



The Little Penguin is a marine animal.

Studies on the Little Penguin *Eudyptula minor* in Victoria: an Introduction

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The 'Parade' of Little Penguins across Summerland Beach on Phillip Island has attracted popular attention for many years although its early history is not well documented. Ornithologists visited the Island at the turn of the century (Campbell 1901) and by 1928 people were being ferried to the island to watch birds arriving on the Summerland shores. In the early 1930s Bert West, one of the original tour operators, was made an honorary wildlife inspector and the Spencer-Jackson family donated about four hectares adjoining Summerland Beach to assist in the protection of the Little Penguins. The Shire of Phillip Island reserved additional land shortly after and again in 1955, before the Shire was given responsibility for managing the Parade. In 1981 a new Committee of Management, with broader representation from the community and government, was given responsibility by the State Government for management of the Penguin Reserve including the Penguin Parade, a responsibility which has been maintained to this time.

The objectives of the Committee of Management are such that it is required to protect the Little Penguin population and its environment, make them available for viewing by the public, generate a store of knowledge to educate the public and have the on-going means to attract visitors and funds to support management of the Reserve.

To achieve these objectives the Committee has required, and will continue to require, scientifically based recommendations and information.

Fortunately, due to the efforts of a number of research groups as well as support from volunteers, the State Government and the Penguin Reserve Committee of Management, a steady build-up of scientific information on Little Penguins is occurring and this is being put to good use in decision making by the Committee of Management. This is evidenced by a recent trend suggesting that Little Penguin numbers may be stabilising, the minimum impact on Little Penguin welfare of the new stand and walkways with their enhanced viewing

and the effective rehabilitation of habitat and control of introduced predators.

Little Penguin research in Victoria owes much to the Penguin Study Group, which is a part of the Victorian Ornithological Research Group formed under the leadership of Pauline Reilly in 1967 (Reilly 1983). The group laid the groundwork for later studies conducted on the Island by J.M. Cullen and P. Dann, with the continuing assistance of the Penguin Study Group now co-ordinated by Ron Thoday.

Apart from establishing basic biological information on the Little Penguin (Reilly & Balmford 1974; Reilly & Cullen 1979, 1981; Dann & Cullen 1990), these studies also showed that the population had declined substantially in the past and that this reduction was continuing in more recent times.

In 1985 the government accepted the need for urgent action to assist the Committee of Management in maintaining the Little Penguin population at the Parade and halting the decline of the population of Little Penguins on Phillip Island. Concerned by the occurrence of an unusually large number of dead penguins around the Victorian coast in 1982 and 1984, and a late 1984 breeding season which led to extensive chick starvation, the State initiated the 'Penguin Protection Plan'.

Under this plan, the Government instituted a buy-back program for all buildings (180) and allotments (780) on the Summerland Peninsula so that it would revert to public ownership. In doing so the Government accepted research findings which indicated that an increase in predators associated with ongoing development would adversely affect breeding success and adult survival of Little Penguins and that the habitat reduction or modification due to development was significantly depressing the local Little Penguin population. It was also recognised that there was an urgent need to have a better understanding of Little Penguin behaviour at sea, in particular about feeding and the availability of prey species. Thus, within the terms of the plan, there was an allocation of funds to promote a substantial research program.

In essence the program sought to provide more details on:

- Little Penguin food and its availability and abundance;
- the feeding areas of Little Penguins;
- aspects of breeding at Phillip Island and elsewhere;
- the relationship between oceanographic parameters and the breeding cycle; and
- the cause of periodic mortality of Little Penguins.

The success of the projects supported by the Penguin Protection Plan can in part be judged by papers gathered in this supplement. Many of the reports were presented in brief at a symposium held in July 1989 on Phillip Island. Subsequently there has been an opportunity to discuss findings individually or collectively, and to refine and co-ordinate the results of projects. Areas where there is a need for further research have been identified and the Committee of Management hopes that this research will be done.

Papers presented below include their own, separate acknowledgements. But it is appropriate to recognise in a more general way a number of people who have contributed to development of the program.

Firstly, the outlines for requisite research were developed by a committee which involved officers of various divisions of the Department of Conservation and Environment, researchers from Melbourne and Monash Universities and from the Penguin Reserve. Subsequently a research committee was established, comprised of D. Bulthuis (Marine Science Laboratory, Fisheries Division), J.M. Cullen (Monash University), P. Dann (Penguin Reserve), K. Harrigan (Melbourne University), D. Hobday (Marine Science Laboratory), M. Mickelson (Marine Science Laboratory), F.I. Norman (National Parks and Wildlife Division) and I. Weir (National Parks and Wildlife Division).

The symposium held at Cowes was planned by J.M. Cullen, P. Dann and F.I. Norman and brought to fruition by G. Edwards and B. Weavers. The symposium and the publication of this supplement were funded by the Penguin Reserve and Wildlife Management Branch, NPWD. The RAOU agreed to publish these papers as a *Supplement to Emu* Volume 91. This and the editorial assistance of Stephen Blaber in coordinating the processing of manuscripts is gratefully acknowledged.

Finally, all projects have depended primarily on finances provided by the Government of Victoria or, in the case of on-going studies at the Parade, through the Committee of Management. Such assistance, essential and necessary, is gratefully acknowledged by all concerned.

References

- Campbell, A.J. 1901. Nests and Eggs of Australian Birds. Melbourne, Campbell.
- Dann, P. & Cullen, J.M. 1990. Survival, patterns of reproduction, and lifetime reproductive output in Little Blue Penguins (*Eudyptula minor*) on Phillip Island, Victoria, Australia. Pp. 63-84 in *Penguin Biology*. Eds L. Davis & J. Darby. Academic Press, San Diego.
- Reilly, P.N. 1983. *Fairy Penguins and Earthy People*. Lothian, Melbourne.
- Reilly, P.N. & Balmford, P. 1974. A breeding study of the Little Penguin *Eudyptula minor* in Australia. Pp. 161-186 in *The Biology of Penguins*. Ed. B. Stonehouse. Macmillan, London.
- Reilly, P.N. & Cullen, J.M. 1979. The Little Penguin *Eudyptula minor* in Victoria, I: Mortality of adults. *Emu* 79, 97-102.
- Reilly, P.N. & Cullen, J.M. 1981. The Little Penguin *Eudyptula minor* in Victoria, II: Breeding. *Emu* 81, 1-19.