A DEVICE FOR FORMING HUMMINGBIRD BANDS

By Albert C. Lloyd and Mary Heimerdinger Clench

The special size X hummingbird bands issued by the U. S. Fish and Wildlife Service present certain problems. Unlike most bands, they are not provided by the Bird Banding Laboratory as preformed, ready-to-use rings. Instead they are issued as sheets of metal upon which are printed sets of 100 numbers and legends. Each band must be individually cut out from the plate, have its edges smoothed, and then be rolled into a cylindrical shape. Attaining a usable band, without sharp or rough edges, and in a reasonably round shape, is not always easy to do. Size X bands are so small they must be held with forceps or some other instrument while they are being formed, and the forceps will sometimes scar the soft metal or scrape off the numbers, even when a bander is using the greatest possible care.

At Powdermill Nature Reserve, Carnegie Museum's research station near Ligonier, Pennsylvania, over 1,000 Ruby-throated Hummingbirds have been banded since 1961. The necessity of shaping this many size X bands inspired the senior author to invent a small device which both facilitates the task and produces a better formed band.

Materials: (1) a hardwood block 1 inch wide, 5-1/2 inches long, and 3/4 inch thick; (2) two pieces of hard clear plastic, 4 inches long, 5/8 inch wide, and 1/8 inch thick; (3) two # 5 round-headed screws, 1/2 inch long; and (4) one # 17 wire brad, 1-1/4 inches long.

Procedure: Round off one end of each of the pieces of plastic so they will not bind when opened (see fig. 1). The facing edges of these pieces should be smooth and straight; this can be accomplished by rubbing them on a flat sheet of fine sandpaper. One-quarter inch from the rounded end of each piece of plastic, drill a 1/8th inch hole. Next place the plastic strips side by side along the center line of the wooden block, and drill through the 1/8th inch holes into the block with a 1/16th inch drill. Then fasten the plastic strips firmly to the block with the # 5 round-headed screws. Thus mounted the strips can be swung out from each other, but without any wobble or play on the wooden block. When closed, the outer (long) edges of the strips will extend slightly beyond the sides of the wooden base; this is useful when applying pressure to form a band.

Holding the two plastic strips tightly together, drill a 1/16th inch hole (# 4 in fig. 1) through the center line and slightly into the block, 1-1/4 inches from the end of the strips. Then drive the # 17 wire brad into the wooden block in the center of the drill mark. Cut off the brad 1/4 inch above the block and round off with a small file. Finally, enlarge slightly the semicircular holes in the plastic with a small round file. The stump of the brad should form a center post within the circular opening between the plastic pieces.

When forming a band on the device, first separate the two pieces

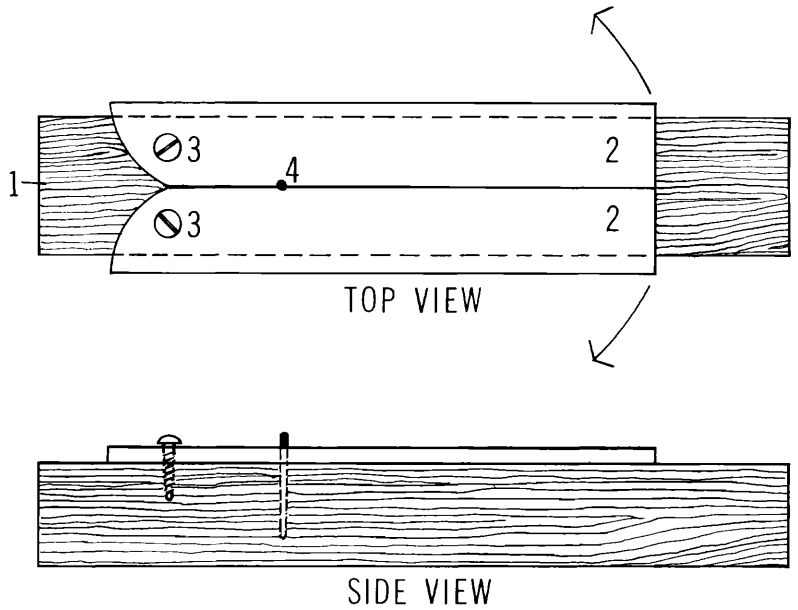

Figure 1. Top and side views of the device for forming hummingbird bands.

of plastic to expose the post. Then, with a pair of forceps, pick up a band strip and place it on edge against the far side of the post, parallel to the long axis of the block, and with the number side out. Center the band on the post so that the ends stick out evenly on either side. Then force the band into a horseshoe shape by pressing it against the post with the far piece of plastic. Now close the other strip of plastic, apply pressure, and you will have a perfectly round band. If the band is not positioned correctly, one end may be higher than the other; this can be rectified by applying pressure with the forceps to the sides of the abutting ends.

For band storage either a large safety pin, or an 18 gauge wire bent into the shape of a safety pin is excellent.

When cutting out the hummingbird bands from the aluminum plate, you will find unnumbered blanks the same size as the bands. These are useful to practice with until you are satisfied with your proficiency in shaping bands.

The above instructions are for forming bands to fit Ruby-throated Hummingbirds (*Archilochus colubris*). They may be adapted for species with thicker legs by using a larger diameter brad and enlarging the semicircular holes in the plastic.

Carnegie Museum, Pittsburgh, Pennsylvania 15213

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