

## **Narrative developed for the Montado wood-pasture system in the south of Portugal**

**Montado** is a High Nature Value wood-pasture system characteristic of the Mediterranean Basin that is listed under the EU Habitats Directive (Habitat type 6310 “Dehesas with evergreen *Quercus spp*”). This traditional socio-ecological system generates multiple ecosystem services (Pinto-Correia et al. 2011, Bugalho et al. 2011, Plieninger et al. 2015). Among these, cork production and the conservation of charismatic and protected wildlife and habitats are of overarching relevance for ecosystem management. The long-term sustainability of the montado ecosystem is currently threatened by declining trends in stand density caused by adult tree mortality and deficient tree recruitment (Acácio and Holmgren 2014, Almeida et al. 2015). The Common Agricultural Policy (CAP) and market pressures have affected management practices, namely an increase in cattle density and grazing pressure, which leads to soil compaction, loss of vegetation cover, and a decline in natural regeneration (Bugalho et al. 2011, Almeida et al. 2015, Guerra et al. 2016). At the same time, destructive soil tillage for pasture sowing and shrub control are contributing to soil degradation and also preventing natural regeneration (Pinheiro et al. 2008). Soil degradation also restricts soil water infiltration, thus aggravating the effects of a shift in precipitation regime and of more frequent droughts (Ramos et al. 2015). The simultaneous increase in tree mortality and decline in recruitment not only affects cork production in the long term, but also causes changes in habitat structure with reduction of tree density, loss of tree cover and fragmentation of the system (Acácio and Holmgren 2014, Almeida et al. 2015). These structural changes can eventually lead to changes in ecosystem extent and distribution in the landscape, with impact on the abundance and distribution of threatened species. This narrative was developed by researchers, based on discussions with protected area managers, namely ICNF - Institute for Nature Conservation and Forests, the public entity responsible for the implementation of nature conservation and forestry policies in protected areas, and UNAC - Mediterranean Forest Union, an association of forest owners, and also supported by literature review.

### **Additional References:**

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