

# SOCIAL BEHAVIOUR



# Social Behavior In Fluctuating Populations

**P. Marler**



## **Social Behavior In Fluctuating Populations:**

**Social Behaviour in Fluctuating Populations** Andrew Cockburn,1987-12-31 This book forges a synthesis between the discipline of behavioural ecology and what is known of the social behaviour and population dynamics of cyclic populations of vertebrates with particular discussion of the cyclic voles and lemmings Areas of uncertainty and those which show promise are identified and tests of competing hypotheses are suggested Finally the relevance of social dynamics to population growth and decline are examined and a hypothesis on the role of aggressiveness in expanding populations is presented The Winter Exploitation Systems of Bay-breasted and Chestnut-sided Warblers in Panama Russell Greenberg,1984-01-01

Population Fluctuations in Rodents Charles J. Krebs,2024-05-31 How did rodent outbreaks in Germany help to end World War I What caused the destructive outbreak of rodents in Oregon and California in the late 1950s the large population outbreak of lemmings in Scandinavia in 2010 and the great abundance of field mice in Scotland in the spring of 2011 Population fluctuations or outbreaks of rodents constitute one of the classic problems of animal ecology and in Population Fluctuations in Rodents Charles J Krebs sifts through the last eighty years of research to draw out exactly what we know about rodent outbreaks and what should be the agenda for future research Krebs has synthesized the research in this area focusing mainly on the voles and lemmings of the Northern Hemisphere his primary area of expertise but also referring to the literature on rats and mice He covers the patterns of changes in reproduction and mortality and the mechanisms that cause these changes including predation disease food shortage and social behavior and discusses how landscapes can affect population changes methodically presenting the hypotheses related to each topic before determining whether or not the data supports them He ends on an expansive note by turning his gaze outward and discussing how the research on rodent populations can apply to other terrestrial mammals Geared toward advanced undergraduate students graduate students and practicing ecologists interested in rodent population studies this book will also appeal to researchers seeking to manage rodent populations and to understand outbreaks in both natural and urban settings or conversely to protect endangered species

**Phylogenies and the Comparative Method in Animal Behavior** Emília P. Martins,1996 In the last ten years the comparative method has been revolutionized by modern statistical ways of incorporating phylogenies into the design and analysis of comparative studies The results of this revolution are particularly important in the study of animal behavior which has relied on interspecific comparisons to infer universal trends and evolutionary patterns The chapters of this edited volume consider the impact of modern phylogenetic comparative methods on the study of animal behavior and discuss the main issues that need to be considered in design and analysis of a comparative study considers possible differences between the evolution of behavior and the evolution of morphology and reviews how phylogenetic comparative studies have been used in certain areas of behavioral research

**Population Crisis** United States. Congress. Senate. Committee on Government Operations. Subcommittee on Foreign Aid Expenditures,1966 *Social Systems and Population Cycles in Voles* R.

Tamarin, 2013-11-21      **Social Behavior and Communication** P. Marler, 2013-03-09 Other books in this series focus on behavior at the individual level approached from the viewpoints of biochemistry anatomy physiology and psychology In this volume we show how the functioning nervous systems of interacting individuals are coordinated with the ultimate creation of complex social structures The intricacies of an individual's nervous system have been subject to intense inquiry and research at the chemical cellular and organ levels has made remarkable progress Work at the social level has been conducted somewhat independently by way of behavioral phenomena and communicative interactions With the emergence of a large body of information from neurobiology the beginnings of an integrated approach are possible New data on social functions are presented in the chapters to follow and the forward looking reader may wish to reflect on how they clarify understanding of interactions between two or more independent nervous systems The outcome is harmonious social structure and improvement in the inclusive fitness of group living individuals We believe that there is in prospect a new way of looking at social function that will ultimately increase our understanding of the highest and most complex levels of neurobiology The modern approach to the study of social behavior involves more than the recording of interactions between animals Each individual brings to the process of social interaction the implications of its prior genetic and experiential history      **Model Systems in Behavioral Ecology** Lee Alan Dugatkin, 2019-12-31 A key way that behavioral ecologists develop general theories of animal behavior is by studying one species or a closely related group of species model systems over a long period This book brings together some of the field's most respected researchers to describe why they chose their systems how they integrate theoretical conceptual and empirical work lessons for the practice of the discipline and potential avenues of future research Their model systems encompass a wide range of animals and behavioral issues from dung flies to sticklebacks dolphins to African wild dogs from foraging to aggression territoriality to reproductive suppression Model Systems in Behavioral Ecology offers an unprecedented systems focus and revealing insights into the confluence of personal curiosity and scientific inquiry It will be an invaluable text for behavioral ecology courses and a helpful overview and a preview of coming developments for advanced researchers The twenty five chapters are divided into four sections insects and arachnids amphibians and reptiles birds and mammals In addition to the editor the contributors include Geoff A Parker Thomas D Seeley Naomi Pierce Kern Reeve Gerald S Wilkinson Bert H Ildobler and Flavio Roces George W Uetz Michael J Ryan and Gil Rosenthal Judy Stamps H Carl Gerhardt Barry Sinervo Robert Warner Manfred Milinski David F Westneat Alan C Kamil and Alan B Bond Paul Sherman Jerram L Brown Anders Pape Møller Marc Bekoff Richard C Connor Joan B Silk Christopher Boesch Scott Creel A H Harcourt and Tim Caro and M J Kelly      Do Lemmings Commit Suicide? Dennis Chitty, 1996 This book is a personal history and apology written by one of this century's most distinguished small mammal ecologists for a life in science spent working on problems for which no final dramatic conclusion was reached Included along the way are some important anecdotes and history about Charles Elton and the pioneering work at the Bureau of Animal Population at Oxford

University from which most of modern population ecology has grown and insights on the philosophy and practice of science

*National Library of Medicine Current Catalog* National Library of Medicine (U.S.), 1988      Rodent Societies Jerry O. Wolff, Paul W. Sherman, 2008-09-15 *Rodent Societies* synthesizes and integrates the current state of knowledge about the social behavior of rodents providing ecological and evolutionary contexts for understanding their societies and highlighting emerging conservation and management strategies to preserve them It begins with a summary of the evolution phylogeny and biogeography of social and nonsocial rodents providing a historical basis for comparative analyses Subsequent sections focus on group living rodents and characterize their reproductive behaviors life histories and population ecology genetics neuroendocrine mechanisms behavioral development cognitive processes communication mechanisms cooperative and uncooperative behaviors antipredator strategies comparative socioecology diseases and conservation Using the highly diverse and well studied Rodentia as model systems to integrate a variety of research approaches and evolutionary theory into a unifying framework *Rodent Societies* will appeal to a wide range of disciplines both as a compendium of current research and as a stimulus for future collaborative and interdisciplinary investigations      *Hearings* United States. Congress. Senate, 1966      *Hearings, Reports and Prints of the Senate Committee on Government Operations* United States. Congress. Senate. Committee on Government Operations, 1966      **Animal Dispersal** N.C. Stenseth, W.Z. Lidicker, 2012-12-06 4 1 1

Demographic significance Confined populations grow more rapidly than populations from which dispersal is permitted Lidicker 1975 Krebs 1979 Tamarin et al 1984 and demography in island populations where dispersal is restricted differs greatly from nearby mainland populations Lidicker 1973 Tamarin 1977 1978 Gliwicz 1980 clearly demonstrating the demographic significance of dispersal The prevalence of dispersal in rapidly expanding populations is held to be the best evidence for presaturation dispersal Because dispersal reduces the growth rate of source populations it is generally believed that emigration is not balanced by immigration and that mortality of emigrants occurs as a result of movement into a sink of unfavourable habitat If such dispersal is age or sex biased the demography of the population is markedly affected as a consequence of differences in mortality in the dispersive sex or age class Habitat heterogeneity consequently underlies this interpretation of dispersal and its demographic consequences although the spatial variability of environments is rarely assessed in dispersal studies      **Soay Sheep** T. H. Clutton-Brock, J. M. Pemberton, 2004-03-04 *Soay Sheep* synthesises one of the most detailed studies of demography and dynamics in a naturally regulated population of mammals Unlike most other large mammals the Soay sheep population of Hirta in the St Kilda archipelago show persistent oscillations sometimes increasing or declining by more than 60% in a year *Soay Sheep* explores the causes of these oscillations and their consequences for selection on genetic and phenotypic variation within the population drawing on studies over nearly twenty years of the life histories and reproductive careers of many individuals Covering population dynamics demography and their effects on selection energetic and resource limitations on the interaction between sheep and parasites and the adaptive

significance of their reproductive characteristics it provides unique insights into the regulation of other herbivore populations and the effects of environmental change on selection and adaptation It will be essential reading for vertebrate ecologists demographers evolutionary biologists and behavioural ecologists **Canadian Journal of Zoology** ,2002

**Population and Reproduction Research Abstracts** ,1969 *Mammal Societies* Tim Clutton-Brock,2016-04-20 The book aims to integrate our understanding of mammalian societies into a novel synthesis that is relevant to behavioural ecologists ecologists and anthropologists It adopts a coherent structure that deals initially with the characteristics and strategies of females before covering those of males cooperative societies and hominid societies It reviews our current understanding both of the structure of societies and of the strategies of individuals it combines coverage of relevant areas of theory with coverage of interspecific comparisons intraspecific comparisons and experiments it explores both evolutionary causes of different traits and their ecological consequences and it integrates research on different groups of mammals with research on primates and humans and attempts to put research on human societies into a broader perspective

**Infanticide** Glenn Hausfater,Sarah Blaffer Hrdy,2017-07-12 Recent field studies of a variety of mammalian species reveal a surprisingly high frequency of infanticide the killing of unweaned or otherwise maternally dependent offspring Similarly studies of birds fish amphibians and invertebrates demonstrate egg and larval mortality in these species a phenomenon directly analogous to infanticide in mammals In this collection Hausfater and Hrdy draw together work on animal and human infanticide and place these studies in a broad evolutionary and comparative perspective Infanticide presents the theoretical background and taxonomic distribution of infanticide infanticide in nonhuman primates infanticide in rodents and infanticide in humans It examines closely sex allocation and sex ratio theory surveys the phylogeny of mammalian interbirth intervals and reviews data on sources of egg and larval mortality in a variety of invertebrate and lower vertebrate species Dealing with infanticide in nonhuman primates two chapters critically examine data on infanticide in langurs and its broader theoretical implications By reviewing sources of infant mortality in populations of small mammals and new laboratory analyses of the causes and consequences of infanticide this work explores such issues as the ontogeny of infanticide proximate cues of infants and females which elicit infanticidal behavior in males the genetical basis of infanticide and the hormonal determinants Hausfater and Sarah Blaffer Hrdy through their selection of materials for this book evaluate the frequency causes and function of infanticide Historical ethnographic and recent data on infanticide are surveyed Infanticide summarizes current research on the evolutionary origins and proximate causation of infanticide in animals and man As such it will be indispensable reading for anthropologists and behavioral biologists as well as ecologists psychologists demographers and epidemiologists *Cheetahs of the Serengeti Plains* Timothy M. Caro,1994-08-15 Cheetahs of the Serengeti Plains is the most comprehensive account of carnivore social behavior to date Synthesizing more than a decade of research in the wild this book offers a detailed account of the behavior and ecology of cheetahs Compared with other large

cats and other mammals cheetahs have an unusual breeding system whereas lions live in prides and tigers are solitary some cheetahs live in groups while others live by themselves Tim Caro explores group and solitary living among cheetahs and discovers that the causes of social behavior vary dramatically even within a single species Why do cheetah cubs stay with their mother for a full year after weaning Why do adolescents remain in groups Why do adult males live in permanent associations with each other Why do adult females live alone Through observations on the costs and benefits of group living Caro offers new insight into the complex behavior of this extraordinary species For example contrary to common belief about cooperative hunting in large carnivores he shows that neither adolescents nor adult males benefit from hunting in groups With many surprising findings and through comparisons with other cat species Caro enriches our understanding of the evolution of social behavior and offers new perspectives on conservation efforts to save this charismatic and endangered carnivore

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