## The Camelid Cavern of Confidence<sup>®</sup>

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The Camelid Cavern of Confidence (CCC) is an adjustable PVC pipe frame with a tarp

over it. All of the parts and supplies can be found at your local home improvement store and/or plumbing supply house. I recommend using 1-1/2" Schedule-40 pipe for strength and durability. And if you want to have a collapsible CCC that is easy to assemble in stages for training purposes or to move and store, think about which connections you want to glue (permanent) and which you want to screw (temporary).

It only takes about an hour and a half to assemble (longer if you drink the beer) and the parts and supplies can be purchased for around \$100.



## Parts List:

#### 8 pieces Schedule 40 PVC Pipe in 10' Lengths

#### **PVC compression type fittings:**

- 12 1-1/2" Tees
- 6 1-1/2" Elbows •
- 1 1-1/2" Cross
- 6 1-1/2" Couplers

#### **Other Supplies Needed:**

- 8 bungee cords •
- 1 8' x 12' plastic tarp
- 1-pound <sup>3</sup>/<sub>4</sub>" self-tapping Phillips head screws
- 1 small can all-purpose PVC cement • (glue)
- 1 six-pack beer or wine •

#### **Tools Needed:**

- Power Drill or power screw driver with a Phillips head •
- Hack saw •
- Rubber mallet
- Miter box (optional for the anal retentive)
- Indelible pen •





Cross





**PVC** Cement (Optional)

6 - 1-1/2" Coupler



3/4" Self-Tapping **Phillips Head** Screws (1lb)

6 - 1-1/2" 90°Elbow

One - 1-1/2'



# **BEFORE YOU BEGIN: We suggest that you read through the entire set of instructions.**

#### **Considering Cement vs. Screws**

If you glue the pieces together with the PVC cement, you will have a permanent structure which you cannot disassemble.

If you screw the pieces together, you will have more flexibility to make changes. We recommend that you put your Camelid Cavern of Confidence completely

together the first time; no cement and no screws. Then take a look at it and decide

- how much work you want to do each time you use it and/or
- how portable you want it to be and/or
- how you want to use it for training purposes.

Then use cement where called for to suit your needs and likewise the screws. <u>Notes</u> on gluing PVC: Remember, you aren't making water-tight connections. So there is no need for PVC primer and expensive glue. Just get a small can of the cheap stuff. To glue PVC, first swab the socket of the fitting with cement, then swab approximately 1 1/2 inches of the end of the pipe. Quickly insert the pipe into the fitting and give it a 1/4 twist. Make sure that you have jammed the pipe all the way into the socket of the fitting, or your CCC may end up a little lopsided.

If you choose to leave your CCC unglued for ease of transportation and storage, spray the removable connections with silicone spray to make it easy to assemble and take apart. Also you will want to label the various pieces with the Sharpie, in a way that makes sense to you. The rubber mallet is helpful for assembling and disassembling the CCC. Use light taps with the mallet as the PVC can break, especially in cold weather.

## **Cutting the PVC Pipe**

With PVC pipe and the other supplies listed above, start by cutting the 10 foot long PVC pipe as shown in the diagram below. Use a new hack saw blade and the miter box to make easy, straight cuts.



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#### Assemble the Base

Assembly A (see diagram) is used to create the sides of the base. <u>Note:</u> Tees are used on the ends of the sides to help stabilize the CCC. And, on windy days you can always slip extra pieces of PVC into the open end of the Tee for added stabilization. If you do not think you will need the extra stabilization, you can use elbows.

A 4-foot piece of PVC pipe is used at each end to connect the sides.

<u>Make the 2 base sides first.</u> The components of the base sides are shown in Assembly A. When laid on the ground, the end Tees should be flat on the ground and the other three Tees should point up.



<u>To connect the base sides to the base end</u>, attach a four foot long piece of PVC pipe between both ends of the sides you just created. You should now have a big rectangle that measures approximately 4 feet wide by 8 feet long.

## Stage 1

Place an 18" piece of pipe into each of the vertical openings in the base. Now you have completed the first part of the

Camelid Cavern of Confidence for training with your llama or alpaca. Walk them through it, do a couple of weaves. Go for a test drive!



## Stage 2

Add one of the 1-1/2" couplers to the 18" vertical pipe added in Stage 1. Attach a 4-foot piece of pipe into each of the six open sockets. They should look like six "ribs" pointing straight up. Your CCC is now halfway complete!

Go for another test drive with your camelid friend!

<u>Note for the Perfectionist:</u> If you are going to need your tarp to fit the frame perfectly, this is a good time to get the tarp out and measure it along the eight-foot dimension. The eight-foot dimension is the most critical one as it corresponds to the length of the CCC. Once you know how long your tarp is, you

#### **STAGE 2**



may need adjust your CCC to fit it perfectly. Measure your CCC from one of the end pipes that is pointing straight up into the air, along the side of the CCC, to the other end pipe that is sticking straight up. It should be something like eight feet long. (Note: We are not measuring the overall length of the base, just the distance between vertical pipes along one side).

## **Building the Top**

The top has three "rafters" that measure approximately four feet: One at either end of the Cavern, and one in the middle.

Assembly B illustrates the construction of the top pieces for the ends of the Cavern.

Construct each of the two end "rafters" by placing two 24" pieces of PVC pipe into a 1-1/2" Tee. Make sure the opening for the center stabilization piece is horizontal. Place the end pieces onto the Cavern.

Assembly C illustrates the construction of the middle top rafter. It is the same as the end rafters,







except the cross is installed in the center instead of a Tee. Take care to ensure that the cross is at a right angle to the two elbows. Place the center piece onto the Cavern.

Now your Cavern should look like Stage 3. Go for another test drive with a camelid friend if you like.

To stabilize the top and create a brace for the tarp, insert a 4 foot long piece of pipe between B and C and between C and B. See Stage 4.

#### STAGE 4



#### **STAGE 3**



## **Positioning the Tarp**

After you have assembled the frame of your CCC, drape the tarp over it to aid in positioning the screws to hold the bungee cords.

You will put a screw in each of the 6 standing ribs. The placement of the screws will depend on the length of the bungee cords and the size of the tarp.



If the tarp, covering the full length of the Cavern is too overwhelming for your camelid friend, take it in steps. You may just need to secure the tarp to one section while your llama or alpaca gets used to going through the Cavern. Then expand the tarp to cover 2 sections, etc.

#### A Versatile Training Tool

As you may have noticed reading through these instructions, the Camelid Cavern of Confidence is indeed a versatile training tool. The authors and RMLA encourage you to use this information to have fun with it and your animals. For permission and a pdf copy of the article please contact Marty McGee Bennett.

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