

Brenton Zampatti

Sub-program Leader, Fish Ecology

SOUTH
AUSTRALIAN
RESEARCH &
DEVELOPMENT
INSTITUTE
PIRSA

Qualifications

BSc (Hons) University of Adelaide

Role

Brenton Zampatti is the Sub-program Leader (Fish Ecology) in the Inland Waters and Catchment Ecology Program at SARDI. The role is responsible for developing and leading research relating to the ecology of fishes and management of freshwater and estuarine ecosystems, and involves close collaboration with State and Commonwealth natural resource management agencies.

Research focus

Brenton has worked extensively on the ecology of freshwater and estuarine fishes throughout south-eastern Australia. His current research involves the impacts of river regulation on native and invasive fishes, and informing aquatic ecosystem conservation. Prior to joining SARDI, Brenton worked on the inland and coastal rivers of Victoria, at the Arthur Rylah Institute for Environmental Research.

With a strong publication and collaborative research record, Brenton is a leader in the field of applied freshwater and estuarine fish ecology. Brenton works closely with managers and researchers, with an emphasis on utilising science to guide conservation and management. He has lectured at the tertiary level and supervised Honours and PhD students.

Major projects

Brenton has been the proponent of over \$5 million worth of research on freshwater and estuarine ecosystems in the past 7 years and is undertaking collaborative projects with NSW Fisheries, Arthur Rylah Institute (Victoria) and numerous universities, including Adelaide, Charles Darwin, La Trobe, Charles Sturt and Griffith.

Brenton plays a key role in multi-disciplinary and cross-jurisdictional environmental water requirement (EWR) projects, including development of the FLOWS technique for the establishment of EWRs for rivers in south-eastern Australian, and leadership of the fish ecology components of the Commonwealth Environmental Water Holder's (CEWH) long-term intervention monitoring project for the lower River Murray.

Brenton is undertaking large-scale research projects on the ecology and population dynamics of native and invasive fishes throughout the Murray-Darling Basin (MDB), including the Coorong estuary, using telemetry, otolith chemistry and demographic data to understand the spatio-temporal scales of population dynamics. These projects are aiding fisheries and water resource management, including environmental water allocation.

Brenton has also been a key contributor to the design and assessment of over 20 new fishways on the weirs and estuarine barrages of the River Murray, making a primary contribution to a ten year, >\$50 million, fish passage restoration project.

Selected publications

Zampatti, B. P. and Leigh, S. J. (2013) Within-channel flows promote spawning and recruitment of golden perch, *Macquaria ambigua ambigua*, implications for environmental flow management in the River Murray, Australia. *Marine and Freshwater Research* **64**, 618–630.

Zampatti, B. P., Bice, C. M. and Jennings, P. R. (2010) Temporal variability in fish assemblage structure and recruitment in a freshwater-deprived estuary: The Coorong, Australia. *Marine and Freshwater Research* **61**, 1298–1312.

Bice, C. M. and Zampatti, B. P. (2011) Engineered water level management facilitates recruitment of non-native common carp, *Cyprinus carpio*, in a regulated lowland river. *Ecological Engineering* **37**, 1901–1904.

Baumgartner, L., Zampatti, B., Jones, M., Stuart, I. and Mallen-Cooper, M. (2014) Fish passage in the Murray-Darling Basin, Australia: not just an upstream battle. *Ecological Management and Restoration* **15**, 28–30.

Boards/Committees

Brenton is a member of numerous State and National working and advisory groups, including the Murray Cod Fishery Management Group, Victorian Environmental Flows Monitoring and Assessment Program (VEFMAP) Technical Advisory Group, MDBA Environmental Water Knowledge Requirements (EWKR) fish leadership group and South Australia's River Murray Operations Working Group. He is also on the Editorial Board for *Transactions of the Royal Society of South Australia* and the organising committee of *Fish Passage 2018*.



P: +61 8 8207 5491

M: +61 427 604 156

E: Brenton.Zampatti@sa.gov.au