

**MONITORING BREWER'S SPARROWS (*SPIZELLA BREWERI*)
USING SONG RECORDINGS^{TWS}**

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Formerly extensive sagebrush-shrub steppe areas of Washington have been substantially reduced and fragmented by conversion to agricultural uses. Thus, conservation of species found only in sagebrush habitats are a major concern for wildlife managers. As part of an ongoing study on the effects of shrub steppe fragmentation on nesting birds in eastern Washington, we color-banded individual male Brewer's sparrows, recorded their songs and tracked their nesting success throughout the breeding season. Recordings indicate that each individual male Brewer's sparrow possesses two different types of songs, termed simple and extended songs. Simple songs are individually distinctive and extremely variable among males within local populations. Thus, recordings of simple song act as acoustic fingerprints for identifying individual males. They are also produced repetitively from late April through the end of May. Recording simple songs during this period may provide a non-intrusive, cost-efficient method for monitoring adult survivorship of Brewer's sparrows and possibly other shrub steppe species.