



PRIMROSES

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ON THE COVER...

Mary's Gold in the garden of Don Keefe, Redmond. This *Primula x juliana* of Sakata origin makes a cheerful and long lasting display. More about Don's *Julianas* on page 5.

Photo by Cy Happy.

PHOTOGRAPHIC CREDITS

Photos for this issue were taken by Cyrus Happy, President, and Jennifer Lort of Victoria, B.C. Tony James, Sybil McCulloch and Susan Ryley of Victoria kindly allowed their primroses to be photographed.

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PRESIDENT'S MESSAGE



The last time I wrote a president's message was 33 years ago—and something like five gardens ago. A durable single white polyanthus blooming now has my hybridizing that was started in 1950 and was ultimately a cross of Garryard Guinevere pollen on my fertile double. That plant spans my active involvement with primulas. It not only marks my seasons, but it epitomizes the hardy perennial hybridizers must strive toward.

On the subject of polyanthus—they seem to be in very short supply at the primrose shows this year. For years they dominated the shows. Now the new hybrids from Japan and Europe seem to be mostly acaulis. Let's not neglect and lose the good polys.

Primula conference

The push this coming year will be toward a successful primula conference in Portland, Oregon, on April 10-12, 1992. We have an excellent director. Greg Becker has developed a comprehensive plan for this three-day event.

Volunteer workers will be needed. Check with Greg, PO Box 3723, Eureka, CA 95501.

The national show will be in our convention center. Let's make it a great show. Start now. Divide your best plants. Pep up your soil. Have the plants in top condition going into winter. Plan ahead. Have winter protection ready in case it is needed. Use 0-10-10 fertilizer in the fall and again in February. Give plants protection just before the show.

There is still time to start seed of the faster-growing varieties. Let's show the world we grow great primulas. Growers in Washington, Oregon and British Columbia, that especially means you!

Jay Lunn article

Jay Lunn has done what I have waited for a very long time. His article, "Wild Primulas

of Western America," is a treasure. You'll find illustrated with beautiful color photos in the Spring 1991 Bulletin of the American Rock Garden Society.

At last we can study good color pictures—closeups and habitat—of *P. parryi*, *P. capillaris*, *P. nevadensis*, *P. angustifolia*, *P. maguirei*, *P. cusickiana*, *P. domensis* plus *P. specuicola* and *P. ellisiae*. *P. suffrutescens* and *P. rusbyi* are included with Jarmila Halda's excellent line drawings. Other American primulas are described in the clear and concise text.

All in all there are five primula articles and two primula portraits in this issue. It should be in every primrosers' library.

Old favorites

Wandering through the Duseks' shade garden in Graham, Wash., where the erythroniums and trilliums thrive, I was pleased to see a patch of double primroses. Lilac Quaker's Bonnet, Cottage White and Marie Crousse all were blooming and spreading happily with minimum attention.

Nearby grew several groups of blue primroses—the gentle blue of 20 or more years ago. These old established plants all had survived two rare sub-zero cold spells last winter. Incidentally, Marie Crousse is getting hard to find.

Slide chairman

APS needs a new slide program director. We need new slides too. Also, we should consider putting slide programs on video. These are easy to mail and easy to copy. Does this project appeal to anyone?

Think advertising.

When a product or service is of special value to primula culture, please inform the editor. We can then request an ad for the quarterly. For example, Lilly/Miller's Pestkill is effective in controlling strawberry root weevil, a pest which eats primrose leaves in

the summer and in the larvae form eats the roots all winter. Lilly/Miller should advertise with us.

And again, Viette Nursery, Rt. 1, Box 16, Fishersville, VA, has offered a nice double polyanthus (called "Mark Viette") for several years. It strongly resembles 90-year-old rose pink Bon Accord Gem.

Interesting reading

Just read two British murder mysteries by John Sherwood. "Green Trigger Fingers" includes much primrose lore. "A Botanist at Bay" has the New Zealand alpine flora playing a major role. Wonder if we could get a short story from him for the quarterly!

Our sincere thanks

Three members have been contributing more than their share to the society—Larry Bailey, alternating between president and editor; Flip Fenili, using his organizing skills as president; and Candy Strickland, rescuing the seed exchange at the last minute in addition to mailing our publications. We hope your efforts were rewarding to you. We can't thank you enough.

The New Nomenclature

The structure of the genus *Primula* has undergone some alterations over the last 50 years. Until recently, primula growers and students used the Smith & Fletcher nomenclature completed in 1949. Since then many new species have been discovered and are still being discovered. Moreover, new taxonomists have contributed to primula knowledge; Fedorov, Kress, Valentine, and Wendelbo.

Primula sections have been moved around, fitted into subgenera and broken up into subsections. My personal reaction at first was that I was too old to learn all the changes, especially the new jaw-breaker names for some of the sections. However, after spending time with Fenderson's *A Synoptic Guide to the Genus Primula*, I am feeling better about the changes. Kris Fenderson says the book is an effort to gather all the new information and incorporate it with Smith and Fletcher. Meanwhile, more studies are being completed. The book is a major stepping stone toward a comprehensive study of *Primula*. By the way, there may be errors or typos but I have yet to find one. The book is a must for the serious student. Masterfully done!



'Mary's Gold,' one of Don Keefe's Sakatas.

JULIANA PRIMROSE COLLECTION

by Donald D. Keefe

For just over three years, I have been collecting and growing *primula X juliana* plants. There are now over 500 plants in the garden that I have grown from seed, or acquired as plants in the last year. Some of my sources have been:

- three Barnhaven Juliana strains from seed
- two *P.X pruhonica* strains from seed of the Jellito Company of Germany
- Sakata Company Japan, Julian Hybrid varieties from seed
- Thompson and Morgan Company seed
- Craven seed from England.

Many of these seedlings are already in bloom (as of March 2, 1991) and I feel their flower colors are far superior to the traditional named Julianas we have in gardens.

Listed below are some of the more than 75 Juliana varieties I currently have in the garden. 'Mary's Gold' and 'Mary's Red', 'Mary's Red Number 2' and 'Mary's Fuschia Semi-Double,' all named for Mary, the light of my life and helpmate, deserve special attention for their toughness, bright coloring and attractiveness. The first three are Sakata Julian Hybridas, and are small, vigorous plants. 'Mary's Gold' blooms almost constantly throughout the year. While all Sakatas are attractive, there are few others as choice.

The two strains, one an F-1, acquired from Jellito Company (Germany), are strikingly unique. About one third of them have many of the characteristics of the Barnhaven Cowichans, except that they are cushion, not stalked, plants. Many are larger than the typical *P.juliae* hybrid, which is a minus. However, their leaves have an unusual, heavy, corrugated look, and are a deep green with a bronze edge that is especially attractive.

Many of the flowers on the Jellito plants have that distinctive, exotic, satin sheen of the true *primula* 'Cowichan' and the color range extends from gorgeous pinks, both light and dark, through red, violet, blue, even to white. The flowers have the typical eyeless or tiny star eyes of Cowichans.

I found no evidence of creeping root stalk, nor did Rick Lupp, who also grew some of these over the winter. Nevertheless, they are ultra-choice plants that deserve extensive propagation by root cuttings to perpetuate plants with their attractive features. I strongly suspect that the plants are a cross between Barnhaven Cowichans and the many Barnhaven cushion Juliana color strains developed over the years, but with the *acaulis*, not polyanthus habit.

The list is a carry-over from last year, and



A group of Julianas grown from Sakata Seed.



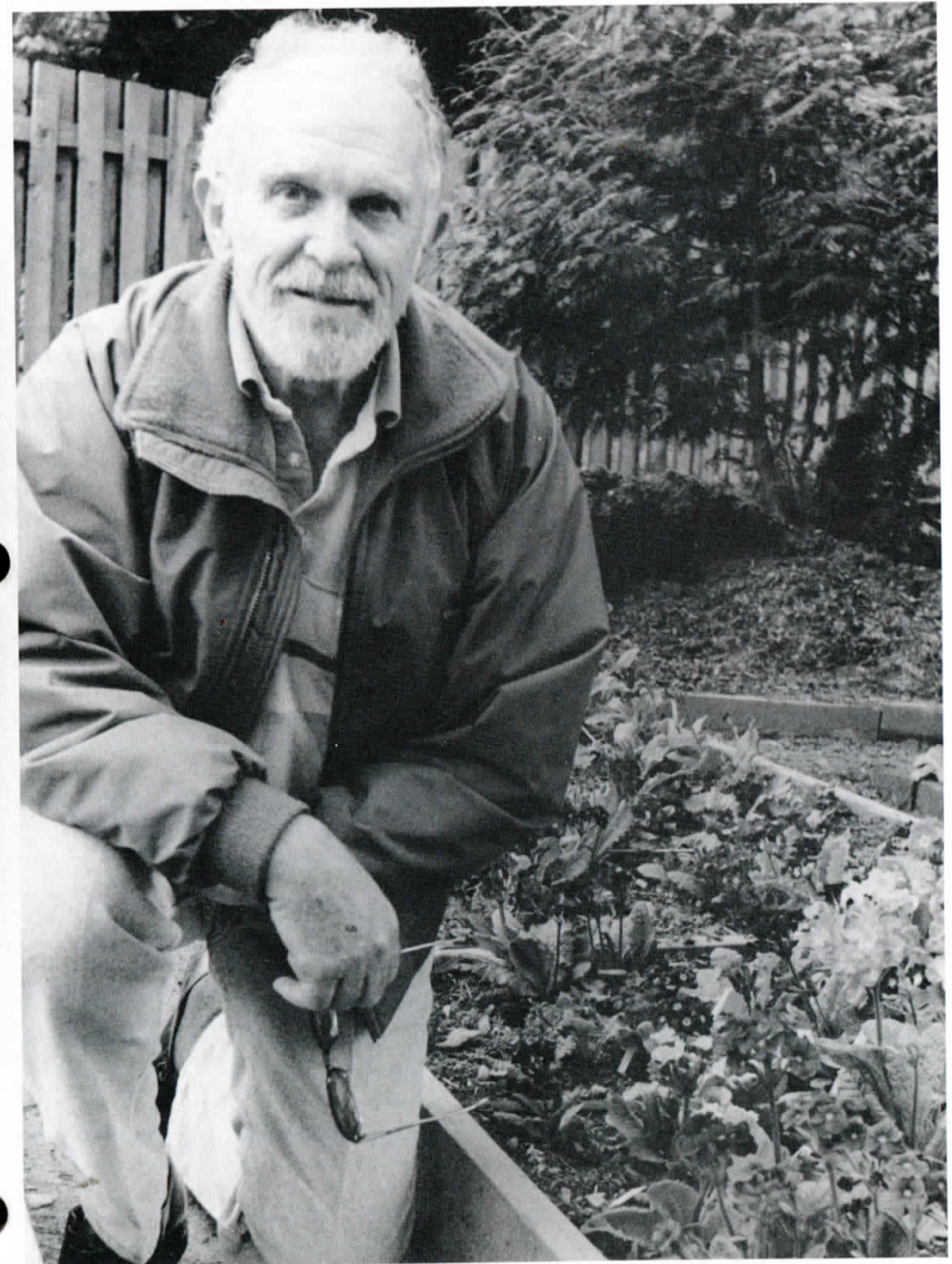
Distinctive, textured leaves of the Jellito strain.

Amy	Mary's Purple
Anita	Mary's Red Cushion
Bea	Mary's Ruby
Betty Green	Mary's Streaky Wanda
Buckland Primrose	Mary's Truly Pink
Butterball	Mary's Velvet Red
City of Bellvue	Millicent 2
Crispii	McWatt's Cream
David Green	Mrs. McGillvary
Dorothy	Nettie Gale
Dark Red Cushion	Old Port
Gracie	Peter's Blue Streak
Ida	Peter's Curly White
Irish Gem	Peter's White
Jay Jay	Pink Cushion
Jay One	Primrose Lodge
X Juliae-like light blue	Roberta
Juliae X Cowichan,	Royal Velvet
Amethyst, Garnet	Sakata Tiny 'Red Pet'
and other color forms	Sakata True Red X
Juliae species	Gold-Laced Polyanthus
Kay	Sakata Salmon Pink
Kinlough Beauty	Sakata Cy's Smokey Red
Lady Greer	Sakata Jary's Coral
Light Yellow Fan	Sakata Pink Bi-color
Lillian	Sakata Pink-White
Little Anne	Bi-color
Little Gem	Sakata True Yellow
Mary's Fuschia	Snow Lady
Semi-Double	Snow Maiden
Mary's Gold	Snow Queen
Mary's Golden Brown	Snow White
Mary's Pink Frost	Wanda
Mary's Pink Touch	Yellow Bi-Color

lets me keep track of the strains I have. As is often the case, I have a limited supply of many of the Julianas in my collection. However, for any that I have surplus plants, I would like to swap for other Julianas. If you don't have any Julianas yourself, there are other plants I would consider:

- show, alpine or species auriculas
- Petiolarid primroses, species and hybrids
- named pulmonarias
- named lamiums, or other unusual, named garden plants.
- gentians or lewisias

Don Keefe is an enthusiastic and dedicated primrose grower, living in Redmond, east of Seattle. He is to be commended on his dedication in raising, collecting and perpetuating such a large number of primula X juliana in such a short time.



Don Keefe by one of his raised Primula beds.

A PRIMROSE GARDEN IN ALASKA

by Marie Skonberg

About six years ago, I became serious about growing primulas. Until then, I only had some *Primula polyanthus* and *P. X julianas* given to me by my grandmother, who is now 85. There were also a couple of *P. sikkimensis* and some *P. denticulata* which had been given to me by my great aunt, now 87 years old. I was beginning to think that primulas were a well kept secret until I bought *Gardening by Mail II*. This wonderful book contained a listing of nurseries that sold primulas, addresses of companies and bookfinders to obtain books on primulas, and the American Primrose Society - I was on my way to the wonderful world of primulas.

Collecting Plants

I ordered plants from various companies: The Primrose Path, Cricklewood Nursery, Rice Creek Gardens, Nature's Garden, Mt. Tahoma Nursery, Colorado Alpines Inc. and Montrose Nursery. The primulas were sent by United Parcel Service, arrived in excellent condition, were planted and thrived! I also ordered primula seed from a couple of sources, but didn't have any luck with germination. It was at this point that the seed list from the American Primrose Society was received. Not about to give up on seed, I ordered several species, carefully planted them in milled sphagnum moss, watered them with warm water, and - lo and behold - my seed germinated!

Growing from Seed

Now I have a number of species and garden hybrids, grown from seed from the APS exchange. I am thrilled at the opportunity to get good fresh seed to expand my collection of primulas. Already I have quite a number:

Primula japonica 'Pink Pagoda,' 'Purple,' 'Oriental Apricot Pagoda,' and a mottled,

red and white Japonica

Primula burmanica, *primula siberica* (formerly *P. nutans*), *P. waltonii*, *P. capitata* subsp. *mooreana*,

Primula vulgaris 'Riesenselekt Mix' and 'Cyrus Gold Centred,' and Rosetta's Doubles, auricula doubles, auricula striped and fancies,

Primula conspersa, *P. halleri*, *P. luteola*, *P. saxatilis*, *P. chionantha*, *P. melanops*.

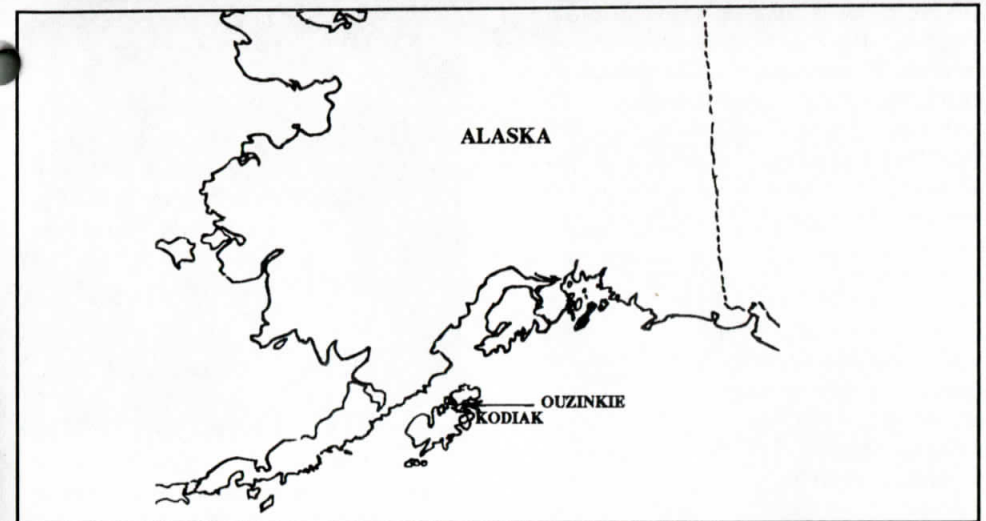
All together, I have over 100 different primulas growing in my garden today: some grown from seed, others ordered through plant catalogs. My goal is to see how many different primulas I can grow here in Alaska.

Primroses in the Alaskan Environment

Ouzinkie is located on Spruce Island, which is northeast from the city of Kodiak. Access to and from Ouzinkie is by plane or



Primula japonica.



Ouzinkie is Northeast of Kodiak on the south coast of Alaska.

boat. Our small community of 200 residents is ruled by the weather. One may feel isolated when visiting, but to us it is an accepted way of life.

The maritime climate on Spruce Island is excellent for growing primulas. We have a lot of rain, cool summer temperatures, rarely above 80 degrees Fahrenheit; winter is around the mid to upper 30's and it very rarely goes down to zero. Snow cover is usually at a minimum: when it does snow, it usually turns to rain, and we end up with slush. We get a lot of freezing and thawing, which isn't good for the primulas. I mulch around the plants in late fall with alder leaves, and sawdust or wood chips, and then cover the gardens with spruce boughs to keep the soil from heaving. The soil is naturally acidic from the numerous huge spruce trees that grow here.

I have most of my primulas growing in raised beds and rockeries around and under the trees. They seem to love it. In the spring I add compost to the primula beds, or kelp gathered from the beaches nearby, and leaf mould gathered from under the trees. Sometimes I also add fish meal or manure, purchased from Kodiak. Right now (February 1991), I have the gardens covered in Remay, because the ground has thawed but there is still a chance of temperatures dipping below freezing. I do everything I can

to protect my precious primulas from destruction.

A Wealth of Flowers

I have large, luscious clumps of *P. sikkimensis* all over the garden. They self seed vigorously, even into the lawn. *P. X juliana* 'Wanda' is also spreading into large masses, covered with so many blooms you



A garden auricula.

can see the lovely magenta colour from the distance. The tiny farinose primroses (*P. farinose*, *P. frondosa*, *P. mistassinica*, *P. modesta*, *P. yunnanensis*, *P. warshenewskiana*, *P. darialica*, *P. scotia*) show their tiny sprays of lavender and pink all along the edge of the gardens, where they grow with gentians and miniature narcissus.

The *Primula denticulata* grow in drifts, their lovely round heads of colour a contrast against the backdrop of the Rhododendrons. The Candelabras reach for the heavens with luminous colors of purple, pink, crimson and orange, while their roots are buried in moist, spongy soil full of peat and leafmould.

Primula seiboldii's curly, crisp green leaves shoulder the most beautiful cutaway snowflakes of lavender, pink and white, while *P. polyneura*, *P. jesoana*, and *P. kisoana*'s furry, fuzzy, plush green leaves push up frond-like buds which open to a heavenly blossom of pink. The evergreen Auriculas show their buds of yellow, purple and lavender, hovering over and protecting *P. x bileckii*'s tiny frame, as her buds magically open to reveal blossoms of lavender-pink with a white eye. She seems too small to bloom so luxuriously.

Primulas are just too beautiful: lovely plants and a thrilling garden pursuit. They are perhaps the most precious plant that God has given us to enjoy. I love my collection of primulas more than words can describe.

A Wish List

I want to continue to collect as many primulas as I can find. I have a wish list:

- *P. X juliana* Buttercup and Butterball,
- *P. sapphirina*,
- double *P. vulgaris* in red, blue or pink and double gold-laced, jack-in-the-greens and especially hose-in-hose.

If anyone has seed or plants of these, I would be willing to beg, trade or buy seed



P. farinosa

or plants for my collection.

Hand-pollinating and breeding primulas is my next dream. Now that I feel confident with most aspects of growing primroses, it is time to learn the joy of producing my own creations. If anyone has knowledge on hybridizing they would care to share with me, I would be forever grateful.

Marie Skonberg says she is 'just a gardener' with 'a love of primroses to share.' Her enthusiasm is infectious, and it is good of her to share with us her experiences growing primroses in the north.

Plan Ahead

Gather and share seed.

APS Seed Exchange
8518 28th Avenue E
Tacoma, WA 98445

NAMES

Ever wonder about the origin of the names of primulas? The following list is reprinted from an article by Ralph Balcom in the summer 1972 issue of the Quarterly.

...Usually a plant is named either for a person or the location where it was found. Sometimes its meaning suggests a characteristic or habit of the plant itself. *Primula japonica*, *P. burmanica* and *P. sikkimensis* refer to the place where the plants were first found. Examples of species named for people are *P. smithiana*, *P. wilsonii* and *P. maximowiczii*. Of course, all of the personal names have latin endings, as required....

Most of the primula names, however, refer to a trait of the plant that caught the eye of the one who named it. Knowing meanings of names of the plants we grow should be of real interest to all of us. Very often it gives us a clue to some outstanding characteristic. Here below is a list of a number of our primulas, most of them species plants, and their meanings:

acaulis - without a stem
algida - cold (algid)
amethystina - amethyst colored
anisodora - scent of anise
aurantiaca - orange-yellow
auricula - ear shaped
capitata - clustered in a head
cunefolia - wedge-shaped leaves
denticulata - toothed
elatior - tall
erosa - notched uneven leaves
farinosa - mealy
glabra - smooth, without hair
glomerata - bunched
glutinosa - sticky
grandis - great
helodoxa - "glory of the marsh"
hirsuta - hairy
hyacinthina - scent of hyacinths
imperialis - majestic
incana - grayish

incisa - edges deeply notched
involucrata - edges rolled inward
luteola - yellowish
macrophylla - large leaves
marginata - distinct leaf margins
malacoides - poorly shaped
minima - smallest
minutissima - tiny
nivalis - snowy
nutans - nodding
obliqua - unequal leaves or sides
obtusifolia - leaves blunt
officinalis - medicinal
pedemontana - foot of the mountain
pinnatifida - feather-like leaves
polyanthus - many flowers
prolifera - multiplies freely
pulverulenta - powdery
redolens - fragrant
reptans - creeping
reticulata - net like leaves
rosea - rose pink
rotundifolia - round leaves
rubra - red
saxatilis - growing among rocks
serratifolia - saw-toothed
veris - spring flowering
viscosa - viscid leaves
vulgaris - common

"Meaning of Primula Plant Names" by Ralph Balcom, *Quarterly of the American Primrose Society*, Vol. 30, No.3, Summer 1972, p. 90.

Ralph Balcom was a foremost expert in growing and hybridizing auriculas in the Pacific Northwest area from the 1950 s to the 1970 s.

CLIMATE DIAGRAMS: A PICTURE IS WORTH A THOUSAND WORDS

by Hans Roemer and Maedythe Martin

Have you ever acquired a treasured primula plant, and then watched it fade and die? If you are willing to learn more about the climatic conditions in the locale where your plants come from, you may be better equipped to predict their special demands and keep them alive. While this goes for all plants you grow, it is particularly important for primulas, because most of them come from climates that are very different from our Pacific Northwest climate.

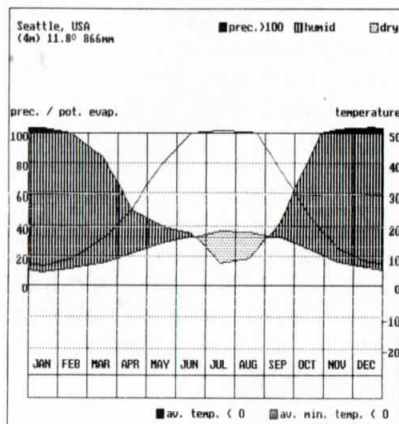
Climatograms

There is a "short-hand" method to characterize climates through "climatograms", originally developed by Professor Heinrich Walter in Germany, but now widely used throughout the world. Climatograms, short for climate diagrams, enable us to compare at a glance the average or characteristic pattern of precipitation, temperature, and their relationship to each other for a number of weather stations. Such diagrams may be plotted for any station for which long-term weather statistics (climatic normals) are available.

Through world-wide comparisons of climates, Walter found that if he plotted the temperature curve and the precipitation curve in the same graph, he could then, by making every 20 millimeters (mm) of precipitation on the vertical axis equal to 10 degrees Celsius, read the approximate periods of water surplus and water deficit from the shaded areas between the two curves.

If this sounds too complicated, simply consider the Seattle climatogram below: the temperature curve is the lower bell-shaped curve with the peak in July, and the precipitation curve is the curve with the high in January and December and the mid-summer low. (The high bell-shaped curve, potential evaporation, is only given for additional reference and may be ignored for now.)

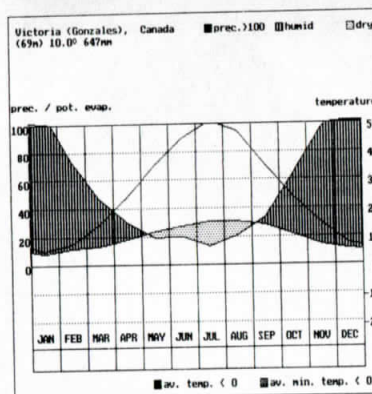
Where the precipitation curve exceeds the temperature curve (vertical shading) a water surplus exists. Where the precipitation curve is lower than the temperature curve (stippled area) a water deficit exists. Precipitation and potential evaporation above 100 mm are shown at 1/10 of their real height as a dark area above the graph.



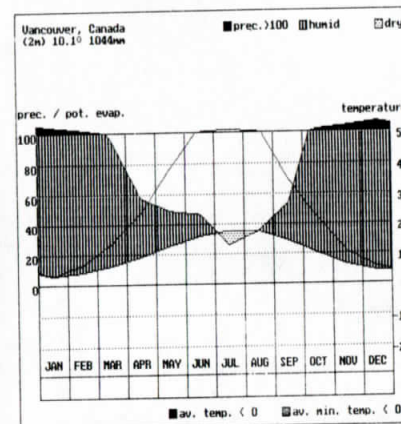
Seattle

Pacific Northwest Climatograms Compared to European Stations

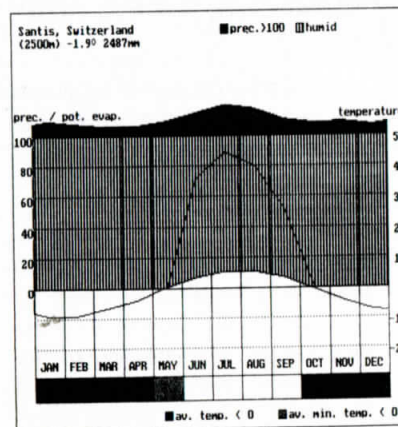
It is obvious that the Pacific Northwest stations all have the same type of climatogram: heavy fall, winter, and spring precipitation, and summer drought of between 1.5 months (Vancouver) and four months duration (Victoria). Average temperatures are 4 to 6 degrees Celsius (38 to 42 Fahrenheit) in winter and 15 to 18 C (58 to 62 F) in Summer. In contrast, the Innsbruck (Austria) climatogram shows almost the opposite distribution of precipitation. There, the highest precipitation occurs during the middle of the growing season. On the average, no water deficit occurs there during this critical time of year. Average temperatures are similar to those of our stations



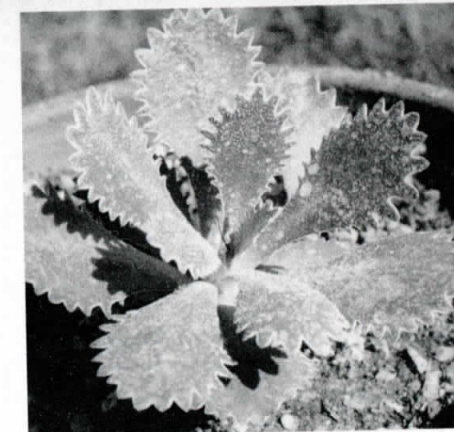
Victoria, Canada



Vancouver, Canada



Santis, Switzerland



P. marginata

only different in having higher total precipitations and colder winters (compare Santis, Switzerland).

Growing Alpine Primulas

What does this mean for the cultivation of alpine species primulas? In their native habitats these plants have plenty of soil moisture available to them during the growing season, unless they grow in very extreme rock habitats. In addition, and probably most importantly for some species, the relative humidity of the air is high during most of the summer. In the winter, most of these species are under a blanket of dry snow.

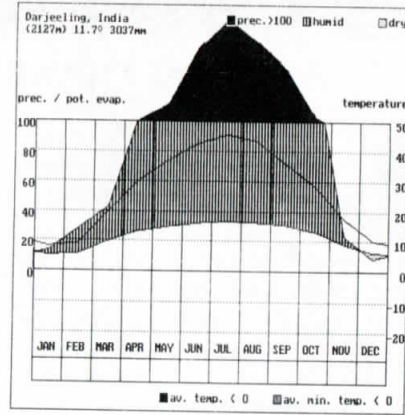
We can now begin to see why primulas originating in Europe and the Alps can only be grown in our gardens here where we water regularly all summer to simulate this period of summer rainfall. Without the artificial climate of the garden, they would perish. While many of our favourite species will be fully exposed to the sun where they occur naturally in the Alps, we would be well advised to compensate for our low-humidity conditions by keeping them in at least partial shade or on a north-facing steep slope in our local gardens. As one may expect, the rock dwellers among the alpine primulas withstand our summers better than those species that grow in an alpine turf community. On this basis, *Primula auricula*, *P. hirsuta*, *P. villosa*, and *P. marginata* are easier than *Primula minima*, *P.*

integrifolia, and *P. glutinosa*. However, all of these species, like most other alpinists adapted to snowy and/or cold winters, suffer from dampness in the mild, rainy winters of the Pacific coast and therefore need good drainage.

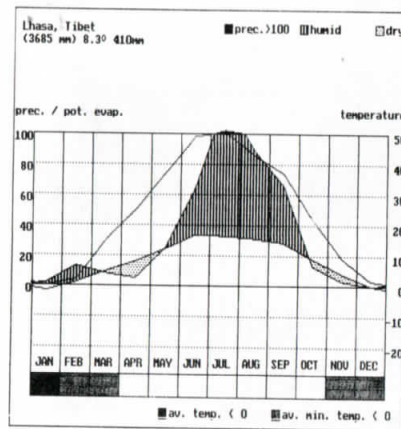
Pacific Northwest Versus Asian Stations

If we call the differences between Pacific Northwest and European climatograms significant, we must call those between Pacific Northwest and some Asian climatograms overwhelming! Not only do all temperate Asian stations show peaks of precipitation during the growing season similar to those in Europe, but we also find that the monsoon influence in that 'primula heaven,' the Himalayas, makes things even worse. The Darjeeling climatogram shows the typical conditions on the south slope of the Himalayas, although primula country starts only at higher elevations (3,500 m). Average temperatures through the seasons are rather similar to Seattle or Victoria. However, the distribution of precipitation could not be more different. From very dry conditions in the winter, the monthly precipitation steadily rises to reach a peak of 798 mm (approximately 27 inches) in July, more than Victoria receives in an entire year, and close to the annual total for Seattle! (NOTE: The total average annual precipitation is at the end of the second line of text at the top of each graph, following the height in meters of the station, the average annual temperature in degrees Celsius. For Seattle, the average annual precipitation is 866 mm).

The same type of distribution of precipitation is prevalent throughout the prime primula areas in the Himalayas from Nepal to Yunnan. Even on the dry north slope of the Himalayas, the precipitation is concentrated in the growing season. The climatogram for Lhasa, Tibet, exemplifies this. Summer rains also prevail throughout China and Japan.



Darjeeling, India



Lhasa, Tibet

Growing primulas From the Himalayas, China and Japan

What was said for the alpine primroses applies in even stronger measure to most Himalayan primulas. One of the better known species is *Primula sikkimensis*, a plant that should occur not far from Darjeeling, although about 1,000 m higher in the mountains. This and other wet-site species from the area expect water-saturated soils and high humidity during the growing season and relatively dry and/or snow-covered conditions from fall to late spring. Contrary to what was said for alpine primulas, however, these tall species of creek banks and similar habitats appear to

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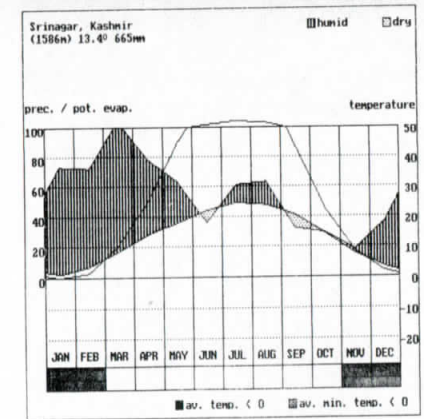


"*Primula denticulata*" is found over a wide range of climates from Afghanistan to SW China and is an easy garden plant.

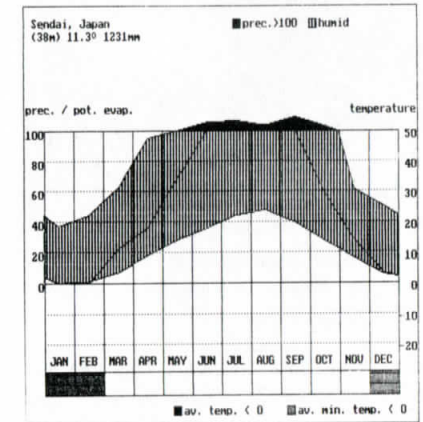
be less sensitive than Himalayan rock-inhabiting primulas. While possibly more resistant to short dry spells, it is mostly the rock dwellers of the Himalayas that are particularly difficult. The Petiolares group with species such as *Primula aureata*, *P. bhutanica*, and *P. gracilipes* is a case in point. Winter dampness and low relative air humidity in summer are their greatest enemies in our coastal climate.

By now the reader will have wondered why *Primula denticulata*, the drumstick primrose, is not one of the difficult species, despite its origin in the Himalayas. The reason is that the geographic distribution of this species spans the whole range of climatic types from summer-dry in Afghanistan to extremely summer-wet in the monsoon countries further east. (Fenderson names virtually all countries from Afghanistan all the way to southwestern China as the species' range.) Our Srinagar (Kashmir) climatogram is representative for the transi-

American Primrose Society



Srinagar, Kashmir



Sendai, Japan

tional area between these extremes, although *Primula denticulata* grows only at higher elevations. It is obvious that the seasonal distribution of precipitation in this area is more akin to that of our own climate than, for example, that of Darjeeling.

To mention just one species from the temperate regions of China and Japan, *Primula sieboldii* (Cortusoides Section) is also a popular and relatively easy plant in our Pacific Northwest gardens. It is reported to be found in wet, grassy places in lowlands, along rivers and in light woods, to 2,000 meters. But even it requires regular watering during the growing season, as suggested by the Sendai (Japan) climatogram. We know that this species does exceptionally well in gardens near Munich (Germany), where the distribution of precipitation

Page - 15



"*P. sieboldii*" in gardens requires summer watering to simulate the summer rainfall of its native Japan.

is virtually identical to Japan. This species' habit to withdraw its foliage by mid-summer helps it to conserve water, but one must remember not to dig it over at this time.

"Easy" Primroses

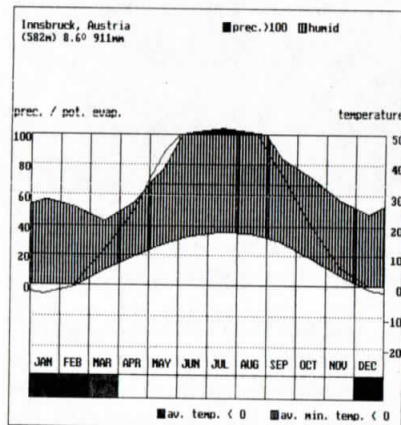
A group of primroses with which we have little difficulties in our coastal summer-dry climate is that of the Vernales Section. This includes the myriad of cultivars and hybrids that have originated from these species. A look at the distributions and associated climate ranges of three important species (and hybrids) in this group explains why they are more tolerant of our climate.

Primula elatior in its many subspecies is known to range from Europe to central Asia. This very large range includes climates such as the one shown above for Innsbruck, Austria, but also the one illustrated for Kars, Turkey, a station near the southern Trans-Caucasus. In the latter diagram a transition

between the European precipitation pattern and the pattern of the summer-dry mediterranean stations (compare Tripolis, Greece) is evident.

Primula juliae has its home in a similar transitional climate of the East Caucasus.

Primula vulgaris (formerly *P. acaulis*), the "English primrose", is probably the only species whose range includes some mediterranean countries. This is significant because the precipitation pattern in the mediterranean areas matches that of our summer-dry coastal areas very closely (compare Seattle and Victoria climatograms with that of Tripolis, Greece). *Primula vulgaris* is indeed the only primula which will survive our summers with nearly no special care, especially if it is grown from seed or plants

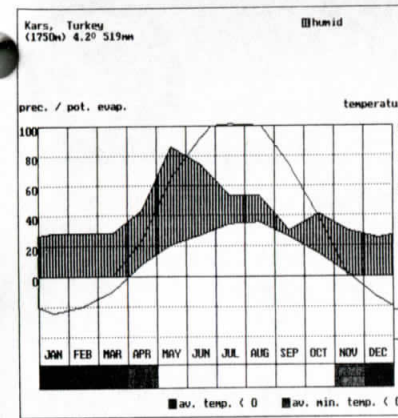


Innsbruck, Austria

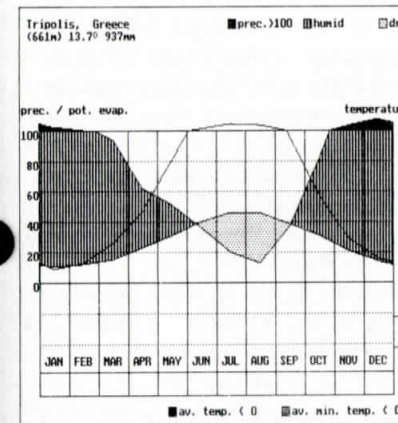
collected in or near the Mediterranean region.

Putting Climatograms to Work for You

Climatic data and climatograms can provide significant information on the cultural requirements of non-native species of primulas in our gardens. However, actual, short-term weather conditions and special microclimates, both in our gardens and in the native habitats, may on occasion seem to prove the long-term averages wrong. It is therefore important to understand them for what they are: **generalizations**. They are



Kars, Turkey



Tripolis, Greece



"*Primula vulgaris*" is found in a wide range of climates, including some mediterranean regions with a climate pattern of summer drought similar to the Pacific Northwest.

also **approximations**, because it is rarely possible to find the records needed for the construction of climatograms for exactly the local and elevation where the species under discussion occurs. But the information they do provide might give you the clue to make the difference in growing a special, beautiful species primula.

Hans Roemer is an ecologist with a serious rock gardening interest in Victoria, B.C. He has designed, with the help of his son, a computer program to generate the climatograms for better cultivation of his alpine plants. Any comments on climatograms would be welcome. Direct them to the editor who will pass them on to Hans.

ROUND ROBINS



"Join a Round Robin, exchange ideas and information, become friends..."

This is how the information sheet on the American Primrose Society Round Robins starts. The APS member in charge of the Round Robins, Elizabeth van Sickle, has been sending Robins around for more than six years, and has some comments on just what is a Round Robin.

There are five groups up and running right now, each with 6 to 7 members. Ages range from people in their 20s to their 80s, and these people live all over the United States, as well as in England, New Zealand and Australia. The idea behind a Round Robin, is the exchange of information on primroses, for those APS members who cannot get to a regular Chapter meeting. Inevitably, though, once you begin writing to and reading letters from other primrose enthusiasts, you become friends as well.

The package of information for each Robin group is coordinated by Elizabeth van Sickle, who initially sends it on its way. Once launched, it travels from one member of the group to another, with post cards sent to the Coordinator, to let her know who has the package now. Over the year, a Robin with conscientious members can make the rounds of the group 3 to 4 times. I gather there are even packets of seed included as a bonus for the group by one of the members. These, and the notes on new catalogs from seed companies, gardening hints for primroses,

as well as other plants in which growers have a common interest, and the latest personal and common interests information for each member, makes the receipt of a Robin package the highlight of the day.

So how do you join a Round Robin? Just write to Elizabeth van Sickle, at the address below. It's unlikely you'll get to join one of the highly successful ones now on their rounds, but Elizabeth will match new applicants for Robins with others sharing your interests, and you can start your own successful APS Round Robin.

There is an appeal for Alaska members, however, as the Round Robin there has recently lost a couple of its officianados, and would like some new primula enthusiasts. Write your initial letter, legible, of course, and NOT in pencil; include information on your primrose growing experience, as well as information about your other interests, and tell Elizabeth what kind of a Robin you want to join: serious botanical information exchange, I-don't-have-time-to-do-this-with-two-small-children-but-I-love-primroses information exchange, pressing the southern (or northern) limits of the primrose growing area, or how do I get them through another summer (or winter)? Send your letter to:

Elizabeth van Sickle,
654 Marine Drive,
Sequim, WA 98382 U.S.A.

NEWS FROM THE CHAPTERS



Washington State

The April meeting was devoted to preparing plants for the show, a common topic for many chapters in March and April. Thea Oakley demonstrated the technique for preparing a winning plant.

Thanks were expressed to Herb Dickson for his donation of several silver trays, a tea kettle and bowls, all trophies to be awarded at the National Show.

Eastside

On February 4, the first meeting in 1991, Beth Tait presented a talk on seed propagation. Thea Oakley provided a cake for the chapter's birthday anniversary.

The program at the April meeting will be a slide presentation on native American primulas by Thea Oakley.

Tacoma

The meeting on April 2 presented two speakers: Jeff Gage, Recycling Services Coordinator, Land Recovery Incorporated, spoke on making compost; Rosetta Jones reminded everyone of how to prepare your plants for the show.

Seattle

The meeting on February 21 included a program by Vicky Sauer on "The *Primula Auricula*." The Chapter went on a visit, on February 23, to the Grand Ridge Nursery, east of Issaquah, to see cultivars of *Primula allionii*. A report on the trip follows the Chapter news.



"*Primula X allionii*"

THE GRAND RIDGE NURSERY TRIP

Fifteen members of the Seattle Chapter pretended it was spring and visited the Grand Ridge Nursery, in Issaquah, Washington, in order to see the *Primula allionii* cultivars in bloom. The sun came out, and Steve Doonan was able to produce quite a few examples of this lovely primrose for us to see.

Primula allionii 'Crowsley' was showing a number of good rose pink flowers, each with a white center; *P. allionii* 'Mary Berry' had several good violet pink blossoms, and others were starting to show color. The plants were beautifully displayed in Phil Pearson's elegant pots, each with a mulch of stone chips, collected for use not only as a mulch, but also as a growing medium.

Steve told us *P. allionii* is found in the wild in the Maritime Alps of south eastern France, and into Italy, but only in a few locations. The primula was named for a M. Allion who fell off a cliff while searching for the elusive plant. The plants are usually found hanging down limestone cliffs, roots firmly imbedded deep into the rock wall, with their long necks covered with dead leaves. Not show quality!

However, this gives a clue to their cultivation, which should be in an alpine house with excellent ventilation and some shade. Rot is their deadly enemy. Fungicidal spray is used at the least suspicion of rot, and browning leaves are removed promptly. If the stem should break, it can be replanted and will usually root.

Flowers are in the white, through pink to purple shades, some with a ruffling at the edges, and the small leaves are quite sticky (viscose). Most of Steve and Phil's plants came from the Earle family in England, who have raised many fine forms of this primula and also hybridised it, using *Primula marginata* or *Primula hirsuta* as the other parent.

Steve recommended we look up the Alpine Garden Society Bulletin of September,

1985, where Margaret Earle writes of a lifetime spent growing these fascinating plants.

At the nursery, other primula relatives were starting to bloom. *Androsace helvetica* was exquisite and *Dionysias* were unfolding bright yellow blossoms.

We all thanked Steve, Phil and Kitty for an inspiring morning, then went home clutching precious promises of beauty, convinced that spring truly had arrived.

Barbara Flynn

A Synoptic Guide to the Genus *Primula* by G. K. Fenderson

This book is intended to serve as a basic reference to the genus *Primula*. Approximately 1375 species, synonyms, and hybrids are included, each with complete reference to author, initial publication, and current status; for nonhybrid taxa, details of typification are also given. Distribution, habitat, altitude, section, a cultural code, stature, and color are indicated for all currently accepted species. The several dozen species described since 1949 are included within this conspectus.

Chapters are devoted to the taxonomic history of the genus, its origins, and distribution. Other chapters treat cultivation of particular species or groups, growing primulas from seed, and pests and diseases.

ISBN 0-935868-24-0. v. + 213 pp. 7" x 10" hardbound with dustjacket; 56 line drawings, 1 black and white photograph.

Available in North America from the author at P.O. Box 571, South Acworth, New Hampshire 03607 (\$40.00 post-paid). Available outside the USA from Wheldon & Wesley, Codicote, Hitchin, Herts, SG4 8TE and from the Royal Horticultural Society.

PRIMROSES IN VIRGINIA

by Ann E. Kline

I hardly dare call it growing primroses. What primroses I get to grow barely exist here at the southernmost limit of the primrose growing area.

Primroses from my childhood

As a child, I remember my mother having wonderful sweetly-smelling clumps of pale yellow *Primula vulgaris*, some having multiflora stocks like polyanthus, some plants with only single flowers per stalks, and some with both. In 1942, my family and I moved to a new house in Falls Church, VA and the next year, 1943, mother ordered seed from Oregon: Barnhaven, I seem to remember. From this seed, she grew half a dozen plants. These polyanthus started out a peachy-pink, but ended up a dark red-orange once our normal spring turned into the fierce heat of summer, about the end of April every year.

I still have about fifty plants descended from this seed, and these are my major primula display in the spring. In 1953, I moved house again, still within Church Falls, which is twelve miles due west across the Potomac River from Washington, D.C. The same polyanthus plants moved to my new home, too, along with starts from mother's *Primula vulgaris*, and I have kept them alive ever since.

Every year, I hopefully order seeds from the seed exchange, looking forward to the plants that will follow. Ha — I'm lucky if a third of the seeds germinate and if just one from each species or variety gets big enough to pot on, not to speak of planting out. So, don't expect too much, whoever sends out the seeds and begs me to send seed of my own for the next year's exchange.



"*Primula sieboldii*" in the garden.

Discovering the American Primrose Society

I think I must have joined the America Primrose Society in the mid-seventies and did it just for the pleasure of reading about what can be done in the way of growing primroses and vicariously travelling to famous primrose areas of the world. It has been a joy to receive every one of the bulletins. When they arrive, I drop everything and read them from cover to cover, even the advertisements, noting sadly that the advertisers live in such favourable primrose-growing areas.

Why was I so gloomy about primroses? I couldn't specifically put my finger on it for a long time, and blamed myself for all the problems. But in the last half dozen years, I have acquired many of the references available to the interested amateur, including Kohlein's *Primulen*, G.K. Fenderson's *A Synoptic Guide to the the Genus Primula*, *Primulas of Europe and America*, *Asiatic Primroses*, and several others. I have studied carefully the origin of the various species in these references. There is only one primula that I can truly say should be happy in my garden: *Primula sieboldii*. We are listed as being Zone 7 for hardiness, but, more than hardiness it is the summer heat that is the problem.

A struggle with the climate

Our one third acre property is on a fairly steep slope, falling about thirty feet from the front northeast corner to the back southwest corner. The slope faces south-south-west, and is a protected one, under the brow of the hill. There is shade in the afternoon all summer from a mature forest of oak, hickory and tulip poplar trees. I have recorded daily maximum temperatures from October 1974, when we returned from a tour of Japan, until the present. That is, with the exception of June 1982 to October 1986, when we were living in Germany. In all that time, the winter minimum fell below 5 degrees Fahrenheit only twice, and then it went to 0 degrees. In one of those winters, I lost all my

camellias, which had twenty years of growth. But you will see, it's not the winter's cold that causes the problems for primroses, it's the summer heat.

Year after year, you can count on the fingers of one hand the number of nights from mid-June to mid-September when the temperature falls below 70 degrees. The day's high is usually in the eighties and low nineties, and the humidity is 75 to 90 percent. The price we pay for a protected site! We lived two summers in Yokohama, Japan, and the summer temperatures were the same there, which explains why the Japanese *P. sieboldii* does so well for me. Thank goodness for air conditioning, but you can't air condition a whole garden. The plants have to take it, or give up, and give up they do, especially primroses.

The survivors: Primroses that adapted

Why have my mother's primroses survived when others haven't? Obviously, they were strains which were more adaptable, and only the strongest cultivars survived over the years as I kept dividing my few plants. Now I have four *Primula vulgaris* strains that I obtained in the late 1970s or early 1980s from an east coast grower, named Hindla: Desert Sunset, Mexico, Butterscotch and a beautiful cream-colored



A "*Primula X juliae*" with polyanthus habit.

plant. One of each of the four groups I ordered survived the years we were in Germany. A tall, thin-stemmed polyanthus, which grows like a Juliana, also survived. These five plants have been divided and re-divided in the past four years, and now I have fairly good sized clumps of each.

There is more of some than of others, due to the rough treatment they received during garden reconstruction since we returned from Germany. This included inadvertently filling over top of the plants, or leaving them out of the ground too long when moving them. I wasn't always available to carefully dig up the plants when filling had to be done. A single *Primula sieboldii* also survived, but I almost killed it when I cultivated the dormant roots, the first summer back from Germany. I had forgotten the life cycle, and summer dormancy of that particular primula.

Since then, I have planted a lot of primula seed and bought a lot of plants with very little to show for it. What has remained for more than two years, I am ready to stand by, though I lost *P. polyanthus* 'Garryard Guinevere' in spring 1990, when I greedily divided it. 'Wanda' has survived, but it has too much sun where it is. Any sun is too much for primulas here in the summer, and I have to be alert to mist them when I see them going limp.

I received *Primula japonica* by mistake for *P. sieboldii*. Once I realized what it was, I put it in a dry bog where it has been for two growing seasons, and it is doing reasonably well. Not like the ones grown in England, but respectable. There is a seedling beside it from my 1989 sowing, and its resting bud looks substantial. I put 17 more seedlings in the bog in June 1990 from the 1990 sowing, and maybe they will survive the winter.



A white form of "*Primula sieboldii*."

I have bought at least 18 *P. sieboldii* from Siskiyou Rare Plant Nursery and perhaps half a dozen have survived. I collected seed from a capsule in July 1989 and planted the seeds immediately. One seedling came up and its resting bud is still visible in the seed pot.

My propagation methods

Sometimes I have excellent germination, and sometimes nothing germinates. Last year, Spring 1990, I planted *P. acaulis*, some polyanthus, and several woodland primulas: *P. cortusoides*, *P. polyneura*, and *P. saxatalis*. These went over a propagation mat with the thermostat set at 70 degrees. Even though these were in a temporary plastic lean-to, I had excellent results. My husband gave me a 9 x 9 foot frost-free greenhouse for my 65th birthday last year, which has a double tier of benches. There are heating cables or propagating mats buried in a 3 inch layer of sand in each of the six sections of the benches. All of the primroses which germinated last year but didn't get planted out, are spending the winter in the greenhouse. There is a pot of *P. mollis*, three pots of *P. auricula* seedlings, and three pots of *P. sieboldii*. According to my experience, auriculas are a waste of time in this part of the country.

Gradually, some success

I am hoping to have more success with seedlings in 1991 than I did in 1990, when I lost several flats of *P. cortusoides*, *P. polyneura* and *P. saxatalis*. We had 2 inches of rain in an hour. I thought the flats were in a reasonably protected place, until I collected the plants at the bottom of the hill, where they had washed down in the torrent. I replanted them all. However, after that, they just gave up and vanished. Maybe I'll have better luck when I keep all potted seedlings in my greenhouse until they are big enough to plant out. Time will tell.

I have about fifty or sixty *P. acaulis* and *P. polyanthus* seedlings planted out, which seem to be doing well at the moment, under their chopped leaf and yew branch coverings. I should have enough survivors by the end of summer to start dividing them, and build up a stock of super heat-tolerant plants. These I can release with confidence to interested people in the local area, via the Alpine and Rock Garden Society. Then I can start working with *P. sieboldii* and *P. japonica* and anything else that happens to survive several summers here. I wish there were more species I could grow, but I must be thankful for what does survive in a climate so inhospitable to primroses.

Here are my seed growing statistics from 1986 to 1990.

Year	Varieties planted	Date planted	Number germinated	Results
1986	2	24 Nov.	nothing	6 weeks on heating cable, in seed pots. Wintered outside. Dried out. Pots destroyed 15 April 1990
1987	47	July	18 varieties	Surviving plants of 4 varieties. Planted at wrong time, of course. 6 plants planted out. Remaining pots destroyed 13 May 90
1988	15	July	nothing	90 degree temp. for 30 days in a row!
1989	30	April November	10 varieties	Surviving plants in 9 varieties. 36 plants planted in plastic lean to on propagation mat.
1990	29	March	17 varieties	Planted in screened, full exposure seed bed, cold frame heated to 35 degrees, and on propagating mat in lean-to plastic green house. Surviving plants of 13 varieties. 57 plants planted.

The remaining pots from 1988, 1989 and 1990 are still in frames. Those from 1988 will be destroyed in July 1991. Anything that germinates from now on will be taken into the controlled environment of the green house.

This article is the result of long consideration on the part of the author before she put pen to paper. Other primrose enthusiasts in similar areas will benefit from Ann's experience. If you have "trials and tribulations" with primrose growing, like those Ann Kline has told us about, please let us all know. Send your experiences to the Editor of the Quarterly.

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AMERICAN ROCK GARDEN SOCIETY WINTER STUDY WEEKEND REPORT

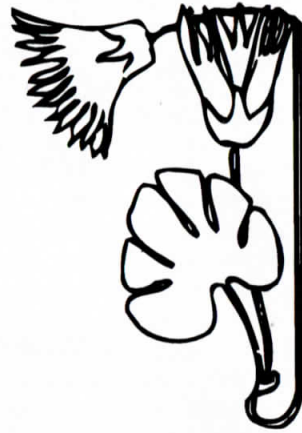
by Rodger Whitlock

The 1991 Winter Study Weekend, with the theme 'Alpines at Home,' was held at the Empress Hotel in Victoria, British Columbia on March 1, 2 and 3. Organized by the Vancouver Island Rock and Alpine Garden Society, the conference featured speakers from Japan, England, Washington State and the Canadian provinces of Nova Scotia, Alberta and British Columbia.

Winter Study Weekends have usually been blessed with good weather, but 1991 conditions were truly wintry. The last weekend of February had record-breaking warm weather, but then temperatures dropped dramatically and the Study Weekend began on a cold, raw, snowy Friday. The conference organizers had a lot of good-natured ribbing over the "balmy Victoria weather."

As such events will, the Study Weekend spontaneously developed its own theme on the subject of garden design, featuring alpinists and other rock garden plants. Perhaps of more interest to American Primrose Society members, however, was Cy Happy's talk in which he summarized the genus *Primula*, showing slides and discussing the cultivation of representative species from most of the garden-worthy sections of the genus. As well, he touched on the history of their cultivation, with special reference to some of the great growers in the Pacific Northwest.

Contrary to popular opinion, the audiences at Study Weekends include many novice growers, unfamiliar with the broad spectrum of plants suitable for the rock garden, not just know-it-all and grow-it-all experts. Overviews of important genera, such as the one Cy Happy gave covering *Primula*, are valuable for such novices, as well as for more experienced gardeners, not familiar with the details of a specific genus. Given the great size and horticultural sig-

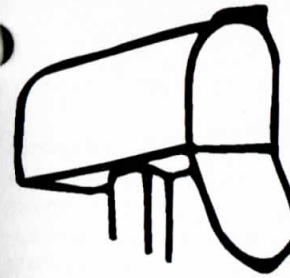


nificance of *Primula*, Cy's talk was extremely educational, and was very well received by the 350-odd members of the audience.

In addition to the formal talks by speakers, the 1991 Study Weekend included a panel discussion of questions submitted by members of the audience; a video on sowing seeds, making troughs and building rock work; plant sales; garden visits; and an impromptu afternoon session for those who preferred not to go garden visiting in the cold and wet. And an added benefit was the visits with all the gardening friends whom you hadn't seen since the last Study Weekend.

The 1992 Western Winter Study Weekend will be held in Portland, Oregon, on February 28, 29, March 1, 1992. The theme is "From the Carpathians to the Caucasus." Further information is available from:

Richard Wagner
2047 SE 20th
Portland, OR
Phone: 503-231-3732



FROM THE MAILBOX

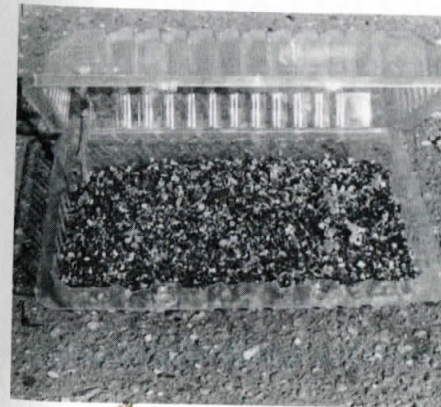


From the Desk of the Seed Exchange Coordinator...

Since I am a beginner in growing primula from seed, would it be possible to advise me as to whether seeds germinate better with some bottom heat? I plan on starting them in an unheated room. I have grow-lights and bottom heating pads.

Swindel's book indicates using a heating cable hastens germination, while the material I received when I joined the Society says the seed should be exposed to temperature extremes.

Your help will be much appreciated.
Jim Hershner



Auricula seedlings in a clear plastic container.

A Reply

Candy Strickland, Seed Exchange Coordinator, sent him information explaining she had no knowledge of growers in the Pacific Northwest using bottom heat to start primrose seed. The information sheet on starting seeds, prepared for the Society by Herb Dickson was also sent to Jim.

There is cultural information from Alice Hills Baylor in the Question and Answer column of the Quarterly in the 1970's to indicate that growers in the eastern United States do start primula seed over bottom heat. Alice also advocates covering the seed with snow, once or twice, at the same time as it is over bottom heat, to hasten germination. In fact, this is providing extreme temperatures. This is most effective for primula species seeds.

My personal experience has been that garden hybrids, both auriculas and primulas, can be grown like other garden seed, and germinate well at 50 to 65 degrees. I use a clear plastic container, like one that used to contain baking from the supermarket. Once washed and filled with vermiculite, I can start 10 to 12 varieties in the one container, depending on the amount of seed of each variety. The lid closes tightly until germination, and the seedling can remain in the container with the lid open a bit until they have enough true leaves to be transplanted.

Editor.

BOOK REVIEWS

The Book of Primroses, by Barbara Shaw. 96 pages, 64 full-color paintings. Timber Press.

As a grower and lover of primroses, I found this book delightful, both for the content, and for the beautiful botanical plates. It has been over thirty years, apparently, since a book devoted entirely to primroses and polyanthus has been published. Barbara Shaw, a very talented botanical artist, has enjoyed primroses since childhood, and now shares her love and knowledge of these lovely plants.

Since 1985, she has been keeper of the National Collection of *Primula verna*les in the north of England. For people interested in botanical art as a hobby, Barbara Shaw tells of her own experience, and also gives tips on preparing plants to paint them: "perhaps the most important word in the botanical painters dictionary is observation."

The chapter on the history of primroses tells how the plants were used medicinally during the Middle Ages. Gerard's herbal of 1597 indicates that the roots, "stamped and strained, and the juice, sniffed into the nose ... purgeth the brain and qualifieth the pain of megrim." In the fifteenth century, double primroses were much admired, and today, *Primula viridifolia*, a green flowered double is still in cultivation.

Gold-laced polyanthus became very popular in the 1800's, especially in the north of England, where competition among florists was acute. The author also tells how *P. juliae* was discovered in 1900 in the Caucasus, and describes some of the many hybrids that have been developed from this species, and are still found in gardens today.

Many of the primroses and polyanthus mentioned and illustrated were unfamiliar to me: 'Buckland Wine,' 'Ken Dearman,' 'Sunshine Susie,' 'Beamish Foam' and 'Ladybird.' I am wondering if these varieties are available on this side of the Atlantic - if not, they should be.

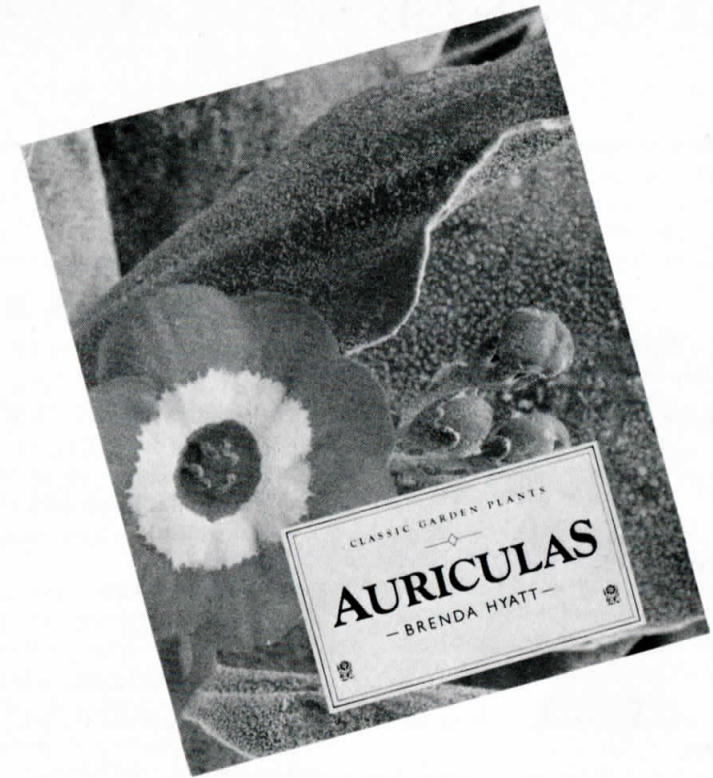
Credit was given to Florence Bellis of Oregon for her work in the 1930s developing the famous Barnhaven strain of primroses. When Florence retired in the 1960s, her collection of primroses and polyanthus was sent to the Sinclairs in England, who produced a wide variety of plants, including the 'Silver Dollar' strain.

Practical advice is given on growing primroses: the need for good soil preparation, ample moisture and protection of the plants from afternoon sun, is stressed.

The sixty-four magnificent paintings, starting with *Primula vulgaris* and ending with 'Ladybird' are, of course, the main attraction of this book and would appeal to any lover of flowers. In fact, I would suggest buying two copies of the book, one for reading, and the second to be taken apart and the plates framed.

This book deserves to be out on display and looked at often, so primroses, those favorite flowers of spring, can be enjoyed all year round.

Book Review by June Skidmore



Auriculas by Brenda Hyatt. 1989: Cassel, London and The Globe Pequot Press, Box Q, Chester, CT 06412. 96pp. \$19.95.

Brenda Hyatt has taken over the stock of 100-plus-year-old Gordon Douglas Nursery, famed for show and alpine auriculas and other old florist flowers.

In 25 pages she introduces the reader to the 400-year history of auriculas, covers the different types of auriculas and their cultivation, propagation and pests. From then on it is a picture book with more than 80 varieties shown in color.

There is never a perfect book. The most notable error in this one is a switch of pictures. The self on page 63 belongs on page 56, and the alpine on 56 belongs on page 63. Any past editor of the APS quarterly has deep understanding of this problem.

The actual shades and tones of colors is quite good. Auricula growers will be able to recognize familiar varieties. For example, I thought I recognized modern yellow self "Chorister" on page 76 at the bottom. Imagine my surprise to be informed that it was claimed to be an ancient garden type Dusty Miller.

It is fun to pick at other people's publications, but really this is a beautiful and informative book and provides a good working knowledge of auriculas, including where to get them.

The dust cover picture, a close-up of a yellow self, would not be the choice of most auricula specialists, who strive for perfection of plant, truss and pips. But on the reverse side is a very nice North America hardiness zone map.

Book review by Cyrus Happy.



The gardening corner where you can request just that special primula you've always wanted. Send your notices to the Editor. Keep your lists short - only two or three items per request, and hope for the best.



Does anyone know the where-abouts of an old Julie called Red Riddle? Don Keefe wants to know, and also wants a plant.

Contact: Don Keefe, 22604 NE 20th Place, Redmond, WA 98053



Wanted: a white 'Wanda.' Please contact Jay Lunn.

Contact: Jay Lunn, 6620 NW 271st Ave, Hillsboro, OR 97124



Wanted to trade for any green-edged show auricles. Contact Thea and Howard Oakley, 3304 288th Avenue NE, Redmond, WA 98053.



Can anyone supply seed of *Primula legionensis*, originating in Northern Spain, near Riaño, or *P. renifolia* from N.W. Caucasus Mts.? Write to Cy Happy, 11617 Gravelly Lake Dr., Tacoma, WA 98499.



A new spring, a new display of primroses, a new issue of the Quarterly and a new editor. This editor wants to include news of primrose growers and their plants, so send word to me, now — Spring is the time of year for primroses.

A trip to the Seattle/Tacoma area has resulted in new friends, new plants and new pictures for the Quarterly. One of the discoveries was recent developments in old fashioned primroses.

Primrose History Recreated

One of the most dedicated hybridizers in the area, Peter Atkinson, is creating wonderful old primrose anomalies that look like plants from 16th century prints. No longer can Bernard Smith, writing in the National

Auricula and Primula Society Yearbook in 1984, state that 'Feathers,' those Jack-in-the-Green Polyanthus with colored, cut calyxes, are no longer in cultivation. Peter Atkinson has re-created them. I hope you can make out the unusual ruff in the photographs.

Peter started with a ragged, white Acaulis, with Jack-in-the-Green tendencies, which was, as it turns out, hiding a genetic time bomb. It must have been a volunteer from an acaulis/polyanthus plant. Now he is forever getting both single stemmed and polyanthus stemmed flowers on the same plant, which is irritating. This scrap of a plant, which is now gone forever, was crossed with a hose-in-hose Juliana, of a most unattractive, faded purple color. Two or three generations later, the progeny are showing considerably more appeal.



"Feathers" and "Shags" A polyanthus with a calyx of leaf formation, but with the corolla shaped into long, narrow petals, Shags probably refers to the shaggy appearance." Bernard M. Smith

Seed of *Primula fedschenkoi* from Uzbekistan in the U.S.S.R. is wanted by the Editor, as it is one of the primulas originating in a climate with a summer drought, similar to the Pacific Northwest. Do any of the botanical gardens know of a seed source?

Maedythe Martin, 951 Joan Crescent, Victoria, B.C. Canada V8S 3L3

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A white "hose-in-hose" developed by Peter Atkinson

Not only are there clear, white, hose-in-hose of sturdy, upright habit, there are other interesting anomalies. *Primula polyanthus* Jack-in-the Greens with various widths of calyxes, feathers, or shags as they are also known, and even Jackanapes-on-Horseback, which we understand to mean a Jack polyanthus that has small leaf forms at the base of the peduncle stems at the top of the polyanthus flower head. This is in addition to the ruffs around each flower.

The anomalous primrose and polyanthus strains coming along well, Peter launched into 'Garryard'/polyanthus crosses. One very successful one is a tall, striking pale yellow Polyanthus with stems and leaves of the characteristic dark red cast of the Garryards, which is now aptly named 'Celebration.' Peter is to be commended on his work to date, and encouraged to continue. And, for those of you fortunate and clever enough to have selected seed of his crosses from the APS seed exchange this year or last, please report on the wonderful surprises from your packets.



Good upright form is characteristic of Peter's plant.



"Jack -in-the-Green" with a clear stripe of yellow on the calyx.

Challenging Primrose Growers

In this issue there are two articles from primrose enthusiasts who are stretching the limits of the climatic growing zone of species *Primula*. Many of you may be in similar situations, for not all members of the Society live in the Pacific Northwest. I have a limited number of reprints of an article "The Lure of Challenge" by Trevor Cole in Ottawa, Canada, from the Spring 1980 (Vol. 38, No. 2) issue of the Quarterly. This small guide offers cultural advice for growers living in "difficult" climates for growing primulas: those with cold winters and hot summers. The reprints will be made available on a first-come first-serve basis to APS members who write to the Editor.

Propagating Notes: Encouraging Recalcitrant Primulas

Mark Dusek has some interesting advice for those who want a special, and reluctant species primula to throw out new crowns. You will have to be willing to take the trouble, and have both good eye-sight and a lot of patience. Two plants on which he has used this method successfully are *Primula bileckii* and *P. warshenskiana*.

At the heart of the technique is the removal of dead leaf tissue from the stem, encouraging the growth of new crowns and new stem roots. I understand that this technique will also work for lewisias. Take tweezers and carefully remove all dried leaf tissue from the stem of the plant: from each crown if there is more than one. Be careful only to take the dead leaf tissue, and do not break off the whole crown. Do this three to four times over the growing period. Success should be evident within 3 to 4 months from when you start.

For lewisias, the technique works in reverse: if you want a large, single crown plant, do not groom the plant by removing dead leaves. You will only encourage new crowns to grow.

So for species growers who are impatient for more crowns on their treasured primulas, try this cultural note.

Primroses for Posterity

Spring is always too full of gardening activities for primula growers, but it is the major period of time in which to record primrose bloom. Beside the joy of having the plant flower for you, it is important to have a visual record of the primula for historical reference. As Editor, I would very much appreciate pictures of primula species in flower, attractive primula garden displays, and attractive or unusual primroses in bloom.

Please take the time to photograph your special Primula plants now, before the season is over. I will be delighted to receive sheets of contact prints of 35mm black and white slides, but color prints are also appreciated. You will be rewarded by having your photograph appear in the Quarterly for all to admire.

New Books on Primulas

Two recent books, one on auriculas and one on primroses have come to the Society's attention. Barbara Shaw has recorded primroses in her painting for years, and now has a book to collect and distribute these attractive pictures for all of us. Entitled *The Book of Primroses*, it is available from Timber Press. A book report is included in the Quarterly.

Auriculas by Brenda Hyatt has large, attractive photographs to illustrate the topic. New, from the Globe Pequot Press, it is available from the publisher (call 1-800-243-0495). There is a book review for member's information in this issue of *Primroses*.



The ruff is predominant and the flower is almost non-existent in this "green" polyanthus of Peter's hybridizing program.

Botanical Information on North American Primroses

A new article in the journal *Rhodora*, Vol. 93(873):67-97, 1991, by Sylvia Kelso called "Taxonomy of *Primula* Sects. *Aleuritia* and *Armerina* in North America" pays particular attention to the arctic and boreal taxa of members of these two sections.

A New Pesticide Product

The Lilly/Miller Division of the Charles H. Lilly Co. has a new product called Pestkill on the market. Among its target population are vine weevils that can decimate the primrose population in your garden. Look for it at your garden center.

A Curious Bit of History

A decorative garden structure of the 18th and 19th Century, the auricula theatre, is described in *Country Life*, Vol. 184, No. 52, December 27, 1990 on pages 36 to 38. The article by Ruth Duthie, called "A Cast of

Auriculas" describes this special purpose bits of architecture, developed to display auriculas or other florist's flowers.

A picture of the auricula theatre that is still in existence at Calke Abbey in England is included, along with a number of references to this phenomena in books and paintings. An insight into the extensive history of the auricula plant still so admired today.

A New Seed Source

If you are looking for candelabra, species primula or selected hand pollinated garden auricula seed, June Skidmore has come up with a new source. Field House Alpines in England has a list of primula seed, as well as its regular list of alpine seed.

The candelabra seed includes some from the Pagoda hybrids raised by the late Maude Hannon of Portland, Oregon, and perpetuated by Anita Alexander. Seed from Barnhaven's Oriental Sunrise strain is also included. Barnhaven seed of *P. sieboldii* and garden auriculas is also available, as well as seed from plants originating with Jack Drake. A fascinating list!

June is the sole agent in the United States, and she will be happy to supply you with a list of seed available. Contact her at 6730 West Mercer Way, Mercer Island, WA 98040.

Primula Enthusiasts Remembered

Notices of the deaths of two dedicated primrose growers have come to our attention. Beatrice E. Sundberg, 79, died February 22, 1991, in a Mount Vernon, Washington hospital. She lived much of her life on a farm in the Warm Beach area of Washington and was especially known for her knack for gardening, especially with primroses. The early Quarterlies frequently mentioned her accomplishments.

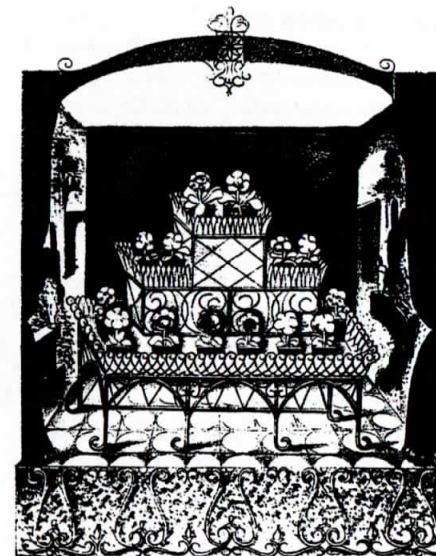
Another early American Primrose Society member, Alice DeReamer died early this

year in her 92nd or 93rd year. Thank you for your note, Joe Dupré to remark on the passing of these two "delightful ladies."

Exotic Alpines

For the adventurous gardener looking for seed collected in the wild, you might like to try some selections from Karmic Exotix Nursery, Box 146, Shelburne, Ontario, Canada, LON 1S0. This company acts as a service for a number of seed collectors in Eastern Europe, who stray into places such as Turkey, the Yugoslavian Alps, Mongolia and Greece to gather wild seed.

About 10 primulas are listed and prices are amazingly reasonable. Check them out.



An auricula theatre.

PRIMULA WORLDWIDE: CONFERENCE UPDATE

The 1992 International Primula Symposium April 10-12, 1992 Portland, Oregon

As America celebrates the 500th anniversary of Columbus' discovery and the American Primrose Society proudly relives its 50 years of heritage, primula enthusiasts from all corners of the globe will convene in the Northwest to celebrate the diverse and rich heritage of the flower we so dearly call the primrose. Not since 1928 has there been such a gathering, and those fortunate enough to attend this symposium will take away the legacy of an important event in primrose history.

The symposium will be a global journey for its participants, talking them from the deserts of the Middle East through the lush valleys and mountainous regions of Europe and Russia, through the rugged peaks of North America and onto the mystery of the Far East. Primula will be seen in their native habitat, as well as in the domestic surroundings of our gardens, where they have become a fascination for sophisticated and novice gardeners alike.

As we draw nearer to April 1992, all aspects of the symposium are taking shape. An array of outstanding international speakers has been assembled and confirmed, along with a series of educational workshops to be conducted by leading horticulturists.

Speakers include:

- Duncan Lowe, author of *Primula of Europe and America*.
- Ron McBeath, from the Royal Botanic Gardens of Edinburgh.
- Two speakers from Japan feature the art of growing and showing types of *Primula sieboldii* and the wild primula of Japan.
- Plus speakers of native America primula, companion plants, micropropagation and much, much more.

In addition, topnotch Pacific Northwest nurseries are preparing their specialties for

your purview and shopping delight. Book offerings, primula exhibits, guided garden tours, souvenirs, beautiful accommodation and tasty meals all await those who attend.

We look forward to one of the biggest and most extensive flower show and displays during the symposium. To achieve this major event, the American Primrose Society would like to appeal to all its members: be prepared to bring or send your most attractive and interesting primrose plants for the enjoyment of the international participants. Now is the time to begin making decisions as to what you want to enter and how you and your plants will arrive. Plant entry forms will be provided to all members with the fall quarterly.

Now all we need is you!. Please mark your calendars and begin making your travel plans because your attendance at the symposium is crucial. A big turnout will guarantee a successful event, and open the possibility of future symposiums and ensure accomplishment of related projects, such as republishing the Pictorial Dictionary of Primulas.

The summer quarterly will include the registration form and brochure outlining full details of the symposium and related events. Read it carefully, make your choices, and take advantage of the early registration benefits. The symposium will be an exciting experience for all who attend a memorable journey to "Primula Worldwide."

See you in Portland!

Greg Becker
Conference Chairman

NATIONAL AURICULA AND PRIMULA SOCIETY — *Northern Section*

Invites all Auricula and Primula Lovers to join in this Old Society

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Invites all Auricula and Primula Lovers to join in this Old Society

Membership includes Yearbook

Lawrence E. Wigley

67 Warnham Court Road, Carshalton Beeches, Surrey, England

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Invites all Auricula and Primula Lovers to join in this Old Society

Membership includes Yearbook

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

Watch for it!



THE REGISTRATION FORM FOR THE 1992

PRIMULA CONFERENCE



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Membership

Due for individual or household membership in the American Primrose Society, both domestic and foreign, are \$15.00 U.S. per calendar year (\$16.00 for renewals postmarked after January 1st); \$40 for three years; or \$200.00 for an individual life membership. Submit payment to the Treasurer. Membership renewals are due November 15th and are delinquent at the first of the year.

Membership includes a subscription to the Quarterly *Primroses*, seed exchange privileges, slide library privileges and the opportunity to join a Round Robin.

Publication

Back issues of the quarterly are available from the secretary.

Manuscripts for publication in the Quarterly are invited from members and other gardening experts, although there is no payment. Please include black and white photographs if possible. Send articles directly to the Editor, Maedythe Martin, 951 Joan Cres., Victoria, B.C., Canada V8S 3L3

Advertising rates per issue: full page, \$60; half page, \$30; quarter page, \$15; eighth page and minimum, \$10. Artwork for ads is the responsibility of the advertiser, and camera ready copy is appreciated. Submit advertising to the Editor.

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