



Primroses

The Quarterly Of The American Primrose Society

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Primroses

The Quarterly of the
American Primrose Society

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The purpose of this Society is to bring the people interested in *Primula* together in an organization to increase the general knowledge of and interest in the collecting, growing, breeding, showing and using in the landscape and garden of the genus *Primula* in all its forms and to serve as a clearing house for collecting and disseminating information about *Primula*.

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Front Cover: Kevin Baker grows *Primula elatior* subsp. *meyeri* in his garden in Calgary Alberta, Canada

Back Cover: Another spring classic, *Primula elatior* (oxslip) at a show in Vancouver BC. Photo by Maedythe Martin.

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Membership in the Society includes a subscription to Primroses, seed exchange privileges, password to the member's only section of the APS web site (including the Pictorial Dictionary) and use of the slide library.

Dues for individual or household membership, domestic and Canada are:
 \$25 per calendar year
 \$70 for three years
 Overseas rates are:
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 \$90 for three years.
 Membership renewals are due November 15 and are delinquent January 1. Submit payment to the treasurer.

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The View from Here

JON B. KAWAGUCHI

As mentioned by the society's vice president, Rhondda Porter, in the issue of *Primroses* Summer 2015, members of the APS Executive and Board are taking turns in writing the introduction for each issue of the Quarterly.

When I replaced Julia Haldorson as Treasurer, I never thought I would still be the Treasurer nearly ten years later. One of the reasons I have continued for all these years is the people who have made my duties as Treasurer easier. No society could survive without the tireless efforts of the members who volunteer their time to a society. When I became Treasurer, I discovered that besides being responsible for the finances there were also the duties of memberships which included keeping track of the membership rolls, sending out membership reminders; lots of extra things. I was very glad when Julia Haldorson volunteered to become the Membership Chairperson and took over these duties.

Another member that spends countless hours supporting the society is Amy Olmsted who is responsible for the Society's Seed Exchange. She sends checks and receipts in a timely manner, and the Seed Exchange has been very profitable the last few years.

Cheri Fluck has been responsible for the back issues of the Society's Quarterly, *Primroses*, for many years and she compiled many sets of back issues of the Quarterly to be sold to the

membership at a responsible price which generated revenues when the society needed it.

Another two people who have made my tenure as Treasurer easier are Maedythe Martin and her daughter Jane Guild. They have spent countless hours getting the Quarterly published for over 10 years. In their early days, Maedythe also was responsible for getting the Quarterly printed and mailed. To save on postage, she would sort the issues and then drive out to the central postal depot where the Quarterly could be shipped in bulk to the U.S. Not only are they hardworking, both are very nice and a pleasure to work with. In recent years, Alan Lawrence volunteered to take over the printing and mailing responsibilities. He has spent his time and effort in finding the best printers and best prices for the printing and mailing of the Quarterly. Due to his hard work and getting the mailing returned to the US, he has reduced both the printing and mailing expenses of the Quarterly. During my term as Treasurer, the website has been redesigned twice, first by Jane Guild and the second time by Michael Plumb. Both of them were able to keep website design costs way down, by donating their time or paying for the design costs. They deserve a vote of thanks. I would also like to thank all of the nurseries and seed companies that placed advertisements in the Quarterly and on the website.

All of these members have given their time to this wonderful society and I want to thank them for making my treasurer's duties so much easier. Their hard work has generated revenues and reduced expenses which allow the society to provide benefits for all APS members, including, but not limited to, the society's wonderful website, four color issues of *Primroses*, and the Seed Exchange. Even with all of their hard work, the reality is that costs continue to rise. The society has not raised membership dues for quite some time. The society relies on revenues from membership dues, seed exchange and back issues sales, advertisements in the Quarterly and on the website but all these revenues are not enough to cover the Society's expenses. Thus, the society is asking members to continue to make whatever donations to the Society that they can to ensure that this wonderful society continues to provide these benefits to its membership.



Primula elatior ssp meyeri

NOTES BY MAEDYTHE MARTIN

I happened to look through Kevin Baker's blog recently and a photo of *Primula elatior ssp meyeri* caught my eye. Its upright leaves are striking, and the color is unmistakable, once you see it. I had it a few years ago as a plant that just came up from some seed, I don't know what, but I hadn't planted seed of *P. elatior ssp meyeri*. It is quite early flowering and was a plant I always looked forward to first thing in the spring. It didn't last forever, though I had it for 5 or 6 years. And now, having planted some seed, this time on purpose, of *P. elatior ssp meyeri* that came from the APS seed exchange, I have a small plant which is putting on new leaves! I am quite excited to have it again.

I thought I would look it up – provide a bit of background information – but it is a bit elusive. It is in John Richards' book *Primula* (2nd ed, Timber press, 2003) but there is not much information. He finds it responds well if treated as an alpine plant, and it doesn't do well for him in his North England garden. We, in Victoria, are a modified Mediterranean climate with very dry summers and mild winters, and while there is no snow cover, the fact that there is less rainfall than in England may make it possible to grow it more easily here. Kevin Baker is in an ideal spot, as Edmonton, Alberta gets snow cover and has a climate where many difficult alpine plants, even *Primula allionii* cultivars can be grown out of doors.

So what did I find? One company listed seed on the internet and described it as follows:

“15 (20) cm, a rare and beautiful subspecies with pale pink to deep purple flowers and a yellowish-orange throat. It is native of the Caucasus, Georgia and north-eastern Turkey where it grows in rock crevices and hillsides in alpine

meadows at an elevation of up to 4,000m. For any humus rich, well drained soil in a sunny spot. Excellent for the rock garden.”

I know it is a plant from the Caucasus and I think of it as their oxslip. There are other *Primula* from this area that are equally intriguing: *P. megaseifolia*, the tiny jewel *P. juliae*, and *P. sibthorpii*, responsible for adding the pink and red color genes for many modern hybrid primroses.

The reference in Richards for *P. elatior* ssp. *meyeri* is to “Valentine and Lamond, Notes in the Royal Botanic Garden Edinburgh... and also to *P. amoena* M. Beib, 1808.” (p. 110) The article by Valentine and Lamond is about *P. amoena* and this gives us the clue that it is closely related to *P. amoena* and was grouped with it for many years. I always hear Pam Eveleigh in the back of my mind when looking up any *Primula*: “Did you look in Smith and Fletcher?” So off I went to hunt out my copy. They do not list *P. elatior* ssp. *meyeri* but under *P. amoena* they relate the introduction of this plant to cultivation and give a very detailed scientific description and finally, 3 pages in, mention *P. elatior* ssp. *meyeri*.

“Reference has been made to the variability of the species in the field. In 1863 Ruprecht (l.c.) described *P. meyeri*, which subsequent commentators generally preferred to rank as a variety or subspecies of *P. amoena*. Kusnetzow (l.c.) who traveled widely in the Caucasus and collected *P. amoena* from many localities, recognized six varieties of which var. *meyeri* is one.” (The Genus *Primula*, Section *Vernales* Pax. By W. Wright Smith and H.R. Fletcher, reprinted from the Transactions and Proceedings of the Botanical Society of Edinburgh, Vol. XXXIV., Part IV. P. 409)

The Royal Botanical Garden Edinburgh Herbarium includes a sheet on *Primula meyeri* with the following information:

Collector/Expedition: Meyer
 Collector: Meyer
 Collection number: s.n.
 Collection date: 07 July 1861

Filing region: West Asia and Egypt

Country of origin: Turkey

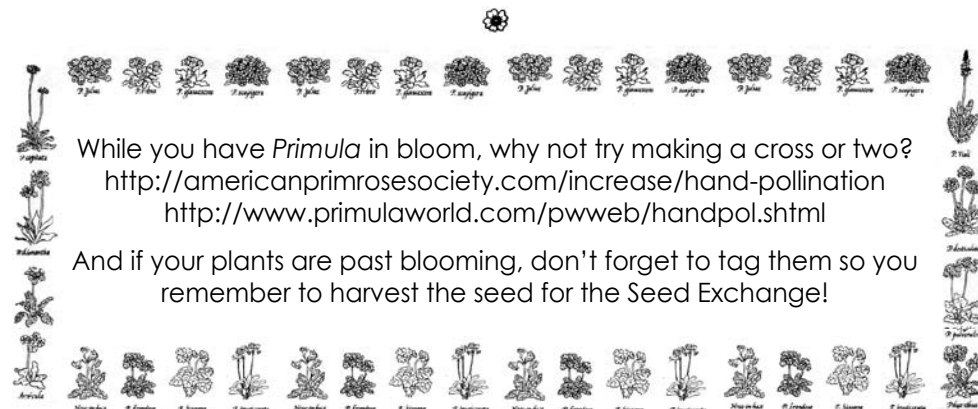
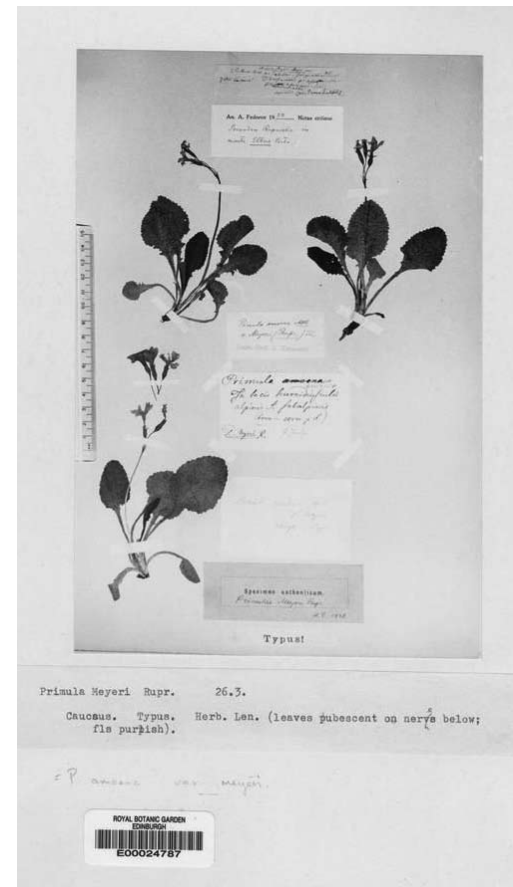
unspecified kind of type of *Primula meyeri* Rupr.

Kind of specimen:
 photograph - black and white (including b/w photocopy)

Barcode: E00024787

Cite as: <http://data.rbge.org.uk/herb/E00024787>

I suspect there is quite a bit of classification history which follows over the years, until it is listed as a subspecies of *P. elatior*. No matter where it is classified, although this gives us some clues to its cultivation, the plant is well worth growing as an early harbinger of spring. Thank you to Kevin Baker for his great picture of the plant.



While you have *Primula* in bloom, why not try making a cross or two?
<http://americanprimrosesociety.com/increase/hand-pollination>
<http://www.primulaworld.com/pwweb/handpol.shtml>

And if your plants are past blooming, don't forget to tag them so you remember to harvest the seed for the Seed Exchange!

Primula cuneifolia subsp. *saxifragifolia*.

BY MERRILL JENSEN

Take a hike on one of the many alpine ridges around Juneau, Alaska and chances are one won't need to look very long before discovering what the locals call pixie eyes - *Primula cuneifolia* subsp. *saxifragifolia*. Another common name is Wedgeleaf Primrose. A true belly flower (best appreciated when viewed while lying on one's belly...) they are rarely more than a few inches tall. Richards (*Primula*, Timber press 2nd ed. 2003) describes them as "nearly stemless with blunt-toothed leaves". The relatively large flowers are bright, bubblegum pink with a yellow eye. In other areas of *P. cuneifolia*'s range, their color ranges from red to white. The species is separated into four subspecies:

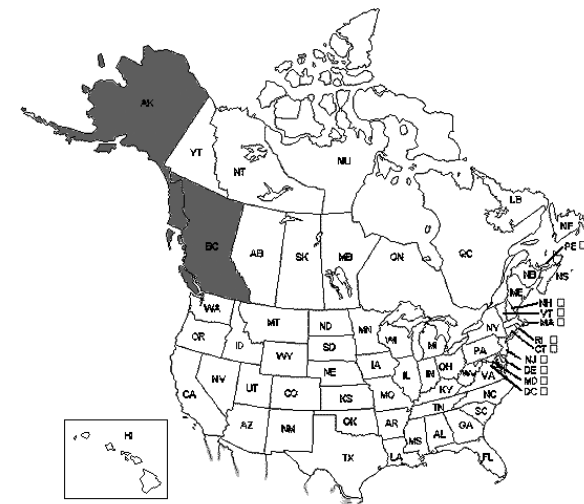
- subsp. *bakusanensis* and subsp.
- *heterodonta* from the mountains of Japan;
- subsp. *cuneifolia* from the Russian Far East and Hokkaido; and subsp.
- *saxifragifolia* that grows in the Aleutians, south central Alaska and east and south to the Coast Ranges of Alaska and British Columbia.

In all my treks to Juneau's alpine area, I've only found the bright pink form. I've found them growing in scattered small clumps in wet, mineralized soil in exposed locations. With their short stature, they are usually found growing apart from the other alpine plants that would shade them out. I have had limited success growing these at the Jensen-Olson Arboretum. Plants collected (we have secured the required collection permits) have rarely lived more than a full year and have not flowered for us here at sea level. Being the

optimist, I continue to collect a few each season to try a different treatment. I suspect that our warmer, wetter weather at sea level is the contributing factor to their demise. In the alpine, they are covered with snow from early October until late June or early July on the higher ridges and therefore escape the freeze/thaw weather patterns we experience at the Arboretum. I have not yet tried starting them from seed. Since the plants are of small stature, I'll need to carefully mark a spot or two for fall seed collecting during one of my treks this summer. If I cannot successfully grow them myself, I know I can always come across them on my excursions to the high country and then sit a spell with these agreeable little gems.



Distribution of *Primula cuneifolia* in North America



Credit: NatureServe. 2015. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. Available <http://explorer.natureserve.org>. (Accessed: April 5, 2016).

Primroses for the Southern States

BY BETTY MONTGOMERY

Betty has provided information for growing primroses from a Southern perspective. She thought it would be good to share some thoughts for people who live in the hot and humid south. Betty gardens in South Carolina.

What better way to chase the winter blues away than bright, colorful, cheery primroses? Primroses are an early, low-growing, flowering perennial plant that add a bright touch to the woodland garden. They come in a wide variety of colors and with the right plant and the proper growing conditions, they will multiply and grace your garden for years. The hybrids are available in a rainbow of colors and the cowslips, which are the easiest to grow, come in a lush shade of rich yellow.

Primroses are native to Europe where they are often seen gracing the roadsides in meadows, ditches or hillsides. They prefer cool temperatures and rich humus soil with lots of compost and leaf-mold. They are low maintenance and easy to grow but the secret is in choosing the right varieties to plant that will take the conditions of our sunny South. Our heat and humidity are not ideal for many of the primroses you see offered in catalogues.

Shortly after Christmas, I start seeing primroses offered in the grocery store. I often buy a couple of these happy looking plants to add a touch of cheer in the house when the days are cold and gray outside. When they have finished blooming, I plant them outside, hoping they might come back. A few do return but there are two kinds that will return faithfully. Consider cowslips and polyanthus.

My first introduction to primroses was when my cousin, Ann Cornelson, gave me a few cowslips (*Primula veris*), a species of

primrose, to plant in the garden. I was told the clumps would divide quite easily, which they did, and, when dividing, to replant them immediately. I placed them along a path under deciduous trees and they have been growing there quite content for many years. You can also grow them from seed, planting the seeds in the fall, but I have never tried this.

Cowslips produce lemon-yellow flowers and have a botanical name that means 'the first of spring'. They should be grown in a partly shaded spot with the crown at ground level. They are happiest when planted in moist soil that has leaf-mold added. The fresh, green crinkly leaves are oval shaped and the flower buds emerge in the center of this lovely green foliage. They were often seen in cow pastures across England but today you see them more along the edges of the road where they are safe from the farmers' plough.

Most primrose flowers seen today for sale are polyanthus hybrids, many of which are a cross between the primrose and the cowslip. These come in a kaleidoscope of colors ranging from white, yellow, orange, red and pink to blue and purple. I have some I bought from Montrose Garden in Hillsboro, NC many years ago. They have done extremely well here in the upper part of South Carolina. These lovely flowers return year after year and grace a path each spring.

There is an exciting line of primroses that is now available in many vibrant



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colors. These have been developed by David and Priscilla Kerley and are called the Belarina Series. The flowers have a rosette-look that is a throwback to the old double English primrose. The flowers resemble a small carnation, and are fully double.

I have seen these offered in several catalogues this season and being a primrose lover, I cannot wait to try them. They are touted to be both heat and humidity tolerant, which is important in warmer areas. Plant Delights Nursery offers them as well as several other mail-order companies. Tony Avent, owner of Plant Delights tests all his plants and if they will grow in his Raleigh, NC nursery, then I am willing to try them. He offers the Belarina Series in a wide range of colors which include cobalt blue, red, pink, bright yellow and cream as well as two varieties that are two-toned, one amethyst with an edging of white, and a yellow one that is edged in orange.

Primroses are happiest in humus-rich, well-drained soil that does not dry out completely. They do not like to be waterlogged during the winter or dry in the summer.

Primroses can be divided by just pulling the plants apart which is very easy to do and they transplant easily. Older plants can be divided just after they bloom so that they have time to regrow before the cold weather comes. This way they will be ready in the late winter or early spring to bloom their heads off. I have also divided them as late as August when I failed to do this earlier in the year, and they have done just fine the following season.

It is a good idea to add leaf-mold or organic material to the soil every few years. This helps the soil stay healthy and rich and it replaces the elements the plants have taken out of the soil. You can also fertilize them with a weak solution of liquid tomato fertilizer. If you give them too much nitrogen, the first number listed on a package of fertilizer, you will get lots of leaves and fewer flowers. Enjoy!

Betty Montgomery, a master gardener and author of *A Four Season Southern Garden*, can be reached at BMontgomery40@gmail.com



Primroses for the South: In Betty Montgomery's garden

Two primroses do well in Betty's garden in South Carolina - one has no name, but is likely a variety of *P. vulgaris* (see photo at bottom). The other Betty tells us:

*"My first introduction to primroses was when my cousin gave me a few cowslips (*P. veris*), a species of primrose, to plant in the garden. I was told the clumps would divide quite easily, which they did, and when dividing, to replant them immediately. I placed them along a path under deciduous trees and they have been growing there quite content for many years."*





Sweden's Auricula Club
 This is Sweden's Auricula Club's blog site, where both members & visitors to the blog can learn more about Primula Auriculas. Members can send in pictures of their auriculas, come in contact with other auricula growers to exchange ideas, auricula plants & seeds. Membership is free & entitles members to a 20% discount on purchases of auriculas from Ray's Perennials. They also will receive regular news letters giving details on special offers & the latest information on auriculas.
Om du vill så får du gärna skriva på svenska till mig. Jag förstår svenska men skriver mycket bättre engelska, mitt modersmål.



Sweden's Auricula Club website has so many great photos of auriculas and also auricula theatres. As Ray

Molin-Wilkinson says, *"you are only restricted by the space you have and your imagination, to create an exciting and interesting place where your auriculas can be admired."* You can get ideas for making your own theatre here, and then google "auricula theatre diy" for even more pictures, as well as articles on making them from scratch, and even turning book shelves and dressers into theatres!

Ray also reminds us, *"One thing to consider is the placement of you display. Auriculas do not do well in full sun; so I normally site mine in a North, East or West facing position. I also look to have some dappled shade on my East & West displays; this is normally given by some deciduous trees in the garden."*



Primula elatior meyeri

“I happened to look through Kevin Baker’s blog recently and a photo of Primula elatior ssp meyeri caught my eye. Its upright leaves are striking, and the color is unmistakable, once you see it.”



“Kevin Baker is in an ideal spot, as Edmonton, Alberta gets snow cover and has a climate where many difficult alpine plants ... can be grown out of doors.”



Pixie eyes - *Primula cuneifolia* subsp. *saxifragifolia*



Photo by Merrill Jensen

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Flowers of Spring

NOTES BY MAEDYTHE MARTIN



One book on my bookshelf, *Poorman's Nosegay* by Lesley Gordon (Collins, London, 1973), has a chapter called "Flowers from a Cottage Garden" that includes sections on *Primula*: the primrose, the polyanthus and the cowslip. Each section has snippets of poetry, flower lore and historical tidbits about the plant. The language is flowery, the information eclectic, but the total effect is charming. One small quote: "the primrose likes semi-concealment among woods and copses; the polyanthus is a garden dweller, but the cowslip

prefers to sun itself in open fields." (p.74). I am glad I picked the book up and I like the bits of information. I also like that these members of the *Primula* family were favorites in the cottage garden. On the cowslip, the author informs us, "This is a plant of many regional names: it was Fairy Cups in Lincolnshire; Crewells in Dorsetshire; Cowsritpling in Yorkshire; Horsebuckles in Kent; Herb Peter or St. Peter's Keys, which became in time, Peterkeys or Peterkin; Our Lady's Keys; Paigle, Pagle or Pea Gulls; and nicest of all, Cuckoo-boots." (p. 74)

To the right is a old page with a botanical description of the cowslip and above is the introductory page for the cottage garden flowers from Gordon's book.





Small, Bad Bugs

“According to Buczacki and Harris in their book Pests, Diseases & Disorders of Garden Plants, there are over 500 species of aphids found in Britain. According to The Earth Life Web, The Aphids, there are approximately 1350 species of aphids in North America...”

In primula, the woolly clumps are usually found close to the base of the stem where it emerges from the ground and where the leaves are folded close to the base of the plant.”



Top photo: Jane Guild. Bottom photo: Jay Lunn

Small, Bad Bugs

RHONDDA PORTER

Des Kennedy, a popular local gardener and writer (who lives and gardens on Denman Island off the coast of BC), published a book titled “Living Things We Love to Hate”. He had chapters on slugs, snails, fleas, spiders, and mice. Woolly and root aphids, which are on the top on my ‘hated living things’ list, were not even mentioned, probably because he doesn’t grow *Primula* and doesn’t do his gardening in pots or in greenhouses where woolly and root aphids tend to be a problem.

Some *Primula* growers use the names woolly aphid and root aphid interchangeably and the distinction can often be unclear as one plant may have a woolly clump close to the base and a whitish waxy coating on the roots just below the soil. It is also possible for one plant to have both. Finding useful information on these pests is not always easy. Even the scientific names of what are commonly referred to as root and woolly aphids depend on what plant is being attacked as several species of aphids produce either a whitish or yellowish waxy or woolly coating. According to Buczacki and Harris in their book *Pests, Diseases & Disorders of Garden Plants*, there are over 500 species of aphids found in Britain. According to *The Earth Life Web, The Aphids*, there are approximately 1350 species of aphids in North America. Some aphids are host-specific and only affect one plant variety, but many aphids are more opportunistic and will affect multiple plant varieties from apples to cotoneasters to lettuce, tulips, and *Primula*.

Eriosoma lanigerum is the main species of woolly aphid. This is the aphid which is believed to be native to North America and was first reported in England in 1787 by Sir Joseph Banks. This aphid is still occasionally referred to as ‘American blight’ in England. This aphid lurks in cracks in the bark of trees and shrubs and is

a significant agricultural pest. In *Primula*, the woolly clumps are usually found close to the base of the stem where it emerges from the ground and where the leaves are folded close to the base of the plant.

Various species of aphids attack the roots of plants and produce a white or light-coloured powdery coating on the roots. These root aphids are a particular problem for plants grown in pots and in greenhouses, although they can affect certain plants such as lettuce and green beans which are usually grown outdoors. Colonies of root aphids are often only discovered when plants are repotted. Buczaki and Harris list *Primulas* and auriculas among the plants which are particularly susceptible to root aphids. According to Smith, Burrow and Lowe, "The most important species is the Auricula Root Aphid (*Pemphigus auriculatae*). This feeds on the roots (or junction of roots and stem) and produces a white powdery wax which makes an infestation easy to see."¹

Both woolly and root aphids affect the health of plants and although they do not immediately result in the death of the plant they can seriously weaken it. Plants exhibit a loss of vigor; there may be yellowing of leaves; plants begin to wilt, and are less likely to produce an abundance of bloom. Some plants seem to try to escape the effect of both kinds of aphids by producing multiple offsets, although plants with root aphids are more likely to die as the roots damaged by the aphids begin to rot.

Treating infestations of either pest depends on a number of factors: the number of plants which are affected, the gardener's choice of organic or chemical control, the availability of suitable biologics or other pesticides, and the gardener's personal tolerance for the use of toxic chemicals. If you are faced with a large number of infected plants, the inclination is to look for a contact or systemic pesticide to be used either as a spray or soil drench.

Organic solutions are available in the form of nematodes, insecticidal oils and soaps, and products containing pyrethrum (a chemical derived from the flowers of the *Chrysanthemum* and

Tanacetum family). A number of companies market a variety of organic pesticides which they claim have no or low environmental impact. One of these pesticides is azadirachtin, marketed under the name Azatrol EC. It claims to be non-toxic to bees and other beneficial insects although it may take about 21 days to have any effect on the aphids.²

There are a large number of highly effective insecticides, such as Acephate, Orthene, Malathion, and Diazinon, which can be used to control woolly and root aphids. All of these insecticides are broad-spectrum, non-systemic organophosphates, designed to be used as either sprays or soil drenches. Organophosphates have proven to be highly toxic to bees and other beneficial insects. Their use has also been linked to sudden hive collapse among honey bee populations. The persistence of these chemicals in the environment depends on the specific organophosphate and on the other chemicals in the mix, but traces of them can be found years after their last use. For this reason, the use of organophosphates is being increasingly restricted and many forms are only available to agricultural users with specific licenses.

One of the most effective controls for root aphids was diazinon. Its residential use was banned in the US in 2004 and in Canada in 2007, although it is still permitted for some agricultural uses. When I used diazinon granules in my soil mix at repotting, I never had a problem with either root or woolly aphids or for that matter, root weevils. Now I have to wonder how many other living things I inadvertently affected. "A powerful neurotoxin, diazinon is highly poisonous to fish, birds and other wildlife -- a single granule can kill a small bird -- and it is one of the most commonly found pesticides contaminating air, rain and water."³

If using highly effective, highly toxic, and persistent insecticides is no longer an option, how can the *Primula* enthusiast deal with these pests? The best way to deal with any pest is to prevent it from taking hold. First, repot all new acquisitions and either throw the old soil away or dispose of it in your garden far from your *Primula*

collection. Since aphids are of limited motility, if there were any in the pot, they can't travel very far. Second, check all your plants regularly. Immediately isolate any plants which show signs of white fluff near the crown or white near the drainage holes in the pot. Even during the spring when woolly aphids develop wings and become little specks of white fluff, they never fly very far, so isolating infected plants will help prevent the spread. Root aphids can be spread by ants which carry them from plant to plant⁴, so watch for any sudden flurry of ant activity in your greenhouse. Third, repot regularly, remove the old soil and check the roots and crowns of all your plants. I know that this seems like a lot of work, but having a smaller collection of healthy, enthusiastically blooming plants is much more rewarding than trying to nurse a large, sickly collection back to health.

However, it can happen that even the most diligent of *Primula* growers will miss an infected plant or two. If the plant is one of several of the same variety, it is often easier to throw the whole plant out rather than trying to save it. If this is not a choice which appeals to you, you can put the plant out in the open away from your main collection and hope that some other living thing will decide to eat the offending aphids. Last fall I discovered a large number of plants with woolly aphid. I had no time to repot them all, so I cleaned them up as best I could with straight isopropyl alcohol on a cotton swab and set them out in the open on the gravel at the side of the driveway and waited to see what would survive. To my surprise most of the *Primula* which I exiled have survived and show no sign of aphids. This is especially surprising as the affected plants were mainly *marginatas* and *allionii* hybrids and I had expected that the persistent winter rains would kill them even if the aphids didn't.

Getting rid of a root aphid infestation takes longer than getting rid of woolly aphids simply because woolly aphids are more easily seen and can be treated without repotting. The easiest way to deal with woolly aphids is by using a combination of isopropyl alcohol and insecticidal soap. The woolly mass can be removed with a cotton

swab dipped in alcohol. Be sure to check all the little crevices and check the soil close to the base of the plant. If possible remove the lower leaves to make it easier to clean the area around the base. Next spray the areas where you found the aphids with insecticidal soap. I don't recommend spraying the entire plant, as I have found that some alpinas are sensitive to having soap on their leaves.

Because root aphids are harder to see, the infestation can have spread more extensively before you see it. Take the plant out of the pot. Put the pot in a pile for cleaning and remove all the soil from the roots. Wash the roots in water and spray the roots with an approximately 50/50 alcohol/water solution.⁵ Cut away the damaged roots (they will show blackened or brownish sections) and spray again with alcohol. For *marginatas* which have carrots, you can even sit the plant in an alcohol solution while you get organized to deal with the offsets which often result from a root aphid infestation. Before putting the plant and its offsets in new soil and clean pots, spray the roots with insecticidal soap.

As with many tasks associated with caring for *Primula* in pots, dealing with pests which have an appetite for *Primula* roots and foliage can involve a lot of work. At times it can almost seem like too much work, but then your collection begins to bloom, and you remember why you do it.

Footnotes:

1. Smith, Burrow & Lowe. *Primulas of Europe and America*. The Alpine Garden Society, Surrey, Great Britain, 1984, page 204.
2. "Aphids" Planet Natural. www.planetnatural.com/pest-problem-solver/lawn-pests/aphid-control/
3. Cone, Marla. "EPA Takes Pest Killer Diazinon Off the Shelves". Los Angeles Times, January 1, 2005 (articles.latimes.com/2005/jan01/nation/na-pest1)
4. Smith, Burrow & Lowe. *Primulas of Europe and America*. The Alpine Garden Society, Surrey, Great Britain, 1984, page 204.
5. Isopropyl alcohol comes in two strengths: 70% and 99%, although the 70% variety is easier to find.

Sources:

- "Acephate", "Organophosphates", "Diazinon", "Malathion", and "Pyrethrins". Entries in Wikipedia.
 "The Aphids". The Earth Life Web. www.earthlife.net/insects/aphids.html
 Integrated Pest Management: Pesticides – University of California Agriculture and Natural Resources www.imp.ucdavis.edu
 National Pesticide Information Center: www.npic.orst.edu (npic.orst.edu/factsheets/acephagen.html)
 Smith, Burrow & Lowe. *Primulas of Europe and America*. The Alpine Garden Society, Surrey, Great Britain, 1984.
 Woolly Aphids: www.heritagefruittrees.com/au/wooly-aphid



New Book on *Primulas*

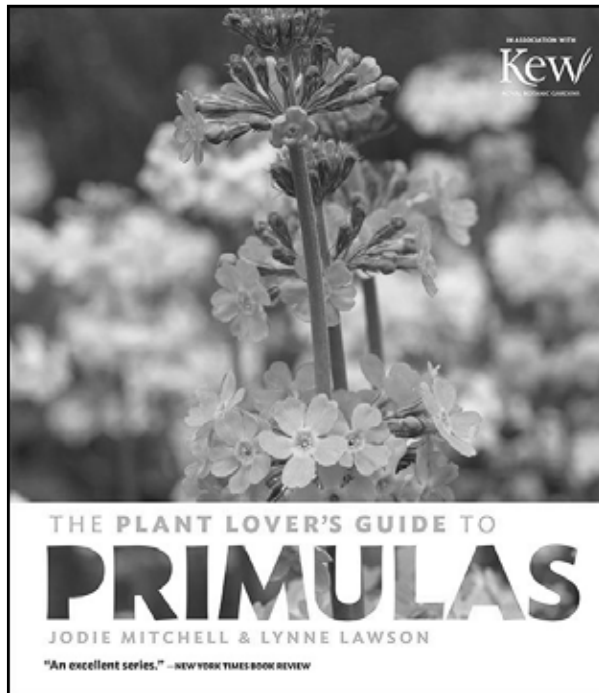
The Plant Lover's Guide to Primulas BY JODIE MITCHELL AND LYNNE LAWSON

Timber Press has recently published a new book on *Primulas* by Jodie Mitchell and Lynne Lawson of Barnhaven Nursery:

“Primulas are so much more than just brightly colored bedding plants. The older varieties of polyanthus are perfect for spring mixed borders, and the long-stemmed candelabra primulas add beauty to waterside and bog gardens. Then there are small alpine species suitable for rock gardens and the infinitely collectible auriculas.

Lynne Lawson and her daughter Jodie Mitchell are specialist growers of primroses. They operate world-famous Barnhaven Primroses, now located in

*northwestern France. Holder of a National Plant Collection for Barnhaven strains and a certified collection of *Primula auricula* cultivars, the nursery continues the 80-year-old tradition of hand pollination begun by Florence Bellis in the United States and carefully maintains the breeding lines she developed. Breeding new varieties of hardy primroses and maintaining rare species and cultivars in cultivation is a vital part of work in the nursery.”*



26 Order directly from Timber Press, or your local bookseller.

American Primrose Society

Minutes of the Board Meeting held on January 24th, 2016

The meeting was held online. Quorum and start at 6.04 pm, EST.

Board members present: Rodney Barker (President of the New England Chapter), Ed Buyarski (Director), Mark Dyen (Director), Julia Haldorson (Director and Membership Secretary), Merrill Jensen (President, Juneau Chapter), Jon Kawaguchi (Treasurer), Alan Lawrence (Interim APS President), Amy Olmsted (Director), Michael Plumb (Webmaster and Interim Secretary), Rhondda Porter (Vice-President)

A. Approval of the Agenda (Ed/Rhondda) Decision on the future of the APS and whether to become involved with NARGS was left off the agenda pending further discussion by email.

B. Minutes of October 25th 2015 – accepted (Ed/Rhondda)

C. Business Arising and Old Business

1. Nominations for new Board members:

- Michael reported that we now have a full slate of candidates, all of whom are the present holders. So far the board has received no other nominations.
- Nominations from the membership may still be submitted by mail or email to the secretary, or via the webmaster [*See website home page*].
- Rhondda introduced the idea of online voting, citing the system used by NARGS. Michael stated that Jane Guild, our previous technical adviser, had been looking into online voting, and that it was still worth pursuing. Alan reminded the board that the completed ballot was about to be distributed with the winter quarterly, so no changes could be made this year.

d) ACTION: Michael will investigate online voting for next year's election. This would be an adjunct to voting by surface mail.

2. Application to become the International Cultivar Naming Authority for Primula:

- Alan has so far not had any input from board members or others regarding the format of documents which are to be used for the registration process. **TABLED** for the board next meeting.

3. Update on the disposal of old hardcopy quarterlies

- a) Rhondda reported that Cheri had sent her a list of remaining paper copies. Rhondda will organize these into batches ("Grab Bags") based on the decade in which they were published.
- b) People will order a grab bag via PayPal on the website. The cost will be \$5 to cover postage. The grab bags themselves will be free.
- c) **ACTION:** Our technical adviser is ill at present, but Rhondda will attempt to set up the PayPal button on the website.
- d) PayPal will send each \$5 to Jon our treasurer (with notification for his records), and will also automatically notify Cheri of the address of the recipient. Cheri will ask Jon for reimbursement of the postage.

4. Cy Happy's Materials

Michael reported that Maedythe had not yet heard back from Cy Happy's relatives regarding the possible donation of his materials on Primula which he has accumulated over many decades. **ACTION:** Michael will email the family.

D. Treasurer's Report (Emailed before the meeting)

1. Income less expenses October 1st to December 31st 2015: 1,192.78
 2. Income less expenses January 1st to December 31st 2015: 1,049.68
- Total liabilities and equity as of December 31st 2015: 28,449.10

3. **MOTION** (Michael/Mark): to accept the Treasurer's Report. **Carried.**

E. Committee Reports

1. **Membership** (Julia, by email):
 - a) Total membership as of January 22nd 2016 is 227 (up slightly from 222 a year ago).
 - b) Sixty members have yet to renew. Reminders were placed in the Quarterly and on the website.
 - c) The seed exchange has had a positive effect on renewals.
 - d) **MOTION** (Mark/Michael): to accept Membership Report. **Carried.**
2. **Editorial Committee** (Maedythe Martin, by email):
 - a) The winter issue of the Quarterly should be in members' hands by mid-February.
 - b) **ACTION:** Michael will post a notice to this effect on the website.
 - c) Rhondda encouraged the board and chapters to submit articles for

the Spring Quarterly

- d) **MOTION** (Ed / Mark) to accept Editorial Report. **Carried**

3. **Website** (Michael):

- a) Just before New Year Michael posted the seed list from Amy, together with the pages that accompany the seed list (three types of order form, instructions, PayPal).
- b) The fall quarterly 2015 was posted for members to view, along with the contents page and message from a board member (Merrill) for public view (to encourage joining).
- c) Members were encouraged on the home page to purchase a 'Christmas Gift Membership'.
- d) The call for nominations to the board was posted on the home page with a link to the webmaster (secretary).
- e) **MOTION** (Rhondda/Mark) to accept Website Report. **Carried.**

4. **Seed Exchange Report** (Amy)

- a) Total income so far: \$1188; total expenses so far: \$937, leaving a plus of \$250.40.
- b) 'Lucky Dip', open to everyone, starts February 1st.
- c) **MOTION** (Mark/Ed) to accept Seed Exchange Report. **Carried.**

F. Chapters

1. The secretary had distributed the reports from the Juneau and New England chapters and from the BC Group. These reports were taken from the draft copy of the upcoming Winter Quarterly.
2. **MOTION** (Michael/Mark): to accept chapter/group reports. **Carried.**
3. Amy reported on the membership of the New England Chapter: 26 APS members out of a total of 43 NE members.
4. Merrill will canvass for more members for the Juneau Chapter.
5. The BC Group is sponsoring the National Show this year, to be held in Portland, Oregon, in conjunction with the Hortlandia Show, April 8-10.

H. Next meeting: April 9th or 10th at the National Show. Detailed arrangements to come from Show Organizer (via Maedythe).

I. Adjournment: (Mark) at 6.53 pm Eastern

Respectfully submitted, Michael Plumb, Secretary



North American Rock Garden Society

Yes, I am interested in a seed exchange, discount book service, slide library, field trips, fact-filled Quarterly, garden visits, and plant sales.
Sign me up!

Membership:
USA, Canada: US\$30
Overseas: US\$35

Please contact:
Mr. Bobby Ward
Executive Secretary, NARGS
PO Box 18604
Raleigh, NC 27619-8604

Make checks payable to
North American Rock Garden Society

<https://www.nargs.org/info/smembership>.

Join the National Auricula & Primula Society

Midland & West Section

www.auriculaandprimula.org.uk



£10.00 Overseas Membership.

to: The Honorary Treasurer, Roger Woods,
44 Tansey Crescent, Stoney Stanton,
Leicestershire, LE9 4BT United Kingdom.

NATIONAL AURICULA AND PRIMULA SOCIETY

SOUTHERN SECTION

www.southernauriculaprimula.org

The National Auricula & Primula Society - Southern Section was founded in 1876 by and for enthusiasts who raised and exhibited Auriculas, Gold-Laced polyanthus and other primulas.

The Annual subscription is £7.00 (UK) for single or family membership, Overseas £8.00

Members receive an illustrated Year Book and a Newsletter - Offsets, containing interesting articles on growing and raising Primulas together with their history and cultivation.

Applications for membership of the N.A.P.S. Southern Section should be made to:
The Honorary Secretary, Lawrence Wigley,
67 Warnham Court Road, Carshalton Beeches,
Surrey, SM5 3ND.

NATIONAL AURICULA AND PRIMULA SOCIETY

NORTHERN SECTION

Please consider joining the National Auricula and Primula Society - Northern Section. Overseas memberships are some of the best ways to learn more about your favorite plants. Benefits include publications and more.

Write: D. Skinner, Treasurer. Nanny Lane, Church Fenton, Tadcaster, N. Yorks. LS24 9RL. Overseas membership £7.50 (\$10.00 US)

Please make checks payable to NAPS.
www.auriculas.org.uk

New Members

New Members
June 25 - September 30, 2015

Year of Expiry	Name	Address
2016	Frank Bittmann	12 Stanton Street, Pittston twp, Pennsylvania 18640 USA
2016	Darcy Damrau Steck	2697 Channel Drive, Juneau, Alaska 99801 USA
2016	Dottie Fennell	Gardens in the Wood of Grassy Creek, PO Box 22, Crumpler, North Carolina 28617 USA
2016	Ann Katholi	Poinciana Drive, Homewood, Alabama 35209 USA
2016	Maola On	728 Symphony Woods Drive, Silver Spring, Maryland 20901 USA
2016	Rebecca Stevenson	219 Frontenac Road, New Kensington, Pennsylvania 15068 USA
2016	Elain Whitesel	7861 Haverhill Lane, Alexandria, Pennsylvania 16611 USA

Should there ever be a question about your membership, please contact:

Julia L. Haldorson, APS Membership
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membership@americanprimrosesociety.org

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