

Growing Primulas in Ontario

by

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Temperatures can vary quite significantly in Southern Ontario where I maintain 2 gardens. In Richmond Hill where we live, the Zone is a 5b/6a, however, a 100 miles further north, right on the 45th degree of latitude we have a cottage in the Muskoka region in a Zone 3b/4a. It is here, where summers rarely get into the 80's and where snow fall is fairly reliable, hopefully arriving before temperatures plunge to the -40 range, that I grow all of my primulas. The pH of the snow tends to be in the range 3.5 to 4.0 making it 5000 times more acidic than tap water, great for growing ericaceous material but not so good for lime lovers. Over the approximately 1 acre of garden, it has been possible to create a number of areas in which to grow primulas. These include bogs, troughs, woodland gardens, perennial beds, raised gravel beds, a tufa cliff and even limestone paths.

The first bog I built started life as a pond where I was hoping to grow water lilies. Sadly, it was far too shallow, the concrete was runny and the ground probably wasn't even level to start with, the net result being a 35-40cm deep depression which sloped to one end, totally useless for its intended purpose. In an attempt to make something out of it, since the concrete was too thick to break up and remove, I added a mixture of peat moss, gravel and sand raised to a height of 25cms above the edge, partly to allow for compaction but also to let plant roots either go down to seek water or stay in the less damp soil further up. Neither this, nor any of the other bog gardens, ever became "smelly" and the slope allowed excess water to seep away. Exbury Gardens, in the south of England, surround their ponds with these primulas making a superb floral display and, at Inverewe Gardens in the north of Scotland, rivers of colour follow streams through the property. It is therefore pretty tempting to try something similar but it all too quickly became apparent that many of these primulas are extremely weedy in a damp environment and, when happy, grow very large and seed everywhere. I do, however, continue to grow *P. japonica* "Appleblossom" and the deep darkish red *P. pulverulenta* which cross to yield attractive pinks but which also provide some pretty ugly flower heads with half the petal being white and the other half red. As a result, deadheading after flowering is pretty well essential. My second plantings in this bog consisted of *P. scotica*, *P. mistassinica*, *P. rosea* 'Grandiflora' and *Pinguicula grandiflora*. For the first year or two all went well with more and more seedlings becoming established. It was only later that I realized they were all *P. rosea* seedlings and within a very short time everything else disappeared, a valuable lesson in paying attention.

I have spent a fair bit of time researching the fascinating lives and discoveries of the Europeans who botanized China and who were responsible for many of the introductions that we take for granted today. Amongst them was Frank Kingdon Ward who brought back *P. florindae* in all its color forms from the common yellow to shades of burnt umber and deep orange red. He named it after his first wife while his second, Jean, gave her name to *Lilium mackliniae*, both splendid plants. *Primula florindae* is very amenable and doesn't need to be grown in a bog as it quite happy in a well mulched perennial bed

in dappled shade. It too will self seed but, being far less robust than the common candelabra types, is a welcome addition to the garden. Other long lived successes in the bog garden have included *P. involucrata*, *P. sikkimensis*, *P. nivalis*, *P. alpicola* and *P. luteola*. There is also a natural damp area where water drains from high up in the back woods and comes closer to the surface as the bed rock rises near the lake. Here *P. nivalis* and *P. macrophylla* do well, planted in amongst *Meconopsis* and *Gentiana sino-ornata* hybrids.

One of the best and perhaps rarest plants that I am growing in a bog is *Primula* X 'Peter Kleine', a hybrid of the difficult *P. clarkei* with the weedy *P. rosea*. The result is a very well behaved plant that slowly increases over time. *P. farinosa* and *P. laurentiana* also thrive in a bog environment but seem to prefer life in a path, composed of a mixture of pure limestone chips and screenings located next to the bog, where they self seed and appear to be much happier in a totally soil free environment.

I have a total of 14 troughs, the largest being 8' long by 5' wide and 3' high with walls 10" thick and the smallest being about half that size. While very small, portable, troughs may work well for some people I have never found them to be of much use. Larger ones seem to promote better airflow and probably keep roots a lot cooler with just the correct amount of moisture. The first ones I made were constructed of concrete reinforced with chicken wire, however, this was hard work, expensive and time consuming. Newer ones have all been made using 4" by 4" pressure treated landscaping ties and seem to work just as well.

Over the last 20 years I have led a number of trips to the Alps and Pyrenees. There we saw *P. allionii*, *P. auricula*, *P. carniolica*, *P. daonensis*, *P. glutinosa*, *P. hirsuta*, *P. integrifolia*, *P. latifolia*, *P. marginata*, *P. minima*, *P. spectabilis*, *P. tyrolensis* and *P. villosa* growing in the wild, some on cliff faces and boulders with others in open alpine meadows. *P. auricula* and *P. marginata* will succeed just about anywhere in the garden and are easy to propagate by cutting off the leggier stalks in late summer and sticking them in a shady spot with a moisture retentive soil. By the following spring almost 100% of the cuttings will have rooted and can be planted out into a permanent spot. In spite of the fact that *P. allionii* is found only in the Maritime Alps on tufa like limestone, not very far north of the Mediterranean, it and many of its hybrids, seem to be fairly hardy and will survive the extreme cold of a Muskoka winter. On the other hand, they never seem to be all that happy, at least not for me. We have found *P. integrifolia* in the Pyrenees growing in turf saturated by snow melt, conditions which are hard to duplicate in the home garden. *P. tyrolensis* prefers limestone cliffs and boulders above the Rolle Pass in the Dolomites and again, is not easy to grow even if plants or seed are available. The rest, along with *P. glaucescens*, *P. wulfeniana* and *P. clusiana*, the Murray-Lyon form of which has double the flower size of the type, all do well in troughs, although it has to be said that *P. minima*, is a shy bloomer in my garden. Perhaps it would be happier in an open bed as we have seen it throughout Europe flourishing in open high meadows often side by side *P. glutinosa* with which it forms interesting hybrids.

We all may have, in the back of our minds, the concept that primulas must have a source of water to grow well and that very few of them really appreciate being baked in full sun. While it is true that, in the wild, a lot of primulas grow in alpine meadows or on cliff faces, temperatures there tend to be modified by altitude and also by the fact that reading drop significantly as night approaches, certainly not the case

in Eastern North America through the summer months. One of the troughs that I constructed over 20 years ago was really designed for drabas, androsaces and eriogonums. To finish off the trough, which is located in a very sunny spot, and to get rid of some surplus seedlings, I planted *P. auricula*, *P. villosa* and *P. glaucescens*. Since then, these plants have grown larger and more floriferous in spite of the fact that they virtually disappear by late summer having been baked to a crisp and receiving water only in the form of rainfall. Rather than dying off, they retreat to ground level and then, every following spring, put on a superb floral display.

I first encountered *P. vulgaris* growing in the woods at my grandparent's farm located in the north of Scotland. At the time, I really wasn't interested in gardening, however, I have since come to appreciate the beauty of this particular primula. Paths, lined with rotting logs and filled in between with 12" of partially composted chipped wood, weave their way through dappled sunlight, a great environment for growing this primula where it tends to flourish for many years. There are many excellent *P. vulgaris* crosses and selections but the best, for me, is the Jelitto Arctic Series in shades of white, rose, red, deep red, blue and yellow. These plants will grow well in a woodland setting but they also thrive in a sunny bed composed of a soil and gravel mixture. Blooms are very large and occur once in the spring and again, just as impressively, in the fall. There are obviously lots of double such as 'Sunshine Suzie', 'Quaker's Bonnet', 'Dawn Ansell', 'Marie Crousse' or 'Val Horncastle' that also do very well but these, and the single forms, need to be divided every few years otherwise they will slowly disappear. In brighter areas of the woodland *P. denticulata* grows to form huge clumps and self seeds everywhere, making it a bit of nuisance. Nevertheless, there are good white and red forms as well as an 'almost' blue that comes true from seed. The Edinburgh Botanic Gardens grew an excellent red selection for many years in a bog at the edge of a pond but I think that *P. denticulata* is happy in many locations other than full sun where it tends to wilt. *P. kisoana*, from Japan, spreads by runners, and can be quite vigorous. While some color forms are a dingy lilac red, there is a very nice pink which does set seed and an excellent white form that doesn't, at least not for me.

P. sieboldii, from the Far East is a worthwhile addition to the woodland garden although it also seems to be happy in sunnier spots. While it doesn't come in a huge range of colours, having mostly white, pink or lilac flowers, or combinations of these, the petal structures are often very attractive. In Japan, where this primula is taken very seriously, there are many named clones, some of which can be pretty expensive to purchase. Most of mine were grown from seed obtained from various exchanges and many of the resulting plants are really quite attractive. They all seem to set copious amounts of seed which can be scattered around to increase their numbers. It is advisable to consider intermixing other blooming perennials as *P. sieboldii* completely disappears underground, to a resting rhizome, by midsummer.

P. cockburniana lights up the woodland garden with its orange red blossoms and looks much like a dainty candelabra. The correct pronunciation is not as in cock-a-doodle- do but as co-burn, after H. Cockburn of the British Consular Service and/or the Reverent G. Cockburn who assisted the collector A. E. Pratt. Scottish names are often never pronounced as they are written. *Penstemon davidsonii* var. *menziesii* usually comes out as *P. d. men-zees-e-i* but in fact the correct pronunciation is *P. d. ming-us-i*, all very confusing even if you are a Scot! Speaking of Scots, another excellent introduction was made by

George Forrest in the form of *P. bulleyana*, named after Arthur Kilpen Bulley, the owner of Bees Nursery and financier of his early expeditions to China, a tortured relationship that Forrest would soon come to regret. The golden orange flowers are attractive and the plant is longer lived than *P. cockburniana* as is *P. b. ssp. beesiana* with its pink/magenta flowers. Dappled shade and a well drained, mulched, soil is also an excellent place to grow *P. cernua*, *P. capitata ssp. mooreana* and *P. muscarioides*. So far, many of the Chinese androsaces and gentians also seem to be happy here but time will tell.

My tufa bed is made up of 2 tonnes of rock and is 10 metres long, 1 metre high and 3 metres wide. Since it was constructed in the fall of 2006, hundreds of plants, mostly seedlings, have been either placed between the rocks or inserted into holes drilled in the tufa. While primulaceae in general seem to be quite happy in this environment, it is too early to state that primulas are, other than various selections of *P. auricula*. *P. allionii* and its hybrids have not done particularly well but it is too early to draw any conclusions other than to say that tufa and limestone are perhaps not necessarily the same thing, at least as far as plants are concerned.

With regards to North American primulas we have seen *P. cuneifolia* in Alaska, *P. suffrutescens* in California, *P. cusickiana* in Idaho as well as *P. parryi* and *P. angustifolia* in the Rockies. *P. parryi* looks as though it should be growable but it isn't for me, making *P. angustifolia* the only one I have succeeded in keeping for any length of time. Even this wasn't much of a triumph for, when it bloomed, the flowers were hidden by the leaves.

Many years ago I grew tender rhododendrons at the cottage. To save them from the extreme temperatures of winter I had a backhoe construct a large pit, lined it with wood and then dug up the rhodos every fall and buried them over the winter. This was a complete failure for, come spring, the pit was the lowest point around and filled almost to the top with icy water. The experiment was soon abandoned. The lesson learned was that plants are either going to live or die no matter what you do and, by extension, there are really no hard and fast rules in succeeding with primulas. The main thing is to create a number of different environments, grow lots of seedlings and stick them in. You might be pleasantly surprised!

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