SRGC ----- Bulb Log Diary ----- ISSN 2514-6114



# BULB LOG 26.....30th July 2021

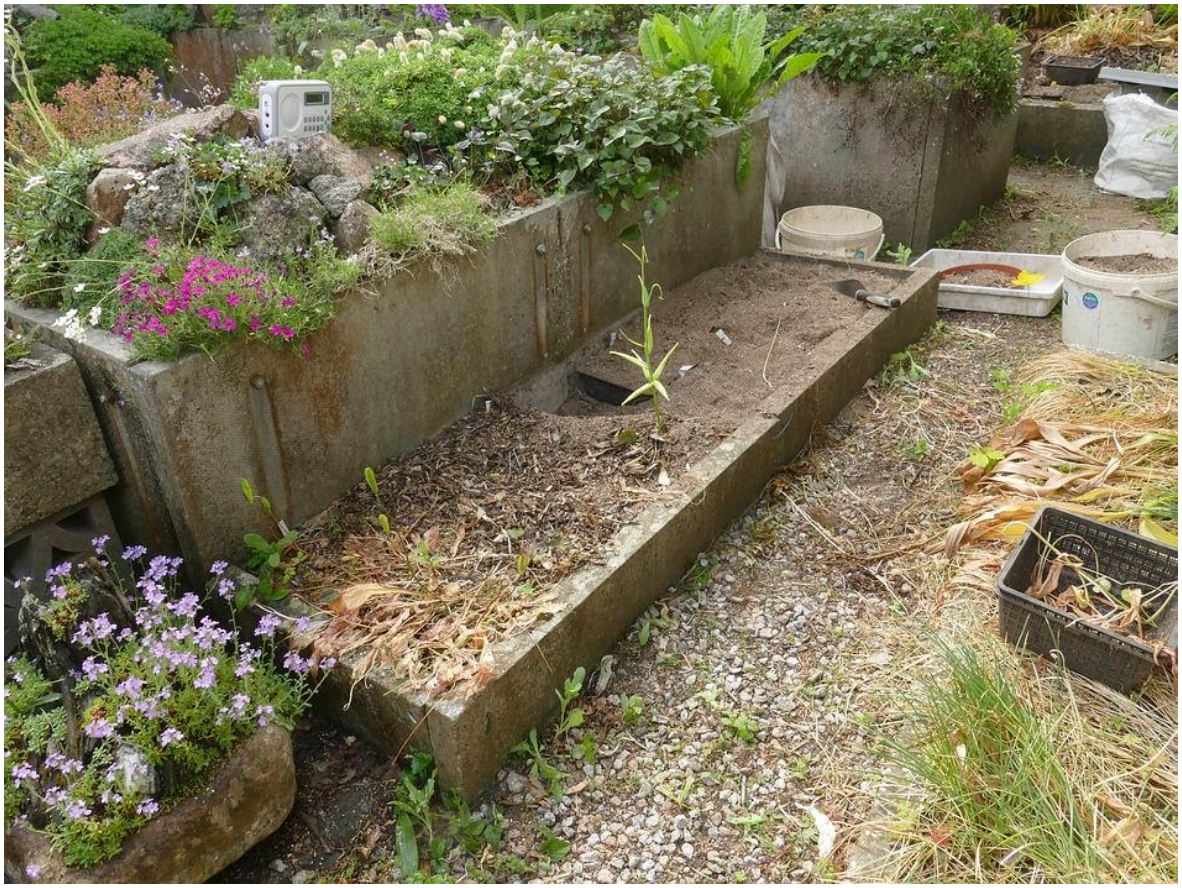
Our friend Colin Crosbie visited our area last week and saw so many gardens where this particular form of Celmisaa was in full glorious flower that he said it should be the regional plant of Aberdeen. It is indeed very common in gardens of our neighbourhood where it has obviously been split and spread to line the front paths or fill the beds of many gardens and I am sure you could do a social study based on how this plant has been shared around over many years.

I am fairly sure that it is a form or possibly a hybrid of Celmisia spectabilis which is a suitable name for the wonderful spectacle of the mass of white daisy flowers it will produce in a good year and this is a good year.

I suspect the original plants came from Jack Drake's Inschriach Nursery possibly bought at the Inschriach plant stall at one of the SRGC shows held annually in Aberdeen. Jack Drake and his partner John Lawson raised a lot of New Zealand plants and had a range of Inschriach Celmisia hybrids and this may be one of those.
In addition to the wonderful floral display the rigid silvery evergreen leaves bring decoration and structure all year round. It will form multiple rosettes which are easy to split off in late summer, autumn or early spring; sometimes they come with a bit of root but even those divisions without roots will root when planted into moist conditions. I walked past the garden where this plant grew every day and two years ago I watched it going through reconstruction to form a drive in for a car during which time a very large multi-rosetted clump, around one meter across, was dug up and left lying unprotected roots exposed on the surface for over six months through the winter before it got spilt and replanted the following summer to form twelve sizeable plants which as you can see from those in the picture above are growing beautifully.

Another neighbourhood front garden which would have stared with one small plant that is now filled with Celmisia.

The bad weather we experienced at peak Erythronium flowering time has resulted in a very poor seed set this year which in combination with the recent dry and sometimes hot conditions has sent the Erythronium underground earlier than they would in a more favourable year when seed was set. The early dormancy has allowed me to get going on a long overdue repotting of the plunge baskets. Ideally to maximise growth and increase I would like to be able to repot them every year but in recent years is has been too wet and by the end of July when I could get into them some were already forming new roots. From my experiences I have no doubt that repotting bulbs every year will result in more vigorous bulbs, maximise their increase and deliver better flowering and while you can get away with repotting every second year, after three years you will notice a decline in the flowering and size of the bulbs.



As long as the weather holds I will concentrate on the plunge baskets of (mostly) Erythronium many of which have not been repotted for several years now - here I have done the far away half of this plunge and will work my way through the other half.

While it is mostly Erythronium bulbs that we grow in these plunges there are a few baskets of other bulbs such as this one of Fritillaria pyrenaica.

The scales that form Fritillaria bulbs only last a year but are replaced by new ones grow which grow at the base of the stem: under good conditions the old scales should wither away as they pass all their stored energy on to the new ones but environmental factors such as the weather can mean that some of the old scales don't completely shrink away. I suspect the reason that some of the old scales here have not passed all their store of energy on to the new ones is because the dry warm conditions forced the plants into a premature hibernation.

Regular readers of the Bulb Log will know that the Erythroniums are not always growing alone in the baskets other plants will seed or creep in - especially when it has been such a long time since I last replanted the baskets - above are some of the usual suspects - Crocus, Corydalis and a rice grain Fritillaria affinis.

Certain bulbs, such as **Fritillaria affinis**, have found it an evolutionary advantage to produce rice grains loosely attached to the main scales. I also find that when left to their own devices such bulbs will grow near the surface where the annual fall of leaves, or other organic detritus, forms new nutritious rich soils such as those found in woodlands. Birds and other wild life also find this top organic layer to be full of food and even in the garden I have watched birds, especially Blackbirds, enthusiastically scattering the detritus around and in so doing will disturb these bulbs scattering the rice grains around as they do and that is the evolutionary advantage to clonal increase. The small rice grains also provide an advantage by falling off when animals dig and eat the main bulbs plus I have observed that in wet conditions when the main bulbs may rot off a proportion of the rice grains always survive.

**Dicentra cuccularia bulbs** have evolved the same strategy of forming many loosely attached rice grains – they also grow near the surface in fact if you plant them too deep they only grow leaves and will not flower until the bulb has made its way to just below the surface. In the garden we often find them lying exposed as the birds disturb the organic mulches, which has led to them spreading around in a number of beds.

By means of stray rice grains they have found their way into many of the erythronium plunge baskets where they grow just below the surface offering no direct competition to the Erythronium bulbs which like to grow in the bottom layers - the yellow bulbs alongside the Dicentra cuccularia are those of Dicentra canadensis which are distinct and easily separated, should I wish to do so.

**Erythronium bulbs**

Repotting time, when I observe and handle the bulbs, is when I learn most about the growth of these fascinating plants - above are a some good sized Erythronium bulbs that when growing well will increase clonally by secondary bulbs forming.

When repotting the plunge baskets I refresh rather than replacing all the soil.
The soils we use in the baskets are loam and mineral based in the form of loam, sand and grit which, because it does not break down, can be reused over a long time.
To refresh the soil I add and mix some of our own leaf mould into a scoop of the old mix to form a bottom planting layer.

I scatter some bone meal onto the bottom layer, which is half of the old mix and half new leaf mould by volume, then I lightly mix it in before placing the bulbs.

Erythronium citrinum bulbs placed on the bottom layer which will be covered by more of the old mix to which I add a light sprinkling of bone meal and leaf mould.

Before I top off the basket I replace some of the other bulbs that I found in the upper layers when I emptied the basket, the  Crocus, Corydlis and Fritillaria do not compete at all with the growth of the Erythronium and bring extra seasonal interest to the frames.

This Erythronium howelli bulb has not been disturbed for around five years and has formed a mass of secondary bulbs.

We see a lot of bulbs in cultivation that form clumps but in the wild they mostly grow scattered around as single flowering stems from seed only rarely as clumps.
My hypothesis is that in the garden we seek to select bulbs that form clumps and most of you will know from experience that if we do not lift and divide such clumps on a regular basis they will start to grow more and more congested until they mostly produce leaves with fewer flowers appearing. There are no gardeners to divide clumps in the wild so clumping forms would eventually die out through the increased competition caused by congestion but in the garden we, the gardeners, provide the advantage by regular division.

Now I have split and spaced them out these Erythronium howelii bulbs they will all grow on to flowering size.


In cultivation we value the bulbs that increase by division as a result of the development of secondary buds forming around the parent bulbs in erythronium these growths can form on the old bulb as it shrinks and at the base of the stem near the top of the bulb.

**Erythronium sibiricum bulbs**

Erythronium bulbs are replaced every year by a new one but the remains of the old bulbs shrink and remain to form a series of chains that can be found at the base of the bulb. There are dormant buds on these chains which can be stimulated into growth if anything happens to them, or if they are removed from the dominant bulb.

Our frames are surrounded by trees and hedges so one of the main problems we have is the encroachment of roots seeking out the nutrients and leaf mould in the potting mix. If left for too long these invading roots would rob all the goodness from the baskets causing some bulbs to shrink away but some of the larger more vigorous types such as Erythronium tuolumnense seem less bothered.

**Erythronium tuolumnense**

**Tree roots**

Despite the invasion of tree and hedge roots these Erythronium tuolumnense bulbs are still a good size.

**Erythronium tuolumnense bulbs**

I often top dress the sand of the plunge beds with shredded prunings which breaks down forming the perfect habitat for some plants such as Anemone ranunculoides and its hybrids to creep in.

The rhizomes of Anemone x seemanii grow well on the top layer of the baskets and unlike the tree roots they do not rob the goodness from the Erythronium below.

Many years after the last repot I found some large imposters had got in with these Erythronium revolutum. With experience you can separate some erythroniums out by identifying the shape and size of the bulbs and it is easy to spot the large Erythronium tuolumnense bulbs on the left that may have arrived as seed from an adjacent plant.

Erythronium tuolumnense bulbs are the largest of the genus and here in the UK the common name for Erythronium is Dog Tooth Violet and you can see the shape resembles the canine tooth of a dog although the size of these it would be more like a Tiger.

Under the watchful eye of the Meconopsis I will continue working my way through repotting carefully working around the few that are setting seed and still have green stems.

I will leave you this week with these green seed stems……