

Project Update: May 2016

Since September 2015 we carried out this study in Nahuel Huapi National Park. We have made significant progress on our objectives and have interacted with various stakeholders including park rangers, local people, researchers and students. In particular, we have made progress in:
Site study survey (Fig. 1)



Figure 1: Study sites in NHNP. Photo by Sebastián A. Ballari

Numerous sites were visited (including islands) in the protected area where the presence of the species under study and free of these sites was determined. In many of these sites the presence of the species was not known, especially for wild boar.



Figure 2: Data collection. Photo by Sebastián A. Ballari

We selected successfully three with wild boar and cattle (Treatment site A), three only with wild boar (Treatment site B), three only with cattle (Treatment site C) and three with absence of both species (Treatment site D -control-).
Data collection (Fig. 2)

To compare sites, large amount of information was collected, including relative abundance, wild boar rooting, richness and abundance of native and exotic plants and soil compaction. Besides cattle faeces to evaluate their capacity disperser were collected. For this part of the work, we had

cooperation of field assistants, mainly students, including students from Northern Arizona University (USA). In the coming months this experiment will be monitored to recognize plant species growing. Experiments (Fig. 3)

To evaluate the combined effect of cattle and wild boar, an experiment with enclosures of 1 m² in sites both species was mounted. Enclosures have four treatments: 1) rooting site with cattle dung; 2) rooting site without cattle dung; 3) no rooting site with cattle dung; and 4) no rooting site without cattle dung (Fig.). Also, an experiment with cattle dung to evaluate their seed dispersal potential, and the combined effect with wild boar rooting was carry out in greenhouse with three treatments: A) soil without seeds; B) soil from



Figure 3: Enclosures experiment. Photo by Sebastián A. Ballari

rooting sites; C) compacted soil extracted in field each treatment have 15 samples with cattle dung and 15 samples without cattle dung. In the coming months this experiment will be monitored to recognise plant species growing.

Most of the fieldwork has been done and is being done the analysis and presentation of data. It is expected to present some of this data in a publication in an international journal, a regional magazine (Macroscopia, <http://nahuelhuapi.gov.ar/multimedios/macroscopia.html>) and a scientific meeting (www.binacionalecologia2016.com).