



Install a Rain Barrel

Rain barrels and cisterns have long been a favored supply of water for experienced gardeners. Now, with the concern about global warming and the push for more sustainable management of our water supply, weekend gardeners are joining the trend and installing rain barrels in their backyard gardens as well.

Why Install a Rain Barrel?

There are four reasons to install a rain barrel:

- To reduce flooding in your yard or basement by storing rain water now so that you may use it in the future to water the plants in your yard.
- To save money on your water and sewage bills.
- To provide your plants with the untreated water they really need. Rain is naturally soft water and does not contain minerals, chlorine, fluoride and other chemicals.
- To help the environment by reducing the amount of water that rushes into city sewage systems and nearby streams. Using stored rain water allows it to absorb slowly into the ground replenishing our natural underground water supplies.

Rain Water Facts and what to Consider when Siting a Rain Barrel

A typical Chicago bungalow has a roof size of about 1,000 to 1,500 square feet. During a storm in which a half-inch of rain falls, a 1,000 square foot roof will produce about 300 gallons of water. Most rain barrels only hold about 55 gallons. Thus you should be aware that you will be collecting a very small amount of the total volume of rain that falls onto the roof of your house and that your rain barrel will need an overflow valve and hose that will take the remainder away from the foundation. Often times, a garage downspout is the best location for a barrel – the volume is lower and it is located away from the house foundation.

To decide whether it makes sense for you to install a rain barrel, walk around and inspect each of your downspout locations. It will be easiest to redirect a downspout that already empties into your yard versus disconnecting one that goes directly into the sewer pipe. Look for a location where there is ample room for a rain barrel (or two connected together) and one that is relatively close to the plants you are planning to water. Also, consider where you will be directing the water that overflows from your rain barrel – *because it will overflow*. Be sure the surrounding area does not slope back towards your foundation, onto your neighbor's property or over walkways. Plants that prefer wetter conditions can always be added in the nearby area to help absorb the additional water that will be present once the rain barrel is installed.

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Connecting Your Rain Barrel

Place your rain barrel near the downspout selected and make sure that it is level. You may want to elevate it so that a watering can or bucket can be placed underneath the spigot at the bottom of the barrel. An elevated barrel also allows the force of gravity to assist in pushing the water out of the barrel. It's not necessary to elevate your barrel, but it can be helpful. You can use cinder blocks, large stones or pavers to elevate your barrel or build a wood platform.

You will need the following materials:

- Downspout elbows
- For aluminum and copper downspouts: hacksaw, screws or rivets and screwdriver
- For PVC downspouts: hacksaw, PVC cement
- Overflow hose and clamps (if not provided by rain barrel supplier)

Optional:

- Hose to attach to spigot (located at base of rain barrel)
- Downspout diverter

Cut the downspout at least 4" above the top of your rain barrel. (Be sure to account for the length of the elbow(s) and the raised base.) Attach the elbow(s) to the end of the downspout with screws or PVC cement. Be sure that the water from the downspout is directed into the rain barrel through the plastic screen vent on top. Place your rain barrel under the downspout elbow. If you use a downspout diverter, which allows all or some of the water to be diverted into the rain barrel, you'll need to cut the downspout higher depending on the size of the diverter. (See links below for downspout diverter information.)

Finally, attach a 4" corrugated drainage hose to the overflow hole on the top-side of the barrel making sure that the water is directed into your own yard and not your neighbors. Also, if you'd like, attach a hose to the spigot at the base of the barrel so that water can be used to irrigate plants in another area of your yard.

Note, that if you have disconnected a downspout from a sewer standpipe, you will need to cover the pipe with a rubber plug or fill it with crumpled newspaper topped with 1" mortar cement. Covering it with a rubber plug will allow you to reconnect it in the future.

If you have the room and want to connect several rain barrels together, there are connector hose kits that are made just for this purpose.



Using your Rain Barrel Water

- Open spigot and empty the barrel partially into a watering can or completely using a hose attached to the spigot.
- Water your containers, vegetables, perennials, shrubs, trees and lawn.
- Wash your car or pets. Rinse hands and feet, tools or muddy boots.
- Overflow water will spill from the vent on the top and the overflow hole/hose on the side near the top so be sure that your rain barrel is sited properly.
- Keep your rain barrel lid on tight at all times to prevent children and animals from entering or falling in.
- DO NOT DRINK WATER from your rain barrel.

According to Organic Gardening Magazine, if you are concerned about runoff pollutants from the roof, such as shingle debris, pollens, molds, fungi and droppings from birds and wildlife, then you may want to avoid using your rain water for your edible plants. Many gardeners though consider rainwater collected in barrels safe to use on their vegetables. If you are concerned, do the following:

- Install a first flush feature that captures the first 5-10 gallons of water that comes off the roof.
http://downspoutdiverters.com/product_downspout_firstflush_dd.php
- Apply water from your rain barrel to the soil around your plants rather than on the plants themselves.
- Rinse produce from your garden thoroughly with clean, potable water before eating.
- Keep your rain barrel clean.

Caring for your Rain Barrel

- Empty your barrel (use the water!) frequently. Keep your rain barrel spigot closed when you are not using the water so that the rain barrel can collect water.
- Regularly check your gutters, downspouts, rain barrel water intake screen, mosquito screen and spigot for leaks, obstructions or debris.
- Always keep your rain barrel lid tightly closed – safety first!
- Rinse out your rain barrel occasionally during the summer. This will remove any buildup of contaminants that flow off a roof with the rainwater and reduce the development of mucky or smelly water.
- If your mosquito netting is intact and there are no leaks, your rain barrel should be mosquito-free. During rainy periods, use your hand to splash off any water that may collect on the top of the barrel. Mosquitoes need at least 4 days of standing water to develop as larva. If you believe mosquitoes are breeding inside your barrel, empty your barrel completely via hose. This will kill all mosquito larvae that may be in your barrel. If you are concerned about mosquitoes breeding in your barrel, you can always add a whole or half of a Mosquito Dunk to the water to kill their eggs. Mosquito Dunks can be purchased at most garden supply stores.

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- At the end of each growing season and before temperatures fall below freezing, drain your barrel and leave the spigot open. Reconnect your downspout using the section that was cut away to install your rain barrel or with a flexible pipe that allows you to direct the water far enough away from your foundation. Turn your barrel over and move it to an inside location. This will protect it from filling during the winter months and prolong the life of the barrel. Drain all hoses.

For more information (and in no particular order):

<http://www.cleanairgarden.com/rainbarrels.html>

<http://www.springsaver.com/>

www.seconddrain.com

<http://www.rainbarrelsandmore.com/>

<http://www2.fiskars.com/Products/Yard-and-Garden/Rain-Barrel-Systems>

<http://www.goodideasinc.com/>

<http://www.algreenproducts.com/>

www.gardeners.com

<http://www.stoneharborgarden.com/>

<http://www.rutlandguttersupply.com/downspout-diverter-rain.asp>

<http://www.greatamericanrainbarrel.com/p-128-save-the-rain-diverters-dover.aspx>

<http://www.chicagogreentech.org/>

<http://www.aquascapeinc.com/rainxchange-rain-barrel>

City of Chicago Sustainable Backyard Program: www.cityofchicago.org/rainbarrel

This information has been gathered from several sources, primarily the City of Chicago's Department of Environment brochures. And as the City aptly points out, MODE as well cannot be held responsible for any rain barrel malfunction, property damage, or injury associated with your rain barrel, its accessories or contents.

*Reprinted from **MODE Landscape Design Vol 6: Gardener's Resolutions**, January 2012*

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