

Waterfowl Activity Budgets



Project
Diurnal Activity Budgets of
Waterfowl

Location
Western Treatment Plant

Client
Melbourne Water

Start Date
May 2005

End Date
June 2006

AES was commissioned to repeat a PhD study done by Dr Andrew Hamilton on diurnal activity budgets of waterfowl on Lake Borrie Pond 9 at the Western Treatment Plant in Werribee.

Melbourne Water's Western Treatment Plant is a Ramsar site and supports very large populations of waterbirds, including species such as pink-eared duck. The original study described the activity of several waterfowl species throughout the day and the period of time that each species spent doing different activities, such as feeding.

Melbourne Water were particularly interested to know whether there had been any changes in foraging behaviour as a possible consequence of large-scale modifications to management of the lake in recent years.

AES initiated the project with input from Dr Hamilton and Dr Graham Hepworth, who did the original statistical analysis. Dr Hamilton advised the field team on how to allocate behaviours to particular categories so that consistency between the two studies could be maximised.

A total of 36 site visits were done over the course of a year resulting in a large dataset which was rigorously quality checked both at the time of collection and transfer into a Microsoft Access database. This database was then queried to provide data in formats for analysis. Results were provided overlaid on data from Dr Hamilton's original study.

