

# Rain Barrels

Collecting the rain that falls on your roof can help your garden and save some of your water usage. Learn how to start your own water conservation system with easy-to-install rain barrels (**figure A**).

It's estimated that during the hot summer months, the average homeowner uses 40 percent of the household water in the yard, and while so much water may make for some green lawns, all that water use is a huge drain on our already dwindling supply. Too often, rainwater becomes wasted water when it's channeled into already stressed sewer systems.

To save a little water from going down the drain, use a simple, efficient, low-cost method for homeowners to collect and recycle water. Installing rain barrels, which are simply large containers that capture rainwater at the end of your downspout can help conserve water. A quarter-inch of rain falling on the average home yields a little over 200 gallons of water. A rain barrel can be filled within a matter of minutes during a good rain.



*figure A*

# Steps to Make a Rain Barrel

## Step 1

1. Start with a large, food-quality, plastic barrel and drill a hole in the cap of the barrel with a large, 3/4-inch drill bit (figure B). While plastic is preferred because it won't rust, any large, waterproof container will work well.



*figure B*

## Step 2

2. Drill a second hole nearby (figure C) along the side of the container about 1 or 2 inches from the top.



*figure C*

## Steps 3 - 5

3. Flip the barrel over and drill a third hole into the base.
4. Determine the number of pipe adaptors (male) and couplings (female) needed to span the distance from the hole at the barrel base to the outer edge of the barrel.
5. Wrap each threaded adaptor end of piping with plumber's tape for a watertight seal.

## Step 6

6. Screw the sections together, making sure they're secure and tight (figure D).



*Figure D*

# Step 7

7. Attach a curved coupling to the hole on the barrel base and connect the additional adaptors to the curved section. Join a spigot to the end of the attached pipe section (figure E). This will allow you to control the release of the collected water.



*figure E*

## Step 8

8. The hole on the side of the barrel is for the spigot. Secure a small piece of PVC pipe through the hole to connect the spigot (figure F).



*figure F*

## Steps 9 - 10

9. Join the spigot to the pipe.

10. Attach a garden hose to the spigot (figure G).



*figure G*

# Step 11

11. To make a water collection funnel, cut a piece of window screening a little bigger than the PVC coupling and secure it with a hose clamp (figure H).



*figure H*

# Steps 12 - 14

12. Slide the pipe into the large hole in the barrel.

13. To attach the rain collector to your house, find a location that is level. Remember that when the rain collector is full, it can weigh over 400 pounds, so it's important to place it in a level location to keep the barrel stable.

14. Place the rain barrel on stacked cinderblocks to raise it off the ground (figure I). This provides room underneath the barrel for the release spigot and a watering can to access the rainwater. Make sure the cinderblocks are stable.



*figure I*

## Steps 15 - 16

15. About one or two inches above the barrel along the gutter, cut out and hinge an elbow section.

16. Fit the base of the section with a metal screen (figure J).



*figure J*

## Step 17

17. Place a pad on the metal screen to soften the sound of rain hitting the metal (**figure K**).



*figure K*

## Step 18

18. When the barrel is full, the downspout can be hinged closed to stop the flow of water to the barrel (**figure L**).



*figure L*

# Step 19

19. Because most rain barrels hold only 55 gallons of water, you can stretch the garden's water supply even further for those dry summer months by adding additional barrels (**figure M**). Just make sure to redirect the surplus water.



*figure M*

## Steps 20 - 22

20. When you install your rain barrel, add an overflow pipe, so that excess water can escape. Make sure that the overflow pipe is pointed away from your home's foundation.

21. Always keep a lid on your rain barrel to prevent any curious children or animals from toppling in, as well as preventing any potential mosquito populations from exploding.

22. If you treat your roof for pests or wood, be sure to unhook your rain barrel for at least two weeks.

# For additional information contact:

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