

FBMG Help Desk

Question of the Week

I would like information about rain barrels and their installation please.

There are many pros to having a rain barrel...



A very old concept!

Recorded history of water collection systems dates back over 3300 years old.

Water is necessary for existence and the collection of it is not new. It may be a pot, a barrel, a cistern, a depression in the ground water collection is important.

- Used as a method to collect water when it is available and store it for use at a later date.
- Originally for survival and a way to serve a city.
- Now as a way to conserve water resources.
- The difference between a cistern and a rain barrel is the size and capacity for storing water.



- *The city of Houston has a cistern.*
- *Built in 1926 it once held 15 million gallons of water that was used for drinking.*



How Do Rain Barrells Work?

Gravity!

Rain Barrells are basically a watertight container of varying material that have a screened opening at the top for water to enter the container and a spout or spigot at the bottom to allow the collected water to be drawn out.



How they work:

- Can be heavy-duty plastic, ceramic or wood
- Usually available at local garden centers as a kit
- May also make your own by using food-grade plastic containers
- Sizes depend upon your need, but typically 30-55 gallons will suffice for the average homeowner
- Rain hits the roof and is directed to the gutters and downspouts
- The water flows from the downspout into the barrel either directly or through a diverter
- Rain is collected over time until the barrel is filled and excess water is sent through an overflow valve
- A spigot is used to drain water into a hose or watering container
- The overflow valve can be connected to additional barrels to increase overall capacity

Beware that children and animals can fall in an unsealed rain barrel. A tight lid is recommended.

How Much Space Does a System Require?

Not much!



All that is needed is a level place to set your barrel that is adjacent to a downspout.

- *Barrel sizes vary from 20-55+ gallons*
- *Typical full size (55 gallon) barrels measure 22-28" in diameter and are between 32" and 36" tall*
- *Some manufacturers offer 'half barrels' that fit flush against a wall to conserve space*
- *Some ceramic containers are shaped like urns to add to the aesthetic appeal*

As a general rule, for every inch of rain that falls on a 1000 sq ft area, up to 600 gallons of rainwater can be collected - so you can start with just one barrel and expand over time



Water from rain barrels has pluses!

In addition to being good for the environment and your pocket book, the other benefits are many.

Untreated it has many uses. For example;

- less use of municipal water supplies
- reduce water bills
- can use the stored water during a drought
- water your garden
- fill a pool, pond, or other water feature
- for outdoor cleaning
- wash your vehicle
- water indoor plants

If treated it has many other uses as well;

- cleaning, laundry, toilet flushing
- showers
- cooking



How to winterize your rain barrel

The rain barrel if it freezes may expand and crack, maintenance is best performed before heavy freeze or deep winter.

Late fall is a good time to winterize your rain barrel.

- *It is best stored in a garage or shed, or upside down if outside.*
- *Drain the barrel completely and remove all debris*
- *Scrub the inside of the barrel and rinse with clean water.*
- *Without a rain barrel in place, you'll want to attach a temporary extension to your downspout to direct any snowmelt or early rains away from your house and sidewalks.*



A field trip to see a practical application!

The Vegetable Garden on our campus is irrigated with our rainwater harvesting system.



You can see this at our demonstration gardens.

<https://fbmg.org/>

<https://fbmg.org/demonstration-gardens/vegetable-garden-fall/>

Want to build your own?

***Instructions are available in PDF format from
Texas A&M***

<https://hlhw.tamu.edu/media/1007/making-a-rain-barrel.pdf>



resource conversion path

Additional informative pdfs are available as well.

***https://travis-tx.tamu.edu/files/2020/08/Build_Your_Own_Rain_Barrel_2016-09.pdf
[howto-rain-barrels-aug2021_0.pdf](#)***

*Do you have questions
about your home
landscape and plants?*

*Contact the Fort Bend
Master Gardener Help Desk*

*Email:
FortBendmg@ag.tamu.edu*

*Phone:
281-341-7068*

*The Help Desk is manned
Monday thru Friday,
9am-Noon*

[Gardening-for-the-Environment.pdf_\(fbmg.org\)](#)

[Rainwater Harvesting, U.S. EPA Green Infrastructure content.ces.ncsu.edu/water-quality-of-rooftop-runoff](#)

[Water Quality of Rooftop Runoff: Implications for Residential Water Harvesting Systems | NC State Extension Publications \(ncsu.edu\)](#)

[Rain Barrels and Other Water Conservation Tools | Mass.gov](#)

[In-Home Use | Rainwater Harvesting \(tamu.edu\) Raingardens |](#)

[Rainwater Harvesting \(tamu.edu\)](#)

[extensionpublications.unl.edu/assets/html/g2148/build/g2148.htmStormwater Management: Rainwater Harvesting in Residential-Scale](#)

[Landscapes](#)

[2012 Saving and Using Rainwater - Solutions for Your Life - University of Florida, Institute of Food and Agricultural Sciences - UF/IFAS \(ufl.edu\)](#)

[Design of Rainwater Harvesting Systems in Oklahoma | Oklahoma State University \(okstate.edu\)](#)

[: http://lid.okstate.edu/rainfall-harvesting](http://lid.okstate.edu/rainfall-harvesting)

[American Rainwater Catchment Systems Association \(arcsa.org\)](#)

[Frequently Asked Questions - American Rainwater Catchment Systems Association \(arcsa.org\)](#)

["Control Your Stormwater and Save Money, Use a Rain Barrel." U.S. Environmental Protection Agency.](#)

["Control Your Stormwater and Save Money, Use a Rain Barrel." U.S. Environmental Protection Agency.](#)

[https://www.atlasobscura.com/places/buffalo-bayou-park-cistern-download \(portland.gov\) History \(rainbarrelsydan.com\)](https://www.atlasobscura.com/places/buffalo-bayou-park-cistern-download (portland.gov) History (rainbarrelsydan.com))

[No Rain Barrel? No Problem! Harvest Rainwater Simply by Liz Caskey \(tamu.edu\)](#)

[Waterwise Landscaping - Urban Programs Travis County \(tamu.edu\)](#)

[The Texas Manual on Rainwater Harvesting — from the Texas Water Development Board](#)

[Making a Rain barrel — from Texas A&M AgriLife Extension ec2001.pdf \(tamu.edu\) making-a-rain-barrel.pdf \(tamu.edu\)](#)