Growing alpines in troughs, planters and containers

Introduction & History
Apart from rock gardens and alpine houses a popular way of growing alpines is in troughs or planters. I first came across this at the nursery of Joe Elliott in Gloucestershire, England. His father, Clarence Elliott, did much to popularise this form of gardening in the 1920s. At Joe's nursery he had all manner of genuine stone troughs and containers, including a Saxon coffin that he had already tried for size!

Why grow in troughs?
There are several advantages of growing in troughs or other containers;

- *the drainage and other soil conditions can be tightly controlled – (e.g of a very free drainage scree type mix or a lime free compost)*
- *you can keep an eye on small or difficult plants that would otherwise get lost in a rock garden*
- *they can keep plants (further) away from slugs and other pests*
- *they can be covered in winter giving a drier environment*
- *they bring plants closer to eye level and can be kept just outside of windows or doors for easy viewing*

Types of troughs and containers
The original troughs were stone sinks, pump sinks and animal salt/water/feed containers. Nowadays it hard to get such stone containers, and of course they can, literally weigh a ton. During the 60/70s people used glazed sinks and covered them with glazed sink and covered them with "hypertufa". This “hypertufa” was a mix of cement, sand, and peat or vermiculite to create something that after a few years would look like weathered stone, including supporting the growth of lichens and moss. However as per Mrs Beeton, “first catch your sink” (not common these days), then cover it, hope that the hypertufa doesn't crack off (sometimes years later). And it still weighs a ton.
Nowadays you can get light weigh mock stone troughs, not exactly cheap but no messing about and they are, at least until filled, light weight. If I were starting again, that’s what I would use.
Over the years I've created several hypertufa troughs and now with the house I have a genuine stone one which is attached to a wall (unfortunately the drainage is wrong, it actually slopes away from the drainage hole but as it is cracked surplus water can drain a little).
Of course you can also use large play pots (pans), and even strawberry pots (pots with large holes in the sides..can be ideal for growing sempervivums).

Sites for your container.
This will depend on what is available, where in the world you are and what you want to grow. Books will tell you full sun but that is based on experience in the

UK. If you are elsewhere in the world that might not be ideal. As a rough rule of thumb, get an idea of how people grow similar plants in gardens. So if they are rock garden plants and locally people have them in full sun, then do that. It may be what space is available will dictate where the container goes, but if you are willing to be flexible then you can usually find something interesting to grow for any position. Under trees is usually regarded as something to avoid, mainly because of drip in the winter, however again your local climate may be different. Even in the UK I expect you could grow cyclamen in a container under trees.

Filling the container

If you are growing alpines then drainage will be important. If you have a trough or planter then make sure the drainage hole is clear of the ground, usually this is done by propping the trough up on a couple of bricks. Tilt the trough so that the drainage hole is at the lower end test this before planting!). Make sure that the drainage hole can be kept clear from the inside by putting broken pots or large pebbles, making sure you don't accidently block the hole. If it is a deep container you make then put coarse pebbles in the bottom of the container.

The compost you put in will depend on what you are trying to grow and the container. Classically if you are growing high alpines or sedums or sempervivums you will want a gritty mix, something like 50% loam based compost and 50% fine grit or coarse sand.

Add rocks on the surface to create an artistic effect (also to create crevices that some plants prefer to grow in. Be careful if that the rock is suitable, don't use limestone for lime haters, sandstone is more appropriate.

If you can get it, tufa is great for troughs. This is a porus limestone that is so soft when first quarried you can easily dig holes in it with a hand drill and then plant into the holes. These need to be plants that grow naturally in limestone crevices naturally. Pick seedlings, cuttings or very young plants and carefully feed the roots into a hole ¾ to 1 inch wide, about 3 inches deep (see below for a list of suitable plants) , that like lime though. One thing to watch with tufa is that if it has been out of the ground for some time then it becomes hard, hard for you to drill holes into and hard for the plants to then grow into. When it first is quarried it can be so soft that it falls apart when you start to drill holes. Ideally when it has been out of the ground for a while then it has a hard skin and a soft centre. Make sure you plant a the tufa with a fair amount of it in the compost, so that it can draw up moisture. Depending on your climate tufa can either dry out too quickly or remain constantly damp, so again, bear this in mind.

What kinds of plants?

Unless you have no garden (in which case the trough is your garden), troughs and containers will be something special. I have tried to think what themes you might have troughs around.

Troughs for plants from a particular location – for example, I have a trough for New Zealand plants which I feel look good together. Planting includes

Ozothamnus coralloides, Helichrysum plumeum, Clematis marmoraria and two Raoulias.

Troughs for a particular plant family or even species. Joe Elliott had two troughs of one of his favourite plants, Gentiana verna which were spectacular when in flower (not so good for the rest of the year but these supplied the seed for the nursery stock). A trough of sedums or sempervivums would give all year round interest.

Troughs for lime loving/lime hating plants. Whatever is the opposite of your natural soil conditions.

Troughs for particular rarities. Probably one of the commonest uses, a mixed trough of small plants too precious to risk in the garden. To give extra protection from the wet (if that's a problem in your garden) you can even create a covering for the trough. I had a custom made one with a wooden frame and tough polythene that I kept on having to put on and take off, before finally giving up. Covering may allow growing such plants as the smaller androsaces.

Decorative trough. Just plants that you like and work well together, the idea here being more for artistic affect.

Temporary troughs. My own contribution. Usually people plant troughs and they are "permanent". While I was deciding what do with one of my troughs I decided to use it for two "plantings " (the plants never actually left their pots). For the winter it was a collection of Cyclamen coum, in the spring and summer it had a planting of Rhodohypoxis (you can see this easily on my Cyclamen coum pages, less easily on the Rhodohypoxis page).

General Planting tips

From experience I would give a few tips;

Don't overplant, if the trough is going to remain viable for a number of years then ensure that the individual plants have room to grow even though in the early days the trough might look a little bear.

Think about the trough all year round. It's very easy to visit a nursery and buy up all those "must have" plants in full bloom. But what will it look like the rest of the year? Will there be any evergreen plants or shrubs?

Make sure there is nothing vigorous. The trough is a very small pond, so to speak so "vigorous" takes on a new meaning. Lithodora (Lithospermum)

oleifolium is listed in books as mainly a plant for alpine houses as it is rather difficult outside. I tried it in a trough. It took over. I transferred it to a brick ringed herb garden. When I left that garden the plant was six feet across, had got under the bricks and was coming up in the grass and heathers, and yes, it was the genuine plant. Which leads to the final tip…

Expect the unexpected. Some plants that are "sure certs" will fail. Others that you took a chance on will thrive. Some will seed or throw out suckers and decide to live somewhere other than where you planted them. Be prepared to intervene.

Individual plants
This could be a very long list, and again will depend on your location, but a few thoughts at random.

Conifers
I wouldn't if I were you. I have taken out every dwarf conifer I have planted. Which included sawing down a 20 year old Abies balsamea var hudsonia. (it was in a power struggle with a 25 year old Daphne arbuscula and I couldn't dig the Abies up). I removed other dwarf conifers, including the true Chamaecyparis obtuse "Nana" (the true plant, not "Nana Gracilis") and successfully replanted them elsewhere. Unless the trough is going to be planted for less than 10 years and you are prepared to face losing a plant, I would not recommend any conifers, I know that goes against common aesthetic advice. There are a few conifers that would be ok for longer than 10 years but they would need to be searched for in specialist conifer nurseries and then you would be a conifer specialist and beyond any help.

Shrubs
If you were creating an ericaceaous trough then shrubs might form the bulk of the plants with the smaller phyllodoce, cassiopes, rhododendrons and perhaps Kalmiopsis. (something I have yet to try). For the neutral or limey trough I think the options are little more limited (I still haven't got over the Lithodora).

Some of the dwarfer Willows are often cited as good plants. Salix x boydii has a fascinating origin, found only once in Scotland by Dr Boyd (who strangely also discovered Sagina boydii, another plant only collected once by him in Scotland). It is upright and looks very old when only a few years old. Slaix reticulata is ground hugging with neat rounded leaves. Both are deciduous.

Ozothamnus coralloides and selgo, good whipcord plants, but ensure they "fit" with the other plants as they look so different.

Daphnes. The very small ones, possibly some of the newer hybrids.

Hebe buchananii "Minor" An evergreen "bun"/cushion.

Genista delphinensis – perhaps, never tried it but I've seen it recommended.

Ilex crenata "Mariesii" – another plant I've seen recommended but yet to grow myself, it sounds interesting as a miniature holly with black berries.

I'm sure there are many others, and will add to this list when I think of them!

Plants for growing in tufa
Silver and Kabscia saxifrages
Potentilla nitida
Smaller alpine dianthus (e.g microlepsis)
Smaller sempervivums
Small campanulas like C.zoysii, C.raineri (true), C.morrettiana
Smaller drabas
Smaller Asperulas like nitida, arcadiensis (was suberosa) and the recently introduced daphneola.

This is a work in progress, if I update it, new versions will appear on my website.

Mark Griffiths, July 2005 www.inspiringplants.org