Golden-crowned Kinglet

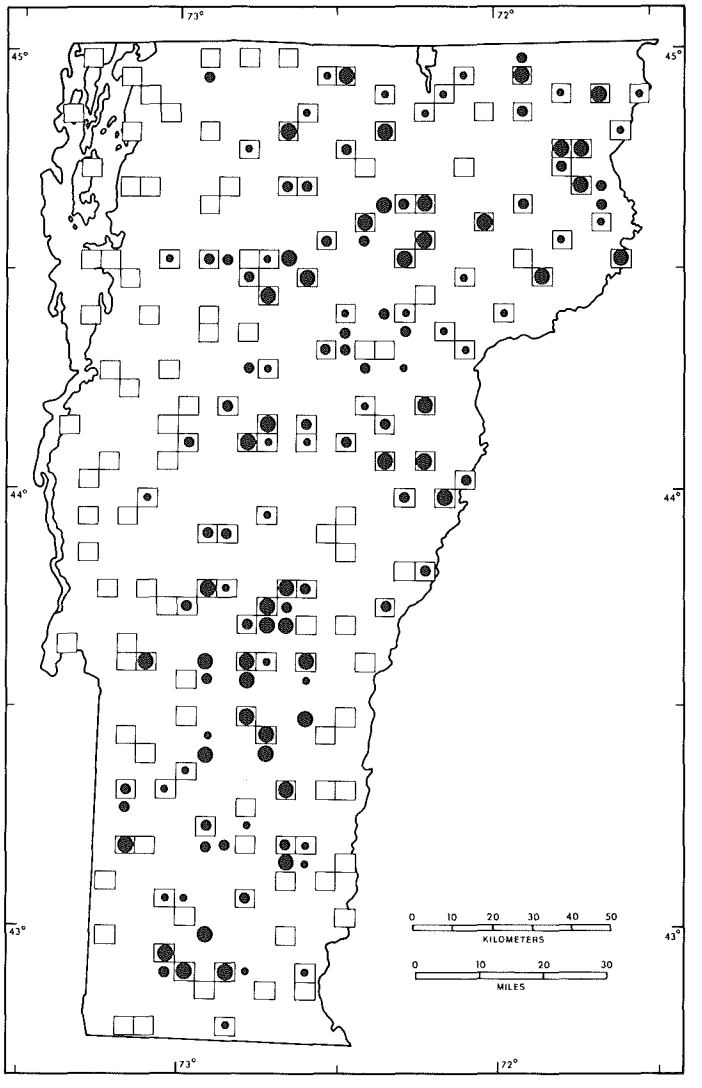
Regulus satrapa

Golden-crowned Kinglets invariably inhabit woodlands dominated by conifers. This species particularly prefers mature stands of spruce, both native and exotic. The species' preference for spruce appears to be related to a combination of factors involving nest sites and foraging behavior. Morse (1976) found that Golden-crowned Kinglets forage mostly in the thick branch-tip foliage of spruces, an area that excludes heavier birds such as most wood warblers. Kinglet nests are usually placed in thick coniferous foliage. Sabo (1980) found that in the White Mountain subalpine habitats of New Hampshire the species was most abundant in virgin stands of spruce. In upstate New York, Andrle (1971) found that 35- to 40-year-old stands of Norway spruce with thick canopies and a DBH of more than 15 cm (6 in) had been colonized by Golden-crowned Kinglets between 1950 and 1970. He suggested that these isolated plantations provide the proper structural and microclimatic habitats for the species.

Golden-crowned Kinglets can be difficult to locate because of their diminutive size, the concealing characteristics of their habitat, and their high-pitched calls, which are outside the range of many people's hearing. The song consists of 4 to 5 high introductory notes that go up the scale, followed by descending, complex, and harsh chickadee-like chatter. The species' habit of branch-tip foraging and its conspicuous hovering often allow sightings by alert observers. Squeaking and swishing sounds will often lure these curious birds into view. The nest itself is extremely well hidden. The principal method of confirming the Golden-crowned Kinglet during the Atlas Project was observation of parents carrying food to young (65% of all confirmations; sightings of dependent young provided 24% of all confirmations).

The Golden-crowned Kinglet winters in Vermont in small numbers. Migration peaks noticeably from late March to early May and from late September to early November. Three egg dates for Vermont, ranging from May 30 to June 8, probably reflect the peak of egg laying. The nest is a pouchlike structure of moss, lichens, and spider web, lined with fine bark, black rootlets, and feathers, often those of grouse. Nests are normally placed well away from the tree trunk in a fork at a branch-tip in thick foliage. Nests are 1.8–18.3 m (6–60 ft) above the ground; the normal range is 9.1–15.2 m (30–50 ft) (Bent 1949). The eggs are white with gray or brown speckling, and number from 5 to 10; 8 or 9 is the usual number. The nest is so small that the eggs are deposited in two layers. There are no data for Vermont on nestlings; five Vermont dates for recently fledged young range from June 28 to July 20.

The Golden-crowned Kinglet is probably more widespread today than it was 100 years ago because of the extensive reforestation that has occurred in Vermont since that time. The kinglets' wintering in a northern range occasionally results in large population fluctuations. L. H. Ross (Field notes) noted very low numbers of kinglets in the late 1930s, and the harsh winter of 1976–77 caused declines throughout the species' eastern range (Robertson 1977). Sabo (1980) recorded a 56% decline in Golden-crowned Kinglets in the White Mountains of New Hampshire between the summers of 1976 and 1977. Much of the Atlas Project work was carried out after this decline, so the species map probably shows a restricted dis-



No. of priority blocks in which recorded

TOTAL 99 (55%)

Possible breeding:	34 (34.3% of total)
Probable breeding:	29 (29.3% of total)
Confirmed breeding:	36 (36.4% 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	2.0
Green Mountains	39	72	39.4
North Central	14	74	14.1
Northeast Highlands	15	94	15.2
East Central	17	89	17.2
Taconic Mountains	4	25	4.0
Eastern Foothills	8	33	8.1

tribution rather than the potential extent of the species' Vermont range.

During the Atlas Project this species was almost unknown in the Champlain Lowlands, where it was absent from 94% of the priority blocks. Golden-crowned Kinglets were very local in the Taconic Mountains and Eastern Foothills, where they were absent from 75% and 67% of the priority blocks, respectively. The highest incidences of occurrence were in northeastern Vermont and the Green Mountains—particularly the Northeast Highlands, where the kinglet was present in 94% of the priority blocks.

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