Key factors for nature value in Montados

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Extended abstract

Montados are parkland forested areas of anthropogenic origin dominated by cork oak (Quercus suber) and/or holm oak (Q. rotundifolia). They are derived from natural Mediterranean forests, where the use of woodland products (timber, charcoal and cork) is combine with cereal crops and livestock grazing in the understory (Blondel and Aronson 1999). These use resulted in a singular "savanna" like land cover pattern particularly important for the biodiversity associated with farming and forestry systems (Canteiro et al. 2011; Godinho and Rabaça 2011; Simões et al. 2012). As result of the mosaic created by this dynamic heterogeneous landscape which forms a wooded matrix with open areas, scattered woodlands and undisturbed patches of Mediterranean forest and scrublands, montados support a high biological diversity (Díaz et al. 1997, 2003; Blondel and Aronson 1999; Tellería 2001; Tellería et al. 2003; Harrop 2007). According to Tellería (2001) bird richness increases in woodlands southwards along the Iberian gradient, with montados and dehesas showing the higher scores. This pattern is related with the increase presence of edge and open area bird which appears to compensate the lost of forest birds. Due to this diversity of species, birds can have an important role in the valuation of montados as HNV. In the last decades the scientific community has given particular attention to the different roles that birds may play in montados: management options and the breeding bird communities (Camprondon and Brotons 2006; Godinho and Rabaça 2011, Leal at al. 2012; Pereira et al. 2012a; Pulido and Díaz 1992), the influence of cork extraction on birds (Godinho and Rabaça 2011; Leal et al. 2011), relevance of habitat diversity in agroforestry matrices (Leal et al. 2011; Pereira et al. 2012b). Birds can thus be use to gather systematic information that allow to improve management actions in montados, and monitor the status of the ecosystem through reliable indicators (e.g. base on

species, communities, guilds). Currently, some of the key questions for the use of birds to value montados that can be asked are: (1) which are the best indicator species to assess the conservations status of Portuguese montados? (2) which are the ecosystem services provide by birds? (3) how birds can improve the HNV of montado? (4) what is the role of birds in the forest certification process? (5) how a manmade system can be managed to allow economical sustainability and high biodiversity values? In this paper we will make a comprehensive review of the work done with birds in montados in order to define the key factors for nature value in montados.

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