## **Ursidae: The Undergraduate Research Journal at the University of Northern Colorado**

Volume 2 | Number 1

Article 12

January 2012

## Song types, repertoires and patterns of song sharing among canyon wrens, Catherpes mexicanus

Anne Rose

Follow this and additional works at: http://digscholarship.unco.edu/urj



Part of the Biology Commons

## Recommended Citation

Rose, Anne (2012) "Song types, repertoires and patterns of song sharing among canyon wrens, Catherpes mexicanus," Ursidae: The Undergraduate Research Journal at the University of Northern Colorado: Vol. 2: No. 1, Article 12. Available at: http://digscholarship.unco.edu/urj/vol2/iss1/12

This Poster Abstract is brought to you for free and open access by Scholarship & Creative Works @ Digital UNC. It has been accepted for inclusion in Ursidae: The Undergraduate Research Journal at the University of Northern Colorado by an authorized editor of Scholarship & Creative Works @ Digital UNC. For more information, please contact Jane.Monson@unco.edu.

## Song types, repertoires and patterns of song sharing among canyon wrens, Catherpes mexicanus

**Biological Sciences** 

Presenter(s): Rose, Anne

Faculty Sponsor(s): Benedict, Lauryn

Natural history studies provide insight into the evolution and function of communicative behaviors such as bird songs. The canyon wren, Catherpes mexicanus, is a non-migratory, monogamous bird species occurring in western North America. Earlier studies describe the vocal repertoire of C. mexicanus as simple and comprising of only three song types. Our study provides a quantitative description of C. mexicanus song. We recorded fourteen wrens, including at least twenty naturally occurring songs from each, over the summer of 2011 in Larimer County, Colorado. In total, we recorded over 1400 songs and subsequently visualized these as sonograms. We assessed the number of different song types and their use by individual males in different territories. We identified five main song types, and eight total song types, for C. mexicanus in Larimer County; these main song types were remarkably conserved across the study group. In addition, we characterized the structure of song bouts and the use of the different song types. Birds generally sang with eventual variety, meaning a single song type was repeated for a long period before the wren switched types. Future work will compare song types of Larimer County wrens with other regional populations. Our results indicate that the canyon wren has stability in song type use and previously unrecognized complexity in its vocal repertoire.