

BAND SIZE DETERMINATION

BY HAROLD MICHENER

When banding birds the question of the proper size of band to be used often arises for a variety of reasons, namely, general inexperience of the bander, inexperience with the particular species in hand, bother of looking up old records or instructions to determine the size used previously on the species, and deviation in the size of the tarsus of the bird in hand from the normal for that species. In general, it can be stated that the optimum safety for the banded bird is given when the inside diameter of the band is the smallest possible which will allow the band to turn easily and to slide up and down freely on the tarsus. The tarsus gauge figured gives an easy means of determining which of the standard sizes of bands most nearly will give this optimum condition. If preferred, the gauge length may be shortened by placing some of the larger and seldom used sizes on a second gauge.

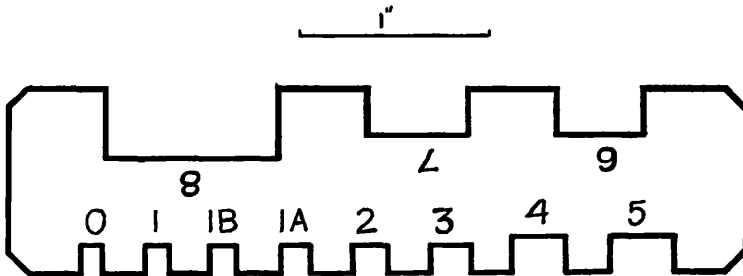


FIGURE 1. Tarsus gauge for determination of proper band size for the bird in hand.

With the gauge held perpendicular to the tarsus, determine the smallest notch which will slip over the greatest width of the tarsus without depressing the thin, rear edge. The number at this notch is the size designation of the band which should be used, unless some special condition indicates otherwise.

This gauge can be made from many materials, sheet plastics, hard pressboard, sheet metal, wood. Probably sheet celluloid, such as is frequently found on the backs of blotter pads, or as is used to make colored bands, is the best of easily available materials. It has an advantage in that the notches are more easily trimmed to the proper sizes. A bright color has the advantage of easier detection between the pages of the daily record book.

There is room for considerable ingenuity in cutting the notches

in the gauge. However, no especially accurate measuring and cutting tools are required. A sharp pointed knife, scissors, a twelve-inch straight-edge with an inch scale on it, a piece of moderately heavy paper and the material for the gauge are all that are needed. Proceed as follows:

1. With the straight-edge and knife cut from the paper a slender wedge that tapers from a point to about one-fourth inch wide at five inches from the point, and extends to about seven inches long.
2. In turn, insert this wedge, as far as it will go without appreciably forcing it, into bands of size 0 to 5, inclusive, and in each case make a mark on the wedge, when at its deepest insertion, at the band end which the wedge first entered. Try several bands of each size to make sure that a deformed one is not relied upon. Then draw lines across the wedge at these eight marks. The widths of the wedge at these lines are equal to the inside diameters of the corresponding bands. The slight taper of the wedge is necessary because the differences in diameters of the smaller bands are so little. For sizes 6, 7 and 8 the widths may be measured directly, or a wedge five inches long with end widths of one-fourth inch and one inch will be convenient. Wedges made of heavy cross-section paper are most convenient for determining the spots where the cross lines should be drawn.
3. Lay out the notches roughly with soft pencil on the gauge blank. With the wedge to measure the widths, press the knife point near the edge of the blank to mark a width for each notch slightly less than the inside diameter of the corresponding band; that is, use the width of the wedge at a point about one-eighth inch on the narrower side of the line for that band. Now with knife or scissors cut the side lines of the notch at these marks and break or cut along the bottom. The cutting of the side lines may be facilitated by a preliminary cut near the center and to the full depth of the notch. Measure the width of each notch with the wedge and trim the notch sides until the wedge, held squarely across the notch, enters just to the line for the proper band size. With good workmanship and luck the notches can be made the correct widths at the first cutting, but an over-width error is hard to correct.

The inside diameters, in fractions of an inch, for the various sizes of bands now being made, as specified by the Fish and Wildlife Service, are as follows.

BAND SIZES AND INSIDE DIAMETERS

0	1	1B	1A	2	3	4	5	6	7	8
.083 (1/12)	3/32	7/64	1/8	5/32	3/16	1/4	5/16	7/16	1/2	7/8

Some of the bands issued some years ago have inside diameters that differ from those given above. If the bander should still have such bands on hand, or should receive some in the future, he can easily provide for them by additional notches in the gauge, or, better, in another gauge.

One of these gauges sent to Mr. Frederick C. Lincoln elicited the following statement. "In my opinion you have hit upon a real idea, one that is sure to be of service to all station operators, but particularly to those who are just starting the work. As is not unusual with articles for which there is a need, it is a simple device. That is the reason it is particularly good. . . ."

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GENERAL NOTES

An Old Herring Gull.—A Herring Gull, *Larus argentatus smithsonianus* Coues, No. A609261, banded as a nestling by W. G. Means, R. J. Eaton, *et al.*, on South Gooseberry Island, Beverly, Massachusetts, on June 21, 1930, was found dying by Gail Wolff of Berkeley, California, on August 5, 1945, at Cape Ann, Massachusetts, within ten or fifteen miles of the banding station. Aside from the fact that this gull lived to the ripe old age of fifteen years, the recovery is interesting as added evidence of the tendency of birds of this species to spend their adult lives in the general region of their birthplace.—RICHARD J. EATON, Lincoln, Massachusetts.

Returns of Banded Birds at Pleasant Valley Sanctuary.—On February 6, 1947, at Pleasant Valley Sanctuary I trapped a male Hairy Woodpecker, *Dryobates villosus villosus* (Linn.), No. 39-307551, which had been banded by Dr. George Wallace January 19, 1939, at this same place, making this bird at least 7½ years old.

On September 26, 1946, at Pleasant Valley Sanctuary a Blue Jay, *Cyanocitta cristata bromia* Oberh., No. 39-307556, was trapped by me which had been banded at the sanctuary by Dr. Wallace on November 22, 1939, making the bird well over seven years old at least.—ALVAH W. SANBORN, Pleasant Valley Sanctuary, Lenox, Massachusetts.

Aged Chickadee, Tree Sparrow, and Chipping Sparrow.—On November 12, 1939, I banded a Black-capped Chickadee (*Parus atricapillus atricapillus* Linn.) 139-94096 at my banding station at Brooks School, North Andover, Massachusetts. This bird repeated frequently up to December 2, 1945, when it was last taken, being then at least in its seventh year. A record of a chickadee over nine years of age is given by Wharton (*Bird-Banding*, 1946, 17: 39). Harding (*Bird-Banding*, 1942, 13: 120) reports one at least six years old.

Eastern Tree Sparrow (*Spizella arborea arborea* (Wilson)) 139-94139 was banded by me on December 11, 1939. It repeated on February 23 and 27, 1940, and returned on January 11, 1941, and again on January 13, 1947. When last captured it was in its eighth year. Middleton (*Bird-Banding*, 1943, 14: 64) reports two Eastern Tree Sparrows, each one at least seven years old.

I banded an adult male Chipping Sparrow (*Spizella passerina passerina* (Bechst)) 139-38306 on May 28, 1939. It repeated on April 30 and on May 5,