



BULB LOG 29.....20th July 2011



Aconitum ferox seed pods

I showed the marvelous sculptural buds and flowers of Aconitum ferox a number of bulb logs ago.



Not surprisingly the seed pods are equally as dramatic and stylish held in bunches of three from each flower stem. There are still a few flowers on the top of some of the stems to remind us of the beauty of the hooded flowers.



Allium flowers

Looking back a few weeks to when the giant Allium flowers were in full and colourful display.



Allium seed heads

Even after they lost all the colour of the flowers they retain a stylish form but what most attracted me to them cannot be captured by a photograph. We should use all our senses in the garden and it was a wonderful tactile experience to gently clasp these seed heads in my hands when they reminded me of a child's springy rubber toy.



Allium stems

Moving up to date it is very interesting to observe that all life has now gone from the stems which have become woody, brittle and ready to snap in the wind while the seed heads themselves stay green and bouncy so they can bounce along in the wind to shed seeds as the capsules eventually split. In an open habitat this tumble weed method of seed dispersal would be very efficient allowing seedlings to establish a long way from the parent plants.



Cyclamen purpurascens

The seed capsule of *Cyclamen purpurascens* has opened to allow the seeds to be shed. *Cyclamen* seeds have evolved a sticky coating to entice ants to carry them off and that too is an efficient way for the seeds to germinate some distance from the parent plant. In our garden there are no ants so the seeds just fall from the capsule and germinate around the parent which is evident from the number of seedling leaves that can be seen in this picture.



A close up shows the open capsule and two spilled seeds.



Cyclamen pots

I grow just a few Cyclamen in pots, mostly forms of *C. mirabile*, and this year I have remembered to get the pots outside to take the rain in good time to support the emerging new roots. Often they have not been watered until August or September and I am pleased that I have remembered my note to myself to do better! And they are getting plenty of rain as recently we are experiencing heavy rain in between the torrential downpours. This wet weather is seriously disrupting my plans to get all the outside repotting and splitting done in July. The pots and the ground are

so wet that you just cannot work them and I fear that if it continues much longer the ground temperature will fall and the Erythroniums along with the cooler growing Crocus species such as *C. vallicola* and *C. banaticus* will start to send out roots, if they have not already started to do so. Once they start to root it will do more harm than good to lift and split them so I will just have to leave them for another year.



Cuttings



To update you on the progress of the cuttings I took - many like the *Celmisias* above, have rooted to the extent that they can be potted on.

Once they are potted I keep them protected in a humid area close to the mist unit until their roots establish in the soil then they are placed into an open frame.

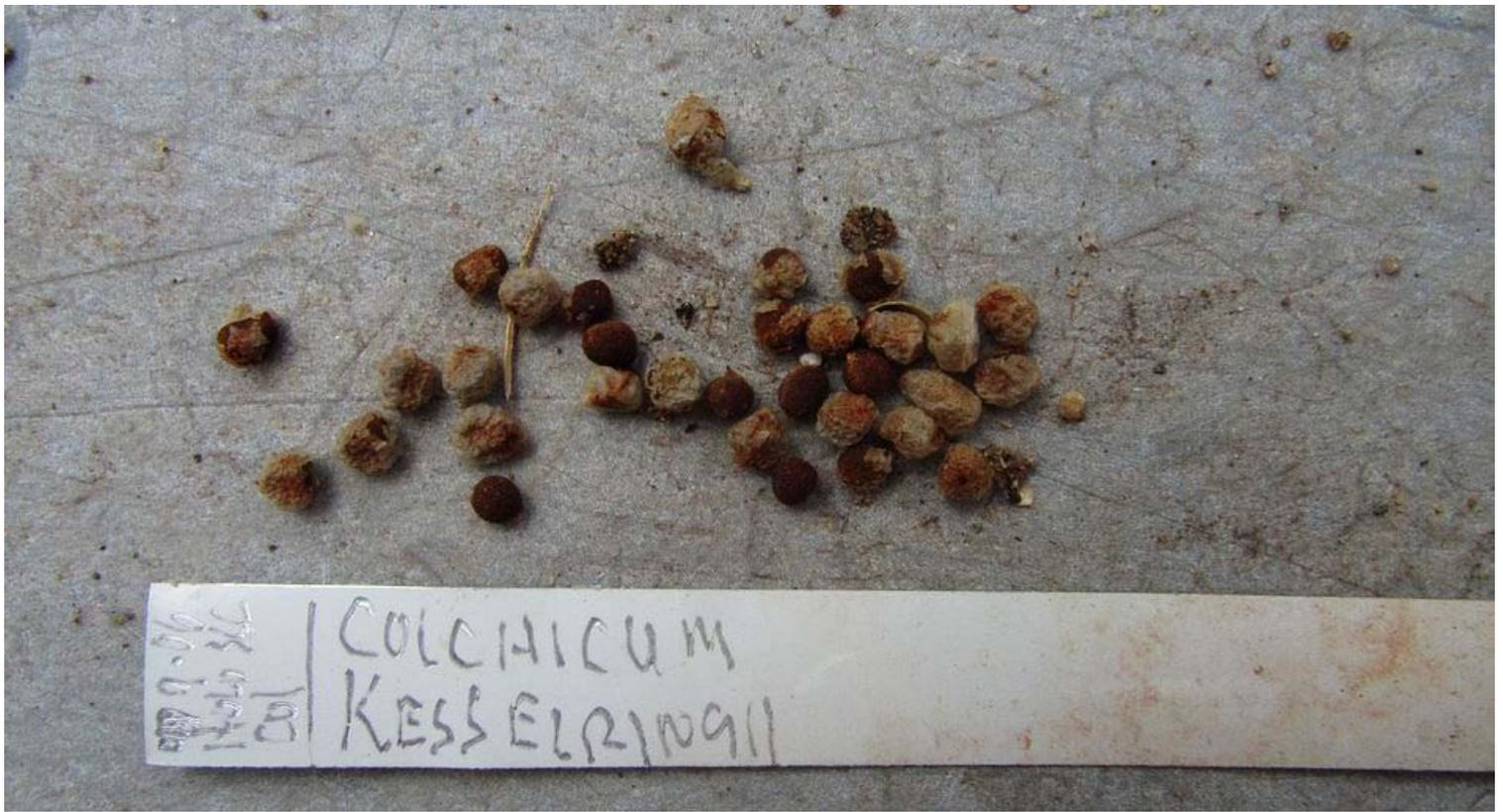


The **Cassiope cuttings** illustrate well how the smaller cutting on the left, taken with a green stem, has rooted quicker than the branched one with a slightly woody stem. Eventually it will catch up but it is a good example of how small cuttings will often root, establish and form better plants, quicker than larger cuttings.



Crocus seed pod

During the rain I can get on with a limited amount of repotting in the confined workspace in the bulb-house and I have made a start. It was only when I tipped off the gravel dressing that I discovered this Crocus seed.



Colchicum kesselringii seeds

Not hidden underground but clasped within the dead leaves I discovered two capsules of Colchicum kesselringii seeds. Colchicum seed is notorious for being reluctant to germinate despite all the tricks that we have to tempt it into growth. I have always had the best success with very fresh seeds such as these sown immediately. I suspect that the surface coating on the seeds that you can see above forms an inhibitor, be it chemical or physical, and if the seed does not find favourable conditions when it is first shed the germination is locked and it is difficult to find what it takes to trigger it into growth.



Sternbergia 'Dodona Gold'

After the severe cold of last winter and the unseasonably hot April I am not expecting a magnificent crop of fat bulbs this year. First they were frozen for weeks on end causing damage to roots, bulbs and leaves then they retreated into an early dormancy during a heat wave in April when we were away at the Conference in Nottingham. The Sternbergias were probably the worst hit most losing their leaves and roots to the frost and you may remember that I decide to dry them out very early in an attempt to preserve any remnants of life. Now I am finding out what has survived.



Sternbergia 'Dodona Gold'

Now they are cleaned up I can see that what was a pot of good sized bulbs of Sternbergia 'Dodona Gold' is now a pot of smaller bulbs this is a bonus to me as I did think in the depth of winter that I would lose all the Sternbergias.



Now the bulbs are cleaned up I can replot them back into the same compost. As the compost I use now is largely sand and grit it does not degenerate in the same that a compost with a high humus content would so I can reuse it

over a number of years. A third of the way up from the bottom of the pot is where the bulbs will sit and to this layer I add a sprinkle of bone meal which will provide some nitrogen and phosphorus. Sometimes, depending on the type of bulb, I will also mix a small amount of leaf mould through this lower part of the compost. Ideally I would have liked to have used a fresh mix of compost but all the ingredients are wet and it is too early to place the bulbs into a



very damp compost. I have mentioned before in an ideal world I would like to replot all my bulbs on the last day of August and water them on the first of September – then it would not matter if the compost is moist or not. Placing the bulbs into damp compost now could lead to wet rot attacks during their continued dormant period which will last around another six weeks.

The bulbs can now be placed into the pot. I take care to space out the larger bulbs, sitting them on their base, once I have them in place the smaller ones can be scattered among them. It does not matter which way

up they land – they will still grow perfectly happily.



Sternbergia sicula

It is good to keep a positive attitude to all results in the garden even losses can be valuable in the lessons we can

learn. Gardeners in general have very unreasonable expectations of their plants as we expect them to perform to their best every single year – bulbs always flowering, fruit always appearing, etc. However observing what happens in nature should quickly teach us that that is not the way of things - some years plants have a bumper year and in others, usually due to climatic conditions, they struggle just to survive – and so, despite our best efforts, it is the same in our gardens.



Sternbergia sicula

This sequence of pictures, starting two above, shows a pot of *Sternbergia sicula* - first with the top of the compost knocked out so I can see that the bulbs look somewhat shrunken - the dark skin, formed over a number of years, is wrinkled. In a healthy specimen that is growing well the bulb should fill if not expand this outside tunic.



I clean the bulbs up by gently rubbing them between the palms of my hands – this removes the old tunic revealing smaller but otherwise healthy bulbs



Sternbergia sicula

Another pot has mixed results with some bulbs surviving while others have been killed by the conditions. The sooty ghosts seen on the surface of the planting layer in the pot tells me that these bulbs have died before I crumble the dried outer skin that often remains even when the bulb has died.



***Sternbergia sicula* bulbs**

Bulbs have amazing survival adaptations and even when they are under stress they have evolved strategies to ensure that some of their genes can grow on. These husks show that last year these bulbs were a reasonable size but due the cold and hence the very short growing season the bulb has split down leaving a number of smaller daughter bulbs which are revealed when I crumble them between my palms. This splitting down into a lot of small bulbils is also caused when bulbs do not receive enough moisture during peak growing periods and is often a result of them being planted too near the surface. This behavior is sometimes used by experienced growers to help increase numbers of particular bulbs by deliberately planting them near the surface to break a single bulb down into lots of bulbils which can then be grown back to mature bulbs in a few years. I have often used this method with both *Narcissus* and *Crocus*.



The remains of the roots on the basal plates of these **Sternbergia sicula** bulbs tell a tale. Normally the remnants of the roots would remain attached and thread like – often they need trimmed back with scissors – but because the roots were killed by the frost all that remains are the ring of tiny circles representing the outer layer/skin of the roots around the perimeter of the basal plates. A more optimistic and healthy sign is the lovely white ring from where the new roots will emerge visible here on the left hand bulb. If the remnants of the old basal plate come away easily I will remove them if not I leave them.



Many of you will remember that the Sternbergia pots sat on an aluminium tray without the benefit of a soil warming cable to limit the frost penetration and that is partly why they have suffered the most but it must also be to do with the frost tolerance of the species and clones as well. We have lost some pots completely.

This pot of Narcissus albidus occidentalis was grown beside the Sternbergia and fortunately it has

survived the frosts better with only the roots that came out of the pot being killed. The thing that affected these bulbs the most was the sudden heat greatly exaggerated in the small volume of our glasshouses that sent them into an early dormancy some six weeks at least earlier than they would under our normal cooler conditions. I have known years when we had to withhold water to force the bulbs back in June so we could get them repotted. Losing some six weeks of growth has resulted in smaller bulbs and I am sure we will see less flowers next season as result of this. The same is true throughout all the bulbs we have under glass.



Narcissus 'Atlas Gold'

My initial brief survey of the bulbs indicates that some have fared better than others.



This pot of **Narcissus 'Atlas Gold'** has done well and this is down to two main factors. Firstly it was on a sand plunge that had a soil warming cable – the cable did not prevent it freezing but it did moderate the cold'. Secondly, this group of *Narcissus romieuxii* start in to growth very early often coming into leaf in October and flowering in Novemeber/December, so they had done a lot of their growing before the worst of the cold hit.



Over fifty bulbs came out of this 7cm pot – I will never get them back in so I have moved it up to an 11cm pot.



The troughs of *Rhodohypoxis* are loving the summer rain and they certainly cheer up the garden with their sky gazing flowers. I just hope for some dry weather so we can get on with our repotting.