ABERRANT SONG OF A FIELD SPARROW

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On 16 March 2016, Gene and Shannon Knight observed a Field Sparrow (*Spizella pusilla*) of typical plumage (Figure 1) in Lafayette County singing a buzzy song suggestive of Clay-colored Sparrow (*Spizella pallida*). The site where the bird was found lies south of Oxford along CR 337 approximately 300 m south of its terminus with CR 328 near an electrical substation. The sparrow was found on multiple visits through at least 1 May.

On 18 March, Rigby recorded audio of the song (https://www.xeno-canto.org/313158) for inclusion the in Mississippi Museum of Natural Science Bioacoustics Collection and video of the bird singing (https://flic.kr/p/Fr9wqB). The song consisted of an initial descending slur, like that of Field Sparrow, followed by a set of five-six buzzy phrases, occasionally completed by the terminal trill from the typical "bouncing ball" song of a Field Sparrow (Figure 2). In the recordings, all songs included the initial descending slur and buzzy phrases, while approximately two-thirds of the songs included the terminal trill. Despite the aberrant song, nothing of the bird's appearance was atypical or suggested hybridization with Clay-colored Sparrow. While the buzzy nature of the song is suggestive of Clay-colored Sparrow, the pattern of notes (slur, buzz, trill), cadence (one long followed by several short buzzes), and pitch (lower than Clay-colored Sparrow) make the source of the aberrant song speculative.

Like most songbirds, Field Sparrows learn their song from other individuals (Nelson 1992, Liu and Kroodsma 1999). Liu and



Figure 1. Field Sparrow singing a buzzy song type reminiscent of Clay-colored Sparrow, Lafayette County, Mississippi, 18 March 2016.

Kroodsma (1999) found that Field Sparrows learn song elements during their hatch year from tutors, and then selectively retain song elements to best match neighboring peers the following spring. Since the soundscape for young birds is filled with many songs, the learning phase presents opportunities for "mistakes" such as learning elements of the song of another species. Many cases of apparent mimicry in songbirds might be attributed to such mistakes during the sensitive learning period.

While rare, there are precedents for Field Sparrows learning the songs of other species. Short (1966) observed an after hatch year Field Sparrow singing the song of a Chipping Sparrow

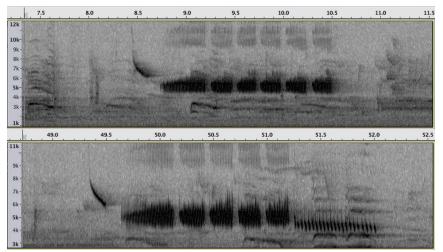


Figure 2. Spectrograms of the two aberrant Field Sparrow song types encountered in Lafayette County, Mississippi, 18 March 2016.

(*Spizella passerina*) in Nebraska. During their study on caged birds, Liu and Kroodsma (1999) found that "one juvenile field sparrow acquired part of his song from another species, the sedge wren, *Cistothorus platensis*. During the hatching year, this juvenile was isolated from adult sparrows and kept in a holding room with other juvenile sparrows and with marsh wrens, *C. palustris*, and sedge wrens. The following spring, adult sparrows were added to the room. This juvenile's song seemed highly abnormal to us, with the ending notes of the song apparently learned from one of the sedge wrens."

The song of the Lafayette County bird was not encountered on return trips to the location later in the summer nor in spring 2017. Possible explanations include predation or that the bird was merely a transient migrant that continued northward. The latter possibility would add credence to the possibility of Clay-colored Sparrow being involved in the song-learning period. While it is possible that the bird was predated or moved elsewhere, the work of Liu and Kroodsma (1999) also suggests that it is possible this was a young sparrow that later adapted its song to neighboring Field Sparrows and dropped the buzzy phrases.

LITERATURE CITED

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