Using a Rain Barrel in the Garden

Rain barrels are a great way to collect natural rain water and use it in the garden. Water can be stored for when it's needed, saving on the cost of watering and preserving this precious resource. A single roof can produce a lot of rain water over the course of a summer. For example, if you get about 10-inches of rain over the course of the spring and summer, an average, 1,360-square-foot roof would yield 8,160 gallons of rainwater. Not only are you conserving water, you are diverting water that would normally run into our waste water treatment systems or into streams and lakes. Plus, it's better water for the garden. Some municipal water systems may be treated with chemicals, such as chlorine, that might be harmful to some plants. There are many commercial rain barrels available to purchase. The simplest rain barrel is a 40 to 80 gallon plastic barrel that can be converted into a rain barrel. You can also link multiple barrels together. Check out the resources below for visuals and detailed, how-to steps.

Here are some key points to keep in mind when installing a rain barrel.

- **Location**- Choose a location that is uphill from your garden, on sturdy ground, and close to the downspout of the gutter that will fill the rain barrel. A filled rain barrel can weigh more than 400 pounds.
- **Height**- Consider propping up the rain barrel a few feet off the ground on cinder blocks or bricks to add more height and flow when emptying the barrel.
- **Connections**- Connect the rain barrel to the gutter using an open or closed top system.
- **Open System**- An open top system has many holes in the top of the rain barrel allowing water to flow freely, directly from the gutter, positioned above it, into the barrel.
- **Close System**- The closed top system has one line for water running into the barrel directly connected to the gutter downspout. You may have to purchase or build a diverter to connect the gutter to the rain barrel. You'll get less debris in the barrel with the closed system and can position the barrel further away from the house.
- **Debris Screen**- You'll need a fine mesh debris screen either attached to the top of the barrel or the end of the downspout. If you don’t filter the rain water, debris will build up in the bottom of the barrel and clog the spigot.
- **Spigot**- Commercial rain barrels come with a spigot already installed. If you are building your own barrel, purchase a 3/4 inch outdoor spigot, boiler drain, and rubber washers from the hardware store and some plumbing tape. Drill a hole a few inches above the lowest rim of the barrel to insert the spigot as shown in the Cornell Cooperative Extension Website below.
- **Overflow Diverter**- Commercial barrels will have an overflow diverter that will divert water away from the barrel once it is full. Install a diverter hose on your homemade barrel and run the diverter hose away from the house into an unused area.
- **Watering the Garden**- Run garden hose or soaker hose from the spigot to the garden. Soaker hoses are great because you can turn on the spigot and do other chores while the water slowly seeps out of the barrel to your plants. You can move the soak hoses to water various plants in the garden.
- **Storage**- Empty and store your rain barrel in a protected spot in winter so it doesn’t get damaged from snow and ice and the seals for the spigot and diverter don't get compromised.

Resources:
*How to Build a Rain Barrel*, Cornell Cooperative Extension:
http://www.extendonondaga.org/natural-resources/community-horticulture-and-gardening/rain-barrels/

*Rain Barrel How-To*, Gardeners Supply Company: