

# CENSUS GRID ON BEAVER MEADOW WILDLIFE REFUGE

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In 1954 the Buffalo Audubon Society laid out a grid of approximately 21 acres on its property in Java, Wyoming County. This grid comprises about one-third of the 68-acre tract owned by Buffalo Audubon Society, Inc., about two miles east of Java Village. It is a rectangle 1650 feet long and 550 feet wide subdivided into 20 rectangles 165 feet by 275 feet (the smaller rectangles 1.04 acres). This grid has been censused once a week for the six week period from mid-May through June each year since 1954.

The vegetation on the census area is climax woods, the dominant trees being hemlock (*Tsuga canadensis*), yellow birch (*Betula lutea*), and wild black cherry (*Prunus serotina*) with lesser numbers of many other species. The understory consists chiefly of speckled alder (*Alnus rugosa*), maple-leaved viburnum (*Viburnum acerifolium*), American yew (*Taxus canadensis*) and many other species of shrubs. 19 ferns and 13 Orchis species are among the ground plants. The plant life correctly indicates a wet woods. (For a more complete cataloging of the botany see Almendinger, 1955, Audubon Field Notes 9 (6): 419.)

The basic object of a breeding bird census is to determine territorial males. Here is a summary of the results of the first three years of the study:

| Year | Total<br>Species | Territorial<br>Males | Males Per<br>100 Acres |
|------|------------------|----------------------|------------------------|
| 1954 | 32               | 56                   | 201                    |
| 1955 | 23               | 23.5                 | 107                    |
| 1956 | 28               | 43                   | 172                    |

More interesting to this author, however, is the compilation of the yearly observations during the census period of individual species. It seems to give a more graphic picture of the conditions observers found in the sanctuary. In the following list after each species is recorded the number of observations 1954 to 1956 in that order.

Red-shouldered Hawk 8, 3, 2; Ruffed Grouse 7, 7, 1; Yellow-billed Cuckoo 1, 1, 0; Black-billed Cuckoo 7, 0, 0; Great Horned Owl 2, 0, 1; Flicker 5, 7, 3; Hairy Woodpecker 1, 1, 1 (all in the same area); Downy Woodpecker 9, 0, 1; Crested Flycatcher 21, 10, 7; Alder Flycatcher 3, 0, 1; Wood Pewee 7, 6, 5; Olive-sided Flycatcher 0, 0, 2; Blue Jay 33, 14, 5; Black-capped Chickadee 21, 11, 0; House Wren 2, 2, 2; Catbird 6, 2, 4; Brown Thrasher 0, 2, 2; Robin 0, 5, 1; Wood Thrush 36, 9, 8; Veery 27, 7, 12; Cedar Waxwing 23, 1, 0; Red-eyed Vireo 21, 16, 15; Yellow Warbler 4, 3, 0; Magnolia Warbler 4, 3, 0; Black-throated Green Warbler 17, 9, 9; Blackburnian Warbler 7, 0, 1 feeding young; Chestnut-sided Warbler 4, 5, 3; Oven-bird 14, 3, 0; Northern Water-thrush 25, 9, 9; Mourning Warbler 5, 0, 3; Common Yellowthroat 15, 10, 12; Hooded Warbler 0, 0, 3; Canada Warbler 21, 14, 13; Redstart 9, 4, 2; Scarlet Tanager 23, 12, 13; Goldfinch 3, 3, 2; Eastern Towhee 5, 1, 4; Field Sparrow 3, 1, 3; Song Sparrow 10, 9, 5.

An interesting sidelight is the fact that some individuals are returning to the same two or three acres each year.

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