

# BREEDING SEASON DISTRIBUTION AND ECOLOGY OF THE VESPER SPARROW IN THE SOUTHERN BLUE RIDGE MOUNTAIN PROVINCE

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The Vesper Sparrow (*Poocetes gramineus*) is widely distributed as a breeding species through much of Canada, the northern United States, and down the Appalachian highlands into eastern Tennessee and western North Carolina. Although the A.O.U. *Check-list* (1957) gives the southern breeding limit as Weaverville, Buncombe County, N.C., the status of the bird is not well known in the southern Blue Ridge Mountains, where Pearson et al. (1959) list summer records only from the periods 1887-1908 and 1930-1933. The paucity of modern records, the lack of ecological data, and the restricted geographical distribution of previous sightings prompt the present report.

## HISTORY

Cairns (1887, 1889, 1891, 1894) regarded the Vesper Sparrow as a fairly common summer resident on high elevation pastures in Buncombe County. Pearson et al. (1959) mention spring and summer records from Blantyre, Transylvania County, in 1908 and Blowing Rock, Watauga County, in 1905 and 1907. Thomas D. Burleigh (pers. com.) found the birds nesting near Swannanoa, Buncombe County, and in the Mills River Valley, Henderson County, from 1930 to 1934. Wetmore (1941) reports specimens collected on Elk Knob, Watauga County, in July 1939, while Stupka (1963) mentions a few records from the Great Smoky Mountains during the breeding season.

## PRESENT STUDY

In late July 1970 and late May 1975, I found Vesper Sparrows singing at a number of locales in Ashe, Watauga, and Avery Counties. Eight territorial males were observed in a 25-acre tract of grazed pasture at 1280 m (4200 feet) just N of Pottertown Gap in Watauga County on 28 July 1970, while six males were seen in the same area on 29 May 1975. Four adult birds were singing in a 15-acre pasture at 1365 m (4480 feet) at Pottertown Gap, Watauga County, on both dates. On 28 July 1970, I found 10 adults singing and behaving as if on territory at 1433 m (4700 feet) in a 40-acre section of pasture land on Old Field Bald, Ashe County. Three males were singing on pasture land between 1311 m (4300 feet) and 1433 m (4700 feet) near Yellow Mountain Gap, Avery County, on 29 July 1970. At Newfound Gap in the Newfound Mountains, I recorded two singing males in a pasture at 975 m (3200 feet) on 24 May 1972, with one bird on the Haywood County side and the other on the Buncombe County portion of the crest.

## HABITAT

The habitat at all these locales was quite similar and resembled that described by Bent (1968). The birds were occupying steep, heavily grazed pasture lands with closely cropped grass, occasional rocks, and a few widely scattered shrubs. The males perched on the rocks, shrubs, fence posts, and ground while uttering their songs. I have not observed the bird in undisturbed grass balds or cultivated fields in the mountains, and all of my records were from areas above 975 m (3200 feet) with the overwhelming majority above 1280 m (4200 feet). Interestingly, no Song Sparrows were seen at four of the five sites, although they are usually quite conspicuous in similar habitat where Vesper Sparrows are absent, suggesting the possibility of competition between the two species. I have made no effort to look for Vesper Sparrows in the pasture lands of river floodplains at lower elevations, and it seems likely that the species does occur in such areas, because Burleigh found them in this type of habitat at Swannanoa and in the Mills River Valley.

Time limitations precluded any extensive searching for nests, and no breeding evidence was seen.

### CONCLUSIONS

The Vesper Sparrow is a summer resident on grazed pasture lands in the North Carolina mountains south at least to Buncombe and Haywood Counties. The bird is particularly conspicuous in the extensive high elevation pastures above 1280 m (4200 feet) near the state line in Ashe, Watauga, and Avery Counties, where it may reach a density of over 25 pairs per 100 acres. Additional studies are needed to determine the entire breeding range of the bird in western North Carolina, and observers should report careful details of any sightings during the nesting season.

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