

BAT MAN IN THE TROPICS: STORIES OF ONE MAN'S CAREER IN FIELD STUDIES OF BATS

Fleming, Theodore H. 2003. *A bat man in the tropics: chasing El Duende*. Organisms and Environments, 7. University of California Press, Berkeley, California. xx + 311 p. \$50.00, \$32.95, ISBN: 0-520-23606-8 (alk. paper).

Those of us who study bats as part of our professional careers in science are truly lucky for two reasons. First, we often travel to unique and remote locations, to spend our time catching, observing, and studying one of the most unique groups of mammals on the planet today. As a result we see and experience things that most people can just read about. Second, we are lucky because it is fun.

In his new book, *A bat man in the tropics: chasing El Duende*, Ted Fleming illustrates these points in a unique and entertaining way. This book is a collection of field experiences and stories, told by the author, over his 30-plus year career as a bat biologist. It begins in 1966 with his first exposure to bat field research on a trip to Panama and takes us through the next 30 years of work in Central America, Australia, and into Mexico, Texas, and Arizona.

In his preface, Fleming identifies the underlying themes that run throughout the book; he calls these themes "*El Duende*." Translated from the Spanish, *el duende* means "hobgoblin" or "ghost," in reference to bats, the central theme of this book. Most people know bats only as mysterious creatures of the night. As one of the most misunderstood of all animals, bats are often feared and despised. The stories that the author relates about his research subjects go a long way in dispelling these myths and demonstrate the value and role bats play in ecosystems all around the world.

But *El Duende* also refers to "will o' the wisp" things that delude or mislead by luring on—the author's metaphor for scientific discovery. Ted Fleming's contributions to bat biology are well known. He has published numerous papers and books on bats and has emerged as one of the best-known bat biologists in the world. This book is unique in his efforts, an autobiography of sorts. Where it offers little in the way of experiments or data, it instead gives the readers a first hand thrill of scientific discovery, and the wonders of the often hidden lives of bats.

The book is well written and entertaining. It is designed to be of interest to the student, field biologist, and lay person alike. In it Fleming does a superb job of communicating the excitement for field work and love for the creatures he studies, something all of us in the field have experienced during the course of our own careers. Most of us have experienced the euphoria of field work but we seldom get the opportunity to express it in our scientific writing. While reading the stories in this book, I often found myself reflecting back on my own field experiences, with some relish and satisfaction. Over the years many of us have heard Fleming tell one or two of these stories at conferences, often to the delight of graduate and undergraduate students. It is all the more satisfying to see them laid down in print to be shared by all.

Each of the 11 chapters introduces readers to a new location where they become acquainted with tropical nature and scientific field work. We explore the excitement and trials of living and conducting research in the field and learn a great deal about the biology of bats as keystone species. Fleming's work over the years revealed much about the role that bats play in an ecosystem and demonstrated their critical contri-

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tribution to ecosystem stability. Perhaps one of this book's best contributions is that Fleming's portrayal of the ecological importance of bats can be equally well understood by the biologist and lay person.

There are 28 black and white photographs in the book, about half of which are of bats, photographed by Merlin Tuttle. Tuttle is widely known for his outstanding bat photography but the black and white images just don't do justice to the subjects. Most of the remaining photos are of Fleming, or those he has worked and lived with in the field. Field biologists and graduate students will recognize many of the names and photos of Fleming's collaborators in each chapter, many of which are well-known biologists in his or her own right. Each chapter also begins with an illustration by the author of bats or other mammals encountered in the field.

The book contains two appendices which are useful to the non-scientist. The first provides a brief overview of the diversity of bats, with a short description of the Order Chiroptera, and each of the 18 bat families. Appendix two is a cross reference of scientific and common names for each of the species, including plants that are mentioned in the text. In addition, there is a nice section that provides a list of general references on bats, as well as specific sources for each chapter.

Lastly, Fleming makes a point in his epilogue, which all students of biology need to be reminded of from time to time. While technology has progressed, and biologists have many new tools and computers for examining and analyzing data, we must be sure we don't lose sight of the real world and the organisms that inhabit it. It is, after all, curiosity about and love of those organisms that first attracted us to this profession.

A bat man in the tropics: chasing El Duende is a truly unique contribution to the bat literature, and one that can be enjoyed by field biologists, past, present, future, and even the arm-chair variety who prefer to dream about the excitement of field work. All will enjoy the opportunity to share Fleming's experiences.

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