered white heavily set with florets. The good easy yellow is P. bulleyana, which is without farina but will throw some startling hybrids when crossed. I had seed of P. serratifolia from the late Chester Strong of Loveland, Colo., in 1957. They germinated easily and gave some fine plants. The flowers are not as heavily set on the stem nor are there as many tiers. The entire plant is smaller and the scapes shorter. The flowers are a splendid yellow with a strip of orange extending from throat to edge of corolla. It was not long lived but when crossed with deep pink japonica it throws some lovely shades of opal and deep red. Anita Alexander has done much in the way of hybridizing the candelabras, and her ravine is a mass of rich color.

Q. Will you please give me an account of P. secundiflora?
A. My notes show I first generated seed of secundiflora in 1954. They bloomed May 24, 1955. It is a long lived member of the sikkimensis group but quite different in some respects. It blooms earlier; the foliage is glabrous with many finely serrated leaves, and the flowers are a rich purple. The florets are on a 3-inch scape, and one-sided umbel with eight to ten flowers. There is slight farina on upper part of scape. It was collected by E.H. Wilson but was first discovered by Delavay in 1884 in glacial debris in the Likiang range of Yunnan. It was named P. vittata by Franchet but now is considered only a form of the many specimens studied. There is another form of colored sikkimensis, P. ioessa, the seed of which was given to me by Mrs. A.C.U. Berry. It is lavender or mauve but rarely white and a fine plant.

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.

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Diary of a Primroser

by Cy Happy

Just came in from viewing the primroses and auriculas (March 2). Touch of frost last night. Just right for holding the early bloomers back a bit. A few of the jack-in-the-green and hose-in-hose seedlings look promising.

My crosses on Marguerite Clark—a yellow julie—are solid cushions of yellow. Jim, age 6, picked a bunch of violets for his mother. Spring is here again with all its miracles. New seedlings of your own crossing make you a part of it.

Rock gardeners like primroses!

Rita and I took in the excellent rock garden study weekend at Port Angeles, Wash., on Feb. 10-12. Attendance was over 500 dedicated gardeners—including quite a few primula lovers. One, C.C. Heimburger, 2060 McNeill Ave., Victoria, B.C., asked if we could find him starts of P. megaseaefolia to use in his hybridizing program. Who, besides Lawrence Wigley, grows it?

Met a young nurseryman who grows selected choice plants, including P. x pubescens, P. x bilekii (minima x hirsuta) and P. wulfeniana (a tiny rosy jewel from the eastern Alps). The grower is Phil Pearson, 21809 S.E. 56th. Issaquah, Wash., 98027.


Needed: some volunteers

As the nominating committee worked on the slate of new officers, they reviewed the total membership list. Sure would like to have some members volunteer in 1979. Need to include new people with fresh ideas.

We hope to inspire writers of primula articles to illustrate their work. Karen Morris’ article shows how it can be done. Kris Fenderson made a very presentable illustration using only a botanical description of the plant. Get busy!

Where to stay in Tacoma

Requests for motel information from people planning to attend the national show indicate others may find it helpful too. The best and closest is Lakewood Motor Inn, 6125 Motor Ave., Tacoma 58499. It runs about $25 a night for two. There are many motels a few miles away along the freeway—Rodeway, Oakwood Motor Lodge and Biltmore Motel to name a few. The last two are less expensive.

The Friday and Saturday after the national show Vancouver Island Rock and Alpine Garden Society will hold its show at St. Mary’s Church Hall, Elgin St., off oak Bay Avenue in Victoria. That’s April 14 and 15. Details from C. C. Heimburger. Skilled growers—good show.

March judging workshop polished skills. Participants practiced setting up a “show.” Then they judged the plants.

In 1955 Mr. Goddard of Victoria came to the APS show in Tacoma with a display of double polyanthus. I heard his family still grows them. Another great source of show auriculas in those days was the Hibbersons of Victoria. A present-day Victoria auricula and asiatic primula specialist is Mrs. L.B. Carruthers, 736 Haultain St., Victoria V8R 2L2. Hope to get an article from her.

Do gardens grow up or across?

Had a phone call from George Waters, editor of Pacific Horticulture. He was desperately in need of a vertical color slide of a rock garden—good rock outcrop with flowers. We sent him a few. Why are rock garden pictures usually horizontal? Photographers, let a few editors—and especially us—see some of your slides and black and whites. Get them out where they might be used.

Dr. Ralph Benedict of Hillsdale, Mich., has more fun with primroses. Always hybridizing and trying new crosses. In south central Michigan he is just a few miles from Ohio and Indiana. We have a lot of members in that area who should get in touch.

Old books, new mug

Rediscovered a catalog of garden books from Watch House Rare Books, 9 Holly Place, London NW3 6QJ. They offer several sets of my favorite, “The English Rock Garden” by Reginald Farrer, and Sampson Clay’s “Present Day Rock Gardens,” plus most of Farrer’s other books. They are not cheap. When I’m looking up a primula, I always want to see what Farrer says about it.

A china mug decorated with primroses is the APS show trophy designated as “The Editor’s Mug.” The editors will select their choice of the best photographic subject that
Old fruit varieties + primroses

A group dedicated to preserving old varieties of fruit and making them available to its members is the Home Orchard Society, 2705 SE 166th, Portland, Ore., 97236. Their scion exchange offers apples—Northern Spy, Bellflower, Fall Bough Sweet, Red Astrachan, Cox's Orange Pippin and many others. Grafted on semi-dwarf roots, they make good shade for primulas without invasive roots.

If there is an old variety of fruit you would like to grow but can't find it, your APS editor would like to help. H.O.S. offers a yellow fig that is a dandy. We just received another excellent booklet: "Fruit Tree Cultivars in British Columbia." Pub. # 1009-1977. Order from Information Division, Canadian Dept. of Agriculture, Ottawa, Ont., K1A 0C7.

On saving energy and climbing mountains


Tentative date of Washington State Primrose Society show is April 1-2, Lutheran Church of the Atonement, 740 S. 128th St., Burien Wash.

Boyd Kline, part of the program at the rock garden study weekend and partner in Siskiyou Rare Plant Nursery, showed slides of P. angustifolia, P. parryi- as he told of his plant hunt in the Colorado Rockies last summer. His companions were Roy Davidson and our own Panayoti Peter Callas, whose article brightened the previous quarterly. Boyd's is the first place to look when searching for rare alpines and primulas, especially American primulas. Address is 522 Franquette, Medford, Ore., 97501.

Alpine Garden Club of British Columbia plans many activities this year, including a wildflower trip to the Siskiyous on the Oregon-California border from June 24 to July 2.

Want striped auricula seeds?

C. Allan Hawkes, one of my favorite auricula writers, discusses striped auriculas in the 1977 NAPS Southern yearbook. Must share seed with him. Crossed Ralph Balcomb's double striped mauve with a striped semidouble from my dusty double strain.

The same dusty double that created the stripe produced one very good yellow self show auricula among the mud colors, mustards and puces. If anyone wants a few seeds of the double stripe, send me a self-addressed stamped envelope and an article—or at least information we can print.

National show info

See you at the national show April 8 and 9 and at the annual banquet on the 8th. All members and guests are welcome. Out-of-towners should check in with Milton Gaschk. He will conduct a garden tour and look after visitors. The show opens at 1 p.m. on Saturday. Come early or the night before and we'll put you to work.