Ruffed Grouse

Bonasa umbellus

During the 20th century, Ruffed Grouse have primarily been restricted to the Allegheny Plateau in eastern and southern Ohio, a distribution pattern that is apparent on the accompanying map. There were records from 245 priority blocks during the Atlas Project, representing 32.1% of the statewide total. Of these records, 180 (84.9% of the regional blocks) were from the Unglaciated Plateau physiographic region. Grouse were fairly uniformly distributed throughout these unglaciated counties, but were perhaps slightly less widespread in areas that have been extensively strip mined.

Fewer Ruffed Grouse were found in the Glaciated Plateau region with records from 40.7% of the priority blocks. They were more locally distributed, becoming scarce to absent along a band extending from Mahoning and southern Trumbull counties through Stark and Summit counties to the Cleveland metropolitan area. Grouse were also scarce along the western margin of this region where suitable habitats are scarce.

Ruffed Grouse were generally absent from the rest of the state. The few records from the Illinoian Till Plain and Till Plain regions were from localities close to the Allegheny Plateau. The only exception was a report from western Lucas County at an area where they had been released during the 1950s (Peterjohn 1989a). The sporadic sightings from western Lucas County during the past 20 years apparently indicate that a grouse population has not become established in this area.

In the 1980s, grouse populations were relatively high through 1982 but noticeably declined in subsequent years (Stoll and MaClain 1986). Hence, the Atlas Project was conducted during the low ebb of grouse population fluctuations in the state. Their relative scarcity may not have affected their distribution within the unglaciated counties, but may have reduced their numbers from marginal habitats along the edge of the Allegheny Plateau.

These data correspond well with the distribution of Ruffed Grouse in Ohio as described by Stoll and McClain (1986). They cited reports from 44 counties as compared to 46 counties during the Atlas Project. They recorded grouse from only one county where they were not encountered during the Atlas Project, near the Ohio River in southern Clermont County.

Ruffed Grouse have not always had a restricted range. When Ohio was initially settled, they were probably fairly scarce residents throughout the state. Their numbers increased when the virgin forests were cleared and replaced by second growth woods. Grouse populations may have peaked between 1850 and 1875, but rapidly declined in subsequent years as a result of overhunting and habitat destruction. The last records away from the Allegheny Plateau occurred between 1890 and 1908 (Peterjohn 1989a).

Their breeding biology in Ohio was described by Chapman et al. (1952). Ruffed Grouse prefer second growth deciduous woods where dense understories, shrubs, vines, and other tangles provide suitable cover. They are equally at home in the wet woodlands of northeastern Ohio and the drier hillsides in the unglaciated counties. Even on these hillsides, however, their territories invariably include at least one small stream. They prefer exten-

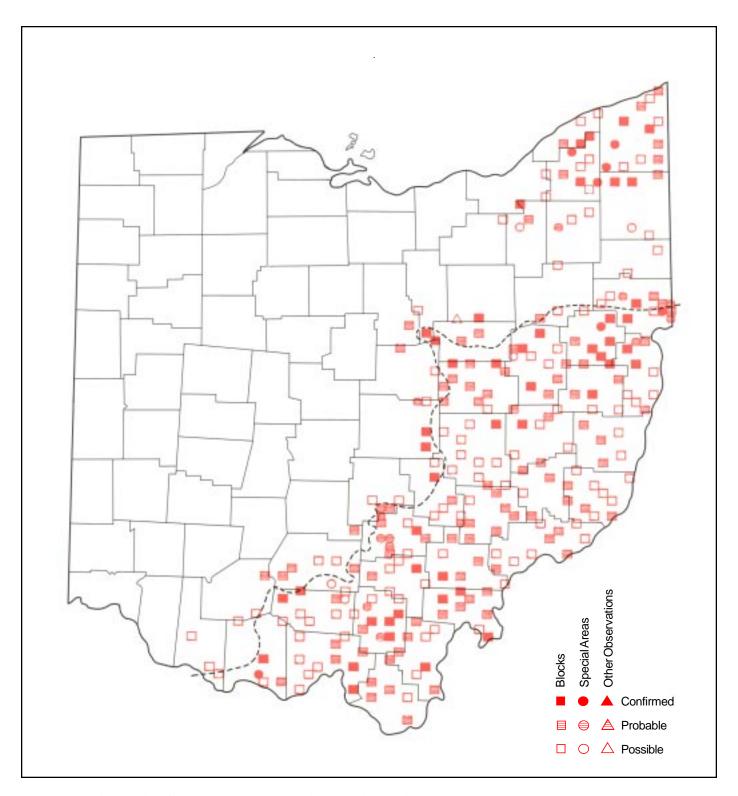
sive tracts of second growth habitats, but may also occupy isolated woodlots. Small numbers may occur in mature woods where greenbriers or other tangles provide dense cover near the ground.



Tim Daniel - Division of Wildlife

Grouse nest on the ground, usually near woodland edges and clearings. These nests are frequently located near the bases of trees and shrubs, but may also be placed under fallen logs and dead branches (Peck and James 1983). Some may be hidden by underbrush while others are exposed, but all are difficult to locate. Breeding grouse proved to be hard to confirm during the Atlas Project. Of 47 confirmed records, 16 pertained to active nests while 29 were of adults accompanied by small young. Reports of probable breeders, primarily drumming males, and possible breeders were nearly equally divided among the data.

Within Ohio, Ruffed Grouse begin their courtship behavior during March but these activities peak in April. On warm, calm spring days during these weeks, the low–pitched beats of drumming males resound through the woods of eastern Ohio. The earliest published egg date is April 10 (Chapman et al. 1952), and most clutches are laid during the second half of April and early May. These young hatch between May 20 and June 10 and become independent by late July. Female grouse may renest if their first clutch is destroyed. Renesting attempts are responsible for clutches through June 10 and reports of adults accompanied by partially grown young until August 28 (Williams 1950).



Analysis of Block Data by Physiographic Region

Physiographic Region	Total Blocks Surveyed	Blocks with Data	% with Data	Regional % for Ohio	Ave. # Individ per BBS Route (1982–1987)
Lake Plain	95	3	3.2	1.2	-
Till Plain	271	1	0.4	0.4	_
III. Till Plain	46	4	8.7	1.6	_
Glaciated Plateau	140	57	40.7	23.3	<0.1
Unglaciated Plateau	212	180	84.9	73.5	<0.1

Summary of Breeding Status

No. of Blocks in Which Species Recorded					
Total Confirmed Probable Possible	245 47 92 106	32.1% 19.2% 37.6% 43.3%			
Confirmed Probable	47 92	19.2% 37.6%			