

MALLARD

50-745737 Banded July 12, 1950, hand reared and released at 3 weeks of age by the N. Y. Conservation Dept. at Conevango Valley, N. Y., caught and released June 9, 1954 at Norristown, Pa.

OCCURRENCE AND MEASUREMENTS OF BLACK-CAPPED CHICKADEES AT MONKTON, MD.

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The 46 Black-capped Chickadees (*Parus atricapillus*) banded at Monkton, Baltimore County, Maryland, during the winter of 1954-55 have been discussed by the author in Maryland Birdlife 12 (3): 75-85, September 1956. Also mentioned was the one Black-capped Chickadee banded the following year on December 26, 1955. It remained through the spring and summer of 1956 and was last seen on July 25, 1956. It returned two years later when it was caught on March 1, 1958. It did not repeat after that date. A Black-capped Chickadee was heard singing as late as August 31, 1956, but it was not determined whether or not it was banded. One Black-capped Chickadee was banded on October 4, 1956. It repeated on November 10 and was not seen or heard again that winter.

Another large group of Black-capped Chickadees came to Monkton in the winter of 1957-58. Robbins (Maryland Birdlife 14: 26-27) reported that Maryland was at the southern fringe of an invasion. That winter 37 Black-capped Chickadees were banded at Monkton, 9 fewer than during the winter three years before. (Only 10 were banded at Laurel by Robbins as compared with 17 in 1954-55.) The arrival date at Monkton was October 14, 1957, when the first one was banded. The last one was banded and the last one repeated on April 19, 1958. The final departure date was May 2, 1958 when a Black-capped Chickadee was heard singing. (Laurel arrival dates and departure dates were October 30, 1957 and April 29, 1958.) Table 1 gives a summary of the dates of occurrence at Monkton.

<u>Year</u>	<u>Number Banded</u>	<u>Arrival</u>	<u>Departure</u>
1954-55	46	10/26/54	6/27/55
1955-56	1	11/ 6/55	8/31/56
1956-57	1	10/ 4/56	11/10/56
1957-58	37 and 1 return	10/14/57	5/ 2/58

Table 2 shows the Wing-Tail measurements of Black-capped and Carolina (*Parus carolinensis*) Chickadees banded at Monkton since the winter of 1954-55. The measurements were to the nearest 0.5 mm. For convenience, in the table the 0.5 mm. measurements were raised to the next 1.0 mm. (The 6 Carolinas and 9 Black-caps measured at Laurel by

Robbins during the winter of 1957-58 fall in the same pattern as the Monkton birds.)

mm.	<u>Tail</u>																		
	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	
56		1		1															
57			2																
58	1			2			1												
59			1	2	3														
60			2	1	1	1	2			2									
61				1		2	3	2	1			1	1						
<u>Wing</u> 62					4	5	3	4	1			4	5	1					
63							6	3	1			1	3	1	2				
64						1			4	1			1	1			1	1	
65												1		1			3	1	1
66		<u>Carolina</u>								1	1			1				1	
67																	3		1
68																	1		

Table 3 gives the Tail/Wing ratios for the Carolina and Black-capped Chickadees using measurements to the nearest 0.5 mm.:

<u>Species</u>	<u>Number</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Range</u>
Black-capped Chickadee	38	.961	.017	.933-1.000
Carolina Chickadee	66	.870	.019	.827-.922

Looking at the measurements of many Maryland chickadees, one sees that there is a greater difference in length between the tail and wing in Carolina Chickadees than in Black-capped Chickadees - Table 4: Difference between Tail and Wing Lengths:

<u>Difference in mm.:</u>	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>
Black-capped Chickadee	2	6	12	10	6	2						
Carolina Chickadee					1	2	6	18	16	13	9	1

Wing measurements alone are of little value in separating these two species. The difference between the wing length and tail length will separate only about 86 per cent of the chickadees. From a sample of 199 chickadees (71 Carolinas and 128 Black-caps), including those banded in 1957-58 by Robbins, all except two Carolinas had a wing length of 57 mm. or less, and all except 3 Black-caps had a wing of 59 mm. or more; the zone of overlap was 56 to 59 mm. Ninety-nine per cent of the chickadees could be identified correctly by comparing tail and wing measurements with Table 2.