ABSTRACT

TITLE:	The Effects of Tamarix on Species Diversity in Formicidae Along the Dolores River, Big Gypsum Valley, Colorado
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ABSTRACT: Invasive plant species do great harm in desert riparian ecosystems. In the southwest, Tamarix has been responsible for much of this damage. Although its effects have been studied, little is known about the changes it causes in arthropod communities in general, and ant communities in specific. In order to investigate these effects, Formicidae were collected in three riparian desert plant communities—invasive Tamarix, native desert shrub, and native willow and grass—to establish the effects of Tamarix on the species diversity of ant communities. Specimens were identified to genus and the sites were analyzed and compared using two-variable Chi-Square, Kruskal-Wallis, and Shannon-Wiener index. The plant community type was shown to be 88% responsible for the difference in ant species present, but there was no significant relation between plant type and total ant abundance. The species diversity was affected by plant type and changed over time.