**Using spatial simulations of habitat modification for adaptive management of protected areas: Mediterranean grassland modification by woody plant encroachment**

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**APPENDIX 1**



**Figure S1** Location map of the study area and spatial relations between grasslands and forest vegetation.



**Figure S2** Spatial arrangement and size of remaining grasslands patches, and spatial explicit causes of fragmentation within the site and a 5 km buffer (Source: Mairota *et al*. 2012).





**Figure S3** Trends of forest above ground biomass for current and projected climatic conditions (NCC\_B versus CC\_B), and under anthropogenic disturbances (fires and management) in both climatic conditions (NCC\_B\_F versus CC\_B\_F, and NCC\_B\_F\_M versus CC\_B\_F\_M).



**Figure S4** Spatial trends in encroached grasslands area: climate change and wildfires (F); climate change, wildfires and management (FM).



**Figure S5** Spatial trends in encroached grasslands area by the selected tree species: climate change and wildfires (F) scenario.

**References**

Mairota, P., Boccaccio, L., Labadessa, R. & Leronni, V. (2012) Landscape pattern analysis PART I. BIO\_SOS Deliverable D6.4 [www document]. URL <http://www.wageningenur.nl/en/Expertise-Services/Research-Institutes/alterra/Projects/BIO_SOS/Deliverables-1.htm>