

GREEN RAINWATER




Don't let rainwater just wash away – save it for a not so rainy day!

The Green Rainwater system is a simple but beautiful way to collect rainwater for use in your yard so that it needn't go to waste. The best part: you can create it yourself.

Water is one of the most precious of our natural resources, which is why I'm always looking for ways to conserve it, both in the houses I design and in my own home and garden. That's why I love water catchment systems so much: they make it easy to collect rainwater and put it to good use in your yard where you don't actually need to use fresh water. While most houses don't have a catchment system built-in, almost all have downspouts that drain rainwater from the roof. So I have come up with a way for anyone who wants one to create their own water catchment system. It's simple, it's beautiful, and it can cut down on your utility bills, too! I call it a Green Rainwater system because using what might otherwise be wasted rainwater in place of fresh, potable water is a very eco-friendly solution and something we can all do to make less of an impact on our environment.



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4 STEPS



STEP 1 Order Materials

- www.aridsolutionsinc.com
- Your local hardware store or online
- Your local nursery

1



STEP 2 Set Up Tanks

- Two or more rain barrels
- Fittings (if not included with barrels)
- Cinder blocks or bricks

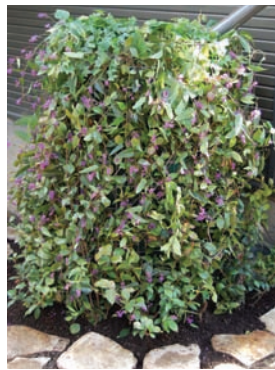
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STEP 3 Wrap The Mesh

- Welding wire
- Downspout elbow joint
- Metal saw

3



STEP 4 Plant The Vines

- Viney plants
- Overhanging plants for on top
- Planting soil
- Hose

4

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Order Materials



A.

BARRELS + FITTINGS

The barrels can be purchased from www.Aridsolutionsinc.com. You will need to get at least two so you can stack them to create more storage and enough space for vines to grow up into. They will come with all the fittings you'll need. If you happen to buy barrels from elsewhere that don't come with fittings then you can pick them up while you're at the hardware store.

1



B.

MESH

If you have leftover welded wire from a previous project then this is a great reuse for it. If not, then just stop into your local hardware store or go to an online to buy some. Two barrels stacked with brick or cinder blocks underneath will be around 3.5' tall so try to purchase wire a bit taller than that. Be sure the openings are large enough to allow vines to grow through. You'll also need cinder blocks or briks, a downspout elbow joint, a short length of hose, and a metal saw if you don't have one already.

2



C.

PLANTS

Visit your local nursery to get the viney plants for your Green Rainwater system as well as some nice plants for the top. Be sure to consult with the nursery attendants who can tell you which plants will do best in your climate, climb the wire well, and, hopefully, require the least water! You'll probably want 6 to 8 plants to go around your barrels.

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Set Up Tanks



drainage for overflow water

to drip irrigation or spigot for hose or watering ..

adequate support

1

2

3

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The trickiest part of this whole project will be making sure the barrels are properly set up and supported from below, but, luckily, it's not actually all that tricky!

A. Lay brick, concrete blocks, or a concrete pad down in a place just under your downspout. You want to create a level, elevated surface on which to rest your barrels (the higher the elevation the better the water pressure).

B. Assemble the barrels on top of this surface according to the instructions. Attach the fittings into the proper openings. Do not attach hoses yet.

C. Once the barrels are in position you will be able to see at what point the downspout must be cut. Use a handsaw to carefully make the cut. Affix the elbow joint to the cut end. With the excess downspout you cut off, just cut it down so that it is short enough to lead right to the opening of your barrel. Then attach it to the elbow joint.

Wrap The Mesh



leave top exposed

wrap securely around tanks

make sure your spigot and other fittings peek out

1

2

3

4

Wrapping the wire around the barrels shouldn't be very hard at all.

A. Simply roll the wire out and around the barrel until the ends meet. Bind them with stray bits of wire (paper clips will do) and gently push down until it is slightly set in the ground and stable.

B. Don't worry if your wire doesn't come all the way to the top of the barrel. Eventually your plants will grow up along the upper edge and fill it out. Until then you can place potted plants with overhanging tendrils on top of the barrel to hide the wire at the top.

C. Make sure you allow your spigot and other fixtures to peek out of the wire so they remain accessible.

D. Attach your own garden hose or hoses to one or both of the overflow fittings to direct any overflow away from the tank and structures.

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Plant The Vines



you can also place plant boxes on top of tanks

let the vine grow freely around the wire

plant flowers around tank

1

2



Now the fun part: planting!

A. Plant your vines at the base of the mesh surrounded barrels. Get them as close to the wire as possible but be sure to space them away from each other according to the needs of the particular plant.

B. Coax the plants into growing up the wire by guiding already formed vines into the wire and gently weaving them through. To prevent vines from developing sparse foliage low on the mesh but dense on top (as they tend to do), pinch back the terminal growth of the stems as they develop because this forces lower branching and more evenly distributed foliage on the wire.

C. After it has rained and you want to water with your collected rainwater, just attach your regular garden hose to the bottommost outlet and turn the spout!

3

4



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Other Possibilities



A. Green Wall

The green wall option is terrific if you live in a very rainy area or simply prefer the look of it. This is also a great way to create shading in your yard:

- i. Order extra barrels from the onset, 4 or 6 in total. Also buy extra plants.
- ii. When setting your first barrel, the one under the downspout, make sure it is the most elevated of the barrels by creating a higher foundation. Each subsequent barrel should be a bit lower than the one just up the line (you can still stack them two high).
- iii. Attach a short length of hose from the top overflow fitting of the first set of barrels to the lower overflow fitting of the next set (allows for transfer of water). Do the same down the line and then attach a hose to the overflow fitting of the last barrel to direct any additional overflow away from barrels.
- iv. You may wrap each barrel individually in wire or all together. Then just plant your flowers!



B. Wood

The wood wrapped barrel is super easy and a great way to reuse old pieces of wood you have around the yard:

- i. Find or buy wood pieces between 2 and 3 inches wide and about an inch thick. They don't have to be the same length as long as they are all long enough to reach the top of your barrels; an uneven edge can look really beautiful. Get enough to go all the way around your barrels. Leave gaps for fixtures (these you can fill in with shorter lengths of wood later on).
- ii. You'll also want to buy a length of thin steel cable long enough to wrap around a barrel 5 or 6 times. Place the lengths of wood around the barrel and carefully (probably with a little help from someone) loop the cable around and through the wood pieces to secure them and also to make an interesting weave pattern around the barrels.
- iii. Attach the ends of the cable using a small steel crimp or clamp. Add planters on top of the barrel to create a flowery top.



C. Stone


The stone gabion look is very attractive. This design also lets you rest assured that your barrel will never fall over (though each barrel filled with water weighs 400 lbs):

- i. Just as with the plant surrounded barrel, you'll need wire mesh to go around your barrels in order to fill them with stone. Choose wire that will hold the size stones you plan to use and that looks nice, too, since it will be exposed.
- ii. Wrap the mesh at a distance from your barrel that leaves enough room for the stones but not so much that your layer of stone is too thick.
- iii. Carefully begin dropping stones into the gap until they come all the way up the barrels, being careful not to hit fixtures. Add planters on top of the barrel if desired.

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For other great projects go to www.mkd-arc.com



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Reclaimed Beauty , a table from reclaimed wood



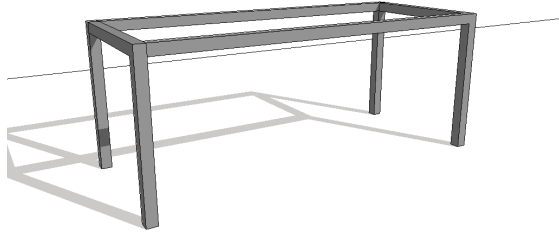
Give old wood a new life in your home: make your own green and gorgeous dining table.

A big, beautiful wood dining table can be expensive. A big, beautiful eco-friendly dining table can be even more expensive. So why not make you own? All you need is a sturdy base and a bit of reclaimed wood, all of which you can most likely find for less than you would spend on a premade wood table, especially one made from FSC (Forest Stewardship Council) certified wood. For a table that's simply stunning you'll want to find a large slab of reclaimed wood (roughly 76" x 36"), hopefully with an unmilled look and somewhat raw but sanded edges – no one wants to get a splinter during dinner! What's so wonderful about this project is you will end up with an elegant, unique table made from wood that might have otherwise gone to waste and the whole process is relatively simple! All your friends (not just the environmentalists among them) will be very jealous.



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2 Steps



STEP 1 Get Your Frame

1

There are two good options for finding a frame for your table. The first is set out on a hunt for the perfect used table by checking out all the Goodwill, Salvations Army, and thrift stores in town. Remember, the surface doesn't matter here; you're only looking for a good, sturdy base. The second option is to order the base from Room & Board - they offer several steel bases in an array of sizes. I recommend the 72" x 30" base with a top that's roughly 76" x 36" to allow for some nice over hang.



STEP 2 Find + Attach the wood

2

For your table top you want to find a really beautiful slab of reclaimed wood. The rawer the better! First look at what's on offer at your local reclaimed wood center. Try visiting the Building Materials Reuse Association's (BMRA) website at www.buildingreuse.org to find some local resources. If you can't find anything locally then you can look at what's available online. Once you have your wood slab it's just a matter of properly bolting it to your frame from below. You can do this on your own if you feel confident enough or get a handy dandy friend or family member to help out. One great thing about this table is that every time you sit to it you will be reminded of the tree it came from!



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Butchers Block Style Table



In case you can't find a nice piece of reclaimed wood large enough for a tabletop then another great solution is to collect smaller pieces of used wood from many different species of trees. Get a variety of grains and colors for a really striking look. Once you've got enough pieces collected you can just bundle them up and bring them on down to your local wood workshop where they can mill it all together butchers block style. Be sure they make it large enough for a nice overhang on your frame. This will give you an incredibly lovely top. It will also age beautifully – just like an old Italian kitchen table. Because it's made from a pieces of imperfect wood to begin with you don't have to constantly worry about dings and scratched because it will all just add more distinct character to your elegant, eco-friendly table.



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