

This volume covers the different petrel groups, genus by genus, and their comparative breeding biologies. A second volume in preparation will expand on aspects of behaviour, energetics, physiology, food, distribution, and conservation.

This book will prove of particular worth to New Zealanders, as about 65 of the world's 110 or so petrels breed or occur in this country.

The petrels are an important, but often forgotten, part of marine communities. With more pressure on marine resources from human exploitation, research on seabirds will become increasingly important.

Alan Tennyson



*Current Ornithology, Volume 8*, edited by Dennis M. Power 1991. Plenum Press, New York. xvi + 335pp. (hardback), ISBN: 0-306-43640-X.

*Current Ornithology* is an annual review journal masquerading as a book. So why should the myth be perpetuated by reviewing it as a book? For any volume in this series the straight answer is that it contains excellent papers about which ornithologists should be aware. For Volume 8 there is the added bonus of a South Pacific flavour with strong New Zealand accents inspired by the Twentieth International Ornithological Congress held in Christchurch in 1990.

The first paper in this volume is an overview of ornithology in New Zealand by Allan Baker, a New Zealander now working in Canada. In 67 pages Baker covers a huge territory: the birds of New Zealand and where they came from, geographic variation, conservation, and the status of ornithological research. Baker performs the neat trick of combining this breadth with numerous specific examples that go into satisfying detail. For example, the discussion of geographic variation presents good reviews of work on Tomtits, New Zealand Robins, Bellbirds, Variable Oystercatchers and Red-billed Gulls.

Baker's paper is also interesting because he occasionally takes the opportunity to pass comment on the direction of both research and conservation initiatives in New Zealand. His plea for a greater emphasis on conservation genetics is well argued in the New Zealand context. However, in other parts of the paper there are throw-away lines that deserve greater attention. Baker puts in plugs both for the use of islands in species rescue programmes and for the ultimate objective of establishing large mainland reserves. However, there is no discussion of conservation priorities and the inevitable trade-offs in choosing strategies. He applauds the many long-term studies from Richdale's population study of Yellow-eyed Penguins to Mills's continuing study of Red-billed Gulls. However, the present environment for research funding focuses on the bottom line and often demands the promise of a return in three years. It would be interesting to have an impassioned justification for the continuation of long-term research. Finally, Baker decries the general shortage of funds for avian research in New

Zealand. This last point may strike a chord with an international audience, but I find little sympathy from New Zealand colleagues studying almost any other taxonomic group. Perhaps we can at least adopt his suggestion that a more efficient use of the available funds will come from teams comprising government, university, museum and amateur researchers.

The other New Zealand contribution is from Ian McLean and Gillian Rhodes at Canterbury University. They examine the way birds recognise enemies and respond to them. The most stimulating aspect of the paper is that it analyses enemy recognition within a different framework from the currently popular optimality approach. This is well developed in the section on nest defence. A model based on feedback from the state of the nest provides a better fit to the level of parental defence than an optimality model. Elsewhere the authors present the results of several elegant experiments. One tests, and confirms, the hypothesis that members of mixed species flocks exhibit reciprocal altruism in their mobbing of potential predators. Two other experiments investigate the responses of Grey Warblers to Shining Cuckoos.

The other five papers move away from New Zealand. The birds of New Guinea and their parasites provide a test of Hamilton and Zuk's model of sexual selection in a paper by Stephen and Melinda Pruett-Jones and Hugh Jones. Their conclusion is that, while there is a correlation between parasite loads and plumage showiness, a cause and effect relationship has not been demonstrated yet. Patricia Gowaty resurrects the question of whether birds can manipulate the sex ratio of their offspring. Her conclusion is that there is enough evidence consistent with facultative manipulation of sex ratios to encourage further research. Lehr Brisbin reviews avian radioecology with particular emphasis on the nuclear accident at Chernobyl. Hans Temrin presents data from studies on Pied Flycatchers, Wood Warblers and Great Reed Warblers to discuss the hypothesis that some male birds hide the fact that they may have already mated in order to attract additional females. Joseph Wunderle reviews the differences in foraging proficiency between juvenile and adult birds and the consequences of those differences.

The eighth volume in the series *Current Ornithology* lives up to the high standards of previous volumes. Production errors are rare, although the preface does place the New World cowbird in New Zealand. The continuing problem for the individual ornithologist will be the expense of a volume that only has a few articles of particular interest. This volume could be an exception for some in New Zealand and the stimulus needed by the rest of us to ensure that our library starts or continues its subscription.

Edward O. Minot

