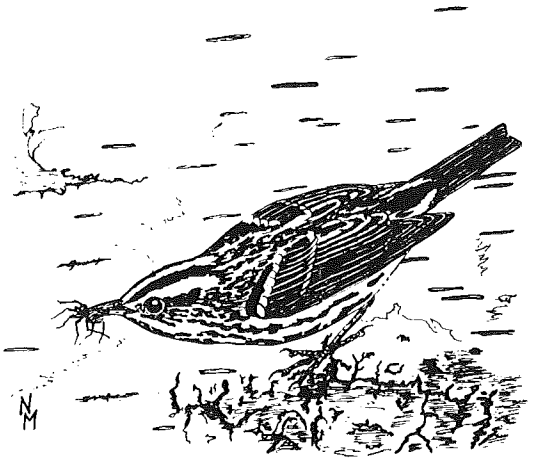
Black-and-white Warbler

Mniotilta varia

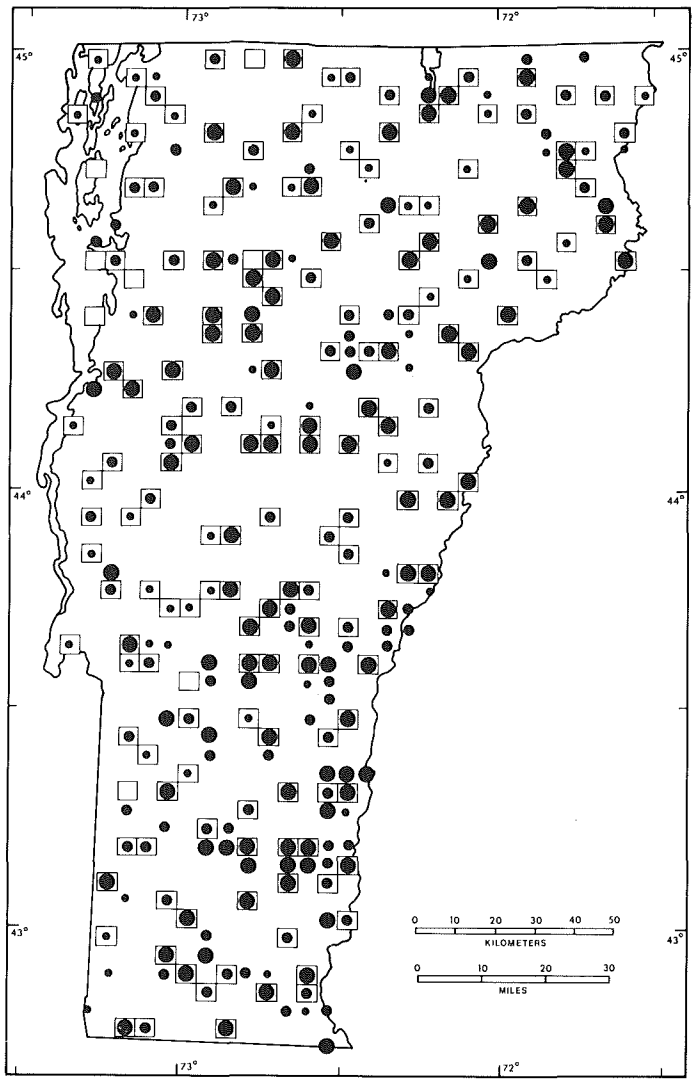


The Black-and-white Warbler is a bark-foraging specialist. It is frequently encountered assiduously creeping along trunks and branches searching for insects and their eggs, and spiders. The species so resembles the Brown Creeper in shape and habits that it was once considered closely related to it. Black-and-white Warblers inhabit a variety of deciduous and mixed woodlands. This bird appears to occur in higher densities in stands of medium-aged second growth with well-developed understories, rather than in more mature closed-canopy forests. It appears to be particularly sensitive to the fragmentation of sizeable woodlands into scattered small woodlots. Galli et al. (1976) and Whitcomb et al. (1977) both found that the species' presence depends on woodlot size; Whitcomb et al. (1977) noted that Black-and-white Warblers disappear from fragmented woodlands.

This small bird has a distinctive song composed of a series of high-pitched disyllabic phrases that have been likened to the sound of a turning, unoiled metal crank. Because the nest is placed on the forest floor and is well concealed in the leaf litter, it is very difficult to find: fewer than 10% of Atlas Project confirmations for the species involved the discovery of an active nest. Black-and-white Warblers may give away the nest location through their vigorous distraction displays. Fledglings, though often noisy, are far from conspicuous, and provided only slightly more than 10% of the confirmations. By far the most common method of confirming this species was the detection of parents with food for their young, which accounted for 76% of all confirmations in Vermont.

The first Black-and-white Warblers arrive in Vermont during the last week of April. Significant numbers appear about a week later. Nesting gets under way by mid May. The nest is a fairly substantial cup of bark strips, rootlets, dead leaves, and grass, nestled into leaf litter and often domed over with dead leaves. Eggs have been recorded in Vermont on five dates from May 26 to June 19. Clutch size may range from 4 to 5 eggs (Harrison 1978). The eggs are white with brown speckling. Incubation and nestling periods are 10 to 12 and 8 to 12 days, respectively. Nests containing young are not on record for Vermont; in New York State dates for nestlings range from early June to late July (Bull 1974). Dependent young have been reported in Vermont from June 30 to July 28 on the basis of four dates. The autumn migration to tropical and subtropical wintering grounds commences in late July, and peaks during late August. A few birds remain into late September or, occasionally, later.

The Black-and-white Warbler is a fairly common and widely distributed species in Vermont. It was located in 96% of the priority blocks. Of the eight priority blocks where it was absent, five were in the Champlain Lowlands, where the species was confirmed in only 27% of the blocks in which it occurred; this contrasts with confirmation in 67% of the blocks in the Eastern Foothills. This disparity appears to be a result of forest fragmentation in the Champlain Lowlands, where land is subdivided into small woodlots. Black-and-whites were considered common in Vermont by Fortner et al. in 1933. Ross (1914, Field notes) found them present above 458 m (1,500 ft) in the Bennington area during the breeding season. The Black-and-white apparently con-



No. of priority blocks in which recorded

TOTAL 171 (96%)

Possible breeding:	38 (22% of total)
Probable breeding:	53 (31% of total)
Confirmed breeding:	80 (47% of total)

Physiographic regions in which recorded

	no. of priority blocks	% of region's priority blocks	% of species' total priority blocks
Champlain Lowlands	26	79	15
Green Mountains	53	98	31
North Central	19	100	11
Northeast Highlands	16	100	10
East Central	19	100	11
Taconic Mountains	14	87	8
Eastern Foothills	24	100	14

tinues to be largely restricted to higher elevations in southwestern Vermont, as it was missed in two blocks in the Taconic Mountains and was confirmed there in only 21% of the blocks. The species occurred in highest numbers in the Eastern Foothills and East Central regions, where it averaged 6.1 per route in U.S. Fish and Wildlife Service Breeding Bird survey data (BBS 1966–79). Always considered common in the state (Allen 1909), the Black-and-white Warbler has probably benefited from the ongoing reforestation of Vermont.

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