Information on Hypertufa from Alice Massey

Thanks go to Alice for her presentation on Hypertufa at the August 31st MGA meeting. The following article is one of her handouts about Hypertufa. Additional information is available on the site.

Hypertufa: ***From the Latin hyper (over, excessively) and tufus (volcanic rock that is porous and crumbly), Hypertufa is a lightweight, manmade stone-like material. It is favored for creating garden ornaments and containers because of its lighter weight. They resemble the old and very heavy stone sinks that had been originally used for watering livestock in England.***

It has been said that if you can make a Jell-O salad, you can make a trough of your own. This process requires only 3 ingredients (plus water) and a minimal amount of imagination. You will also need plastic garbage bags or dry cleaner bags, a wire brush and something to use as a mold.

I use Portland cement, Perlite and Peat Moss in equal parts. There are many "recipes" but this is what I have been using and I don't care to complicate things. Using straight Portland is important; mixes like Quickrete are already amended and may not make as strong a trough. In a colder climate where frost is a possibility it would be wise to mix in a handful of synthetic concrete reinforcing fibers to increase strength. For a smoother look you can substitute Vermiculite for the Perlite and follow the same directions.

For your forms you can use nesting cardboard boxes (center a smaller box inside a larger one), but here is where you imagination kicks in, you can also mold this material over the outside or the inside of a bowl or most any size or shaped container. A freeform container can be cast over a mound of damp sand. Have fun with this and think up some new ideas. The Dollar Store is a great place to find inexpensive items to use as molds.

Use a large plastic tub to combine the dry peat moss (you can sift this first to remove any large stickst), the Perlite and cement. Cement is caustic so wear protective gloves. A dust mask is a good idea also so you don't breathe in Perlite or cement dust.

Mix the dry ingredients completely and add water, a little at a time, until the mixture looks like cottage cheese. Not too wet or too dry, think mud pies. Do not add too much water as this will weaken the container.

Sturdy cardboard boxes can be used as is, other molds should be covered or lined with a plastic bag; it does not have to be smooth as the walls should look "rustic". Pack the mixture firmly into or onto your mold. The thicker the walls the stronger the container will be. You can make a few drainage holes at this point or you can wait until the mixture hardens and drill them with a masonry bit.

Cover you container with plastic and put it in the shade, on a level surface, while it hardens. Slow drying makes for a much stronger container. Begin checking your project after about 24 hours. Once you cannot scratch it easily with your fingernail (anywhere from 24 to 36 hours) you can begin to unmold it. Do this very carefully as the container is not completely set yet and can be easily broken at this point.

At this point the wire brush can be used to rough up the sides of the container. If there are any visible "mold seams" these can be brushed out now. You will not want to press too hard at this point as the walls are still friable.

Lightly cover your container with plastic again and leave it in a shady spot for about 2 weeks. I often give it a spray with the hose if I remember. At this point the cement should be fully cured but because cement is highly alkaline you now need to leach out the lime before you can use the container for planting. Leave it outside in an area where it will receive regular rainfall (or water from your sprinkler) for at least 3 weeks for the lime to leach out. You can hasten the process by soaking your planter in a mixture of 10% vinegar to 90% water overnight.

The normal cement color will, in time, resemble old stone. You could paint your container at this point if you wish.

Succulents like Sempervivum (Hen and Chicks) look particularly good in Hypertufa containers but any plant suitable to the size of the container will do well. For this handout and additional information in pdf format for your records