



## GRASSHOPPER SPARROW SONG DIVERSITY IN JAMAICA

Arushi Dalal <sup>1,3</sup>, Julia Warfield <sup>1,3</sup>, Rebecca Hill <sup>1</sup>, Sara A. Kaiser <sup>2</sup> and Bernard Lohr <sup>1</sup>

<sup>1</sup>Department of Biological Sciences, University of Maryland Baltimore County

<sup>2</sup>Laboratory of Ornithology, Cornell University,

<sup>3</sup> Undergraduate authors who contributed equally to this work

In this project, male songs of Grasshopper Sparrows (*Ammodramus savannarum*) were compared to investigate song variation on the island of Jamaica. *A. savannarum* are present throughout North America and the Caribbean, and in some areas these birds have developed region-specific songs over time. *A. savannarum* males sing a characteristic “buzz” song and the separate components of this song may vary geographically. The songs of the Jamaican subspecies (*A. savannarum savannarum*) stand out because on this island there are two versions of the “buzz” song; an “eastern” and “western” version. This within-island song variation is, as far as we know, unique to Jamaica. Eastern birds only sing one end note while the Western birds sing two. I am measuring how these songs may differ in other, more subtle, ways as well using quantitative measurements of song in the SIGNAL sound analysis program. That work is still ongoing. Studying these songs can uncover what cultural and biological selective factors may influence how song in this species can diverge rapidly at the local scale, in ways that it does not elsewhere.