

Alonso, J.A. & J.C. Alonso. 1999. Collision of birds with overhead transmission lines in Spain. En: *Birds and Power Lines* (eds. M. Ferrer & G. F. E. Janss), págs. 57-82. Quercus, Madrid

Abstract

The purpose of this study was to assess the mortality of birds by collision with overhead transmission lines, with particular reference to threatened species. Nine areas were chosen representing the most typical habitats of the Iberian Peninsula. During 326 hours of observation of bird flight across the 25000 m of power line studied, 16669 individuals were recorded, comprising 89 species. Numbers of bird crossings over the line per time of day and season were analysed, as well as the relationship between phenology and flock-forming of the species involved. In the nine sample areas, along about 100 km of power line, 230 birds were found to have died by collision, belonging to 53 well-defined species, eight of which figure in the Spanish Red List. The estimated total mortality was 2226 birds over all nine zones, with an estimated average of 2.95 individuals colliding per km per year. Collision with overhead transmission lines is biologically of little significance as a cause of death in birds. However, it could be important in certain power line spans running through areas with high bird concentrations, or in the case of areas inhabited by endangered species.