

International Rock Gardener





This month the IRG brings you a selection of plants from North and South America and from China and the Himalayas, illustrating the experiences of gardeners from around the world in growing these beauties. It is a trait often found in rock gardeners that they will often persist time after time in their attempts to grow their desiderata, not being keen to accept failure. Another habit is their excitement to grow untypical forms of iconic plants. Such is the variety of our lives, I suppose!

Cover picture : *Tecophilaea cyanocrocus* by J. Ian Young



--- Mountains in the Gardens ---

THREE EXPERIENCES WITH A 'MOUNTAIN PRIDE' by 'McPavlis'

If you have a good photograph it is easy to find inspiration to write about your personal pleasure and experience with the portrayed plant. The photograph here is actually a scanned slide taken in NE California by William (Liam) McCaughey: 'Mountain Pride' is the lovely subshrub *Penstemon newberryi* which has three distinct subspecies. Liam, a quiet Irish gentleman, is a talented photographer. Everybody enjoyed his portrait of the delicate furry *Pulsatilla ambigua*, on the cover of [IRG 14 February 2011](#).

Liam strategically placed *Penstemon newberryi* subsp. *newberryi* in the foreground of the volcanic cone of Mt. Shasta so we can admire the natural beauty of this 15cm high clump with showy pink flowers and well-shaped glaucous leaves. The rock is acidic granite.



Penstemon newberryi subsp. *newberryi* photo Liam McCaughey

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I have seen this **subsp. *newberryi*** on the sleeping beauty volcano called Lassen Peak in the [Californian Lassen National Park](#). Some places around the peak in the park are still active with steaming cracks and boiling mud. The trailhead from the parking place to the top, which was blown away in the series of eruptions from 1914 to 1917, was so full of people that it resembled a pilgrimage. There was a perfect group of this penstemon in the middle of the long cone made from screes and isolated pale volcanic rock formation. Some plants were happy to bloom in the north facing crevices and stabilised screes.



Penstemon newberryi subsp. *newberryi* photos John P. Weiser

Ed.: *John P. Weiser, an enthusiast of native plants, grows a wide selection of western American plants in his dry-land rock garden in Sparks, Nevada. He also delights in photographing these plants in habitat.*



Penstemon newberryi subsp. *newberryi*

*The genus *Penstemon* with nearly 300 species, is the largest genus endemic to North America. Little wonder that there has been, since 1946, is an organisation devoted to this genus, [The American Penstemon Society](#).*

*John says: From the Sierra Nevada of California and Nevada we have *Penstemon newberryi* ssp. *newberryi*. This is a high elevation *Penstemon*. I find it growing on loose decomposed granite screes at 4300-11500 foot (1300-3500 metres) elevations. On these loose screes, the movement of the loose material will, over time cover the stems where they sprawl, these stems will root easily. The resulting mats can be several feet across. This also makes it a snap, to take rooted cuttings.*

One of the joys in finding a stand in bloom comes from watching the little [Black Chinned Hummingbirds](#), perform aerial acrobatic moves, while chasing off would be interlopers - chirping and buzzing threats the whole time.

photo John P. Weiser

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All plants in the Lassen Park had very small blue-green leaves forming mats some 10cm tall and dense clusters of 3cm long narrowly tubular flowers in different shades of red. One plant was outstanding with its dark burgundy red colour just asking to be made a new cultivar called 'Old Wine'! The largest colony of this subspecies was just below the irregular, fragmented summit where more very desirable magenta red colours can be seen. The problem is that this pretty subspecies is fussy in cultivation; calling for a special acidic mineral substrate, cool moist conditions in the growing period and a snow blanket for protection during winter.

Penstemon newberryi* subsp. *berryi looks like a more compact prostrate relative of *Penstemon davidsonii*. Its small leaves are greener, flowers are fatter and approaching the dark magenta shades of red, the shrubs are up to 15cm tall. I saw them above one pass in the Trinity Alps in California in poor acid soil in an opening of pine forest. The place received plenty rain and cool winds giving an eternal electric fan effect. This subspecies is easier to tame and in one large rock garden in Ashland, Oregon, I saw a cushion 60cm across in full bloom.

Right: *Penstemon newberryi* subsp. *berryi*

© Br. Alfred Brousseau, 1995 Saint Mary's College of California

My third experience with Mountain Pride Penstemon happened in Southern Ireland where I was one of the speakers at their famous [Termonfeckin study weekend](#). Aberconwy Nursery from Wales offered there the very rare ***Penstemon newberryi* subsp. *sonomensis*** in a very compact variety. I got it from Keith Lever and planted it the next day into the new baby crevice garden of [Billy Moore in Dublin](#). This West Californian subspecies with deep carmine-pink flowers is from the coastal rocky ridges and the internet



gives a warning about its difficulties in eastern gardens and suggests that it is not fully hardy. Billy Moore told me that the only plant (planted in wet late November) which died during their very damaging winter was this compact *P. newberryi* subsp. *sonomensis*. Does that not seem to be bad luck?

Left: *Penstemon newberryi* subsp. *sonomensis*
© Br. Alfred Brousseau, 1995 Saint Mary's College of California



Mark McDonough in Massachusetts, USA seems to agree about these plants: in a NARGS Forum thread entitled ["Don't forget the red ones!"](#) he writes:

I think the genus Penstemon has some interesting cases, such as with the shrubby Dasanthera species, where flower colour traverses the pink to red spectrum. I hear people describe the flowers on Penstemon rupicola as red, or "cherry red", but to me they are definitely a rich pink.

Penstemon newberryi has several forms, often the flowers are a rich intense pink, or "rose-red", but there are some true pure red

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flowered forms. [Bob Nold's book on Penstemon](#) mentions a cultivar of *P. newberryi* named 'Red Lassen' offered by Siskiyou Rare Plant Nursery; a cherry red selection. I once grew a form of *Penstemon newberryi* ssp. *sonomensis* from seed that had amazing blood red flowers, not pink in the slightest. Googling around, I found another cultivar at Yerba Buena Nursery named [Penstemon newberryi sonomensis 'St. Helena'](#).

The CalFlora site has some nice photos of [Penstemon newberryi ssp. sonomensis](#), they look decidedly red. The subspecies is notoriously fussy in cultivation, but who wouldn't want to grow this beauty?

---Plant Portrait---

ACONITUM 'RED WINE' – IT'S WORTH A TOAST OR TWO © Grahame Ware

It finally happened for me after years of waiting for it. My seed-raised plants (well, okay- a seed raised plant) of *Aconitum* 'Red Wine' blossomed gloriously in my new garden here in Yellow Point, north of Ladysmith on the east coast of Vancouver Island. I'd finally found the right spot and done the right things to make it happy. Far from being just an ordinary table wine, this one has good vintage, bouquet and spirit. Allow me to sketch the history of this plant as well as my own personal thread in that cord.

History

Aconitum 'Red Wine' is a member of the climbing clan of Monkshood. However, unlike most of its kin, it is not wispy, small-flowered or anaemic. This is a classy fellow that shows the usual toughness of *Aconitum* but has an extra delicacy in its form and colour.

Jonas Bengsston of Djupetals Nursery in Sweden told me the following. "*In the Spring of 1989, Gothenberg Botanical Garden received seeds of what was supposedly Aconitum hemsleyanum from the Shanghai Botanical Garden. At Gothenberg they already had clones of A. hemsleyanum and they discovered that it did not match. The flowers are as big as those of the popular herbaceous Aconitum 'Spark's variety' and the colour is a wine red (RHS colour chart 185A). It is*

likely a natural hybrid that comes true from seed."



Left: A. 'Red Wine' coming into growth in spring.

© Grahame Ware

Bengsston was the first nurseryman in Sweden (and by extension the world) to trial it and then build up stocks. I had contacted Bengsston in 2005 as part of a large feature story I was developing for the RHS Plantsman Journal on the climbing Monkshood.

The full Spring 2006 article for the RHS can be seen [here](#) on my Owl and Stump website. In 2006, Bengsston sent me a whack of seed so

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that I was able to share it with people like Ellen Hornig, who ran that wonderful nursery in upper New York state, Seneca Hill Perennials (alas, sadly no longer in business).



'Red Wine' growing in the Norwegian gardens of (left) Magnar Aspaker and (right) Geir Moen.

Garden Culture

I was able to start a number of seedlings down the path to maturity in 2006 and 2007. However, the climate of North Okanagan (especially the winters) proved too much. Oh, they didn't perish (mostly), they just sulked and the following spring, rallied a bit before they swooned in the heat of summer's string of 40C temps! Who could blame them? Still, most lived even after moving house in summer (late June of 2008) with no beds or gardens to put them in. The following spring I decided (after establishing a few 'beds' in the sandstone), that I would spot a few around. Too much sun or not enough? Enrich the soil or leave it lean and rocky? Bengsston indicated that in the cool, west coast maritime climate of Sweden that they did best in full or near full sun. Yet, the German and French growers thought that semi-shade was optimum. Likely this is due to the stronger sun of the Continent.

It can get very hot here in the summer being on the leeward side of the [Arrowsmith Massif](#). The first spot that I trialed was under a *Pinus parviflora var brevifolia*. It was doing fine through the early and late spring but then it fried in the record summer heat of 2009 and I lost that one. The only compensation that year was that my Beloved and I got to swim a lot in our local ocean beaches. Another strategically placed plant made a shrivelling goodbye in another bed under a small *Magnolia*. Not so strategic after all.

The remaining pots of 'Red Wine' trembled as I approached them the following spring with border spade and cultivator in tow. I had decided that the next thing I had to do was to mimic their natural situation. 'What is that?' you may well ask. In the wild they are generally found in swales or near creeks in forests where their roots are in thick layers of well composted duff that overlies a gravelly, mineral-rich substrate. Foster shrubs aid in the climbing and clambering whilst at the same time provide some amelioration from the sunlight. I decided that the north side of my house underneath a small *Acer* hybrid would be the next best trial spot. There was plenty of morning sun especially when the sun wheels around in summer and splashes and dashes off the siding full force through till

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11am. I side-dressed it liberally with a mix of well-composted fir bark mulch and old cow manure and gave it regular shots of chicken/kelp tea from my rainwater barrel. The plant grew nicely that year but did not even get close to flowering. But it was okay, it was alive.

The following year in August of 2011 of a very backward summer and a cold, wet spring, it budded and flowered magnificently. Five years had passed since they had been ushered into existence. (Anecdotally; it will take 3-4 years from seed as I understand from talking to different gardeners). I had helped it with a little twist tie or two getting up the tree which itself is only 6' x 4' (2m x 1.5m) tall x wide. After that I let it do its own thing with the only asterisk is that my cat had swatted at one of the green buds and dislodged it somewhat. So I curled it gently 'round a small branch and out of further temptation.



Aconitum 'Red Wine' twining through *Acer x mandshurica* © Grahame Ware

By the end of August when a dawdling summer finally kicked in (and the crickets started to play their cellos), the flowering was in overdrive. They were dangling and dancing in the breezes on strong stems with the *Acer x mandshurica* providing the perfect foil and dancing partner. They were very classy. In fact I was hard pressed to think of when I've ever had so lovely a presence in my garden. They were like little cherubs bobbing joyfully, mystically in the breeze. They kept flowering

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through most of September. The flowers are about 2 1/2" (6.5cm) long. Two other plants grew somewhat but did not even come close to making a show. I'll deal with them this spring. It's the last Sunday of January as I write this passage and a little probing around the roots tells me that "Duke" is ready for a return engagement. The other two are looking like they'll make a run as well.

I can certainly see why the European equivalent of the Perennial Plant Association, the ISU (International Hardy Plant Union), judged Red Wine "an outstanding plant" in 2000 after trials in many gardens by many members of that association. It's a fabulous plant compared to the likes of the species *AA. vilmorinianum*, *hemsleyanum*, *episcopale*, etc. What's the expression? "*Blows their doors off!*" This is not to say that some of the species aren't worth having in your garden. It's just that this one is a star.



Close-up of Aconitum 'Red Wine' flower © Grahame Ware

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Conclusion

I have described my difficulties in getting 'Red Wine' established to the point of flowering. Others like the very good plantswoman, Ellen Hornig, just threw up her hands in an "I give up!" fashion as it just did not like the humid, hot Northeast of the US. In her words, *"If it didn't succumb to some black rot before it ever set buds, it got mites, or whatever; once it did set buds. I saw a few flowers before I gave up entirely (as did it - it did not persist), and they were nice, but too few to bother with. Aconitums did poorly in the Oswego (NY) climate."*

Finding that *sweet spot* in your garden is the key. In order to do this you may need to have a few plants for the experiment. I believe though that it will prove worthwhile once you've seen it radiating in full-on, flowering mode.

I wrote in 2006 that A.'Red Wine' was not widely available. However, now [Jelitto Seed](#) is offering it for sale and it is very expensive. 1 gram will cost you 24 Euros and this will produce about 200 plants if all goes according to that idealistic horticulturalist Hoyle. A packet costs 8 Euros and will likely produce 15-20 plants.

In Canada, Kristl Walek's Gardens North has been known to stock seed and the plant is listed (as a form of *A. hemsleyanum*) in the RHS Plantfinder by several nurseries for the UK.

I thought that I was going to have a veritable bounty of seed this October but one day (night?) deer paid a visit and snarfed most of the seed. The SRGC Seedex was the real loser. Pawley and Hayes are probably breathing a sigh of relief. But somewhere in the woods nearby, some Red Wine is germinating this spring having gone through a rather curious scarification process. Since moving here I have, understandably, developed a very keen desire to taste local venison. Very local...as in the 100 foot diet. I will also be checking deer dung carefully to see any Red Wine sproutlings waving up at me.

I will have had some good, healthy plants on offer at the Spring Sales for the [Alpine Garden Club of BC](#) and Vancouver Island Rock & Alpine Garden Society ([VIRAGS](#)) at the Owl & Stump table. These plants are several years old and should be ready to flower quite soon.

Let's all raise a glass to a great new plant and say, thankfully, to Red Wine *with* red wine - "CHEERS!"

G.W.



---World of Bulbs---

VARIATION IN *TECOPHILAEA CYANOCROCUS* by J. Ian Young



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Tecophilaea cyanocrocus was originally introduced to cultivation from Chile where it grows at an elevation of between 2000m to 3000m on the dry slopes of the Andes. It was thought to have been driven to extinction in the wild shortly after being discovered by over-collecting, over-grazing and habitat destruction but reports of new populations being discovered in the wild started to emerge around 2001.

The species is split into three varieties - these being the deep blue type *Tecophilaea cyanocrocus* (left), *Tecophilaea cyanocrocus* var. *leichtlinii* which has a greater white zone in the centre and *Tecophilaea cyanocrocus* var. *violacea* which has a lovely violet colour.



The presence of red pigment mixing with the blue to produce the distinctive violet hue makes var. relatively easy to distinguish. It is more difficult to decide exactly what percentage of white in the throat differentiates between the type and var. *leichtlinii* - it is this lack of a clear boundary that gives the variety and not sub specific status within this species.

Left: *Tecophilaea cyanocrocus* var. *leichtlinii*

Below: *Tecophilaea cyanocrocus* var. *violacea*



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We have been growing *Tecophilaea cyanocrocus* for many years now and it is the bluest of blues in the plant world. We also have *T. violacea* which has a wonderful velvety texture to the royal purple petals. Seedlings from these two forms come fairly close to the colour of the parent, provided that they have been kept separate from each other at flowering time.



Close-up of the throat of a flower showing the hair-like appendages on the edge of the floral segments.

It was when raising seedlings from our *T. cyanocrocus* var. *leichtlinii* that we started to get a considerable variation in the amount of white seen in the flowers. The form is described as having a white star in the throat and the extreme variation is seen in the picture below (in the first segment) where the typical form and a very nearly white form with a blue flush are shown together.



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There must be something fundamentally obtuse about gardeners. When a plant is known for its stunning blue colour we want the white form and if it is normally white then we want the pink form and so on!

Being typical of this school of gardeners we have been selecting out various forms from *T. cyanocrocus* var. *leichtlinii* and illustrate a couple of our favourites which we distributed under the names of 'Craigton Cloud' and 'Craigton Snow Drift'.



Tecophilaea 'Craigton Cloud'



Tecophilaea 'Craigton Snowdrift'

We have had these forms separated out for a few years now and they are multiplying up quite satisfactorily, each selection now fills a pot. For once the form that I like the best also seems to be the most vigorous, this does not happen very often I can tell you!



All forms set good seed and some forms in the second generation have displayed even more white – the most extreme has only a faint blue picotee edge.

Setting seed in bulbs depends on three main factors, the first is that the bulb must be growing well, the second is that transfer of pollen to the stigma must take place, the third is that once the pollen is on the stigmatic surface the weather conditions must be warm enough for the pollen to grow down the tube and fertilise the embryonic seed. It is this last factor that so often leads to a poor seed set in our garden.



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Tecophilaea seed is of the type where the young corm forms beside where the seed lies so I sow the seed at some depth, 5cms, in the seed pot this means that the young corm is in a more stable environment and can develop much better in the first few years. If it is sown in the traditional manner on the surface with a covering of gravel it will still germinate but the young corms are only protected by a thin covering of gravel for the entire first year of growth. It is only in the second year that the corm will produce a contractile root and slowly start to move itself down into the potting mix. I sow the seed in late August and leave it outside to take the winter wet only moving under cold glass when it starts to germinate.



Tecophilaea corms with contractile roots

For some reason *Tecophilaea* has a reputation of being difficult to grow but this is not the case. I think it is the 'rare bulb syndrome' where growers become fearful of the reputation of a bulb and do not apply the basic needs. The best way to overcome this syndrome is to imagine it is a common or garden crocus you are growing in a pot and grow it that way.

They require a good soaking in September which will initiate root growth and then they must remain moist throughout the winter. Growth here in N.E. Scotland, usually appears above ground in November/December when the leaves slowly push through the topdressing. It is only when the temperature starts to rise in March and April that the growth accelerates and it is now that they need plenty water as the plants come in to bloom. When the plants are in full flower I add a supplementary potassium-rich feed to both aid the growth of the new corm and help form next season's flower bud. By this stage you can reduce the watering but always keep them moist until the leaves start to yellow then you can start to dry them out in preparation for their summer rest. High temperatures and or drought will send the plants into an early dormancy which may result in poorly formed new corms. Corms replace themselves every year - the new corm forms on top of the old corm which should pass all its food store over, leaving only the remains of the old tunic at the base of the new corm. If you find that the old corm is still present and around the same size as the new one this is evidence that the plant went into premature dormancy.



J.I.Y.



Tecophilaea corms – new corm formed, only husk remains of old corm



Tecophilaea cyano-croceus var. *leichtlinii* - second and third generation selected seedlings



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---Mountains in the Gardens---

CLUNY PRIMULAS: an update from John Mattingley



The season is moving on at [Cluny House Garden](#) in Perthshire: *Primula moupinensis* (left) is in flower.

Note that the leaves are basically smooth and the plants have not yet sent out the one or two runners that we expect to get.



Right: *Primula hoffmanniana*

If we now look at *Primula hoffmanniana* we can see very obvious differences in the flower and the fact that the individual plants have so few flowers.



Left: *P. hoffmanniana* foliage

This photo shows the very upright, crinkled, vibrant leaves and the fact that the plant is already sending out quite a few runners with plantlets at the end. I can remember getting so fed up with the number of plantlets to be pegged down into the ground that I just emptied a bag of compost on top of them and just shoogled the plants with my fingers (shook the plants to move the compost between the plants): it worked well.

Primula calderiana is the purple flower amongst the *hoffmannianas*.

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This is, of course, *Primula sonchifolia* in flower (left) and I hope that this will be the year that *sonchifolia* produces good seed.

I have probably around 30 plants of various ages arranged in three different areas so not all the eggs are in one basket.

None of my plants are manually fertilised so I was very happy to see far more insects in March due to the good weather and it was noted that the flowers did not last long before dropping which is often a good indicator, fingers crossed!



Left: *Primula nana*

This is last year's success story with *Primula nana* ([edgeworthii](#)) not only flowering well but I was also able to raise over 100 good plants to place in the garden to give early colour. The neat farinose leaves are an added attraction.



Left: *Primula kisoana alba*

The soft furry leaves of *Primula kisoana alba* which is spreading to make a colony.

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Primula kisoana alba (left) coming up through the bed and flowering in pure white.

An endangered species in the wild this plant is crawling around several beds at Cluny and I no longer need to propagate it.

I don't suppose I should have said that – I will have tempted fate!

The photo, (below left) shows an *arisaema*, possibly *A. propinquum*, coming up through the soil in front of the *P. hoffmanniana* bed where it will eventually provide shade during the warmer months of the year. This one reaches over 150cm

(5ft) in height and I can almost stand under the leaves myself.



It is no wonder that their tubers are fed to animals when you see their size. Above (right) is one of the tubers sitting on an 8cm wide beam of a bridge at Cluny. The tuber was found lying proud of the soil probably removed by the action of frost coupled with the digging of a pheasant. We try not to lift our plants but leave them to look more natural.

Right: *Primula macrophylla* var. *moorcroftiana*

Now it is time to leave the *PP. moupinensis*, *hoffmanniana* and *sonchifolia* to their own devices and to start looking after the others.

This little beauty is now 5cm high and in full flower. This is the first time I have seen an example of a blue flower of *Primula macrophylla* var. *moorcroftiana* with a white eye/ring.

I've a reasonable number of them but where do you put them in a woodland garden, [Ben Lawers](#) would be more appropriate!

J.M.

