Species Snapshot: Yellow-breasted Chat (Icteria virens)

This is the fourth installment in our regular feature presenting a brief synopsis of the banding and encounter records submitted to the Bird Banding Lab 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. Thirty-two Chats banded before 1960 were encountered; however, to conserve space, they are not included in the following summary of banding or encounter data. Consequently, the following summary includes all Chats banded and encountered from 1960 through 11 Dec 2017.

Banded Birds

Numbers and Age and Sex Categories

Since 1960, 63,515 Yellow-breasted Chats have been banded in North American, Central America, and the Caribbean (Table 1). Sex was identified (either at banding or upon encounter) for 56% (n = 35,455); of these, 52% (n = 18,511) were males and 48% were females (n = 16,944) females. Of those banded as males, 93% (n = 17,293) were aged as SY, ASY, or AHY compared to 7% (n = 1,218) aged as L, HY, or U. Of those banded as females, 88% (n = 14,855) were aged as SY, ASY, or AHY compared to 12% (n = 2,089) aged as L, HY, or U. Of the 28,060 Chats for which sex was not identified, 30% (n = 8,381) were aged as SY, ASY, or AHY compared to 70% (n = 17,969) aged as L, HY, or U.

Geographic Distribution

Since 1960, Yellow-breasted Chats have been banded in every state of the United States (including DC) except for Alaska and Hawaii (n = 58,387), 11 Central American or Caribbean countries (n = 3,247), and 8 Canadian provinces (n = 1,881) (Fig. 1). The top 5 states (Texas, n = 6,338; California, n = 4,864; Arizona, n = 4,798, Maryland, n = 4513; and Louisiana, n = 3,067) comprised 40% of Chats banded in the US. Two-thirds of the Chats banded in Central American and the Caribbean were banded in Mexico (n = 2,209) and nearly 90% of the Chats banded in Canada were banded in British Columbia (n = 1,100) and Ontario (n = 555).

Seasonal Distribution

Two-thirds (n = 41,937) of all Yellow-breasted Chats were banded between May and Aug (approximate breeding season) compared to 22% (n = 13,786) banded between Sep and Oct (approximate fall migration season), 10% (n = 6,337) banded between Mar and Apr (approximate spring migration season), and just 2% (n = 1,455) banded between Nov and Feb (approximate over-wintering season) (Table 2). Sixty-nine percent (n = 40,166) of the Chats banded in the United States and 87% (n = 1,628) of the Chats banded in Canada were banded between May and Aug. Conversely, about half (n = 1,094) of the Chats banded in Mexico were banded between Mar and Apr and about half (n = 545)of the Chats banded in the remaining 10 Central American and Caribbean countries were banded between Nov and Feb.

Encounters

Numbers and Age and Sex Categories

Since 1960, there have been 403 encounters of 283 unique banded Yellow-breasted Chats recorded through 11 Dec 2017. Of the 283 unique Chats, 9 had "bad age/sex" errors or were encountered only on the day on which they were banded, leaving 274 unique chats with valid sex (recorded at banding or updated at encounter) and valid age at banding data that were encountered at least once after their banding day

Table 1. Number of Yellow-breasted Chats banded and encountered in North America, Central America, and the Caribbean between 1960 and 11 Dec 2017 by age at banding and sex (either

sex at banding or sex updated upon encounter).

	AHY 9,987 8,937 7,644 HY 1,071 1,912 14,435 0 5 1,498 SY 3,232 2,773 430 ASY 4,074 3,145 307					Encountered birds				
Age code	Male	Female	Unknown	Total	_	Male	Female	Unknown	Total	
AHY	9,987	8,937	7,644	26,568		49	35	20	104	
HY	1,071	1,912	14,435	17,418		3	3	28	34	
L	0	5	1,498	1,503		0	0	10	10	
SY	3,232	2,773	430	6,435		41	16	2	59	
ASY	4,074	3,145	307	7,526		35	24	2	61	
Unknown	147	172	3,746	4,065		0	0	6	6	
Total	18,511	16,944	28,060	63,515		128	78	68	274	

Table 2. Number and seasonal distribution of Yellow-breasted Chats banded in the United States, Mexico, Canada, and 10 other Central American and Caribbean countries. Data includes

records f	from 1960) through	111 I	Dec 2	2017	٠.

records from 1900 through 11 Dec 2017.								
	Nov - Feb	Mar - Apr	May - Aug	Sep - Oct				
Country/region					Total			
United States	256	4,963	40,166	13,002	58,387			
Mexico	652	1,094	142	321	2,209			
Canada	2	12	1,628	239	1,881			
Central America/Caribbean	545	268	1	224	1,038			
Total	1,455	6,337	41,937	13,786	63,515			

Eighty-two percent (n = 224) of the 274 encountered Chats were banded as AHY, SY, or ASY compared to 16% (n = 44) banded as HY or L and 4% (n = 6) banded as U. Forty-seven percent (n = 128) were sexed as males compared to 28% (n = 78) as females and 25% (n = 68) as unknown sex.

The oldest Chat encountered was banded as an ASY-F in Jul 2006 in Arizona and encountered at the same location as banded in May 2016 (minimum age at encounter 11 yr 11 mo.). This bird was also encountered in Jun 2015, at the same location. The second oldest Chat, and the oldest male, was banded as an SY-M in Aug 2006 in Colorado and encountered at the same location in Aug 2014 (minimum age at encounter 9 yr 2 mo). Of the 10 oldest Chats encountered (minimum age 5 yr 0 mo), 3 were banded as AHY-M, 3 as AHY-F, 2 as ASY-F, and 2 as SY-M. All 10 were encountered at, or within 15 mi of, their banding location.

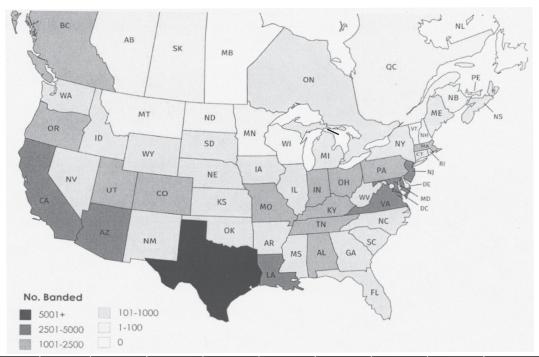
Geographic Distribution

Of the 274 encounters of unique Yellow-breasted Chats with valid sex and age data, 95% (n = 259) were banded in the United States, 4% (n = 12) were

banded in Canada (all in British Columbia), and 1% (n = 3) were banded in Mexico (Table 3). All but 3 of the 274 encounters occurred in the United States. The remaining 3 encounters occurred in Mexico and included 1 Chat each banded in Alabama, Nevada, and New Mexico.

Most (n = 260) of the 274 encounters of Chats with valid sex and age data occurred within 30 mi of their banding location. Of the remaining 14 Chats encountered more than 30 mi from their banding location, 2 were banded as AHY-M, 1 as AHY-F, 2 as ASY-M, 1 as HY-F, 3 as HY-U, 3 as L-U, and 2 as U-U. The greatest distance between banding and encounter locations was 1,938 mi for a Chat banded as U-U in New Jersey in Sep 1961 and found dead in a building or enclosure (how obtained code 21) in Vera Cruz, Mexico, in Apr 1962. The greatest distance for a male Chat was 1,831 mi for a male banded as AHY in Pennsylvania in Jul 1984 and found dead (how obtained code 0) in Vera Cruz, Mexico, in Jan 1985. The greatest distance for a female Chat was 938 mi for a female banded as HY in Alabama in Sep 2011 and encountered in Mexico in Apr 2013.

Figure 1. Geographic distribution of banding locations of Yellow-breasted Chats in North America between 1960 and 11 Dec 2017. Not shown: Central America and the Caribbean



Banding state					Encour	nter state									
	Same	AL	NV	NJ	ОН	OR	PA	WV	MX	Total					
Tennessee	52	1								53					
Maryland	42							1		43					
Colorado	27									27					
California	16					1				17					
Kentucky	17									17					
Arizona	13									13					
Wyoming	12									12					
Nevada	9									9					
Missouri	8									8					
North Carolina	8									8					
Louisiana	7									7					
Texas	5									5					
New Mexico	4									4					
Oregon	4									4					
Virginia	4									4					
Massachusetts	3			1						4					
Maine	3									3					
South Dakota	3									3					
West Virginia	3									3					
Pennsylvania	2								1	3					
Alabama	2								1	3					
Utah	2									2					
Delaware	1									1					
Georgia	1									1					
Oklahoma	1									1					
South Carolina	1									1					
Indiana					1					1					
New Jersey							11		1	2					
British Columbia	11		1	_ _						12					
Mexico	3									3					
Total	264	1	1	1	1	1	1	1	3	274					

Birds Banded

Of the 259 encountered Chats that were banded in the United States, 47% were males (AHY, SY, and ASY: n = 119; HY: n = 3), 30% were females (AHY, SY, and ASY: n = 74; HY: n = 3) and 23% were unknown sex (AHY, SY, and ASY: n = 22; HY and L: n = 32; U: n = 6). Of the 12 encountered Chats banded in Canada (all banded in British Columbia) five were males (2 aged SY, 3 aged ASY) and seven were of unknown sex (5 aged as L, 1 as HY, and 1 as AHY). Eleven of the 12 were encountered in British Columbia and one was encountered in Nevada. The three encountered Chats that were banded in Mexico included one banded as AHY-M, 1 as SY-F, and 1 as AHY-U. All three were encountered in Mexico.

Interesting Encounters

Ten of the Yellow-breasted Chats encountered were banded as L (not yet fledged); 8 of these were encountered within 30 mi of their banding location. One of the remaining 2 was banded in Jan 1992 near Somes Bar, CA, and encountered 436 mi SSE in May 1993 (still in California). The other was banded in Jul 2006 near Osoyoos, BC, and found dead (how obtained code = 0) near Sun City, NV, in May 2007, a distance of 913 mi.

Two Chats were encountered 6 times. One was banded as an AHY-F in May 2005 in Tennessee and was encountered at the some location as banded in May 2006, twice in Jun 2006, and once each in Jul 2006, Jul 2007, and Aug 2010. The other was banded as an ASY-M in May 2009 in Kentucky

and encountered at the same location as banded in Jun 2009, 3 times in Jun 2010, and twice in Jun 2011.

The record for longest duration between banding and first encounter at the banding location is 9 yr 0 mo for a female Chat banded in Arizona as ASY in Jul 2006 and encountered in Jun 2015 (this individual was again encountered at the same location in May 2016 and is the longevity record for females). The record for longest duration between banding and first encounter at the banding location for a male is 7 yr 9 mo. for a Chat banded as SY-M in Colorado in Aug 2006 and encountered in May 2014, (this individual was again encountered at the same location in Aug 2014 and is the longevity record for males).

The record for longest duration between banding and encounter for a Chat not encountered at its banding location is almost 5 yr for an U-U banded near Ocean City, MD, in Sep 1960 and found dead (How Encounter Code = 0) in Apr 1965, 352 mi away in West Virginia.

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Yellow-breasted Chat by George West