

Rodent population dynamics: from ecological theory to population management of endangered and pest species

Studies of processes underlying individual and population variability in rodents are central to ecological theory on population regulation and control. However, despite a long history of studying rodent population dynamics, the mechanisms driving population systems have been shown to be extremely difficult to understand and manage. In particular, many prolific rodents, such as voles, exhibit large and more or less regular fluctuations in population numbers causing a massive damage to crop yield. Other rodents formerly referred to as pests now have declined and changed their status to become endangered. This symposium aims at contributing to both population theory and management practice in both endangered and pest rodent species. The potential topics include:

- The dynamics of rodent populations, modelling population cycles, description and explanation of fluctuations in numbers
- The effects of environmental variability on rodent population dynamics
- The vole population cycles as a source of environmental variability for other species
- Density dependence in processes shaping individual and population processes
- Pest management of outbreaking rodents
- Conservation management of endangered rodents

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