

RECLAMATION

Managing Water in the West

Biological Control of Saltcedar

Carlsbad New Mexico

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Project Overview

- Releases initiated in 2004
- Posidi ecotype of saltcedar leaf beetle (*Diorhabda elongata*)
- Beetles released in cages and sleeve-bags



Release site locations



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2004 site was in a basin just outside of levy road



Flooding occurred mid April and during over-wintering period



Predation



Yellowing from leafhopper damage



2005 site in lake bed
Before grasshopper invasion



After grasshopper invasion



2006 site - sacaton understory



Plants cut back to encourage regrowth



12' x 12' tent





- Populations of the Posidi beetle crashed at many sites early 2006
- Beetle stock was not available until mid July
- ~200 eggs were put in sleeve bags in the tent on July 18
- Eggs hatched, but NO beetles were found at 1 or 2 weeks after release



2006 2nd Beetle release

- David Thompson (NMSU) provided 50 adult beetles and released them at the 2006 site on September 12



Carlsbad 2006

- **September:**
 - 23 adult beetles
 - 7 egg clusters
 - Slight defoliation
- **October:**
 - ~120 3rd instar larvae
 - ~60 2nd instars
 - Dead larvae?
- **November:**
 - Saltcedar mostly senesced
 - 4 adult beetles
 - 20+ 3rd instars (dead?)



Carlsbad 2007

- Stick with 2006 site
- Posidi availability unknown
- APHIS permit for Fukang release pending

