



Nzi Trap Sewing Instructions

Schematic drawings are provided here for sewing and assembly. Comparable sizes are suggested in metric and English units based on 1.5 meter or 60 inch width fabric.

Drawings and instructions are also provided in a single Power Point file. The figures display best at 800 x 600 resolution.

[Download Detailed Sewing Instructions](#) [Power Point](#) or [PDF](#)

[PDF version of this entire web page](#)

- ☀ Use quality polyester thread and sew double seams, blue thread helps when sewing netting.
- ☀ A #16 jeans needle is best for heavy-weight denim fabrics, and Sunbrella awning fabric.
- ☀ Over-sew all corners and confirm that all corners are completely closed up.
- ☀ Make best use of the selvage; finish any free edges with zig-zag stitches and/or twill tape.
- ☀ Reinforce the hole at the apex of the cone with twill tape if using light-weight netting.

It takes about two hours to sew a trap once all the pieces have been cut.

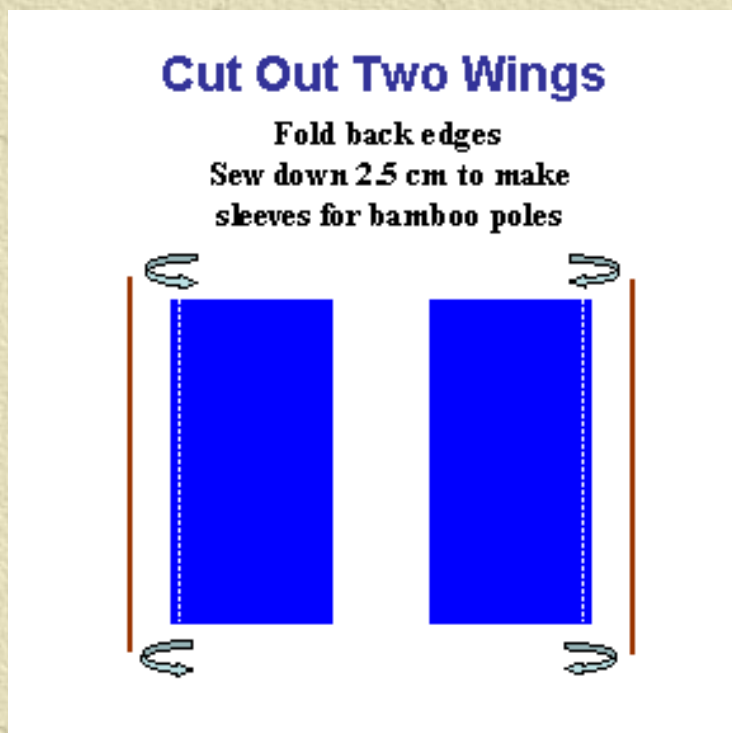
Fabric in a 60 inch width is best for making the blue portions of the trap based on straightforward rectangular cuts for a 36 inch trap format. This width accommodates an 18 inch wide front shelf, and two 21 inch wide wings (18 inches plus 3 inches for a folded back sleeve for the inner support poles). Note that **Sunbrella** awning fabric comes in both 46 and 60 inch widths (codes 46** or 60**). A similar approach can be used for 1.5 meter width fabric (~59 inches) with slightly narrower sleeves. The three rectangular blue pieces that form the two wings and the front shelf can also be cut out as a single "U-shaped" piece in fabric that is 54 inches wide. By cutting out both "U-shaped" and 18 x 36 inch rectangular pieces, there is no waste of fabric. Netting in similar widths is the most convenient format for cutting out other trap pieces. Large-format rolls of netting are

awkward to handle.

The trap pieces can be sewn together in any sequence, but it is best to leave the attachment and then closing of the cone as the last step. This provides easy access to all parts of the trap during sewing. If pieces are not cut exactly to size, it is also easier to stretch and match the cone to the trap body at the very end. A symmetrical, matched cone facilitates smooth, upward movement of flies into the collector.

Below is a simple and methodical method of assembly. This sequence keeps the bulk manageable and avoids most 3-dimensional "inside-out" confusion. With this method, it is easy to visualize the trap in terms of its final geometry. Note that the trap can also be sewn without corner sleeves, e.g. if one adds fabric loops/ties instead to save on material costs. I prefer to use full sleeves for thin internal support poles, and therefore provide instructions for making these sleeves.

Ten "Easy" Steps



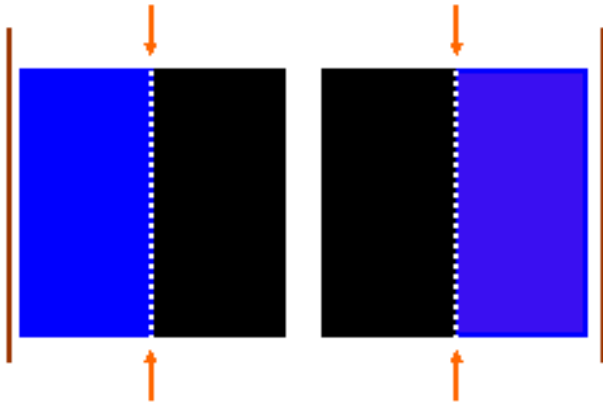
Cut out two rectangular pieces of blue (**100 x 55 cm or 36 x 21 in**) for the front wings.

The extra **5 cm or 3 in** on the short side of the rectangle provides for a sleeve to hold thin bamboo poles. These inner supports give the trap shape and distribute tension evenly. This avoids tears in severe weather, especially as the fabric ages.

Fold back **about 2.5 cm or 1.5 in** from the edge (e.g. to match the thickness of the poles being used), and sew down to make a sleeve. Wide sleeves make it easier to set up and take down traps.

Cut Out Two Side Walls

Attach the black sides to the inside long edge of the blue wings

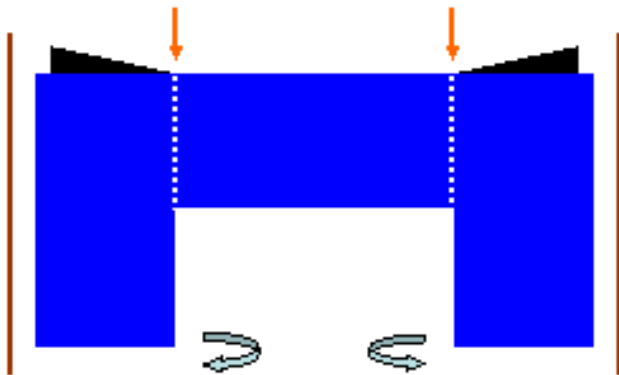


Cut out two black rectangular pieces (100 x 50 cm, 36 x 18 in) for the side walls.

Attach each blue wing to each black side on the long edge, keeping the sleeve of the blue wing to the outside.

Cut Out Top Front Shelf

Fold back black sides, attach shelf to upper half of blue wings



Cut out one blue rectangular piece (100 x 50 cm, 36 x 18 in) for the top front shelf.

Fold back each blue-black piece at the seam; lay out with the blue facing up and the sleeves to the outside.

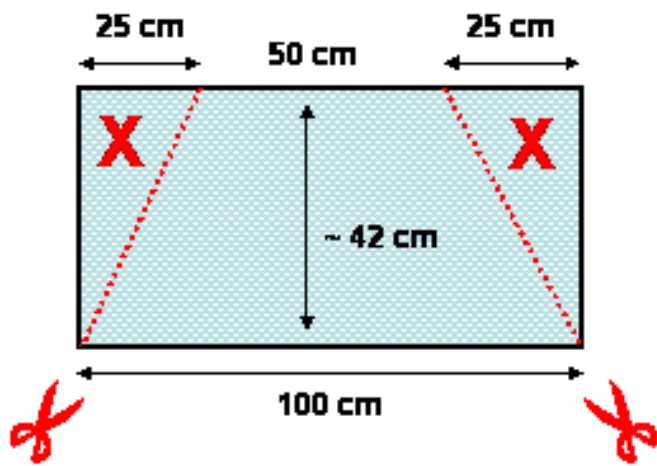
Sew the short side of the blue shelf to the upper, inner half of one blue wing.

Attach the other end to the other blue wing in the same fashion.

You can also sew the blue front shelf into the seam of the blue wing and black side as a single first step, so long as you carefully match all three fabrics.

Cut Out Horizontal Shelf

Trim the corners to produce a 42 cm high trapezoid with sides of 100 & 50 cm



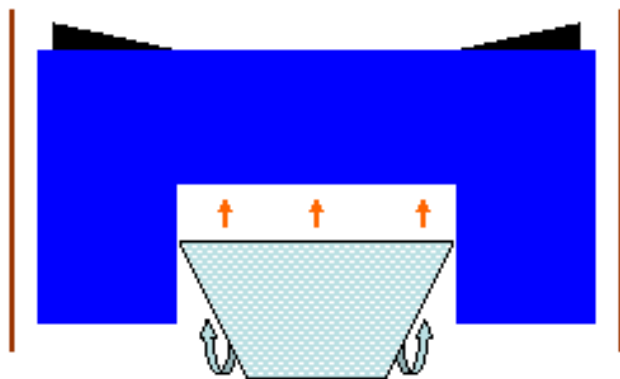
Cut out a trapezoidal piece of netting for the inner shelf exactly as shown.

Start with a rectangular piece of netting (**100 x 42 cm, 36 x 15 in**). Mark **25 cm or 18 in** in from one corner on a long side. Draw a line to the adjacent corner and trim the triangular piece off. Repeat for the other corner.

With seam allowances, this exact size produces an inner shelf that does not sag at final assembly. Adjust the dimensions to suit your sewing style. If the shelf is too wide at final assembly, sew a triangular tuck into the remaining open edge.

Attach Shelf to Front

Working from the front of the trap, attach the netting shelf to the bottom edge of the front blue shelf



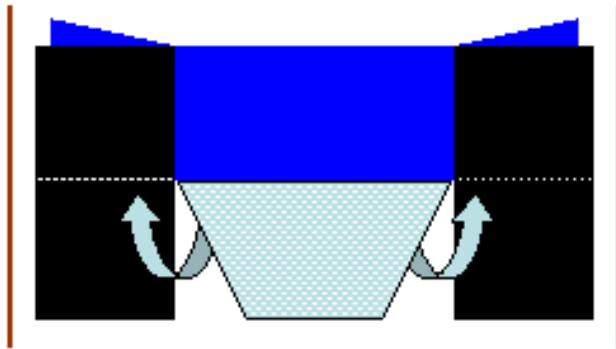
Lay out the blue-black assembly flat on the table. Keep the front of the trap or the all-blue side towards you.

Lay the trapezoidal netting shelf on top of the front blue shelf. Match the long side to the bottom of the blue shelf exactly, and sew together.

The netting shelf will next be folded back into the body of the trap for attachment to the side walls.

Attach Shelf to Sides

Mark the centre of the black side walls
Fold back the netting shelf from the front
and attach each side to the black walls



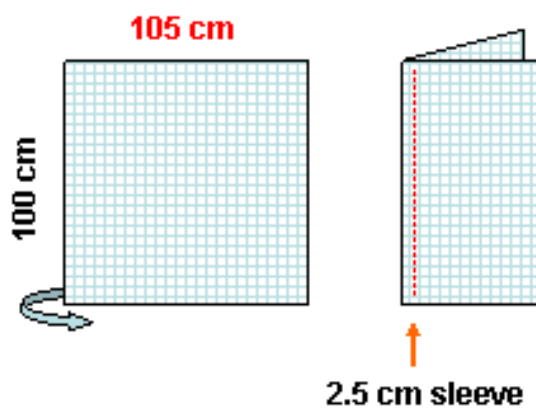
With a white marker (e.g., a thin wedge of soap), draw a line across the middle of the black sides. Match up with the sides of the trapezoidal netting. Sew the edges of the trapezoidal netting to the black only (fold back the blue wings to keep them out of the way).

The assembly is bulky at this point and is starting to take a 3-d shape, so be careful not to sew into multiple layers of cloth (e.g. it is easy to do this when sewing up the corners). Trim off any netting that extends beyond the edge of the black. The fit of this piece is dependent on how exactly one has cut out the other pieces of the trap, and seam allowances.

For stiff netting, trim the netting just before the edge of the black cloth. This makes the attachment of the next piece of netting easier by eliminating a stiff right-angle seam at this point.

Cut Out Back Netting

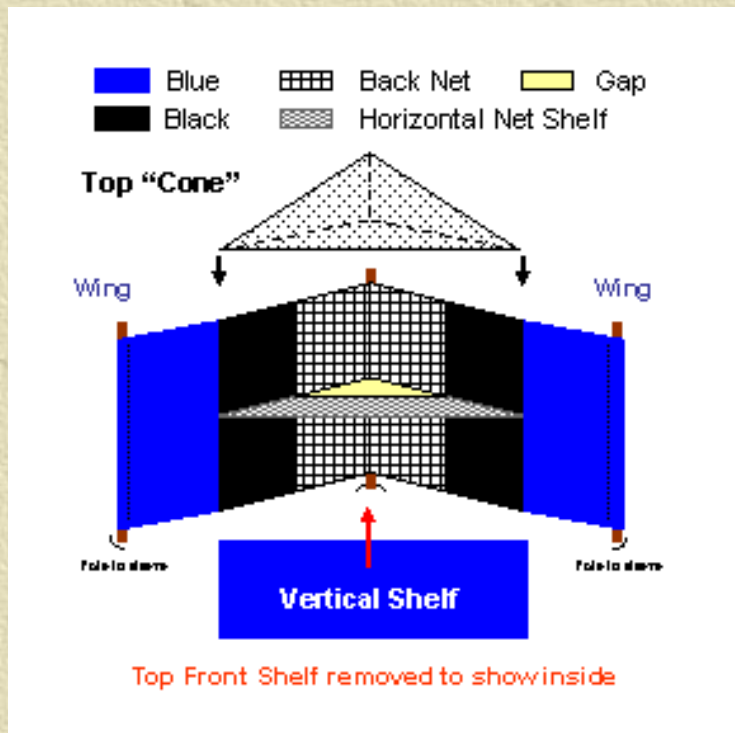
Add an extra 5 cm to one side, fold in half, sew a line to make a middle sleeve



Cut out a **105 x 100 cm** or **39 x 36 in** piece of netting to form the back of the trap.

Fold the netting in half along the slightly longer side, and sew a line **2.5 cm** or **1.5 in** in from the middle to form a sleeve at the back corner of the trap.

Reinforce the ends of the sleeve with multiple lines of sewing as these are major tension points.



Attach the back netting to the body of the trap in two simple steps. First, lay the netting along the back edge of the black on one side of the body of the trap. Match the outer faces and sew together. Reinforce the bottom edge of the netting and black with a few extra lines of sewing (a tension point prone to tears as the netting deteriorates with time).

Invert the trap and repeat on the other side, taking care not to confuse right and wrong sides (the sleeve must end up on the outside of the trap!).

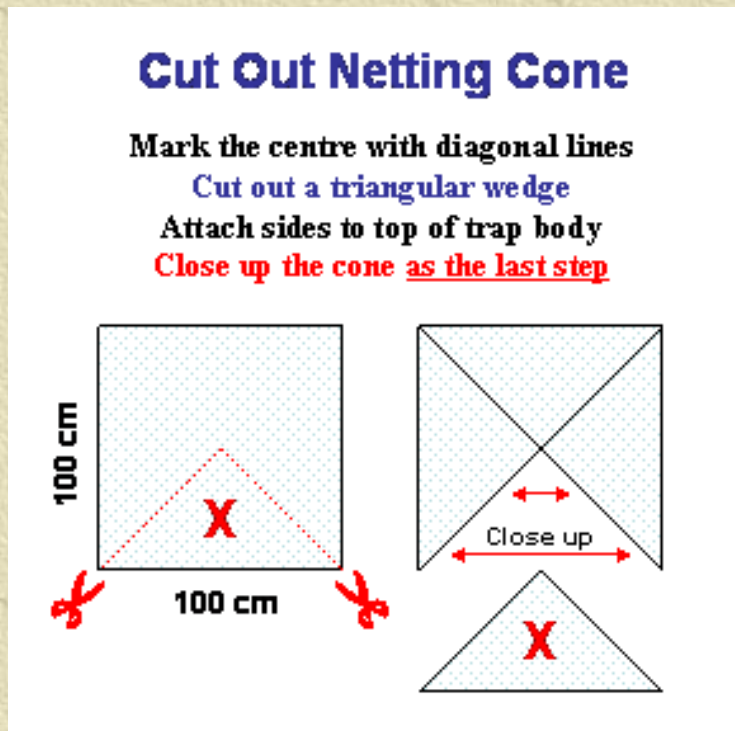
You should now have a symmetrical triangular body that will be just a bit less than **1 x 1 x 1 meter or 36 x 36 x 36 inches**, depending on seam allowances.

Cut out a square **100 x 100 cm or 36 x 36 in** piece of netting to make a cone for the top. Check the trap body dimensions at the top first to be sure that this is the correct size for the finished trap (extra is fine but you do not want to be short).

Mark the exact centre of the square at the intersection of diagonal lines drawn between opposite corners. Cut out a triangular wedge from one side.

Matching outsides, attach the bottom of the cone to the top of the front blue shelf so that the cut-out will face the back of the trap (arbitrary choice here). Attach the other two sides of the cone, taking care to close corners without sewing through bunched-up fabric.

Lay the trap out flat on a table to match the edges of the cone cut-out and trim any mismatched edges. Close-up the cone leaving a hole at the top to accommodate an exit funnel. Reinforce this top tension point well.



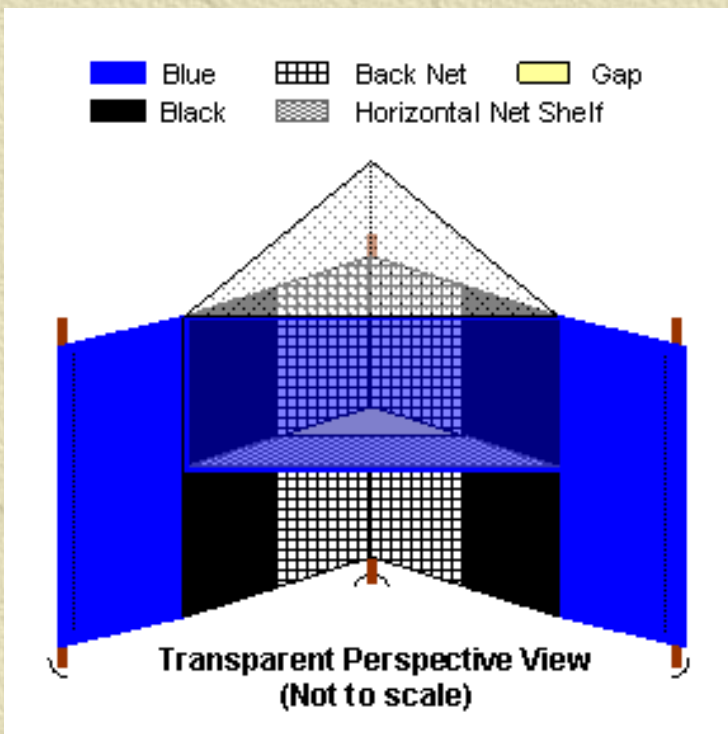
- ☀ Multiple cones should be cut out from netting back-to-back to retain a useful piece of cut-out netting (about 25 inches square). This can be pieced for later use as a trap component or can be folded up, trimmed and sewn to form a [netting sleeve](#) for use with a bottle-type trap collector.

The Completed Trap

As a final check, drop the whole trap over your head and stretch out the inside with your arms. Check each corner and seam to ensure that everything is closed.

Lastly, stretch the trap out between three poles to check for a sagging inner shelf. Depending on your sewing skills, you may need to sew a small triangular tuck into the netting shelf in the middle if it sags badly.

When using fabrics that fray badly, the free bottom edges should be finished. With netting that bunches during sewing, a fabric tie/loop can also be attached at the bottom junction of the black and netting to be used as an extra tie-down point (e.g. with a tent peg).



Congratulations, you are done!

Even if you are a novice sewer, this should not have been too traumatic. With experience, making a trap should only take a few hours. You now only need to prepare some [accessories](#) such as poles, wires, bottles, etc. to [erect](#) the trap.

Updated
25-Jan-2007