



BULB LOG 33.....17th August 2011



I am now working my way through repotting the bulbs or at least as many pots as I can before they need to be watered. I start with the Narcissus as they want to root sooner than most then I do Crocus and finish off with the Fritillarias which as a general rule can be watered a month after the rest. A careful look at the base of these Narcissus bulbs shows the root tips already emerging even though they have come out of completely dry compost. Now the bulbs are at this stage I do not need to worry about placing them into slightly moist compost as their roots will grow and start taking up the moisture. I will of course have to make sure that the compost does not dry out completely as that will damage the new roots but the way our weather has been with nearly constant cloud cover

and highs of around 13C I do not see this as a problem.



**Narcissus
romieuxii bulbs**

The first task is to separate the bulbs from the old compost. Once I have done that I take the bulbs as seen on the left and gently rub them between the palms of my hands to remove some of the layers of old skins. This generally also reveals any bulbs that have died.



Narcissus romieuxii bulbs

It is while I am repotting that I am discovering the true extent of the damage caused by the winter as this pile of cleaned bulbs is much reduced from the previous picture. Many of the bulbs in this pot were dead - killed by the frosts with only a husk made up of the skins being left and those that survived the frosts then had their growth cut short when the unseasonal heat wave we experienced in April sent them into an early dormancy. In the case of the pot above the number of bulbs went down as did the size of the bulbs that survived, with few looking like they are big enough to flower.



Narcissus romieuxii bulbs

Another pot and another form of *Narcissus romieuxii* and I find a better result.



Narcissus romieuxii bulbs

Once these are cleaned up you can see that this time I have an increase in numbers and many do look like they may flower. The sides of the pot have been distorted by the growth of the bulbs so there is no way that I can get them all back in. In this case I end up with a surplus that will go to the bulb exchange at the Discussion Weekend. There are many factors that affect how a bulb will respond to the extreme cold these include how much moisture is in the compost, what stage of growth the bulbs are in, where the pot is placed, etc. There is another very important factor and that is different clones will have different tolerances to heat, cold etc and that is why I keep growing bulbs from seed to get that variation and seek the ones that are best suited to our weather.



This pot of mixed seedling bulbs shows some healthy bulbs and a lot of sooty hollows that are all that remains of others that died in the winter.



NARCISSUS
BAETICUS m5549

Narcissus baeticus bulbs

In this pot of *Narcissus baeticus* bulbs I find that the roots had grown well and seem to have survived the frosts.



NARCISSUS
BAETICUS m5549

Narcissus baeticus bulbs cleaned up

Once I have cleaned up the bulbs I can see that while some, on the left, are perfectly healthy, others have died and become hard dry shells. It is important to check for and discard any bulbs like this because, if they get wet, rots will develop on them which will also attack the healthy bulbs.



Healthy and damaged bulbs

Here you can see clearly the healthy bulbs on the left. When I am not sure of the state of a bulb I will carefully peel back the skins to see what is revealed and in this case the two bulbs on the right are dead.



Pot size

Never be afraid to reduce the size of pot you replant the bulbs in if the numbers have been reduced – here I have dropped down to a much smaller pot suitable for the few healthy bulbs that are left.



Narcissus bulbs splitting

Having looked at the effects of the cold on the bulbs, this picture illustrates how many bulbs respond to reduced watering. If you find that many of your bulbs break down into lots of small ones rather than a large flowering sized bulb then it is more than likely because you have not watered them enough during their growth period ; however the same reaction can occur if the growing season is cut short by a heat wave – which we had in April . Narcissus bulbs get bigger each year growing extra layers and in time they may split producing offsets alongside the main bulb.

Some strong growing bulbs can split into two flowering bulbs in a single year.



Crocus Corms

When I start to get bored with repotting the Narcissus instead of stopping I will switch to Crocus for a change. Here again you can see the results of early dormancy causing the corm to be replaced by a number of smaller ones rather than a large one. Unlike Bulbs, Corms are replaced completely every year with a new corm forming on top of the remains of the old one. In a good growing season the old corm should reduce down to just the

slimmest remains of the tunic which sits at the base of the new corm but when the growth is cut short the remains of the old corm are more noticeable .



Crocus laevigatus corms

Notice the button-shaped remains at the base of each of these corms – under good growing conditions these should have shrunk away to a thin skin, passing all the starch reserves on to the new corm which would also be that bit larger than these are.



Crocus corms

The spring flowering Crocus have been worst affected by this as they had a shorter period for the new corm to grow - a process which happens after flowering. The new corms above are about the size of the old remains which you can see even better in the picture below where I have separated the old corm from the new one



Crocus corms



Crocus cartwrightianus

It is the Crocus that have been most damaged by the cold winter with many total losses like *Crocus cartwrightianus* above where only the tunics remain. However in the next pot, *Crocus cartwrightianus* albus (see below) was damaged and the corms are much reduced in size but have survived.

**Crocus
cartwrightianus
albus**



Crocus caspius

I only find the seed pods of Crocus caspius when I am repotting because they always hide under the gravel top dressing.



Crocus caspius seeds

Because of the cold interrupting the pollen growth only some of the seeds are viable this year – you can see the nice plump fertile ones alongside the wrinkled immature ones above.



Crocus caspius

Tipping out the compost above the corms I get a good idea that these bulbs have survived well but as I have shown above it can be deceiving as the tunics remain intact disguising the size of the corm.



Crocus caspius

Here are the cleaned up corms replanted into fresh compost. I have other pots of *Crocus caspius* that have not done so well as this pot of mixed seedlings. Although I have never noted any significant variation in the appearance of the flowers of different *Crocus caspius* seedlings there is obviously a difference in their tolerance of cold.



Tecophilaea cyanocrocus

Another change for a break: this time a pot of seed raised *Tecophilaea cyanocrocus* - these have done reasonably well in the difficult conditions of last season.



Tecophilaea cyanocrocus corms

How much you clean the old corm is always a dilemma as subsequent layers of corm tunics build up year after year. Of course in the wild no one removes the old tunics and they will just build up one on top of the other but I believe that in cultivation it is best to remove some of the old layers – if you repot each year just remove the outermost old layer leaving last season's layer to cover the corm as on the left above. I stripped one down to reveal the corm , compressed stem, right, to show the structure with the shoot for next spring's growth sitting on the top. The thin white inner tunic can also be seen. I do not advise cleaning them this much.



Tecophilaea cyanocrocus corms

Strong growing Tecophilaea corms will produce an offset - on the left is a reasonable offset that will require one more year's growth to reach flowering size (1st) the one on the right will take around three years. In the best year I have had a single corm produce two offsets one flowering size the other a 1st size giving a 250% increase.



***Tecophilaea cyanocrocus* corms**

All cleaned up and spaced out in fresh compost I look forward to a good flowering from this pot and I am hopeful that I will find as good results in the rest of the *Tecophilaea* when I get round to repotting them in the coming weeks.



A flower picture to end this week's bulb log of the first of the autumn ***Crocus ?nudiflorus***. I have never worked out precisely which species this is. I have had varying identifications from other growers but frankly do we always need to know the precise name ? Just enjoy the flowers.