

Ruffed Grouse

Bonasa umbellus



The drumming of a Ruffed Grouse is the heartbeat of a northern forest, and its unexpected burst from cover can make hiking a thrilling experience. The Ruffed Grouse breeds from the southern Appalachians north to Labrador and west across Canada to Alaska. In the American West, it occurs in the Rocky Mountains south to Utah. Because the Ruffed Grouse is dependent on thickets and aspen groves, the maturing of Vermont's forests has raised concerns for its future. The species has been extirpated from portions of its range in the mid-Atlantic region and central United States, although reintroductions into the latter region have been successful (Rusch et al. 2000).

The Ruffed Grouse reaches its greatest densities in areas where aspen is a dominant part of an early successional forest community. Aspen buds comprise the bulk of the winter diet, but fruits, berries, catkins, and herbaceous vegetation are consumed during other seasons (Rusch et al. 2000). Ruffed Grouse prefer areas with brushy hedgerows, wooded riparian corridors, and other habitats in an early stage of succession (such as young forests). Having survived several centuries as one of America's premier game birds, today's Ruffed Grouse are evasive. Fourteen nests were found during the second atlas, from 4 May through 1 July. Of all records submitted to the atlas, females with broods (11 May through 15 August) provided more than 87 percent of the 321 confirmations. Ruffed Grouse are one of the few species for which local residents can be reliably queried; most people recognize the bird, often called "partridge," and are more likely to encounter nests or broods in their daily travels than are atlasers.

Ruffed Grouse occur throughout the state. They were not reported in a few blocks in the Champlain Valley, where they may be restricted to the remaining small woodlots and thus were not conspicuous to atlasers. Reports were also slightly fewer than in the first atlas in the Southern Vermont Piedmont, but there is little reason to think that there are large expanses of the state where the species is absent. In the Northeast Kingdom, they

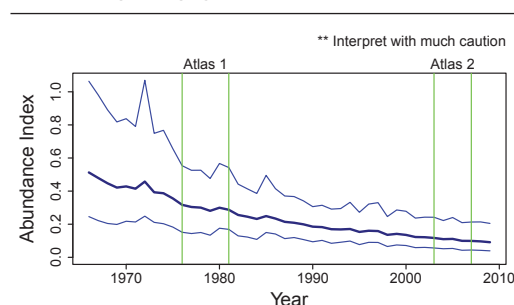
may occur in the same areas inhabited by the state's few Spruce Grouse.

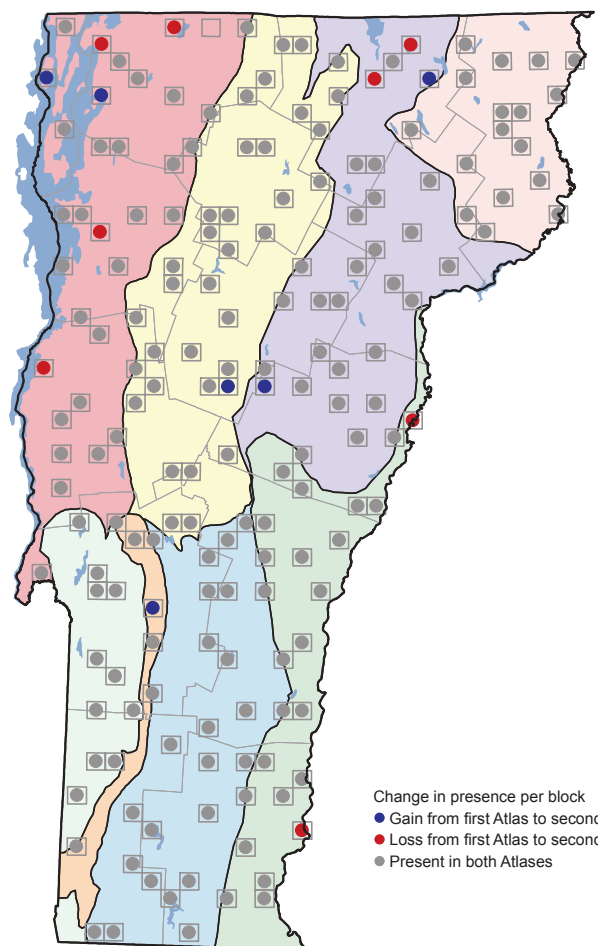
Comparison of the first and second atlas maps suggests that there has been no change in the distribution of Ruffed Grouse. Breeding Bird Survey data indicate that Vermont's Ruffed Grouse population decreased, but not significantly, from 1982 to 2007 (Sauer et al. 2011). Nevertheless, the 2005 Vermont population estimate was 48,900 drumming males, more than 8 percent above the 1980 estimate (Dessecker et al. 2006).

Elsewhere, the Ruffed Grouse has not been faring as well. In New York, the numbers of atlas blocks where Ruffed Grouse were detected decreased by 18 percent between the first and second atlases (McGowan and Corwin 2008). Pennsylvania's second atlas revealed a 33 percent decline (Wilson et al. 2012), with severe declines in the southeastern part of the state. In Ontario, the second atlas found substantial declines in many regions—particularly in the south—but a 27 percent increase in the Northern Shield (Szuba 2007).

Although the Ruffed Grouse has a large continental population, it is a medium priority species on Vermont's Species of Greatest Conservation Need list because the species has been declining in New England, and its early successional habitat has also been on the decline. Ver-

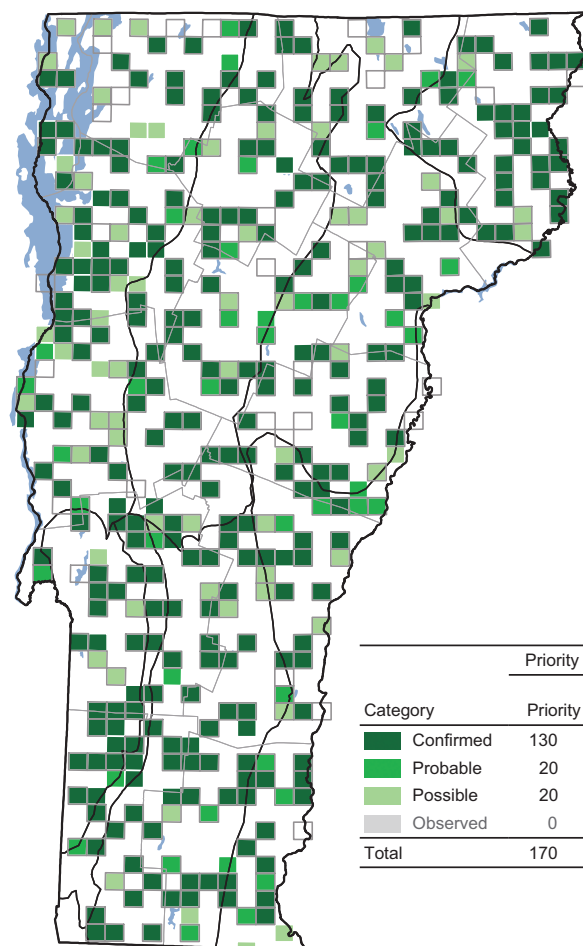
RELATIVE ABUNDANCE OVER TIME





CHANGE IN DISTRIBUTION BETWEEN ATLASES

Biophysical Region	First Atlas	Second Atlas	Change	% Change
Champlain Valley	30	28	- 2	- 7
Northeastern Highlands	17	17	+ 0	+ 0
Northern Green Mountains	34	35	+ 1	+ 3
Northern Vermont Piedmont	28	28	+ 0	+ 0
Southern Green Mountains	27	27	+ 0	+ 0
Southern Vermont Piedmont	21	19	- 2	- 10
Taconic Mountains	11	11	+ 0	+ 0
Vermont Valley	4	5	+ 1	+ 25
Totals	172	170	- 2	- 1



Category	Priority Block Count	
	Priority 1	Priority 1 & 2
Confirmed	130	251
Probable	20	36
Possible	20	51
Observed	0	0
Total	170	338

DISTRIBUTION IN CURRENT ATLAS

Biophysical Region	% of region species occupies	% of all records for this species found in region
Champlain Valley	89	19
Northeastern Highlands	94	10
Northern Green Mountains	95	18
Northern Vermont Piedmont	87	17
Southern Green Mountains	98	16
Southern Vermont Piedmont	90	11
Taconic Mountains	95	6
Vermont Valley	100	2

mont's Wildlife Action Plan has set a goal of supporting a population that can sustain an annual harvest of 150,000 Ruffed Grouse. Guidelines applicable to Vermont laid out in the Ruffed Grouse Conservation Plan include promoting the use of even-age forest-stand management (including harvest of 20,900 acres per year); retaining aspen-birch stands and soft mast; enhancing shrub growth along roads and around seeps; planting of legumes on forest roads and clearings; and saving clumps of conifers for winter cover (Dessecker et al. 2006). Implementation

of these recommendations will ensure healthy grouse populations in Vermont even as forestlands mature.

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