

Dr Adrian Linnane

Sub-program Leader, Crustaceans

SOUTH
AUSTRALIAN
RESEARCH &
DEVELOPMENT
INSTITUTE
PIRSA

Qualifications

BSc (Hons) Aberdeen University
PhD National University of Ireland, Galway

Role

Dr Adrian Linnane is the sub-program Leader for Crustaceans at SARDI. The role is responsible for providing PIRSA Fisheries and Aquaculture with scientific advice relevant to the sustainable management of southern rock lobster, prawn, blue crab and giant crab fisheries in South Australia.

Research focus

Prior to joining SARDI, Adrian spent 6 years working as a post-doctoral scientist at the Martin Ryan Marine Science Institute, National University of Ireland, Galway on a range of European Union inshore fishery based projects. With over 40 published reports and 50 scientific publications, Adrian is an acknowledged leader in the field of crustacean biology and fisheries stock assessment. His research has primarily focused on crustacean reproductive biology, predictive capacity of recruitment indices, harvest strategy development and fishery survey design.

Adrian has previously worked in research institutes in Ireland, Norway, Scotland and the United States and currently supervises both undergraduate and post graduate students at Adelaide and Flinders universities.

Major projects

Adrian has been the principal investigator for a number of cross-jurisdictional rock lobster fishery projects within Australia. These have included;

(i) "*Informing spatial and temporal management of the South Australian Northern Zone Southern Rock Lobster (*Jasus edwardsii*) fishery*". This project provided scientific advice underpinning changes to the harvest strategy for the Northern Zone Rock Lobster Fishery of South Australia.

(ii) "*Sustainability of the rock lobster resource in south-eastern Australia in a changing environment: implications for assessment and management*". This project investigated whether reduced fishery performance reflected an actual decline in biomass or was the result of changing catchability or recruitment. The study involved

extensive catch rate standardisation, as well as in-depth analyses of how environmental variables impacted on catch rate. The predictive capacity of recruitment indices in relation to future fishery performance was also examined.

(iii) "*Standardising data collection across the southern rock lobster fisheries of South Australia, Victoria and Tasmania*". This project established requirements for standardised data collection, storage, manipulation and reporting across the rock lobster fisheries of South Australia, Tasmania and Victoria. It also identified opportunities for database standardisation and operationally feasible, cost effective methods of data collection and delivery through electronic logbook automation across the three States.

Key publications

- Linnane, A., McLeay, L., McGarvey, R., and Jones, A. 2017. Industry-Supported Sampling Underpins Temporal Management Policy Change in a Commercial Rock Lobster (*Jasus edwardsii*) Fishery. *Journal of Shellfish Research*, 36: 511-517.
- Linnane A., Penny, S., Hawthorne, P. and Hoare, M. 2015. Residency and movement dynamics of southern rock lobster (*Jasus edwardsii*) after a translocation event. *Marine and Freshwater Research* 66: 623-630.
- Linnane, A., McGarvey, R., Gardner, C., Walker, T. I., Matthews, J., Green, B., and Punt, A. 2014. Large-scale patterns in puerulus settlement and links to fishery recruitment in the southern rock lobster (*Jasus edwardsii*) across southeastern Australia. *ICES Journal of Marine Science* 71: 528-536.
- Linnane, A., Gardner, C., Hobday, D., Punt, A., McGarvey, R., Feenstra, J., Matthews, J. and Green, B. 2010. Evidence of large-scale spatial declines in recruitment patterns of southern rock lobster *Jasus edwardsii*, across south-eastern Australia. *Fisheries Research* 105: 163-171.

Boards/Committees

Editorial Board – Fisheries Research

Southern Rock Lobster RD&E Committee

South Australian Southern Rock Lobster Harvest Strategy Working Group



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