

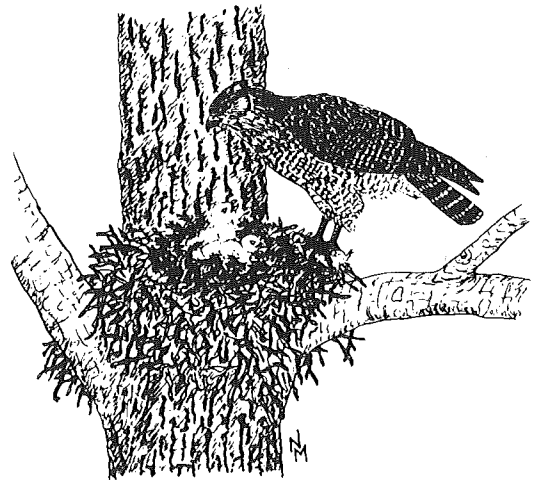
Red-shouldered Hawk

Buteo lineatus

The Red-shouldered Hawk favors temperate climates and breeds from the north central states and southern Quebec south to Florida, the Gulf Coast states, and northern Mexico, with a separate population in California (AOU 1983). Vermont is near the northern limit of the species' range. Although the winter range does reach as far north as southern New England, most of these hawks winter farther south (AOU 1983). There are three records for Red-shouldered Hawks in Vermont in December, one in January, and three in February (RVB, Winter 1975-76, Winter 1980-81, Winter 1981-82).

Red-shouldered Hawks are among the earliest hawks to return to their nesting grounds in the spring. At Winhall, in 1976, following a mild period, a calling bird turned up on territory on February 25. These hawks are among the first to be seen from the ridges, and are usually moving northward by March 15. When breeding birds arrive, they waste no time in establishing territory. In the spring, territorial calls of these birds are one of the most familiar sounds in areas where they breed; their notes are frequently imitated by Blue Jays. The tumbling, erratic flight of the male is often observed by hawk watchers in the spring. Most fall migrants have left by early November, but two were reported on the Rutland Christmas Bird Count in 1981. Red-shouldered Hawks were observed more frequently on fall hawk watches in the Green Mountains than in the Eastern Foothills or Taconic Mountains. During migration, they are seen less frequently than either Broad-winged or Red-tailed Hawks.

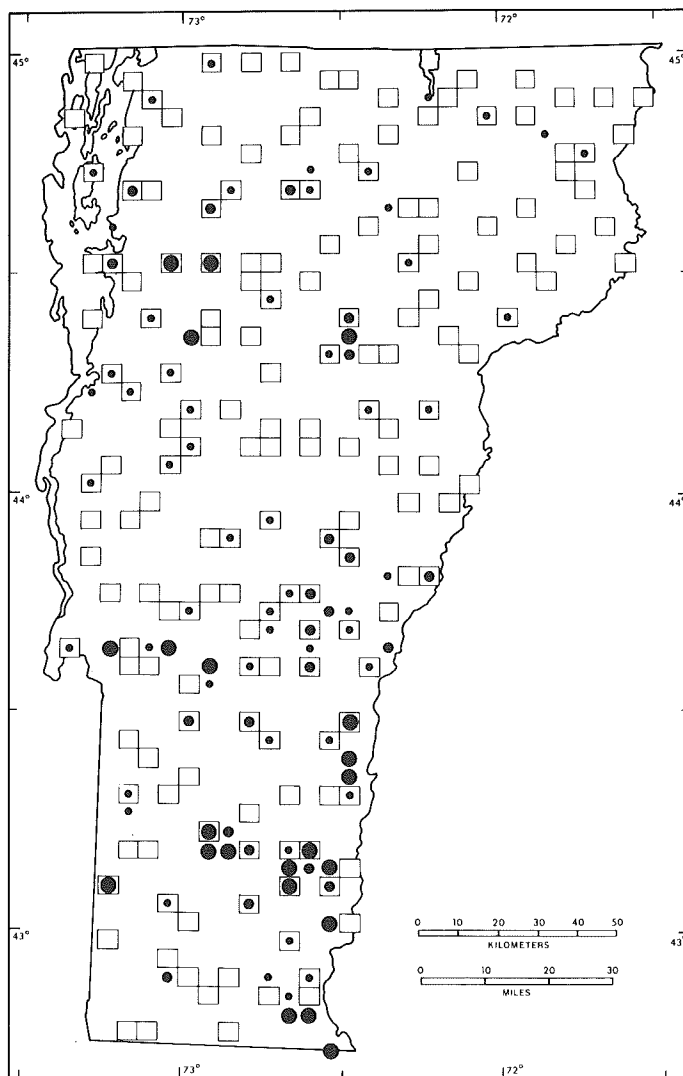
Mature riparian and floodplain forests, or upland deciduous forests adjacent to floodplain forests, are most often used by nesting Red-shouldered Hawks (Portnoy and Dodge 1979; Bednarz and Dinsmore 1981; Morris and Lemon 1983). Quite often the largest deciduous trees in a forest tract are selected as nest trees (Portnoy and Dodge 1979). For feeding, small wetland or other natural openings are important (Bednarz and Dinsmore



1982). The only nesting density information comes from Maryland, where Stewart (1949) found 1 pair per 2.1 sq km (0.8 sq mi).

The nest, constructed in a large tree, is a platform of sticks, which may be decorated with sprays of conifer branches. Nest building was observed in West Brattleboro on April 24 (RVB, Spring 1976), and birds were beginning to nest on March 30 in Westford (RVB, Spring 1980). Thirty-six Vermont records for nest and egg dates range from April 15 to May 26; clutches varied from 1 to 4 eggs, 3 or 4 being the usual number. The nests were at heights of 8-18 m (25-60 ft), most often in deciduous trees; only two were in conifers. Two nestings occurred in old nests of other species—the Red-tailed Hawk and American Crow (Hartland, Windsor County, 1892). Nests with young were recorded on three dates: May 25, June 4, and July 2. Fledglings were seen on May 29 (in Winhall), June 28 (in Westford), and July 9 (in Topsham). A family group of four birds was observed in Ripton on June 1 (RVB, Summer 1982).

The Red-shouldered Hawk was reported during the Atlas Project from all seven physiographic regions, but was not confirmed in priority blocks in the Northeast Highlands, North Central, or East Central regions. Bottomland deciduous forest habitat is limited in north central and northeastern Vermont. Lower densities are expected toward the



No. of priority blocks in which recorded

TOTAL 62 (35%)

Possible breeding: 39 (63% of total)

Probable breeding: 16 (26% of total)

Confirmed breeding: 7 (11% of total)

Physiographic regions in which recorded

	no. of priority blocks	% of region's priority blocks	% of species' total priority blocks
Champlain Lowlands	15	48	24.0
Green Mountains	17	31	27.5
North Central	4	21	6.5
Northeast Highlands	1	6	2.0
East Central	7	37	11.0
Taconic Mountains	3	19	5.0
Eastern Foothills	15	63	24.0

limits of a species' range, and the scarcity of records for these regions may simply reflect Vermont's proximity to the fringe of the Red-shouldered's range.

Red-shouldered Hawks have a varied diet; they will take birds, mammals, reptiles, or amphibians (Bent 1937). In the summer, in wetland feeding habitats, they will consume amphibians and reptiles.

The Red-shouldered Hawk is on the *American Birds'* Blue List throughout its range (Tate and Tate 1982), and is on lists of Threatened Species in New York and New Hampshire; it is not, however, currently being considered for such listing in Vermont. These hawks accumulate organochlorine pesticides

and PCBs (Henny et al. 1973). Evidence suggests that Red-shouldered Hawks are vulnerable to habitat alteration, including forest fragmentation (Henny et al. 1973; Galli et al. 1976; Bednarz and Dinsmore 1981; Armstrong and Euler 1982). Large tracts of mature, deciduous forest with scattered wetland and other openings are important for this species.

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