

How to Build a Birdbath Guzzler

by Pat McCormick, HCMG

What is a Guzzler?

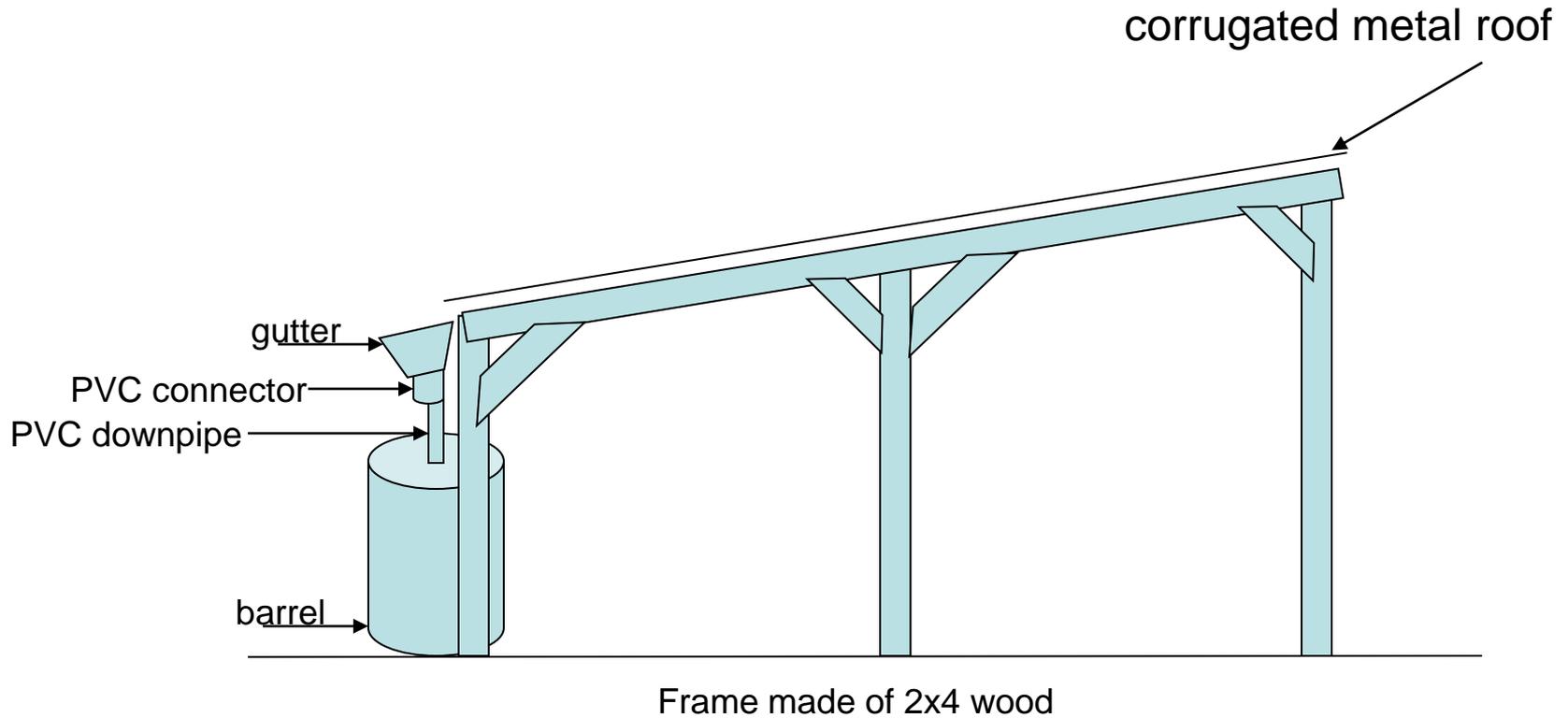
With the drought taking its toll on wildlife in remote areas, there has been an invention of a simple device to allow rainwater to be collected for wildlife to drink. Searching the web will yield numerous examples of wildlife guzzlers that meet the needs for large game. These guzzlers are designed for remote area and to require little or no maintenance. They collect rainwater from the roof of a shelter and store the water and allow it to be available for drinking. This demonstration guzzler is intended to provide water for small birds, frogs, lizards and any animal that can get through or over the fence at the Boys and Girls Club. We call it a birdbath guzzler since the water output is less than it would need to be in the wild. In the summer of 2009, Billy Kniffen came to the Club and helped us build this guzzler.



**Demonstration Guzzler
in the future Native Plant
Garden
Boys and Girls Club of
Fredericksburg
208 E. Park Street**

How to Build a Birdbath Guzzler

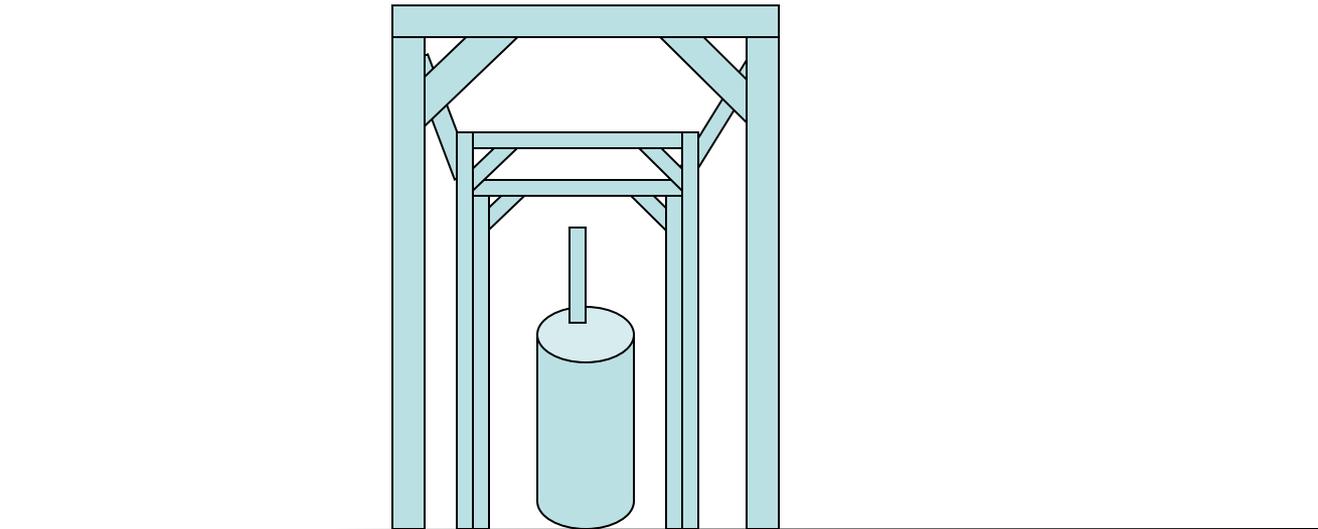
Side View Diagram



Birdbath Guzzler Diagram

Back View of Frame

The dimensions of the wood frame depend on the barrel that you choose. This one came from Woerner's Feed and Seed in Fredericksburg. It has a screw on lid. I paid \$18 for it (50 gal, smells like jalapenos, they also have some that smell like apple cider). Another source is Dave the Barrel Man in San Antonio. Some barrels have secured lids that cannot be removed. The guzzler can have a lower profile if the barrel is placed on its side. If you choose to have a lower profile, make sure your barrel won't leak from the lid. This guzzler does not have a frame to support the barrel since I don't expect to have wildlife knocking it over.



View from the rear



This barrel is not supported with a frame. It will be supported with soil pushed up against it. The property of the Boys and Girls Club is fenced and our only large wildlife will be the 2-legged variety.

Materials for this Guzzler

- 1 barrel (30 gal or 50 gal) (Acquire this first)
- 10 pieces of 8 ft 2x4 wood (maybe less since we used scrap wood)
- 1 lb of 3 inch screws
- 4 ft of plastic gutter with 2 end pieces
- 2 ft of 1 ¼ inch pvc
- 1 ¼ inch pvc connector
- 2 pieces of corrugated metal 12 ft
- Box of 1 inch nails with wide head to nail metal roof to wood frame.
- 3 small screw (¾ inch) to hold pvc downpipe to connector and connector to gutter
- Brass faucet or plastic faucet
- 1 conduit lock nut that will attach to the faucet on the inside of the barrel, it must match the size of faucet opening that is inside the barrel
- Silicon caulk
- 12-18 inches or more of 3/8 inch copper tubing
- 18 inch length of ¼ inch drip tubing
- Drip system emitter attachment for end of drip tube
- “Quickcrete” concrete bag 40 or 60 lbs

Tools Needed

- power drill
- circular saw
- hole drill or circular drill bit for power drill 1 ¼ inch
- tin snips to trim the corners of the metal roof for safety
- silicon caulk tube or gun
- copper tube cutter

Roof and Frame Dimensions

The roof of the guzzler is made easily from corrugated metal which comes in various lengths and in 2 ft widths. It was convenient to make the guzzler 4 ft wide to accommodate 2 strips of metal. Make the guzzler frame 2 inches narrower and shorter than the metal roof. The roof should cover the wood so that it is protected from weather and so that the metal can be nailed easily to the wood frame.

For an upright barrel, make the legs in front 6-12 inches taller than the barrel. There needs to be adequate space for the gutter which is screwed to the wood frame and is usually 4 inches from bottom to top lip.

For this guzzler the front legs are 4.5 ft tall, the middle legs 5 ft and the back legs 5.5 ft tall. The length of the tin roof are 12 ft. The long boards are cut to 11.5 ft. The 3 lateral pieces are 46 inches each. There should be a total of 12 diagonal support pieces, 2 pieces for each leg. Use 2.5 inch or 3 inch screws.



Gutter and Downpipe

The larger the roof, the larger the diameter of the pvc downspout required. If the diameter is too small, the water will back up and overflow the gutter in a heavy rain. This guzzler has 48 sq ft of surface and requires a larger pvc down pipe. I used a 1 ¼ inch pvc and connector. Use at least a 1inch pvc.

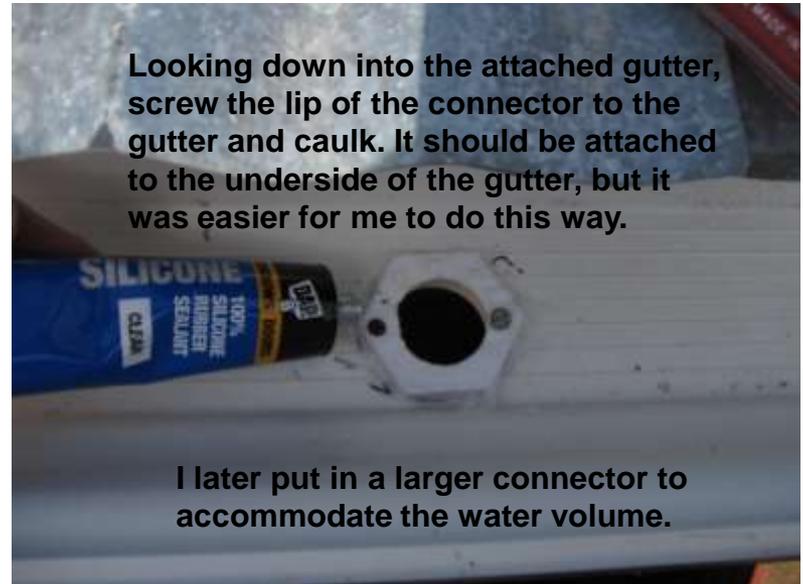
Use a pvc connector to attach the pipe to the gutter. You might need to cut off part of the connector if it restricts water flowing down the pipe. If you cut the connector, be sure to use pliers to hold the connector when cutting it so you don't lose a finger or need stitches.

Drill or cut a hole in the gutter to accommodate the connector. We used a drill to cut the hole in the plastic gutter. Use silicon caulking to seal and fill the gaps. Use small screws to attach the connector to the gutter.

Use silicon caulking to “glue” the end pieces of the gutter to the gutter.

Use a screw to secure the pvc downpipe to the pvc connector. This allows you to remove the downpipe when necessary.

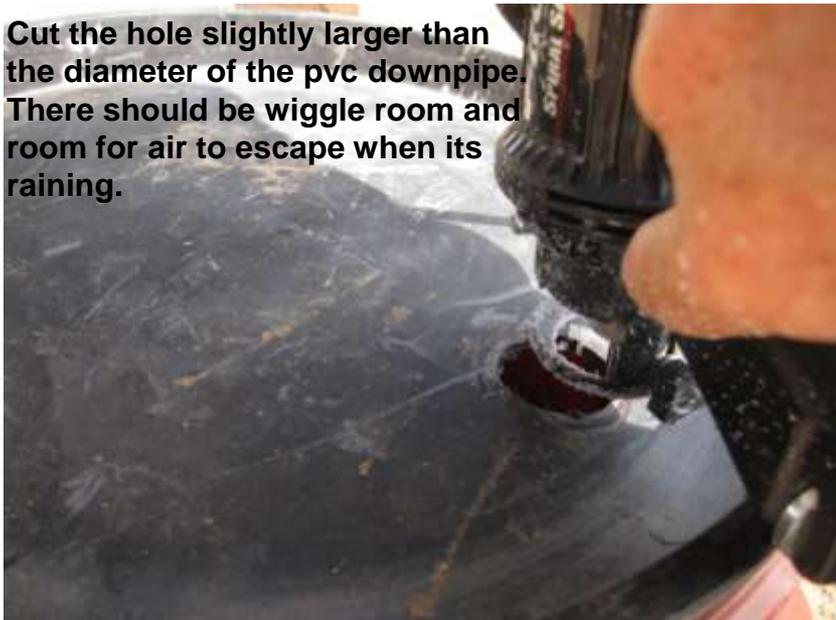




Barrel Assembly Directions

- Coming out of the barrel a brass faucet is recommended. The sharp threads dig into the plastic and make a tight seal. A less expensive plastic faucet will also work. The faucet is inserted into the barrel and is affixed by putting on a conduit lock nut on the inside. Caulk the faucet and the conduit lock nut. On the outside, attach an adapter to the faucet that connects $\frac{1}{4}$ inch drip tubing. Feed the drip tubing through the copper tubing.
- The birdbath component leaves room for much creativity. Take the copper tubing and insert it into the quickcrete so that it is permanently integrated. This will allow you flexibility as to how the water drips into the birdbath and prevents critters from gnawing on the drip tubing.
- A simple birdbath can be made with a 5 gal bucket, cut off the top 2/3. Optionally you can insert the copper tubing through a $\frac{3}{8}$ inch hole drilled into the plastic tub. Fill the bucket with quickcrete forming a bowl shape. Add water slowly. Let dry. Feel free to use other birdbath making techniques you might be aware of.

Cut the hole slightly larger than the diameter of the pvc downpipe. There should be wiggle room and room for air to escape when its raining.



Water from hose flowing into gutter.



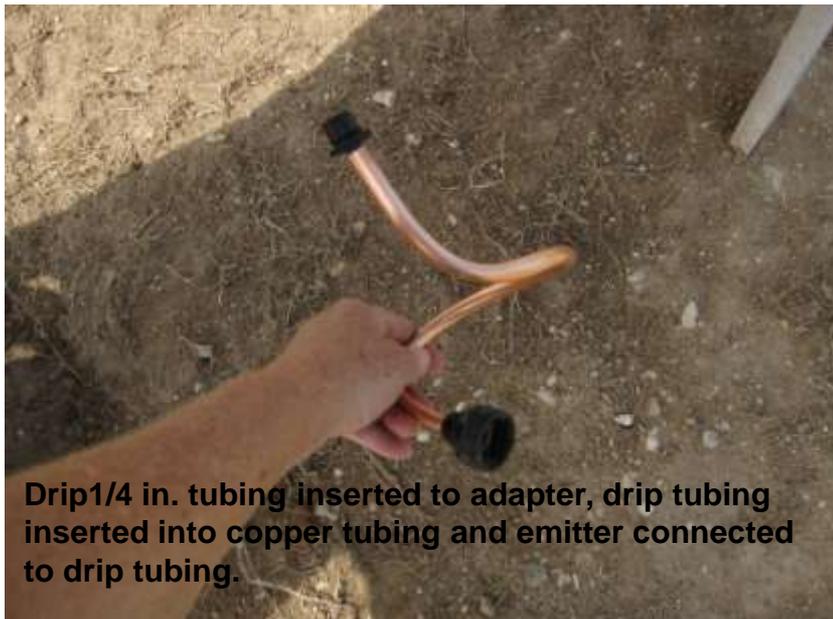


Drill the hole for the faucet the same diameter of the faucet.



The faucet threads will dig into the plastic barrel. This should be caulked as well.

Reach inside the barrel and screw and caulk on a conduit lock nut onto the faucet. Jostling the faucet with hoses could loosen it.

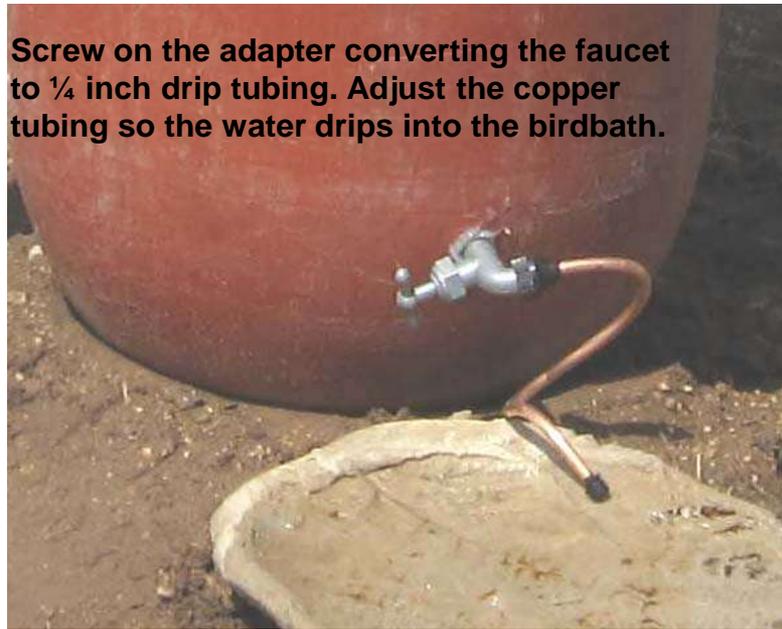


Drip 1/4 in. tubing inserted to adapter, drip tubing inserted into copper tubing and emitter connected to drip tubing.



Faucet screwed into barrel and caulked. It is sideways to accommodate clearance of the handle.

Screw on the adapter converting the faucet to ¼ inch drip tubing. Adjust the copper tubing so the water drips into the birdbath.



Finished guzzler with cascading birdbath and curious kids.

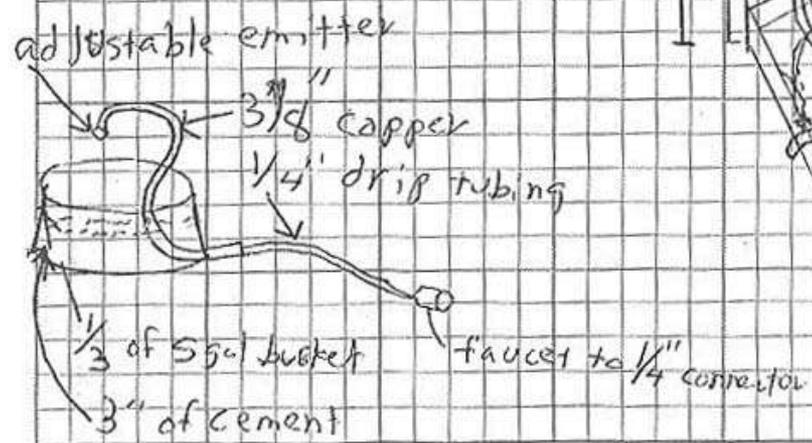
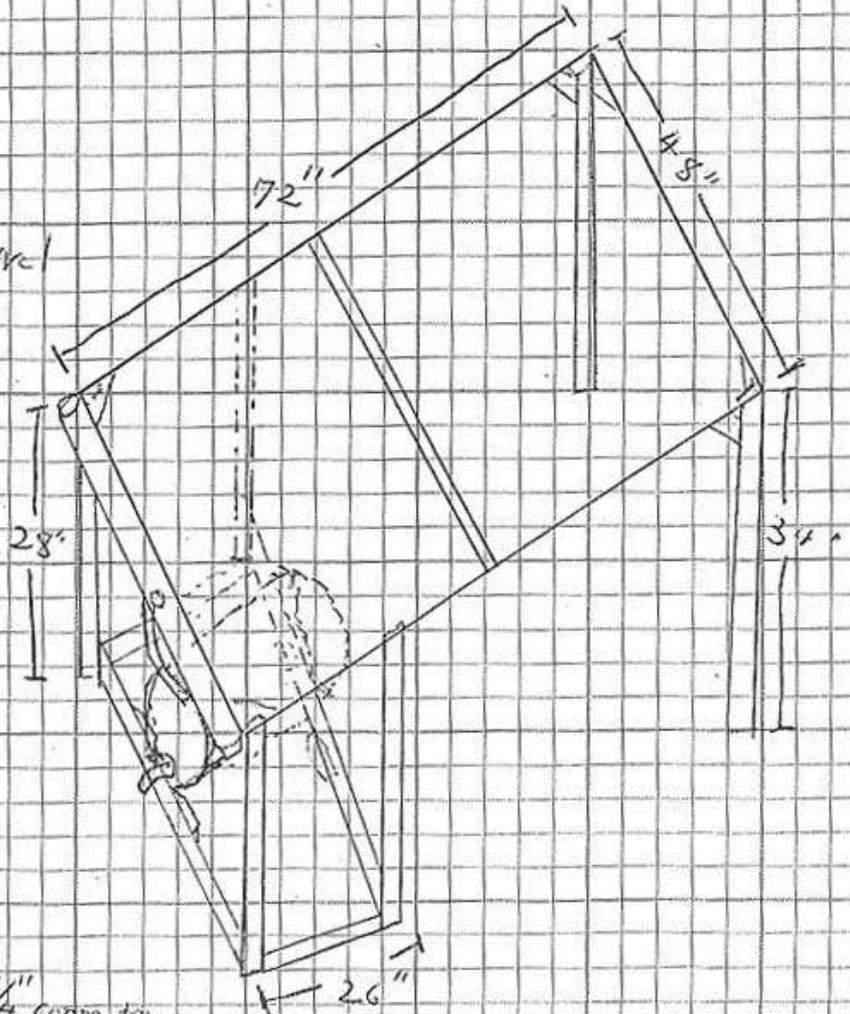


Priya Pat Kids Billy

Original Diagram for Guzzler



- Water Guzzler
 7' X 4' 2 sheets 7' x 2' tin
 8 - 2' x 4' x 8'
 1 - 30 gallon barrel
 4' guttering
 1" PVC from Gutter Barrel
 1 faucet
 1 wildlife waterer



Demonstration Guzzler

Kerrville AgriLife Extension Office
built according to the Original Design



The Kerrville guzzler has a 30 gal barrel and is laying on its side. It requires a frame to support it and keep it from being jostled. This is a 7 ft long guzzler and made according to the “Original Diagram”

