

Rain Barrels

What is it?

A rain barrel is a container connected to the downspout of a building, which catches rain running off the roof.

Why do it?

Using a rain barrel helps to reduce the amount of rainwater runoff from your property. It stores water for use in irrigation during dry spells, reducing the need to use drinking water in the garden. A rain barrel also helps control erosion and keeps water from seeping into basements or along foundations. Some uses for collected rainwater are: watering plants, indoors and out, moistening compost, rinsing your compost bucket and filling bird baths. Before using rain barrel water on vegetable gardens research potential contaminants and toxins present in your roofing materials. Do not use rain barrel water to drink (people or pets), or to wash your hands, face, dishes or clothes.



How to get started

- 1) Choose a location for your barrel near a downspout and a garden or other place where the water collected in it can be used.
- 2) Develop a plan for managing the overflow water from your rain barrel. Find out what codes your municipality has regarding disconnecting a downspout from the sewer system.
- 3) Decide if you want to assemble your own system or purchase a pre-made barrel. Make sure the barrel you select is opaque to prevent algae growth and "food grade" if reused.
- 4) Source the parts you need. Check the shape of your downspout before ordering a diverter.

Key Factors to Consider

Gravity: When using a rain barrel to water, gravity is your friend. If your yard has a downward grade from your downspout towards the area you intend to water, a hose can be used to water plants or to ditch irrigate a vegetable garden. If your yard is level you can elevate your rain barrel, and to some degree, be able to irrigate using a hose. Elevating your rain barrel will also allow you to fill watering cans and buckets.

Water Pressure: There is very little... for every 12 inches of water in your barrel you will have 2 pounds of water pressure (most homes have between 50 to 60 pounds of water pressure). You will not be able to use sprinklers or hose nozzles. (Without the assistance of a pump)

Managing Overflow: In many municipalities (including Cincinnati), you are required to direct rainwater from your roof into the storm water system. Keep in mind that 623 gallons of water is generated for every 1" of rain on a 1,000 square foot roof (an area 20 x 50 feet). An average rain barrel holds 40-50 gallons of water, which means your rain barrel will fill up very quickly and you will need to have a way to manage the overflow. Some options for managing overflow are: return it to the storm sewer via a direct line from your rain barrel; use a diverter installed on your downspout above your rain barrel; direct overflow into an adjacent municipal storm drain (most likely not allowed by building code); direct overflow to a rain garden or swale (must be approved by your municipal storm water management department).

Care and Maintenance: Empty and rinse out your rain barrel at least once a year. Keep mosquitoes out by installing a screen if your barrel is open at the top; add a tablespoon of vegetable oil to the water's surface; drain and clean at the sign of mosquito hatchlings; use Mosquito Dunks (available at retail garden centers or hardware stores).



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Installing your Rain Barrel

- If you are installing the faucet yourself, ask for a detailed instruction kit at the CGC or find it on the resource page of civiggardencenter.org. We recommend using a ¾" male, quarter turn, full-flow faucet with a Banjo TF 075-¾" bulkhead fitting.
- Place your barrel on its stand near the chosen downspout. A stand raises the barrel enough to fill watering cans, and increases gravity flow when using a hose. An inexpensive stand can be made from four 8"x 8"x 16" concrete blocks. Be sure your stand is level; a full barrel weighs approximately 400 pounds and will tip on a windy day if unbalanced.
- Where you cut into the downspout will be determined by the type of elbow or diverter you are using. Refer to the rain barrel or diverter manufacturer's instructions. If you are building a rain barrel with your own improvised design and parts, keep in mind that water always seeks its own level. Metal downspouts can be cut with a chop saw (if taken down first) or a hacksaw and tin snips. Vinyl downspouts can be cut with a saw, utility knife and shears.
- Insert the inflow tube or downspout into the top of the barrel. Direct the overflow to the proper place. Get started collecting your own rain and remember to use the water in between rain events.



Local Resources

- Barrels, diverters and faucet assembly kits and instructions are available in the Civic Garden Center lobby, Monday through Friday 9:00 am - 5:00 pm and Saturday 9:00 am - 4:00 pm.
- The CGC offers How to Build and Use a Rain Barrel classes several times a year.
- Green City Resources and Green Streets are Cincinnati companies that install large-scale rainwater harvesting systems: www.greencityresources.com, www.green-streets.net.
- Greener Stock in Columbia-Tusculum sells rain barrels: www.greenerstock.com.

Online Resources

- CGC's Rain Barrel Installation Guide, on the Resources page of www.civiggardencenter.org
- Rain Brothers, a rainwater harvesting company in Columbus: www.rainbrothers.com
- Gardener's Supply: www.gardeners.com
- Natural Rain Water: www.naturalrainwater.com

