

A COMPARISON OF CARABID BEETLE ASSEMBLAGES BETWEEN TWO FIELD TYPES IN WESTERN KANSAS

*SHAUN DUNN, Department of Biological Sciences, Fort Hays State University, Hays, KS, 67601, USA

ROB CHANNELL, Department of Biological Sciences, Fort Hays State University, Hays, KS, 67601, USA

Abstract: The carabid beetle assemblages of two types of habitat, Conservation Reserve Program and rangeland, were investigated to compare the species of carabids that inhabit those areas. In the summer of 2005, a total of 34 pitfall-arrays were set-up in a paired design throughout Trego County, Kansas. A significant difference was found in species richness between the two treatments; however, no difference was found in either total abundance or evenness between the treatments. Species composition also varied between treatments, though inconsistently. Using one species, *Pasimachus elongatus*, a logistic regression was able to predict the correct treatment type 91.2% of the time. This research supports the use of carabids as indicators species in grassland conservation and adds to the limited literature on carabid beetle ecology in the United States.