

Black-capped Chickadee

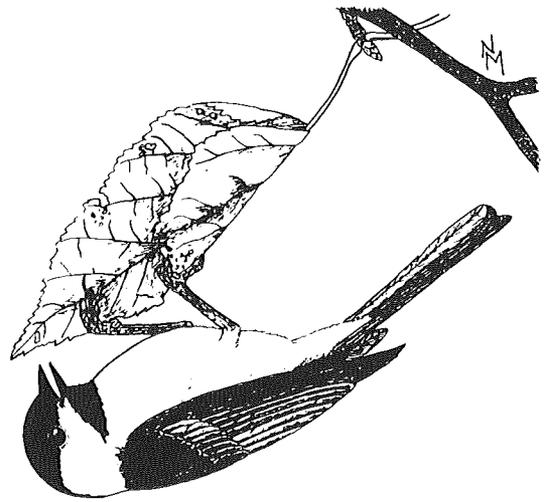
Parus atricapillus

Black-capped Chickadees are many people's favorite birds, providing welcome signs of life during long northern winters. They are found in deciduous, coniferous, and mixed woodlands, and are commonly seen around dwellings with nearby woodlots. Odum (1941a) found that chickadee territories usually contained both mature forest and second growth, including hedgerows and edges.

The Black-capped Chickadees' frequent vocalizations and active foraging methods make them easy to locate. Only during the early stage of the nesting cycle can chickadees be considered inconspicuous. Breeding confirmation is also relatively easy to obtain; 90% of the chickadee records from Atlas Project priority blocks were confirmations. Observation of adults with food for young accounted for 42% of Vermont confirmations. Recently fledged young and active nests contributed an additional 28% and 20% of confirmations, respectively.

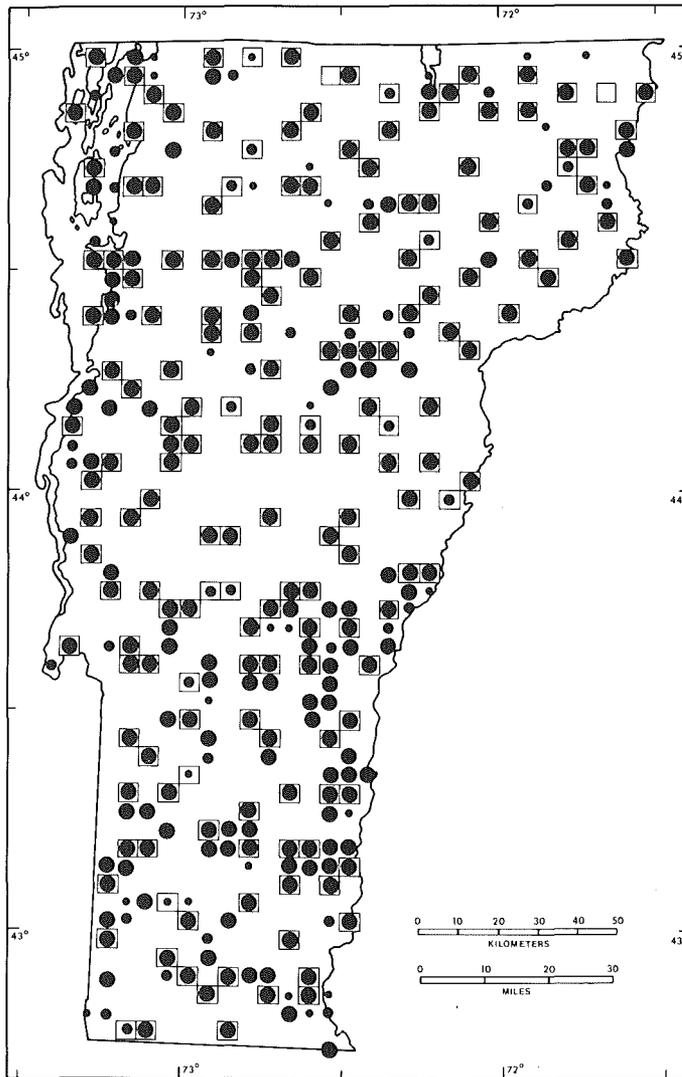
Black-capped Chickadees are year-round residents in Vermont, although young birds may migrate during some years. Large southward movements have been observed in years when a good breeding season coincided with poor seed production in northern forests (Lloyd-Evans 1981). Pairs separate from winter flocks from late March to mid April and establish territories through aggressive interactions with other chickadees. Both members of the pair utilize the two- or three-note whistled song during encounters with challengers, although the male defends the territory more vigorously than the female (Odum 1941a). Territories are largest during nest construction and decrease in size as the young develop (Odum 1941a; Stefanski 1967).

Nesting chickadees utilize either an old woodpecker hole or a nest box, or excavate a nesting cavity, usually in a well-rotted stub, with both members of the pair removing bits of wood and scattering them at a distance from the nest tree. Vermont chickadees have been observed building nests be-



tween April 3 and July 6. More than half of 23 Vermont nest sites were in birches or aspens; other tree species, rotted stumps, fenceposts, and nest boxes were also used. Nests were placed at heights of 0.6–3 m (2–10 ft); the average was 1.7 m (5.6 ft). The cavity is lined with moss, feathers, hair, and soft plant materials. The female incubates the 5 to 10 white eggs, finely spotted with reddish brown, for 12 to 13 days (Bent 1946). Twenty-two egg dates from Vermont ranged from May 2 to July 15; the average size of 13 clutches was 6.3 eggs. Vermont nestling dates range from May 9 to July 30 (19 records). The young fledge after 16 days in the nest and remain with their parents an additional 3 to 4 weeks (Odum 1941b; Smith 1967; Wiese and Meyer 1979). Fledglings have been observed in Vermont from June 6 to August 10 (27 records).

Banding studies by Smith (1967) and Wiese and Meyer (1979) indicate that juvenile Black-cappeds disperse from their natal area, and that they are replaced by other young in winter flocks of 6 to 10 chickadees. The dominant individuals in such flocks are the pair whose breeding territory corresponds to the flock territory (Glase 1973). Other species often join chickadees to form foraging flocks of mixed species, which may include Downy and Hairy woodpeckers, Red- and White-breasted nuthatches, Brown Creepers, Golden-crowned Kinglets, and, during migration, warblers and vireos.



No. of priority blocks in which recorded

TOTAL 177 (99%)

Possible breeding: 3 (2% of total)
 Probable breeding: 14 (8% of total)
 Confirmed breeding: 160 (90% of total)

Physiographic regions in which recorded

	no. of priority blocks	% of region's priority blocks	% of species' total priority blocks
Champlain Lowlands	31	100	17.5
Green Mountains	53	98	30.0
North Central	19	100	11.0
Northeast Highlands	15	94	8.0
East Central	19	100	11.0
Taconic Mountains	16	100	9.0
Eastern Foothills	24	100	13.5

All early accounts of Vermont birds list the Black-capped Chickadee as a common resident. This status holds true today: chickadees were located in 99% of the priority blocks during the Atlas Project, and in all the physiographic regions of the state. Although density was not measured during the Atlas Project, personal observations and Christmas Bird Count data indicate that the lowest densities of individuals occur in the Champlain Lowlands, where chickadees are limited to woodlots, swamps, orchards, and hedgerows (N. L. Martin, pers. observ.). The five Audubon Christmas Bird Counts between 1978-79 and 1982-83 illustrate this distribution: counts from Burlington and Ferrisburg in the Champlain Lowlands

averaged 4.6 and 6.6 chickadees per party hour; counts in the well-forested Green Mountains and eastern part of the state averaged from 9.5 to 14.7 chickadees per party hour; and the Island Pond Bird Count in the Northeast Highlands averaged 7.1 chickadees per party hour, probably reflecting a greater rate of emigration from the boreal forest (CBC 1978-1983). Black-capped Chickadees are among Vermont's most abundant birds and are likely to remain so, for they have shown adaptability in adjusting to human-influenced environments.

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