## **BUILDING A RAINBARREL**

A rainbarrel is a simple and inexpensive container, usually a 55 gallon food grade drum, that is helpful for storing water for use in a garden. It is either connected to a gutter downspout to collect the water from a roof or can be used as a stand alone field barrel placed in the garden and filled with water from a local source. Be sure to use food grade containers to avoid toxins that can leach from plastic in non-food grade containers into the water.

### HOW TO BUILD A RAINBARREL

INSTALL THE WATER FAUCET. The faucet will be located at the bottom of the barrel and is used to attach a hose or fill watering cans.

- Mark a spot on a flat surface of the barrel approximately 6 inches from the bottom.
- Drill a hole for the faucet at marked spot using 1 inch spade bit. A 1 inch spade bit will make the appropriate sized hole for a <sup>3</sup>/<sub>4</sub> inch spigot.
- After drilling the hole, sand the inside and outside of it to remove any burrs that might prevent the "O" ring from sealing properly.
- Slather the threads of the faucet with silicone caulk. When installed this will seal the connection between the barrel and the faucet.
- Screw the faucet clockwise into the barrel from the outside in.
- Place the "O" ring on the faucet threads inside the barrel and fasten with the <sup>3</sup>/<sub>4</sub> inch nut using channel locks or pliers.

# INSTALL THE OVERFLOW: The overflow should be on the side of barrel where water will be directed to an area that is most needed. Avoid placing it directly above faucet.

- Mark a spot on a flat surface of the barrel approximately 3 inches from the top. Drill a hole on the marked side of the barrel using a <sup>3</sup>/<sub>4</sub> inch spade bit.
- Cement the PVC coupling to the piece of straight PVC, using primer and PVC cement. This will be your overflow.
- Holding the coupling end of the pipe, slide it from the inside of the barrel into the hole. The coupling will act as the stop to keep the overflow from falling out of the barrel. This pipe will act as the overflow for water once the barrel has filled or could be used to divert overflowing water to another container or barrel.

## HOW TO INSTALL A RAINBARREL

#### CONNECT TO A DOWNSPOUT:

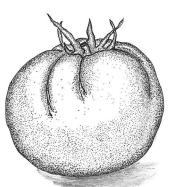
- Choose the downspout nearest the garden to install the barrel.
- Measure the height of the rainbarrel, including measurement of the stand you will use (cinder blocks). A stand will raise the rainbarrel above the ground to improve water pressure (the higher the stand, the more pressure).
- Cut gutter downspout with a hacksaw or sawzall just above the height of this measurement.
- Place the rainbarrel on the stand facing the overflow pipe away from the house to avoid water draining towards the foundation of the building.
- On the top of the barrel, drill a hole 4 inches from the edge of the lid. With your saw, enlarge the hole to fit the downspout. You may want to place a screen over the hole if there are any gaps, this will prevent mosquito larvae from forming.

#### USE AS A FIELD BARREL:

 A field barrel is not connected to a downspout but used as a storage container for water in situations where a water source is not regularly available on site. The field barrel may be occasionally filled with water from neighbors (with permission) or a nearby source, reducing the need to carry hoses out to the site. Place the barrel near the garden on a stand as described above.



This Resource Guide is prepared by Keep Growing Detroit for participants in the Garden Resource Program. For more info please contact 313-757-2635, keepgrowingdetroit@gmail.com or visit our website at WWW.DETROITAGRICULTURE.NET



## MATERIALS LIST

- Food grade plastic 55 gallon barrel (with removable top)
- 1 foot of 1 inch "C-PVC" pipe (cut with hack saw)
- <sup>3</sup>/<sub>4</sub> inch "C-PVC" coupling
- <sup>3</sup>/<sub>4</sub> inch male hose bib/faucet (water on/off valve)
- <sup>3</sup>⁄<sub>4</sub> inch nut (for faucet)
- <sup>3</sup>⁄<sub>4</sub> inch "O" ring (rubber washer)
- Tube of silicone caulk
- Jar of PVC cement & primer
- 2 concrete cinder blocks
- Downspout adapter

## TOOL LIST

- 7/8 inch spade bit (to fit C-PVC pipe)
- 1 inch spade bit (match size of spigot)
- Electric drill
- Sandpaper
- PVC utter or hack saw
- Channel locks or pliers
- Hack saw or sawzall
- Sharpie or permanent marker

## SAFETY TIP

Be sure to place barrel on a level surface and keep partially filled to avoid tipping.

