



This week I am revisiting troughs - a regular subject through the eighteen years of the Bulb Log. I compare growing plants in troughs to the many sketch books I have, over many years, filled with drawings. The sketch books of varying size allow me to experiment and work out ideas for larger works but all too often the dynamic freshness that I capture in a sketch book is lost when I try and replicate it on a larger scale. I see troughs of varying sizes as the garden version of my sketch books - each trough being an experiment in habitat manipulation where I can try out ideas and methods with the knowledge that at the worst if

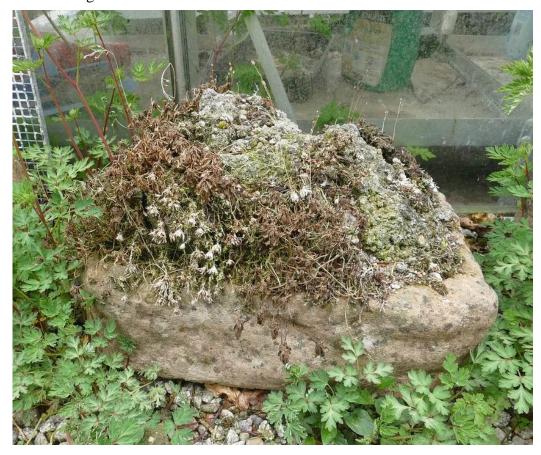
it does not work out it only affects a small trough. The aim is to match the habitat in the trough with the plants and the weather.

Over the years I have made a range of troughs including cast in concrete, carved and painted polystyrene fish boxes, cement moulded on fish boxes, carved out of granite among others - to read more about the methods I have provided some links at the end of this Bulb Log.

In books and online we are shown many pictures of perfect troughs, the majority of which were obviously pictured not long after being planted - there is good reason for that because it becomes increasing difficult to keep the plants in a trough healthy in the long term many can start to decline after two or three years.

I am sharing some of the lessons I have learned and more importantly some of the mistakes I have made in the hope that it will be useful for others.

First we need to understand the weather is a critical factor that we have to deal with and in particular the rainfall will have a big influence on the soil mixture you use, and to some degree, the type of plants that you can grow. A good starting mixture is 50%



by volume of grit and garden soil or a John Innes type compost - from that base you can make adjustments to suit your specific weather and the types of plants that you want to grow. It is possible to have a number of troughs offering different habitats by adjusting the compost mix - add more grit for extreme drainage less to retain more moisture you can also adjust the PH to create a niche habitat for acid or lime loving plants - all things are possible in troughs.

One myth that is completely <u>wrong</u> but sadly constantly repeated is to place a layer of grit for drainage in the bottom of the trough. This has the very opposite effect and would lead to a perched water table with more moisture staying in the very place you do not want it, that is near the surface. It is simple all the grit for drainage should be evenly mixed through your compost you then just cover the drainage holes with something like a fine plastic mesh to prevent the compost washing out before filling the trough with your well drained mixture. Do not just fill the trough to the top - mound it up into a pile then when you add your rocks you can build a mountain increasing the planting depth of the trough. The next thing is to be bold with whatever rocks you have available to create an interesting landscape and by doing this you will be creating multiple micro environments within your trough. The trough will have a north, south, east and west face with the best drainage for plants at the top of the outcrop getting slightly moister for those planted nearer the level of the rim especially on the north side.

The position of the trough also has a big influence mostly because of exposure to direct sunshine: you will notice a difference between the extremes of one placed in full sun to one in full shade. The ideal position for a trough would be where it gets sunshine for some of the time but avoids the hottest time around mid-day. The dead trough above had grown well for over five years because the habitat was matched to the plants, position and weather but then this spring our weather changed and we had the driest sunniest period for that time of year on record causing a missmatch.

The choice of plants is very wide and depends on your weather, what you would like to grow and what is available to you. Many of us start with big plants because we are in a rush to get a mature looking trough but my advice is to use small plants, rooted cuttings or even start by sowing seed directly into the trough then you have the pleasure of watching them gradually growing into the shape of the rock landscape you have created also such plants will generally live for much longer.

If I do use bought-in plants I wash as much of the compost off the roots as I can so when they are planted in the trough the roots can get into the chosen compost mixture. Washing the roots also lets me see if I can split the plant up into a number of smaller plants, which is possible with a number alpines that do not have a single tap root. The main ongoing care of troughs is watering them in dry conditions especially when the plants are in active growth and feeding them. I routinely scatter a balanced N-P-K fertiliser, with added trace elements if possible, on the troughs around February and again a few months later in addition I will water them with a half strength tomatotype fertiliser from time to time in the late spring and summer.



In some of the troughs that have been planted longest, over 30 years, I made the mistake of leaving them flat with just a few placed rocks but they still retain some of the original plants. a single plant of **Saxifraga cochlearis minor** (above) not only outlasted all the other saxifrages we originally planted but has grown over the entire metre long trough as well as over the moss covered sides.

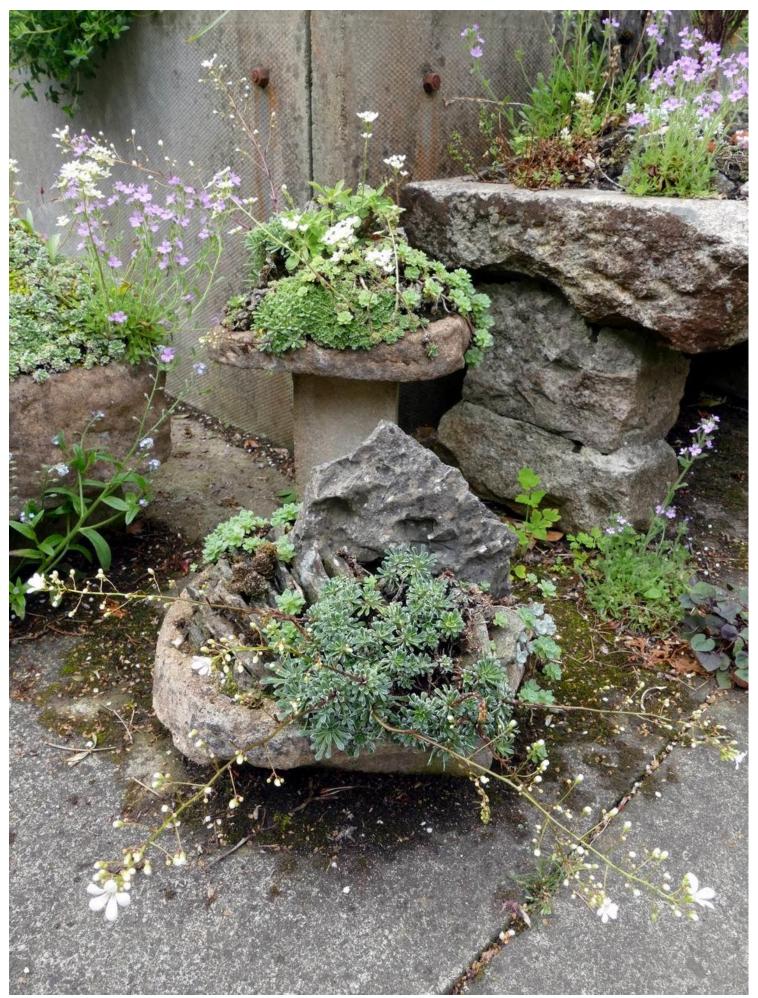


Another trough planting of the same vintage (left) has a **Dianthus alpinus** which has spread across the majority of the trough with a tiny Hebe hybrid holding its own in one corner.

I can recommend Saxifraga cochlearis minor and Dianthus alpinus as two very reliable long lived trough plants.



Molly looks on admiring these two oldest planted troughs.



Size doesn't matter. We have a number of these tiny troughs I made from cement; free formed as a flat base with a drainage hole and a 1-2cm deep rim that I used to demonstrate how you create planting depth by building up a landscape with rocks. These two were planted in 2008 using unrooted cuttings intended to show how they could look with plants added – they all rooted and get only the occasional watering and feeding as I described previously.



Saxifraga cochlearis minor, Primula marginata another silver saxifrage hybrid and Sedum pachyclados.





This trough was originally planted with a single bought silver saxifrage plant that when I washed the roots I could pull apart into several small plants. Since then Dactylorhza orchids and **Erinus alpinus** have self-seeded.



Primula marginata, Erinus alpinus and Cymbalaria muralis.



Here I simply scattered seed of **Erinus alpinus** onto a single fissured lump of limestone that fills this small trough.



Sempervivums are excellent plants - they are tough, easy to propagate and bring all year round colour to troughs of all sizes.

Smaller troughs that can be relatively easily moved around are good for plants which may like full light in winter and early spring but prefer a more shaded position in the summer.



The position of a trough makes a big difference to the habitat and the growth habit of the plants. Early in the year I planted some seedling **Cymbalaria muralis** into this small landscape made of broken concrete. I placed it in a position where it was getting too much sun before their roots had chance to fully explore the cooler moist depths. When I noticed that the young plants were suffering I moved the trough into some shade and within a few weeks the growth took off, as above, so I moved it back into the original position.





**Troughs and Slab Beds** 





I used old roofing slates to build the high crevice style landscape in this trough and the long lived plants here include **Raoulia australis**, **Erigeron scopulinus and Antennaria dioica**.



The slab beds are like large troughs.



**Petrophytum hendersonii** is another long lived plant suitable for troughs and, like all the others I am highlighting, is easily propagated by cuttings.



These are old plantings where the plants, such as the Globularia, have been left to grow naturally. As they sprawl out from the original cushion they do suffer some die back but new growth emerges towards the end of the branches.



Globularia meridionalis





Slab bed





Saxifraga cuttings and Erinus alpinus.



Granite troughs with very old plantings.



I replanted this wild style trough last year when the Dactylorhiza had been attacked by a black fungal disease. I cleaned them up by removing the new tubers forming at the base of the stems then replanting some of them back into the trough, see <u>Bulb Log 2519</u>: as you can see they are looking healthy.



When planting a trough it is best to choose plants that enjoy a similar habitat and have a similar or compatible rate of growth. Here I got that wrong, I did not expect this Dianthus to grow so much, now I have to consider moving it and replanting this trough.



After several years growth I can assess which Saxifraga cuttings which are adapting best to our conditions and growing well - these are the ones that I will propagate.



A trough planted with saxifrages several years ago.



I have used some troughs to form parts of the edges of the new bed beside the pond: notice a Meconopsis has seeded into the one in the foreground. I would never plant these larger Meconopsis in a trough but it is quite common that they put themselves there.



A growing colony of a pink form of **Ramonda myconi** spills out from the trough into the bed.



You may not associate troughs with ponds but here is another habitat to be explored. The one in the foreground has been there since we built the pond nearly 40 years ago with the original Salix lanata which has been joined by a self-seeded colony of Dactylorhiza orchids. Beyond there are two more islands.



This is just a lump of semi submerged rock that I placed originally for decoration and for the frogs however gradually the moss grew. A number of year ago I planted some Pinguicula grandiflora and had a nice growing colony until the birds stripped off a lot of the moss, hence the wire nesh, reducing the number of Pinguicula down to just two plants – I will need to find a new source to help me replenish the numbers of this plant.



More plants have established themselves on this moss covered rock I only planted the Pinguicula - the Dactylorhiza, Viola, Oxalis plus a number of grasses and Cardamine have self-seeded.





Continuing on with this experiment last year I placed a trough on a column so that only the bottom was in the water, filled it with soil and left it through the winter. Early in the spring I planted out some tiny seedlings of Pinguicula vulgaris only to be thwarted by the birds again when they excavated the wet soil as mud for their nests.



I only planted out half of the pot of Pinguicula vulgaris seedlings so after mounding up the trough with a rough mix of sandy soil and broken concrete, hopefully making it unattractive to the birds - I planted out the remaining few.



The pond with three islands.

I will finish off this week with this link to the latest <u>Bulb Log Video Diary Supplement</u> where I look at the troughs plus a number of links to previous Bulb Logs and articles that have an emphasis on troughs that may be of interest just click on the links below.

Making a trough form Polystyrene Fish Box.

Casting a cement trough using cardboard box mould.

Cement covered polystyrene Fish Box trough.

Landscaping troughs

Landscaping troughs 2

Landsacped troughs

Reworking the landscape in one of the raised beds with concrete.

Survey of some of our troughs