

## Capturing Rainwater at Your Home

As we all now know, this summer (and year) has been the driest and hottest on record in Montgomery County, as well as across the state. While some welcome rains came in December, we still ended the year with as much as 36 inches below our average annual rainfall. Montgomery County was designated as in an Exceptional Drought during most of last year. All of this gives us an even greater appreciation of the importance of conservation and the use of water saving efforts such as harvesting rainwater.

### *Locating a rain collection system:*

If you already have a rain gutter system on your house, you can easily adapt it to accommodate a rain barrel, or rain barrels. Cutting off a portion of the downspout and re-directing it to a barrel is not only simple, but can be done very inexpensively. If you live in an area that has homeowner restrictions that may prevent you from placing a rain barrel (or anything else of that nature) in your front yard, then you can consider placing the barrel in the back or side yard. It's best to find out whether or not there are restrictions in your neighborhood before you spend time and money on a project, but anywhere a downspout is located, or can be located, is an ideal spot for a rain collection system.



*Photo courtesy of Paul R. Nelson*

### *Choosing a rain barrel:*

There are a variety of pre-fabricated rain barrels available at any of the large home and garden stores. One such plastic barrel is shown in the above photograph. This barrel, made to look like a terra cotta vase, is not only attractive, but comes equipped with a hose bib/spigot and length of hose. It also has a screened entry portal and a small planter on top and holds approximately 50 gallons. Most commercially available rain barrels come equipped with these amenities and cost less than \$100.00.

If you'd rather make your own system, then chose a watertight container such as an old barrel, 55-gallon plastic drum, etc.... Make certain that the inside of the container is clean and sealed at both ends, with only a small opening at the top for rainwater entry. This will prevent creating a drowning hazard for small animals and will help eliminate a potential breeding ground for mosquitoes. Don't use a clear or white barrel, as too much sunlight inside the barrel can lead to excessive algae growth. You will also need to drill a hole in the container about 5-inches from the bottom. A hose bib or spigot (available at most home improvement stores) will then be screwed into the drilled hole. Seal around the spigot using a silicone or other waterproof sealant.

The barrel, purchased or made, can be set on the ground or, as in the case of the pictured one, be placed on concrete blocks or bricks. Elevating the barrel will make it easier to place a container or 'watering can' under the hose and spigot. Most commercially-available barrels come equipped with an outlet on the back of the barrel, allowing for connecting additional barrels, thus providing even more storage capacity.

### ***Connecting the modified downspout to the barrel:***

This can be as simple as positioning the barrel opening under the gutter's downspout and removing (with a hack saw) a portion of the downspout; permitting the rainwater to empty directly into the opening on the barrel. If needed, a flexible downspout can be purchased at any home improvement store. This inexpensive device will allow you to re-direct the water from the end of the downspout to the barrel opening should they not otherwise line up. If you don't have a gutter system in place, one can be installed relatively easily. Even a short piece of guttering (as little as 10 or 12 feet) can produce a surprisingly large amount of water in a very short period of time. Make certain that you wear all of the appropriate safety equipment, such as gloves and safety glasses, when modifying the downspout or constructing a gutter system.

### ***Using the harvesting system:***

Once your rain barrel is in service, you can use the provided hose, a watering can or other container to water potted plants, bushes, or any other greenery that you would normally water with a hose. You will be surprised how much water is collected during even a small rain event, and how far 50 gallons of water will go towards keeping your plants in good shape. Best of all, you're using rainwater instead of drinking water.

So, even though the rains have been few and far between this summer, installing a rain barrel is a relatively inexpensive and easy way to take advantage of the rain we do get. It's a water wise thing to do! And just maybe...your actions will encourage your friends and neighbors to do the same thing.

For more information:

- Visit the Montgomery County Extension Service Office (Texas Agri-Life) across from the Lone Star Convention Center to see their demonstration garden and to learn more about rain harvesting techniques.

- Visit Memory Park in Montgomery, walk around to the back of the building, and view the cistern that was constructed to harvest rainwater and was funded by the Lone Star Groundwater Conservation District.
- Check out a book by Brad Lancaster, “Rainwater Harvesting For Drylands and Beyond, Volume 1: Guiding Principles to Welcome Rain Into Your Life and Landscape”
- The Texas Water Development Board (“TWBD”) publishes an excellent document called The Texas Manual on Rainwater Harvesting, Third Addition, 2005 and can be found on the TWBD web site at: [www.twdb.state.tx.us/innovativewater/rainwater/docs.asp](http://www.twdb.state.tx.us/innovativewater/rainwater/docs.asp)
- Visit the Lone Star’s website at [www.lonestargcd.org](http://www.lonestargcd.org) for even more information on harvesting rainwater.

The Lone Star Groundwater Conservation District was created by the 77<sup>th</sup> legislature in 2001 to protect and manage the groundwater resources of Montgomery County. Lone Star works to maintain a balance between protecting the rights of private landowners and the responsibility to protect groundwater. For additional information, please visit the District’s website, [www.lonestargcd.org](http://www.lonestargcd.org).