



Useful Reusing

- How to make an “old fashioned” watering device from a plastic bottle.



If you have a lot of people who will need to water at the same time, or if you have a lot of children who want to water, having enough watering cans can be a problem, and also can be expensive. When we ran a session on “Sustainability Lessons from the Victorians”, we discovered the wonderful device known as a “thumb pot”. This provides a physics lesson as well as being really useful for watering, especially for seeds or delicate seedlings.

The thumb pot uses air-pressure to keep water in a bottle, even though it has holes in the bottom.

This works because, if you keep a thumb or other bit of your hand tightly pressed over the open top of a bottle, the water can't get out as the air can't get into the bottle.



To make a pot, you will need:

A plastic bottle with a lid - 1litre is a good size, but up to 2 litres will work.

A marker pen

A bradawl, or sharp nail and a small hammer

How To:

1. Turn the bottle upside down and mark a pattern of holes on the base. It helps to look for areas where the plastic is thinner.
2. Use the bradawl or nail to make holes where you have marked them. It may help to have someone to hold the bottle. If you find the plastic is too thick to make a hole in this way, you may need to use a drill with a fine bit. If you do, for safety, wedge the bottle in a bucket of sand or vice rather than holding it!
3. Remove the lid of the bottle and make a hole in the middle of it - about 5mm in diameter is ideal.
4. Now try out your pot by submerging it in water until it has filled up, then putting a thumb or the palm of your hand over the hole in the top. Take it to where you want to water, remove your thumb and watch the water flow out. You can control the rate of flow by how much of the hole you uncover. If you find the water flow is too slow, make the hole bigger, or take off the top all together.