

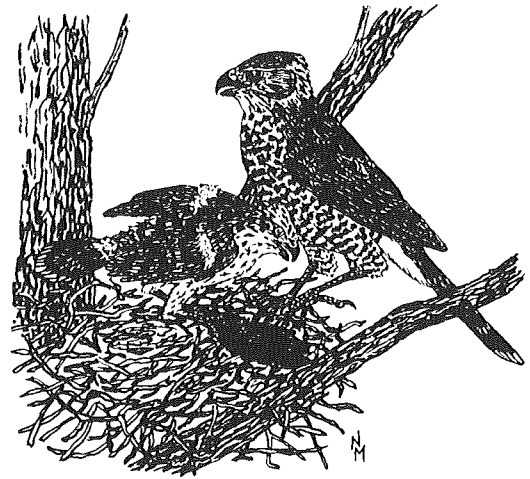
Cooper's Hawk

Accipiter cooperii

The Cooper's Hawk is the least numerous of Vermont's nesting accipiters. Intermediate in size between the Northern Goshawk and Sharp-shinned Hawk, it seems to prefer woodlands of intermediate character. Reynolds et al. (1982) found that in Oregon favored nest sites were 50- to 80-year-old stands with trees of intermediate height and density. Nests were commonly found in pine stands in eastern Massachusetts (Bent 1937), and in New York and Pennsylvania were located by Meng (1951) most frequently in northern hardwoods and oak-hickory stands.

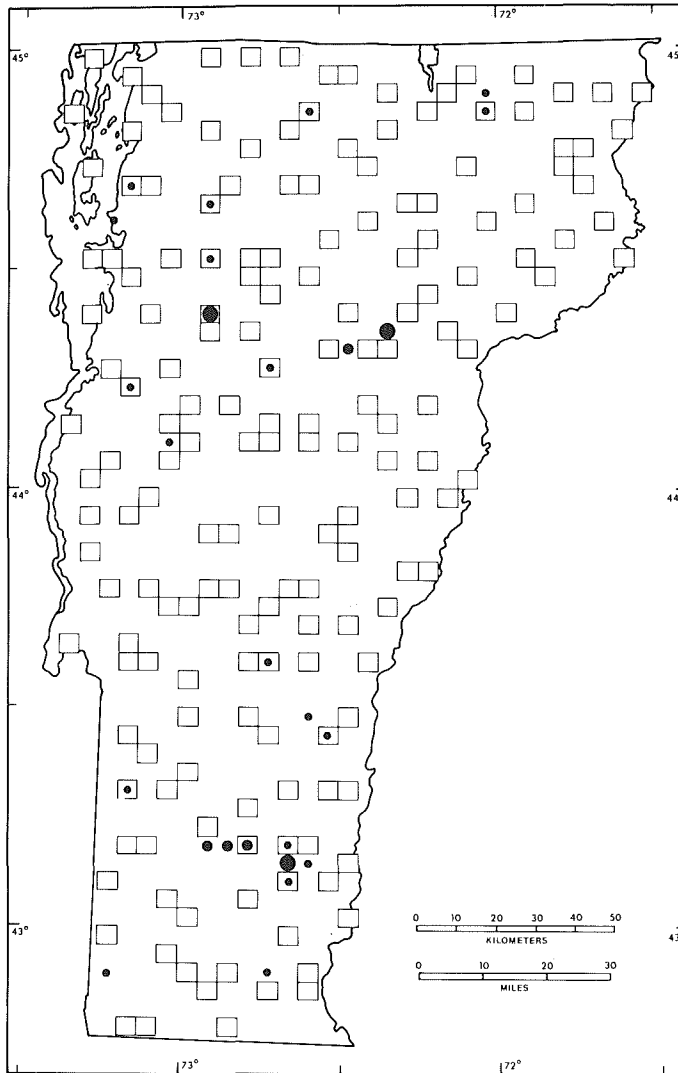
The Cooper's Hawk is one of the raptors whose feeding habits made them particularly vulnerable to the effects of the buildup of chlorinated hydrocarbons (e.g., DDT and DDE) in their tissues. The Cooper's diet consists of small- to medium-sized birds and, to a lesser extent, squirrels (Meng 1959). The insectivorous diet of many of the Cooper's prey species produced concentrations of pesticides in the hawks, which eventually led to lowered calcium deposition in eggshells and the poisoning of embryos and young. Snyder et al. (1973) were able to correlate breeding failure in this species with high DDE concentrations in its eggs.

Population declines in this species commenced in the late 1940s, but were most evident during the 1960s. Henny and Wight (1972) believed there was a 25% annual rate of decline for this species from 1948 to 1967. Slower rates of decline before 1948 were mainly caused by hunting. The Cooper's reputation as a depredator of poultry made it a favorite target; however, this reputation, while admittedly not undeserved, was certainly exaggerated (Meng 1959). Since the banning of DDT in 1972, Cooper's Hawk populations appear to be recovering. The species has been tentatively removed from the National Audubon Society's Blue List, although it maintains its status as a Species of Special Concern (Tate and Tate 1982).



During the nineteenth century in Vermont the Cooper's Hawk seems to have been one of the most common raptors in the state (Perkins and Howe 1901). Samuels (1872), however, alluded to a previous period of scarcity in New England. In 1933 Fortner et al. reported that the species was uncommon, evidencing declines from hunting. Smith (1934b) called it uncommon to rare. Since the 1940s the species has become alarmingly scarce in Vermont, so scarce in fact that it has been proposed for Species of Special Concern status in the state. During the Atlas Project it was located in only 25 blocks, including 14 priority blocks.

Cooper's Hawks return to nesting areas in Vermont during mid March and early April. Early spring, before the trees leaf out, is the best time to search for nests. The adult's loud cackling can offer a clue to the nest's whereabouts. The nest is a fairly substantial structure of sticks built next to the trunk in conifers and in the crotches in deciduous trees (Bent 1937), usually just under the crown or in the lower portion of the crown (Reynolds and Wight 1978). The average height of 11 Vermont nests was 13 m (42 ft), out of a range of 9-21 m (30-71 ft). Egg dates for Vermont range from April 29 to June 15 for 10 nests. The average size of 12 Vermont clutches was 4.1 eggs, well within the recorded range of 3.8 to 4.3 (Reynolds and Wight 1978). The eggs are pale



No. of priority blocks in which recorded

TOTAL 14 (8%)

Possible breeding: 12 (86% of total)

Probable breeding: 1 (7% of total)

Confirmed breeding: 1 (7% of total)

Physiographic regions in which recorded

	no. of priority blocks	% of region's priority blocks	% of species' total priority blocks
Champlain Lowlands	4	13	29
Green Mountains	5	9	36
North Central	1	5	7
Northeast Highlands	0	0	0
East Central	1	5	7
Taconic Mountains	1	6	7
Eastern Foothills	2	8	14

blue when fresh, fading to dull white. The incubation period has been reported as 34 to 36 days (Meng 1951) and 30 to 32 days (Reynolds and Wight 1978). The young remain in the nest from 27 to 35 days (Meng 1951; Reynolds and Wight 1978). The flying young may remain in the vicinity of the nest for periods of up to 53 days (Reynolds and Wight 1978). The autumn migration of the Cooper's Hawk in Vermont peaks during early and mid October; a few may be seen at later dates, including rare overwintering birds.

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