

# Landscape change under indirect effects of human use: the Savanna of Central Chile

*Fuentes, Eduardo R.; Avilés, Reinaldo; Segura, Alejandro*

## **Abstract**

The Chilean Intermediate Depression to the north of Santiago has experienced a physiognomical transformation from a *Prosopis chilensis* woodland to an *Acacia caven* savanna. Today *P. chilensis* trees are scarce and belong mostly to the larger size classes. By contrast *A. caven* seems to reproduce frequently and its populations consist of individuals of all size classes. In this paper we document these changes and report the results of tests aimed at determining the causes of these physiognomical changes. We found that livestock, leporids, introduced Mediterranean forbs and agriculture account for differences in seed dispersal and survival of *A. caven* and *P. chilensis*, which can explain the documented changes in the Chilean landscape.

**Keywords** Chile, *Prosopis*, *Acacia*, Seed survival, Herbivory, Landscape ecology