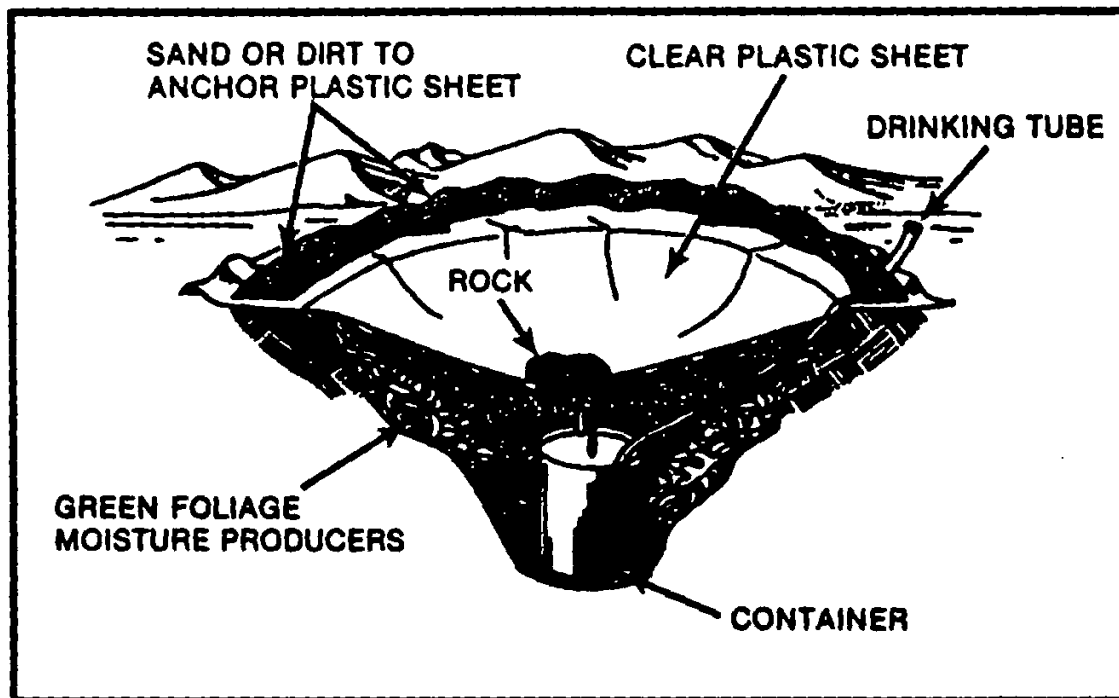


## Distilled Water from a Plastic Covered Hole in the Ground

For the belowground still (figure 5-7), you will need a digging tool.



**Figure 5-7. Belowground still.**

You should select a site where you believe the soil will contain moisture (such as a dry stream bed or a low spot where rainwater has collected), where the soil will be easy to dig, and where sunlight hits most of the day. Proceed as follows:

- Dig a bowl-shaped hole approximately 3 feet across and 2 feet deep.
- Dig a sump in the center of the hole. The depth and the perimeter of the sump will depend on the size for the container that you have to set in it. The bottom of the sump should allow the container to stand upright.
- Anchor the tubing to the bottom of the container by forming a loose overhang knot in the tubing.
- Place the container upright in the sump.
- Extend the unanchored end of the tubing up, over, and beyond the lip of the hole.
- Place the plastic sheeting over the hole, covering the edges with soil to hold it in place.
- Place a rock in the center of the plastic.
- Allow the plastic to lower into the hole until it is about 15 inches below ground level. The Plastic now forms an inverted cone with the rock at its apex. Make sure that the apex of the cone is directly over your container. Also make sure the plastic cone does not touch the sides of the hole because the earth will absorb the condensed water.

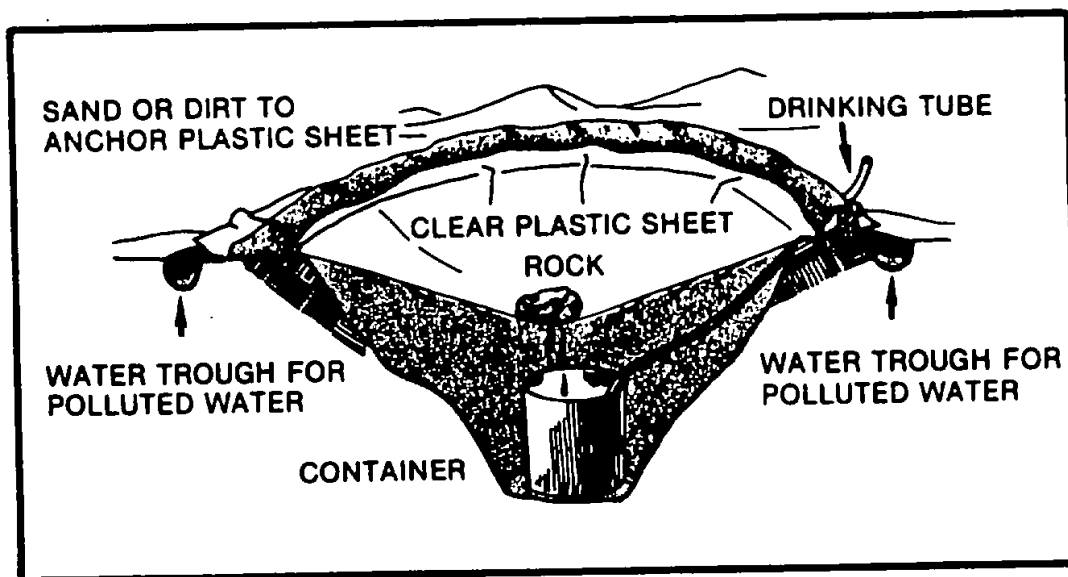
## Distilled Water from a Plastic Covered Hole in the Ground

- Put more soil on the edges of the plastic to hold it securely in place and to prevent loss of moisture.
- Plug the tube when not being used so that moisture will not evaporate.

You can drink water without disturbing the still by using the tube as a straw.

You may want to use plants in the hole as a moisture source. If so, when you dig the hole you should dig out additional soil from the sides of the hole to form a slope on which to place the plants. Then proceed as above.

If polluted water is your only moisture source, dig a small trough outside the hole about 10 inches away from the lip of your still (figure 5-8).



**Figure 5-8. Belowground still for obtaining potable water from polluted water.**

Dig the trough about 10 inches deep and 3 inches wide. Pour the polluted water in the trough. Be sure you do not spill any polluted water around the rim of the hole where the plastic touches the soil. The purpose of the trough is to hold the polluted water so that the soil will filter it as it drains into the container. This process works extremely well when your only water source is saltwater.

This was taken verbatim from the US Army Survival Manual (FM 21-76) 19<sup>th</sup> printing 1991.