



We are feeling great waves of grief because on Friday 26<sup>th</sup> June we had to say a final good bye to our beloved Miss Molly the Wonder Dog - she was fourteen and a quarter years old.

I know how many of you are dog lovers and have experienced this trauma- we have gone through it a number of times most recently with Poppy, Miss Lily, then Megan Molly's twin sister just 2 years ago and it never gets less painful.

While we have lost the physical presence of Molly she will be with us forever through the many memories happy years we have enjoyed together.



Regular readers will be aware of **Molly** because she was always with us in the garden no matter what the weather and appeared - well, starred - regularly in the Bulb Log Diary and Videos – below I share just a few recent images of Molly through the seasons of this year.

















Molly



In recent weeks I have been making good use of the wet days by getting on with the annual repotting of the bulbs. I am always interested to see how the potting compost, which started out as a 50/50 mix of loam based John Innes and 6mm grit, has held up so I run the now dry mix through a sieve.



During the year humus in the JI mix breaks down to the extent that the proportions are now more like 60 of grit and 40 of the loam. This is a good illustration of why it is best to repot every year- having started off with a well-drained mix this would get would increasingly leaner as the loam and humus degrade.



compost mix and a supply of water at the correct time to allow for that initial growth.

When I find a good crop of Narcissus bulbs it is both rewarding and reassuring that I have provided a suitable environment for the bulbs with the correct watering and feeding regime. This regime starts again now be repotting the bulbs into a new 50/50 mixture – they will stay dry until I start watering them on 1<sup>st</sup> September when the roots will start to emerge.

To get good growth it is essential to have a good root system so it is important that they have both a fresh



Narcissus bulbs cleaned up and repotted before the final topping off with the compost mix.

One of the reasons that I find growing bulbs so fascinating is that repotting lets me see the way the underground swollen storage organs develop and react to changes in their environment. The typical 'bulb' shape of this batch show that they have grown well so I can fill the pot again, with a small surplus over - but that is not always the case.



Narcissus bulbs



The first signs that these Narcissus bulbs had not grown so well is the elongated shape an indication that they are trying to go deeper.

They are not seeking an optimal depth but an optimal condition; these bulbs needed to be growing in cooler, moister compost so they seek to achieve this by taking themselves deeper.

This is further indicated by the way they have broken into several smaller elongated bulbs rather than being a plump bulbous shape. Breaking down into many small bulbs is is a typical survival reaction employed when they are grown too hot and or dry.

By learning to read these signs the bulbs teach us the best methods to grow them and we can use these reactions to our advantage.

Potting healthy bulbs nearer the surface will stimulate this break up into several smaller bulbs and

is something I regularly do as a way to increase the number of bulbs quicker than they would under normal conditions as well as being less invasive than chopping them up as chips or twin scales.



These bulbs are a Galanthus cultivar that I broke down in this way a few years ago - starting with two bulbs which each broke down into several small ones and now after a year of good growth most are back to flowering size.



## Sternbergia greuteriana bulbs

How different bulbs grow and increase is a constant source of fascination to me such as the way these Sternbergia greuteriana bulbs have produced a small bulbil on what appears to be a stem growing from the top of the bulb.

The bulbils did not reach the surface so I only found them when I tipped the pot out.

I have repotted them back in with, and at the same depth, as the parent bulbs.



These are one year old **Tropaeolum azureum tubers**. I sowed the seed last August and placed the pots outside to take the weather. They started to germinate in October/November when I took them into the bulb house for some protection from severe frosts but also from slugs that could devour a whole pot of seeds overnight.



They grew well, producing a tangle of growth with the first few flowers appearing in April; some of them even went on to produce a few seeds in their very first year. I could see some of the small tubers breaking the surface of the seed pot as they grew.





## Tropaeolum azureum tubers

As well as the mass of tubers near the surface it was even more fascinating to also find that there was another mass of them growing right at the bottom of the pot.



Tropaeolum tricolor seedling tubers.



**Tropaeolum tricolor** does exactly the same with some of the first year tubers escaping through the drainage holes in the bottom of the pot as well as the cluster breaking the surface.



Mature **Tropaeolum tricolorum** tubers take different forms often moulded to the shape of the pot as shown here.

When they are growing well the tubers produce a series of smaller tubers along the length of a root like structure as shown in the picture below.

I suspect that the seedlings when growing well can also produce these secondary tubers which would explain the mass of tubers I found clustered at the bottom of the seed pots.

A part from their size the mature tubers are distinguishable from the new ones by the by the textured skin.



The secondary **Tropaeolum tricolorum** tubers are on the left with the mature ones with the more textured skin on the right.



There are still a few bulbs flowering in the sand beds here it is **Allium crispum and Allium gomphrenoides**.





Allium gomphrenoides



Allium crispum



I wanted to show the last of the **Calochortus uniflorus** flowers mostly to show that these plants also produce stem bulbils that form just below or sometimes just at ground level see picture below.



Calochortus uniflorus stem bulbil.



Run free Miss Molly – you are forever in our hearts.....