

large species, whether hatched from the small end or the large end of the egg.

The appearance of the fracture understandably led Porter (Friends in feathers, 1917) to believe erroneously that hatching of the Bobwhite (*Colinus virginianus*) is effected by external (parental) agency. The egg membranes of the hatched shell as they dry, contract, especially where cut by the egg tooth (Could "hatching enzymes" such as possessed by animals of other classes be involved?), pulling inward the loose fragments of shell and creating an apparent edge of external shear.—David Kenneth Wetherbee, Patuxent Research Refuge, U. S. Fish and Wildlife Service, Laurel, Maryland.

Some Leg Sizes and Band Sizes. Many data on leg sizes and band sizes have been tabulated by Blake (*Bird-Banding*, 25: 11-16, 27: 76-82, and 29: 90-98) and Bergstrom (*Bird-Banding*, 25: 58-59). The data in Table I represent information on species not covered by Blake and Bergstrom or species on which they had few data.

Table I. Leg sizes and band sizes.

Species	Sample Size	Aver. Greater Diameter	Aver. Lesser Diameter	Band Size
<i>Butorides virescens</i>	1	7.7	3.6	6
<i>Accipiter velox</i> Im. ♂	16	3.3	2.3	2
<i>Accipiter velox</i> Im. ♀	12	4.1	3.1	3
<i>Charadrius vociferus</i>	16	2.8	2.0	1A
<i>Actitis macularia</i>	34	2.5	1.7	1B
<i>Tringa solitaria</i>	22	2.8	1.9	1A
<i>Totanus melanoleucus</i>	1	5.0	2.7	3A
<i>Totanus flavipes</i>	18	3.3	2.1	2
<i>Erolia melanotos</i>	1	2.5	1.8	1B
<i>Erolia minutilla</i>	29	1.7	1.3	0
<i>Limnodromus griseus</i>	1	3.2	2.2	2
<i>Ereuntes pusillus</i>	64	1.9	1.4	1
<i>Empidonax flaviventris</i>	8	1.5	0.9	0
<i>Dolichonyx oryzivorus</i> ♂	44	2.6	1.6	1A
<i>Dolichonyx oryzivorus</i> ♀	32	2.5	1.5	1A or 1B
<i>Passerculus sandwichensis</i>	17	1.8	1.1	0

The measurements were made with a "Blake" gauge and the recommended band sizes follow Table I in Blake (*op. cit.*). J. Woodford and Frank T. Lovesy. c/o Royal Ontario Museum, Toronto 5, Canada, and 220 Gowan Avenue, Toronto, Canada.

More Recoveries of Massachusetts Robins.—Some of the Robins (*Turdus migratorius*) banded at our station in Groton and recovered elsewhere have been described in earlier issues of *Bird-Banding* (24: 5-6, 28: 99). In addition to four recovered within 50 miles of Groton, we have had seven more Southern reports, as follows:

Age

Sex	Month Banded	Month Recovered	Place Recovered
A ♂	June, 1953	November, 1954	Claxton, Ga.
im.	July, 1952	March, 1954	Whittier, N. C.
♀	July, 1952	December, 1955	Ocean Springs, Miss.—"shot"
im.	Sept., 1955	February, 1956	Whiteville, N. C.
♀	Sept., 1954	January, 1957	Savannah, Ga.—"caught by cat"
im.	July, 1956	January, 1958	Plant City, Fla.—"shot"
im.	July, 1957	February, 1958	Hogansville, Ga.

—William P. Wharton, Groton, Mass.

White-Throated Sparrow Wintering Dates at Baltimore.—In the north-western suburbs of Baltimore, an area just above the Fall Line, the White-throated Sparrow (*Zonotrichia albicollis*) arrives in late September or early October and is then seen until about mid-May; for the period 1951-1957 my extreme dates are September 27 and May 17. Observation of some color-banded

birds indicates, however, that the individuals which actually spend the winter here do not arrive until late October and early November—some even later than that, perhaps—and that they leave from late March to late April; my extreme dates for such marked birds 1951-1957 are October 19 and April 29.

During 1951-1957 I banded 120 White-throats, and used color bands on 51 of them. The original trapping dates of color-banded birds that wintered about my home were October 21, November 5, 8, 11, 12, 14, 19, 27, December 5, 16, January 1, February 12. The dates on which color-banded return birds were first seen were October 19, 24 (two), December 20. The dates on which color-banded winterers were last seen were March 22*, 31, April 13, 14, 19, 21 (two), 22, 23 (two), 24, 27, 29; the bird marked * may have been present to April 8.

Although the dates from November 27 on seem late for actual arrivals, and no doubt represent at least some birds that arrived earlier but were not promptly trapped (of course it is not assumed that *any* bird was trapped on the very day of its arrival), it may be noted that fall migrants as late as December 20 are reported for Maryland by Stewart and Robbins (Birds of Maryland and the District of Columbia, North American Fauna No. 62, 1958: 366-368); they also report spring migrants as early as March 5.

The longest stay I have recorded for a color-banded winter resident is 183 days—from October 24, 1954, to April 24, 1955. Some other stays have been 135, 156, 162, 165, and 169 days.—Hervey Brackbill, 2620 Poplar Drive, Baltimore 7, Maryland.

Migration of Breeding American Robins at Baltimore.—Observation of color-banded Robins (*Turdus migratorius*) at Baltimore, Maryland, from 1942 through 1958 has yielded some information on the movements of those that breed in a part of the city just above the Fall Line. The data come from 55 birds that were present from 1 to 6 years.

My dates indicate that the first males return before the first females, and that the majority of males return before the majority of females; however, some females return before some males. The two sexes seem to leave at the same time. The longest stays I have recorded were made, by both sexes, in the warm year 1951: a male was present February 13-October 4, which is 234 days; a female was present March 9-October 20, which is 226 days. Some other stays have been: males, 201, 202, 214, 220 (two birds), 222 days; females, 205, 209, 225 days.

Sixty-three first sightings of return breeders have ranged from February 13 to April 28; the peak period of returns has been March 6 to April 7. Twenty-two dates obtained during periods of daily search for returned birds, and so believed to be precise, are: 10 males, February 13 to March 20; 12 females, March 7 to April 5. A return bird has twice been the first Robin of the year; some other return birds have appeared during the first few days of migration.

Thirty-seven last sightings of breeding birds have ranged from September 5 to October 31; the peak period of last sightings has been October 2-20. Fifteen final dates believed to be precise are: 7 males, September 28 to October 17; 7 females, September 28 to October 20; one bird of unknown sex, October 31.

Each year some of my color-banded Robins disappear in July and August and are unfindable later despite much searching; I have 40 "final" dates in those months. Presumably, though, these birds have merely secluded themselves especially well during the molt, for the ones I have recorded into September and October have stayed until they then completed their change of plumage. Invariably, the latest departure dates are yielded by birds that are accustomed to visit my window feeding shelf daily. Stevens (*Bird-Banding*, 23: 168-169, 1952) similarly reports his latest dates, of "about October 15-20" at Fargo, North Dakota, obtained from regular feeding shelf visitors.

Three Robins that I have banded have been recovered at a distance. One nestling, banded May 23, 1949, was "trapped, probably near New Orleans, La.," the letter reporting this to the Fish and Wildlife Service was dated January 29, 1950. Another nestling, banded May 21, 1952, was "caught" at Delraida, Alabama, a suburb of Montgomery, on February 5, 1954. The spots at which these two birds were hatched were only 65 yards apart; the bird caught in its first winter was 200 miles farther southwest than the second-winter bird. An adult male color-banded August 29, 1946, and not seen again was found dead at Roper, North Carolina, on March 6, 1947.—Hervey Brackbill, 2620 Poplar Drive, Baltimore 7, Maryland.