

Making a Kick Net by Hand



Kick nets are great tools for collecting insects in streams. They consist of a rectangular sheet of netting that's supported on either side with poles. They typically require two people to operate, one person who holds the net upright in the water with the bottom edge of the net laying against the streambed and a second person who "kicks" by stirring up all the substrate with his/her feet. The insects that are dislodged drift downstream into the net. Kick nets of varying quality are available commercially and if you want to use a kick net to do research, you'll be better off buying a well-made one that you can use for a long time. However, if you are collecting for fun, doing educational programs, have a limited budget, or simply want to explore a stream, a handmade kick net will do just fine.

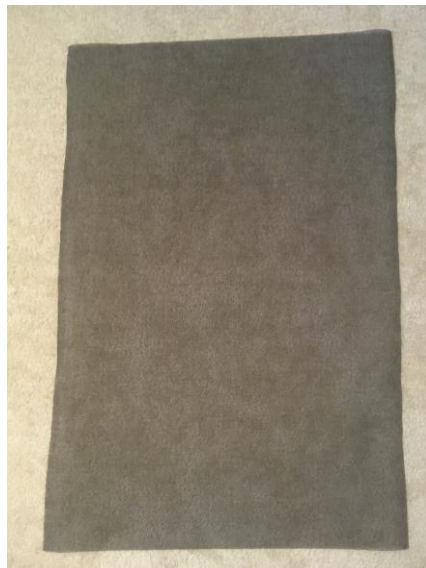
There are several ways to make kick nets, including simply stapling screen to a pair of dowels with a staple gun, but I like one that's just a little more complicated to make. I find they come apart less easily and don't require quite such frequent repairs. To make it, you'll need the following:

- **Window screen.** The kick nets pictured here were made from a roll of 36" x 25 foot screen, which you can purchase at a hardware store and will make several nets. I recommend the 48" screen if your water is more than a foot deep.
- **Two wooden dowels** - I use 1/2" x 36" dowels. If you are working in deeper water, get 48" dowels instead. Any diameter dowel will work, but I recommend something between about 1/2 inch and 3/4 inch. Anything smaller is easy to break and anything wider is needlessly heavy.
- **Two thumbtacks** (optional)
- **Scissors**
- **Sewing machine or needle for hand sewing**
- **Thread** – I recommend nylon thread for longevity



I have been sewing since I was about 8 years old, so I use a sewing machine to make my nets. You can do the exact same thing I describe here stitching by hand – it just won't be as quick to make.

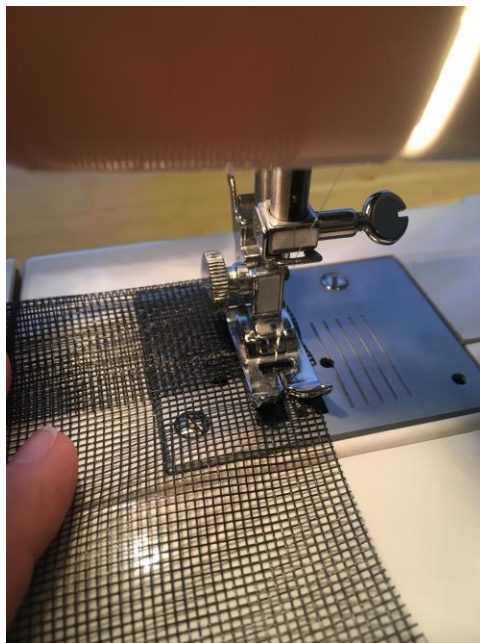
Step 1. Cut a rectangle of screen. I cut 2 foot sections from my roll, so my pieces were 36" (the width of the roll) by 24". I use the width of the roll of screen as the width of my net, so the length I cut from the roll is the final height of my net. The nets I make are 34 inches across and 24 inches high when complete.



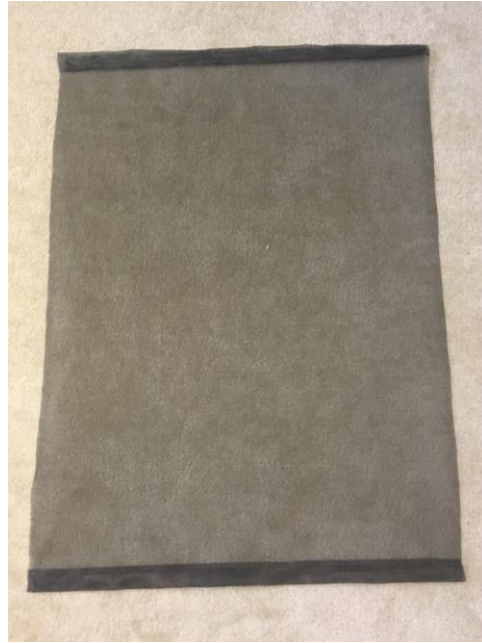
Step 2. Fold over about 1" along one of the shorter edges (make it 1.5 inches if you've got a ¾ inch dowel). Pin if needed. Stitch in place about 1/4 inch from the raw edge. If using a sewing machine, backstitch at both ends.



Step 3. Stitch across the tube you made about 1/4 inch from one end. Stitch back and forth a few times for a strong seam.



Step 4. Repeat on the other end of the netting, folding over about 1 inch, sewing 1/4 inch from the raw edge, and stitching across the bottom of the tube. Make sure the “bottom” on both ends of the net are the same! The final product should look like this:



Step 5. Insert dowels into the pockets you made.



Step 6. If you want to be able to remove the dowels when not in use, you're done. This makes it easier to fold up and put away. However, it makes the kick net harder to use as you have to hold the net in place in the stream and also hold the dowels in place in the pockets. I like to add a couple of thumbtacks to hold the net in place during use. Press them part way in with your thumb and then hammer them in the rest of the way.



The final net should look like this:



To make your kick net easy to carry, roll the net along one of the dowels and secure in place with a twist tie or other fastener:



It takes me about 15 minutes to make one of these nets with a sewing machine and they cost about \$4 altogether. Considering how much the professional kick nets cost, I much prefer making a new one of these when one breaks than laying out the cash for a new pro net.

Good luck and here's hoping you find many interesting things with your net!