

Bulb Log Diary ----- ISSN 2514-6114 Pictures and text © Ian Young SRGC

...2<sup>nd</sup> December 2020 BULB LOG 49.

Narcissus 'Craigton Chalice'



We have been enjoying the early flowering of some forms of Narcissus in the 'U' shaped sand bed. This structure is the third incarnation since I first converted this plunge from pots to growing the bulbs directly in sand almost twenty years ago. The reason for converting from growing all these bulbs in pots to growing some directly in the sand was twofold - first it was to cut down the scale of the repotting we had to do every year and secondly it was to bring a change to the routine and present me with some new challenges.



The initial trials were so successful that we have since converted the plunges in two of the bulb houses to sand beds. Without the benefit of labels I am forced to study each individual flower looking for differences between the many seedlings most of which are subtle variations. I am especially looking for individual clones that stand out clearly from the masses.



One seedling that does stand out, as in this mixed group, is **Narcissus 'Craigton Chalice'**. I first selected it from a pot of seedlings with the intention of bulking it up by growing it in a pot however one year when reporting I found a pot that had lost its label so in a rash moment I decided to spread those bulbs through the sand bed only to discover in the flowering season that those were my Craigton Chalice bulbs.

All was not lost because I still had the bulbs they were just mixed through with several hundred others. One thing my mistake did confirm was the bulb I hope to distribute as Narcissus 'Craigton Chalice' is distinct and stands out clearly from the masses. I rescued some bulbs from the sand and now I have two pots to work on bulking it up again. Another interesting observation is that the exact same clones flower much earlier in the sand beds than they do in pots. These are the still tight buds of 'Craigton Chalice' still some weeks off flowering, while the ones in the sand have already been flowering for a few weeks.





There now follows a photo-essay looking back at some of the sand beds trough the year starting with the 'U'shaped one. This picture, taken in mid-January, shows a stage of flowering close to what we have today in 2020, illustrating that the flowering time of these Narcissus varies considerably depending on the weather - as a result many of these narcissus are flowering for a second time in ten months.



As the year progresses the flowers of those early bulbs fade and are replaced with waves of later flowering ones.



Narcissus including bulbocodium, obesus and hybrids.



Tecophilaea cyanacrocus and Muscari sp. are mixed among the Narcissus.



As we move through April the yellow hoop petticoat Narcissus flower prolifically.





Eventually the Narcissus season starts to subside but there are plenty other bulbs flowering.



Tropaeolum azureum and T. tricolor climb up the mesh I have placed along some of the glasshouse walls.



Some Tulipa and Fritillaria flowers join in.



In this bed most of the flowering is over by the middle of May.



Moving over to what was the Fritillaria House before we converted entirely to mixed bulbs growing in sand beds. Our intention is to have flowers for as many weeks /months of the year as we can with the first two pictures taken this week followed by a small selection from earlier this year.



This week.



Now I jump back to the end of February.



Crocus and Narcissus





End of March.





By mid- April some Fritillaria are in flower.



Fritillaria





Fritillaria





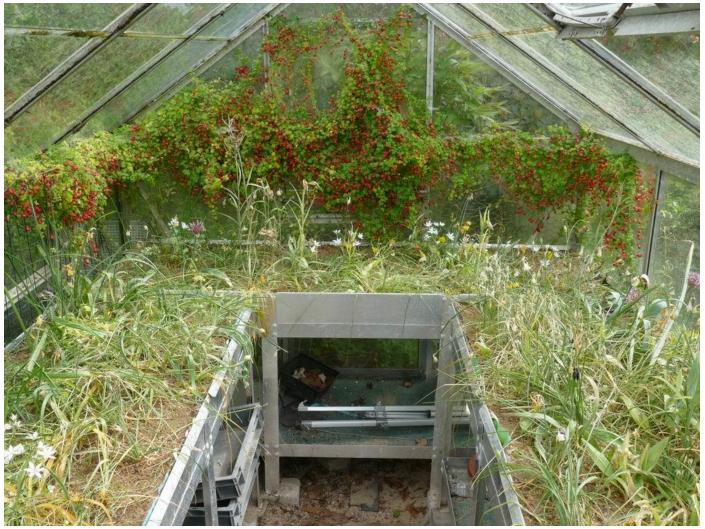
Fritillaria tubiformis



In May the last of the Narcissus are flowering along with the white flowers of an Ornithogalum sp.



Ipheion are good for adding later flowers but they increase rapidly in the sand so I need to thin them out.



Towards the end of May many of the early bulbs are in retreat but there are others still to flower.



We have a number **Ornithogalum sp**. that flower through the warmer months.



There are a number of smaller Allium species that flower through May into June.



Allium platycaule



Calochortus uniflora



Allium crispum and Allium gomphrenoides



Allium gomphrenoides



Triteleia ixioides, Allium crispum and Allium gomphrenoides

The Triteleia and Alliums stop flowering towards the end of July which brings the season to a close but at the same time I spot a Colchicum shoot pushing though the dry sand heralding the first of the new season of flowering. I continue to seek bulbs that will fit in with the Mediterranean type season that will flower in the dry summer months



A white Colchicum species photographed on 28<sup>th</sup> July represents an early start of a new season of flowering in the sand beds - the only month we have not had a flower is when the sand is completely dry in August. On the right another Colchicum is the first into flower early in September after I have soaked the sand again.



In September growth is apperaing both leaves and flowers such as Cyclamen mirabile along with Crocus species.



September also brings the first of the **Sternbergia sicula** flowers and we don't have long to wait before the Narcissus start flowering again in October.

I finish off this week with some notes about the making of and the ongoing care of the sand beds based on the questions that I am most frequently asked.

## PLUNGES

1 Ideally the plunges should be as deep as possible: ours are 15cms and anything less could be difficult to manage. 2 The structure of the plunges must be sufficiently strong to take the considerable weight of the wet sand.

3 There must be good drainage built into the plunges so that excess water can drain away freely.

4 We use a soil warming cable placed near the bottom of the sand, not as a source of heat but to protect the bulbs against deep frost freezing the sand all the way through. The sensor is in the sand and the thermostat is set to zero - in recent mild winters it has never come on but it is necessary if we get a severe winter.

## SAND

The best sand to use should be gritty and open with a range of particles from around 0 - 5mm. In the UK it is often sold as 'Sharp Sand' but it does not need to be sharp, angular, most of the sand we use is natural with rounded particles. 'Builders Sand' as sold in the UK is not suitable because it is too fine and does not allow free drainage, neither is sand that contains a lot of clay. The best test of the sand is to take a handful of the wet sand, squeeze it tightly in your hand then open and shake your hand gently - if the sand is suitable the ball should break apart relatively easily if it stays in a tight ball it is not suitable. You can adjust the sand by adding additional grit until it falls apart when applying the above test.

When we started we placed around 3-5cms of sand in the plunges which covered the warming cable, we then placed the bulbs before filling the plunges to nearly the top - if planting the bulbs after the plunges are full of sand then they are best to be around 7cms deep.

## WATERING AND FEEDING

We apply the first water of the season on the  $1^{st}$  September, I call it 'the storm', (in warmer areas it may be a month later), this is done using a hose pipe with an adjustable sprinkler and it will take several good soakings to ensure the moisture has penetrated all the way through the sand. The first soaking will only wet the top few centimetres so repeat the soaking several times, leaving time between each pass for sand to absorb the water. See <u>Bulb Log 36/20</u> for more on preparation of the sand and applying the first storm.

When the surface of the sand is wet I then spread a light dressing of 7-7-7, N-P-K Growmore pellets to the wet surface. The reason I don't add the feed to the dry sand first is that the effect of the water flooding over the surface can wash the dry fertiliser pellets into clusters and I want it more evenly spread. Once the surface of the sand is wet I evenly scatter the pellets then leave them for a while to absorb some moisture before continuing with the watering – the fertiliser pellets are less likely to get washed around when they are wet. During the season I sometimes add a few additional 7-7-7 pellets around the neck of individual bulbs, often the larger leaved ones such as Sternbergia and Ornithogalum.

It is essential to maintain watering through the growing season which for these bulbs is the winter so on 1<sup>st</sup> October I repeat the process of completely soaking the sand. If the weather is mild and sunny it may be necessary to water the sand in between the September and October storm – this year I watered twice in that period; not to the same level as during the storms but sufficient to ensure that the bulbs had plenty water and food to support the rapid growth of leaves and roots. Watering changes the surface of the sand, washing smaller particles to the surface which, if left can encourage the growth of moss as well as forming a hard impervious cap, so a few days after watering I go over the sand, gently roughing up the surface to both aerate the sand and help it absorb the next water.

I continue to water and feed the bulbs in the sand throughout the winter – in November our outside water is turned off so I have to switch to filling and carrying watering cans back and forward. Fortunately in the colder weather the period between watering gets longer, sometimes it can be as much of a month - it very much depends on the outside temperature and the amount of sunshine. Every time I fill a watering can I add half strength Tomorite, a liquid 4-3-8 Tomato, fertiliser to feed the bulbs. As the flowers start to fade the bulbs switch to forming seed and next season's flower buds so I apply Sulphate of Potash, a white powder containing only Potassium (Kallium) I usually do this around mid-March when I turn the outside water back on. <u>See Bulb Log 14/20</u>.

As the weather warms up it is critical that I keep the plants well supplied with water until I start to notice the first signs of the leaves turning yellow, an indication that they are shutting down. Because we grow such a wide range of bulbs in these beds I now have to judge which of the bulbs are still green and requiring watering so I no longer water the entire area but apply water around the individual bulbs still in growth.

In this <u>Bulb Log Video Diary Supplement</u> I talk about the construction and maintenance of the bulb house sand beds while looking at what was flowering in April.