**Methods**

*Data selection and curve-fitting*

All grasses (exotic, native, annual, perennial) were at first combined into a separate variable which we call 'total grass cover'. The set of variables consisting of small, medium and large Eucalyptus seedlings as well as Eucalyptus canopy cover, we call 'Eucalyptus growth'. To proceed with our analysis, we first tested whether a) Eucalyptus growth would differ after almost two years (Winter 2006 to Autumn 2007) and b) if there was a general relationship between grasses and Eucalyptus presence (Fig. 1). When both showed to be true, we generated a dataset that included the grasses data from Winter 2006 as well as the Eucalyptus growth data from Autumn 2007 because we were interested how initial grass cover would affect Eucalyptus growth later on. Since, on plot-level, there was often zero Eucalyptus, we decided to group and summarize the data on property level. In this data set, we also split up exotic (annual and perennial) and native (annual and perennial) grass cover. Next, we visually explored all combinations of grass cover (total, exotic, native) with all combinations of Eucalptus growth (canopy, small, medium and large seedlings). Since only exotic grasses showed a consistent effect on Eucalyptus growth and all seedling sizes behaved comparably, we went on with detailed analysis and curve fitting for Eucalyptus canopy and all seddlings vs. exotic grass cover (depicted in Fig. 2). For curve fitting with the non-linear least squarte method (nls() function in R), we chose an exponential decay equation of the shape a \* *e*(-b \* x). Pearson correlation was used to assess the relationship of fitted vs. observed values. Analysis was done in R, version 3.5.1.

*Confounding effects*

[Bernd]