

BANDING RECOVERIES OF THE BLACKPOLL WARBLER

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Few studies have been published of the banding recoveries of warblers (*Parulidae*). This summary of recoveries of the Blackpoll Warbler (*Dendroica striata*) was undertaken as part of a study of the autumn migration of the species (Nisbet 1970). Although the recoveries are few and throw little light on the migration routes of the species, they have two other noteworthy features: (a) an indication of short-distance southward movements in New England in autumn; (b) extremely late dates of most of the recoveries. Further studies of other long-distance migrant warblers would be of great interest, despite the low recovery rates for these species.

At the end of 1969, 43,205 Blackpoll Warblers had been banded in North America, and eight recoveries had been reported. This total excludes recaptures and returns recorded at the banding site by the bander: these have not been compiled systematically, but a list of returns of Blackpoll Warblers banded as transients has been published separately (Nisbet 1969).

Excluding one recovery close to the banding site in June (Seal Island, Nova Scotia, 1922), the remaining seven recoveries are listed below.

141-003049	f.g.	28 Sep. 46	Toronto, Ontario: ca. 43°45'N, 79°25'W. (H. H. Southam)
	x	21 Oct. 46	Toronto.
500-63947	f.g.	6 Oct. 52	Huntingdon Woods, Michigan: 42°29'N, 83°23'W. (N. T. Kelley)
	x	16 Oct. 52	Huntingdon Woods.
104-54842	1st W ♂	11 Oct. 62	St. David's Is., Bermuda: 32°31'N, 64°40'W. (D. B. Wingate*)
	+	0 Nov. 63	Pembroke, N. Carolina: ca. 34°40'N, 79°23'W. (reported by Wingate & Baird 1965).
111-50678	1st S ♂	15 May 66	Brownsboro, Alabama: ca. 34°50'N, 86°35'W. (M. L. Robinson)
	v	27 Sep. 68	Duluth, Minnesota: ca. 46°45'N, 92°10'W. (B. Basham)
106-06073	f.g.	18 Sep. 63	Sudbury, Massachusetts: 42°24'N, 71°23'W. (D. Junkin*)
	x	4 Nov. 65	N. Kingston, Rhode Island: 41°35'N, 71°26'W.
104-74812	1st W ♂	2 Oct. 66	Sudbury, Massachusetts (D. V. Howard*)
	x	20 Oct. 66	Pawtucket, Rhode Island: 41°52'N, 71°22'W.

*Contribution No. 80 from the Hatheway School of Conservation Education, Massachusetts Audubon Society, Lincoln, Massachusetts 01773.

<i>121-48212</i>	1st W ♂	25 Sep. 69	Lincoln, Massachusetts: 42°25'N, 71°20'W. (I. C. T. Nisbet*)
	x	28 Sep. 69	Franklin, Massachusetts: 42°05'N, 71°24'W.

Key to symbols and terms:

Banding data are given on the first line, recovery data on the second line in each case.

Band number: *italics* indicate that the band was returned.

Age and sex: 1st W - first winter; 1st S - first summer (one year old); f.g. - full-grown, age uncertain; ♂ - male; ♀ - female.

Manner of recovery: v - caught and released with band; + - shot; x - found dead.

Date of recovery: 0 - exact date not reported.

Name of bander is given in parentheses: * - banding in association with Massachusetts Audubon Society.

The first two entries in the above list are local recoveries reported by non-banders. The third and fourth are interesting long-distance recoveries, but were indirect (banding and recovery in different seasons): hence they do not provide direct information on routes of migration.

The only direct recoveries indicating movement are the last two, banded in an area in eastern Massachusetts where Blackpoll Warblers are concentrated in September and have been banded in large numbers (Howard 1967, 1970). These recoveries indicate short-distance flights (30-60 km) in directions between S and SSW towards the south shore of Rhode Island. The third recovery from this area (fifth in the list), although indirect, falls on exactly the same line (95 km S). Such short-distance movements had not been suspected from previous field-work (Nisbet *et al.* 1963, Nisbet and Drury 1969). However, they are consistent with the fact that the median date of passage at the Sudbury banding station is five days earlier than that at Block Island, R. I. (Nisbet 1970). These data suggest that some birds which stop over in inland Massachusetts move south towards the coast before final departure. Southward movements have not been seen by day (Nisbet *et al.* 1963 and unpublished), and it seems possible that the birds make short nocturnal flights.

The most striking feature of the recovery list is the lateness of the dates of recovery. Five of the six birds reported dead by non-banders were later than 16 October, a date when most Blackpoll Warblers have already left the North American continent; two were in November when only stragglers have been recorded (Bent 1953, Nisbet 1970). Each of these five records was later than the 99th percentile of the records at the nearest major banding station (Nisbet 1970: Table 4). This indicates that late stragglers are very much more likely to die and be found than birds at the height of the autumn passage.

In view of this finding, it is unfortunate that there is little direct information on the causes of death. 104-54842 was reported shot; 500-63947 was thought to have been killed by a cat; 106-06073 was found dead on a lawn, without external injuries, and was thought to have flown into a window. 121-48212 (not a late straggler) was also found dead on a lawn; its body was frozen soon after death, a subsequent autopsy by Dr. George Faddoul of the Waltham Field Station, University of Massachusetts (*per* J. Baird), revealing an infection with *E. coli*, but no clear indication of the cause of death.

ACKNOWLEDGMENTS

I am grateful to the Bird Banding Laboratory for supplying the original list of recoveries (Job. No. 01-04-000-0317), and to B. Basham, N. T. Kelley, M. L. Robinson, J. Baird, and D. V. Howard for additional details.

LITERATURE CITED

- BENT, A. C. 1953. Life Histories of North American Wood Warblers. U. S. Nat'l. Museum Bull. 203. Washington: Smithsonian Inst.
- HOWARD, D. V. 1967. Five years of mist netting (1962-1966) at Round Hill, Sudbury, Massachusetts. *Records of New England Birds*, 23(2): iii-vi.
- HOWARD, D. V. 1970. Lincoln, Mass., in Atlantic Flyway Review (ed. F. S. Schaeffer). *EBBA News*, 33(1): 46-47.
- NISBET, I. C. T. 1969. Returns of transients: results of an enquiry. *EBBA News*, 32(6): 269-274.
- NISBET, I. C. T. 1970. Autumn migration of the Blackpoll Warbler: Evidence for long flight provided by regional survey. *Bird-Banding*, 41(3): 207-240.
- NISBET, I. C. T., W. H. DRURY and J. BAIRD. 1963. Weight loss during migration. Part I: Deposition and consumption of fat by the Blackpoll Warbler *Dendroica striata*. *Bird-Banding*, 34(3): 107-138.
- NISBET, I. C. T. and W. H. DRURY. 1969. A migration wave studied by moon-watching and at banding stations. *Bird-Banding*, 40(3): 243-252.
- WINGATE, D. B. and J. BAIRD. 1965. Blackpoll Warbler banded in Bermuda recovered in North Carolina. *Bird-Banding*, 36(3): 192.

Received October, 1970.