



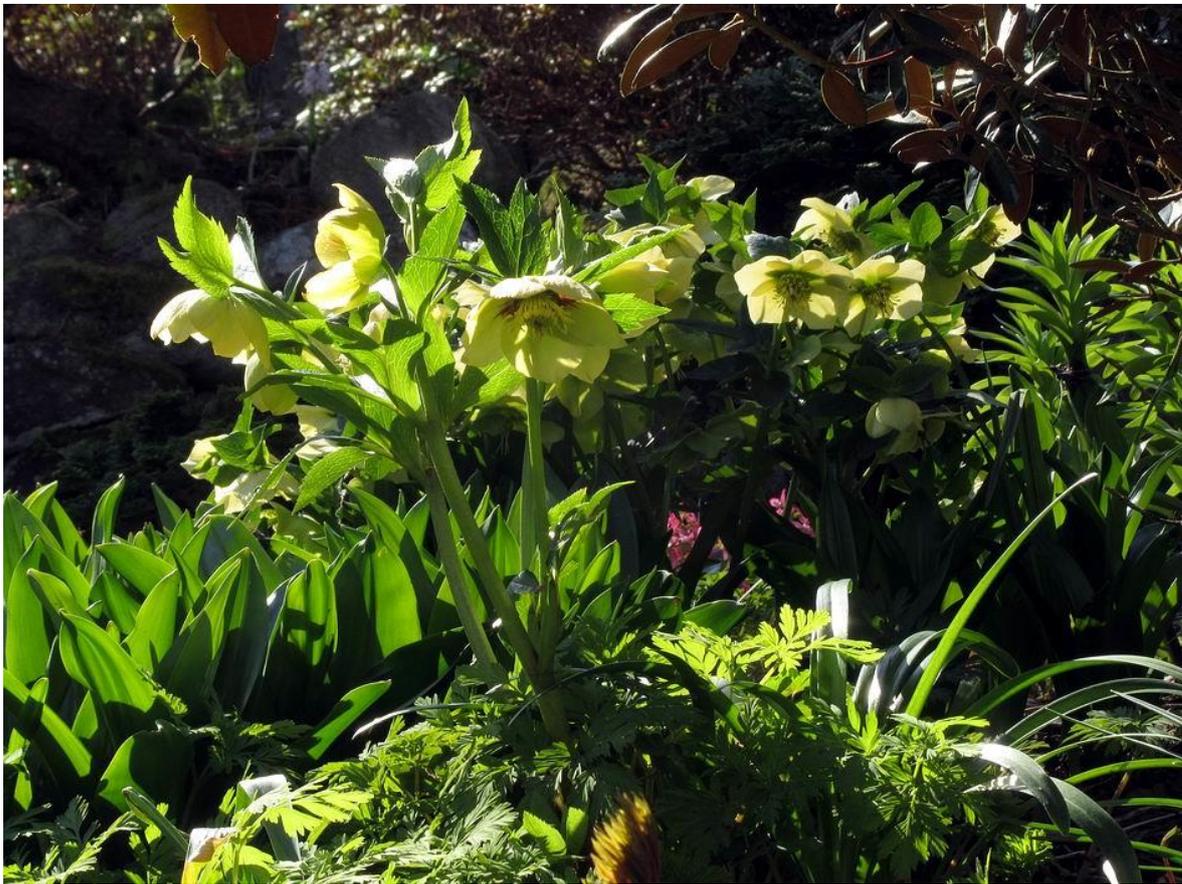
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----- Bulb Log Diary -----

Pictures and text © Ian Young

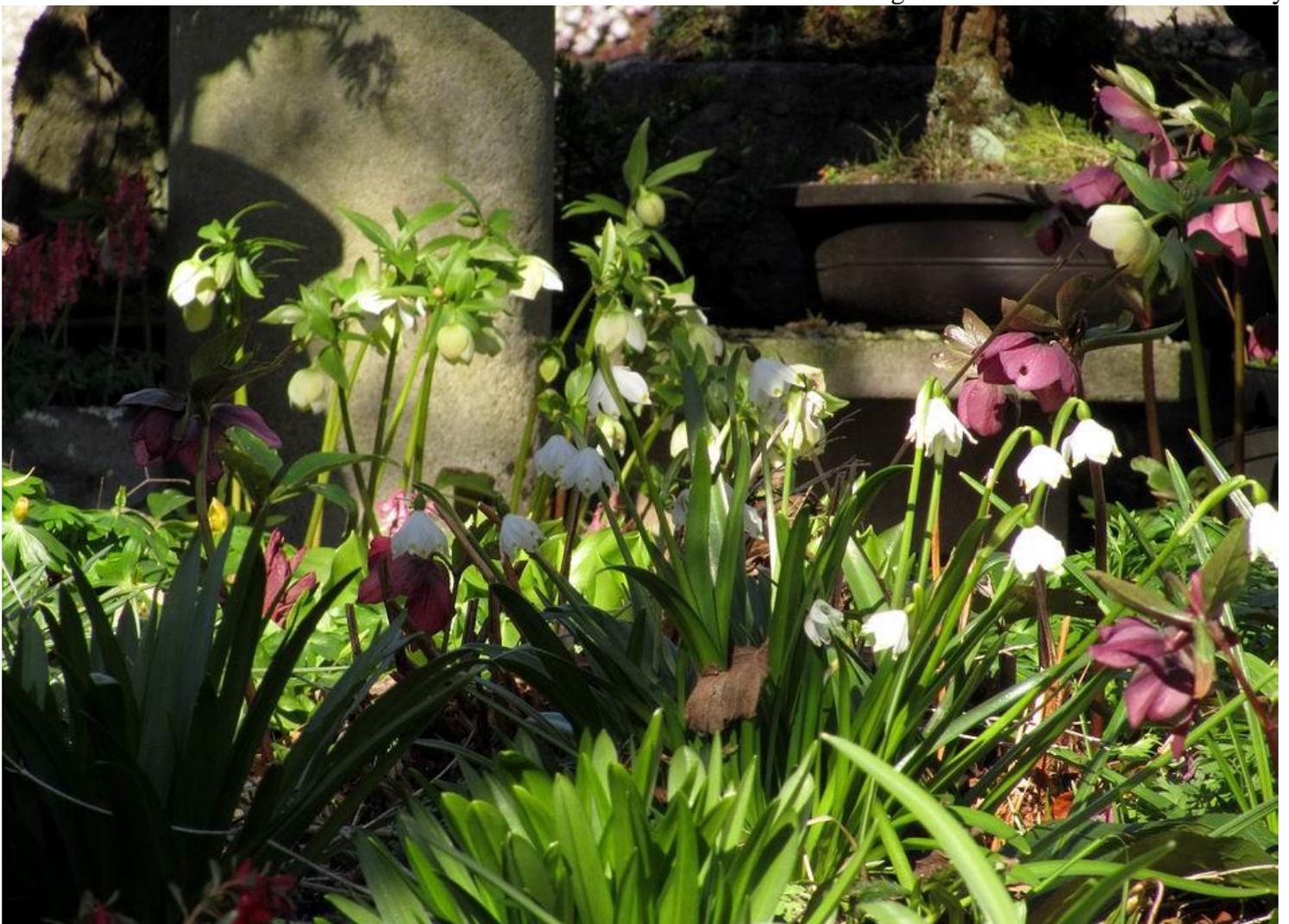
BULB LOG 13.....1<sup>st</sup> April 2015





Regular readers will know that I do not differentiate between my art and my gardening – to me they are one and the same - gardening is another medium for me to explore my creativity. A critical factor in any form of art is the changing light and how it affects the scene in front of us. The strong back light in the cover picture prevents it from being a good botanical illustration but it does relate the atmosphere of the bright sunshine. The light gives us and ‘x-ray’ type view of the

leaves featuring their internal structure beautifully.



Strong sunshine gives the strongest differences between the lightest areas and the dark shade and cameras struggle to record such a range of contrast however photographing in such conditions can bring a strong sense of depth and atmosphere.

When I am asked what is the best light in which to take pictures of plants and gardens I will say the flat light that you get on a day when high white clouds cover the sky. The range of contrast in such conditions is much reduced and the camera has a better chance of recording some detail in both the highlights and shadows as shown in the picture on the right.



### **Crocus pelistericus**

Some plants need sunshine before they open their flowers - Crocus pelistericus will open its flowers if it is warm enough but flowering this early we need direct sun to warm the air enough for them to open. The strong light also gives a great range of tones in the flowers rather than all being a single solid colour – as they appear in the shaded parts. This crocus features in one of this week's [Bulb Log video diary supplements](#).

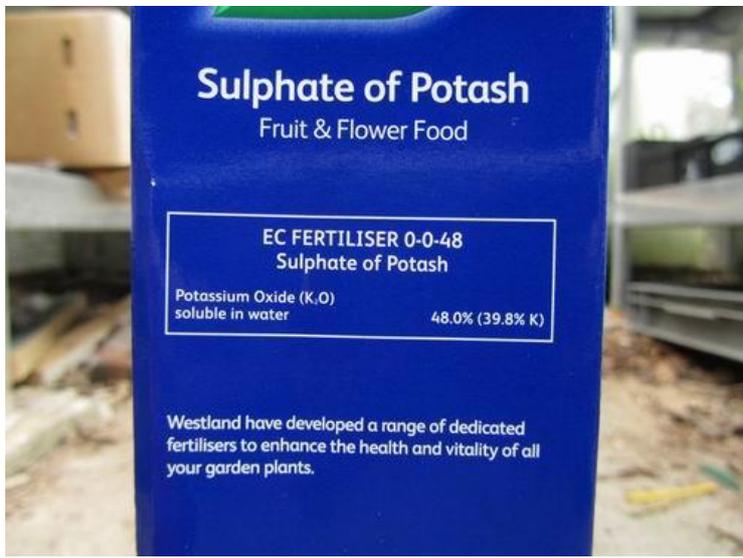


Back to some more views of the garden taken in the strong sunlight: above, the brightly lit area towards the centre

is like a vignette drawing your attention - you have to force your eye to look into the shadow.



Extra depth can also be alluded to by framing the scene, as I have done above, with the trunk of a Pieris.



A timely reminder – I have now started to feed the potassium supplement to the potted bulbs in the bub house.



A small amount of the white powder is added to the surface of each pot then watered in.

See more in the [Bulb Log video diary supplements](#).



Strong light illuminates the flowers of *Erythronium tuolumnense* as they start to open leads me into another chapter of 'Erythroniums in Cultivation' – *Erythronium caucasicum*.....

*Erythronium caucasicum*





*Erythronium caucasicum* is one of the Eurasian complex that includes *E. dens-canis*, *E. sibiricum* and *E. japonicum*: it is always the first of the genus to flower in our garden with flowers appearing as early as February.

My experience of growing this species is limited to a small number of mature plants that flower every year but are extremely slow to increase, I have had seed on a few occasions from our own plants and these seeds are growing on and will reach maturity in a year or two. It is not difficult species to grow enjoying exactly the same conditions as *Erythronium dens-canis* in our garden - open situations as well as under deciduous trees and shrubs. Despite being relatively easy to grow this species is uncommon in cultivation - the reason for this I would speculate is that

it is very slow to increase by offset or division at the bulb, leaving seed, which is not very often seen on offer, as the main way of increasing stocks. As a result the most difficult part of establishing this plant in our gardens is getting some material in the first place so my advice would be to acquire some whenever you see it offered either as bulbs or seed.



***Erythronium caucasicum***



***Erythronium dens-canis***



***Erythronium sibiricum* subsp. *altaicum***

*Erythronium caucasicum* flowers look superficially like a white form of *Erythronium dens-canis* but *E. caucasicum* can be quickly distinguished by its yellow anthers and pollen while *Erythronium dens-canis* always has dark brown/violet anthers and pollen – I know of no variation in this feature.

*Erythronium sibiricum* subsp. *altaicum* also has white flowers and yellow pollen but it is easily separated by the shape of the style which is not split into three sections at the tip as it is in both the other species.



**Erythronium caucasicum seed**



*Erythronium caucasicum* seed is similar to all the other Eurasian species all of which possess an elaiosome – a fleshy appendage that has evolved to attract ants and other insects which act as a valuable aid to the plant in distributing the seeds over wide area. The elaiosomes form on the opposite end of the seed to where it is connected, inside the ovary, to the parent plant. This seed is best sown on the surface as soon as possible after it is ripe then covered over with just a light layer, 1cm, of gravel. Our seed pots are kept in open frames where they never dry out completely and we get good germination the following spring - some sporadic germination can be expected with dried seed. Should you receive dried seeds soaking them overnight in water (with the smallest amount of soap to break the surface tension) before sowing will help rehydrate them, greatly improving the germination rate.



**First year seedlings**

First year seed leaves are small and without any markings - the characteristic markings start to show in third year leaves



**Second and third year seedlings**



**Four and five year old seedling leaves** will start to develop their full markings. The larger leaf on the right is broader than the typical leaf and is a good indicator that this bulb is almost mature and should flower next year.



**Mature leaves**

Mature leaves give the appearance of being brown covered in an irregular series of green blotches and are very similar to those seen in many forms of *Erythronium dens-canis* – this makes it difficult to distinguish these species from the leaves alone with the exception that those of *Erythronium caucasicum* appear around four weeks earlier.

Erythroniums will only flower when they have two leaves - the flower is clasped in the middle of the two leaves as they push through the ground.



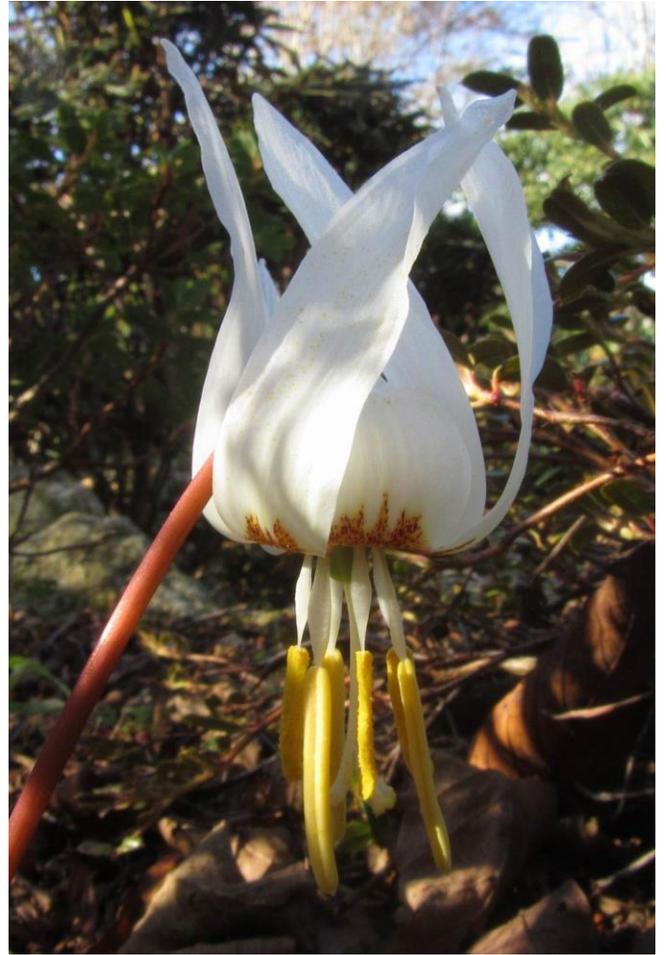


The bulbs look similar to those of the other members of the Eurasian species but unlike many forms of *Erythronium dens-canis* none of the *Erythronium caucasicum* that we grow will form clumps at any speed.

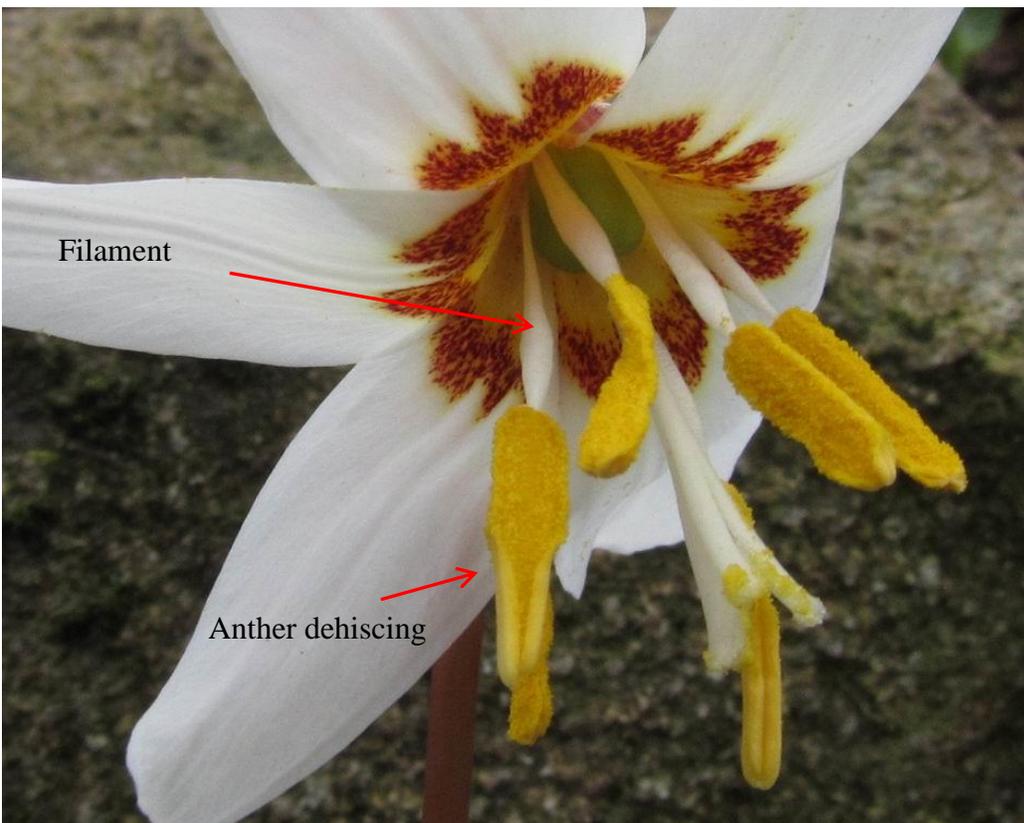
It took one bulb around five years to increase to two flowering bulbs so progress is slow – it may be that clump forming clones do exist in wild populations but have not been introduced into cultivation - certainly not into our garden. Hopefully as more are raised from seed clump forming clones may occur.



**Closed anthers**



**Three anthers dehisced, exposing ripe pollen**



Filament

Anther dehiscing

When the flower first opens all six anthers are closed around the pollen and are of equal length. Three of the anthers will dehisce first and shrink in length as they do so, giving the flower three short and three long anthers – shortly after the other three mature and also shrink in length as they release the pollen.

These pictures also show the shape of the filaments that connect the anther to the flower.



The flower is white with a central yellow zone that varies in size and the amount of red stippling – this colour is also visible from the back of the flower.





One form we grow has a pink flush to both the leaves and the outside of the flower bud but it fades to white as the flower opens, see below. This form has the most dramatic colour in the centre of all the forms we grow.

I have seen photographs of beautiful pink forms of *Erythronium caucasicum* growing in the wild and they would be a welcome introduction to cultivation. In one plant I have seen a picture of, the stunning red speckled yellow area normally confined to the central zone of the flower extends all the way up the petals.



The variety in the examples that I have seen photographs of show we have only a small selection from this species in cultivation and that there is tremendous potential of exciting new forms being introduced sometime in the future.