BULB LOG 26.....25th June 2014

Dactylorhiza fuchsii

The hardy Dactylorhiza orchids are the dominant flowering plant in the garden just now and they are quite a spectacle.

Dactylorhiza fuchsii is one of the native species and can be found all around the country and the seaside in Scotland – we always have a few but they are slow to increase especially when compared with some of the bigger garden hybrids that involve D. elata and foliosa as well. Like many other growers we have previously had problems with fungal attacks that manifested as black spots on the leaves and or tuber which ultimately lead to the demise of the plant. Fortunately we had always allowed them to seed freely and often we scattered the seeds around the garden including in the troughs. This attractive vignette displays one such self-sown group of orchids and a self-sown fern – all I had to do was to bring the two troughs together.

We were quite devastated when we lost so many treasured Dactylorhiza to the ‘black death’ all those years ago but over the intervening years our stocks have grown massively by lifting mature plants out of some of the troughs and increasing them in the garden beds. Previously almost all our plants were of one or two clones increased vegetatively while now we have any number of clones each of which we have also increased by division.

Chance seedlings appear in the strangest of places. They germinate in the most unlikely areas that are not actively being cultivated or not being disturbed by us. They have never appeared in the more nutrient rich or cultivated areas where we eventually plant and grow them on.

Although difficult to make out due to the excessive growth but the Dactylorhiza above have self-seeded into a large pot that sits semi submerged as an island in our pond. The pot was for Salix lanata grown in imitation of a feature that I admired in the late Jack Crosland's garden where he grew this willow on a small rocky outcrop in his pond. I have a great fondness for this plant, which is among the first 'alpines' we ever grew, but had the experience of one spreading so much in the 1970's that it took over our entire front garden before we had to remove it - so I was very taken with the Crosland method of containment. I was not expecting Dactylorhiza to self-seed into a pot that sits up to its rim in water all year around.

We do lift the seedlings from the troughs and plant them in the garden where they both grow bigger and increase quicker and so we have literally hundreds of them around just now. The other great advantage is they bring flowers to our garden after much of the early flowering bulbs have finished extending our flowering season well into summer.

I showed this same scene a number of times in earlier bulb logs when the Corydalis were in flower, then the Trillium, Erythronium and Fritillaria and now we have the orchids.

This bed had Leucojum and Galanthus followed by Trillium and now features the orchids.

Dactylorhiza and Celmisia

The above group is made up by at least four clones which is not only good for the variation in flowers and growth but also is better when we are struck by the dreaded fungal diseases again. The disease is called *Cladosporium orchidis* - I am sure the spores are always present in our gardens just waiting for the ideal conditions to make their attack. It would seem that a lot of people from many different parts are suffering losses this season and I think it is only a matter of time before we get another assault. This time because we have so many different clones I hope that some of our plants will prove more resistant and survive. This disease has been discussed fully, during the last major outbreak in 2007, in the SRGC Forum pages - click to read all the information including a link to the Wilson's article in the Rock Garden, the SRGC printed Journal.

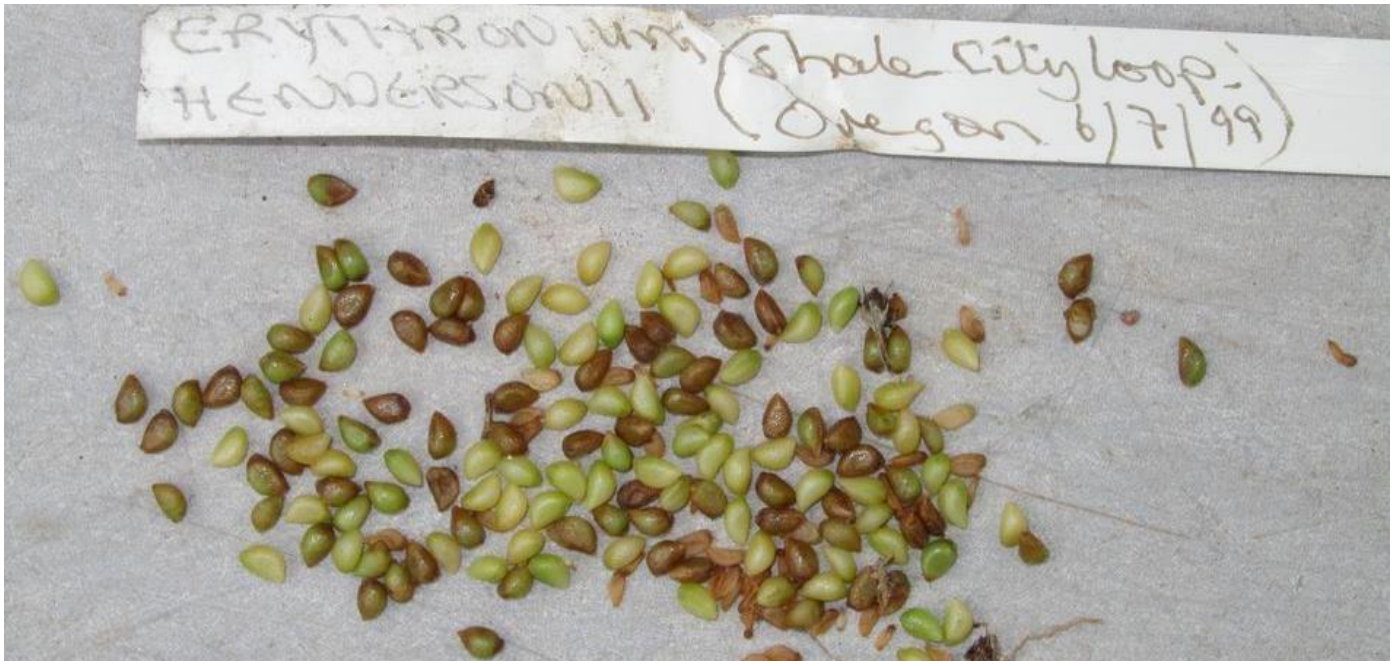
For the meantime we have no signs of the infection and can enjoy the many clumps like this one that self-seeded into the top of the rock garden along with a volunteer Meconopsis - the Erythronium seed pods in the foreground lead me nicely into another task of the moment.

Despite the bad weather during some of the flowering period I am getting seed on some species including the first time we have had garden seed from this unknown species. It is a small flowered yellow species that may be related to E. grandiflorum originally collected as seeds from Mt Prevost, BC, Canada – I first described it in Bulb Log 1711 – there is no mention of this taxon in the new Erythronium book. I always feel that we are succeeding in establishing a plant in our garden when we start to get our own seed. As I only have five original seed raised bulbs I decided to repot them and sow the 7 seeds I got into the same pot.

Erythronium elegans seed

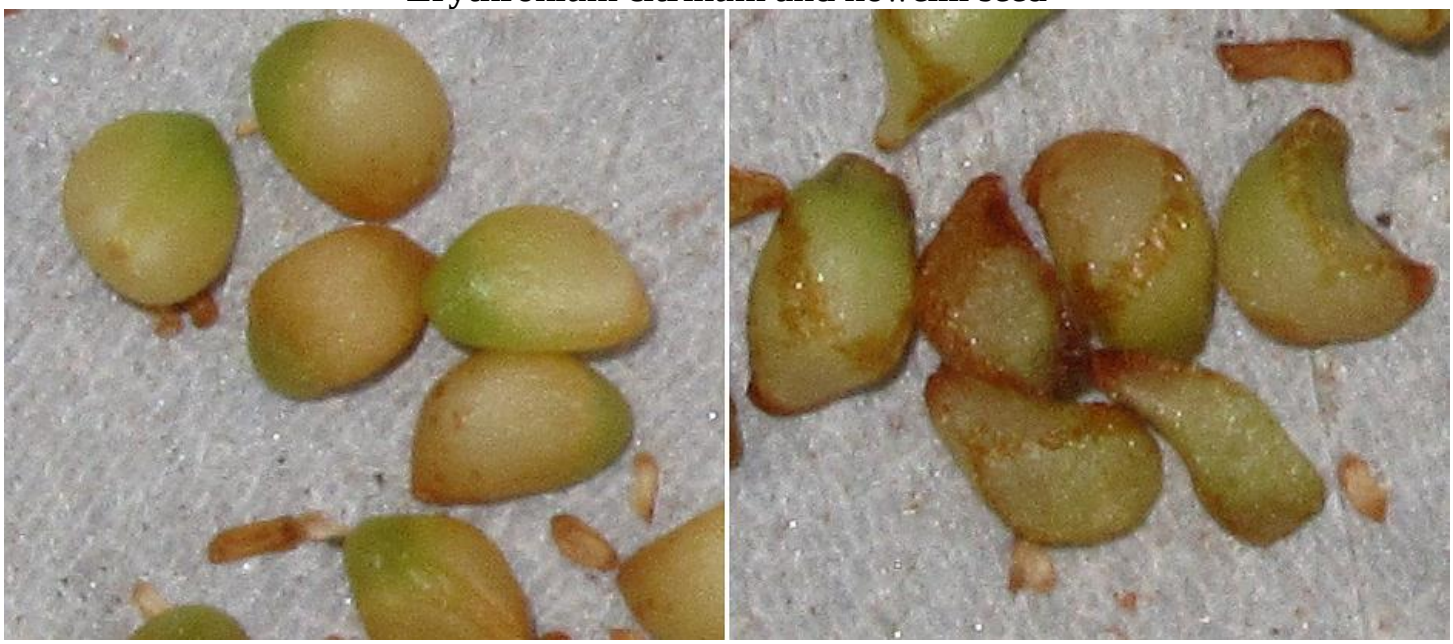
I always like to record the different seed types by taking photographs showing both the seed and the capsule where possible.

Erythronium helenae seed



Erythronium hendersonii seeds

Erythronium citrinum and howellii seed



The fascinating question for me is can we distinguish these two similar species from their seeds?
I think that the pictures of the seed and capsules then this close look at the seeds above shows that you can.

Eryhtronium oregonum seed and capsule

Eryhtronium klamathense

Due to the bad weather at flowering time, which was not conducive to good pollen growth, we only got a single capsule of seed. In previous years I have put up a temporary cover over this plunge bed with some of the rarer species and that did greatly improve the seed set – next year I will make that effort and cover this bed while the Erythronium are in flower.

Many of the hybrid Erythroniums I grow are fertile and set seeds but you do not get nearly as many seeds per capsule as the true species. Pictured below is the capsule plus seed contents of - E. revolutum, top and E. ‘Craigton Cover Girl’ below. Again due to the weather the E. revolutum capsule only delivered about half of the seeds I would normally expect but still many more than the hybrid.

I find that seedlings from hybrids invariably turn out fairly similar in appearance to the seed parent provided yet another species has not provided the pollen.

Back to some of the strange places that Dactylorhiza seedlings appear – like in cracks between paving slabs! The wire mesh is there to protect one of these seedlings in particular – I would have just left them alone but for the fact that one of them is white.

Dactylorhiza white seedling

In all the years we have never had a white seedling before. We grow the white D. ‘Eskimo Nell’ and have had almost white D. fuchsii but never had our own white garden hybrid before. In a few weeks, when the flowers are going brown, I will have to lift this slab and carefully rescue this precious seedling – I will at the same time rescue the others. Then I have to hope that it will grow well and increase.

These are four of those seedlings showing the variations on a theme that you get.

Dactylorhiza garden seedlings

Dactylorhiza ‘Eskimo Nell’

If it proves to be a good increaser our white seedling will be an alternative to Dactylorhiza ‘Eskimo Nell’.

Two white garden seedlings

Just like they say about the bus - ‘you wait hours for one then two come along together’ - we have a second white seedling on the rock garden.

I can never over-emphasise the importance and benefits of raising your plants from seed – the variations are not only in the appearance but also in their tolerance of different growing conditions and susceptibility to disease……..