How to mend a mist net

Betsy Trent Thomas

Necessity, as the proverb goes, is the mother of invention. My first mist nets were secondhand ones, given to me by a visiting ornithologist; they had seen 'better days.' The first time I set one up a Blue-black Grassquit (Volatinia jacarina) flew into it low, bounced back and, clinging to a weed stem eyed the net carefully, then flew right through one of the 10 cm rips in the net.

Not only is the price of new mist nets going up, but also more and more nets are being used in remote areas where there are no ready replacements for damaged ones. Accordingly, the only solution to having and keeping nets in good condition is a needle and thread and a little patience. Since I have learned how to mend my nets, I find the time spent doing so pleasant and relaxing. Also, I no longer feel stressed when they get torn, and perhaps more important to handling birds, I don't mind cutting the net with scissors to extract a badly tangled bird. This greatly speeds netting when you are very busy. Another bonus: mending keeps an old favorite, soft net in use. I still have and use those first gift nets, many mends later.

Men, please don't think that only women can mend nets. If you can extract a tiny warbler from a mist net, you can easily learn to mend a net yourself. Here's how.

Materials

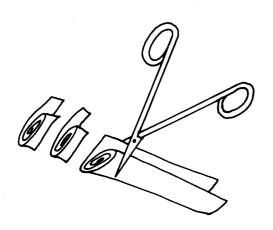
- 1 spool of black cotton thread, size 70 or 80 to mend the usual 50-denier nets. Heavier thread, size
 8-40, is needed for correspondingly heavier nets. Try to find 100% cotton because cotton is easier to knot and to handle than nylon, blends, or covered threads.
- 1 needle large enough to hold comfortably and to thread easily.
- 1 pair of sharp scissors; nail or surgical scissors are best.
- 1 white bathmat or towel with heavy nap. (Should you be mending a net that is not black then, of course, the thread should match the net color and the bathmat or towel must be a highly contrasting color.)
- 1 piece of light weight, brightly colored plastic about 15 X 15 cm. Fabric strips, soft narrow ribbon or colored string can also be used for markers; I have found strips made of locallyabundant, orange plastic grocery bags the most convenient.

How to mend

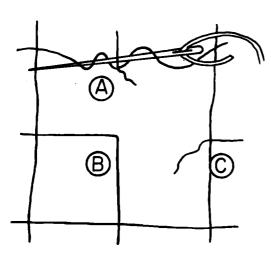
- 1. Make colored strips from the plastic by rolling or folding it in order to slice off $\frac{1}{2}$ -1 cm wide strips (Fig. 1).
- 2. Set up your net in an area where you can examine it easily against sky, then loosely tie, with a single overhand knot, a marker strip

through each hole and the adjoining net. Take down your net in the usual manner. After this, mark those nets which have holes to be mended at the end of netting sessions.

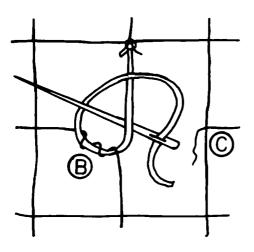
3. Spread out bathmat or towel on a table with good light; I prefer daylight. Open net bag and













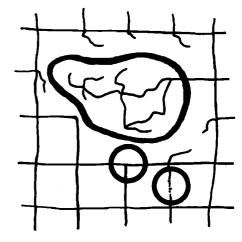


Fig.2

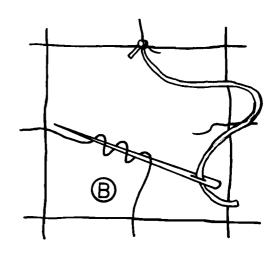
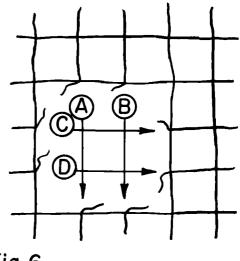


Fig.4



North American Bird Bander

take out one end of the net leaving the horizontal support line loops still tied. If your first hole is far from the end, carefully put that end of the net in a second holding bag.

- 4. Spread out your hole so that the bathmat nap keeps it open. Don't tackle a big hole on your first try; start with a small one. Test all weak-looking points around the hole such as those in the heavy circles in Fig. 2 by pulling smartly on them. If a bat has chewed some strands of your net, consider them broken. With the scissors, snip out all loose ends in the center of the hole, such as that which is in the large circle of Fig. 2, leaving only tie-on ends no longer than one side of the net's mesh. It is far easier and stronger to mend the whole area than to try to incorporate fragments of net.
- 5. The most common type of hole is shown in Fig. 3. Select a "T" break at either A or C for your starting point. Most, but not quite all, holes have one or more such "T's". Wrap the threaded needle around the net once on either side of the "T" as shown in Fig. 3. Then knot your thread to itself **twice**, then knot your thread **twice** again, this time to the broken end of the "T". Firm all knots with fingernail tension.
- 6. Now draw the thread to the next point, B in Fig 4, which in this case is an "open corner." Here wrap the needle around the corner **three** times, for there is often nothing to tie it to and, also, you will be changing directions for the next side. Draw your thread to the approximate size of the net's mesh and carry your thread back **over** itself, then bring the needle **under** your thread and up through the loop that is formed, as shown in Fig. 5.
- 7. Pull your thread through. If you see that the net square is going to be too big or too small, insert the needle tip into the closing knot to adjust the length of the side, guiding the knot closed with the needle. Finish the mend of Fig. 5 by again twice wrapping the needle around the "T" at C, then knotting your thread twice with the broken stub and to itself. Knot it a third time to itself if the stub is too short for knotting.
- 8. Trim off the thread and net stub ends to about 1—2 mm long, as you mend. These bits of thread and net can be collected handily at a corner of the bathmat, keeping your work area uncluttered and clear.
- 9. In the case of a hole like that shown in Fig. 6, you must use four separate threads. The first two in one direction, A and B, form a "ladder."

The third and fourth threads, C and D, are knotted as they cross threads A and B of the "ladder" by triple wrapping and knotting as described for point B in Fig. 5. The first two threads of the "ladder" should be left a little bit longer than the normal span, as knotting takes up a small amount of thread.

10. Some general reminders are: never tie a single knot, always two - and tension them smartly. Mend small holes around the perimeter of a big one first. In mending large holes, avoid long empty expanses, as it is sometimes difficult to judge where and how long the next point of connection should be. If you do make a connection error — be brave — snip it out. Don't run double threads along one side of a square. Be careful in trimming ends. If you never trim the wrong thread by mistake, you are sharper-eyed or smarter than I am — maybe both!

Apartado 80844, Caracas 108, Venezuela

