

# Composting...



Compost is basically free plant food. It provides nutrients for plants, enriches soil health, gives the soil more water holding capacity (which means less watering), creates soil structure and acts as a buffer to toxins. So why wouldn't you want to start your very own compost pile?

## Carbon

### Brown items like:

Autumn leaves  
Wood chips  
Shredded paper  
Saw dust  
Straw

## Nitrogen

### Green items like:

Grass clippings  
Fruit and vegetable waste  
Coffee grounds  
Kitchen waste

## Hot Pile

Hot composting is building and actively mixing a pile to produce disease-killing temperatures and can yield finished compost in three to four months.

- **Step 1: Construct the enclosure**  
Must be at least 3 ft. high and wide and I must have a cover to protect it from the rain.
- **Step 2: Build Lasagna layers**  
The ratio by volume should be 2 parts carbon to 1 part nitrogen. Start with a brown layer and alternate with the green layers.
- **Step 3: Moisten**  
Wet down each layer with a hose as you go. The goal is the dampness of a wrung-out sponge but not sopping wet.
- **Step 4: Toss it gently**  
After every two or three layers of green and brown, use a pitchfork or compost fork to stir the ingredients together.
- **Step 5: Keep piling and cover**  
Add layers until the pile is 4ft deep. End with a layer of leaves and give the pile a general stirring and light sprinkling of water.
- **Step 6: Check the temperature**  
It should heat up within 24 to 36 hours to the ideal temperature of 141° F to 155° F. It kills weed seeds and disease pathogens at these temperatures and will maintain its temperature for several days to a week or longer.

## Cold Pile

Cold composting is adding materials gradually to a bin or pile and allowing them to compost slowly with little maintenance.

- **Two steps:** Put your waste in a pile, and wait.
- This method of composting requires minimal effort but may take a year or two before it produces compost you can use in your garden.
- You can think of a cold composting as the add-as-you-have-materials pile.
- Do not put in diseased plants or weeds that have gone to seed. Without high temperatures to kill off disease pathogens or weed seeds, you will be spreading them around your landscape.



- Bement, L. (2010). What's your composting style?: Consider time, space, and effort when choosing which is right for you. *Grow*, 3, 62-67.
- Garnham, P. (2011). The keys to compost: If you never seem to have enough, use these five steps to increase your quantity and quality. *Grow*, 6, 56-59.

# Rain Barrels



Harvesting rain water with rain barrels not only helps the environment, it saves you money! Using rain barrels can have a significant impact on your water bill, especially when watering your landscaping. Rain water can help improve the health of your lawn, gardens, and trees.

## Tips on how to use your rain barrel

### 1. Choose the right container

The type of barrel you choose is important. It must be a food-grade container that was meant to hold liquid and can withstand the pressure of water. You cannot simply use a trashcan because it will not be able to hold the water for long.

### 2. Place the container on level ground

The location of the barrel must be on level and stable ground. When the rain barrel is at its maximum capacity, it will weigh quite a bit and tipping is a risk on unlevel ground.

### 3. Make sure to have a lid on your rain barrel

Water stored in any kind of container represents a risk for small children. Animals may also become trapped and drown if your barrel is uncovered. You should never use an open container for rainwater collection.

### 4. Use a fine screen over the top of the barrel

Standing water is also where mosquitoes breed best. Use a fine screen over the top of the barrel so the mosquitoes can't reach the water in the first place.

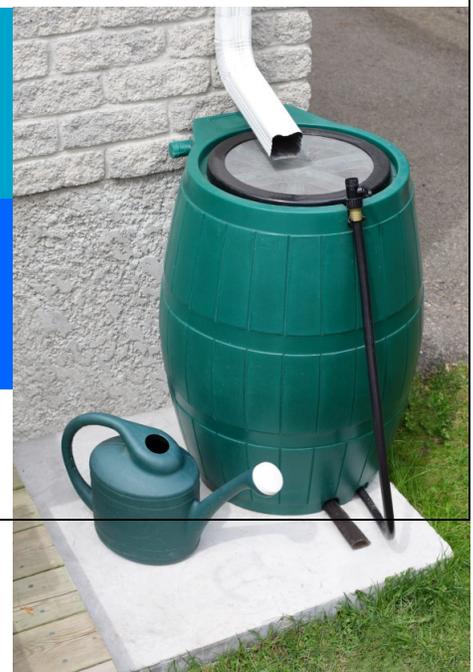
### 5. Monitor the rain barrel for overflow

An overflow of water may damage the foundation of your home over time. If you are leaving for a extended period of time, take precautions to avoid the overflow of water.

**Ten inches of rain falling on a 1,000 square foot catchment area will generate about 6,000 gallons of rainwater!**

**Attaching a hose to the spigot of your rain barrel is an easy way to transport the water you have collected to your landscaping.**

**Visit [www.rainbarrelguide.com](http://www.rainbarrelguide.com) for more information!**



How to use rain barrels for rain water harvesting. (n.d.). Rain Barrel Guide.  
Retrieved July 20, 2011, from <http://www.rainbarrelguide.com/>



3000 Richmond Avenue, Suite 350  
Houston, Texas 77098  
[www.houstonbeautiful.org](http://www.houstonbeautiful.org)

# Rain Gardens

Rain gardens are shallow depressions that can hold runoff from roofs and driveways. By slowing and filtering roof or driveway runoff, rain gardens can help protect our waterways and reduce sewer overflows and flooding. They can also be a beautiful addition to your landscape, with attractive plantings in deep, rich soil.



## 5 Steps to Building Your Rain Garden

### 1. Locate and size possible sites

The rain garden needs to be built on a fairly level yard and on a big enough area to avoid tree roots and utilities. There must be a way for the runoff to flow to your rain garden, whether over the yard, through a pipe, or rock-filled ditch.

### 2. Design, excavate, and amend soil in rain garden

Use a hose or string to get the desired size and shape. Excavate soil 18-30 inches deep. Replace with 12 inches or more of bioretention soil mix without compacting it, so that the bottom of the rain garden is at least 6 inches, but not more than 12 inches, below the overflow height. This is your "ponding depth" which will hold rain to soak in.

### 3. Create a safe inflow and overflow

Create an overflow (see diagram) at the lowest point along the edge of the rain garden. Armor that overflow area out several feet with rocks, to spread the water's flow and prevent erosion.

### 4. Plant and Mulch

Choose plants that fit your yard, and fit the conditions. Plant, and water well to establish plants. Mulch the bottom of the rain garden with 2 inches of compost and mulch the sides and top with 3-4 inches of wood chips and bark, or pine needles.

### 5. Maintain your rain garden

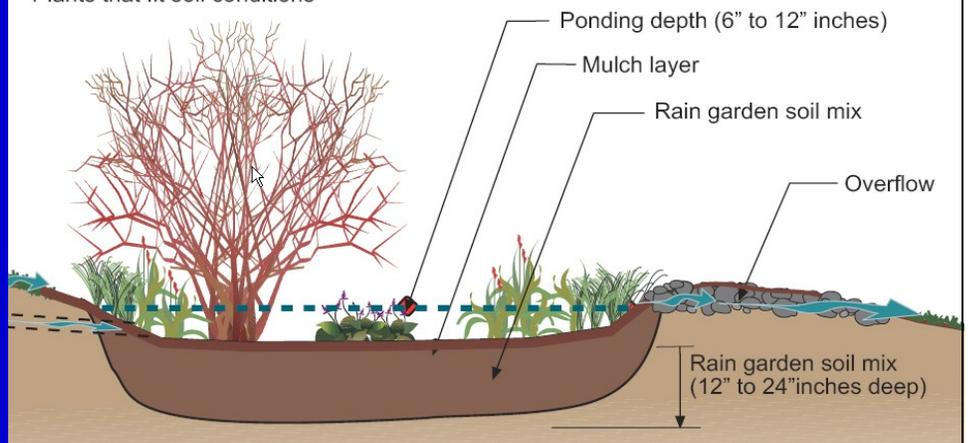
Water regularly for the first 1-3 years and replace mulch layers annually. Weed until the plants close in, do not use weed killers or fertilizers. Keep the inflow and overflow areas free of debris.

## Choose plants that fit your yard, and fit the conditions.

- **Bottom:** plants that like wet conditions.
- **Sides:** plants that can stand wet or dry soil.
- **Top edge:** drought-tolerant plants.

(For Texas plants): [www.watersmart.cc](http://www.watersmart.cc)

Plants that fit soil conditions



Learn more at [www.rainwise.seattle.gov](http://www.rainwise.seattle.gov)

Building a Rain Garden. (n.d.). *Seattle.gov*. Retrieved July 28, 2011, from Seattle Public Utilities website: [http://www.seattle.gov/util/groups/public/@spu/@usm/documents/webcontent/spu01\\_006287.pdf](http://www.seattle.gov/util/groups/public/@spu/@usm/documents/webcontent/spu01_006287.pdf)



3000 Richmond Avenue, Suite 350  
Houston, Texas 77057  
[www.houstonbeautiful.org](http://www.houstonbeautiful.org)