

# Dr Jason Tanner, Marine Environment & Ecology

## SARDI Aquatic Sciences

### Areas of expertise

- Benthic ecology
- Seagrass epifauna interactions.
- Fish use of habitat.
- Population and community modelling.
- Environmental assessment.

### Countries of work experience

Australia, Jamaica and USA.

### Overview of experience and qualifications

Dr Tanner has 16 years experience in marine ecology, working in both tropical and temperate systems. He has published 30 papers, most in high profile international journals.

In the last 6 years, he has played a key role in the development of the Marine Environment & Ecology Program, which he leads. This program conducts research into environmental assessment of human activities in marine ecosystems, including aquaculture, pollution, dredging etc; the effects of marine invasive pests; performance assessment of marine parks; and threatened species. He has been heavily involved in several major projects in this time, including a suite of large multidisciplinary studies to assess the environmental impacts of aquaculture and to inform aquaculture planning. Other large projects include the environmental assessment of proposed dredging operations at Outer Harbour, and the assessment of environmental risks associated with introduced *Caulerpa taxifolia*. In addition, he is habitat theme leader for the CLLAMM Ecology cluster, overseeing the development of a dynamic habitat model of the Coorong.

Dr Tanner has a particular interest in the landscape ecology of seagrasses, and especially the consequences of habitat fragmentation and arrangement on the fauna that live in seagrass meadows. He has also been heavily involved in a major project funded by DEH to develop a new technique for seagrass rehabilitation along the Adelaide coast, and has undertaken several studies looking at environmental influences on seagrass health.

Prior to that, he spent 3 years working with SARDI examining habitat change in Gulf St Vincent. This focussed predominantly on the consequences of seagrass fragmentation for associated fauna, and working with the prawn industry to examine the impacts of commercial trawling on benthic fauna.

Another component of this work was the assessment of habitat distributions over large scales using remote video cameras. He has also done some work on the ecology of introduced marine species, to develop an understanding of the potential impacts these species may have on our ecosystems.

Prior to moving to SARDI, he spent 8 years researching the population and community ecology of benthic invertebrates on coral reefs, involving extensive field surveys and experimental work, as well as modelling.

This is continuing, with the current focus being long-term (40 years) dynamics of corals.

Dr Tanner maintains close involvement with several universities, and participates in teaching. At the undergraduate level, he has contributed to courses on coral reef ecology, marine ecology, biometrics and population modelling, while at the graduate level he has supervised 10 honours and 4 PhD students.



### Professional appointments:

2002-present: Program Leader – Marine Environment & Ecology.

2000- present: Affiliate lecturer/Senior lecturer, School of Earth & Environmental Sciences, University of Adelaide.

1999-2001: Marine Ecologist, SARDI Aquatic Sciences.

1996-1998: ARC postdoctoral fellow, Dept of Marine Biology, James Cook University.

1995: Research associate, James Cook Uni.

### Research and consulting

2006-: Environmental risks of the introduced *Caulerpa taxifolia*.

2006-: CLLAMM ecology habitat – developing a dynamic habitat model of the Coorong.

2004-: Studies of seagrass rehabilitation, and environmental influences on seagrass health.

2001-: Studies on the environmental impacts of aquaculture, and potential mitigation strategies.

2002-07: Environmental assessment of proposed dredging operations at Outer Harbour.

1999-2002: Habitat change in Gulf St Vincent.

1998: Demographic consequences of clonality

1993-2000: Population ecology and long-term decline of corals in Jamaica.

1991-: Studies on the population and community ecology of corals and other benthic invertebrates on the Great Barrier Reef.

### Contact

Dr Jason Tanner,  
Principal Scientist, Marine Environment & Ecology,  
SARDI Aquatic Sciences.

PO Box 120, Henley Beach  
South Australia, Australia 5022

Tel: +61 8 8207 5489 Fax: +61 8 8207 5481

E-mail: [jason.tanner@sa.gov.au](mailto:jason.tanner@sa.gov.au)

[www.sardi.sa.gov.au](http://www.sardi.sa.gov.au)