How do we decide whether a particular vertebrate species can be classified as a pest? What is achieved by control of such pests? The approach advocated by Jim Hone uses statistical and economic analyses as well as mathematical modelling to determine the pest status of species and to analyse the effects of control on pest abundance and on the damage caused by pests. To do this the book reviews critically the literature on damage assessment and control evaluation. Links are then made to relevant topics in ecology, epidemiology, fisheries management and economics, showing how analyses in other scientific fields can be used in the analysis of vertebrate pest control.

The scope of the book is worldwide and many mammalian and avian pests are described using case studies. The emphasis is on the evaluation of data, rather than on specific control methods.

Analysis of vertebrate pest control

Cambridge Studies in Applied Ecology and Resource Management

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PREFACE

The idea for this book developed out of my interest into how other scientists had estimated the damage by vertebrate pests and the effects of vertebrate pest control. How did scientists obtain data and how did they analyse it? Was it of any use? In writing this book I have attempted to collate and critically comment on information on a variety of topics in vertebrate pest control. The collation is not exhaustive. Many good studies have not been used simply because of limited space.

I thank many people for assistance with discussions and comments on draft manuscripts. Graeme Caughley and Tony Sinclair of the editorial board of the books in this series assisted with discussions and negotiations. Roger Pech, Peter O'Brien, Glen Saunders, David Choquenot, John Parkes, Graham Nugent, Chris Frampton, Clem Tisdell, Peter Whitehead, Mary Bomford, Mike Braysher, George Wilson, Peter Brown, Chris Cheeseman, Stephen Harris and Astrida Upitis provided useful comments. The ideas and details are, however, mine, so blame me for any errors or omissions. Fellow staff and students at the University of Canberra tolerated my occasional absences to write the book. Staff at the Central Science Laboratory, Worplesdon, Surrey, provided discussions and facilities. I am grateful to them all. I also thank Alan Crowden and Alison Litherland of CUP for editorial assistance.

Finally, I am an ecologist, not a biometrician, economist or mathematician. I have attempted to bring their fields of study a bit closer to my own and that of my fellow ecologists. I hope that fellow ecologists can, and do, use the results, though they should not expect to be spoon-fed. In the words of a much greater author, 'I should not like my writing to spare other people the trouble of thinking. But, if possible, to stimulate someone to thoughts of his own' (Wittgenstein, 1967).