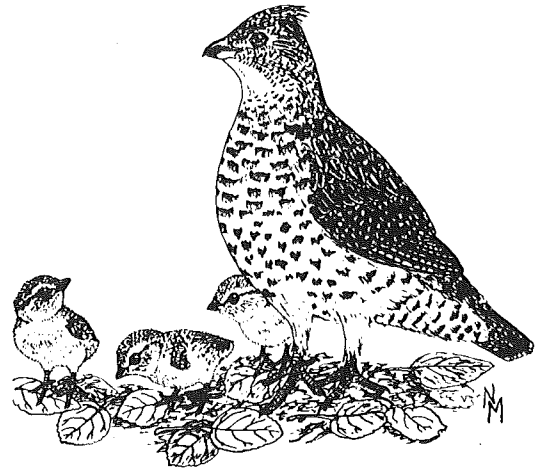


Ruffed Grouse

Bonasa umbellus

The Ruffed Grouse, or “partridge” as it is known throughout Vermont, is a popular upland gamebird for which there is an annual autumn hunting season. The species inhabits mixed or deciduous forest with brushy clearings and a thick understory growth of shrubs. The presence of grouse seems to be determined by the occurrence of catkin-bearing trees and shrubs, especially aspen (Svoboda and Gullion 1972), although alder has also been cited as important in marginal situations (Palmer 1963; Pietz and Tester 1982). Brood range, winter food resources, and drumming sites in Vermont are found in early successional forest, primarily second-growth areas and abandoned farmland (Black 1976; M. Scott, Vt. Fish and Wildlife Dept., pers. comm.).

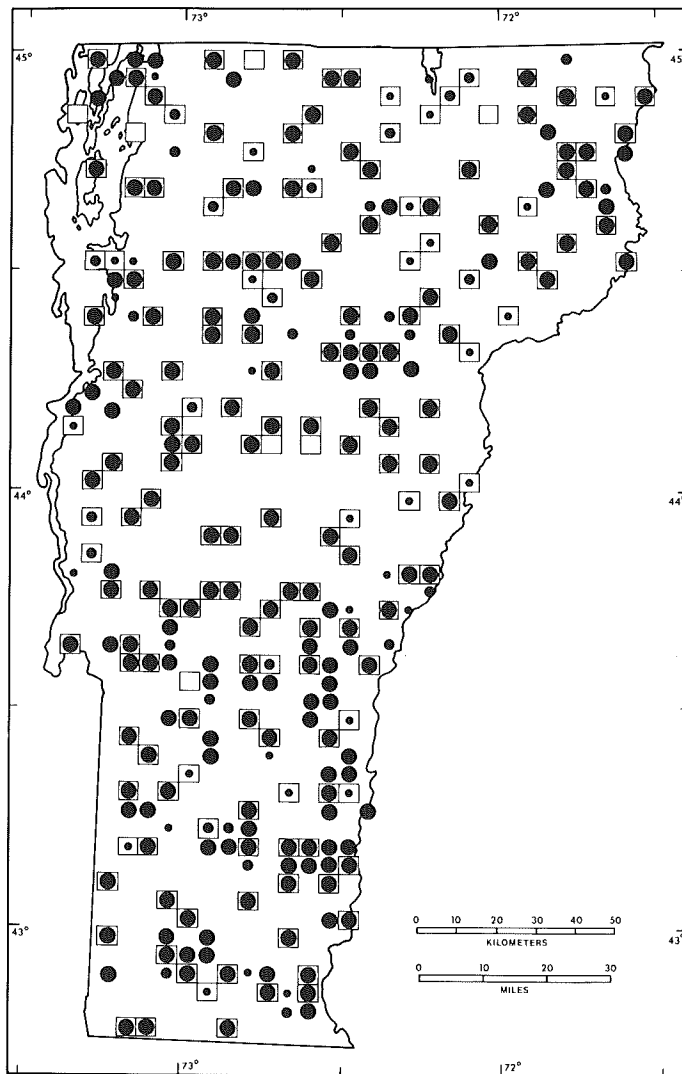
Ruffed Grouse are often encountered along old roads and trails in the woods. The Ruffed Grouse’s startlingly explosive flush often leaves the observer breathless. Another clue to the presence of Ruffed Grouse is the territorial drumming of the male. A low, throbbing, accelerating sound, drumming is caused by a series of compression waves created by the beating of the male’s wings while he remains in a stationary position on a display log, stump, elevated terrain, or stone wall (Sousa 1978; M. Scott, Vt. Fish and Wildlife Dept., pers. comm.). Research in Grafton, Vermont, showed that stone walls were used frequently for drumming by grouse (Black 1976; M. Scott, Vt. Fish and Wildlife Dept., pers. comm.). Drumming begins after the snow melts, is most frequent from March through May (Edminster 1947), and peaks in late April (Brander 1967). Drumming may be heard at other times of year, especially when juveniles disperse in autumn. Confirmation is most easily obtained by locating broods, either through the conspicuous distraction displays of the hen or by flushing the chicks. Eighty-one percent of Vermont confirmations involved the discovery of a brood.



Adult Ruffed Grouse are resident and sedentary. Females may occasionally move more than 1.6 km (1 m) (Hale and Dorney 1963); juveniles may move considerable distances after broods break up in early September (Godfrey and Marshall 1969). Mating occurs from late March to mid May, and nesting is under way by mid April. Dates for 11 Vermont nests containing eggs range from April 20 to June 9. The nest is usually a hollow at the base of a tree or stump, and is lined with leaves. Eggs vary widely in number; the average size of 1,473 New York State clutches was 11.5 eggs (Bump et al. 1947). Replacement clutches were smaller, averaging 7.5 eggs for 149 re-nests in New York (Bump et al. 1947). The incubation period lasts 23 to 24 days, although it may be lengthened by cold weather (Bump et al. 1947).

Ruffed Grouse chicks leave the nest within hours of hatching. At that time broods move to early successional habitats and openings, such as recently lumbered areas and overgrown pastures, and along woods roads where insects—a staple in the chick’s diet—are abundant (Edminster 1947). Twelve Vermont dates for flightless chicks range from May 30 to July 31. The young can fly at 10 to 12 days (Johnsgard 1973). Forty-two dates for broods of fledged young in Vermont range from June 10 to July 31.

The Ruffed Grouse is common and wide-



No. of priority blocks in which recorded

TOTAL 172 (96%)

Possible breeding: 22 (13% of total)

Probable breeding: 14 (8% of total)

Confirmed breeding: 136 (79% of total)

Physiographic regions in which recorded

	no. of priority blocks	% of region's priority blocks	% of species' total priority blocks
Champlain Lowlands	28	90	16.0
Green Mountains	53	98	31.0
North Central	18	95	10.5
Northeast Highlands	16	100	9.0
East Central	18	95	10.5
Taconic Mountains	15	94	9.0
Eastern Foothills	24	100	14.0

spread in Vermont; it was found in 96% of the priority blocks, and breeding was confirmed in 79%. This species is subject to periodic or cyclic declines. Average per-party-hour figures from the National Audubon Society's Christmas Bird Counts for the period 1969-82 illustrate a steady rise in the number of grouse between the winter of 1970-71 and the winter of 1979-80. During 1970-71, only 0.02 Ruffed Grouse per-party-hour were observed on Vermont counts; by 1979-80 the population had recovered to a peak party figure of 0.28. Vermont forests have now grown somewhat beyond the successional stage of optimal

ground cover for the Ruffed Grouse. The future of the Ruffed Grouse in Vermont will depend on land-use practices, and especially forestry practices in woodlands.

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