## How to build an easy, cheap outdoor shelter for feral cats.

I wanted to find a way to build a simple, relatively cheap shelter to house some of the local feral cats. I wanted it to be something that could be easily reproduced in quantity with commonly available materials and with relatively simple tools.

The following plans use a large plastic storage container that has some holes cut into it along with some insulation and bedding.

As of 2011 they cost me about \$35 each to make and I can easily make 12 of



them in a weekend. I have been told by the people at the local cat shelter that they probably hold up to six cats each when the weather is very cold. I have been making them for about 4 years and aside from replacing the bedding they seem to hold up pretty well in the elements.

The following is a list of materials for making 12 shelters:

Qty	Size	Item
12	50 Gal.	Rubbermaid (or similar) storage container
1	4' X 8' X 3/8"	A-C grade exterior plywood
2	16oz tubes	"Lexal" brand sealant/adhesive
3	2" X 4" X 8'	Pressure treated lumber
96	3⁄4"	Sheetrock screws
1	Roll	duct tape
1	Roll	strapping tape (optional)
1	6' X 12'	Sencor carpet padding
1	30" X 36"	Clear Lexan, Lucite or Plexiglass sheet (optional)
1	Bale	Straw (NOT hay or salt hay)

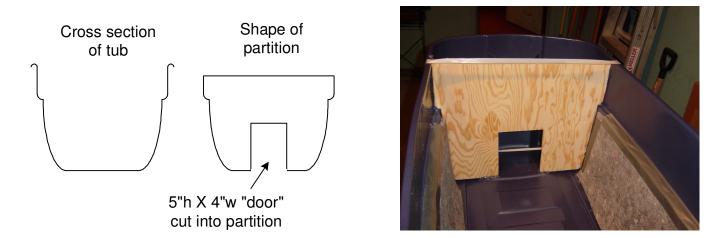
Most of the materials can be substituted for similar items. For instance the 2x4's don't need to be pressure treated. Likewise you could use 2x3's or even 2x2's. Similarly you could use thicker plywood, longer screws etc. Just use common sense.

One thing that is important it to ensure that the materials are non-toxic and don't retain moisture. Don't use carpeting or towels for bedding/insulation.

You will also <u>need a jig saw or band saw</u>, drill / electric screwdriver, carpet knife, utility knife, scissors etc.

So here goes.

First make cardboard template that matches the inside profile of the cross section of the tub. Then add a door hole to it. This template will be used to cut 12 partitions out of the sheet of plywood. (Have the lumber yard cut the plywood into six equal pieces that are 16" x 48". The cost for cutting is nominal and greatly reduces the work you will have to put into cutting out the partitions) Cut out the detailed shape of the partitions with the jig or band saw. The partitions will be used to create a vestibule of sorts so that the wind doesn't blow into the shelter. The following is an approximation of the template/partition.



Next cut the 2x4's into 6" lengths. These will be used for feet. You will need four, one for each corner of the tub. You will drive two deck screws through the bottom of the tub into each foot to secure it.

Next cut the Sencor into 10" x 6' strips. These will be used for insulation along the inner sides of the tubs.

Cut the Plexiglas into 24 equal pieces, each about 4.5" x 7" in size. These will be used as windows on each side of the shelter to provide the ability for us to look in and the kitties to look out. I consider this step optional but probably provides the cats with a good measure of security.

You will need to cut several holes in each tub before you start assembling them. Cut two doors in one end of the tub, a few air holes in the other end near the top and then some optional window openings on each side.

The two doors are abut 5" high and 4" wide and should be placed on the sides of the tub at the very end. I usually put two <sup>3</sup>/<sub>4</sub>" holes in the far end of the tub up high for some ventilation.

Finally I drill two, 1 <sup>1</sup>/<sub>2</sub>" holes about 3" apart up high on each side on the end away from the door to use as windows.

Next step is to screw the feet onto the corners of the tub. Do it on an angle so as to make the widest, most secure footprint. Use a drill with a screwdriver bit to screw the deck screws right through the tubs into the wooden feet.

Next use the duct tape to tape the Sencor to the insides of the tubs. Place it in a "U" shape with the top of the "U" facing the end with the doors cut into it. The Sencor is like a dense felt padding that you can buy at any carpet store. It has a 'finished/glossy' side and a softer felt like side. Tape it in so that the felt side is against the tub and the glossy side is facing in towards the cats. This allows the tape to stick better and helps keep moisture absorption to a minimum.



Next you want to glue the partitions into the tubs. Lexal is one of the few tube based sealants that sticks well to these plastic tubs. It's expensive compared to tub/tile sealant but after all this work you want a strong joint.

Run a bead of the Lexal along the perimeter of the partition and then slide it down into the tub next to the door holes. Use the duct or strapping tape as a temporary clamp to hold the sides of the tub against the partition until the Lexal dries.



At the same time run a bead of the Lexal around the outside of the window holes and stick on one of the little Plexiglas sheets for window glazing. Use a piece of tape to hold the window in place until the Lexal dries.

Lastly place a 2" thick bunch of straw into the bottom of each tub for bedding.

That's it. In one weekend and for about \$300 you have provided shelter for up to 60 feral cats.