Diet of the Barn Owl (*Tyto alba*) in NE Peloponnese

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Abstract

The diet of the Barn Owl (*Tyto alba*) was studied in Moustos wetland near Astros Arkadia in Eastern Peloponnese (Mt Parnon and Moustos Wetland Protected Area) through pellet analysis using material collected through the years 2012-2015. The analysis of owl pellets provides a non-lethal tool to record the micro-mammalian fauna of the broader Moustos Wetland, a NATURA 2000 area that has been also designated as "Strict Nature Reserve" by the Greek Law, where animal trapping and killing is strictly prohibited. The area is characterized mainly by the wetland's hydrophilous vegetation, agroecosystems and garrique. In total, 1,461 prey items were recorded. By number mammals made up 97%, birds and insects 1% each of the total prey, while in terms of biomass the percentages were, respectively, 98, 2 and <1. The main prey species accumulatively for the four years were, in terms of biomass, *Mus macedonicus* (41%), *Apodemus sylvaticus* (30%), *Rattus rattus (*10%), *Crocidura suaveolens* (4%) and *Apodemus epimelas* (3%). Micro-mammals population fluctuations are considered for the observed annual abundance differences of the species' consumed.