Rainwater Catchment Systems

By Wendy Kudrow

Rainwater harvesting has been around for hundreds of years. What some gardeners don't realize, is how easy it can be to install an affordable rainwater catchment system. By capturing the water that rains on your roof into a simple barrel (or series of barrels) that sit(s) under your rain gutter, you could be harvesting hundreds of gallons. For every inch of rain that falls on a thousand square feet space, six hundred gallons of water can be harvested. That's a lot of water! You may not want to invest in a tank large enough to hold that much



water, but you can still save quite a bit in 55-gallon barrels or converted trash cans.

You can purchase the barrels online for roughly \$50.00 to \$100.00, but you can get them for less from companies that use large barrels to store food. Wash them out with soapy water and they are ready to use. From there, a few plumbing parts and a garden hose can be enough to give you a working system. You will have to modify your downspout so that the rain will go into the barrel.

To set up the barrel system, you will need to level the ground where the barrels will sit. There are many options for setting up the barrels that can range from very simple to a little more elaborate, but you will want to consider drainage under the barrels and a way to raise them off the ground for easy access to the drain faucet. There are many options for directing the water out of the barrel(s) as well. A system can be so simple that it only requires a tarp mounted under a shed roof that is pulled down by a braided rope and weighted at the bottom of a barrel. The water runs down the tarp and the rope through a funnel and into the barrel. This system may cost as little as \$20.00. Online tutorials will give you a complete parts list and DIY instructions for the system you want. If you need hired help you can still save by having the needed parts at the worksite when your helper arrives.

Here, though, are some additional things that you will want to consider. Be sure to keep the system inaccessible to children, rodents or mosquitoes. If your garden is uphill from your catchment system, do not despair. A simple submersible pump powered by a voltaic panel can move the water up to where you want it. This is an economic choice in long run compared to dependence on city or well water only during the dry season. Worried about your system freezes in the winter? Just install an aquarium bubbler built for a 50-100-gallon tank. Water that is circulating cannot freeze. In winter, be sure to keep your conveyance pipes free of water when not in use.

References:

https://homesthetics.net/?s=rain+catchment+systems

https://www.diynetwork.com/how-to/outdoors/structures/how-to-create-a-rain-barrel
https://www.instructables.com/id/How-to-Make-a-Rain-Barrel-Water-Catchment-System-/

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