

# Dr Marty Deveney - Subprogram Leader

## Marine Biosecurity SARDI Aquatic Sciences



### Areas of expertise

Invasive species biology, aquaculture and fisheries biosecurity (including pest and disease management), risk analysis, veterinary medicine and disinfectant registration and use, application of scientific principles to public policy.

### Countries of work experience

Australia, Czech Republic, Russia, Senegal, Slovenia, China.

### Overview of experience and qualifications

Marty received a PhD in parasitology, examining the taxonomy and biology of benedeniine monogeneans (flatworms), including outbreaks in aquaculture and the risks that they pose to emerging aquaculture sectors, from the Department of Molecular and Microbial Sciences at The University of Queensland in 2003. He has 10 years experience in working with diseases and pests in aquatic systems. He has special interests in the properties of biological systems (including farms) that allow them to become infested by pests or infected by pathogens. He has significant experience in working with monogenean (flatworm) parasites of finfish and their management.

Much of Marty's current research focuses on *Caulerpa taxifolia*, an invasive alga that was first identified in South Australia in 2002. An environmental risk assessment is in development, which examines the physiological tolerances of the plant, factors associated with colonisation success and growth and compares the biological features of invaded and control sites. These factors will be used in a risk analysis framework to determine areas at risk of *C. taxifolia* colonisation and a quantification of the changes to invaded environments.

Marty has significant experience in the use and registration of chemotherapeutants and disinfectants to manage diseases and pests, including designing and performing efficacy and safety studies, registration processes and ongoing monitoring of use.

He has extensive experience in developing policy frameworks and supporting auditing and management capabilities for government. He is currently acting as Technical Executive to the Emergency Aquatic Animal Disease Response Agreement Working Group of Aquatic Animal Health Committee, an intergovernmental and industry group developing a framework within which formal agreements between aquatic industries and government could be developed for co-management and cost sharing in disease-related emergencies.

### Professional appointments:

2001-2004: Aquatic Health Project Officer, Department of Primary Industries and Resources, South Australia, PIRSA Aquaculture  
2004-2007: Aquatic Resources Officer, Aquatic Health, PIRSA Aquaculture  
2007-: Subprogram leader, Marine Biosecurity, South

Australian research and Development Institute (SARDI) Aquatic Sciences.

### Selected

#### publications:

**Deveney, M R,** Scott, K. (2008). Simulated aquatic animal disease outbreaks: a tool for improving responses to emergencies. *OIE Scientific and Technical Review* 27(1): 147-159.  
**Deveney, M R,** Bayly, T J, Johnston, C J, and Nowak B F. (2005). A parasite survey of farmed Southern bluefin tuna, *Thunnus maccoyii* (Castelnau). *Journal of Fish Diseases* 28 279-284.  
Pouyaud, L. Desmarais, E. **Deveney, M,** Pariselle, A. (2005). Phylogenetic relationships among monogenean gill parasites (*Dactylogyridea*, *Ancyrocephalidae*) infesting tilapiine hosts (*Cichlidae*): Systematic and evolutionary implications. *Molecular Phylogenetics and Evolution* 38 (2006) 241-249  
Whittington, I. D., **Deveney, M. R.** and Wyborn, S. J., 2001, A revision of *Benedenia* Diesing, 1858 including a redescription of *B. sciaenae* (van Beneden, 1856) Odhner, 1905 and recognition of *Menziesia* Gibson, 1976 (Monogenea: Capsalidae). *Journal of Natural History*, 35, 663-777.  
**Deveney, M. R.,** Chisholm, L. A. and Whittington, I. D., 2001, First published record of the pathogenic monogenean parasite *Neobenedenia melleni* (Capsalidae) from Australia. *Diseases of Aquatic Organisms*, 46, 79-82.



### Research projects:

Parasites of farmed tuna (completed 2007)  
Parasites of wild and farmed kingfish (completed 2007)  
Development of applications for minor use permits for the antimicrobial oxytetracycline and the oxidant hydrogen peroxide (completed 2007)  
Studies on the biology and taxonomy of capsalid (monogenean) parasites  
Development of an optical system for the enumeration of parasites of finfish  
Environmental Risk Assessment for the invasive alga *Caulerpa taxifolia*.

### Contact

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