## Sharon Findling Education Oakland OR

## HOOP HOUSES

Of course you want a pole barn with outrider feeding stations, room for a winter's supply of hay and straw storage. The reality is you need a shelter for your goats, period.
I learned how to make hoop houses (Quonset huts, cattle panel shelters, whatever you call them) from Manda Doffing who uses them for everything from hay storage to birthing parlors.

Ingredients
316 ft cattle panels Twistable wire or baling twine
4 (or more) metal tee posts $16 \times 20$ tarp or ?? for cover
2 additional cattle panels, fencing or pallets Rebar or ?? for ground staples
Sledge Hammer Fencing tool or pliers
Post pounder Fence staples
Hammer Opt plywood or other end material
I always try to put my shelter in a fence corner or at least along a fence. Try to have a wooden post somewhere in the construction. If you don't use a fence for stabilizing, your structure will need more tee posts, and extra cattle panels (fencing or pallets). You should also think about using $2 \times 4$ center posts.
Let's assume you're going to put the long side against a fence. Figure out how wide you want your floor - do you want to be able to walk in upright, bent over, not at all? The lower your ceiling, the warmer your shelter will be.
This works best if you have two people but you can do it alone. Take the first panel and place the short end on the ground at the fenceline, at the wooden post (if you have one, otherwise try to do it at a tee post). Push the panel into an upside down " $\cup$ ". This works best if you get under it and push up. When it's where you want it, pound at least one rebar (or what have you) staple into the ground securing your "U". Is that what you want the floor to look like? The roofline? If not, pull your staple and adjust.
When it's where you want it, do the next panel, overlap one "square" and pound in your securing staple. Tie the two panels together. If you use wire make sure all ends are pointing down (think about torn fabric cover from sharp ends). If you are using baling twine, consider "sewing" the panels together using lots of knots. Just to be safe, put in at least two ground "staples" in each panel on each side.
Put the third panel in place and secure. Now you are ready to put on the cover. Consider putting a piece of plywood cut to fit the end, drill holes in it so you can tie it into place. This will make your shelter stronger, warmer and protect your tarp. I have one shelter that I tied on left over metal roofing material as cover and put a couple of pieces at the end. This shelter is shoved into a fence corner so is very stable.
Cover with the tarp or other cover material. There is no way to explain how to do it and by the time you get done suicide will look like a good thing. DON'T do it on a windy day. I started on the ground away from the fence and tied the tarp to the frame (leaving enough tarp so you can overlap and tie to the inside - keeps the wind from picking up your tarp). Next, throw the tarp up over the structure so it lands on the other side of the fence. Now you have to decide if you want the fence included or excluded from your structure. I think "exclude" works best. Tuck the tarp between the fence and the structure, then tie it down. Go to the back where your plywood is. Fold the tarp to sort of look like an envelope and tie it all down.
If you started with a wooden post, go inside and using fencing staples connect the cattle panel to the fence post. If you have a tee post, tie the structure to it. If you have neither, that's ok. Think about putting a cattle panel hay feeder in front of your plywood wall - this will protect the tarp wall and be an easy way to feed hay.

Take one of your "extra" cattle panels, attach one end to your wooden post and stand it in front of the end (plywood/tarp) of your shelter. Drive in at least two tee posts and tie the panel to them. Cut it off to fit. Take your second extra panel and stand it along the long side and drive in two more tee posts - one in the middle, one at the end. Tie the panel to the three posts. You'll have a piece left over from the end. You can make a short fence with another tee post driven in at the front of your shelter, tie your left over panel to the two tee posts and you will keep your goats from walking between the "fence" and the shelter. I took a piece of left over tarp and tied it to the front "fence" and that will help keep out the wind and rain.
The reason for all these "extra" panel fences around your structure is that if you have young stock in your field and you don't keep them from climbing on your structure they will have it flattened within a week. They think it's some kind of jungle jim thing and really enjoy climbing, jumping and chasing each other over your hard work. If you don't want to "fence off" your shelter, be sure you put $2 \times 4$ braces down the middle ( $2 \times 4 \mathrm{~s}$ as tall as your ceiling on the inside, drill a hole in one end, tie it to your structure, wedge the other end into the dirt as tight as you can).
I did a web search on cattle panel shelters and found lots of interesting information. One person in snow country took a piece of cattle panel and "sewed" it across the ceiling of his structure. His theory was that as snow built up on the structure, the weight would push down and the cattle panel would maintain the shape. I put one in one of my structures just to see what it looked like - we don't have a lot of snow - and when I pulled down on the "U" ceiling it did help stabilize the structure.
I have pictures if anyone wants to see them but if you have computer access it would probably be good to look at some of them on the internet. They do work well, are cheap and last a long time.

