

What is a Rain Barrel?

Save rain, save water, save money!

Did you know that half of a typical household's water use is outside of the home? That's half your water bill!

Rain barrels, or similar rain catchment systems (cisterns), have been used throughout history in many different cultures. Rainwater collection systems offer many benefits to individuals who use them, ranging from lower water bills to a better quality water for plants (no chlorine, which some plants dislike). Rainwater collection systems also benefit the environment. The obvious advantages are less withdrawal of groundwater and conserved use of treated municipal water. The less obvious advantage of rainwater collection is that it helps reduce stormwater runoff, lessening the amount of runoff that may lead to flooding.



So how does a rain barrel work? It works by being placed near a roof or a downspout. The rain barrel can be connected to the downspout either by shortening your gutter or connecting a pipe to divert rain from the roof into the barrel. Without a gutter, you can rely on good aim or a "rain chain." Rain barrels and rain catchment systems can range from simple to complex. The simplest of barrels rely on gravity to deliver water, but more ambitious homeowners may choose to use pumps and flow controls to better meet their water needs. What is important to remember is that unless a proper filtration system is installed, water from rain barrels or other catchment systems is not potable for humans or pets.

There does not have to be a lot of rain to fill your barrels. This is good news for residents of the state in drought areas who may go weeks without seeing even a quarter of an inch of rain. Let's estimate that a typical roof is 1,200 square feet and four downspouts. If a rain barrel is attached to every downspout then only 0.3 inches of rain would be needed to fill each rain barrel. That's more than 200 gallons of irrigation water! Rain barrels come with a spigot near the bottom of the barrel so that a standard garden hose can be connected. Look for more information on how to build your own rain barrel in the manual *Rainwater Harvesting for Homeowners* at Clemson's PSA Shopping Mall (shopping.clemson.edu) or attend a Build-Your-Own workshop. Find out more at our website www.clemson.edu/carolinaclear.

