

MUHNAC RESEARCH SEMINARS

27 MAIO 2014, às 17h00



Reproduction and population genetics of the water vole *Arvicola scherman cantabriae*

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ABSTRACT

The water vole *Arvicola scherman cantabriae* has an important fossorial activity, feeding preferably on roots and is officially considered a pest in Spain. In Asturias the attack of this species has become the main cause of economical loss in fruit orchards in recent years. To reduce the use of rodenticides, it is important to gather more information about the reproduction, genetic structure and population dynamic of this subspecies in this region. For this study it was obtained a representative sample of 30 individuals of *A. s. cantabriae* per month along two annual cycles in central Asturias (2011 to 2013) in several semi-intensive apple orchards. Necropsy of all specimens was performed in order to get as much biological information as possible.

We are generating data on reproductive characteristics of *A. s. cantabriae* and its population structure based on sex, age and seasonality. We determined the period of maximum sexual activity for males and females, the most important breeding season and potential fecundity of the females. At the National Museum of Natural History and Science in Lisbon, we are applying molecular genetics tools to uncover the genetic variability, population structure and dynamics of this species in a patchy landscape. We will present the applied methodology and preliminaries results.

Reserva Visitável – Laboratório Chimico
Museu Nacional de História Natural e da Ciência
Rua da Escola Politécnica 56, Lisboa