

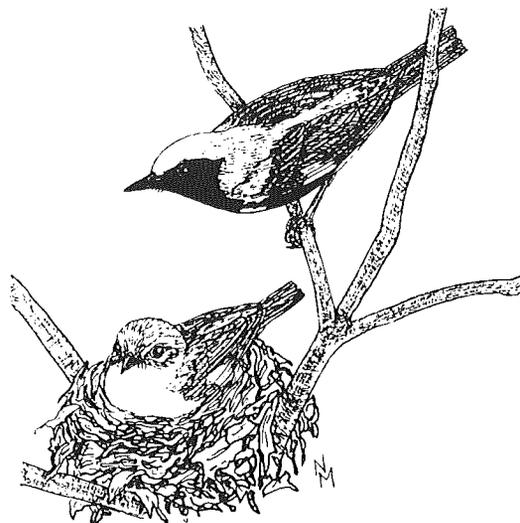
Black-throated Blue Warbler

Dendroica caerulescens

Few species of North American wood warblers show as marked sexual dimorphism as the Black-throated Blue Warbler. The radiant blue male with his jet black throat differs so radically from his somber-hued, gray-green mate that inexperienced observers have difficulty identifying both members as a pair. Fortunately, the small white wing patch is normally present in both sexes, but even this key field mark may be lacking in some fall-plumaged birds.

Wintering in the Caribbean, this species returns to Vermont in early May. Black-throated Blue Warblers prefer to breed in dense undergrowth within upland deciduous forests. Although their precise habitat requirements are ill defined, the species appears to require much more overstory than some warblers that inhabit thickets (such as the Common Yellowthroat), and prefers drier areas than others (such as Northern Waterthrush) that inhabit bogs and swamps. Black-throated Blues may frequently be found with Mourning Warblers in seral habitats that spring up after selective cutting, provided considerable canopy remains. Black-throated Blues are less often associated with bramble thickets, however, preferring instead dense stands of hobblebush, mountain and striped maple, deciduous saplings, or, when available, laurel and rhododendron thickets (Harding 1931; Black 1975).

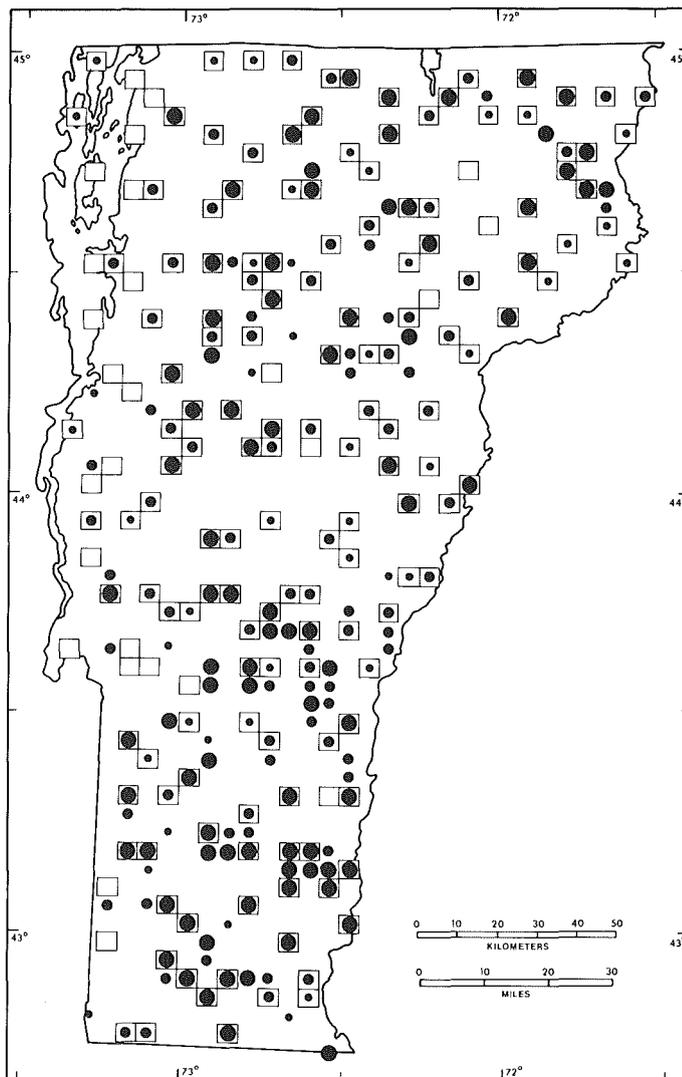
Populations may be locally distributed even in apparently suitable habitat. In New Hampshire, Black (1975) found that densities varied from 41 to 55 pairs per 40.5 ha (100 a), but lower densities are more typical in Vermont (D. P. Kibbe, pers. observ.). In second-growth northwoods, Carpenter (1972, 1978) found densities ranged from 6.5 to 20 pairs per 100 ha (3 to 8 pairs per 100 a), and that in intervening years the species was absent. In Vermont, greatest densities are probably found in the thick undergrowth that springs up after selective cutting, but actual survey data are lacking.



The species is generally, if locally, distributed throughout Vermont, although it is uncommon to rare in the Champlain Lowlands, where suitably forested habitat is generally lacking. Elsewhere in the state Black-throated Blues may be readily found, particularly at higher elevations, unless excluded by homogeneous coniferous growth or the lack of a dense undergrowth.

Black-throated Blue Warblers take arthropod prey from the foliage of shrubs and the lower canopy of deciduous vegetation. Males and females have similar foraging strategies throughout the breeding season; however, males forage more in the subcanopy, at 5–15 m (16.4–49 ft), than do females, who utilize the lower shrub zone at less than 5 m (16.4 ft) (Black 1975).

Although the pair jointly visits prospective nest sites and initiates nest construction, the majority of the building is done by the female over a period of 3 to 4 days. The nest is typically constructed of bark fibers and cobwebs, 23–91 cm (9–36 in) above ground, in the dominant shrub strata. The nest may be moored to surrounding vegetation by cobwebs. Laying commences a day or more after the nest is complete. Incubation of the whitish eggs, which are wreathed with brown blotches at their larger end, commences with the laying of the fourth, and final, egg. Egg dates for Vermont (10 nests) range from June 7 to July 26, but nest



No. of priority blocks in which recorded

TOTAL 153 (85%)
 Possible breeding: 33 (22% of total)
 Probable breeding: 54 (35% of total)
 Confirmed breeding: 66 (43% of total)

Physiographic regions in which recorded

	no. of priority blocks	% of region's priority blocks	% of species' total priority blocks
Champlain Lowlands	17	55	11.1
Green Mountains	54	100	35.3
North Central	16	84	10.5
Northeast Highlands	16	100	10.5
East Central	17	89	11.1
Taconic Mountains	10	62	6.5
Eastern Foothills	23	96	15.0

building has been recorded as early as May 24 and as late as July 9.

Incubation, also the female's dominion, usually takes 12 to 13 days (Harding 1931). The female eats or carries away the empty eggshells as the young hatch. Both parents feed the young in the nest for 10 to 14 days. Nestling dates for Vermont (eight records) range from June 17 to August 8. Fecal sacs are eaten or, later in the nestling period, carried to a dead branch for disposal. Ten-day-old fledglings might more aptly be called groundlings, since they are incapable of sustained flight. Fledglings may remain on the territory to be fed for 5 to 10 days, and the male may continue to actively de-

fend the territory a week or more after he has stopped feeding the fledglings (Black 1975). The species lingers in Vermont through early October. Fledglings have been noted as early as June 25 and as late as August 9 in Vermont (nine records). Perhaps because the young remain under the care of the adults for a prolonged period, more than 60% of the Atlas Project breeding confirmations were for young being fed (FY). Adults are exceptionally tame while feeding young (Terres 1980), thus making breeding easy to confirm.

DOUGLAS P. KIBBE