

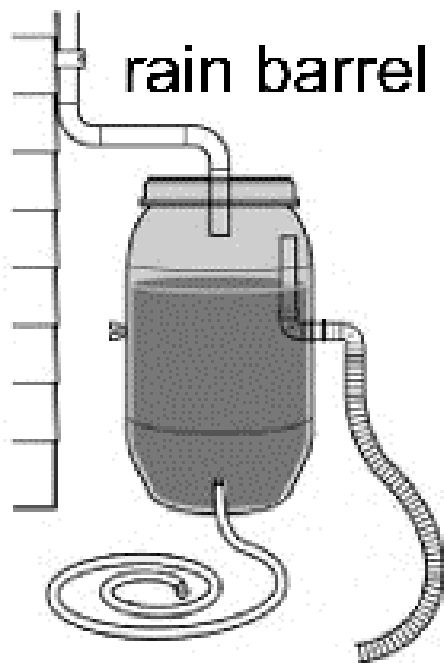
# Rain Barrels

## What is a Rain Barrel?

Rain barrels are used to collect water during rainfalls. Collecting rainwater for use during dry months in rain barrels or other containers is an ancient and traditional practice. Historical records show that rainwater was collected in simple clay containers as far back as 2,000 years ago in Thailand, and throughout other areas of the world after that.

These days, rain barrels collect and store rainwater coming off of the roof of a house or other building. Because of the big flat surface that a roof provides, more water can be captured from a roof than if the rain barrel was just collecting what little water rained directly into it.

Here is a picture of what a rain barrel today might look like:



A rain barrel is usually a 55 gallon container about 3 to 4 feet tall and about 2 to 3 feet wide and it is placed next to the house where there is a downspout coming down from the roof.

There is an opening at the top of the rain barrel to collect the water from a gutter downspout and the opening is covered with a fine mesh material to keep debris and insects out, especially mosquitoes.

There is a faucet at the bottom to which a hose can be attached so that the water can be used just like from an outdoor faucet at home.

And there is also an overflow opening near the top of the barrel so that if the rain barrel fills up with too much water, the extra water can be redirected away from the building into a garden or other safe area with a bigger hose attached to the overflow opening.

## What are the benefits of using a rain barrel?

1) Use of a rain barrel **conserves water**.

More than 70 percent of the Earth's surface is covered by water, but only 2.5% of this supply is considered fresh water. The rest is found in the form of salt water in the oceans. Of the fresh water that exists, most is locked up in glaciers and ice caps. Water can also be found in the form of clouds and humidity in the soil. That leaves 3/10 of 1% found in the form of lakes, rivers and streams. Unfortunately, much of this small amount of freshwater is in danger of drying up or becoming so contaminated that it cannot be used for human consumption. Changing our habits of water use can help to prevent this growing problem. Capturing rainwater in a rain barrel allows it to be used for watering lawns and gardens, washing cars, and topping off swimming pools.

2) Use of a rain barrel **provides "healthy" water for plants.**

The water collected in a rain barrel is considered "soft" water because it has no added chemicals, such as chlorine, lime, fluoride, or calcium. This makes the rainwater ideal for watering lawns and gardens, washing cars and windows, and filling birdbaths.

3) Use of a rain barrel **reduces water runoff.**

Stormwater runoff is the primary cause of pollution in our streams today. Stormwater runoff carries fertilizers, pesticides, and other chemicals into local streams which then continue to flow into bigger and bigger bodies of water eventually ending up in our oceans. Stormwater runoff also causes erosion, which is a loss of soil or other material from where it is needed. Using a rain barrel helps to reduce the amount of stormwater runoff.

4) Use of a rain barrel **saves money.**

The water that comes out of faucets inside and outside a home costs money. Water collected in a rain barrel is free. Why not save money by collecting hundreds of gallons of clean, fresh water for free!

**How much rainwater can be collected in a rain barrel?**

Believe it or not, for every inch of rain that falls on a area of 1,000 square feet, approximately 600 gallons of rainwater can be collected. An average size 2-story house with 4 bedrooms and 2.5 bath might have a roof area of 1500 square feet.

That would mean a total of 900 gallons of rainwater could be collected from 1 inch of rain (600 gallons from the first 1000 square feet and 300 gallons from the additional 500 square feet).

Fairfax County has an average rainfall of 40.5 inches each year, with 25.1 inches falling between April and October. Since most users of rain barrels are capturing rainwater only during the spring, summer, and fall months which is when they need and use it, that means a homeowner could possibly collect over 22,500 gallons of water during that time (900 gallons per inch \* 25 inches = 22,500 gallons). For most homeowners, that is a lot of water to supplement their water supply!

**Related Links:**

See the following websites for more information about rain barrels.

[www.rainbarrelguide.com](http://www.rainbarrelguide.com)

<http://www.epa.gov/region03/p2/what-is-rainbarrel.pdf>