Greetings from volcano land.

Yes, at Chehalis Rare Plant Nursery we had about three-fourths of an inch of ash from the Sunday, May 25, eruption of Mount St. Helens. It was a nuisance and a lot of work cleaning up, but very little damage occurred.

The mountain is a continuing problem—just like our membership is a continuing problem. We had many good promotional ideas discussed at the board meeting during the annual picnic. Most of them involved spending money—of which we are always short. Ideas are being researched for cost and possible benefit for further discussion and action at our next board meeting.

We decided that at all our annual shows we should put greater emphasis on selling membership in the American Primrose Society. Nothing is more effective than an enthusiastic member selling membership in APS to friends, to visitors at shows and displays and to members of other plant-oriented groups.

We are bucking the most highly competitive field there is. It is not money but competition for the use of that precious commodity, leisure time. There are myriads of other organizations and activities with meetings to attend and publications to read. Then comes public entertainment—movies, concerts, exhibits, spectator sports, recreational sports and hobbies. And probably our toughest competitor for time is the television.

Finally we have to overcome the natural inertia of the human person and the tendency to procrastinate, to do nothing, to make no changes that require time and effort.

How do we compete with these attitudes and time grabbers? We create interest through shows and public displays of good plants in bloom, and we show our plants to friends and neighbors in our own yards and gardens. Our own interest and enthusiasm can become contagious if we express them. Also, when we share primula plants, we can put a string on them. "If you will become an APS member, I will be glad to share with you," you could say.

I enjoyed my visit to the Eastern Chapter meeting and show at Cornell University. The hospitality was great, the show plants of good quality and the gardens visited superb. I met and talked with many wonderful people. The time was all too short.

I would like to see all future shows opened to the public for viewing and entries. If possible, it is helpful if shows are held in a public place with plenty of traffic, such as a shopping mall. APS and its chapters get the best exposure to new people and prospective members at public shows. A public site also provides a good place for a plant sale.

I am certain that if everyone tries to get a new member, APS membership will grow rapidly.

Herb Dickson
Red self show auricula grown by Wagon Wheel Gardens

In 1832 George Glenny began to write treatises on the culture of florist’s flowers. Some years later the author collected his articles for publication in London of a book, "The Culture of Flowers and Plants."

His articles appeared in newspapers and magazines, including “Horticultural Journal and Magazine” and “Gardener’s Gazette.” His intent, he said, was to teach “the best and cheapest way to cultivate florist’s flowers and to convey in the plainest language all I could that was useful to those who knew less than myself.”

This quarterly will feature two sections from Glenny’s book, a journal for growing auriculas and a discussion on raising polyanthus. Will they be as useful for you as they were for his readers a hundred years ago? We hope so.

The Auricula

by George Glenny

Reprinted from "The Culture of Flowers and Plants"

It will be seen that by simple culture the auricula can be kept in good health and bloomed in something bordering on perfection; that there may be, by close observation, and judicious experiments on valueless plants, some improvement made in time, we do not dispute; that some of the nostrums recommended so indefinitely by our predecessors, may have produced effects pleasing to them, we have no doubt; but we have yet to learn whether our forefathers were good judges of the properties which we now value; whether, in fact, they did not fall into the error into which some younger growers even now fall, and value size, without considering the coarseness as a blemish, is to us doubtful. Indeed, so far as our experience goes back, (which is something like thirty-five years,) the first pair of auriculas in a show was always the largest; and even in our young days we have seen much more beauty and symmetry in the stands that have been placed low or rejected altogether, than we have in the winning blooms. It would be difficult to say how often we have seen very coarse specimens of Cockup’s Eclipse, Grimes’s Privateer, Lancashire Hero, and such like, win first prizes against what in our estimation were better flowers. We are, therefore, confirmed at present in our opinion, that taking colour, neatness, health of plant and general properties into consideration, we prefer very much the flowers we have seen grown under the treatment we have recommended, as far superior to those which have been grown stronger, longer, and (for we never saw an exception) coarser. Some of these days we may discover a liquid manure that may, by application at the time the flowers are expanding, increase the beauty and brighten the colours; but were we to begin growing to-morrow, it would be on the principles we have here laid down; for the more simple the compost and general management the better.

We now proceed to give the treatment which we have always observed from month to month; and as we must begin the year, we are to presume that the plants are all in their frames, in the compost we have recommended; that there are...
offsets round the edges of pots, struck and not struck root, as the case may be, others singly in the smallest pots, and plants of all sizes upwards, to those in the smallest show pots, which are size forty-eight, and those in the larger ones, size thirty-two; besides which, we are to suppose there are seedlings of one season and upwards, all requiring the attention peculiar to their several states. We commence then with—

January —As there is danger of frost this month, and it is not desirable to get them frozen, it is necessary to keep coverings ready for use, and to cover the last thing at night, however mild it may be; but the milder the weather, the later ought they to be covered up; the morning frosts frequently come without any previous indication. If the weather be mild in the mornings and through the day, although the ground may be frozen, the plants may have all the warmer part of the day. It must be observed too, that the plants will require watering but seldom, indeed, while there is any moisture in the soil they ought not to have any; they might, until the end of the month, be almost allowed to flag before they have it, but there must be no tampering with water; whether they have it once in a month, or once in three months, they must have enough to wet all their compost alike. There is nothing more dangerous than partial watering, and we were going to say, nothing more frequently given, sprinklings that hardly go an inch into the soil, and leave all the under portions as dry as dust; the consequence is, not with these only, but all other plants, that the top fibres get a little nourishment, while the principal get none, and the plant is checked too often fatally. If they will do without, let them; but when you give it, let it be enough to go through; and all waterings should be with a fine rose, so that they may require several times going over before the soil is well wetted. As a general rule, they should have all the air that can be given, whenever the weather is sufficiently mild; but in north or east winds of any strength, they are better only tilted on the side, away from the blowing point. This treatment is still good for offsets, seedlings, and old blooming plants. The frame should occasionally be emptied and swept out, and the plants re-turned, for it clears away vermin and the eggs of vermin; and besides, keeps the plants and pots clean, and as they are re-turned, the holes should be examined, and the pots rubbed round with the hand to clear away any dirt.

February —In this month, and early in next, the plants for blooming should be all top-dressed. The surface should be stirred with a blunt piece of wood, so as to loosen as much as you can without disturbing the fibres, and the loose stuff thrown out. The top-dressing should be rich. If you have good well-rotted poultry-dung, you may add one-fourth of it, one-fourth of cow-dung also rotted, and two-fourths, or half, of clean sand. These, well mixed together, make a first-rate top-dressing; but in the absence of poultry-dung, you may use two-thirds cow-dung, and one-third sand. This must be put on the top, to fill the pot to the rim; but previous to putting it on, the dead and decaying leaves must be carefully removed by pressing them, or rather tearing them downward,
bearing at the same time a little sideways. When they are all filled up as proposed, they are to be returned to their frames, and have the benefit of shading for a day or two, and a gentle, but nevertheless, proper watering. The foliage as well as the soil should be watered, so that a fine rose and a light hand should imitate a gentle shower of rain; and if there happen to be a mild shower, they may have the benefit of it, for it is not to be presumed that any watering is so good as they would receive from two or three hours' gentle rain; for this reason, we should not be in a hurry to water after top-dressing, until it began to get rather dry, for if it were to get very dry, the water would hardly soak in. The plants will begin to grow fast towards the end of the month, if the weather be at all genial, and will require additional care to keep from frost, by timely and efficient covering. The seedlings in pans will be greatly helped by stirring the earth between them. All seedlings coming forward enough to bloom even in their small pots, should be top-dressed, as well as the regular blooming plants, for they want the stimulus which the removal of the spent earth and the substitution of good rich compost never fails to give, and they will be greatly assisted by the operation; nor will any of the pots of offsets be the worse for similar treatment, as the earth will be generally found a good deal sunk or settled down in the pot, and sometimes the surface foul, or mossed over. Stirring a little, and throwing out the top, and substituting fresh rich compost, will give an extra strength to the growth, and be of use in forming good plants for a future time.

March — The plants are now growing fast, and before the end of the month many trusses will be showing. Of course, any that are not already top-dressed, must be set to rights, without delay, as directed last month. Care must be taken now, that the hearts of the plants do not fill with dust or water after the pips show, for dust would stain the flowers, and wet, for any continuance, would injure the mealy powder which forms so conspicuous a portion of the surface of the bloom. In watering, therefore, the greatest care must be taken to avoid wetting the foliage, or washing the dirt up into the plant, until the truss rises up, when there is not so much danger, for a gentle rain will not hurt the pips, nor the ordinary watering of a very fine rose; but when it is considered that the powder which characterises the flowers and leaves of this plant is easily displaced, it must be obvious, that while the truss is down in the heart, wet and dirt must be fatal to what might otherwise be a good bloom. If there be any plants on which you are depending for a strong flower, and the offsets are not an object, remove, at once, any that may be growing out of the stem, by cutting them away with a sharp knife, before they have become large enough to rob the parent plants of any part of their nourishment, because, if an off-set takes to healthy growth, it seriously affects the bloom any time before it is matured. If, on the other hand, you are depending on increase, and can spare the bloom, pick off all the pips, and earth up the off-sets, which will cause them to grow more rapidly, and strike down roots. Seedlings will, in some instances, be blooming even this month. As soon as you can ascertain that they are not better than we have, get rid of them, either by throwing or giving them away, or selling them, for as the only object of raising seedlings is to get better than we have, or something as good, and different from what we have, all that do not answer that description are totally worthless to the growers of collections. Seed may be sown this month in large pots, of similar earth to that in which they are grown. We prefer large pots to seed-pans, because the greater body of earth keeps more uniformly moist than the shallow pans will allow it to keep. This should be levelled an inch below the top, and the remainder should be sifted through a fine sieve. The pot should be gently bumped on the table, to settle the earth down a little, and then levelled with a strike, so as to be even with the top edge of the pot; on this, sprinkle the seed thinly, and sift only just enough fine stuff over it to cover it properly. This must be placed in the frame along with the plants, and before the earth is dry at the top, let it be watered with a fine rose, so fine as that the wet may fall like dew, for it is absolutely necessary that there be not a grain of earth or seed disturbed. It is the best way to use one of the patent syringes, with the finest rose that is made, and to throw the water up, that it may descend without any force whatever, and in so light a shower, that it can disturb nothing. It must be watered enough to wet the whole body of earth, for frequent waterings are not desirable; this will sink the whole body below the edge of the pot, and a flat glass may be placed
on it, when you are giving the plants air, but it must not receive the whole heat of the sun.

April — The trusses of the rising blooms must now be attended to. Those which are to be nursed for their blooms, must, as soon as they begin to open, be placed apart from each other, by tucking bits of soft moss, or lint, (the former, however, is far the better) between the foot-stalks, so as to place the pips a sufficient distance from each other to open freely without touching; and any pips that are coming deformed, or too weak to open the size of the rest, or too much advanced to keep while the others overtake them, may be removed with sharp pointed scissors or tweezers, and great attention must be paid, that none of those which are to remain get damaged in the operation. When the colours become pretty clear in the budding pips, and they begin to open out well, those intended for exhibition should be removed to a warm sheltered spot, and be placed under hand-glasses, on a table or bench, if convenient; but if not, on a very clear spot of ground, out of the way of wind and dust. Water must be administered freely while the blooms are advancing, for they require a good deal of nourishment, to give them size and colour, and character; and would be seriously checked, if allowed to want it. Care must also be taken to cover from frost. The hand-glasses ought to stand on four flower pots reversed, and placed at the corners, of a proper height to let the edge of the glass down an inch below the edges of the pots in which the plants are; but in windy weather, it will be necessary to cover mats on the windy side, and the sun must be kept off, by as light a cloth or calico as can be had, for light is of great service in bringing out the colours. Continue to reject seedlings that are useless, and to pick off the pips of small plants that you wish to grow well, as the blooming will retard them. Attend well to watering seedlings and small plants, as the smaller the pot the sooner they dry, and the plants suffer accordingly. Take off dead leaves, and occasionally clean out the frames. The examination of the plants blooming for show, should be frequent, because the blooms arranged one day, may, by their growth, displace some of the moss, and they will require very frequent adjustment, for by means of the moss, properly attended to, the flowers will be grown into their proper position, and want no dressing on the day of show, but merely removing the moss.

May — The treatment should in all respects be similar to last month, for the greater part of April, and more than half of May, gives us blooming specimens in every stage, from just opening to the perfect flower; but as some of the early ones will have gone off bloom, you may place them in a frame by themselves, in a shady situation, and allow them to receive a moderate share of genial rain, but cover them against violent falls, and in stormy weather. Those who intend saving seed should remove half-a-dozen choice varieties, whose properties they wish to amalgamate, and place them under a hand-glass,
supported by pots a few inches from the ground. The plants to select should be one season potted, and they should be taken before the pips are forward enough to be fertilized. As soon as they show well enough to enable us to distinguish perfect from imperfect pips, those most perfect in each truss should be selected for seed, and the remainder be picked off. The number of pips to leave on, may be determined by the quality; if there are two or three equally good, two or three may be retained; if there be one better than the rest, that one alone should be kept. These plants must be refreshed with water, and may be uncovered, to receive the benefit of a mild shower, but the glass should be placed over them at night; and if there should be any indication of frost, a mat, also, that will reach to the ground, as frost might prevent them from seeding. Some would take the trouble to fertilize them artificially, but this is a matter of fancy. To do this the anthers must be removed, before they burst, from the one to be impregnated, and then, with a camel's hair brush, take the powder from some fine pip of the sort whose properties are required to be imparted to the seedlings, and take it to the plant to be seeded. If the pistil be in a condition to receive the pollen, it will take it from the camel's hair pencil or brush freely; by this means your best pips on all the selected plants may be impregnated with the pollen taken from the best pips in the whole collection; and thus something like a chance of a fine race of seedlings will be secured, as far as our means of providing for it enables us to do so. It is well to study what properties are required by any particular variety to improve it, and to apply the pollen of a flower possessing that quality. The depriving of the plants of some of their buds will increase the strength of those left, and augment the chances of producing good seed; and, confining the selected plants to those with some good property, and fertilizing with others of known other good properties, will afford reasonable hope of saving a little seed of first-rate excellence, and producing plants of a desirable quality.

June — The plants, as they have done blooming, may be placed in a frame, in a shady situation, as before directed; and as no seed may be required from the general collection, the whole of the pips may be picked off, but the stem ought not to be broken; they must be watered occasionally, or be allowed to have rain, and be uncovered altogether, except in stormy weather, and especially when the wind is boisterous. They may suffer from too much wet; but if the bottom of the frame is impervious to water, and will allow it to run off, there will be little danger. Yellow leaves must from time to time be picked off, and the drainage examined; for at this period the soil is apt to work down among the crooks, and even fill up the holes in the bottom, in which case the soil remains too wet for the health and proper growth of the plants. Water seedlings occasionally, and where there are fresh sown ones up, as soon as they are large enough to handle well, prick them out into fresh pots an inch apart, to grow into strength. Seedlings that have been growing in this state until they nearly touch, may be planted round the edges of pots, about three in a large sixty, or four or five in a size of forty-eight; any of those that have advanced much after being so planted, may be removed, one each, into sixty-sized pots; and those in sixty-sized pots may, if their roots fill the pot, be removed to size forty-eight, for seedlings ought to be encouraged in their growth, without reference to season, until they develop their qualities, when they are either permanently adopted or got rid of. Continue putting into the shady frames all plants as they go out of flower.

July — The practice of last month, in every particular that it will apply, is to be continued without any exception. As the plants have, throughout the collection, done blooming, they must be all subject to the same treatment; but those plants which have not flowered need not be moved from their winter frames; and although they must have the advantages of covering from extreme wet, and shading from hot sun, they must be uncovered as much as possible, with due regard to these provisions; or it would be as well, if you have flooring enough made, for all the lights to be removed to the shade; it would save the trouble and attendance required for shading, while they remain in their original place. Seed that is ripening may be picked and put in the sun to dry, in such boxes or drawers as will prevent any from escaping; and those who like autumn sowing may sow half their stock.

August — This month we propose to re-pot the general collection, and we advise one prevailing rule, to disturb as little as possible the balls of earth of all those that have been one year potted in the smaller flowering-pots; remove the
offsets as carefully as possible, and be careful to preserve the roots of the old plants from injury, as much as you can. The surface of the balls may be rubbed off a little, so that the fibres are not bruised or broken, and the loose crocks at the bottom may be taken away; but the next sized pot must be supplied with crocks, and sufficient compost in them to raise the ball to the surface. Compost must then be filled in between the ball and the pot, and pressed between, without moving or displacing the root. If, on turning out any of these balls, the roots do not appear to have grown much round the sides, they may be replaced in their own pot, and allowed to go over another season in the same, but if the plant be not healthy, you may conclude there is something wrong at the root, and therefore you should shake out all the soil, and examine it, as directed with regard to new plants. The plants that have been bloomed the second year, and have been one season in thirty-two sized pots, may be shaken out and deprived of some of their roots; and the best way to do this is, to shorten the main centre, or carrot-like portion, with the fibres attached to it; they must be then carefully re-potted, in the same sized pot, if strong, and if not strong, in a forty-eight sized pot; but mostly these plants from the large sized pots are strong, and although deprived of their lower roots, want room; besides which, the present potting of them will do for two seasons, if they are healthy. The present month must be looked upon as the potting month, and the whole collection, down to the smallest plants that have not already undergone it, should be changed. Look well to the watering of seedlings, prickling out, potting, or shifting all that require it; when these are potted, shifted, and properly attended to in all these particulars, let them be returned to their shady frames, watered, to settle the earth about their roots, and closed up altogether for two or three days, after which they may have air as usual, and be protected from heavy rain, but except against violent or too much rain, they may be wholly uncovered. The offsets taken off during all the potting operations must be placed round the edges of pots, to strike root, or if rooted, potted off into small pots about the size which the plants warrant; very small ones, even if rooted, may be planted three or four in a pot, and stronger ones should have pots to themselves; but there is always danger of suffering for want of water if plants are kept in very small pots, so that many prefer keeping them round the edges, three or four in a pot, to giving them small pots to themselves; and if a man be so situate as not to be able to attend very often to them, they will do better in the larger body of earth; however, a large sixty-sized pot will take a pretty well rooted offset, and keep it growing well until it is full of roots, and the ball should then, without reference to the time of year, be transferred, with its ball of earth undisturbed, to a pot a size larger. All this work should be done before the month is out.

Gold-centered alpine auricula with precise, formal features grown by Cyrus Happy

September —Towards the end of this month have the frames removed to their winter places, well washed out and dried, and in these frames place your stock; begin by selecting the strongest, and give them room; as you proceed, continue adding the most promising of the remainder, and so go on until the whole are placed in their winter quarters; from this time begin to be more sparing of water, and consider them liable to frost. The proceedings with regard to seedlings may be continued as before in all respects in which they are applicable, except the transplanting those from the seed-pan to pots, in which they are to be one inch apart; they must be kept from the external air a few days, to get them somewhat established before they are treated like older plants; but as some seedlings grow faster than others, and they keep
coming up in seed-pan{s} until every seed has vegetated, the pans should be protected from the slightest frost; and after the first part of this month they should not be removed. Nor are the flowers which come up now to be depended on for character sufficiently to throw any away on account of a deficiency in their colours.

October — A continuance of last month’s treatment must be now observed, save and except, that there is still more danger of frost as we approach the winter; and, therefore, preparation must be made for covering in case of necessity. Water must be avoided, except when absolutely necessary; as the less they have the better, until they really want it. In mild weather, the glasses are best off altogether; but dry parching winds, and hot sun, (both of which are frequent in October) will be always kept better off by covering and shading.

November — This month may be considered winter, so far as the management of this flower is concerned; plenty of air in mild weather, tilted lights, and light shading on bright warm days. Give no more water than is necessary to keep the earth from actually drying; and take particular care that seedlings and seed-pan{s} are not permitted to be dry or distressed for moisture, as from the very small hold they have of the soil, the very surface drying would be fatal to their health and strength, if not to their existence. We must be careful, too, in the removal of yellow leaves, to throw them out of the frame, and to go over the plants several times in the month to get rid of them, for their very presence creates damp and mildew. The frames must not be allowed to accumulate dirt, or falling leaves. Choose mild days to remove the pots out; and well brush out the frames, and the floor of them; for dirt and dead leaves will always be damp, and that is the greatest enemy the plant can have. In open weather, then, mind to uncover the frame, and when the sun is not too hot, let all the plants have the benefit of it. Cover from rains, and in every other respect let the directions for previous months be a general guide. Let the coverings from frost be light water-proof calico or canvass, that the light may not be excluded, for no plant can thrive in the dark; and it should be remarked, that a thin water-proof covering, reaching to the ground all round the frames, is as effective as matting, which is dark; and in most cases much more offensive.

December — This month like one or two preceding, and January and February which follow, must be subject to the treatment most seasonable; for in this country different seasons change the nature of these three or four winter-months sufficiently to make them change places with each other so far as the weather is concerned. It would be useless here to recapitulate the precautions we have given; and the winter-months’ treatment is but a series of precautions.

Notes on Woodland Primroses
by Ralph Benedict

Even though sieboldii is the most beautiful and highly developed of the woodland primroses, many of the other wild species make charming plants that fill special needs better than sieboldii.

Some remain green during the summer. Some have beautiful foliage—kisoana and je-soana. Some have flowers that meet a special need—cortusoides, saxatilis and polyneura.

There is a wide variation in flower color from pale pink, magentas to purples. Some have larger or more flowers to a stalk. We have a polyneura with fringed petals. Much improvement could be made on these plants by careful breeding and observation.

If you have a rock wall laid up without mortar with soil behind it, plant kisoana in the cracks. It will spread through all the crevices and will last until freezing if kept moist. What a beautiful sight!

Primula cortusoides and saxatilis are the only woodland primroses we grow here in Michigan that will repeat blooming in the fall if kept moist. However, unlike the fall blooms of the vernals, they will go with the first freeze.

P. kisoana, if started early in the year from seed, often spreads the first summer and will bloom the following spring. P. jesoana grows very slowly. It blooms after three to five years and spreads only after three or four years.

Sieboldii is the only woodland primrose that dies down in late July or early August even though it is well watered. Some of the other woodland primroses will die down if dry; but if they are watered, they will stay until the first freeze. In fact, kisoana and je-soana need a long season to ripen seed—often in September and October—while sieboldii and other ripen their seed in July and August. Seeds from these woodland primroses are available through the seed exchange or from Far North Gardens in Livonia, Mich.
The great difficulty in the cultivation of the Polyanthus is to get strong plants with single hearts, for the root is apt to throw up side shoots, which take from the strength of the principal one, and from each other. To obviate this, considerable pains must be taken to plant out only single hearts when the roots are parted after blooming, and also to remove all side shoots at their very first indication. Some varieties of the flower are all but useless for show, because of their disposition to spawn instead of strengthen, and the whole of them may easily be got into a bad state by carelessness. All the Polyanthus plants deteriorate by being allowed to grow and spread, for, instead of one good truss, they have a number of weak ones, not one of which would be good enough to exhibit singly.

CHOICE OF PLANTS.

Under these circumstances we begin some directions for the growth of this florists' flower, by recommending the first choice to be of such plants only as have good strong hearts, and promise to give centre trusses only. The best time to choose such plants would be about February or March, by which time they develop themselves, and show pretty well what they will be. With regard to the choice of sorts, the Polyanthus is so far behind what we hope ere long to see it, that we cannot say much on behalf of a sufficient number for a collection. We must build our hopes on improvements to be made ourselves, and therefore say, by way of beginning, choose a few varieties, as many as you like of each, but take those with single hearts only.

POTTING.

The plants must be reared in pots, for that is the only way to keep them for sale; when we have them we can plant them out, or continue them as they are, whichever is necessary. If the pots are full of roots, prepare a bed of good compost in a shady situation, where only the morning sun shines on it; let the compost be, if possible, that which comes from rotted turfs, mixed with about one-third cow or horse-dung, rotted fairly into mould. Mix this well together a good nine inches deep, and into this turn out the balls of earth whole, without disturbing any of the fibres. If, however, the pots are not full of roots, but on the contrary there is plenty of room for them to grow, they had better remain in their pots. But, among other points to look at in choosing plants, that of seeing that they are well established in the pots is essential, and this can only be known by the firmness of the plant in the pot, or by turning out the ball to see the roots have reached the side. If they fairly show themselves, however little, and they are in good-sized pots, they may be considered established; but if they are in small ones their roots...
may easily be made to reach the side by spreading them, but such plants will do no good. To be of any real service, they should be autumn-shifted, and have grown considerably in their pots, and if they have filled them with roots so much the better.

PLANTING IN BEDS.

We must keep up the management both ways: supposing them to be intended for planting out, they should stand in the bed nine inches apart every way, and be planted as deep as they were in their pots; indeed, the old surface of the ball of earth in the pot should be just covered with the new soil, so that both beds should be levelled and appear alike.

PROTECTION.

As we suppose this to be the end of February, or some way into March, when the weather rapidly changes from mild to severe, it will be necessary to cover them with light litter of some kind, such as pease-haulm, or broken straw, for if laid on as it comes from the truss it would be too heavy and close; this covering should be on at night if there be the slightest chance of a frost, and be taken off at daylight if the weather be mild. The Polyanthus is by no means a tender plant; there is a very great doubt in the minds of some whether a covering is necessary at all, but our experience tells us that it is easy to damage the incipient flower of the most hardy thing in nature; and as these flowers may be wanted for seed, or even for exhibition, no chance should be thrown away. The open nature of pease-haulm, or straw, when it has been bent or broken, is such as to admit air and light, and yet to protect against a great deal of frost. In this way must the Polyanthus be seen right up to its bloom; and as the truss rises, the protection must be the more certainly attended to; but, besides this, the plant must be examined to see that there are no side shoots taking any prominent growth, for if there be any, they must be removed before they grow enough to draw any strength from the main truss, or from the heart of the plant before the truss appears.

FLOWERING.

When the flowers are about to open, small hand-glasses may be used to protect them; and if the beds are necessarily where the sun can reach the plants in the heat of the day, artificial shade must be used. If the flowers are not wanted for show, save only the handsomest pip of each plant, and cut away the remainder; and do not put the glass over it unless it be frosty or at dusk, nor cover nor shade it except when there is frost, for that is not favourable for seedling. As soon as a single handsome pip has set its seed, pinch or cut away any other buds and flower, to throw all the strength into the single pod; and having saved a pod from the most perfect flower of each variety, or of such varieties as you think worth the trouble, you have only to attend properly to the plant you raise from them, and may fairly expect some novelty or excellence to reward you for the trouble. But we have now to take the case of the plants not being so well established as you like: in this case you must place them all under glass in their present pots, giving them moderate moisture, plenty of air, and throwing something over these frames at night to prevent a frost from checking them, which, as the only hope you have of blooming them depends on their winter growth, would be very serious.

RE-POTTING.

As soon as the roots have reached the sides of the pot, and begin to mat, they should be removed into some of a larger size; but if they are already in thirty-twos they must be continued in the old ones, because thirty-two sized pots are as large as they can be well shown in. They must be kept from flagging for want of water, but must not be kept wet. If any of the pots look always wet as compared with the rest, you may conclude the soil is bad, or the drainage not free; and you must examine, by turning the ball out of the pot, what state the crocks or drainage is in. If, as is very likely, you find them all stopped up with soil, break them all away from the ball without damaging the fibres, and put new dry ones in the pot about the same height, put a little dry soil on the top, but not too much, and return the ball to the pot as nearly in the same place as possible, that is, no deeper nor shallower, but of the two it had better be raised a little than lowered. Sometimes the stoppage of the water may be found to be caused by the hole in the bottom of the pot alone being clogged up, and the drainage inside open enough; in this case the hole must be cleared, and the crocks, or whatever open stuff may be used for the purpose, should be replaced. The earth of the pot need not be disturbed if you examine the hole first, as the clearing of that may be all that is wanted; and a day or two will show whether the soil dries any better than it did. As the trusses of bloom rise, you will have to remove all but the strongest; but if you have been careful to remove any side growth when it first appeared, this cannot
often happen; it is very rare to have two trusses come up in
the centre or heart of the plant. As the buds swell, you
have only to consider the purpose for which you want the
bloom; if for seed, the buds may be reduced to two or three
as soon as you see which is likely to be the strongest; and
eventually you may do as recommended for out-of-door plants
—leave only one, but that must be perfect.

FOR SHOW.

If, on the contrary, you want the flower for show, there
ought to be as many buds left on the truss as the plant, from
its strength, will carry well. If the stem be strong, ten or a
dozens flowers could bloom well. In the country they reduce
generally to five of the best they can select; however, less
than seven will not make a handsome truss of anything; and
if there be strength to carry seven, we should reduce them to

Nicely formed gold-laced polyanthus

that number as soon as they were forward enough to enable
us to select the best. There is nothing now to do but to shade
them from the heat of the midday sun, and give them all the
air we can in mild weather. When the flowers have nearly
opened, they must have no sun at all, nor must cold winds be
allowed to blow on them. Having now brought all our sup-
posed new collection to flower, and seeded, or shown them,
we may turn those in pots into the open border; those in
pots may be allowed to give a pod of seed each, and have all
the other pipes cut off. They will require well watering while
they perfect the seed; and when this is gathered, let them
grow freely until the middle of July, when they must be
taken up, and each separate variety be carefully parted into
as many pieces as there are hearts, and be planted out in such
a border as we have described, nine inches apart every way;
or, if it be more convenient, in rows a foot apart, the plants
being only six inches apart in the rows; these have to be
kept clear from weeds, have plenty of water, and be examined
frequently to ascertain that there are no side-shoots coming,
or to remove them if any appear. There may be very few
come so strong as we like, but a very moderate plant of one
heart will give a better bloom than a large one formed of more
than one heart, as all Polyanthuses must be shown with a
single truss on a single stem, and therefore, for the purpose
of exhibition, all side-growths are useless, and even mis-
chievous; but if you want to propagate them, of course the
more there are the better they will answer the end in view.

WINTERING.

In the autumn we have a choice of the two modes of getting
them through the winter: in one, by continuing them in the
open border; the other, by potting them. We prefer the
border until they are actually in flower. The only protection
we should give them would be, as we have directed with the
first plants, peas-haym, or broken loose straw, laid on at night,
and taken off in the morning, unless it be frosty, in which
case it should remain on. As the blooms rise, let those which
are strong enough for exhibiting be covered with blooming
glasses, propped up with bricks three or four inches from the
ground, and let there be straw all round to protect them, three
or four inches. It is this which makes us prefer the nine-
inches distance to the six; it gives room for litter all round the
vacancy, and all round the glass also, the full height; indeed, at night, glass and all should be covered, to protect the flowers from frost; but, as every plant will not be fit for showing, six inches may in general be found sufficient. Presuming the flower to be all we want for showing, the only difficulty remaining is that of potting it. To do this well, the ground must be literally soaked; a large ball of earth must be released by cutting round it at sufficient distance to avoid all the fibres, and then the ball may be raised with the spade. You will be able to reduce this ball to the size of a thirty-two pot without hurting the roots if you are careful; when you have done this, put some broken potsherds or crocks at the bottom of the pot, and enough compost on them to bring the plant to a proper level, and before you attempt to put in the ball of earth, convince yourself it is small enough to go in the pot freely, and let some new compost go in all round it; once assured of this, and that it will rest at a proper height, take it up with both hands, and drop it in its place; fill up with dry sifted compost, that it may go down all round, and fill up the vacancy between the ball and the pot; this done, let the pot stand in water up to the brim, till the new and its own compost are completely soaked, when it may stand in the shade until it has drained well again; and the plant will not flag at all for the whole period it is wanted for exhibition. If you determine to grow them in pots, prepare your compost as before directed, get your pots of the size thirty-two, and fill one-third with crocks, put some compost on them, and raise the plants from the ground without breaking the fibres, but do not wet the ground, as in the case of moving them in bloom; let the fibres be rather spread on the compost, which must be heaped up like a cone inside the pot, until it is a right height to keep the plant in its proper station, and add enough on and among the roots to fill the pot up well, the collar of the plant, which is the under part of the lower leaves, being even with the top surface, and, considering that it sinks a trifle, this should be even with the top edge of the pot; by knocking the bottom of the pot gently on the potting table or bench two or three times, the compost will be settled well about the roots, and they are ready for placing in the frame, when they should be liberally watered through a fine rose, so as not to disturb the surface of the soil; and great care should be taken that this watering is effectual, that is, that it wets every part of the compost all through the pot; more plants have been ruined by scanty waterings than by all other sorts of mismanagement.

What's better than one good laced polyanthus? A border or garden full of them! combined; slight watering only moistens the surface and an inch or so below it, and this does more harm than good, the fibres lower down get no nourishment, the plant only gets a limited nourishment from the upper roots, and, without actually flagging, it dwindles, or rather does not advance, and people wonder why. In stoves, greenhouses, or pits, slight watering is ruinous. When plants are said not to require much water, it should be understood as meaning seldom watering; but watering, if given at all, should moisten every grain of soil that the plant grows in, and even drain away, and it should not be watered at all until it wants moisture. Rain-water is always the best; river-water next; spring-water ought to be long exposed to the air before it is used, for it is always more cold, and mostly deficient of those properties which exposure to the air can alone give. Once conveyed to the frames, we leave them to the management recommended for wintering the plants in the first instance.

RAISING FROM SEED.

We now come to the raising of plants from seed; and this, although simple enough with attention, is rarely undertaken with the care it deserves, chiefly because the seed is plentiful; the raisers are sure to have plenty, however careless they are,
and they never once calculate that those lost, however few they may be, are more likely to be good than those which brave the bad management. But, in all probability, the fact of saving but one pod of seed where they might save half-a-dozen or more, may induce more painstaking in the raising of seedlings; and the fact of every seed being saved from the best pip may enhance the value in the eyes of the owners. It has been customary for the old florists, and some of the modern ones, to sow annually seed in autumn. We have done this; but we are quite certain that the loss of some by this plan is inevitable. It is true, that it sometimes lies in the ground a considerable period, and the autumn-sown frequently does not vegetate till the spring. We prefer sowing in boxes, or large-mouthed pots, very thinly, in March, till which time we keep the seeds from the air, and if possible in their pods, as they preserve better. Having sown them very thinly in sifted compost, we sift a thin coat of compost over them, sufficient to cover them completely, but no more. From the time they are sown, we keep them moist, but not wet; cool, but not frosted; in a cold frame in which Camellias and Azalea indica are kept, or in a greenhouse, where there are plants which cannot stand frost, or even out-of-doors, if there be hand-glasses and occasional litter to keep off frost and harsh winds, the seed will germinate freely; and the same treatment will do until the plants have three or four rough leaves,

PRICKING OUT.

when they should be pricked out, an inch apart, in good large pots, which may then be placed in a frame, for the convenience of shading them from the hot sun and keeping off heavy rains, which would disturb the plants; here they may grow till they are touching one another, when a bed may be made for them in the open ground, and they may be planted out, six inches apart, all over it. They will be large enough to require no other care than watering occasionally till the autumn, when they must be subjected to the frame treatment in pots, or the out-of-door management, with temporary covering, by means of litter, as in the case of old plants. When they bloom, you must judge of their qualities by the ordinary rules laid down and acted upon by florists, throwing aside all that are worse than those they were raised from, and preserving the few, for there may be very few indeed that are as good or better. These must be treated like the established varieties we have already referred to. There is, however, one subject upon
which a good deal might be said, although it does not affect all places or persons. The enemies to the Polyanthus are numerous, but the slug, snail, and red spider are the universal pests; the two former attack them in good health, the latter only when they are neglected and sickly. If our directions about water and air are strictly attended to, there is no danger of the red spider; but if the plants once suffer from irregularity in this matter—if they receive any check from only partially moistening the compost—it is almost sure to attack them; they require to be well watered when watered at all; to be shaded from violent sun, and, if in pots, protected from chilling winds and heavy rains. This will always keep them in health, and the red spider, which is rather the effect than the cause of sickness, will not trouble you. Not so, however, with snails and slugs; they attack and destroy almost in a night, and there is scarcely a preventative that will last long; a ridge of lime, frequently renewed, will keep them from the bed, if it be surrounded, but there may be many, even in the ground; the destruction of the whole is the only possible security. Lay cabbage and lettuce leaves on the surface, between the rows and plants; examine them every morning, and destroy all you find on them; frequently rake the surface with a shallow rake, for they do not go low down, and this either disturbs them or fills up their holes, in both of which operations many suffer. This, and trapping them with leaves, will soon clear an infested bed, if others are prevented from coming to it; but the best and most effectual way of doing this is to set in earnest about clearing the neighbouring beds also. If there be any hedge which harbours them, the bottom should be cleared from weeds, and whatever else chokes it up; and if there be a bank or ditch, the weeds should be taken away, and the place cleaned, so as to destroy the principal harbour.

PROPERTIES OF THE POLYANTHUS.

OF THE PIP.—1. The single pip or flower should be perfectly flat and round, and be slightly scalloped on the edge, and three-quarters of an inch diameter. 2. It should be divided in six places, forming six apparent flower-leaves, each of which should be indented in the centre to make it a kind of heart-shaped end; but the divisions must not reach the yellow eye. 3. The indenture in the centre of the apparent flower-leaves should be exactly the same depth as the indenture formed by the join of these flower-leaves, so that it should not be known by the form of the flower which is the actual division and which is the indenture; in other words, which

Grower seeks perfection

is the side and which is the centre of the flower-leaf, and all the indentures should be as slight as possible to preserve the character. The tube should be one-fifth of the whole width of the flower, and stand up at the edge, above the surface of the yellow eye. 4. The flower should be divided thus—the yellow tube in the centre being measured, the yellow eye, round the tube, should be the same width as its diameter; and the ground colour of the flower should be the same: or draw with the compasses, opened to the sixteenth of an inch apart, a circle for the tube or centre; open them to three-sixteenths, and draw another circle for the eye, then open them farther to five-sixteenths, and draw a third circle for the ground or dark colour. Beyond these circles there is a yellow facing, which should reach round every flower-leaf to the yellow eye, and down the centre of every petal to the eye, and so much like the edging that the flower should appear to have twelve similar petals. The ends of these twelve should be blunted, and rounded like so many semi-circles, so that the
Outline of the circle should be interrupted as little as possible. 5. The tube should be nearly filled up with the six anthers, which are technically called the thrum, and the flower should not exhibit the pistil. 6. The edging round and down the centre of the leaves formed by the divisions should be of even width all the way, and universally of the same shade of sulphur, lemon, or yellow as the eye, and there must by no means be two shades of yellow in the eye. 7. The ground colour should be just what anybody likes best, but clear, well defined, perfectly smooth at the edges inside next the eye, to form a circle; and outside, next the lacing: a black or a crimson ground, being scarce, is desirable; but the quality of the colour as to clearness, rather than the colour itself, constitutes the property.

Of the Plant.—1. The stem should be strong, straight, elastic, and from four to six inches in length. 2. The footstalks of the flowers should be of such length as to bring all the flowers well together. 3. The truss should comprise seven or more flowers, and be neatly arranged to be seen all at once. 4. The foliage should be short, broad, thick, and cover the pot well.

Of the Pair, or Collection.—The pair or pan of more should comprise flowers of different and distinct colours, either the ground colour or the yellow of each being sufficiently different from the rest to be well distinguished. The whole should be so near of a height as to range the heads of bloom well together. The great fault of the Polyanthus now, even among the best sorts, is that the divisions between the petals are so wide as to make the flower look starry, whereas there should be no more gap where the division is than is in the indentation of the petal itself.

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

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

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

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

Ortho Lawn and Garden Sprayer—a convenient and accurate sprayer that works with your garden hose.
Trevor Cole’s experiences in growing primulas at the Ottawa Research Station were designed to assist growers in less temperate regions of the world. He didn’t intend for it to be the “last word.” APS hopes his comments will serve as a springboard for discussion.

Growing conditions can vary from neighborhood to neighborhood in the same town. What is successful for one gardener won’t work at all for his friend across the street. Many fine primula growers — half of the membership of the society — live in the eastern part of the United States and Canada and in other harsher regions of the world. No one knows what their success and failures are unless they are shared. This quarterly is your vehicle for offering your own suggestions and comments.

We hope you will.

—The editors

Trevor Cole’s analysis of the performances of the many primulas he has grown in Ottawa was very interesting.

The reported indifferent and uneven colors resulting from his sowings of the primula japonica selections “Silva Tarouca” and “Valley Red” surprised me. My luck has been extremely good with both named forms as their blooms are strikingly vivid—rich shades which also have the advantage of being sun-proof.

Both colors are difficult to describe, so I resorted to matching them to the RHS color charts. “Silva Tarouca” is slightly dilute RHS vermillion—not “orange” as Trevor expected it to be. It shows a tomato cast to its color in bright sunshine.

“Valley Red” is slightly dilute RHS fuchsia, leaning a bit more to red than purple. In both cases the plants are strong-growing, heavy textured in leaf and blossom.

My seed of “Silva Tarouca” came from Czechoslovakia, where I believe it originated. “Valley Red” came from the RHS seed distribution. Under both names the resulting seedlings were so true in color that no discernable difference was evident between plants.

Another good color form is one that came to me simply labeled P. japonica “Carminea.” Previously I had raised several pink selections only to dispose of them because they bleached in strong light to a leprous appearance.

“Carminea” is a lovely wild-rose pink, shading to deeper rose in the center and has proved resistant to sun. When my donated seed was listed on the last APS list, gremlins changed “Carminea” to “Carblinea,” which must have appeared puzzling and unpronounceable to members! At the Empress study weekend a well-known eastern grower saw my color photos of “Carminea” and said it appeared to be very, very similar to one grown in the Northeast under the name “Rose du Barri,” a much prettier name altogether.

On Trevor’s list of japonica primulas “Red Hugh” was included. Since the very well-known hybrid between pulverulenta and cockburniana has borne that name for 50 years, it is surprising that another candelabra primula could have been given the same name. Possibly he had an experience similar to one I had.

Three years ago I sowed a packet of seed labelled “Red Hugh” and produced a splendid crop of japonica “Valley Red”!

In Vancouver we have several imposters masquerading as P. wilsoni, so it would appear that red candelabras suffer particularly from this infuriating confusion. It is especially unfortunate when these misnamed plants and their seeds are spread abroad by innocent growers—compounding the error ad infinitum.

The British ACS “Asiatic Primulas” book by Roy Green is an invaluable help in untangling similar species. It is so precise in the descriptions and measurements of the parts of the plants included.
**Offer Extended**

**Schultz-Instant**

**Fertilizer**

with Model S "Mixerator Yard Gun"

4 teaspoons per garden

water garden

vegetables, flowers, roses,

trees, shrubs, lawn, everything for yard

& garden.

Available at your store or send $7.95 with this ad for 5 lbs Schultz Fertilizer plus a $2.95 "Mixerator" Free. (Estate Size 25 lbs with 2 "Mixerators" $30.00. Free delivery. Extended, limited offer. immediate shipment.

Schultz Company

DeKalb. 61720 Northwest, St. Louis, MO 63043

**SPRING HILL FARM**

P.O. Box 42

GIG HARBOR, WA 98335

Fresh Seed of

Polyanthus, Acaulis, Juliae

$1.00

Double Vernals,

$3.00 for 50 seed

Transplant after August

RUTH BARTLETT HUSTON

**Species and Cultivar Primulas**

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

 Precise Catalogue 40'

THE ROCK GARDEN

R.F.D. #2

Litchfield, Maine 04350

**SEED of DOUBLE ACAULIS**

Per Packet (30 Seeds) — $3.00

Supply very limited

Plants available at the nursery including a few juliana crosses.

Rosetta Jones

6214 So. 287th St.

Kent, Wash. 98031


**Spring Hill Farm**

P.O. Box 42

Gig Harbor, WA 98335

Fresh Seed of Polyanthus, Acaulis, Juliae

**$1.00**

Double Vernals,

**$3.00 for 50 seed**

Transplant after August

RUTH BARTLETT HUSTON

**Species and Cultivar Primulas**

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

Precise Catalogue 40'

THE ROCK GARDEN

R.F.D. #2

Litchfield, Maine 04350

**SEED of DOUBLE ACAULIS**

Per Packet (30 Seeds) — $3.00

Supply very limited

Plants available at the nursery including a few juliana crosses.

Rosetta Jones

6214 So. 287th St.

Kent, Wash. 98031

contain much information about the early hybrids and selections. "Gardening Illustrated," which I acquired as bound copies—years 1940 to 1946—have splendid articles about the origins of many old named hybrids, such as "Dartingtons," "Lissadels" and others. Plus there are stories about japonica color forms "Postford White" and "Millars Crimson" by George Dalrymple, one of the finest authorities on the various candelabras of that period.

I suppose the hard cover books are reluctant to include a listing that needs updating every few years to keep abreast of developments. Possibly a simple descriptive list giving brief details as to stature, leaf form, colors and other distinguishing features should be published every three to five years. That could help greatly in preventing several obviously different "versions" from being established in widely separated areas.

This lack of definitive information about the many "variations on the candelabra theme" was the subject of discussion by a fair number of members at the APS picnic in Chehalis this July. This means that I am not alone in wishing to have more knowledge so that many plants can be assured of legitimacy.

The mental image of the cartoon I will enclose has been in my mind for several years. Hope it amuses you—black humor maybe!

Thea Service Foster

"Foster's Folly"

566 Esquimalt Ave.

West Vancouver, B.C.

Canada V7T 1J4

**Rare Dwarf Slow Growing Conifers**

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

**ALPENGLOW GARDENS**

13328 King George Hwy.

North Surrey, B.C., Canada

**The American Rock Garden Society**

(founded 1934)

cordially invites you to join its growing list of enthusiastic members.

Annual Seed List • Quarterly Magazine

Family Membership — $10.00

Single Membership — $9.00

Overseas Membership — $8.00

Patron Membership $25.00

Life Membership — $250.00

Donald Peach

Rt. 1, Box 282

Mena, Ark. 71953

35
Diary of a Primroser

by Cyrus Happy

Late summer bloom seems to be normal with the new dwarf polys and primroses. Sold under various names (Julian hybrids at Parks), they are generous with their vivid flowers in spring, late summer and fall. The plants I raised from seed seem perfectly hardy. Store-bought plants were not consistently hardy. That seems to be true with many primulas.

Rule: The best adjusted plants are those you raise from seed where they will be growing.

Surprising primrose growers

That the hardiest of perennials, Fred Clarke, gave us a scare. A small stroke sent him to the hospital. But, true to form, he was home again in two days. Fred and Helen are really "something else."

Primula growers never cease surprising me. For example, member Mrs. Otto Ohrt, who lives on Horsehead Bay, a small arm of Puget Sound, grows Primula nutans in a shady bed. The plants live long lives and seed themselves generously. She has had many years of experience in providing the right conditions for hard-to-please primulas and rhododendrons.

Many years of experience resulted in a book on one of our favorite companion plants. Nelson Coon’s "The Complete Book of Violets" includes violes and pansys and gives a good list of varieties, used in medicine, their place in history, literature and folklore, commercial violet culture and general garden care. It is $10 from the author: Nelson Coon, Vineyard Haven, Mass. 02568. His other books include "Using Wayside Plants," "Gardenin for Fragrance" and, my favorite, "A Garden Diary." All are available from the author.

Plea from the disorganized

Help! I’ve lost a letter. Someone in England ordered double auricula seeds, and I don’t know who. All I have is the envelope postmarked "Leicester." Guess I’ll never get organized.

As your plants settle in for the winter, I suggest a watering with 0-10-10. Liquinrix Bloom is a good one. No nitrogen to make soft tissue—just phosphate and potash to stimulate roots and next year’s flower beds.

To weed or not to weed is the question in the autumn. Seems that if we leave the weeds to protect the primroses, the winter will be mild and the weeds take over. If we remove the weeds, the winter will be severe and the protection sorely missed.
Surplus copier, anyone?

Does anyone have an old Polaroid slide copier they don't need? We could use it to turn out one-step black and white prints from color slides. I copy slides now onto 35mm black and white film which makes good prints, but it is time consuming.

Don't forget to send in your deposit for the 1981 study weekend at Port Townsend, Wash., to Hollis Phillips, 7550 - 39th Ave. NE, Seattle, WA 98115.

If you want double acaulis and polyanthus seed and Rosetta Jones is sold out, try Allan Goodwin, Goodwin's Rd., Bagdad So.-7407, Tasmania, Australia. His are giants. Rosetta's are smaller and show the juliae influence.

Magic moments in the garden

Our Emily is 21 months old now. We had a great summer learning about fruit. First strawberries, then Santa Rosa plums. The raspberries were a great favorite, and the salmon-colored seedling raspberry bore fruit for more than six weeks. She called them A-bees. Now we are sharing a magic moment sitting on a patch of dry grass in the morning sun sharing a superb Gravenstein apple. Being a 58-year-old father has its rewards.

What St. Helens did right

Herb Dickson has an inch of volcanic ash on top of the soil in many of his potted plants. Auriculas root right into the ash. I've noticed that soil that is regularly top-dressed with manure or compost becomes too organic and needs a top dressing of mineral material, such sand, fine crushed rock (or volcanic ash).

Jim Menzies says he has had great germination from about 20 different species primula this year using chick grit. The larger seeds were sprinkled on the soil mix and covered with one-eighth inch grit. Very small seeds were sprinkled on top of the grit and lightly watered in. Chick grit is available at most farm and feed stores.

American Primrose Society

Officers

President: Herbert Dickson, 2568 Jackson Highway, Chehalis, Wash. 98532
Vice president: Frank Berthold, 1614 NE 128th, Portland, Ore 97230
Recording secretary: Ann Lunn, 3040 N.W. Parkview Lane, Portland, OR 97229
Treasurer: G.K. Fenderson, Grout Hill, South Acworth, N.H. 03607
Corresponding secretary, east: Alice Hills Baylor, Stage Coach Rd. Stowe, Ver. 05672
Corresponding secretary, west: Gus Arneson, 1004 NW 179th Pl., Seattle, Wash. 98177
Editor emeritus: Florence Bellis, 2835 N. Oak Ave., Lincoln City, Ore. 97367

Directors

Alice H. Baylor, Stowe, Ver. 1978
Elizabeth Van Sickle, Sequim, Wash. 1978
Ruth Huston, Gig Harbor, Wash. 1979
Loie Benedict, Auburn, Wash. 1979

Membership

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

Publications

Back issues of the Quarterly are available. Order from the secretary.

Manuscripts for publication in the Quarterly are solicited from members and other gardening experts, although there is no payment. Please send articles and photographs to the editor's office, 11617 Gravelly Lake Dr., S.W., Tacoma, Wash. 98499.

Advertising rates per issue: full page, $60; half page, $30; quarter page, $15; eighth page and minimum, $10. Submit advertising to the editor.

Seed Exchange

Ross Willingham, chairman, 2248 S. 134th, Seattle, Wash. 98188.

The treasurer respectfully requests the presidents of all affiliated clubs to forward the agreed upon voluntary contribution to the national treasury of $1 a member to him at their earliest convenience.

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