Hypertufa

Materials:

- Portland cement,
- Peat moss,
- Perlite
- Concrete reinforcement fibers (the last item can be purchased at concrete suppliers

Mixing:

- (For safety wear a dust mask when mixing dry ingredients and waterproof gloves when handling the wet mix.)
- Measure equal parts of the Portland cement, Peat Moss and Perlite into a container. Add a small handful of the reinforcing fibers. (You should be able to see a number of the fibers throughout the mix.)
- Slowly mix in enough water until you can squeeze a handful of the mixture to form a ball which holds together and just a few drops of water comes out as you squeeze the ball.

Forms:

- You can use plastic and Styrofoam containers of all sizes. Forms could also be made of wood, cardboard boxes, feed pans, etc.

Building:

- Line the form with a plastic bag. Wearing gloves place handfuls of the hypertufa mixture in the bottom of your form and pat it firmly into place (about 1 to 1½ inches thick for a small container, 2 inches for a large one). Continue by building up the sides until all sides are the desired height and thickness (at least 1 inch thick). Place several wooden dowels in the bottom to form drainage holes. Place the container into a plastic bag and leave the container in a shady place or in your garage to harden.

Curing, Unmolding & Texturing:

- After 24 - 72 hours (for an average size 24 hours is enough during warm months) the trough should be hard enough to work with; it shouldn't be scratchable with your fingernail. Carefully remove from the mold; it will still be a bit fragile at this point. Rough up the exterior with a wire brush, putty knife, etc. until it has the look you want. Using a propane torch, burn the fiber hairs off the outside of the container.

Final Curing:

- Place the container - without the form - back into the plastic bag. Allow to cure as above for at least 1 week; 1 month will give you 25% more strength. The trough can now be removed from the plastic and placed outside to weather for at least 2 months; this will remove alkaline chemicals from the cement which would be harmful to plants. Lean it against a fence or building to allow greater air flow.

(Adapted from material from the Wisconsin-Illinois Chapter of the North American Rock Garden Society.)