

POPULATION ECOLOGY OF THE

Cooperatively Breeding Acorn Woodpecker

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Cooperatively Breeding Acorn Woodpecker:

Population Ecology of the Cooperatively Breeding Acorn Woodpecker Walter D. Koenig, Ronald L. Mumme, 2020-03-31
Ever since the acorn woodpecker was observed and described by Spanish explorers its behavior particularly the unique habit of caching acorns in specialized storage trees or granaries has impressed observers Acorn woodpeckers are also one of the few temperate zone species in which young are reared communally in family groups This demographic study investigates the complexities of acorn storage and group living in acorn woodpeckers at Hastings Reservation in central coastal California It is one of the most thorough studies of any avian social system to date Dispersal Dynamics of the Cooperatively Breeding Acorn Woodpecker Philip Norman Hooe, 1995 **Demographic and Fitness Consequences of Delayed Dispersal in the Cooperatively Breeding Acorn Woodpecker** Justyn T. Stahl, 2006 ABSTRACT Cooperative breeding in birds occurs when more than two individuals provide care for a single nest In many species the additional adults present are offspring from a previous year who have delayed dispersal and provision young who are non descendant kin Delaying dispersal and age of first breeding can influence the demography and fitness of individuals but the fitness and demographic consequences of helping behavior are poorly understood Using long term data 1972 2004 I examined the demographic and fitness consequences of helping behavior in acorn woodpeckers *Melanerpes formicivorus* Using a multi state capture mark recapture framework I found that the apparent survival of breeders was higher than helpers and the survival of males was higher than females Juveniles were much more likely to become helpers rather than breeders following fledging and helpers were more likely to remain helpers rather than becoming a breeder Both survival and transition rates varied annually and were positively influenced by the acorn crop For fitness estimation I focused only on reproductive females who were banded as juveniles Although helpers began reproduction significantly later and lived significantly longer than breeders there was no significant difference in lifetime reproductive success or individual fitness between the two groups However birds that successfully bred at age 1 without helping had a significantly higher fitness than those who helped and successfully bred at age 2 or older My results suggest that delayed dispersal and reproduction in the acorn woodpecker lead to a loss of fitness when conditions are favorable for successful reproduction However if constraints in the environment prevent an individual from breeding at age 1 helping is a viable option until reproduction is possible **Movement Patterns and Nest Site Selection in the Cooperatively Breeding Acorn Woodpecker *Melanerpes Formicivorus*** Philip Norman Hooe, 1989 **Cooperatively Breeding Acorn Woodpecker** Walter D. Koenig, 1987 *Competition and Cooperation in the Communally Breeding Acorn Woodpecker (*Melanerpes Formicivorus*)* Ronald Lane Mumme, 1984 **Causes and Consequences of Nestling Size Variation in the Cooperatively Breeding Acorn Woodpecker (*Melanerpes Formicivorus*)** Mark Thomas Stanback, 1991 *Cooperative Breeding in the Acorn Woodpecker* P. B. Stacey, 1984 **Cooperative Breeding in Vertebrates** Walter D. Koenig, Janis L. Dickinson, 2016-01-07 Brings together long term

studies of cooperation in vertebrates that challenge our understanding of the evolution of social behavior *Mobbing Behavior in the Cooperatively-breeding Acorn Woodpecker (Melanerpes Formicivorus)* Lauren Ashley Wilkerson, 2012

Studies of Vocal Communications in Cooperatively Breeding Acorn Woodpeckers (Melanerpes Formicivorus) Yuan Yao, 2008 **Ecological and Evolutionary Aspects of Cooperative Breeding in Acorn Woodpeckers of Central Coastal California** Walter Daniel Koenig, 1978 **Cooperation and Coordination in the Family** James L. Savage, Camilla A. Hinde, Rufus A. Johnstone, 2021-04-23 Acorn Utilization in the Acorn Woodpecker (Melanerpes Formicivorus) Nanette Louise Pratini, 1989 **Encyclopedia of Animal Behavior**, 2019-01-21 Encyclopedia of Animal Behavior Second Edition Four Volume Set the latest update since the 2010 release builds upon the solid foundation established in the first edition Updated sections include Host parasite interactions Vertebrate social behavior and the introduction of overview essays that boost the book's comprehensive detail The structure for the work is modified to accommodate a better grouping of subjects Some chapters have been reshuffled with section headings combined or modified Represents a one stop resource for scientifically reliable information on animal behavior Provides comparative approaches including the perspective of evolutionary biologists physiologists endocrinologists neuroscientists and psychologists Includes multimedia features in the online version that offer accessible tools to readers looking to deepen their understanding Ornithology Michael L. Morrison, Amanda D. Rodewald, Gary Voelker, Melanie R. Colón, Jonathan F. Prather, 2018-09-03 The essential text for ornithology courses this book will leave students with a lifelong understanding and appreciation of the biology and ecology of birds Aves the birds is the wildlife group that people most frequently encounter With over 10 000 species worldwide these animals are part of our everyday experience They are also the focus of intense research and their management and conservation is a subject of considerable effort throughout the world But what are the defining attributes that make a bird a bird Aimed at undergraduate and graduate students Ornithology provides a solid modern foundation for understanding the life and development of birds Written by renowned experts from around the globe this comprehensive textbook draws on the latest research to create an innovative learning experience Moving beyond bones muscle and feathers it provides the core information needed to build the bird linking anatomy and physiology with ecology and behavior As it reviews the major orders of birds the book highlights their wide diversity and critically evaluates ornithological concepts and theories Incorporating brief biographies of leaders in the field the text describes their contributions in the context of key historical events in bird science Each chapter ends with a summary of the material covered a discussion of potential management and conservation applications and suggested study questions that will stimulate thought and discussion Contributors Peter Arcese George E Bentley Lori A Blanc William M Block Alice Boyle Leonard A Brennan Luke K Butler Zac Cheviron Luis M Chiappe Melanie R Col n Caren B Cooper Robert J Cooper Jamie M Cornelius Carlos Martinez Del Rio John Dumbacher Shannon Farrell Maureen Flannery Geoffrey Geupel Patricia Adair Gowaty Thomas P Hahn Ashley M Heers Fritz Hertel

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Cooperative Breeding in Birds Peter B. Stacey, Walter D. Koenig, 1990-04-19 Cooperative breeding is an unusual kind of social behaviour found in a few hundred species worldwide in which individuals other than the parents help raise young Understanding the apparently altruistic behaviour of helpers has provided numerous challenges to evolutionary biologists This book includes detailed first hand summaries of many of the major empirical studies of cooperatively breeding birds It provides comparative information on the demography social behaviour and behavioural ecology of these unusual species and explores the diversity of ideas and the controversies which have developed in this field The studies are all long term and consequently the book summarises some of the most extensive studies of the behaviour of marked individuals ever undertaken Graduate students and research workers in ornithology sociobiology behavioural ecology and evolutionary biology will find much of value in this book

The Evolution of Avian Breeding Systems J. David Ligon, 1999 Ever since Darwin birds have provided much of the stimulus for the study of evolution and natural selection This volume in the Oxford Ornithology Series looks at three of the most fascinating aspects of their reproductive biology sexual selection parental care and mating systems It provides empirical assessments of the main theories of mate choice by females and includes numerous related topics such as the role of sexual selection in speciation It examines the often extreme sexual dimorphism in plumage and the bewildering array of ornamentation and courtship displays Although most avian species are socially monogamous others exhibit polygyny or polyandry of various forms and the book looks at the effects of these extra pair copulations on paternity and on the evolution of mating systems Throughout the book the various theories are illustrated with extensive examples drawn a wide range of species making it a valuable resource for all ornithologists and student of animal behavior

Acta XIX Congressus Internationalis Ornithologici Henri Ouellet, 1988

The American Naturalist, 2005

Reviewing **Cooperatively Breeding Acorn Woodpecker**: Unlocking the Spellbinding Force of Linguistics

In a fast-paced world fueled by information and interconnectivity, the spellbinding force of linguistics has acquired newfound prominence. Its capacity to evoke emotions, stimulate contemplation, and stimulate metamorphosis is truly astonishing. Within the pages of "**Cooperatively Breeding Acorn Woodpecker**," an enthralling opus penned by a highly acclaimed wordsmith, readers embark on an immersive expedition to unravel the intricate significance of language and its indelible imprint on our lives. Throughout this assessment, we shall delve to the book is central motifs, appraise its distinctive narrative style, and gauge its overarching influence on the minds of its readers.

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