Comparative Studies of Song Sparrow Vocalizations James Mulligan Saint Louis University Project Number 150

The sympatry of three congeneric sparrow species; namely, the Song, Lincoln, and Fox Sparrows in the Jackson Hole area is a unique circumstance in the distribution of this group. Elsewhere they are separated by habitat if not by considerable distance, but here these species breed together. The Fox and Song Sparrow were observed actually defending interspecific territories. The study conducted during a period of four days in early June was preliminary and was aimed mainly at obtaining a collection of Song Sparrow vocalizations as part of a larger study of the same throughout most of the geographic range of this species. There was question here of the variation which might be found in certain stereotyped calls, since the possibility existed that those used for territorial defense might show character displacement in areas of close sympatry with congeneric species.

It was found, using evidence from detailed measurements of audiospectrographs, that the most common and important of these calls varies not at all from that found in the other parts of the range. In fact this call is evidently quite uniform through the entire range of the Song Sparrow, including the widely separated races of the Mexican Plateau.

Further studies are anticipated to clarify the similarities and differences in the visual and sound signals used by the above species in their mutual relationships at Jackson Hole.

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