

DIY Container Watering System

Step-by-step construction, easy, affordable and perfected by Robin Frolic. Good for the container gardener without time or inclination to water plants daily.



1. First, get a plastic bin. I bought bins at the dollar store that hold 5 litres of water each. (I've recently started using the large plastic jugs that stores sell kitty litter in, after washing them out carefully, since I've found those are sturdier and I have them around the house anyway.) This will be your reservoir, so go ahead and place it on the bottom of the planter. (If your planter already has holes, I'd seal up all but one or two holes; you do want a bit of drainage capability, but not much.)

2. Next, you're going to need three things:

Cotton shoelaces. You can find these at dollar stores. The length of the shoelaces needs to be so they can brush the bottom of the reservoir at one end, and the other end extends about 6-10" or so into the dirt. If it's a very tall planter, add a few more inches to the length of the shoelaces.

Pipe. You can buy PVC pipe at Home Depot or another hardware store, or you can buy a hollow plastic or metal broom/mop handle at the dollar store and cut that into pieces, which is what I did. If you aren't buying pre-cut lengths of pipe, you'll also need a way to cut the pipe (for plastic pipe, a handsaw will work; for metal pipe, you'll need a pipecutter tool that costs a few dollars at Home Depot). The length you cut your pipe is going to depend on how tall your pot is. You want

the end of the pipe to stick up a foot or more above the soil line, and the bottom end of the pipe will extend a couple inches into your reservoir.

A Drill Bit. One that is the same diameter as the pipe you're using. This will cost a few dollars at a hardware store, but you can use it over and over.



3. Carefully drill a hole in the reservoir lid using your bit. Now poke four holes into the lid, so the shoelaces will be a good fit (we don't want space around the shoelaces). Put one end of a shoelace through a hole in the lid, make sure the end brushes the bottom of the reservoir, then tie a knot in the shoelace on either side of the hole in the reservoir lid (to prevent the shoelace from either being pulled out or falling in). Do this for all four holes. Now put your pipe through the hole you drilled, so that it extends an inch or so into the reservoir. If it's a little loose, you can wrap some duct tape around the pipe until it's snug when you insert it.



4. Start adding dirt to cover the reservoir, making sure to keep the shoelaces upright and coming through the top of the soil as you fill it in. Get to within a few inches of where the final soil line will be, and lay the rest of the shoelaces flat. I've added some red stars for you so you can see where the shoelaces are exiting the dirt. (Ignore the small round pot, that's just what I was using to scoop dirt into the large planter.)



5. Add the rest of the soil, then plant your plants or seeds. Fill up the reservoir through the tube; I find that using a large funnel, the kind you can buy at a dollar store in the kitchen section, makes it a lot easier to pour water into the tube. Then give the soil a good watering with a regular watering can. If you've only planted seeds, you'll need to continue watering it until they sprout and have grown a couple inches tall. If you've planted seedlings, you're fine; as the soil dries out, it draws the water from the reservoir via the shoelaces, and keeps the soil moist. (I'd also advise coming up with some sort of cap to cover the pipe, I used Duplo blocks since I had a ton of them around and they fit the pipe well. But even just some plastic wrap held on with a twist-tie would work fine. You just want to prevent bugs and detritus from getting into the pipe.) Please try not to make the same mistake I did one year - don't put the pipe at the back of the container, since that makes it really difficult to lean over and get water into it once the plants grow high. Make sure to have the pipe near the front of the planter, not the back.



6. This picture shows an example of one of the kitty-litter jugs I mentioned earlier, with stars indicating where the shoelaces enter the reservoir. Since this planter is narrow, I used only 2 shoelaces rather than 4. (In case you're curious about the planter itself, the reason there's plastic-covered holes in the side is because I occasionally plant things, such as strawberries, growing out through the holes; the plastic prevents the dirt from falling out, and you just cut an X in the plastic and then plant through the X.)



7. Here you see the planter in use (and note that for this picture, I'd rectified the mistake I made the first year I tried this system; in this pic, taken the second year, the pipe is near the front). With a 5-litre reservoir, I only need to refill the reservoir every 4-5 days, and as you can see I have several tomato plants (which are heavy drinkers), some herbs, and some flowers. It's great because they never dry out, and it's a whole lot more efficient in terms of water use. (Note that if you

do let the reservoir run dry and the soil dries out, you need to water the plants with a watering can in addition to refilling the reservoir. It won't draw water through the shoelaces unless the dirt is already moist.)

The total cost for converting three of my planters was about \$4 per planter, which covers the cost of the drill bit, pipe, shoelaces, and two plastic boxes (since the third used a kitty-litter jug I already had). If you need to buy a pipecutting tool or handsaw, that will be a little more expensive; if you already have plastic bins around and/or a drill bit that will work, it will be a little less expensive. Either way, it's a pretty cheap system to set up, and due to the lack of competition for water, I can now handle more plants in a single container than I could before. If you do any Square Foot Gardening techniques then this is especially effective, but even if you don't, the system is good for anyone who doesn't have the time and/or desire to get out there every day and water their plants.

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