

## WARBLER RETURNS AT SOMESVILLE, MAINE

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At least 20 species of wood warblers are known to nest on Mount Desert Island. In the last ten years I have banded 18,085 birds of all species. Of these, just over 4,000 were warblers, taken in nets set in the same locations for the entire period, and 35 of the warblers have returned at least once (Table II). Twenty-five species of warblers have been banded, and of the 11 species returning, all but one are known to nest on Mount Desert (Tables I & II). The

TABLE I. NUMBERS OF WARBLER SPECIES BANDED AT SOMESVILLE, ME., AND THE NUMBER OF RETURNS

	Total banded, 1959 thru 1969	Returns thru May 1970
Black-and-white Warbler ( <i>Mniotilta varia</i> )	141	7
*Blue-winged Warbler ( <i>Vermivora pinus</i> )	1	
Tennessee Warbler ( <i>Vermivora peregrina</i> )	130	
Nashville Warbler ( <i>Vermivora ruficapilla</i> )	262	1
Parula Warbler ( <i>Parula americana</i> )	358	4
Yellow Warbler ( <i>Dendroica petechia</i> )	13	
Magnolia Warbler ( <i>Dendroica magnolia</i> )	300	3
Cape May Warbler ( <i>Dendroica tigrina</i> )	74	
Black-thr. Blue Warbler ( <i>Dendroica caerulescens</i> )	35	
Myrtle Warbler ( <i>Dendroica coronata</i> )	521	9
Black-thr. Green Warbler ( <i>Dendroica virens</i> )	378	2
Blackburnian Warbler ( <i>Dendroica fusca</i> )	43	
Chestnut-sided Warbler ( <i>Dendroica pensylvanica</i> )	71	
Bay-breasted Warbler ( <i>Dendroica castanea</i> )	109	
*Blackpoll Warbler ( <i>Dendroica striata</i> )	818	1
Palm Warbler ( <i>Dendroica palmarum</i> )	13	
Ovenbird ( <i>Seiurus aurocapillus</i> )	126	4
Northern Waterthrush ( <i>Seiurus noveboracensis</i> )	147	
*Connecticut Warbler ( <i>Oporornis agilis</i> )	1	
*Mourning Warbler ( <i>Oporornis philadelphia</i> )	9	
Yellowthroat ( <i>Geothlypis trichas</i> )	116	1
*Yellow-breasted Chat ( <i>Icteria virens</i> )	6	
Wilson's Warbler ( <i>Wilsonia pusilla</i> )	36	
Canada Warbler ( <i>Wilsonia canadensis</i> )	89	5
American Redstart ( <i>Setophaga ruticilla</i> )	272	2

\*Not known to nest on Mount Desert Island.

TABLE II. DATES OF ORIGINAL CAPTURE AND RETURN(S) OF WARBLERS  
BY SPECIES

			Date banded	Date returned
Black-and-White Warbler	AHY	M	5 Sep. 62	6 Jun. 65
	AHY	F	10 Sep. 63	19 May 65
	U	M	21 May 64	6 Jun. 67
	AHY	F	6 Sep. 68	22 May 69
	HY	F	8 Sep. 68	1 Sep. 69
	U	M	22 May 69	20 May 70
	AHY	M	3 Sep. 69	8 May 70
Nashville Warbler	U	U	18 Sep. 63	14 Sep. 65
Parula Warbler	AHY	M	16 Sep. 61	21 May 64
	U	M	29 May 66	22 May 67
	HY	M	10 Sep. 68	6 Sep. 69 & 8 May 70
Magnolia Warbler	U	U	12 Sep. 61	20 Sep. 62
	U	M	23 May 64	12 May 70
	HY	U	26 Aug. 65	10 May 70
Myrtle Warbler	U	M	19 May 61	11 May 62
	U	F	11 May 62	9 May 63
	U	F	16 May 64	29 May 65
	U	U	12 Sep. 64	8 May 65
	U	M	8 May 65	10 May 66
	U	M	23 May 65	10 May 66
	HY	U	6 Sep. 65	5 May 66
	U	M	7 May 67	22 May 69
	U	M	12 May 69	8 May 70
Black-throated Green Warbler	AHY	M	10 Sep. 60	17 May 62 & 26 May 65
Blackpoll Warbler	U	U	31 Aug. 64	14 Sep. 65
Ovenbird	U	U	8 Sep. 61	4 Sep. 62
	AHY	U	12 Sep. 62	13 May 64
	AHY	U	5 Sep. 63	4 Sep. 64
	HY	U	14 Sep. 67	23 Aug. 68
Yellowthroat	AHY	M	7 Sep. 65	4 Sep. 67
Canada Warbler	U	M	30 May 62	15 May 64
	U	M	19 May 63	22 May 65
	U	F	22 May 64	22 May 65
	U	M	6 Jun. 67	18 Aug. 68 & 23 May 70
American Redstart	U	F	26 Aug. 63	30 Aug. 64 & 26 Aug. 67

TABLE III. RESULTS OF SPRING AND FALL BANDING AND RETURNS OF WARBLERS, FALL 1959 THROUGH SPRING 1970

	Spring	Fall
Net hours	2,100	12,692
Total banded, all species	861	7,537
Warblers banded	440	3,629
Warbler returns	27	12
Non-warbler returns*	1,652	54

\*Including 791 individual Purple Finches, which returned 1,438 times, - 1,416 returns in the Spring, 22 in the Fall.

The majority of non-warbler bandings and returns were taken in traps, therefore the net hours shown above are not applicable.

TABLE IV. RETURNS OF WARBLERS TO SOMESVILLE, ME., BY SEASONS

	1st Return	2nd Return
Banded Fall / Returned Spring	10	2
Banded Fall / Returned Fall	10	1
Banded Spring / Returned Spring	14	1
Banded Spring / Returned Fall	1	0

TABLE V. AGES OF RETURNING WARBLERS.

	Ages in Months						Ind. older than 40 mos.
	11-15	16-20	21-25	26-30	31-35	36-40	
Black-and-White Warbler	1		3			1	49m. 48m.
Nashville Warbler				1			
Parula Warbler	1		2				47m.
Magnolia Warbler	1						83m. 71m.
Myrtle Warbler	2		6			1	
Black-thr. Green Warbler					1		72m.
Blackpoll Warbler	1						
Ovenbird	2			1	1		
Yellowthroat						1	
Canada Warbler			2		2		47m.
American Redstart	1						50m.

exception, the Blackpoll, probably nests here, since its nest has been found on a small island only a few miles away, and the species has been seen on Mount Desert in July.

Mount Desert Island, much of which is contained in Acadia National Park, is on the Maine coast just east of Penobscot Bay. The combination of mountain and sea, fresh water ponds and streams, and northern bogs, has made it popular with naturalists, as well as vacationers, for well over a hundred years. The island is semi-bisected by Somes Sound, often called the only fjord on the Atlantic coast, and the Somesville banding station is at the northern end of the Sound, almost in the center of the island. The property is on a salt water cove into which runs a brook, the outlet of Echo Lake. A dam makes a small pond just above tidewater. The nets are set in the brook valley, about 200 yards above the pond, in alder growth. A "drip" is piped from a hillside spring near one bank of nets. Growth in the narrow valley is mostly Smooth Alder (*Alnus rugosa*), Gray Birch (*Betula populifolia*), and Red Maple (*Acer rubrum*), but on the high land on either side the trees are predominantly coniferous—Balsam Fir (*Abies balsamea*), Red Spruce (*Picea rubens*), White Spruce (*Picea glauca*), and White Pine (*Pinus strobus*). Ground covers grow in variety and profusion, as they do over most of the island.

During the ten-year period that ended in 1969, most of my banding was done during the fall migrations—a total of 12,692 fall net-hours, versus approximately 2,100 net-hours of spring banding. Fall netting produced 3,269 warblers, spring netting 440. But of the total of 39 warbler returns, 27 came in the spring (Table III).

Table IV shows, furthermore, that 15 birds banded in the spring returned in the spring, while only 1 spring-banded bird (a Canada Warbler,) returned in the fall, although its second return was in the spring. It is interesting to note also (Table II) that all returns of Myrtle Warblers came in May, as did 7 of the 9 bandings of these birds. Perhaps no definite conclusions can be drawn from all this, but the data suggest that the number of warbler returns at this station might be much higher if more netting were done in the spring. I hope that it can be in the future.

The approximate ages of returning warblers are shown in Table V. It has been assumed that, in the Somesville area, most young are fledged in June or early July. An HY captured in September is therefore no older than 3 months, while an AHY captured in August or September is at least 15 or 16 months old. Calculating ages on this basis shows that of the 35 returning warblers, 4 were at least 4 years old, a Black-throated Green Warbler was 6, and two Magnolia Warblers were approximately 6 and 7 years old respectively.

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