Hoeschele, M., D.E. Gammon, M.K. Moscicki and C.B. Sturdy. 2009. Note types and coding in Parid vocalizations: the chick-a-dee call of the chestnut-backed chickadee (*Poecile rufescens*). *Journal of the Acoustical Society of America* 126:2088-2099.

A first step to understanding how a species communicates acoustically is to identify, categorize, and quantify the acoustic parameters of the elements that make up their vocalizations. The “chick-a-dee” call notes of the chestnut-backed chickadee (*Poecile rufescens*) were sorted into four call note categories, A, C, D, and Dh notes, based on their acoustic structure as observed in sound spectrograms, and evaluated based on the syntactical ordering of the note types within calls. The notes were then analyzed using quantitative measures and it was determined which features have the potential to convey information to discriminate note type, individual, and the geographic origin of the producer. The findings were comparable to previous research of congeners in that chestnut-backed chickadee calls were produced with a relatively fixed syntax and contained similarly structured note types across all geographic regions. Overall this information will form a base for future research on chestnut-backed chickadee vocalizations and will strengthen the foundation for future comparative evolutionary studies.