

Making Ripples

Cisterns 101

by Amanda Bancroft

Harvesting rainwater may seem like herding raindrop-shaped cats, but with the right system, it could really work to meet your water usage goals. If you want a small-scale project, building a rain barrel might be best. Rain barrel workshops are offered around Northwest Arkansas at places like the Botanical Gardens of the Ozarks and Ozark Natural Foods, and are typically provided through the University of Arkansas Division of Agriculture Cooperative Extension Service in Washington County. Fees for these workshops range from \$20-30.

A cistern to provide water for your home is a bigger commitment and a larger contribution towards the environment and lowering your water bills. It's also a bit tricky, depending on the needs of your home and which model you select. The best place to begin is to reduce your consumption and increase your conservation of water. This could mean starting small, like turning off the water while brushing your teeth. Or take the next step, such as installing low flow faucets and purchasing a front loading washing machine that uses a fraction of the water in each load of laundry.

Reducing our consumption of water makes it easier and cheaper to install a cistern and not worry about running out of water. Historically, cisterns have been found at Neolithic village sites and were in use by the fourth millennium BC. We've always been worried about water storage! Choosing the right setup is crucial, as is following any laws about grey water or septic and other system requirements for your area. If there are no legal blockades, installing a cistern for drinking water and home use is much easier, especially if you have a galvanized metal roof.

Do you want the cistern above ground or below ground, out of sight? Do you want it to be made of polyethylene, which creates a biofilm to prevent off-gassing and lasts for about twenty years, or perhaps some other kind of material? How much can you afford to pay for materials like screens, gutters and downspouts, padding layers for the tanks to sit on, a pump, and the myriad of filters you may need? There are many decisions to make with all parts of your rainwater system, including the collection surface, initial conveyance, holding tanks, distribution and fixtures. You can hire a company or build a cistern yourself using YouTube videos and other resources.

Don't let your dream of water conservation get washed down the pipes! With even a little effort, you can begin turning a spring rainfall into a windfall. Visit RainwaterConnection.com for tons of useful calculations and diagrams on how much rainwater you can collect, how much you'll need to store for summer drought, and more. RainwaterHarvesting.com is another great resource, and you can pick up Brad Lancaster's books at Nightbird Books on Dickson St. in Fayetteville.

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