## Ruby-crowned Kinglet

Regulus calendula

The Ruby-crowned Kinglet is a bird of coniferous forests; it appears to be more closely associated with native spruce and fir than the Golden-crowned Kinglet. In Vermont. the Ruby-crowned Kinglet is most frequently encountered in stands of spruce and fir at the edges of bogs, small ponds, and lakes. Sabo (1980) found that in subalpine habitat in New Hampshire the species tended to select sites near standing water. The Rubycrowned Kinglet appears to prefer open woodlands and edge over the dense mature stands inhabited by the Golden-crowned Kinglet (Lepthien and Bock 1976), Rabenold (1978) recorded more generalized feeding habits by the Ruby-crown than by the Golden-crown—an indication of possible subordination of the former to its congener, which might in part explain the Rubycrown's absence from the subalpine ridge habitats that support the Golden-crown.

The best indication of the presence of breeding Ruby-crowned Kinglets is a male singing over an extended period of time. The song has two segments: the first is composed of 2 to 4 high, sibilant notes that are difficult to hear even quite near the bird; the second consists of 3 to 5 startlingly loud, mellow-toned, whistled triplets delivered jerkily and in quick succession. The nest is difficult to discover because it blends extremely well into the evergreen foliage in which it is placed. Henderson (1949) located nests by watching kinglets return to them and by rapping on the trunks of nest trees to induce distraction behavior from the female.

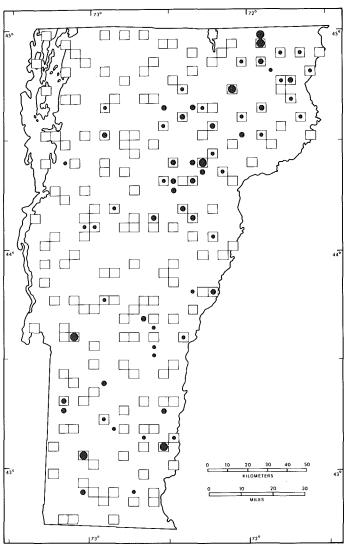
The Ruby-crowned Kinglet is a short-distance migrant. Most eastern Ruby-crowns winter from the Carolinas through the Gulf Coast states (Lepthien and Bock 1976). The species returns to Vermont during mid April; most are on nesting territory by mid May. Migrants may be seen in nonbreeding areas as late as the third week of May. The nest is a pendant structure of moss and lichens placed in thick foliage on a side



branch of a spruce or fir. Nest heights are at 0.6–30.5 m (2–100 ft); most are 4.6–9.2 m (15–30 ft) off the ground (Bent 1949). The 5 to 11 eggs are white with red-brown spotting (Bent 1949). There are no dates for eggs in Vermont. The incubation and nestling periods of the Ruby-crowned Kinglet are unreported, but probably compare to those of related species. There is a single reported nestling date for Vermont—June 25. The autumn migration begins in early September and peaks in October. A few kinglets remain to mid November, or rarely, December.

There were no definite breeding records for the Ruby-crowned Kinglet in Vermont before the Atlas Project. Cutting (1884) and Spear (1976) made general, but not specific, references to breeding by the species in Vermont. Peterson and Peterson (1980) also included Vermont in the Ruby-crowned Kinglet's breeding distribution. The Atlas Project resolved any doubt in the matter by recording a total of seven confirmations of breeding from 1977 to 1981.

Atlas Project records of the Ruby-crowned Kinglet were most numerous in the North Central region and the Northeast Highlands, where it was recorded in 63% and 69% of the priority blocks, respectively. There was a scattering of records from all other regions. The species was reported from a surprisingly low proportion of the priority blocks in the Green Mountains. A



No. of priority blocks in which recorded

TOTAL 42 (23%)

Possible breeding: 23 (55% of total)
Probable breeding: 13 (31% of total)
Confirmed breeding: 6 (14% of total)

## Physiographic regions in which recorded

	no. of priority blocks	% of region's priority blocks	% of species' total priority blocks
Champlain Lowlands	2.	6	5.0
Green Mountains	6	11	14.0
North Central	12	63	28.5
Northeast Highlands	11	69	26.0
East Central	5	26	12.0
Taconic Mountains	2.	13	5.0
Eastern Foothills	4	17	9.5

significant number of records of possible breeding outside of northeastern Vermont may have been of late-migrating, nonbreeding birds, present only for short periods in early June. Probable and confirmed records outside of northeastern Vermont are from areas of uniform high elevation with standing water and pockets of suitable habitat, such as Conant Swamp in Thetford.

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