

# Build Your Own Rain Barrel



A How-To guide provided by the  
Alabama Environmental Council.  
[www.aeonline.org](http://www.aeonline.org)



A Rain Barrel is a simple device to capture rain water to use for a number of uses like watering plants, gardens, and yards. This is meant to be an easy how-to guide for an afternoon project for someone with basic skills\* and materials.



### Materials:

55 gal. food-grade barrel	4" to 3" converter
3/4" water spigot	3"-5" pipe clamp
3/4" coupler	screen
Rubber gasket	silicon caulk



### Tools:

Safety glasses/earplugs	Saw
Drill	Pliers
15/16th" Drill bit	Knife/file

## Step 1



Directly below one of the "caps" on the lid, drill a 15/16th inch hole 2 inches from the bottom of the barrel, being sure to be on a flat spot of the barrel. Add a light bead of silicon around the hole, add the gasket to the spigot and thread it into the hole.



## Step 2

Drill a hole 2" from the top of the barrel, being sure to be on the flat spot of the barrel. Thread the coupler into the hole to create the overflow. To insure enough overflow, add a 2nd overflow on the other side.



Add a 4 foot section of hose to the overflow to handle water that has filled the barrel.



- Disclaimer—Always remember safety rules when using tools and if you are not comfortable using these tools, please seek an experienced helper for your protection.
- Water should not be used for drinking, cooking, or bathing.

## How-To build your own Rain Barrel

**Step 3**



Cut screen into an 8 inch circle that will cover the top of the 4" to 3" converter. Place the 3"-5" pipe clamp over the screen, sliding it down onto the 4" side of the converter. Be sure to create a flat surface across the top and that the screen is fully collected under the clamp with no space for bugs to get into the screen. This will serve as a filter to keep larger particles and bugs from entering the barrel.



**Step 4**



Pick the "cap" on the opposite side from where you put your spigot to put your intake hole. Use the saw to cut a hole approximately 3" in diameter. (Use the converter to measure) Use a file or knife to trim the rough edges. Insert the screened converter. Do not caulk, so it can be removed to clean.



**Step 5**



Once your barrel is fully assembled, it will be necessary to place it on a flat surface, elevated high enough to get a watering can under the spigot. Remember that when full, the barrel could weigh up to 400 pounds. Place it under an existing gutter spout, or close enough to divert the spout over the intake. Some people have used flexible landscape tubing and added it directly to the intake hole. If you are concerned about a dirty roof, you can search the internet for a diverter or run-off valve to filter the first rain fall.

### Things to Remember:

- Safety should be your first concern. If you are not comfortable with tools and light how-to projects, recruit a helper.
- Keep the lid secure and the barrel on a level surface so children or animals cannot hurt themselves.
- Rain is a natural resource that can be used in many ways. It is estimated that an inch of rain over a 1,000 sq. house can yield 600 gallons total. Divide that by downspouts.
- Use connected to a soaker hose for best efficiency.
- Join several barrels to add capacity.

### Other website resources

<http://www.epa.gov/region3/p2/make-rainbarrel.pdf>  
<http://www.harvesth2o.com/resources.shtml#barrels>  
[http://www.aquabarrel.com/DIY\\_Free/](http://www.aquabarrel.com/DIY_Free/)  
<http://www.swfwmd.state.fl.us/conservation/rainbarrel/>

Enjoy your rain barrel and the natural resource of rain water.

### Resources:

- Water your lawn early, according to local restrictions while using only native plants that grow in your region. Also, consider adding a rain garden to utilize any runoff not captured for reuse in rain barrels.
- Be mindful of water usage inside the home as well, to save both water resources and energy.

**Take action to protect our water resources, through the Alabama Water Agenda, a proactive, citizen-driven campaign for improving water policy in Alabama. [www.alabamawateragenda.org](http://www.alabamawateragenda.org)**

For more information, visit the Alabama Environmental Council's website at [www.aeonline.org](http://www.aeonline.org) or contact [info@aeonline.org](mailto:info@aeonline.org)