



BULB LOG 14.....4th April 2012



Trillium rivale



In a week when there is so much coming into flower in the garden and I have hundreds of pictures I have decided to devote Bulb Log 14 to one of my all time favourite plants.

We first received *Trillium rivale* when we were helping to clean out the late Harold Esselmont's bulb frames one autumn. I came upon a pot with no signs of visible growth so I started to tip off the compost slowly looking for any signs of life when I encountered some slender growths. I carefully replaced the compost I had removed with some fresh mix and put the pot in a frame.



Show Plant

In the spring we discovered that it was a pot of *Trillium rivale* and after a few years we managed to get a good flowering pot full that we took to many an SRGC Show as can be seen in this scan of an old slide. The plant in the garden above is a direct descendent seed raised from that original pot.



Despite being one of the smallest of the *Trilliums* it has relatively large flowers which open pale pink with some darker spotting in the throat. As in many flowers the pink starts to fade after a few days to almost white.



Pollen and Stigma

As with all plants it is best to ensure that fertilisation has taken place and help things along with a paint brush, cross pollinating between different clones where possible. This picture shows that there are plenty pollen grains about the flowers including on the stigmatic surface.



Seedlings

If sown fresh the seed will germinate in the first spring however stored seed can take two or more seasons before it breaks dormancy – I have had Trillium seed germinate five years after being sown.



Purple seedling

Raising plants from seed is the best way to increase your stocks at the same time you will get variation in how the plants look and the growing conditions that they can tolerate. Seedlings that survive in your garden will have been those that are most adapted to your local conditions since those that cannot tolerate your conditions will perish at an early stage. This selection process is reinforced for every generation you raise from your own garden seed. You will also start to see some variation in how the plants look, most obviously in their flower shape and colour – less noticeable in this species are the variations in the leaves although strikingly marked specimens do occur. The deep purple marked flowers are most desirable.



Mixed Seedlings

When you want to clone out a pot of seedlings there are only two ways to do it. I have over the years tried to mark the clone I want to separate with a stick, label, tie some string around the stem but inevitably all these attempts have failed to produce the desired effect.

There are two ways to ensure success. One is to pot them all in individual pots.

The second is to replot them when they are in full flower as I did here.



Trillium rivale clone

This was the clone I wanted to separate out because it combined the dark, well marked flowers with a leaf that had the veins picked out in a pale colour.



Trillium rivale in Oregon (with me)



I was delighted to be able to see **Trillium rivale** in the wild in Oregon in the company of, among others, Ed Alverson who took the picture of me sitting beside a step wooded riverside bank covered in Trillium rivale and Erythronium citrinum.



Trillium rivale and Erythronium citrinum.

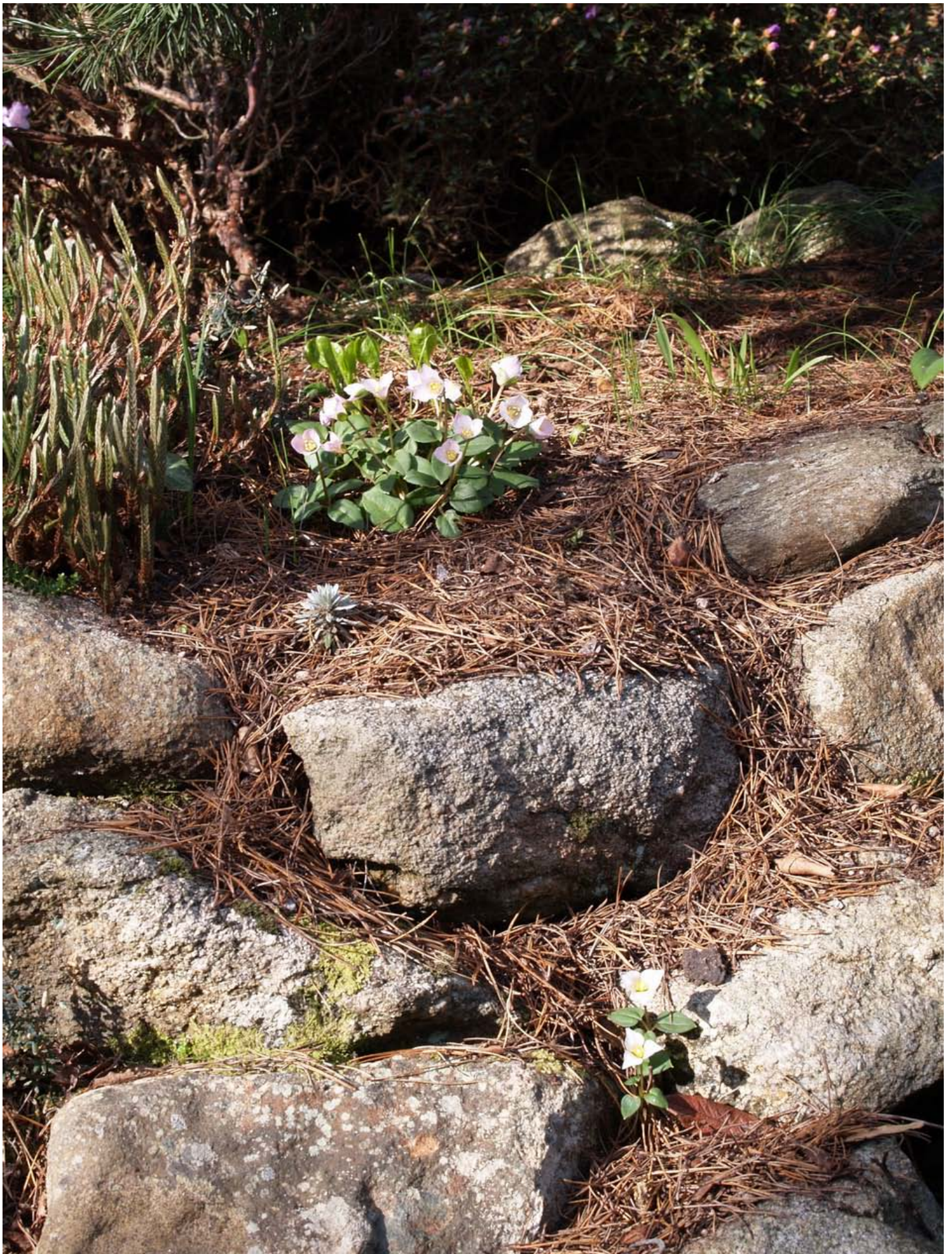
As I grow older (mature) I also mature as a gardener and have different objectives. When we were first introduced to showing our plants by Harold Esslemont we were very enthusiastic exhibitors but over the years while our enthusiasm for the shows in general remains we rarely show our own plants any more. There are a number of reasons for this change: first my main interest has become seeing the variability that you get in a species so I want to grow as many forms as possible which necessitated moving down to small square plastic pots which would look

out of place on a show bench.



The second main reason was that I wanted to grow as many of the plants in our garden and not just in pots. Seeing plants in the wild gives me many ideas of how I can try and emulate those conditions in the garden and indeed the picture on the left is in our garden and not in the wild.

Trillium rivale



Trillium rivale

Having seen them growing in the leaf litter among the rocks on the steep slope in Oregon I decided to try growing them among the rocks which form this raised bed. I planted one seedling there last year and now I see it doing well I will plant a lot more in this place. I will split the clump on the top and spread it among the rocks.

Pot of Seedlings



You may have thought it extreme or foolhardy for me to be handling Trilliums in full flower but that is precisely the time we should be moving them. Trilliums grow from a creeping rhizome or underground stem. Each year as the flowers fade this stem starts to grow producing a new growth bud for next year's leaf and flower but most importantly it also starts to form new roots that will support next year's growth. Careful division and replanting at this time will minimise the risk of damaging these roots. How often do you read that Trilliums sulk for a year or so after being divided? This is because the same writers tell you to split them in the Autumn when the growth dies back or in the Spring when the growth is just starting. By following these

instructions you will damage the new roots leaving the plant to survive on the old roots, that do not die off, and as a result the plant will not be able to grow as strongly as it should and is unlikely to flower the following year. Splitting the plants carefully when the flowers are out and replanting them immediately so that the new emerging roots can grow as normal will ensure that the plants do not sulk and you will still get flowers the following year. This is the case for all Trilliums.



Having a good open potting mix ensures that you can tip the plants out and separate them with minimal damage.



Each clone can now be planted separately and as you can see the roots hardly know they have been disturbed



This close up of the rhizome shows the new bud just starting to form and the first signs of the new root growth. The old roots survive for a number of years along the rhizome and will keep the plant alive if the new roots are lost but it will not flower.



Sometimes a plant will produce two shoots and start to form a clump as above : others seem to be reluctant to do this and just remain as a single stem for a long time. If the main shoot is lost or damaged secondary buds can form along the length of the rhizome. You can encourage extra buds by making a shallow cut the along the length of the rhizome which, with luck, will result in buds forming at each of the ridges of previous year's growth. A more extreme method is to remove the main bud cutting just behind where the new roots have emerged. This will leave the new bud with its roots; the older parts of the rhizome with its roots attached should, now the dominant shoot has been removed, form secondary buds. Just think: it is exactly the same process of removing the dominant bud from the stem of a chrysanthemum to encourage multiple flowers rather than a single large one – except the trillium stem runs underground.



Having knocked the flowering seedlings out of the pot I plant them singly along the bank of another humus bed by making a deep slot with a trowel to accommodate the full length of the roots.



Observe the stems and you will see from the colour change the depth that they were sitting at previously and make sure that you plant them to around the same depth.



Trillium rivale in garden



Whatever the weather and whenever you move plants in growth always water them in well. This serves two important purposes firstly it supplies plenty of water so the plant can replace the moisture lost during the shifting process but also it washes the soil into close contact to the roots so that they can function efficiently.





Two pictures of the same seedling show the difference between using natural light, above, and flash, below.





Trillium rivale

Finally for this week here is one of the reasons why I love this wee beauty so much and can never have enough of it.

Below is just a small selection of the flower size, shape and colour we have out at this moment.



Trillium rivale