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North Eastham, Cape Cod, Massachusetts.

RETURNS FROM BANDED BIRDS: SOME LONGEVITY RECORDS OF WILD BIRDS

BY MAY THACHER COOKE

(Continued from page 119)

TOWHEE. *Pipilo erythrophthalmus*

- *B223710, banded at Demarest, N. J., on August 8, 1933, by Keahon Garland, was retrapped at same place June 25, 1937, rebanded with B223755, and again retrapped May 12, 1938.
- B237662, banded at Summerville, S. C., on April 10, 1933, by W. P. Wharton, was retrapped at same place January 31, 1937.
- *C126037, banded at Demarest, N. J., on August 3, 1932, by B. S. Bowdish, was

retrapped at same place May 9, 1935, rebanded with 34-247690, and again retrapped June 1, 1938.

- *34-235642, banded at Lexington, Mass., on July 27, 1934, by Mrs. Ada C. Govan, was retrapped May 20, 1935, and July 12, 1939 at same place.
35-117841, banded at Huntington, L. I., N. Y., on June 27, 1935, by Geoffrey Gill, retrapped at same place July 18, 1936, July 12, 1937, October 6, 1938, and May 16, 1939, was rebanded August 4, 1939, with band 39-122343, was retrapped May 11, 1940.
35-213572, banded at Nashville, Tenn., on November 13, 1935, by Mrs. F. C. Laskey, was retrapped at same place July 11, 1939, and April 7, 1940.

SPOTTED TOWHEE. *Pipilo maculatus*

- *A237627, banded at Berkeley, Calif., on July 23, 1931, by E. L. Sumner, was found dead at same place September 11, 1936.
A265873, banded at Garnet Valley, Summerland, B. C., by S. A. Liddell on July 5, 1932, was retrapped at same place March 13, 1937, rebanded with 34-227082, and again retrapped March 28, 1938, June 12, 1939, and March 19, 1940.

BROWN TOWHEE. *Pipilo fuscus*

- *A274362, banded at Strawberry Canyon, near Berkeley, Calif., on July 25, 1932, by E. L. Sumner, was killed in mouse trap at same place November 3, 1937.

SAVANNAH SPARROW. *Passerculus sandwichensis*

- F36120, banded at McMillan, Mich., on August 4, 1931, by O. M. Bryens, was retrapped May 15, 1936, and May 21, 1937 at same place.
*F91184, banded at McMillan, Mich., on August 6, 1932, by O. M. Bryens, was retrapped May 4, 1935 and June 25, 1937. Found dead July 30, 1937 at same place.
*H36564, banded at McMillan, Mich., on July 6, 1933, by O. M. Bryens, was retrapped May 16, 1934, July 15, 1935, July 6, 1936, and June 14, 1940 at same place.

VESPER SPARROW. *Pooecetes gramineus*

- B91717, banded at Blaney Park, Mich., on May 12, 1933, by K. Christofferson, was retrapped at same place May 11, 1939.
C145534, banded at Princeton, Mass., on September 6, 1933, by L. B. Chapman, was retrapped at same place June 30, 1936, and July 2, 1938.
L1880, banded at North Eastham, Cape Cod, Mass., on August 28, 1933, by O. L. Austin, was retrapped at same place, May 4, 1935, July 21, 1936, July 19, 1937, and April 16, 1938.

SLATE-COLORED JUNCO. *Junco hyemalis*

- 685453, banded at Wyncote, Pa., on January 10, 1929, by Miss Esther Heacock, was retrapped at same place January 1, 1935.
A138516, banded at Chestnut Hill, Philadelphia, Pa., on February 20, 1934, by John Dornan, was retrapped at same place February 2, 1937 and January 11, 1939.
A142766, banded at Oliverea, N. Y., on May 6, 1929, by Mrs. Florence K. Daley, was retrapped at same place April 25, 1934.
F22558, banded at Overbrook, Pa., on November 6, 1930, by Henry P. Baily, was retrapped at same place January 20, 1937.
F59172, banded at Groton, Mass., on December 3, 1931, by W. P. Wharton, was retrapped at same place December 9, 1937.
F62254, banded at Washington, D. C., on December 19, 1931, by John Molter, was retrapped at same place December 3, 1936 and April 13, 1937.
F98275, banded at Bar Harbor, Maine, on April 13, 1933, by Mrs. Effie A.

- Anthony, was retrapped at same place April 19, 1938.
 L8707, banded at Newton Center, Mass., on December 4, 1933, by F. H. Kennard, was retrapped at Cambridge, Mass., April 8, 1938.
 34-21352, banded at Chestnut Hill, Philadelphia, Pa., on February 26, 1934, by John Dornan, was retrapped at same place April 9, 1937 and January 12, 1939.

JUNCO. *Junco oreganus*

- A61615, banded at Barkerville, B. C., on April 28, 1927, by T. T. McCabe, was captured and released at Kitimat Mission, B. C., April 20, 1934.
 H72836, banded at Grand Canyon, Ariz., on December 14, 1932, by E. D. McKee, was retrapped at same place October 19, 1938.
 L43591, banded near Berkeley, Calif., on November 22, 1933, by E. L. Sumner, was retrapped at same place February 14, 1938.
 F59898, banded at Salem, Ore., on October 17, 1931, by F. M. Erickson, was retrapped at same place February 1, 1937.

RED-BACKED JUNCO. *Junco phaeonotus*

- H72661, banded at Grand Canyon, Ariz., on December 17, 1932, by E. D. McKee, was retrapped at same place November 24, 1938.
 H72690, banded at Grand Canyon, Ariz., on December 10, 1932, by E. D. McKee, was retrapped at same place November 25, 1938.
 H72824, banded at Grand Canyon, Ariz., on December 10, 1932, by E. D. McKee, was retrapped at same place December 15, 1937, March 21, 1938 and November 25, 1938.

TREE SPARROW. *Spizella arborea*

- A140497, banded at Amherst, Mass., on January 15, 1931, by Mrs. F. M. Cutler, was retrapped at same place February 17, 1932, February 9, 1933, December 18, 1933, November 24, 1935, March 13, 1937, April 12, 1937, and November 19, 1937.
 B129607, banded at Ithaca, N. Y., on January 27, 1931, by A. C. Fraser, was retrapped at same place January 1, 1932, November 27, 1932, November 18, 1933, December 3, 1934, December 13, 1935, March 10, 1937, and December 19, 1937.
 B170312, banded at Norristown, Pa., on February 21, 1932, by R. J. Middleton, was retrapped at same place December 1, 1938, the fifth return.
 C171621, banded at Pequannock, N. J., on February 12, 1933, by Gustave Dumont, was retrapped at same place January 14, 1939, the sixth return.
 C185357, banded at Pequannock, N. J., on March 17, 1933, by Gustave Dumont, was retrapped at same place January 16, 1938, the fourth return.
 F39680, banded at Jamestown, N. Dak., on April 6, 1932, by G. L. Berner, was shot at Alva, Okla., about January 1, 1937.
 F76438, banded at Lenox, Mass., on December 15, 1932, by S. M. Pell, was retrapped at same place January 8, 1938 and November 23, 1938.
 H51480, banded at Demarest, N. J., on February 15, 1933, by B. S. Bowdish, was retrapped at same place January 21, 1937 and December 7, 1937.
 H55443, banded at Branchport, N. Y., on December 11, 1932, by Verdi Burtch, was retrapped at same place February 16, 1938.

CHIPPING SPARROW. *Spizella passerina*

- B80841, banded at Beachton, Ga., in the spring of 1929, by S. H. Stringer, was shot at same place March 8, 1938.
 C64747, banded at Sanbornton, N. H., on October 7, 1932, by E. C. Weeks, was retrapped at same place October 15, 1937.
 F22491, banded at Winter Harbor, Maine, June 26, 1932, by J. P. Wetherill, Jr., was retrapped at same place July 8, 1938.
 F22755, banded at Summerville, S. C., on March 2, 1931, by W. P. Wharton,

- was retrapped at same place April 9, 1937.
F67318, banded at Summerville, S. C., on February 15, 1932, by W. P. Wharton was retrapped at same place March 10, 1937.
H91522, banded at Groton, Mass., on May 8, 1933, by W. P. Wharton, was retrapped at same place May 11, 1936 and April 27, 1937.
H91525, banded at Groton, Mass., on May 8, 1933, by William P. Wharton, was retrapped same place May 2, 1939, April 27, 1940, and October 3, 1940, when band was replaced by 40-1538.
H92413, banded at North Eastham, Cape Cod, Mass., on October 13, 1933, by O. L. Austin, was retrapped same place May 10, 1940.
35-31420, banded at Beltsville, Md., on April 25, 1935, by W. M. Davidson, was retrapped same place September 13, 1938, March 30, 1939, and April 17, 1940.

FIELD SPARROW. *Spizella pusilla*

- F67334, banded at Summerville, S. C., on February 20, 1932, by W. P. Wharton, was retrapped at same place March 2, 1937.
H27290, banded at Elmhurst, L. I., N. Y., on October 21, 1932, by Mrs. Marie V. Beals, was shot at York, Pa., April 7, 1937.
L20971, banded at Summerville, S. C., on April 11, 1931, by W. P. Wharton, was retrapped at same place March 13, 1937.
L39594, banded at North Eastham, Cape Cod, Mass., on April 15, 1934, by O. L. Austin, was retrapped October 22, 1939, at the same place.
34-8239, banded at Nashville, Tenn., on October 5, 1934, by Mrs. F. C. Laskey, was retrapped same place March 20, 1935, March 25, 1936, March 17, 1937, April 3, 1938, March 20, 1939, and March 23, 1940.
34-33523, banded at Ithaca, N. Y., on August 15, 1934, by A. C. Fraser, was retrapped October 23, 1935, April 22, 1937, and April 25, 1939, same place.

HARRIS'S SPARROW. *Zonotrichia querula*

- 124795, banded at Fairbury, Nebr., on January 3, 1925, by Agness and Susie Callaway, was retrapped same place April 18, 1928, February 17, 1929, November 8, 1929, and April 26, 1931.
176079, banded at Fairbury, Nebr., on December 23, 1925, by Agness and Susie Callaway, was retrapped same place February 17, 1929, December 9, 1929, February 23, 1930, and February 23, 1933.
511130, banded at Fairbury, Nebr., on December 15, 1927, by Agness and Susie Callaway, was retrapped same place April 2, 1929, November 6, 1929, April 4, 1931, April 9, 1934, and November 4, 1934.
697484, banded at Chapman, Kans., on December 10, 1932, by W. N. Wilkins, was retrapped same place December 9, 1933, March 19, 1939, and February 13, 1941.
34-107247, banded at Chapman, Kans., on January 1, 1934, by W. N. Wilkins, was retrapped same place March 21, 1939, and January 21, 1940.

WHITE-CROWNED SPARROW. *Zonotrichia leucophrys*

- *569909, banded at San Francisco, Calif., on September 1, 1930, by F. N. Bassett, was found dead at San Francisco, Calif., April 28, 1938.
*A178778, banded at Berkeley, Calif., on June 19, 1930, by E. D. Clabaugh, was retrapped at same place September 17, 1937.
B124047, banded at Berkeley, Calif., on November 23, 1930, by E. D. Clabaugh, was shot at same place about August 5, 1940.

GOLDEN-CROWNED SPARROW. *Zonotrichia coronata*

- 123932, banded at Stanford University, Calif., on February 16, 1924, by P. N. Baxter, was retrapped same place January 6, 1928, and November 30, 1930.
150448, banded at Stanford University, Calif., on December 9, 1924, by G. H.

- Offerman, was retrapped same place December 5, 1930 and March 7, 1931.
 A176908, banded at Woodacre, Marin County, Calif., on October 20, 1930, by J. Mailliard, was retrapped at same place October 25, 1936, December 5, 1937, and March 26, 1938.
 C102454, banded at Benicia, Calif., on December 21, 1932, by E. A. Stoner, was retrapped at same place February 10, 1937.

WHITE-THROATED SPARROW. *Zonotrichia albicollis*

- A197232, banded at Summerville, S. C., on January 7, 1931, by W. P. Wharton, was retrapped at same place January 26, 1937, and rebanded with 36-125387.

FOX SPARROW. *Passerella iliaca*

- B191126, banded at Oradell, N. J., on November 15, 1931, by Mrs. C. L. Bull, was recovered on Pelleys Island, Newfoundland, December 28, 1936.
 C160076, banded at Pomfret, Conn., on November 11, 1932, by Mrs. K. B. Wetherbee, was retrapped at St. Pierre Island, near Newfoundland, April 10, 1937.
 C169173, banded at Ambler, Pa., on March 11, 1933, by Charles Platt, was captured at Franklin, Conn., March 13, 1939.

SONG SPARROW. *Melospiza melodia*

- A124267, banded at Demarest, N. J., on April 15, 1929, by B. S. Bowdish, was retrapped at same place March 11, 1934, and rebanded with F120982.
 A132620, banded at Hillsdale, Mich., on April 21, 1931, by B. A. Barber, was retrapped at same place April 9, 1936.
 A162476, banded at Branchport, N. Y., on September 21, 1929, by Verdi Burtch, was retrapped 2 miles north of Branchport, N. Y., March 30, 1937.
 B102111, banded at Harvard, Mass., on September 20, 1930, by J. L. Peters, was retrapped at same place August 8, 1936.
 B130907, banded at Branchport, N. Y., on July 23, 1931, by Verdi Burtch, was retrapped at same place August 15, 1936.
 *B165736, banded at Gates Mills, Ohio, on July 23, 1931, by S. P. Baldwin, was retrapped at the same place June 5, 1932, July 10, 1933, June 8, 1934, April 15, 1935, July 2, 1936, and July 18, 1937, when it was rebanded with F20302.
 *B174251, banded at Winter Harbor, Maine, August 3, 1932, by J. P. Wetherill, Jr., was retrapped at same place July 15, 1937 and July 7, 1938.
 B194235, banded at Komoka, Ont., on July 20, 1932, by J. C. Higgins, was retrapped July 27, 1938, at the same place and band 34-122852 added.
 *C76579, banded at Winter Harbor, Maine, July 19, 1931, by J. P. Wetherill, Jr., was retrapped at same place July 20, 1936.
 C111312, banded at Groton, Mass., on May 24, 1932, by W. P. Wharton, was retrapped at same place August 3, 1936 and April 21, 1937.
 C142992, banded at Waynesville, N. C., on June 26, 1933, by Miss Marion A. Boggs, was retrapped at same place April 25, 1938.
 *F35260, banded at North Eastham, Mass., on June 25, 1931, by O. L. Austin, was retrapped at same place June 28, 1936.
 F51215, banded at Lisle, Ill., on October 1, 1931, by E. Jurica, was retrapped at same place April 9, 1937, the sixth return.
 *H75001, banded at Demarest, N. J., on August 7, 1933, by Keahon Garland, was retrapped at same place April 3, 1938.
 H88704, banded at Ottawa, Ont., on April 23, 1933, by R. E. DeLury, was retrapped at same place June 25, 1934, April 8, 1935, April 26, 1936, and May 9, 1937.
 *C149409, banded at Greenwich, Conn., on June 30, 1933, by Miss M. G. Willson, was killed by auto at Elmsford, N. Y., March 27, 1939.

SNOW BUNTING. *Plectrophenax nivalis*

B80275, banded at McMillan, Luce County, Mich., on February 28, 1929, by Oscar M. Bryens, was retrapped at the same place January 21, 1931, February 19, 1933, and January 20, 1934.
L73527, banded at McMillan, Mich., on February 22, 1934, by Oscar M. Bryens, was retrapped at same place February 3, 1936, January 27, 1933, and February 15, 1941.

U. S. Fish and Wildlife Service, Washington, D. C.

GENERAL NOTES

Sex Ratio in Oklahoma Tree Sparrows (*Spizella arborea*).—Several years ago I submitted partial evidence (Heydweiller, 1935 and 1936) for the theory that Tree Sparrows segregate in winter, with the female range somewhat farther south than the male. This postulation was based on large series of birds collected at Ithaca, New York, Indianapolis, Indiana, and some two hundred Kansas specimens loaned by the Museum of Zoology at Lawrence, Kansas. Thus I had material from the northern and central parts of their range.

Three years ago we moved to Oklahoma, reasonably near the southern extension of Tree Sparrow range. Between affairs purely domestic I have tried to check the truth of this theory, with results both puzzling and highly satisfactory.

Specimens collected during the winter 1940-1941, when Tree Sparrows were the most abundant winter bird in the Stillwater area, were in precisely the reverse of the sex ratio at Ithaca, New York, and consequently in complete accord with my theory. The original table can now be completed as follows:

Part of Range of Species	Locality	No. of Winter	
		Males	Females
North	New York State (Chiefly from Ithaca, personal collection, 1933-1935)	102	31
Central	Indiana (Indianapolis, col. Jan. 1935, dissected by A. M. H.)	16	22
South Central	Kansas (U. S. Biol. Surv. and University of Kansas collections)	185	158
South	Oklahoma (Stillwater, personal collection, 1940-1941)	31	78

The 1939-1940 collection, however, was highly puzzling, and I submit the following unanswered problems for what they are worth. During this winter Tree Sparrows were relatively infrequent in the Stillwater area. In spite of a vigorous campaign to collect them in quantity, only 39 were bagged the entire season, yielding the disconcerting ratio of 28 males (72%) and 11 females (28%). While these figures were too meager to consider representative, the proportions throughout the season remained too consistently in favor of the males to ignore.

One explanation that sounded plausible was that the bulk of the Tree Sparrows might have travelled farther south that year, an excessively severe winter in Oklahoma, giving this state the sex proportions usually found in the northern states. To test this postulation a table was made of Tree Sparrow records in the Bird Lore Christmas Censuses from 1936 through 1941, covering the two tiers of states immediately west of the Mississippi. However subject to variables in man hours, weather, and possible inaccuracies, these records still indicated unquestionably that the center of Tree Sparrow abundance in 1939-1940 occurred at the Iowa and Kansas level, with unprecedented numbers at every station and sub-normal figures to the extreme north and south. During the following winter (1940-1941) they seem to have distributed themselves more evenly, with sharp