Mrs. Brodhead's Primula
By Jay G. Lunn, Hillsboro, Oregon

In 1892, Mrs. Brodhead collected some plant specimens at Ketchum, Idaho in May and early June at 6,000 feet altitude and at Bayhorse, Idaho, July 1 at 8,000 feet altitude. She sent these specimens to Marcus E. Jones, a distinguished field collector and taxonomist of western plants. The following year [1] he published a description of the collection from Ketchum, as a new species, Primula brodheadae, and the collection from Bayhorse, as a new variation, P. brodheadae var. minor. Included in the description of the new species, Jones wrote that it was “Dedicated to Mrs. Brodhead, the collector.” I have not been successful in finding any information about Mrs. Brodhead, but she surely must have been a robust individual to travel around the rugged territory of central Idaho at that time. Travel then would have been by horseback, wagon, stagecoach, rail or foot.

When Louis O. Williams published his “Revision of the Western Primulas” [2] in 1936, he concluded that P. brodheadae and the P. brodheadae var. minor were synonymous with P. cusickiana, a status which perseveres today. This was after Ferdinand Pax had reduced both to P. parryi in 1905 [3], apparently without seeing the collection material that Jones used in making his determination. Thomas Howell [4] and Per Axel Rydberg [5] both recognized the species in their works, albeit they misspelled it “Broadheadae” (or at least different from Jones’ spelling). Although Smith & Fletcher [6] spelled the species name correctly, they considered it synonymous with P. angustifolia, a determination that they would have not made if they had seen both in the wild! They even referred to correspondence with Mrs. A. C. U. Berry which indicated that she was inclined “to regard it as a geographical form of P. cusickiana.” At least one reference [7] gives M. E. Jones the credit for collecting the specimen from Bayhorse, Idaho. This cannot be correct, because Jones was traveling in Mexico from April 16 to July 18, 1892. On July 1, he was visiting a salt peter mine and botanizing in Jayamite, Mexico. The type specimens for both the species and variety of P. brodheadae resided in the personal herbarium of M. E. Jones until it was purchased by Pomona College in 1923.

The type specimen for P. brodheadae var. minor was misplaced, but the type specimen, for the what was once considered P. brodheadae, now resides at the Herbarium of Rancho Santa Ana Botanic Garden (photocopy, next page). This specimen appears to be very similar to the primrose that grows in the proximity of Boise, Idaho, that is known by local botanists as P. wilcoxiana [8], nomen nudum (name unaccompanied by a description or reference to a published description). In Jones’ description of P. brodheadae var. minor, he wrote “I suppose that this species is the same as var. Wilcoxiana, Wood of P. Parryi, but I do not know that that was ever characterized in print.”

It is unlikely that anyone will ever know exactly where Mrs. Brodhead
Mrs. Brodhead's Primula continued

collected her namesake. In those days collectors routinely carried barometers to determine the elevations at which they made various collections. These instruments were not always terribly accurate. Read Marcus E. Jones [9] and you will run across comments in his diary and field notes like "...barometer greatly disturbed" and "...my barometer got out of order, but this is not far out", so elevation records should be viewed with some suspicion.

Mrs. Brodhead's first collection site, the town of Ketchum, Idaho, was created in the 1880's by ranching and mining. Averell Harriman, president of the Union Pacific Railroad, didn't start building the Sun Valley ski resort until 1936. Therefore, Ketchum probably wasn't much of a town before that, but it may have been the prominent landmark for the area. The elevation near Ketchum is 5,736 feet. Has the site where she collected remained intact, or has it been destroyed by the development at Sun Valley, or could it possibly be 30 miles south of her reference point? In 1950, Dr. Richard M. Bond wrote in this Quarterly [10] about his trip with Mrs. A. C. U. Berry and their search for P. brodheadae. I believe I have visited the same site, where they found plants, and its elevation is approximately 5,100 feet and 30 air miles from Ketchum. Although I have been there as early as mid-April, the primroses have always been past full bloom, but from what I have seen, they look very similar to the herbarium specimen of P. brodheadae. Did we walk in the footsteps of Mrs. Brodhead? Maybe — or, maybe not! There is at least one record of an old collection made in the vicinity; however, it was even farther from Ketchum than this site.

In the late 1800's, Bayhorse, Mrs. Brodhead's second collection site, was a flourishing mining town. The mouth of the canyon of Bayhorse Creek was filled from canyon wall to canyon wall with various sorts of domiciles, from wood houses to tents, or anything else that would provide shelter for miners who flocked there. What remains there today is only a skeleton of its past grandeur. The elevation of Bayhorse is about 5,400 feet, so to proceed to the 8,000 feet level, one would have to ascend almost to the top of the steep canyon walls.

On the opposite side of the Salmon River from Bayhorse Creek and approximately 25 miles southwest are the White Cloud Peaks. At one site there, at an elevation of 10,000 - 10,400 feet, grows a diminutive form of P. cusickiana in the alpine tundra (pictured). An unusual characteristic of the population at this location is its flower color. Although many of the plants exhibit the typical violet-purple color of the species, there are quite a few individuals with white or intermediate colored flowers. These plants are small in stature, just as Jones described them in his diagnosis for P. brodheadae var. minor. He described the plants as 2 inches high; flowers 1 to 2 on the scape; leaves an inch long or less. In contrast, he described the species as 2 to 4 inches high; 1 to 4 flowered; leaves 1 to 4 inches long. The form of the plants in the White Clouds may be a result of their short growing season and intense radiation from the sun. More likely, the form of the plant is the result of adapting, over many thousands of years, to the environment of its little niche of the world, that it has claimed as its home. Could this have been the source for one of Mrs. Brodhead's collections? I wish I knew!

SOURCES:
Plant Portrait

By Ann Lunn, Hillsboro, Oregon

PRIMULA ELLISIAE
OR PRIMULA RUSBYI?

It was the Fourth of July weekend in central New Mexico; not exactly the place a cool weather-loving Northwesterner would prefer to be. The purpose of the trip was to locate, observe and photograph *Primula ellisiae* and *P. rusbyi* in the wild.

Uncertainty and differing opinions persist as to the taxonomy of these two species. Both are members of the Parryi Section, but there the agreement ends. Pax (1905) and Balfour (1913) considered both to be *P. rusbyi*. Today, Halda lists *P. ellisiae* as *P. rusbyi* ssp. *ellisiae*. Although Richards lists them as separate species, he does not discount the possibility that Halda is correct. Sylvia Kelso believes they are both variants of the same species.

A plant later to be described as *P. ellisiae* was discovered in 1901 by Miss C. Ellis in the Sandia Mountains of New Mexico. Thus, our first destination was Sandia Crest, a steep rocky ridge just east of Albuquerque. The road ascended through areas of small farms, up through beautifully forested landscapes, and finally reached the top at about 9500 feet at Sandia Park. On that Fourth of July holiday weekend, the park was filled with people. Even the gift shop and restaurant were overflowing!

Determined to see *P. ellisiae*, we started up the trail with what seemed like a hundred other people. Not seeing any likely habitats, we moved off the trail and looked over the edge of the vertical precipice. There they were, nestled in steep, southwest-facing rock crevices. It is an amazing location for a primula that needs partial shade in the summer in cultivation. Here in New Mexico, however, the majority of rainfall comes in late summer and early autumn. That fact, combined with the high altitude and large rocks, help to keep the roots cool.

Continuing up the trail (it would have required rock-climbing skills to photograph the first plants) we spotted one plant of *P. ellisiae* growing in a rock crevice somewhat above eye level. From that viewpoint, the flat, rose to pink flowers were easily seen and photographed. The one and a half-inch flowers were centered with a yellow eye. The corolla tube equaled or slightly exceeded the yellowish-green calyx covered with white farina. Three to four-inch leaves encircled the six-inch flower stems; the leaves were slightly sticky with finely toothed margins. Unlike its close relative, *P. rusbyi*, the leaves assumed a drooping posture, rather than the rigid, upright stance of *P. rusbyi*.

Having seen *P. ellisiae*, we were anxious to observe *P. rusbyi* in its native habitat. Henry Rusby discovered *P. rusbyi* in the Mogollon Mountains of New Mexico in 1881. We planned to look in the Magdalena Mountains to the northeast of the original discovery site.

Now there was the true wilderness experience. We had the whole, rather desolate, wind-swept mountaintop to ourselves. At about 10,000 feet on a gentle, north-facing slope, *P. rusbyi* was found. Even at this altitude, the blooming season was almost finished. The soil was rocky and humusy, about what one would expect above treeline in areas of heavy snowfall. Lichen-covered rocks and short grasses surrounded the primula along *Oxalis* and an occasional deep red *Lomatium*.

The plants in this area were quite distinct from *P. ellisiae* we saw earlier. *Primula rusbyi* appeared to be a sturdier plant with stiff, sharp-toothed upright leaves. On the few plants still in bloom, we observed the yellow-eyed flowers were darker, more purple or magenta than rose. There was a distinctive crimson ring around the eye. The corolla tube was 2 to 2 1/2 times as long as the calyx, a characteristic that distinguishes it from *P. ellisiae*. *Primula rusbyi* was shorter than its relative, but both were covered with white farina. *Primula rusbyi* reported rarely sets seed, whereas *P. ellisiae* can be quite prolific.

We have grown plants from seeds labeled *P. ellisiae* and *P. rusbyi*. All the resulting plants appear to be *P. ellisiae*. Our plants are grown under the eaves on a gently, north-facing slope, and we observed, *P. rusbyi* having stiffer, more upright leaves with more toothed margins. One distinguishing characteristic is the length of the corolla tube relative to the length of the calyx.

*Primula rusbyi* at the Magdalena Mountain site had a corolla tube definitely twice or more the length of the calyx. At Sandia Crest, *P. ellisiae* exhibited the more nearly equal corolla tube and calyx.

However, two populations are not large enough for a scientific sampling. Plant characteristics are notoriously variable and it is possible that we were seeing the extremes of those variations. In the final analysis, I would need more evidence before taking a stand on either side of the controversy. That sounds like a good excuse to go back to New Mexico!

**SOURCES:**


Primula Brevicula

by Ian D. Scott, Fife, Scotland

Words like “This looks like an easy nivalid” often return to haunt us. And so it was with my first attempts to establish Primula brevicula in the garden. With so few species of the nivalid (Crystallophlomis) section in cultivation, I was delighted to be offered seed from the 1993 Kunming-Gothenburg Botanical Expedition to NW Yunnan (KGB). Three collections had been made of this dwarf high alpine form (KGB 118, 376 and 506) as well as a sinopurpurea / brevicula intermediate (KGB 134).

Naturally my first recourse was to John Richards’ work on the genus, in which he relegates P. brevicula to being merely a subspecies of P. chionantha. His reason for this classification is that, when reintroduced into cultivation in the 1980s, the dwarf wild plants collected on the Cang Shan grew out of character in our milder climate, producing much larger plants that closely resembled P. sinopurpurea.

We surface sowed our seed (KGB 118) into plugs using a peat-based compost in mid-February and left them uncovered in an unheated greenhouse. Excellent germination occurred four weeks later and growth was so rapid that the plugs of seedlings were being potted up by mid-April, and planted out into the garden by late May. The plants are extremely attractive, with single seedlings rapidly forming little clumps. The dark green leaves are small and lanceolate, about 5 cm in length and 1 cm in width with the leaf margins finely toothed, although this may not be immediately obvious as the edges tend to roll back on themselves. The base of each leaf coming up from the crown has a distinctive red coloration. Another diagnostic feature is the undersurface of the leaf, which is heavily coated with white farina.

During the winter of ’94 the resting buds of the outside plants were covered with a layer of fine gravel but given no other protection. Despite conditions that oscillated between being very wet and being very cold, the plants came up strongly in the spring and were flowering by mid-May. In their natural habitat, this species is said to flower at snowmelt or low, the species inhabits stony pastures and alpine meadows. Whatever the reason, by the autumn there was scarcely a clump still alive. Even more tragically, all the small seed capsules were devoid of viable seed, except for one oddly shaped capsule that had elongated into a thin cylinder of nearly 2 cm length. In retrospect, having now seen the same long seed capsules on herbarium material at the Edinburgh Royal Botanic Garden, this was our only fertile seed pod from over a dozen healthy plants! This single capsule contained over 60 seeds which await sowing in January ‘96 to prove their viability.

Despite this initial set-back, all is not gloom, as the experience should help us with our current batch of seedlings. These came from the Alpine Garden Society China Expedition of 1994 (ACE). Initial reports indicate that a number of growers have had successful germination with the four collections (ACE 1545, 1689, 1799, 1877), but will this will lead to viable seed production and a wider cultivation? Let us hope so. I am sure that given time and patience we can elucidate the preferences of this fine plant. It would be a shame to see history repeating itself, eighty years on.

Twins Wanted!

Dennis Oakley reports that he still has a couple of English growers looking to “twin” with an APS member. For more information write to:

Dennis Oakley
10060 Dennis Place
Richmond, B.C. V7A 3G8
Canada
A Shopping Expedition in England

by John Kerridge, Vancouver, British Columbia

It started with a planned 10 day visit to my sister in England and gradually became a quest for named auriculae as the temptation to bring back plants overcame me. My sister was happy to come along, and that is how we ended up in a rented car all over Northern England up to the Scottish border seeking out specialist nurseries.

For most of its 53 year history, the American Primrose Society has seen only a few named varieties, mostly bred here, and we clearly need to begin work on a really good collection. A few members who have acquired good collections thoughtfully make offsets available as insurance against loss, so the job shouldn’t take too long. Also, an injection of really good material should give the A.P.S. a boost — and could attract new members. Frank Michaud of Alpenglo Gardens here in B.C. used to import and distribute years ago, and I believe Shows and interest were all the better for it.

The first problem was where to look for the best material. The National Auricula and Primula Society Northern Section had listed Prize Winning Auriculas 1989 - 1994 in charts drawn up by Alan Chadwick, showing ‘Selfs and Edged’ and ‘Alpines’, respectively. This is a most useful guide, and surely the varieties listed have to be the best, if not the most vigorous or easy to grow. Alas, they are of course not that easy to find, and many would be a treat even for local N.A.&P.S. members. Another survey lists auriculas most often grown (N.A.&P.S. Northern Section Year Book, 1994), but these would not necessarily be the best, although doubtless easier to grow. Perhaps they offset readily, or were micropropagated. Interestingly, there is a feeling that some of the recent introductions are superior to old-timers, who like us can fade away with time.

Import permits were ready, marked ‘traveling in England’ (also ones for Wales and Scotland but this dream was cut short by lack of time). A good effort was made to locate local Plant Inspectors to obtain all those Phytosanitary Certificates, and here a major problem arose. The Head Office in England wrote that Canadian Authorities required ‘soil tests’ from the site of each nursery dealt with, and that as each test could take a number of weeks, be prepared for delays! This seemed a formidable obstacle, but from previous trips I knew the real requirements are that the plants be truly rootbare and that the medium that they were grown in be certified as being free of certain specific organisms. In the end this was carried out satisfactorily.

Off we went from Pangbourne in the beautiful Thames Valley near Oxford, and first found Castle Alpines near Woodstock, a small back-garden business packed with alpines and some good Auriculas. Then in a long and rapid run on the motorway we were up near the Scottish border near Penrith, visiting Hartside Nursery at Alston. The country here is so beautiful in its soft green setting of the northern dales, mellow and misty, perfect for Primula. Here another problem arose — temptation by such a variety of P. alionii cultivars and hybrids! These soon began to crowd into some of the space originally intended for auriculas, and the small car was filling up fast.

The drive down to York through Middleton is worth the visit in itself, down the Pennine ridge forming the backbone of England. We drove past stone-walled fields with flocks of sheep on the hillsides and into York — where accommodation was not available! Such a beautiful city is a popular tourist destination.

Michael Myers near Harrogate holds the National Collection of P. marginata, and as he was expecting us, was able to provide a number of cultivars. Again temptation took over. Then we had a lucky strike; at Beningborough Hall near York was a plant sale with the support of the Royal Horticultural Society. Many growers came to sell on the lawns of the great walled garden, and the whole setting was a picture. How lucky people are to be able to collect such wonderful plants without all the hassles of transport, agricultural inspections, customs etc. For us this sale saved a lot of traveling around and brought more purchases, not all of them auriculas!

The next stop had to be the last unless the car was to be traded for a truck, with my old friends Steven and Marlene Craven and their daughter Dawn at Bingley near Bradford. Their new location on a hilltop looking over to Derbyshire Peaks is a winner, and the breezes suit the Primula. We enjoyed a social evening (in the pub) trading ideas. By now I was up to 119 plants — that should have been the end. The load was sufficient to make us turn for home. Originally there were unrealistic plans to get to more nurseries, three in Lincolnshire, several in the Midlands and two near the Welsh border in Shropshire.

A highlight to come was a chance to stay with Peter Ward, Hon. Sec. of the N.A.&P.S. Midland and West Section, and to travel with him to their Annual Meeting and Symposium in Birmingham. The planning to do this required moving heaven and earth at this end to change my ‘unchangeable’ return ticket. We traveled with Bob Archdale, their new President, and had good discussions. A fine talk by Allan Hawkes, the authority on striped auriculas, was appreciated also by Maedythe Martin, who had traveled there especially to hear about her special interest. Of course there was a plant sale. How can you resist...?

Back in Pangbourne it was now all hands to getting those plants ready for inspection, conveniently done at home for a fee; but the convenience was spoilt by difficulties with timing. Do not fly home on a Monday as the inspection has to be done on a prior weekday, too long for bare-root survival. Coupled with that, the inspector would only do it on the Thursday, which meant preparing everything on the Wednesday. Are you still with me? By the time you have recovered from the flight home and can stand looking at all those bare roots again you are looking at almost a week for the poor things. Luckily, survival hasn’t been too bad since it was late September and the plants were not trying to grow anyway. We put them in straight sand as some mushiness and impending rot was obvious. Just now in February they are...
transplanted into a gritty mix. The *P. marginata*’s and *P. allionii*’s look the best! This was not my original intention.

I forgot to tell you that on the first time around the Inspector rejected my efforts and a total recleaning was done. Phew! For travel the plants had their roots in aluminum foil with a small piece of damp toilet tissue. Next time I shall try to get small plants with a free root system that is easy to clean. Being greedy, we had looked at larger ones that had lots of offsets — and were root-bound. Try cleaning those down to the microscopic level of freedom from any soil or like material.

It is a good idea to put a ‘Live Plants - Perishable’ sign on any package in transport, should it get delayed or lost. On previous occasions, I have had an unlabeled package sent air freight just to sit for a week in a hot warehouse, until I happened to phone England to see if it had been sent yet.

Here is a list of some of the sources. If you are planning a visit you can write first, but from my experience nursery owners are too busy to get into correspondence nor are they anxious to plan their days ahead to see the odd visitor. Do write first if it is specifically indicated. It is certainly polite to call by phone to see if a visit is convenient. Some are mail order only. I have listed phone numbers where they are available to me; directory inquiries are very helpful. On occasion in some nurseries, a plant inspector will certify an approximate number of primulas ahead of time. But for Canada, you will still have to do the root washing. Ask about this service at individual nurseries.
Surfing the Net for Primroses: A Beginner's Information Guide
by Pat Wilson, Juneau, Alaska

A novice primrose grower and a veteran librarian, I decided to find that special book that would answer all my primrose questions. After all, there's nothing like a good book to answer those obvious, beginner's questions that can be embarrassing to ask.

In Juneau, Alaska, we are fortunate to have an automated community library system that allows us to dial-up from our home computers. The system also provides Internet access via our statewide SLED (Statewide Library Electronic Doorway).

Using my trusty computer in the warmth of my home (it was January, so this was an important consideration), I began my quest for information. I started locally and then surfed my way along the Internet to the Seattle Public Library, the Multnomah County Library in Portland, Oregon, as well as to the libraries at the University of Alaska, the University of Oregon, and the University of Washington.

INTERNET SITES

On those rare occasions when I beat my husband and son to our computer and successfully Netscape into Internet, I always find myself wandering through twists and turns that reveal the most amazing, trivial, and fun information.

I ran searches on the Lycos and Webcrawler indexes, each of which yielded more than fifty sites when I used the keywords "primroses" and "primula". Some of the hits were for cosmetics, herbal medicines, folk songs, and the literary works of Keats, Shakespeare, T.S. Eliot and others. There was the famous violist, William Primrose, the music of Johannes Brahms, Watership Down. Primrose Hill in North London, restaurants with primrose rooms, and even a primrose color designation that is commonly used by casket manufacturers!

Some sites directly related to the culture of primroses, although none was very substantive. There were graphics of primroses and some short snippets of information drawn from larger general publications. You might want to try some Internet searches to see if you have better luck. Sites change rapidly, and many new sites are being added, so it is difficult to stay current.

I found several general gardening sites that I can recommend as a starting point for Internet searches. Internet browsers like Netscape are nice, but you don't need one to access these sites:

Mertus' Gardening Web Page  
http://www.cog.brown.edu/gardening  
Includes 1617 gardening catalogs with links to some of the best gardening home pages.

GardenNet’s Guide to Internet Resources  
http://www.olympus.net/gardens/point01.htm  
Links to lots of useful sites and strong in Pacific Northwest gardening information.

Gardenscape Home Page  
http://www.gardenscape.com  
International in scope with useful information for the professional and recreational gardener.

Gardening in the Cabbage Patch  
http://www.polarnet.fnsb.ak.us/users/pbabcock/patch  
A collection of articles from the Fairbanks Daily News Miner, primarily of use to far north gardeners.

LIBRARY SURFING

My quest for one special book, in addition to turning into a "primrose tour of the Internet", developed into a survey of what is available in a representative group of Pacific Northwest libraries. The results were quite interesting, not only for what is there, but for what isn’t.

In Juneau, we have seven books on primroses, most of which were published in recent years. This turned out to be a very respectable collection and a surprise, for we are a community of fewer than 30,000 people.

I was surprised to learn that the Seattle Public Library, which has the largest collection, hasn’t added many new titles in recent years. Their collections, however, are rich in older volumes from the 40’s and 50’s, with exotic sounding titles and authors.

The university libraries had small collections, with the University of Washington topping the group at eight titles. The book list, resulting from my meanderings along the Internet, appears at the end of this article. A comparison of the collections clearly shows that new materials are not added regularly.

Regional groups might want to consider donating titles on primroses to their local libraries. Our Juneau group purchases books on a regular basis. I’m certain this practice introduces books into the collection that wouldn’t otherwise find their way onto the shelves. Although it is always possible to borrow books through interlibrary loan, it’s a more difficult process that many people don’t undertake.

Compiling this list has proven to be a learning experience for me. I hope the listing proves useful to others.

The library designations follow the citation [ ]: J=Juneau Public Libraries, M=Multnomah County Library, S=Seattle Public Library, UA=University of Alaska, Fairbanks, Library, UO=University of Oregon Library, UW=University of Washington Library.

BOOKS


Biffen, Rowland Harry, Sir. The auricula, the story of a florist's flower. Cambridge [Eng.], University Press, 1931. 164 p., illus. [M]


Bohmig, Franz. Gattung Primula. [1954]. 189 p. (Gartnerische Kulturpraxis 3) [UW]
Surfing the Net for Primroses continued


Hogg, Thomas. A practical treatise on the culture of the carnation, pink, auricula, polyanthus, ranunculus, tulip, hyacinth, rose, and other flowers: with a dissertation on soils and manures, and catalogue of the most esteemed varieties of each flower. 6th ed. London, Whittaker & co., 1839. 275 p., illus. col. [UW]


Norwicke, Joan W. and John J. Skvarla. Pollen morphology and the relationship of the Plumbaginaceae Polygonaceae, and Primulaceae to the order Centrospermae. (Smithsonian Contributions to Botany, no. 37) Washington, Smithsonian Press, 1977. 64 p., ill. [S,UW]


---


PERIODICALS


Primroses. Tacoma, WA., American Primrose Society, [1977 -] S 2/596

Pat Wilson is currently the librarian at the Juneau Law Library in Juneau, Alaska. ✡️

---

Discount for A.P.S. Members

The Smith and Hawken Company, as part of their commitment to gardening and programs that promote gardening, is pleased to offer members of the American Primrose Society a 10% discount in all of the products they carry in their retail stores. This offer is good at any Smith and Hawken store in the United States, exclusive of the catalog and does not include sale merchandise.

To take advantage of this offer and obtain your discount, simply present this notice at check-out. To find the store nearest you, you may call, toll-free, (800) 776-3336. We thank Smith and Hawken for their generosity to the A.P.S. membership.
**Under The Overhang**

by Rick Lupp, Graham, Washington

**ARETIAN ANDROSACE FOR THE ALPINE HOUSE**

The androsaces are close relatives of the primulas, and many are plants that are well known to rock gardeners and alpine house enthusiasts around the world. Section *Aretia* subsection *Aretia* embraces some of the crown jewels of European high alpine cushion plants, most of which make perfect subjects for the alpine house and can be grown without too much difficulty if an effort is made to provide for their most basic needs.

We grow all of our aretian androsace in a well drained mix that consists of approximately two thirds minerals by volume in the form of coarse sand and pumice (you can substitute granite grit, etc. for their most basic needs. Healthy plants will have less problems with pests.

Aretian androsaces all seem to do best in cool, bright situations. We grow ours in open ended hoophouses under 50% shade cloth, which does not seem to adversely affect their ability to produce tight cushions with short stemmed blooms. During the hottest summer periods, we move our plants out of the alpine house into cooler areas in the open. They make wonderful plants for troughs that are small enough to keep cool in summer and cover in winter.

We consider *Androsace vandelli* to be the queen of aretian androsace, with its wonderful tight domes of tiny, silver rosettes a feature unique to this species. A well grown plant will be totally covered with single, white flowers with a small yellow eye. This plant grows exclusively in rock crevices in nature and requires extra care to ensure that it is not too wet in winter. We grow older plants on a small platform of flat rocks to prevent the cushion becoming too wet from being in contact with the top dressing during winter. A well-grown plant will make a four or five inch dome in about five years.

Another classic cushion androsace that should decorate every alpine house is *A. pubescens*. This beauty forms domes that are not as tight as those of *A. vandelli*, and the rosettes of soft green foliage are covered with small, fine hairs, more noticeable in some forms than in others. The difference in floriferousness of various plants can also be quite pronounced; thus this is a plant that merits growing from seed to provide a good selection of forms from which to choose those worth growing on. In good forms this plant can also totally cover itself with a bloom of single, white flowers. We find this plant easier to please than *A. vandelli* but with similar requirements.

*Androsace cylindrica* is another great favorite of ours for the alpine house. We find this plant to be one of the easier aretian androsaces to grow and keep for the long term. It makes very impressive domes made up of rather large rosettes that build up into good size plants rather quickly. The white flowers with a green-yellow eye are borne eight to ten per rosette and are held on somewhat longer stems than the two preceding species. *Androsace hirtella* is a very similar species with more narrow foliage and sweet scented blooms. It is also quite easy in cultivation.

The perfect choice for a combination of ease of cultivation and beauty of form and bloom might well be the hybrid offspring of the above two species, *A. cylindrica x hirtella*. This hybrid can vary from plants that look very much like one or the other of the two parents to plants that are nicely intermediate between the two. Almost all of the seedlings of this cross are plants that produce nice, rounded cushions with a good bloom. The resultant hybrid vigor produces plants that are trouble free in cultivation and build up into good specimens in short order — just right for those that are getting started with an alpine house.

Those of you who are looking for more of a challenge can try *A. alpina*, *A. brevits* or *A. hausmannii*. These are more demanding plants that require careful attention to their needs at all times if you want to keep them for the long term and have them bloom well. They can succumb very quickly to problems resulting from overwatering, stagnation or, especially in the case of *A. alpina*, aphid attack. Take good care of them and they can reward you with an incredible display of spring bloom.

Give yourself a treat and decorate your alpine house with some of these classic alpine beauties. ☺

---

**American Primrose Society Seed Exchange**

We are sorry to report that the A.P.S. Seed Exchange coordinator, Marie Skonberg, has encountered health problems that make it impossible for her to continue as coordinator next year. We thank Marie for a job well done, especially for recruiting so many excellent seed donors. A special thank you goes to Sylvia and John McDonnell for stepping in to host this year’s exchange, and to members of the Seattle, Eastside, and Washington State A.P.S. chapters for helping to bag seeds, and put orders together.

We are now looking for a new Seed Exchange coordinator for this fall. Happily, Marie will stay on as an advisor to the new chairman, providing contacts, procedures, and good all-around advice. The Seed Exchange might be a good job for a chapter or a group of primula growers to tackle. If you’d like to volunteer, or would like more information, please contact the editor.
More about Plant Plugs
by April E. Boettger, Vader, Washington

I am one of those folks who just loves the snow, even lots of snow — when firmly entrenched in my bed with the electric blanket on medium, with a cat or two draped here or there and of course, with a good book to read. I then proceed to occasionally look out the window saying, “Oh My, How Lovely!”

And that is just how I spent Sunday morning, instead of a book I had my Winter quarterly! I only wish it could have lasted as long as this snow.

I really appreciated Ian Scott’s article on growing his primula as plugs, since I planted well over a hundred 11” x 21” flats of plugs two years ago and several dozen more last year. I used mostly the 72’s (6 cells x 12 cells) for planting on; each plug was about 1 1/2” wide by 2 1/4” deep. I also used some 48’s (12 - 4 packs to a sheet) for direct selling. In addition, I bought some 50’s to try this year.

So far I have succeeded easily with Primula bellidifolia, P. fiaccida, P. rosea, P. alpícola, P. floríndae, P. secundíflora, P. viálii, P. prolífera (candelaブラ), P. dentículata, P. veríis, P. vulgaríis, and many primula (vernáles) hybrids. With all of these it is best to sow just one seed per cell. You may get a few blanks, but not many. I have been less successful with P. aurícula; next time I’ll use at least three to five seeds per cell.

I use the same soil mix in plug trays that I use for everything in my nursery, filling the plugs about three quarters full and lightly covering them with washed pumice. The pumice provides protection for the seed but doesn’t block the light needed for good germination. I think the pumice also helps to prevent damping off.

Don’t overfill or the seed may get washed into the next cell or right away. I use my fingers to poke the soil down, though eventually I’d like to have a tool to tamp whole sheets at once or at least a row at a time.

I fill the plug trays outside, water them well, let them drain a bit, then carry them inside where it is warm to plant them. To sow, I place a small quantity of seed on a lid or saucer, shake the container lightly so that the seeds are scattered, then use my dampened finger tip to pick up a seed and drop it (hopefully) over the middle of the cell. I keep a couple of toothpicks handy for markers, so that I know where I left off when the phone rings or I’m interrupted. I have a special nozzle that sprays a fine mist for watering after planting.

Since primula seed needs to be kept constantly moist, the plug trays must be watered several times a day. For this reason I don’t recommend using trays smaller than the 72-cell sheets. Anything smaller tends to dry out too fast. With the larger trays, too, if you don’t get everything transplanted the first day, you can neglect them for a year or two — speaking from personal experience.

Needless to say, it takes much more time to plant this way, but I do most of my seed planting in February when not much else can be done. (However, my transplanting is done in the Spring and Fall when I have an overwhelming number of things that need doing immedi-

continued on page 28

Journal Report
by Mary Frey, Kent, Washington

ADVICE AND PRIZES

Primrose cultivation based on a lecture by Dr. John Lonsdale is featured in the December 1995 Quarterly Bulletin of the Alpine Garden Society. Lonsdale masters petiolarids (including P. gracilipes, P. petiolaris and P. aureata) by providing an optimum environment: 60% shade and high humidity. Petiolarids detest warm weather so Lonsdale installed a misting system, spraying them for a minute every hour until 6:00 p.m. Also, instead of using peat in his soil mix, Lonsdale uses a fine grade bark called Cambark to duplicate the woodland duff.

Lonsdale also explores P. allionii and primrose pests and diseases. His best and most basic advice is that “no amount of chemicals can substitute for regular repotting, division and observation of your plants. A well looked after plant is far less susceptible to attack by any insect or fungus.” Amen.

Nine members of the primulaceae family were recognized by the Joint Rock Garden Plant Committee of the Royal Horticultural Society, the Alpine Garden Society, and the Scottish Rock Garden Society, in its 1994-1995 selections.

Primula bhutanica grown by Alan Furness adroitly grows two colonies in different areas. One thrives in a rich leaf-mold bed shaded by trees and shrubs and misted daily by a computerized watering system. The other group prospers at the base of large boulders on a steeply sloping, northern peat bed. Even though the latter bunch receives no misting, both grow equally well.

Primula ‘Nettie Dennis’ grown by John Dennis earned the Award of Merit, bestowed to plants of great merit for exhibition. Dennis’ cross between P. aureata and P. gracilipes is a compact plant smothered with large creamy-white blooms and a deep yellow eye. It blooms from May to October!

Primula ‘Wharfedale Village’ grown by David Rankin won Preliminary Commendations, given to promising new plants. At first glimpse the bloom clusters on this gorgeous plant resemble hydrangea balls. The creamy frilled blossoms combined with leaves heavily coated with white farina add up to one striking plant. It is a clone of P. x pubescens.

Primula brevicula grown by Alan Furness also won Preliminary Commendations. Sir Isaac Bayley Balfour and George Forrest retrieved this plant in 1916, yet its worth as a garden plant is only now being recognized. Furness’ winning plant is from seed collected in 1993 near N.W. Yunnan, China. It grows in an unshaded north-facing peat bed at the base of a large boulder.
Chris Wood writes a smart review on the worth and culture of Gold Laced Polyanthus. He abandons the practice of sowing new seed in July or August so that plants flower in spring. Rather, he advocates waiting until the following spring so that plants have time to mature to their finest. Further, Wood believes that the practice of having plants last only one year discourages new growers from planting gold laced polyanthus and "precludes the naming and propagation of varieties".

Mary Frey's e-mail address is: MLFREY@AOL.COM

American Primrose Society Slide Library

Available in the A.P.S. Slide Library, in addition to the slide programs listed in the last issue, are several videos recorded at the 1992 Worldwide Primrose Symposium:

- "Primulas of Many Springs", Cy Happy III, & "Primulas of the Clouds", Ron McBeath
- "Primula of the Rising Sun", Koochi Oogaki
- "A Rocky Marriage", Ron McBeath, & "Sakurasoh", Tsuneo Torii
- "Old World Splendor", Brian Burrow, & "Primulas and Friends", Frank Cabot
- "Yankee Doodle Dandy" (Wild Primroses), Sylvia Tass Kelso
- "A Touch of This and a Touch of That" (Micro-Propagation), Randy Burr, & "A Star is Born" (Show Auriculas), Larry Bailey

The colors of primrose flowers in the videos are not always true, tending too much toward blue colors, but we believe the videos are still of great interest and value. Where two programs are listed together, there are two programs on the same video.

Costs to rent slide programs are $10 US each; video rentals are $5 US each, which includes our mailing out the program by Priority Insured Mail. Those getting the program are expected to return it within two weeks at their expense by Priority Insured Mail. Insurance should be $250 for slide programs, and $50 for videos, which we believe is the minimum amount for insurance.

Overseas requests require higher fees due to the amount charged by the Post Office. Please write for rates.

Videos made in the US are reported to be compatible with playing equipment in Canada, but not compatible with systems in England and Australia.

To order, please send the program name and the date it is needed, along with a check or money order for the appropriate amount in US funds (payable to the A.P.S. Slide Library) to: John A. O'Brien, Sr., A.P.S. Slide Librarian 9450 Herbert Place Juneau, Alaska 99801
Board of Directors Meeting continued

contact with Peter Ward of the N.A.P.S. in England and will order their society growing guides to sell through the A.P.S. library.

Judges: No report.

Round Robin: No report.

Quarterly Librarian: Cheryl Fluck reported she has done over $700 in business.

Membership: Cyrus Happy suggested a membership brochure be professionally done. Claire Cockcroft is interested in helping with the brochure. April Boettger resigned as membership chairperson.

A.P.S. has received a donation of $622 from the Alaska Group. John has written to thank them.

Quarterly Editor: Claire Cockcroft said donations received will be in the Winter issue, which will be printed by Eagle Press in Redmond. Claire has been corresponding with Jacques Mommens regarding a Quarterly index covering the past ten years. The Quarterly will print a notice regarding the willing of member slides, books, plants and finances to the A.P.S.

A letter from Herb Dickson was shared with the Board. Contents of the letter will be tabled until the next meeting when Herb may be present.

Any other business: Addaline Robinson has received three Life memberships in the past three months.

Cheryl Fluck will float the price on old Quarterlies. Interested buyers must be A.P.S. members to purchase old Quarterlies.

Meeting was adjourned at 2:15.

by Dorothy Springer

American Primrose Society Bookstore

A.P.S. members are able to get special prices on these beautiful books:


*Primula*, by John Richards, 1993 - $36US


*The Genus Primula*, by Josef Halda, 1992 - $20US

Periodically, our librarian obtains older, used books. For a list of what is available, send a self-addressed, stamped envelope to her. Address your orders and inquiries to:

Thea Oakley, American Primrose Society Librarian
3304 288th Ave. NE, Redmond, WA 98053 USA

Thea’s e-mail address: othea@halcyon.com

Orders must be prepaid in US dollars by check on a US bank or by international money order, made out to Thea Oakley, A.P.S. Librarian. Postage and handling: in the US add $3 for the first book and $1.50 for each additional book, or outside the US add $5 for the first book and $2.50 for each additional book.

Notes from the Editor

By Claire Cockcroft, Redmond, Washington

CANADIAN CUSTOMS

Dennis Oakley reports from Richmond Beach, British Columbia, about his experience with Canadian Customs and seeds ordered from Plant World:

“We felt it must have been the ‘grinch who stole Christmas’ who checked the package, because we were charged $3.75 duty, $3.25 AST and $5.00 service charge!! We have placed many orders from Great Britain, USA, France, and Tasmania; this is the first time this has ever happened. Apparently the law is that if the seed packets are less than 25 grams they are dutiable, but a ‘truckload’ is exempt. We feel it may have been avoided if the customs sticker had said ‘No Commercial Value’. I wrote Plant World, pointing this out, and to my surprise they gave us a credit note for £10.00 and suggested that when we order we request that the sticker be so marked. This was doubly appreciated, as their seeds are very good.”

U.S. PLANT INSPECTIONS

What must you do if you follow John Kerridge’s example and go primrose shopping abroad (Page 10), but want to bring plants into the U.S.? First apply for an import permit from the U.S. Department of Agriculture (USDA). Processing takes about one month. Then obtain a phytosanitary certificate when you purchase your plants. The certificate is not mandatory but is helpful, since the USDA inspectors will destroy any infected plants. Plants roots must be washed clean of all soil before packing. If you are carrying the plants, pack them, along with a copy of the import permit, in a box separate from your luggage. Fly into a location that has a plant inspection station; Los Angeles, San Francisco, Seattle, New York, and Miami all do. Remember that USDA plant inspectors work Monday through Friday only. Plants arriving on the weekend must wait.

For detailed information, contact your local plant inspection station.

YUNNAN PRIMULA SPECIES

Steve Hootman of the Rhododendron Species Botanical Garden in Federal Way, Washington, sent the accompanying photo of a *Primula* species that he collected this summer in Yunnan, China. The seed is in the APS seed exchange as SEH #215 and was collected at 3900 m. The plant grows about six inches high and the blossom is fragrant. Steve has tentatively identified the plant as *Primula faberi*, a rarely seen primula not in cultivation.
MORE SLUG CONTROL IDEAS

Jan Kelly finds that slugs thrive in the damp climate of Conquille, Oregon. Since Jan has four cats and two dogs, she’s sensitive to the problems of using slug bait around pets. She’s found a method of baiting that works for her, and she asks that I share it with you:

“Somewhere along the line I read about putting the [slug] bait in pieces of black plastic pipe. My husband cuts the pipes about six or eight inches long and I use a long, plastic ice tea spoon to put the slug bait in the pipes. I find the granular bait works best as the pellets have a tendency to roll back out. Not only does this [method] keep animals out of the bait, the bait lasts longer because it is protected from the rain and watering.

Last year was the first year that I really had the slugs under control — I must have a hundred of these pipes around my gardens, state parks, attractions and protected areas. WILDFLOWERS is not a source. WILDFLOWERS is not a place where you can buy a flower, but we do have a lot of information about wildflowers and plants associated with the organization. You can see information about individual states, catalogs, international links, photography sites, plant identification and reference materials.

Norman Singer in Sandisfield, MA, suggested a list server called Alpine-L, a 250 member network that started as a forum for alpine lovers but includes other serious gardeners including primula growers. Members exchange information via electronic mail, which is posted to everyone on the list. There is no charge to join. To subscribe, send to listserv@nic.surfnet.NL the command:

```
SUBSCRIBE ALPINE-L YOURNAME
```

For example:

```
subscribe alpine-L Reginald Farrer, Washington DC Zone 7a
```

The comma enables the LISTSERV software to alphabetize its list of subscribers alphabetically by surname.

NEW PLANT SOURCE

Add Reflective Gardens Nursery to your list of mail order primula and pinnellia sources. This is a new nursery offering a good selection of woodland plants and plants not often seen in other catalogs. Write for a catalog:

Reflective Gardens Nursery
24329 NE Snow Hill Lane
Poulsbo, Washington 98370
phone/fax: (360) 598-4649

MORE INTERNET RESOURCES

Gary Lipe in Fort Worth, TX, wrote that wildflower information is available from WILDFLOWERS at URL:

http://rampages.onramp.net/~garylipe/

WILDFLOWERS organizes wildflower information in one place and tries to identify other related Internet resources. WILDFLOWERS is not a commercial endeavor but vendors, gardens, state parks, attractions and publishers are invited to highlight how wildflowers are associated with their organization. You can seek information by individual states, catalogs, international links, photography sites, plant identification and reference materials.

The chapter’s annual seed sowing meeting boasted over 70 varieties of seeds this year. Dot writes:

“People have been wonderfully kind and sent seed to DKC/APS. Some came from John Kerridge, Jan Scott, and RHS Wisley... We’re delighted with everything... Now we need somehow to arrange for a summer with minimal or no 90° days and gentle rain falling in adequate amounts.”

In March, the DKC/APS joined the Delaware Valley Chapter of the North American Rock Garden Society to hear a talk by Kris Fenderson, author of A Synoptic Guide to the Genus Primula.

WASHINGTON

Washington State Chapter

Meets the second Friday of each month, except July and August, at the United Good Neighbor Center at 305 S 43rd Street, Renton, (across the street from Valley General Hospital) at 7:45 p.m. Guests are welcome.

February’s meeting featured Rosetta Jones and Thea Oakley leading a discussion on sowing seeds. The group also finished plans for the Chapter’s annual show, to be held on Easter weekend at the Rhododendron Species Botanical Garden.

Eastside Chapter

Meets the first Monday of every month at First Interstate Bank, 6615 132nd Avenue NE, Kirkland, at the Bridle Trails Mall at 7:30 p.m.

At February’s meeting, members viewed slides of primulas and gardens by the late James Menzies. The group also enjoyed a cake and party celebrating the chapter’s birthday.

Pennsylvania

Doretta Kibler Chapter

Meets four times a year. Contact Dot Plyler, chapter president, for details.
News from the Chapters continued

Seattle Chapter
Meets four times a year. Visitors are welcome. Contact June Skidmore, chapter president, for details.

Rick Lupp, owner of Mt Tahoma Nursery, gave an excellent presentation at February's meeting about small, early-blooming varieties of primula and androsace.

Tacoma Chapter
Meets the first Tuesday of each month, except July and August, in the Fireside Room of the First United Methodist Church, 1919 West Pioneer, Puyallup, at 7:30 p.m.

OREGON
Oregon Primrose Society
Meets the third Friday of every month from September through May at 1 p.m. at the Milwaukie Community Club, 42nd and Jackson Sts., Milwaukie OR. Contact Ann Lunn, chapter president, for details.

Valley Hi Chapter
Meets the second Monday of the month from September through November and February through May at 1 p.m. at Thelma Genheimer’s house, 7100 SW 209th, Beaverton, OR. Contact Thelma for details.

BRITISH COLUMBIA
BC Primrose Group
Meets on the third Wednesday of September, November, January, March, and May, at 7:30 p.m. at the Thomas Hobbs Southlands Nursery, Vancouver. Call (604) 274-0551 or (604) 224-7813 to confirm.

At the November meeting John Kerridge showed slides of his trip to England. (Story on Page 10.) Following John’s talk, a raffle was held of a named auricula donated by Bodil Leamy, and leftover Barnhaven seeds were offered to the members.

The January meeting had a good turn out of 20 members and three visitors. For the program, John Kerridge spoke about his method of seed planting and passed out some leaflets giving the details. He then followed with a slide presentation of his visit last year to Alaska, showing gorgeous beds of primulas that had us all drooling. He also had some slides of the various species native to the area and explained how these had migrated from Asia and Japan. He also told of the difficulty in getting to Marie Skonberg’s place due to bad weather that caused his plant to turn back, necessitating the trip be made on her husband’s fish boat! Seeds that were collected with permission from Van Dusen Gardens were distributed.

The date for our show and sale was fixed for April 26, 27, and 28, 1996. ⭐

More About Plant Plugs
continued from page 20

ately, if not sooner!) Anyone who has tried to gently rip apart an over-planted pot of seedlings will appreciate this method. Have you ever noticed that if you plant five seeds none come up, but that if you plant 50, at least 75 will germinate?

Locally, plugs sheets are sold to fit in 11” x 21” or 17” x 17” flats. The cells themselves can be as tiny as a dime with about 500 per sheet or as few as 18 cells per sheet with each cell equaling a three inch pot. They are sold in cases of 100 sheets, ranging from about $30.00 to $40.00. So you may want to share.

The only other thing I might add is that it is probably a good idea to put two or three balls of a slow release fertilizer close to the bottom of your cells. ⭐

KILL BUGS ON CONTACT

“Schultz-Instant” Insect Spray is effective against aphids, whiteflies, mealybugs, spider mites, and other indoor & outdoor pests. Use it on edibles up to day of harvests!

Made With BOTANICAL PYRETHRINS FROM CHYSANTHEMUM FLOWERS

Ask For “Schultz-Instant” Products At Local Flower & Garden Shops

CRAVENS AURICULAS
— NEW FOR 96 —
We can now ship auriculas to the U.S. We offer our U.S. friends the chance to share in the beauty of Old English Auriculas. Two collections are available.

THE YORKSHIRE COLLECTION
4 different named Show Auriculas. 2 Yellow, 2 dark/red

THE AIREDALE COLLECTION
4 different named Alpine Auriculas.

Both Collections each $20 inc. Postage & Packing

All collections sent with easy to follow instructions. Plants will be bare root, well wrapped, dispatched in Jiffy Bags.

Plant Catalogue $3 Seed Catalogue $3 Both $5.

Please send Dollar Bills or Sterling Cheques. No postal orders to

Cravens Nursery 1, Foulds Terrace / Bingley, West Yorkshire / BD16 4LZ / England
Tel: 01274 561412

A PLETHORA OF PRIMULA

April E. Boettger
244 Westside Highway
Vader, WA 98593
(360) 295-3114

Primula Lover's Delight
because as primulaceae enthusiasts we plan to carry a full range of primulaceae, but as primula specialists our forte is primroses-especially auricula.

Free list with SASE or detailed catalog for $2.00.

Mail order only
U.S. & Canada

AT THIS TIME WE ARE NOT OPENED TO THE PUBLIC.

CHEHALIS RARE PLANT NURSERY

19081 Julie Road, Lebanon, MO 65536
Herb Dickson, Proprietor

After 30 years of selecting and breeding, I have developed an improved strain of Garden Auricula with a complete pallet of color.

Garden Auricula - 75 seeds
Mixed - Brown - Yellow - Red - Blue
Picotee - White - Petite Hybrids
Exhibition Alpine - 75 seeds
Hand pollinated Double Auricula - 15 seeds
Hand pollinated Show Auricula - 20 seeds
Yellow Self
Primula Florindae - 150 seeds or more
Mixed Candelabra - 200 seeds or more

ALL PACKETS $2.00 EACH

50 cents postage & handling in U.S. and Canada
Other foreign orders $1.00 postage & handling
MINIMUM ORDERS - 3 packets
Officers of the Chapters

Doretta Klaber Chapter
President, Dot Plyler
18 Bridle Path, Chadds Ford, PA 19317

Eastside Chapter
President, Thea Oakley
3304 288th Ave. NE, Redmond, WA 98053

Oregon Primrose Society
President, Ann Lunn
6620 NW 271st Ave., Hillsboro, OR 97124

Tacoma Chapter
President, Dan Pederson
7614 48th Ave. E., Tacoma, WA 98443

Valley Hi Chapter
President, Orval Agee
11112 SE Wood Ave., Milwaukie, OR 97222

Washington State Chapter
President, Rosetta Jones
E. 170 Dunoon Pl., Shelton, WA 98584

Seattle Chapter
President, June Skidmore
6730 W. Mercer Way, Mercer Island, WA 98040

Alaska Group
Contact Jean Eichman
P.O. Box 20765, Juneau, AK 99802-0765

British Columbia Primrose Group
President, John Kerridge
4660 10th Ave. W. #1102, Vancouver, B.C., Canada V6R 2J6

EDITORIAL DEADLINE FOR SUMMER ISSUE OF PRIMROSES IS MAY 1

MT. TAHOMA NURSERY

Rick Lupp (206) 847-9827
Alpines, Washington State Natives, Species Primulas, Troughs and Trough Plants
Custom Propagation
Nursery open by appointment only
Mail Order in U.S. & Canada only
Send $1.00 for Plant List
28111 - 112th Avenue E.
Graham, Washington 98338

SEED OF DOUBLE ACAULIS AND DOUBLE AURICULA

NEW SEED CROP IN AUGUST
MINIMUM ORDER
40 SEEDS - $5.00

ROSETTA JONES
E. 170 DUNOON PL
SHELTON, WA 98584
PHONE: 206-426-7913

AMERICAN PRIMROSE SOCIETY

OFFICERS
President - Dr. John Kerridge, 4660 10th Ave. W, #1102, Vancouver, BC, Canada V6R 2J6
Vice-President - Ann Lunn, 6620 NW 271st Ave., Hillsboro, OR 97124
Past President - Cyrus Happy III, 11617 Gravelly Lake Dr. SW, Tacoma, WA 98499
Recording Secretary - Dorothy Springer, 7213 South 15th, Tacoma, WA 98465
Corresponding Secretary - Thea S. Foster, 779 E 21st St., North Vancouver, BC, Canada V7J 1N7
Treasurer - Addaline W. Robinson, 9705 SW Spring Crest Dr., Portland, OR 97225

DIRECTORS
Fred Knapp, 58 Kaintuck Lane, Locust Valley, NY 11560
1997 Glen Spurrell, 72 St. Anne's Road, Toronto, Ont., Canada M6J 2C3
Misty Haffner, 8118 Hamstead Ln., Juneau, AK 99801-9116
1996 Larry A. Bailey, 1507 9th Ave. N., Edmonds, WA 98020
Flip Fenili, 7102 Citrine Lane SW, Tacoma, WA 98498

EDITOR
Claire Cockcroft
4805 228th Ave. N.E., Redmond, WA 98053
e-mail: ccrcft@halcyon.com

ROUND ROBIN
Edward Davis
226 S High Street, Hillsboro, OH 45133

SEED EXCHANGE
Position open. Please contact the editor for more information.

SHOW JUDGES
Rosetta Jones
E 170 Dunoon Place, Shelton, WA 98584

LIBRARIAN
Thea Oakley
3304 288th Ave. NE, Redmond, WA 98053
e-mail: othea@halcyon.com

SLIDE LIBRARIAN
John A. O'Brien, Sr.
9450 Herbert Place, Juneau, Alaska 99801

MEMBERSHIP
Dues for individual or household membership in the American Primrose Society, domestic and foreign, are $20 U.S. per calendar year ($21 for renewals postmarked after January 1); $55 for three years; or $275 for an individual life membership. Submit payment to the treasurer. Membership renewals are due November 15 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.

PUBLICATIONS
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.

Advertising rates per issue: full page, $100; half page, $50; quarter page, $25; eighth page and minimum, $12.50. Artwork for ads is the responsibility of the advertiser, and camera ready copy is appreciated. Submit advertising to the editor.