

Blue-winged Warbler

Vermivora pinus

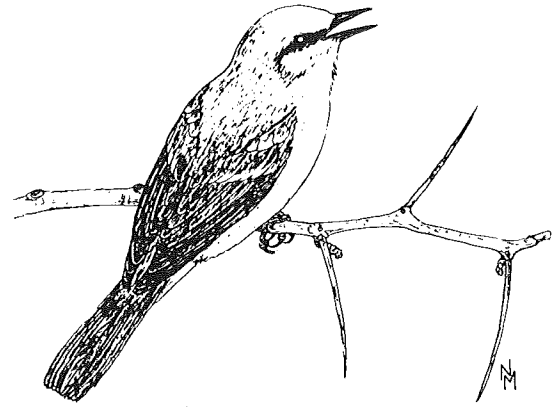
The Blue-winged Warbler is a rare species in Vermont; the first breeding record for the state was established in 1976 during the Atlas Project (ASR, A. Pistorius). The Blue-wing prefers young second-growth forest but accepts a wide range of vegetative density. It is most frequently found in brushy, neglected fields and pastures, 30 to 70 years into secondary succession (Confer and Knapp 1979); woodland openings and edges; and open swamps and streamside thickets.

Territories usually encompass a little more than an acre, but vary in size according to habitat. The species is most easily located in mid May by the distinctive *bee buzz* song it delivers, usually from a relatively high, exposed perch. Sexual activity is most intense just before and during the first day of nest building (Ficken and Ficken 1968a).

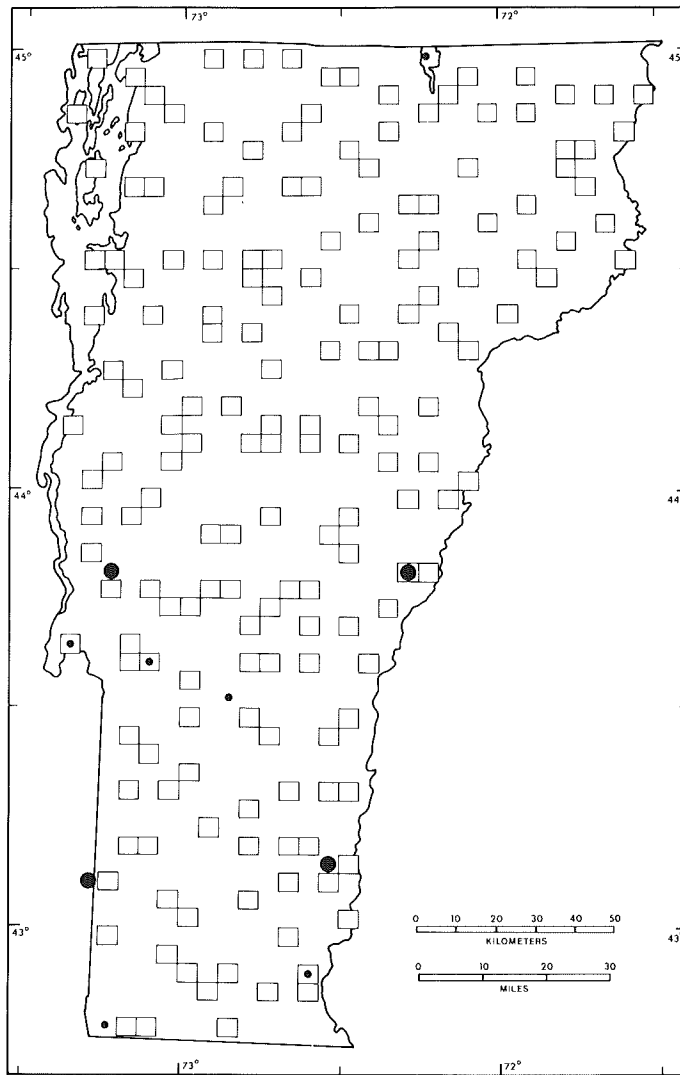
The nest, made of coarse grasses, bark shreds, and dead leaves, forms a deep and somewhat narrow cuplike structure that is lined with fine grapevine bark shreds, grass stems, or hair. Supported on a sturdy foundation of dead leaves close to or on the ground, it is built among and attached to upright stems of weeds and grass clumps (Chapman 1907; Bent 1953; Harrison 1975).

Incubation of the 4 to 6 eggs takes 10 to 11 days; the young leave the nest about 10 days after hatching. Three of the four Atlas Project confirmations were made in early July when the adults were busy feeding the young (FY). Vermont's nesting data are limited, but most are similar to those listed by Bull (1974) for New York State: egg dates, May 18-June 17; nestlings, June 4-July 11; fledglings, June 16-August 12. Generally, the Blue-winged Warbler spends a scant 3 months on its breeding grounds, leaving Vermont by the second week in August to return to its wintering grounds, which extend from southern Mexico to Nicaragua.

It has been known for some time that the Blue-winged Warbler hybridizes with the



closely related Golden-winged Warbler over an extensive area of eastern North America, where their respective ranges overlap. The similarity of courtship displays, the rapidity of courtship bond formation, and the shared habitats of these birds probably facilitate this hybridization (Ficken and Ficken 1968a). There are two general hybrid types. "Brewster's" (*Vermivora* "*leucobronchialis*"), by far the most common, has been recorded in the Sudbury, Vermont area since 1974. During the Atlas Project, three instances of male "Brewster's" mated with female Blue-wings were reported: at Sudbury, summer 1976 (ASR, A. Pistorius); at Rice's Mills, summer 1977 (ASR, W. G. Ellison); and at West Haven, summer 1981 (ASR, S. B. Laughlin). In addition, a singing male "Brewster's" was located in the summer of 1981 in Castleton (ASR, S. B. Laughlin), and another in Middlebury (RVB, Spring 1979). In Williston, a "Brewster's" was present in an area with singing male Golden-wings. Crossbreeding with the Golden-winged parental form may produce a much rarer, recessive hybrid, the "Lawrence's" (*V.* "*lawrencii*"). There have been only three reports of "Lawrence's" for Vermont: at Sudbury on June 15, 1966 (G. Shampany, GMAS records); at Manchester on May 12-13, 1975 (a heterozygous Golden-winged Warbler) (T. Will, pers. comm.); and at Missisquoi National Wildlife Refuge on May 17, 1980 (RVB, Spring 1980). The initial (1976) record for a Blue-winged Warbler breeding in Vermont was of a male "Brewster's" that had mated with a female Blue-winged War-



No. of priority blocks in which recorded

TOTAL 4 (2%)

Possible breeding: 3 (75% of total)

Probable breeding: 0 (0% of total)

Confirmed breeding: 1 (25% of total)

Physiographic regions in which recorded

	no. of priority blocks	% of region's priority blocks	% of species' total priority blocks
Champlain Lowlands	1	3	25
Green Mountains	0	0	0
North Central	0	0	0
Northeast Highlands	0	0	0
East Central	0	0	0
Taconic Mountains	1	6	25
Eastern Foothills	2	8	50

bler, located with young in Sudbury (ASR, A. Pistorius). Of the four state breeding confirmations, two were of "Brewster's" mated to Blue-wings.

Historically, Blue-wings occurred primarily west of the Appalachians (Cooke 1904; Short 1962). Very little was known of the species' nesting habits in southern New England before about 1880, when nests were found in southern Connecticut (Bent 1953). The Blue-wing was listed by Perkins and Howe (1901) as a rare visitant in Vermont; sightings existed, however, as far north as St. Johnsbury and Lunenburg.

The Blue-winged Warbler seems to be expanding at the expense of the Golden-

winged Warbler. Studies show a general pattern of Blue-wings replacing Golden-wings within 50 years of the initial hybridization (Confer and Knapp 1981). This replacement has already been evidenced at a few of the older southern Vermont breeding locations. If the patterns established in New York (Bull 1974), Connecticut, Michigan, and Ohio (Gill 1980) hold true, the Blue-wing should increase in Vermont in the years to come.

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