



Fishery consequences of marine reserves: Short-term pain for longer-term gain

Thursday 3 July 1 – 2pm

Speaker

Jess Hopf

PhD candidate,
James Cook University

Location

Gould Seminar Room

(Rm 235) Gould Building (Bldg. 116),
Linnaeus Way, ANU

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This lecture is free and open to the public

RSB event information:
biology.anu.edu.au/News/Events.php

Understanding how exploited species respond to reserve establishment, and the implications of this for resource yields from these populations, is a central problem in ecology, conservation, and resource management. Marine reserves are a ubiquitous conservation management tool, often implemented with the aim of protecting biodiversity and ecosystem functions. Reserves, however, are commonly established in areas used by both recreation and commercial fisheries, making them a controversial management strategy. As reserves accumulate fish biomass, it is argued that the associated increase in reproductive output will benefit fisheries through larval export; however, it remains unclear whether these recruitment subsidies will sufficiently compensate for the loss of fishable habitat. In my PhD, I have been using ecological modelling to address this issue and better understand how fish metapopulations dynamics change in response to the establishment of marine reserve networks. Most recently, my work has been focusing on evaluating the short-term effects of reserves for fishery yields, using coral trout (*Plectropomus* spp.) in the Keppel Islands, Southern Great Barrier Reef, as a focal system.

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About the speaker

Jess is broadly interested in understanding how systems respond to management actions, and the implications of this for the conservation of our natural resources. She is currently carrying out a PhD in ecological modelling, working with Professor Sean Connolly, and Professor Geoff Jones at James Cook University, and Dr David Williamson at the ARC CoE for Coral Reef Studies.