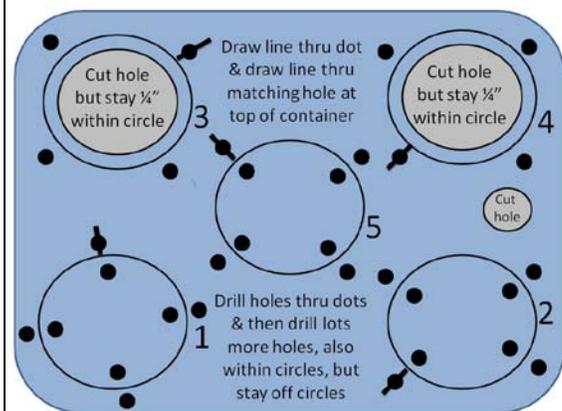


Make your own self-watering tomato planter – by Selinda Barkhuis



Pic.1: Materials and tools you need



Pic.2: Draw circles & dots to guide cutting & drilling holes



Pic.3: Screen and container with holes per instructions



Pic.4: Matching lines on screen & containers will match up holes

Materials you need:

- Rubbermaid Roughneck 18-Gallon Tote with lid (\$9 at Home Depot). The center of the lid will serve as the aeration screen and the outer rim will hold the plastic mulch in place.
- 20" piece of 1" PVC pipe (10' sections sell for \$3-\$4), to be used as watering tube.
- 24"x19" piece of red plastic mulch (available at local nurseries) or black plastic mulch (cut from a heavy-duty garbage bag). The mulch cover will keep heat and water in, and weeds out.
- 5 one-quart yogurt-type containers. Two containers (circles 3 & 4) will serve as wicking chambers and the other three (circles 1, 2, and 5) will serve as additional supports for the aeration screen.
- Bundle of 6 or 8" wire ties (A few dollars at any hardware store). These will tie the containers to the aeration screen.
- 19" x 13" piece of weedblock (optional), to minimize growing medium falling through the aeration screen.

Tools you need:

- A drill with a 1/4" bit to cut the holes;
- A sharpie or pen to draw the circles and dots;
- A razor knife or heavy scissors to cut the lid;
- A PVC cutter (\$10-\$20) or a hand saw to cut one end of the PVC pipe at an angle;
- Heavy-duty paint chisel scraper to scrape plastic debris, left from drilling the holes, from the lid.

Making the planter:

- To make the aeration screen, cut the middle out of the tote's lid but keep the lid's rim intact so that it can be used to hold the mulch cover down (see Pic.8). Trim the edges of the screen so it fits snugly in the tub at the height of the yogurt containers (see Pic.6).
- Drill a number of holes in the sides of all of the yogurt containers. There should be at least one hole near the bottom and there should be several at different heights. These holes will allow water to enter/exit each container regardless of the water level in the planter. Drill four holes around the top of each container (but stay below the top rim to ensure the container's integrity). These holes will be used to tie the container to the screen.
- Take each yogurt container in turn and hold its top against the bottom of the aeration screen in the pattern shown (see Pic.2). Draw a circle on the screen around the top of the container. Write a number on the container and put that same number next to the circle you have just drawn. Then draw a dot on the screen opposite each of the four holes along the top of the container. Draw a line from one hole at the top of the container to its accompanying dot on the screen, so that the holes can be easily matched when it is time to tie the container to the screen. For circles 1, 2, and 5, also draw four dots within the circles that match the four dots you have just drawn on the outside of the circles (See Pic.2). After you've drawn all the circles and dots for the containers, draw a circle around the pvc watering tube.
- Cut out circles 3 and 4, staying at least 1/4" to the inside of the drawn circle (see Pic.2). Cut out the hole for the pvc watering tube along the drawn circle. Drill holes through all the dots. Then drill lots more holes in the screen, including within circles 1, 2, and 5, but NOT on the drawn circles. These holes will allow the growing medium and plant roots to receive oxygen through the water overflow hole.
- Decide on which side of the planter to place the overflow hole and take one of the containers and hold it against the outside of the planter on a level surface. Draw a mark even with the top of the container and drill a hole about 1/4" below that line (see Pic.5).



Pic.5: Drill overflow. Cut pvc pipe at an angle



Pic.6: Place screen & pvc pipe (angle end down) in the planter



Pic.7: Place optional weedblock on screen



Pic.8: Plant tomatoes opposite fertilizer band

- Attach the containers to the aeration screen using the ties, and place the aeration screen within the tub (see Pic.6).
- Cut one end of the pvc tube at an angle (see Pic.5) and place that end on the bottom of the planter through the aeration screen
- If you use the optional weedblock, cut out two holes for the wicking chambers (circles 3 and 4) and cut the hole for the pvc pipe, and place the weedblock on the screen (see Pic. 7).

Planting the tomatoes:

- It takes just over **1.5 cubic feet of growing medium** to fill the planter. It is important to get the right mix of growing medium, which will last about six growing cycles. A list of recommended growing media, as well as a formula to make your own, is available at <http://www.earthbox.com/approved-growing-media.asp> . One of the recommended growing media is Gardner & Bloom Blue Ribbon Blend Premium Potting Soil, which is available at Airport Garden in Port Angeles.
- Place the planter at its final location. Once you have added the growing medium and the water, it will be very heavy and difficult to move. Moisten the growing medium and fill the wicking chambers completely, patting down the medium as you go. Continue to fill the planter, mixing **2 cups of dolomite lime** in the top few inches of the growing medium. Dolomite lime enables tomato plants to absorb calcium which prevents blossom end rot.
- Fill the planter with growing medium to the top of the rim so that it mounds a bit along the center. Fill the planter with water through the pvc watering tube until water pours through the overflow hole.
- Place a band of **3 cups of dry organic fertilizer** on top of the growing medium (see band of fertilizer on the right side of the planter in Pic.8). This is all the fertilizer that your tomatoes will need throughout the entire growing season. Do not mix the fertilizer into the growing medium. Do not use time-release or soluble liquid fertilizers. A list of recommended fertilizers is available at <http://www.earthbox.com/approved-plant-food.asp> .
- Cut a hole for the pvc watering tube and place the red or black plastic mulch on the growing medium and fasten it with the lid's rim. Cut a 3" X for each plant opposite the fertilizer band (i.e. on the left side of the planter in Pic. 8). Transplant each plant through the X, and, only this time, water the plants in from the top. Replace the flaps from the mulch around the plant.
- Throughout the growing season, keep the planter's reservoir watered through the pvc watering tube. Do not add water to the growing medium from the top and do not withhold water from the reservoir. As long as water is available in the reservoir, the plants will take exactly what they need.
- Prune and stake your tomatoes as necessary, depending on whether you planted determinate or indeterminate tomatoes.

Finding more information:

- <http://www.earthbox.com> . Scroll to the bottom of the home page to find information about growing other vegetables ("planting guide"), replanting the planter for subsequent use ("instructions"), and many other questions ("FAQ").
- <http://www.seattleoil.com/Flyers/Earthbox.pdf> . This 37 page .pdf provides instructions for making self-watering planters out of all sorts of buckets and containers.
- Search your favorite search engine with the key words of "making a self watering planter."