

Areas of expertise

Marine mammal and seabird ecology, pelagic ecosystem trophodynamics, ecological effects of fishing and assessing and mitigating interactions between fisheries/aquaculture with protected species.

Countries of work experience

Australia, USA, Antarctica

Overview of experience and qualifications

Dr Goldsworthy has been undertaking research in the field of marine biology for over 17 years, specialising in the ecology of marine mammals and seabirds, ecosystem trophodynamics, the ecological effects of fishing on pelagic ecosystems, and operational and trophic interactions with fisheries. He completed his PhD at Monash University in 1992 on fur seal populations in South Australia and the subantarctic, then was awarded a two-year Post-doctoral Research Fellowship at the Smithsonian Institution in Washington DC, where he used molecular genetic methods to investigate hybridisation and population structure in fur seal populations. He then worked for two years monitoring the impacts of the *Iron Baron* oil spill on little penguin populations in Tasmania, then at CSIRO Marine Research (Hobart) investigating the ecological effects of subantarctic fisheries for Patagonian toothfish. In 2000, he took up a position in the Zoology Department at La Trobe University, where he established the Sea Mammal Ecology Group, before taking up a position with SARDI Aquatic Sciences in 2004, where he now heads the Pelagic Ecosystems SubProgram.

Dr Goldsworthy has published over 40 scientific papers, supervised 14 PhD students and 9 Honours students.

Research and consulting

The primary area of research at present includes a broad-scale study to understand the pelagic ecology of the eastern Great Australian Bight, with a focus on the role of small pelagic fish and cephalopods, and the effects of fishing on populations of seabirds and marine mammals. Implicit in this research is an understanding of the trophic pathways that sustain commercial fish production and high-trophic predator populations. This project supports a number of PhD studies focused on investigating the diet, foraging locations (through satellite tracking) and reproductive performance of little penguins, short-tailed shearwaters, crested terns, and New Zealand fur seals.



Other research includes determining the status and trends in Australian sea lion populations, and identifying key foraging habitats to assist in managing the placement of aquaculture sites to reduce interaction rates. Projects are also being undertaken to assess and mitigate interactions between protected marine species and fisheries and aquaculture.

Professional appointments:

2003 – present: Subprogram Leader – Pelagic Ecosystems. SARDI Aquatic Sciences. Also: Senior Lecture, Zoology Department, La Trobe University (currently seconded to SARDI), and Affiliate Senior Lecturer, Department of Earth & Biological Sciences, Adelaide University

2000-2004

Senior Lecturer, Sea Mammal Ecology Group, Department of Zoology, Latrobe University, Bundoora, Victoria, Australia

1998-2000

Marine Mammal Ecologist, CSIRO - Division of Marine Research, Tasmania.

1995-1997

Scientific Officer - Tasmanian Department of Environment and Land Management, Wildlife Management Section - Marine Ecosystems.

1992-1994

Post-doctoral Research Fellow. Smithsonian Institution, National Zoological Park, Washington, DC USA.

Contact

Dr Simon Goldsworthy, Subprogram Leader - Pelagic Ecosystems, (Aquatic Sciences).

Tel: 08 8207 5325 Fax: 08 8207 5481

E-mail: goldsworthy.simon@saugov.sa.gov.au

SARDI Website www.sardi.sa.gov.au