FOREWORD

This is the fifth in a series of books that are reports on research conducted at or near the Philip L. Boyd Deep Canyon Desert Research Center. The preceding books in the series include: *Mammals of Deep Canyon*, by R. Mark Ryan (1968); *Ants of Deep Canyon*, by G. C. and Jeanette Wheeler (1973); *Deep Canyon, A Desert Wilderness for Science*, edited by Irwin P. Ting and Bill Jennings (1976); and *Plants of Deep Canyon*, by Jan G. Zabriskie (1979).

The Boyd Research Center is a 6,727 hectare reserve that is located near Palm Desert, Riverside County, California. It is one of twenty-six reserves maintained by the University of California in its Natural Land and Water Reserves System. The Boyd Research Center is administered by the Riverside campus of the University of California.

The geographic area utilized for the investigation of the birds of Deep Canyon, as in the earlier studies mentioned above, was considerably larger than the Boyd Research Center itself. The entire study site is called the Deep Canyon Transect. It includes the Deep Canyon region of the Santa Rosa Mountains and a portion of the adjacent Coachella Valley in the Colorado Desert (a subdivision of the Sonoran Desert). The study site is a rectangle 34 kilometers long by 19 kilometers wide that includes the Boyd Research Center. The Deep Canyon Transect ranges in elevation from 9 meters on the floor of the Coachella Valley to 2,657 meters at the top of Toro Peak.

Few other places in the world offer the unusual opportunity for one to be basking in winter at air temperatures in the high seventies (Fahrenheit), while several feet of snow are lying on the ground less than 32 airline kilometers away. This elevational gradient allows nearly every habitat that occurs in inland southern California to be represented within the boundaries of the Transect. Therefore, it is not overly surprising that 217 species of birds, out of the approximately 500 species that are known to occur in southern California, have been recorded on the Deep Canyon Transect to date.

This book is intended for two audiences: (1) The interested layman can learn which species of birds occur in the Coachella Valley and adjacent

Santa Rosa Mountains. The information available includes the types of habitats in which each species can be found, as well as the time of year the birds are present. Although the book is not intended to be a field guide, the colored plates certainly will help identify some of the more common birds of this portion of southern California. (2) The desert-oriented scientist will also find considerable unpublished data regarding the population dynamics of this region's bird communities. Much of the book deals with the energy flow through the birds in different habitats. These animals represent a major portion of the complex distribution of energy within these habitats. Therefore, this information will be useful to anyone interested in the energetics of wild populations.

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