

Pathway for Multispecies and Systems Integration

Summary

Seafood production systems are traditionally characterised by intensification, specialisation and geographic concentration, potentially leading them to have negative anthropogenic impacts (Dumont et al., 2020). Introducing layers of seafood production through multispecies systems, and integration within and between production and other users, could bring increased productivity, efficient resource-use, and increased farm resilience.

This Scoping Project will use a collaborative approach to rank offshore multispecies systems across regions, from temperate to tropical, and list the key challenges and opportunities.

The project will address unmet needs of end-users by focusing on emerging aquaculture species and novel systems to prioritise sustainable and integrated seafood and marine products, while major established or strongly emerging species or sectors, particularly salmon and seaweed, will provide background knowledge.

The project will work on the main research question: Which multispecies systems can be viably and sustainably integrated for offshore seafood and marine production? The context of this research builds on existing research and industry-ready knowledge with the backbone of this process the development of simple Viability and Sustainability Criteria, which assesses the multispecies and systems against minimum evidence-based requirements. These minimum requirements may include, for example, closed lifecycle of the species, trophic levels within the system, skills and expertise currently in Australia or New Zealand.

The Scoping Project will create a pathway for BECRC decision-making and support the development of future research projects by identifying priority partners and investment.



Project ID

2.23.001

Research Program

RP2 Seafood & Marine Products

Project Leader

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Duration

6 months

Participants

- » University of Tasmania
- » Auckland University of Technology
- » The New Zealand Institute for Plant and Food Research Limited