SRGC ----- Bulb Log Diary -----

BULB LOG 25.....19th June 2013

This view shows how our bulb beds have changed with the season as the low growing early spring bulbs are replaced with larger stemmed more lush plants. For the first time this year one group above has added an entirely new intermediate phase to our aim of perpetual planting but more of that later as first I want to talk seeds.

Erythronium sibericum seed pods

A question that has fascinated me is when is the best time to collect seeds from bulbs and when and how you should sow them? Like most of my plant questions I find the plants give me all the answers if I just make observations and draw the correct conclusions. The group of Erythronium that includes dens-canis, caucasicum, sibericum and japonicum differ in many ways from the Western North American species and no more so than in everything to do with the seeds. The first difference I observed is the way the stems behave when the plant has been fertilised. In the Western North American (Westerners) species the stem stays rigid and erect holding the seed capsule aloft but in the dens-canis group the stems flop over so the capsule lies on the ground. The capsule then just slowly disintegrates, shedding the seeds.

Another question I had was does it make any difference if the seed is still green or do I have to wait until the capsule opens or disintegrates. I discovered that the seed receives all it needs from the parent before the capsules start to change colour – all that happens then is the plant cuts off nutrients and moisture so the stem, capsule and seeds start to dry out and eventually the capsule opens or disintegrates to allow the seed to disperse.

My method now is once I see a capsule has fully swollen I will collect the stem complete with seed capsule – the pictures below show green and yellow capsules but the seeds are all fully developed or more correctly - as fully developed as they need to be when they part from the parent plant. I believe that many bulbous seeds continue to develop for some time, 4 to 6 weeks, after being shed from the plant and for this reason I advise that you do **not** store them in a refrigerator, as is often suggested, because the cold will arrest the continuing development of the seed. In my experiments bulb seeds placed in a fridge immediately on collection gave very poor germination while those kept in ambient temperatures for 6 weeks gave a high percentage of success. If you want to store seed for the longer term you can place them in the fridge after the six weeks have passed.

Erythronium sibericum seed pods above and seeds below

Another important difference between the Westerners and the dens-canis group is that the latter have *elaiosomes* – fleshy attachments to the seeds that have evolved to attract ants and other insects to aid dispersal of the seeds. This dispersal strategy gives me major clues to how and when to sow the seeds. I sow these seeds immediately on collection and leave the seed pots in the open. Ant dispersal would suggest that it is best to sow the seeds deeply but I have not yet come to a definitive conclusion on this aspect as it is taking me some years to complete my trials comparing whether it is best to sow on the surface or deeply – all being well I hope to have that answer next year.

Erythronium japonicum seedpods above and seeds below

Although the capsules are still green the seeds are perfectly viable and ready for collection.

The form of the elaiosomes and the shape of the seed varies within the dens-canis group species.

From the left is E. dens-canis, sibericum, then japonicum.

The E. sibericum seed in the centre is just starting to turn brown and if left exposed to the air all these seeds will turn brown as the outer coats start to dry out to form a protective layer.

Nature makes the most beautiful gardens and we should always take lessons from this unsurpassed tutor. The lane where I walk Lily, our wee dog, continually inspires me as it did this week in this colourful scene with the Creeping Buttercup, **Ranunculus repens**, in glorious flower, the ivy completely covering old wooden garage doors and the shadows of the fleur de lis finials to the gate projected and enlarged onto the facing wall.

The lesson I take from this is to allow nature to take its course in the garden and be willing to allow plants to self-seed - sowing themselves around.
The yellow Ranunculus flowers took over from another yellow flowered plant that you will see evidence of if you study this picture carefully or you can look at the picture below where you will see more clearly.

I am not suggesting that we allow these invasive species to take over our gardens - although if I had endless land I would love to have plantings of wild flowers like this on a large scale - but we should be prepared to let plants naturalise with some degree of control.

Ranunculus repens and Taraxicum officionalis

Pseudofumaria alba, Meconopsis cambrica, Hyacinthoides hispanica

All the flowering plants in this part of our garden have self-seeded along with some that are not in flower, such as the Digitalis in the foreground. We have the choice to remove them or allow them to stay there for the time being.

How could such a beautiful flower as Meconopsis cambrica be considered a ‘weed’? In our garden the rule is that only if their growth is going to cause permanent damage to the growth of other plants will they will be removed.

The sharp yellow flowers are very attractive and bring colour to this bulb bed where all the spring bulbs that gave us so much early colour and are now retreating underground for the summer.

Other plants seeding around in this bed include Aquilegia, Aconitum and Delphinium - even some of the large Alliums have sown themselves. Plants like Roscoeas have still to emerge and later in the year these plants will die back allowing the autumn bulbs such as Crocus and Colchicum to flower.

Controlling the spread of these seeding plants is easy if you apply the discipline of dead heading them as soon as the flowers go over. We try to do this on a daily basis! Like all the best plans this does not always work out so we have to do selective weeding but this accidental way of gardening does bring some great plantings that we would never have come up with.

A group of Aquilegia plants that self-seeded into the edge of the gravel which along with Meconopsis and Corydalis create a fabulous show of colour.

Returning to my opening comments regarding this bed- it is the purple Corydalis capitata that has spread by self-seeding providing us with flowers before the Arisaema jungle takes over in a few weeks' time.

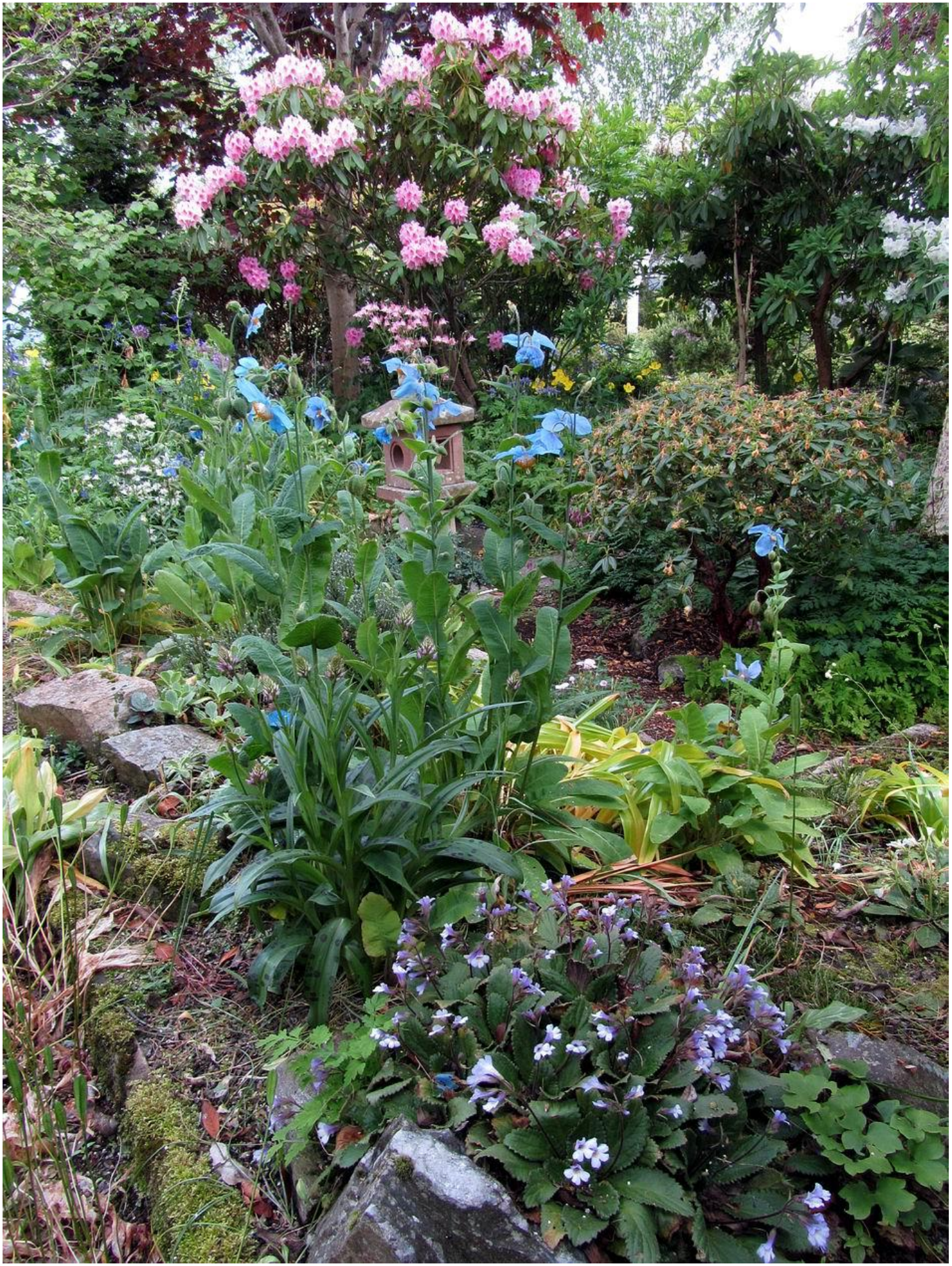
Corydalis capitata

All but the original Corydalis capitata we planted in this picture have sown themselves. The Arisaema have also spread through seeding and running around as I will show in coming weeks.

I am delighted to say that I have also found a few self seeded plants from the fabulous **Corydalis pseudobarbisepala** which with stunning blue flowers and attractive foliage has to be one of the best blue species for the garden. I did collect some seed which I sowed in a pot two years ago but got no germination - luckily I did not collect all the seed before it was shed allowing some to germinate around the parent.

Other blue Corydalis self-seed freely around the garden; many, like the one above, are hybrids between the various species that we grow together such as Corydalis ‘Craigton Blue’ seen in the centre ground of the picture below.

The majority of plants in this picture are there because they put themselves there including the blue Meconopsis.



The last picture this week also features self-seeded plants in the form of the Meconopsis that seed freely around the gravel areas and the Dactylorhiza. The Haberlea rhodopensis has not self-sown as yet but I always hope that one day it might…….