

The Ecology Of Small Mammals Institute Of Biologys Studies In Biology No 51

Introductory chapters. The process of dispersal. Patterns: cyclic versus stable populations. Applications. Looking backward and forward. Invited commentaries.

Animals of this size face different physiological and ecological challenges than larger mammals.

Animal Dispersal

The Evolutionary Ecology of Small Mammals

The Ecology of Small Mammal Communities in Southern Wisconsin

Ecology of Small Mammals in the Northern Chihuahuan Desert

Ecology of Small Mammals Small Mammals

Proceedings from the International Colloquium on Winter Ecology of Small Mammals held at Powdermill Nature Reserve from 14 to 18 October, 1981. 37 papers.

The Ecology of Small Mammals Hodder Education ***Landscape Ecology of Small Mammals*** Springer Science & Business Media

Relationships of Small Mammals on a Michigan Farm : Including Results of Investigations Under Federal Aid in Wildlife Restoration Project Michigan 2-R

Activity Patterns in Small Mammals

Winter Ecology of Small Mammals

Landscape Ecology of Small Mammals

Population and Community Ecology of Small Mammals in Northern Venezuela

1. This research project on small mammals was carried out between December 1994 and August 1997 at the Leeds University Farms in West Yorkshire. 2. Densities of captures were assessed using weekly live trapping and mark-release-recapture (MRR) methods. One hundred and thirty two Longworth traps were set out in a complex fanning landscape consisting of four replicate blocks of silvoarable agroforestry designed as a series of tree rows planted at low density (178 trees/ha) and separated by arable alleys cropped with cereals (wheat or barley). Adjacent to each of these agroforestry systems is an area of trees planted at forestry density (2500 trees/ha), an arable field and a mature hedgerow. 3. Overall 1680 captures were obtained, 70% of which were of *Apodemus sylvaticus*, 20% of *Sorex araneus* and only 10% of *Clethrionomys glareolus*. 4. *A. sylvaticus* and *S. araneus* showed preferences for the agroforestry system, whereas *C. glareolus* preferred the mature hedgerows. Overall, the highest density of capture was found in the tree rows (13.4 animals per 100 trap nights) and the least in the arable field (4.2 animals per 100 trap nights) 5. Densities of captures of *A. sylvaticus* were greater in Autumn than the other seasons, notably in the tree rows when the arable areas provide little cover. 6. Population densities were calculated and showed the same seasonal pattern as densities of captures. The highest population density was in October 1996 (36 mice/ha). 7. Male *A. sylvaticus* bred extensively from mid-Winter until early Summer. The female had a longer and more sporadic breeding period. Overall, the animals showed little or no breeding condition during the phase of population increase in the Autumn-Winter period. 8. Radiotracking of *A. sylvaticus* was carried out from May 1996 until June 1997. Home ranges were estimated using cluster analysis. 9. Home range sizes of *A. sylvaticus*, estimated using 95% of the density distribution, were between 0.04 and 0.30 ha. Home ranges of males were larger than those of females and showed seasonal patterns, with larger ranges during the Spring-Summer period which corresponds to the breeding season. 10. All the individuals tracked had overlapping home ranges spreading over the different habitats, particularly in the agroforestry system (tree rows and arable alleys) where most of the activity of the animals was recorded throughout the year.

From their largely descriptive beginnings about a half century ago, studies on the ecology of small mammals have mushroomed in number, scope, content and complexity. Yet strangely, or perhaps not so strangely if one considers the extent and complexity of ecological interactions, the main problems for which the early workers sought answers still defy complete analysis, and basic hypotheses remain untested if not even untestable. The same holds true for so many branches of animal ecology that it seems to be the complexity of the concepts that frustrates efforts rather than the subject species. Like all branches of science, small mammal ecology has been subject to a series of fashionable approaches, one following another as technology penetrates previously impregnable regions. Doubtless the future development of our science will be punctuated by wave upon wave of new endeavour in whole fields that are perhaps even yet unidentified. Answers to the complex questions which ecologists ask do not come easily. Increasingly though, they arise in direct proportion to the efforts expended upon their elucidation. Many studies have achieved such a high level of elegance, in terms of manpower and apparatus, that there is a feeling that questions asked when such resources are unavailable are not worth asking. Nothing could be further from the truth. Many a complex model has failed fully to explain the phenomenon for which it was constructed because of a lack of basic field data on the species' natural history.

The ecology of five major species of small mammals in the ASOERP study area

The Ecology of Small Mammals (Rodentia, Insectivora) in the Coastal Mountain Fynbos of the Southwestern Cape

Ecology of Small Mammals in a Brazilian Gallery Forest

The Ecology of Small Mammals on the Subsurface Disposal Area, Idaho National Engineering Laboratory Site

The Population Ecology of Small Mammals in Pennine Woodlands

This volume, first published in 1975, looks at small mammal populations with emphasis being placed on their ecology and energy dynamics. It discusses the most productive research techniques and research objectives.

The second part of the book deals with the roles of small mammals in ecosystems.

Environmental conditions change considerably in the course of 24 h with respect to abiotic factors and intra- and interspecific interactions. These changes result in limited time windows of opportunity for animal activities and, hence, the question of when to do what is subject to fitness maximisation. This volume gives a current overview of theoretical considerations and empirical findings of activity patterns in small mammals, a group in which the energetic and ecological constraints are particularly severe and the diversity of activity patterns is particularly high. Following a comparative ecological approach, for the first time activity timing is consequently treated in terms of behavioural and evolutionary ecology, providing the conceptual framework for chronoecology as a new subdiscipline within behavioural ecology. An extensive Appendix gives an introduction to methods of activity modelling and to tools for statistical pattern analysis.

The Ecology of Small Mammals, in Particular Apodemus Sylvaticus L. in a Silvoarable Agroforestry System

The Ecology of Small Mammals in Set-aside Land

Community Ecology of Small Mammals

Small Mammals

Small Mammals As a Model

ECOLOGY, MAMMALS, MALHAM TARN, CONISTON HALL, ANIMAL POPULATIONS, ANIMAL BEHAVIOUR, BREEDING PATTERNS, WOODLANDS.

A summary of much of the experimental work on the spatial ecology of small mammals. This field has entered an exciting stage with such new techniques as GIS and systems modeling becoming available. Leading contributors describe and analyze the most well-known case studies and provide new insights into how landscape patterns and processes have had an impact on small mammals and how small mammals have, in turn, affected landscape structure and composition.

Ecology of Small Mammals in Tropical Forests of South India

An Ecological Approach

The Biology of Small Mammals

International Colloquium : Winter Ecology of Small Mammals

Small mammals (Rodents and Insectivores) constitute 31.18% of total mammal species found in India. In spite of their abundance, this largest group among mammals has received little attention of ecologists. From the geomorphological standpoint Rajasthan offers multiple possibilities. The Aravallis diagonally bisect the state into western arid and eastern semi-arid and mesic zones. The southern and southeastern parts of state have various rock systems. Present book is an endeavour to cover small mammals of the whole state. The book is first of its kind in India, which takes into account habitat preference, food and feeding behaviour, home range, activity pattern, reproductive behaviour, biochemical communication and physiology of small mammals of desert and hilly terrain. It also includes zoogeography of small mammals found in Rajasthan and changes in faunistic composition being brought by canal and tube well irrigation. It is expected that book will be quite useful for students, researchers, and teachers of Ecology and Zoology.

A comprehensive and invaluable resource, *Methods for Ecological Research on Terrestrial Small Mammals* is a must-have for any ecologist working on small mammals.

The Ecology of Small Mammals

Methods for Ecological Research on Terrestrial Small Mammals

Ecology of small mammals

Abstracts of Papers

Microhabitat Ecology of Small Mammals on Grassy Road Verges