



Picking up from last week's theme of habitat, this time I am looking at two extreme versions: one the lush green growth of leaves in the garden as shown on the cover compared to the arid sand beds in the bulb house as I let them slowly dry out for the summer months.

I have been trying to find bulbs for the sand beds that will produce flowers into
June and July while tolerating or even thriving in the Mediterranean type regime of winter wet leading on to a dry summer. I seem to be finding a few that are proving suitable bringing the colour of their flowers to that period.



Allium crispum, Allium gomphrenoides, Triteleia ixioides and Ornithogalum sp.

I have been raising an increasing number of the smaller Alliums that so far are adapting very well to this habitat. The view beyond the glass out into the garden shows the stark contrast between the increasingly desert-like hot and dry conditions of these sand beds compared with the cool moist garden with its lush green growth.

Triteleia ixioides, Allium crispum and Allium gomphrenoides

As the majority of the Narcissus, Fritillaria, Crocus, and other bulb leaves showed signs of yellowing, around six weeks ago, I stopped watering across these sand beds but continued to water carefully around the stems of Alliums, Triteleia, Ornithogalum and any other plants that were still in growth.





Triteleia ixioides



Allium crispum and Allium gomphrenoides

Allium crispum has relatively large petals making them stand out as one of the showiest of these small onions but the complexity of the inflorescences makes them all worthy of the attention of my camera.



Triteleia and Allium parvum

The majority of the earlier flowering bulbs that I have experience with form their flowers before they go into the summer rest protecting and supporting the precious buds within the bulb for some nine months before they spring into growth either in the autumn or the spring. These bulbs can form next season's flowers because their leaves continue to grow feeding the bulbs long after the current season's flowers have faded and the seed is formed. In contrast the leaves of most of these Alliums die back before the

flower stem pushes up leading me to wonder if they formed their flowers in the same growth cycle as they appear. Their leaves do appear early, some in late autumn/ early winter, so this long growth period suggests to me that they may form their flowers after growth restarts and not before the dormancy. I can see some bulbs will have to be sacrificed and cut open to satisfy my curiosity unless someone with more experience of alliums is able tell me definitively.

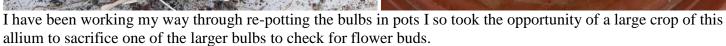


Allium gomphrenoides



Allium barcszewski







I can see the cenral bud within the scales but despite this being one of the largest of the bulbs there is no evidence of a flower. This is not conclusive as it is possible that this bulb would not have flowered so I have marked the pot



and will check to see if the other bulbs in this pot of a similar size flower or not.

These are the seed pods from this pot and the stems have completely dried out and are no longer supporting the seed, so even though the capsules are still green the seed will be perfectly viable.

The first sand bed experiment that I established has been so successful that most, although not all, the bulbs have grown and increased extremely well: so well in fact that the when they were all in full growth they were becoming too crowded and having to compete for the light.

In the spring I made the decision to thin the bulbs out this summer which I have started by lifting one section 30cms x 30cms.





All these bulbs came out of that one 30cm square area.



The two large bulbs above came from a good depth in the sand bed while the mass of tiny ones are the result of that bulb being planted too near the surface where it dries out more causing the bulb to break down into many smaller ones.



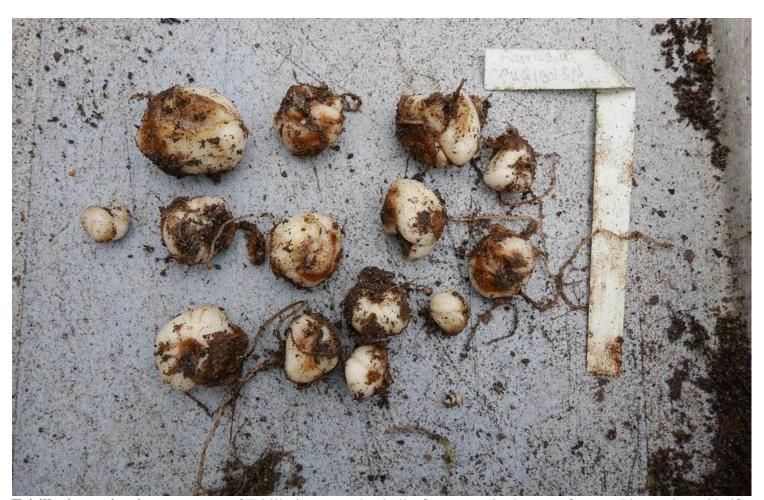
Contents of one pot of Narcissus bulbs before being cleaned up.







You would think at this time all the narcissus bulbs would be dormant but if there is the slightest amount of water present certain types, mostly forms of **Narcissus bulbocodium**, will have new roots emerging. I will keep the compost of these just moist, to preserve the roots.



Fritillaria puqiensis, a synonym of Fritillaria monantha, bulbs from a pot in the open frame - I have planted half of them directly into the garden and the rest back into a pot.



Celmisia cuttings

Regular readers will remember in Bulb Log 2019 I showed the mist propagation unit full of cuttings these rooted Celmisia cuttings are ready for potting on now and as they will only be grown in pots for a short time I am recycling the compost from the bulb repotting and using that to pot up the cuttings.



Cuttings potted up with re-used bulb compost.



I am returning to the subject of the damage to the Dactylorhiza namely the browning and dying back of the stems and leaves of some of the plants, such as in this trough, which I have decided to investigate further.



Trough with contents removed

As soon as I started to remove the leaves to get the rocks out of the trough I saw a mass of healthy Dactylorhiza roots almost at the surface





Once I got them out I can see that the tubers and roots were, as I suspected, very congested and pressed against the rocks.



I did speculate that the stress to the plants caused by competition and the congestion of tubers could be a contributory factor for whatever has caused this particular die back. I suspect the weather may be another factor as the majority of those affected were the ones that were first into growth this year.



This is the same clump shown in the previous picture washed off so you can clearly see the lighter coloured new tubers, these will support next year's growth, growing beside this seasons the slightly darker ones.





Here is another of the congested clumps showing again that all the tubers, new and old, look healthy also I can detect that fuzzy look and the smell that I associate with a healthy mycorrhiza.

On the left is a single old tuber, separated from the clump above, that lost its top growth to the damage showing that the loss of the stem and foliage has not stopped it forming two good sized new tubers for next year. It is this increase where one tuber produces two new ones that lead to the progressive congestion.

I am aware of the various everpresent bacterial and fungal problems that sometimes infect these plants: my feeling is that this damage is as much a physiological and or weather related issue leading to the plants being more susceptible to damage or attack.



This is the total of the Dactylorhiza tuber removed from this one trough some of which I have planted back into the trough while I have planted the others elsewhere.





We should always prioritise foliage when arranging our plantings because long after the ephemeral flowers have had their moments in the limelight the leaves will continue to cloak the ground with a range of green hues in a multitude of shapes and textures.

The following series of pictures celebrates foliage.



The decorative qualities of ferns should never be underestimated.



Asplenium trichomanes

Ferns come in all sizes from the large to the small and depending on your selection they can grow in a wide range of habitats from full sun to full shade.



This could be considered one of the most problematic planting areas in the garden – it is at the back of the area I opened up recently by removing a dense growth of shrubs. At the base of a large Betula, also shaded by other trees and shrubs, I am building up a tapestry of foliage plants that should tolerate this habitat. I have also planted Galanthus and some other bulbs that will flower early before the deciduous canopy develops.



More established plantings such as this one, also shown on the cover, have a complex sequential planting from the carpets of early flowering bulbs through various waves of colour to the foliage that now plays the starring role.



I am also fascinated by how we see the view is altered by the ever changing light – here I have cropped the Arisaema leaves out of the picture but their presence remains in the form of their projected shadows.



High cloud cover gives a flat light which greatly reduces the contrast allowing us to appreciate the mixed shape, form and texture of the greenery which includes Aconitum, Aquilegia, Arisaema, Dicentra, Podophyllum, Trillium and ferns.



Removing the colour allows us to appreciate the form and tones.



In simple black and white the image takes on a more abstract look allowing us to see the shapes. There is good news that Kelly Jones, Washington State, USA, has volunteered to take on the indexing for 2019, showing what a great international comunitity we have. I will leave you this week with a link to the latest <u>Bulb Log Video Diary Supplement</u> this one featuring the front garden drive way plantings.......