

## Land-use influence in Mediterranean perennial swards of *Poa bulbosa*: a case study in the International Tagus Region

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Pastureland abandonment or intensification of livestock activity change the floristic patterns of Mediterranean perennial swards which are very important to the conservation of some bird species. The main objective are: 1) to recognise floristic patterns in Mediterranean perennial swards of *Poa bulbosa*; 2) to identify the communities that configure the European priority habitat 6220\* (Pseudo-steppe with grasses and annuals of the *Thero-Brachypodietea*); 3) to assess the effects of land-use management on the floristic composition of these communities. Field research was conducted in central eastern and south eastern mainland Portugal. Vegetation sampling was carried out in 2009-2010 on 9 sward sites, following the phytosociological method. Classification and ordination of relevés were obtained by Two Way Indicator Species Analysis (Twinspan), Canonical Correspondence Analysis (CCA) and Detrended Canonical Correspondence Analysis (DCCA). Monte Carlo Permutation Tests were performed to analyse differences in floristic patterns. Livestock load, stoniness and land-use history of the last 10 years were selected as the key variables that best explain the ordination model. The absence of extensive livestock grazing results in a reduction of *Trifolium subterraneum*-dominated areas and in a density/cover reduction of *Poa bulbosa*-dominated areas. High livestock loads change the floristic patterns of Mediterranean short swards by favouring species of the *Stellarietalia mediae* class. The control of woody vegetation through grazing or cutting is considered as a good conservation measure.