

With the approach of dusk, breeding pairs roosted in their nest hollows and did not join the evening flocks of non-breeding birds flying to their communal roosts.

### Conclusion

It appears that at least some Rainbow Lorikeets in Oatley and the surrounding district have become fully suburbanized and do not need to move long distances between feeding, roosting and breeding sites. They are also quite capable of successfully competing with other suburban bird species, both native and introduced. Rainbow Lorikeets have reclaimed their ancestral territory in Oatley and throughout much of southern Sydney by utilising a wide range of newly available food sources throughout the year.

### REFERENCES

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## BOOK REVIEW

**The Penguins — Ecology and Management** P. Dann, I. Norman and P. Reilly, 1995. ISBN 0 949324 58 2. Surrey Beatty & Sons Pty Limited, 45 Rickard Road, Chipping Norton, New South Wales 2170, Australia. 475 pp., numerous figures and b/w photographs, and 8 colour plates; 150 × 210 mm; hard cover. Available from leading Natural History Bookshops and publishers, RRP Aud\$85.00 plus postage.

This book contains some of the papers presented at the Second International Penguin Conference held at Cowes, Phillip Island, Victoria, Australia in August 1992. The papers are divided into four groups: A — Breeding Biology, B — Foraging Ecology and Energetics, C — Sexual and Geographic Variations, D — Management of Penguins and their Environment.

The eight contributions under Breeding Biology reflect a wide range of topics from census to overall effects on populations of occasional severe annual losses, from synchrony to asynchrony, from cost of reproduction to using such costs to appraise marine resources, the influences of behaviour on reproduction, and the factors controlling behaviour. The increasingly broad approach, made possible by the rapid advances in newer technologies, is apparent also in the section on Foraging Ecology and Energetics. The paper by R. Bannasch entitled 'Hydrodynamics of Penguins — an experimental approach' is a 'must' to read and, together with the contribution of B. Culik on 'Energy Expenditure of Adelie Penguins', sets the basis for appreciating the other papers on partitioning of resources and foraging using satellite telemetry and data loggers. A paper of 'Consumption of Southern Ocean marine resources by penguins' indicates an increasing interest in the role of penguins in biomass studies of this vast ecosystem. Sexual dimorphism of the bill is a feature of many species and an interesting hypothesis is presented for this evolution, and

a taxonomic approach applies this feature to assert that Macaroni and Royal Penguins should be regarded as separate species. The five papers on management are concerned with problems at colony site: the presence of people, changes in the physical attributes of the colony site, predators. One on heavy metal and organochlorine concentrations in tissues shows the increasing pollution of foraging areas.

It is inevitable that such a volume does not cover all the topics discussed at the Conference. It does indicate the great differences in approach that are possible nowadays because of the advance in technologies. They also demonstrate the importance of critical long-term studies in appraising changes in abundance. For the reviewer, it is the variety of studies that makes the book interesting to read. The book should be read by anyone interested in seabirds and others to appreciate the scope of the quantitative studies that are now possible with this group. Increasingly, those who study penguins know more about the marine environment than those who claim an expertise.

The quality of the colour and b/w photographs selected is variable. Some are excellent and clearly illustrate and enhance the topic to which they refer. Others are poor, and even out of focus. Some appear to have little relevance to the text and others are placed with little relevance to the text. This is a pity because so much can be told by appropriate photographs. There is not a single photograph depicting a Little Penguin of the host country or its habitat, even though five of the papers are about this bird and it is probably the most managed of all penguins — remarkable!

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