

Sporting Crossbow Buttresses

The Bags :

The bags themselves are a cheap woven nylon and can be bought in a variety of sizes very cheap. We used two different sizes- large 64cm x 86cm and a smaller one 30cmx30cm.

The larger was the actual buttress on which the target was fixed and the smaller was an inner core going inside the outer bag.

The fill material was simply off cuts of wetsuit (divers) material which we got for nothing as it was of no use for anything else.

The Making of the Buttress :

Sheets of cardboard were cut to size so as to fit snugly inside the bags; both bags- the large and small ones, in order for the bag to maintain its shape. They were for the front, back, sides, bottom and top and they were simply pushed in place, leaving the top piece until after packing.

The small bag was packed quite firmly to the top with wetsuit material then the top piece of cardboard was put in place.

Then enough wetsuit material was put into bag so that when the small bag was put in it would sit in the middle. From here it is a case of filling up the rest of the bag (being sure to surround the little inner bag so that it is central- Picture 3 the red top of the inner bag can just be seen) careful to maintain the shape- don't overfill as it will cause bulging.

Packing the large bag fairly firmly is important otherwise gravity will simply make it all sink to the lower part and there won't be enough material in the higher part of the buttress to stop any bolts. Picture 4.

Once full insert the top piece of cardboard and close the zip. We chose to put a piece of tape over the nylon zip to stop it from splitting open with the force of the bolts hitting and the arbalests pulling out their bolts. The last step is to tie a thin rope to the handles, which is long enough to go over the top of the frame and tie down behind the frame.

The Frames :

These can be made how you wish. The green one in the pictures was made of wood with a hard plastic mesh behind (we use this at our club), or you can possibly adapt the frames you may have.

Picture 13 and 14 show those we used at the Worlds 2011- they are a metal A-Frame. These had a sheet of strammit behind purely to give the bag something to lean against otherwise the bag would have fallen through the frame.

The main points are that you have a ledge of some sort for the bag to sit on so as to take the weight of the bag (it is rather heavy when completed) and the ability to tie the attached thin rope on the bag to something at the back- we chose to tie it centrally to the rail that joined the legs. Picture 12

The Target Face Pins :

These were simply cooking skewers as they need to be fairly long- about 30cm.

Sporting Crossbow Buttrresses continued

General Information :

At the Worlds 2011 we had six sporting crossbow competitors including one that shot the Scorpyd Crossbow and the buttrresses stopped all the bolts.

There were no bounce outs and no pass throughs.

One Australian competitor did have very short bolts for a sport crossbow and that caused a problem as a couple of his bolts went in as far as the fletches. This was corrected by changing his buttrress to one with a very tightly packed inner core.

Throughout the entire Worlds- Target and matchplay we only changed one sporting bow buttrress as mentioned above.

All in all we were more than satisfied with the results that were achieved regarding design, stopping ability and wearing of these buttrresses after the many and varied types of materials we had experimented with in the lead up to the event.

Unfortunately manufacturers make these bows with much faster speeds but really don't help much with a suitable buttrress for target shooting to stop them, so as the saying goes "Necessity is the mother of invention".

The finished bag -front and side





The red top of inner bag can be seen.



The large bag filled with wetsuit material.

Target frame from front



Target frame from side.



Target frame folded from front.



Target frame folded from side.



Folded frame being picked up.



Folded frame being moved.



Bag on frame as viewed from front.



Bag on frame as viewed from rear.



A-Frames used at the Worlds 2011

