

Species Snapshot: Chipping Sparrow (*Spizella passerina*)

This is the eighth installment in our regular feature presenting a brief synopsis of the banding and encounter records submitted to the Bird Banding Laboratory for a particular species. Each installment will feature a new species; suggestions for species to be covered or data to be presented are welcome (swgabrey@gmail.com). Space limitations of **NABB** prohibit any in-depth analysis of the data and these notes are not meant to show any trends in population parameters such as population density or growth rate, geographic distribution, etc. and should not be viewed as a definitive analysis of the status of the species. Although the banding program began in the 1920s, the currently available digital records for banding data include only those records from 1960 to the present (pre-1960 banding data are available in other formats, however). All encounters, including those of birds banded before 1960, are available in digital format. The following summary includes only those birds banded and encountered from 1960 through Jun 2019 in the United States, Canada, Mexico, and the Caribbean.

Banded birds

Numbers and Age and Sex Categories. – Since 1960, 360,670 Chipping Sparrows have been banded in the United States, Canada, Mexico, and the Caribbean (Table 1). Sex was identified (either at banding or upon encounter) for 11% (n = 38,080); of these, 61% (n = 23,069) were males and 39% were females (n = 15,372). Of those banded as males, 95% (n = 22,129) were aged as AHY, SY, or ASY compared to 3% (n = 682) aged as HY or L, and 1% (n = 258) aged as U. Of those banded as females, 98% (n = 15,127) were aged as AHY, SY, or ASY compared to 1% (n = 142) aged as HY or L, and <1% (n = 103) aged as U. Of the 322,229 sparrows for which sex was not identified, 56% (n = 182,040) were aged as AHY, SY, or ASY compared to 36% (n = 114,515) aged as HY or L, and 8% (n = 25,674) aged as U.

Geographic distribution. – Since 1960, Chipping Sparrows have been banded in all of the United States except Hawaii (n = 294,971); in all of

the Canadian provinces and territories except Newfoundland, Labrador, and Nunavet (n = 64,649); Mexico (n = 1,049); and 3 Caribbean countries (Belize, n = 4; Bahamas, n = 3; and Cuba, n = 2) (Figure 1). At least 10,000 sparrows were banded in each of 9 States and 2 provinces. The top 5 states (Texas, n = 37,008; Pennsylvania, n = 25,571; Michigan, n = 18,634; Colorado, n = 16,706; and New York, n = 15,650) accounted for about 39% of the sparrows banded in the United States. The top 2 provinces (Ontario, n = 42,220; and Alberta, n = 12,775) accounted for 85% of all sparrows banded in Canada.

Seasonal distribution. – About 43% (n = 156,467) of all Chipping Sparrows were banded between May and Aug, 27% (n = 95,953) between Sep and Oct, 11% (n = 38,845) between Nov and Feb, and 19% (n = 69,404) between Mar and Apr (Table 2). Of the sparrows banded in the United States, 36% (n = 107,237) were banded between May and Aug compared to 30% (n = 88,985) between Sep and Oct, 13% (n = 37,784) between Nov and Feb, and 21% (n = 60,694) between Mar and Apr. Of the sparrows banded in Canada, 76% (n = 49,230) were banded between May and Aug, 11% (n = 6,940) between Sep and Oct, <1% (n = 156) between Nov and Feb, and 13% (n = 8,323) between Mar and Apr. Most sparrows banded in Mexico were banded between Nov and Feb (n = 903); none were banded in Mexico between May and Aug.

Encounters

Numbers and Sex and Age Categories. – There have been 446 encounters representing 436 Chipping Sparrows banded in the United States, Canada, Mexico, and the Caribbean between 1960 and Jun 2019. No encounter record had invalid or mismatched sex, age, or species data and no sparrows were encountered more than once on the same day. Eight of the 436 sparrows were encountered twice, and one was encountered 3 times; the following summary is based on only the most recent encounter for those birds with multiple encounters.

Sex was identified for 12% of the sparrows (n = 52) encountered; 60% were males and 40% females (Table 1). All but 1 of the males (n = 30)

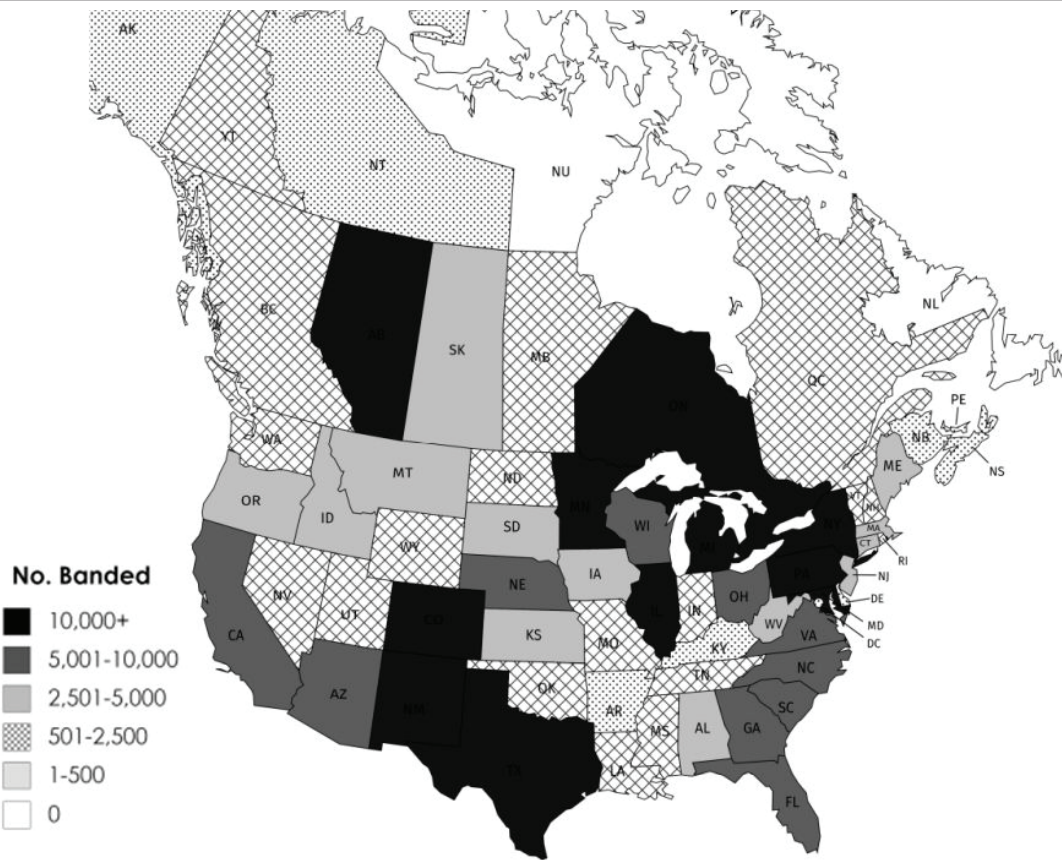


Figure 1. Geographic distribution of banding locations of Chipping Sparrows in the United States and Canada between 1960 and June 2019. Not shown: Alaska (n = 102), Yukon (n = 530), Northwest Territories (n = 74), Mexico (n = 1,049), Belize (n = 4), Bahamas (n = 3), and Cuba (n = 2).

Age code	Banded birds				Encountered birds			
	Male	Female	Unknown	Total	Male	Female	Unknown	Total
AHY	16,111	11,814	144,981	172,906	25	20	226	271
HY	679	140	109,831	110,650	0	0	74	74
L	3	2	4,684	4,689	0	0	11	11
SY	3,370	2,115	25,434	30,919	2	1	16	19
ASY	2,648	1,198	11,625	15,471	3	0	9	12
Unknown	258	103	25,674	26,035	1	0	48	49
Total	23,069	15,372	322,229	360,370	31	21	384	436

Table 1. Number of Chipping Sparrows banded and encountered in the United States, Canada, Mexico, and the Caribbean between 1960 and Jun 2019 by age at banding and sex (either sex at banding or sex updated upon encounter).

Country/region	May – Aug	Sep – Oct	Nov – Feb	Mar – Apr	Total
United States	107,237	88,985	37,784	60,964	2,949,711
Canada	49,230	6940	156	8323	64,649
Mexico	0	28	903	110	1,041
Caribbean	0	0	2	7	9
Total	156,467	95,953	68,845	69,404	360,670

Table 2. Number and seasonal distribution of Chipping Sparrows banded in the United States Canada, Mexico, and the Caribbean between 1960 and Jun 2019. Total for US banding includes 1 sparrow with unknown banding date.

and all females (n = 21) were banded as AHY, SY or ASY; the remaining male was aged as U. Of those sparrows for which sex was unknown, 65% (n = 251) were banded as AHY, SY, or AHY, 22% (n = 85) as HY or L, and 13% (n = 48) as U.

Three percent (n = 13) of the Chipping Sparrows encountered were 6 yr 0 mo or older when encountered: 6 AHY-U, 3 HY-U, 2 AHY-M and 2 AHY-F. Twenty-one percent (n = 93) were between 03yr and 05yr11mo, 53% (n = 233) were between 01yr and 02yr11mo, and 22% (n = 97) were less than 11 mo or had no minimum age recorded.

The oldest sparrow encountered was banded as an HY-U in Sep 1987 in Ontario and encountered in May 1998 at the same location (minimum age at encounter 10yr11mo). This record was also the longest elapsed time between banding and encounter. The oldest male (and second oldest overall) was banded as an AHY-M in May 1987 in New York and encountered in Apr 2006 at the same location (minimum age at encounter 9yr10 mo). This individual had also been encountered the previous Apr, 9 miles from its original banding location. The oldest female (and sixth oldest overall) was banded as an AHY-F in Aug 2007 in Wisconsin and encountered in Aug 2013 in Wisconsin, 9 miles from its original banding location (minimum age at encounter 07yr02 mo). The oldest sparrow banded as L to be encountered was banded in Aug 1968 in Ontario and encountered in Sep 1971, 8 miles from its original banding location (minimum age at encounter 3 yr 3 mo).

Geographic distribution. – About two-thirds (n = 236) of the encounters of Chipping Sparrows occurred in the state or province in which the bird was banded (Table 3).

Three of the 436 sparrows were encountered more than 1,000 miles from their banding location, 53 between 501 and 1,000 miles, 103 between 26 and 500 miles, and 261 less than 26 miles (or no distance reported). Of the top twenty distances between banding and encounter locations (all at least 950 miles), sex was identified for only 2 (see below). Of the remaining 18 whose sex was not identified, 12 were aged as AHY, 2 as ASY, 1 as HY, and 3 as U.

The greatest distance between banding and encounter locations was 3,013 miles for an HY-U banded in Alberta in Aug 1976 and shot (how obtained code 1) in El Salvador in Oct 1976. The greatest distance for a male (and the 11th greatest distance overall) was 1,148 miles for an U-M banded in May 1961 in Michigan and shot in Louisiana in Apr 1962. The greatest distance for a female (and 20th greatest) was 950 miles for an AHY-F banded in Alabama in Feb 1963 and encountered in Ontario in Jun 1963 during normal banding operations (how obtained code 66).

Other interesting encounters

One Chipping Sparrow was encountered three times. This bird was banded as an AHY-F in Quebec in May 1999 and encountered in May 2000, May 2002, and Jun 2004.

All three encounters were during normal banding operations

(how obtained code 66) and at or within 4 miles of its original banding location. Five sparrows banded as AHY-U were encountered on two occasions each; the two encounters for each of these individuals occurred either at or within 12 miles of their banding location and within 5 years of being banded. One sparrow banded as an AHY-F in Quebec in May 1999 was encountered in Jul 2000 and again in May 2002; both encounters were at or within 4 miles of its banding location and were the result of normal banding operations. One sparrow banded as an AHY-M in New York in May 1997 was encountered in Apr 2005 and again in Apr 2006; this is the longest time (8 yr) between banding and encounter for a bird encountered more than once. Both encounters were at or within 8 miles of its banding location.

Acknowledgements. – I thank the more than 2,600 permit holders who have banded Chipping Sparrows over the decades, all the individuals who reported encounters, and staff at the Bird Banding Laboratory for supplying the data.

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