Preliminary Report: Third WHOI Workshop on Albatross Demography, 15–19 May, 2006

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The Third WHOI Workshop on Albatross Demography was held 15–19 May 2006 at Le Centre d'Études Biologiques de Chizé. Attendees included

Hal Caswell	Woods Hole Oceanographic Institution
Christine M. Hunter	Woods Hole Oceanographic Institution
Christophe Barbaud	CEBC-CNRS, Chizé
Remi Choquet	CEFE-CNRS, Montpellier
John Croxall	British Antarctic Survey
Paul Doherty	Colorado State University
Jaume Forcada	British Antarctic Survey
Stephanie Jenouvrier	CEBC-CNRS, Chizé
Marie Nevoux	CEBC-CNRS, Chizé
C.J.R. Robertson	Wild Press, New Zealand
Virginie Rolland	CEBC-CNRS, Chizé
Paul Scofield	Canterbury Museum, Christchurch
Henri Weimerskirch	CEBC-CNRS, Chizé
Zachary Vincent	University of Cape Town

The primary focus of the workshop was a comparative analysis of the adult life cycle for a representative selection of albatross species and populations (9 data sets). The group reviewed the 4-stage adult model and carried out parameter estimation, focusing on stage-specific survival, breeding probability, and breeding success. Life expectancy, breeding interval, and lifetime reproductive success were then calculated from those probabilities. Intensive effort was devoted to defining an appropriate model selection procedure, and to estimating parameters and conducting model selection using a new program. Simultaneous estimation using several data sets promoted additional discussion and understanding of model behavior and identifiability. Significant progress was made and specific plans established for each group to complete analyses after the meeting.

In addition, the group began exploration of a life cycle including both the pre-breeding and the adult portions of the life cycle; this model will be essential to obtaining population growth results.

There was considerable discussion of how breeding probabilities in the model might be influenced by pair disruption caused by the loss of a partner. The group developed a first approximation to a two-sex model that tracks the formation, breakup, and reformation of pairs.

There was agreement that a follow-up workshop, to focus on demographic analysis, is a priority.