PLENARY TALK: Conservation genetics

Mighty mice and hybridizing hares: what rodents and lagomorphs tell us about chromosomes, conservation and climate change

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Although there are dozens of species of rodents and lagomorphs in Europe, knowledge of their biology, ecology and genetic biodiversity is heterogeneous and heavily biased towards their traditional classification as laboratory models, agricultural pests, harbingers of disease or game species. While some of these taxa have been instrumental to our understanding of speciation and vector-borne zoonoses, in this brief (and almost certainly biased review), I would also like to present some of the more recent and innovative research in fields often reserved for larger and perhaps more 'charismatic' mammals. At the same time, it should be noted that almost all rodent/lagomorph species, predominantly vegetarian and serving as food sources for the higher trophic levels of most terrestrial ecosystems, are experiencing (severe) decline in numbers, often due to changes in agricultural practices and climate warming. The perception that rodents and lagomorphs are by definition common, widespread, and flourishing also means that almost 20 threatened species (and many more at a local level) are falling under the radar. Restocking and reintroductions are now considered acceptable actions even for these smaller mammals, and can be highly successful, although post-monitoring needs improvement. Such examples make interesting models in themselves for investigating the impact of these management interventions, given that understanding how to halt the decline of these important, fascinating yet unappreciated animals should be considered imperative to biodiversity conservation.