SRGC ----- Bulb Log Diary -----

BULB LOG 20.....16th May 2012

Allium derderianum

This is my only plant of this beautiful dwarf allium raised from a pinch of wild collected seed. It has flowered for the last three years now but to date I have never had any seed set. I know that it is commonly said that many plants are not self compatible but I do not think that is always the case. When a flower first comes out there may be some mechanism to prevent self fertilisation as it is always desirable to have genes from two parents but I think that mechanism breaks down as the flower starts to age and self fertilisation becomes possible. Another factor is that something needs to transfer the pollen and I have been doing that on an almost daily basis for the last week in an all out attempt to get seed to increase this most desirable of onions.

Allium yosemitense

Allium yosemitense has a more lax flower head with fewer but larger individual flowers - unfortunately it's stems tend to etiolate in our cool low light conditions. I also raised this from seed but succeeded in getting a number of bulbs from the original sowing so with the mix of genes I always get a reasonable seed set.

The weather is really dreadful for May even by Scottish standards –cold, wet and windy so I will retreat and bring you an update on the stage of growth in the bulb houses. Many of the earliest bulbs are now heading into summer dormancy while others that are still ripening seed have quite green leaves.

Bulb house with Ornithogalum

Ornithogalum sp.

All the Ornithogalum that I grow have white flowers with varying degrees of green on the reverse.

Ornithogalum sp.

As the flowers start to fade the white starts to become transparent and the green starts to bleed through so it can be seen from inside the flower.

Ornithogalum sp.

Another Ornithogalum sp showing the beautiful form of the ovary in the centre of the flower.

I cannot resist showing yet another picture of **Tropaeolum azureum**.

Bulb house left

Much floppy growth in the bulb house - some quite yellow indicating the bulbs are going into dormancy and need to dry out. Others remain green and need low levels of moisture so they grow as long as possible to feed their bulb. In most cases there is enough moisture still in the sand plunge to provide for them but for the odd few that still look to be growing strongly I water them individually.

Bulb house right

Muscari sp.

From the swelling capsules this beautiful wee Muscari sp. collected in Turkey looks to be setting seed again this year. However looks can be deceiving - on occasion the capsule is empty or has but a single seed in it – I keep my fingers crossed for a good harvest.

Crocus longiflorus seed capsules

Although the recent cold is not the best weather to enable seed to set the plants that flowered in warmer periods like last autumn or earlier in the year have set some seed which I am now starting to harvest.

Crocus longiflorus seed

Although the capsules had not started to split I opened them to get the seed which you can see above. This is now ready for storing or sowing. We can learn the best way to store seed from what would happen in nature and with many Crocus the seed would be collected by ants and taken under ground where it would remain warm and dry until the autumn rains come. Ideally you should sow the seed half way down a pot into dry compost and keep the pot dry and shaded from extreme sunshine for the summer and on this occasion that is exactly what I have done. However due to limited space under glass I cannot do this with all of our seed so my alternative is to store Crocus and Narcissus seed in dry sand in plastic packets. These packets can then placed into a shaded stable environment until I sow them in August/September. It is very important not to put them into a fridge as is often recommended because the development of many of these seeds is ongoing for a number of weeks after the seed is shed and this process requires warm temperatures – placing it directly into a fridge can seriously inhibit this development and result in less fertility. If you do want to store the seed long term, for more than a year, then you can store the seed in a fridge but do not place it there for six to eight weeks after collecting.

Seed stored in dry sand

The types of seed that I store this way are the same seeds that I sow deep – those are seeds that have evolved elaiosomes to encourage ants to distribute their seeds such as Crocus, Narcissus, etc. Wind distributed seeds I store dry in paper packets.


Narcissus cantabricus seed capsules

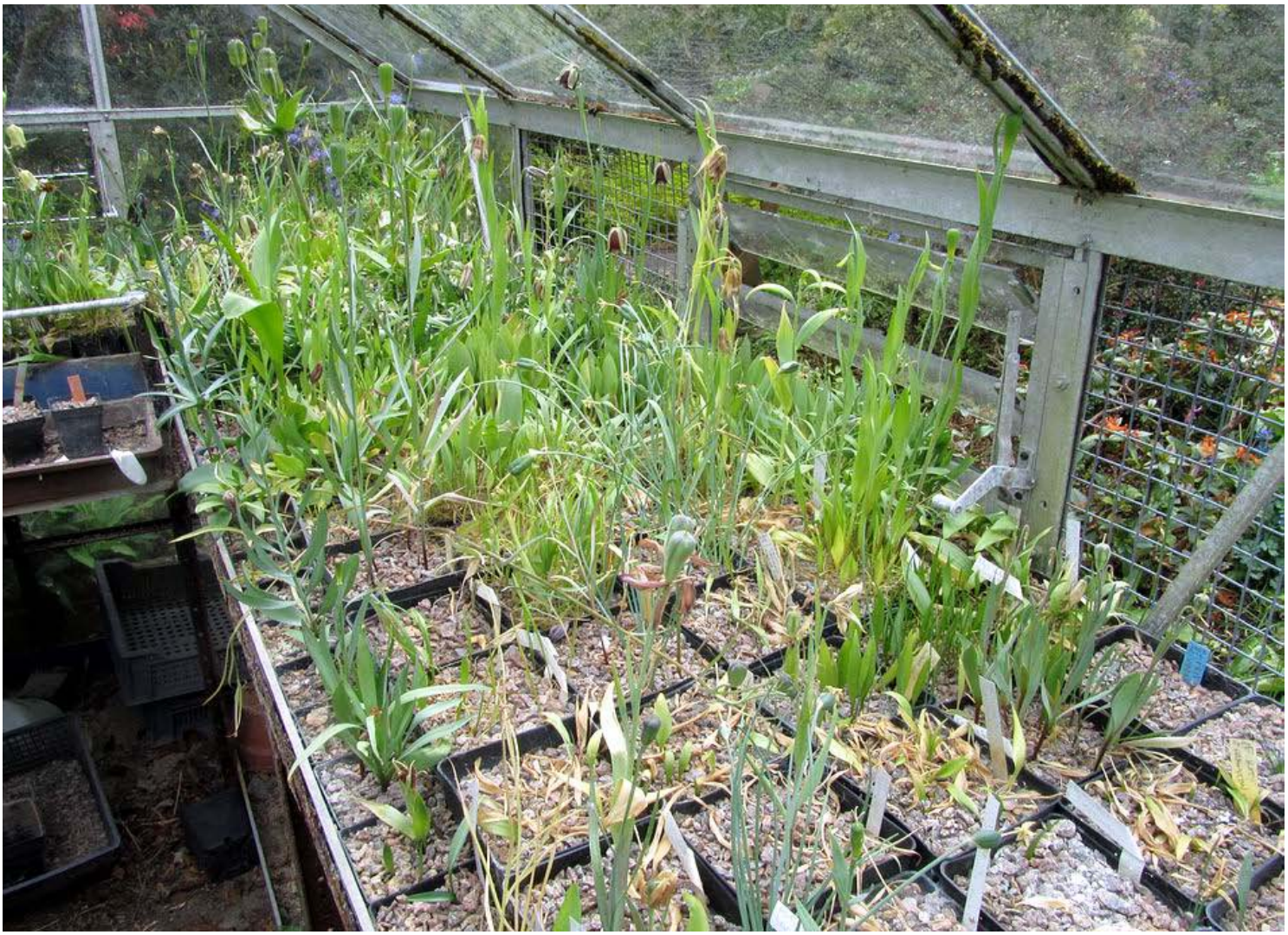
Another common question is - when is the seed ready to collect and do you have to wait until the capsule opens? The answer is no the seed is ready to part from the parent before it would be shed naturally. The plant starts to shut down before that capsule dries and splits. In fact that is exactly why the capsule dries and splits so the seed is not receiving any more beneficial support from the parent some time before it is shed so you can start to collect as soon as you detect the stem narrowing. The Narcissus cantabricus seed capsule above has just started to turn yellow and it is an ideal time to collect the seed – in my experience if I wait until the capsule splits I inevitably lose some of the seed.

Narcissus cantabricus seed

I especially wanted seed from this form of Narcissus cantabricus so have been paying it particular attention by ensuring the flower was well pollinated and timeously collecting the seeds. One capsule contained 29 seeds.

Narcissus rupicola seed pod

There is a beauty in flowers even as they dry out and I am always interested to observe which bulbs hang on to the remains of the flower and which shed it. I then try and work out if this is a genetic or environmental phenomenon.



Fritillaria house

Fritillaria affinis

A nice fat looking seed capsule on Fritillaria affinis complete with now redundant tepals and stigma still attached.

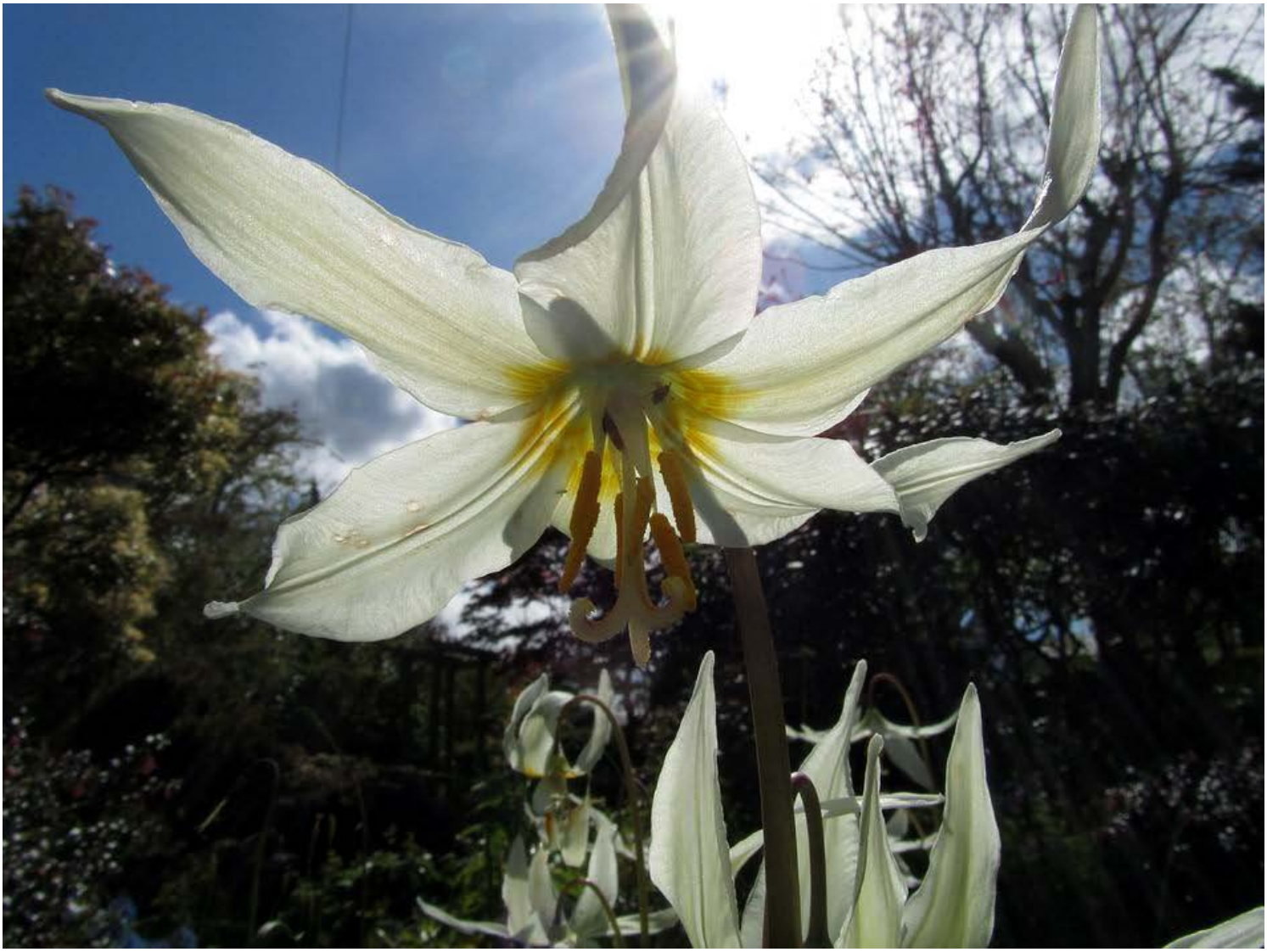
Fritillaria chitralensis

Hopefully these fat Fritillaria chitralensis capsules are full of good, fertile seed.

Fritillaria whitallii

Too many of our Fritillaria capsules look like this Fritillaria whitallii and the one below, with only the thicker substance of the tip sitting on the shrivelled unfertilised bottom section. The capsule shape is indicative of the cold wet weather conditions at flowering time where the conditions did not allow the pollen to grow down and complete the fertilisation process – so the seeds have not developed. The pollen grows down the tube fertilising the seed from the tip of the capsule and sometimes it is fat in the top half where the weather has been warm and then narrow at the base where the pollen ceased to grow as it turned cold.

The second flower of Narcissus cazorlanus with the dried remains of the first.



Erythronium oregonum

And then the sun came out briefly before the rain and wind returned.....