

SRGC ----- Bulb Log Diary ----- Pictures and text © Ian Young

BULB LOG 38......21st September 2016



The content of the Bulb Log is based on what is interesting me in the garden that week - now we are well into autumn the sun does not climb so high in the sky hence it casts a low light across the garden that will pick out certain details like a spot light. That is exactly what attracted me to take the picture above where a rather mundane subject has been elevated by the spotlight effect lighting up the now fading Sanguinaria leaves.



It got me thinking that this is exactly the sort of attraction that draws insects towards a flower and they can see a much wider range of wavelength of light than we can - there is also the added incentive that a tasty treat awaits their attention while my reward is purely visual.



Crocus nudiflorus

The sole purpose of the flowers of Crocus nudiflorus, seen here in its typical purple form and a number of white forms, is to attract a pollinator. As an adaptation to achieve cross pollination from another clone the stigma is usually receptive before the flower's own pollen is exposed - however the stigma remains receptive for the age of the flower as it is better to be self-pollinated than not at all. Most seedlings raised from a white form will be purple but I find a small percentage of seedlings will also be white.

This is one of our own white seedlings which has fuller, more rounded petals than 'Orla'. The multi branched stigma make it almost impossible for an insect to enter the flower without making contact - the ripe anthers sit just below the stigma. It is interesting to speculate why some Crocus species flower in autumn and I suspect it is to take advantage of the many insects that appear at this time of year in combination with there being less competition as many more plants flower in the spring.

After a night of wind and rain you can see how susceptible the flowers are to being knocked over; something that used to upset me more than it does now. I understand that the flower only needs to be open for a short time to get pollinated and it may be possible that fertilisation can still occur when the flower has fallen over. With fewer flowering plants around their flowers must shine out like beacons to the flying insects – I have seen bees, wasps and hoverflies all being attracted.

Colchicum flowers are also susceptible to being knocked over by wind and rain but they also continue to open in the sunshine even when lying on the round.

These groups of wide open colchicum flowers must make a huge target for pollinating insects. This is a group of Colchicum bulbs that for many years I have been growing in polystyrene boxes allowing me to replant and split them every year to speed the rate of increase.

Colchicum

Crinodendron hookerianum

We nearly always get a few out of season flowers on Crinodendron hookerianum so we can have both flowers and ripe seed pods at the same time.

Crinodendron hookerianum seed pod and flower.

The view from our swing seat gave me more inspiration as I watched the changing light from the low sun picking out the seed heads of Dactylorhiza and Meconopsis in turn.

Dactylorhiza stems with seed.

Dactylorhiza stem with seed

A stem with multiple flowers, like these Dactylorhiza orchids, brings another great survival advantage. As the flowers open over a long period the plant is not relying on suitable weather conditions on one or two days. On the left you can see the difference between the fat ripe capsules full of seed, mostly towards the bottom and top and the shrivelled empty remains of the ones in the middle of the spike which were not successfully fertilised. This reflects our weather conditions when the plant was flowering - the flowers open from the bottom to the top so the conditions were good when the first flowers opened - hence the ripe seed - then turned unfavourable (wet and cold as I remember) so the middle flowers were not fertilised, then the weather improved as the flowers at the top of the spike opened. Last year we had very little seed set on the Dactylorhiza but this year we have about a 30percent set. It is easy to collect the seed onto a sheet of paper, see below, where you can see how fine it is; almost dust-like, enabling it to be blown long distances on the wind, its main method of distribution. I have tried sowing it in seed pots many times without any success - you need laboratory-type conditions to get germination however we do find seedlings appearing around the garden mostly in places that are not disturbed or cultivated.

Gathering seeds and scattering them across the troughs etc. has also resulted in many plants.

Dactylorhiza seed.

This rock garden bed is full of self-sown plants including the **Meconopsis** which I leave to self-seed and so continue the process of spreading – towards the front is a now merging tangle of two species of **Roscoea** which I originally planted out and have been self-seeding for a number of years.

Roscoea alpina

Roscoea scillifolia

Roscoea scillifolia and Roscoea alpina self-seed in with each other but they are easily distinguished at both flowering time and seed time. The seed capsules of Roscoea alpina always remain down in the leaves while those of Roscoea scillifolia extend on a stem.

The light paints beauty into the remains of an Erythronium seed capsule and Meconopsis complete with a cobweb.

Every plant in our drive way beds was introduced by scattering seed directly onto the gravel and now they continue the process by self-seeding.

One of the plants is **Geranium sanguineum** which has a very efficient method of ensuring the seed is distributed away from the parent.

Geranium sanguineum seed capsule.

Each flower has up to five seeds held at the base of the capsule as the seed pod ripens it dries out and then, like an ancient trebuchet, the seed is catapulted by the spring-loaded action which forms the top part of the vessel.

Strawberries also have an efficient seed dispersal adaptation using birds etc, to eat and drop the seeds over an extended area.

This plant seeded into the gap between the slabs at the base of our swing seat and provides us with tasty treats.

Corydalis mucronipetala seedlings

Earlier in the summer I collected quite a lot of seed from our plants of Corydalis mucronipetala, you will remember I used a wee bag to catch the seed which I sowed immediately. I must say I am slightly surprised that it has germinated as I thought it would need a cold period to stimulate germination but obviously this is not the case. I now have the problem of growing these seedlings big enough before the onset of winter. I will feed them regularly with dilute tomato fertiliser and take them under glass when it turns colder to try and keep them actively growing for as long as possible. My biggest challenge to keeping them growing will be the lack of light as our days shorten.

All these plants seeded in the gravel edge along the front path – a mossy saxifrage, **Oxalis acetosella** and **Cyclamen hederifolium.**

They are ideal companions giving a very natural-looking planting with none of them out-competing.

Cyclamen hederifolium album with Celmisia spectabilis.

Pseudofumaria alba and lutea have both self-seeded into this narrow south facing bed where we grow bulbs that need some warmth – it is the hottest driest bed we have. The scarlet flowers of **Lapeirousia laxa** have survived in this bed for many years I am not sure that the bulbs are hardy but it sustains itself by self-seeding around.

Pentaglottis sempervirens

There are some plants that volunteer in the garden without any help from us these beautiful blue flowers are one such plant.

Pentaglottis sempervirens is often considered a weed and while I would not encourage it by allowing it to seed around without some control – I will remove the flower stems before seed is released - I am happy to have its blue flowers and prickly foliage bring some interest to this bed while the majority of the plants have finished for the season.

Pentaglottis sempervirens

I do encourage this lovely grass **Festuca glauca** to seed by gathering the ripe seed and scattering it where I would like to have some plants growing.

Eucomis biflora is like the Veratrum fimbriatum I wrote about a few weeks ago in that the leaves were not chewed at all until the flowers stem started to elongate then they leaves were ravaged by snails and slugs.

Self-seeding is also encouraged in and around the troughs, we can choose if we leave the plants or not. The strawberry plant is allowed to stay so we can enjoy the tiny but very flavoursome fruits.

Crocus vallicola is a very welcome volunteer at the edge of this trough .

The fallen pine needles stand out like a rust red carpet illuminated by a shaft of sunlight hitting the raised wall where Trillium rivale grew earlier in the year now Crocus nudiflorus flowers spikes are pushing through.

Crocus nudiflorus

The very next day the Crocus nudiflorus flowers are open – note how flat the light is here; there was no sunshine.

As light was one of this week's themes I finish with this picture looking towards some troughs with ghostly figures looking on – no camera trickery or manipulation was involved just the magic of light...... Click the link to see the latest <u>Bulb log video diary supplement</u> which looks at Autumn flowers, Crocus, Colchicum and Cyclamen and how the lovely low light paints the garden.