

Influences of the tamarisk leaf beetle (*Diorhabda carinulata*) on insectivorous birds along the Dolores River in southwestern Colorado

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Biological control, a relatively new addition to the arsenal against tamarisk (*Tamarix* spp.), is potentially a sustainable and inexpensive option for the management of this invasive shrub. However, there are questions associated with this approach as it calls for the introduction of additional non-native organisms and can contribute to changes in the existing structure of riparian vegetation. In 2010 we began a study to better understand how a biological control agent, the tamarisk leaf beetle (*Diorhabda carinulata*), influences native bird species following its introduction and spread along the Dolores River of southwestern Colorado. We addressed two questions with regards to tamarisk beetle-bird interactions: 1) Do insectivorous birds eat *D. carinulata*? 2) If birds are using *D. carinulata*, are they eating the beetle in proportion to its availability in the environment? To answer these questions, we systematically sampled insects, tamarisk beetles, tree phenology, and recorded foraging behavior and diets of insectivorous birds at three sites along the Dolores River (Slick Rock, Crocker-Bedford Ranch, Bed Rock). This presentation will provide an outline of our research design, along with preliminary results from 2010, and will attempt to clarify some of the potential influences of the tamarisk beetle on riparian avian communities.