

Abalone Industry Reinvestment Fund (AIRF)

Updated: August 2023

Abalone fleet behaviour: does spatial structure of fishing follow stable patterns or do management changes significantly alter spatial structure of effort

Lead Agency: Institute of Marine and Antarctic Studies (IMAS)

Funding: \$63,370.00

Start Date: 1 September 2022

End Date: 31 August 2025

Status: CURRENT

Aims and Objectives:

The aims of this project are to understand background patterns in the way divers spread their effort across the fishery, and how these patterns might be altered when management action occurs or when the economics of fishing in specific locations change.

This project has four primary objectives;

1. Characterise inter-annual fleet patterns in the absence of management change or economic drivers,
2. Determine extent of change in spatial structure of fishing effort in response to the size limit increase from 140mm to 145mm in the Western Zone in July 2019,
3. Determine whether economic variables correlate with the gradual shift from normal fishing to extreme pulse fishing in the North-East greenlip fishery.
4. Explore the feasibility of identifying characteristic signatures of individual and fleet level change, which can be applied to identify other wholesale fleet events, such as switching of fishing locations on Tasmania's south coast in response to perceived risks.

Progress Report

A series of code blocks have been developed which will provide an initial platform for the investigation of fleet dynamics in the Tasmanian abalone fishery. The [progress report](#) uses a case study to showcase the outputs of the code and demonstrate how it can be used to investigate patterns in the way fishers utilise known fishing grounds.