## Scott Bills

# Making Your Own Outdoor Target Backstop

In this article I will go through the materials, instructions, and procedures to build your own replaceable/rebuildable 4´ x 4´ target backstop for target shooting. This target is great for home archery as it is highly mobile, long lasting, and versatile. You can even use it as a back stop for most 3-D targets should you flinch a shot and miss. The only caveat is that it is not suitable for broadheads. So let's get going!

### **Materials**

- 16´ (feet) of 2x12 treated lumber (if you want to leave it outside). You could use a wider board such as 16″ but I have found it unnecessary. I have shot carbon arrows from high powered compound bows into this target without pass throughs.
- 2´ of 4x4 or 4x6
- one 8´ 2x4
- plastic chicken wire—one roll of 25´x 2´ should be plenty
- 32´ of 1x2 trim
- at least 4´x 8´ of synthetic grass carpet or similar material
- 18" of %" threaded rod (if you want the target to be mobile)
- 2 washers and jam nuts for the above (if you want the target to be mobile).
- 2 agricultural wheels (if you want the target to be mobile).
- 2´ of 2x6 or 2x8—4´ if the target is to be non-moveable.
- 3" deck screws
- roof shingles (if you want to leave it outside) and roofing nails to affix them
- 2<sup>"</sup> deck screws

- two 3´ pieces of ¾´´ nylon rope (if you want the target to be mobile).
- a small piece of round stock or 1x1 wood for rope handle.
- lots of plastic shrink wrap or similar filler.
- wood stain (if you like).
- basic tools such as a power saw, hacksaw, and cordless drill/screwdriver

### Instructions (Cutting, Assembly etc.)

The first thing to do is to cut the 2x12s to form a 4<sup>°</sup> box. This requires you to cut two pieces at 48<sup>°</sup> and two at 45<sup>°</sup>. Plan to use the longer pieces for the top and bottom of the target. You will want to reinforce the lower corners with either 4x4s or 4x6s (*see Photo 1*). Screw these together using the 3<sup>°</sup> deck screws.

If you intend to make the target movable cut a 45° corner off one of the braces to allow clearance for the wheel axle (*see Photo 2*).

Also drill a <sup>%</sup>/<sub>"</sub> hole in the lower portion of one side. Insert the rope and tie a knot so the rope *Continued on the Next Page* 





Photo 2

cannot pull out. Drill a % hole through the small piece of round or square stock and put the rope through the handle and knot it. Adjust it to a length where the target lifts off the ground about 6" when your arm is at full length and you are standing straight. This will be the lift strap if you intend for the target to be mobile.

Once you have the lower section sides and lower braces assembled you are ready to put in the top braces. For this use two 2x4s cut to 45 inches (*see Photo 3*).



Photo 3

The reason for these braces is they will allow you access to the interior for stuffing the target and to take the top off later to refill the target without the sides caving in. Try out the top by fitting it and running a few screws in. Use the 3" screws for these steps. Once satisfied remove it and go to the next step.

Once you have got the frame complete you will wrap the target with the plastic chicken wire (PCW). This will provide support for the stuffing during assembly and use. Use the  $2^{"}$  screws to secure the PCW as tightly as possible. (*see Photo 4*)



Photo 4

It is time to stuff the target with the filler. Stuff the target full with plastic wrap or whatever filler you decide to use. (*see Photo 5*).



Photo 5

I picked the shrink wrap up from work where it was used on incoming material on pallets and then discarded. I would think a Home Depot would probably have a bunch of this stuff they throw away. You might be able to acquire a similar or better material. Be creative.

Now take the outdoor carpet and cut two 4' square

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sections for the faces. Screw this in place using the  $2^{"}$  screws. Next cut the 1x2 trim to the size of the frame to reinforce the face material. You can either make  $45^{\circ}$  corners using a miter box or butt the square ends (*see Photo*  $\theta$ ). Use  $2^{"}$  screws to secure these strips.



Photo 6

Insert the <sup>%</sup> rod through the face and bracing. Install a wheel, a washer, and a lock nut on one side. Put the other wheel on the opposite side and measure how



Photo 7

much rod is needed allowing room for the washer and nut on that side. Remove the wheel and cut the rod with a hack saw. Install the wheel washer and nut. Tighten these down to a point where they are secure but still roll easily.

The last thing to do is to install a front foot. This should be a two foot section of 2x6 or 2x8. Space it as tall as needed to sit level with the wheels installed. Use the 3" screws to fix it in place. If you make the target non-moveable, you should use two pieces of the wood on each end as feet. This step is necessary so that the target does not tip in use or in the wind (*see Photo 7*).

The final steps involve either staining the wood and/or installing shingles on the top section. If you decide to shingle the top, do so before you put the screws in the top. This is done so that you can remove the top later to repack the target when, and if, necessary.

### Conclusion

So, there you have it, your own "can't miss target". The faces can be replaced as use warrants and it will hold up to arduous use. I have yet to wear out the filling even after a year's use of the target. The target is big enough so that even the largest FITA or field faces can be used or several small target faces can be set up on it for multiple people shooting.

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