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Shallow-deep ecosystem links in the spotlight

Marine researchers are aiming to shed new light on the relationship between fish communities in Tasmania's shallow and deep reefs

The state's shallow reefs are vital to commercial and recreational fisheries for scalefish and invertebrates and have been studied extensively.

Comparatively less is known about deep reef ecosystems. Project Leader, Dr Laurenne Lyle, from the University of Tasmania's Institute for Marine and Antarctic Studies, said.

The deeper shelf reefs (beyond 40 metres) provide habitat for many fish species found in shallow reef areas but a greater understanding of the broad scale community and habitat structure is required for future management.

that include Tasmanian rock lobster and abalone," Dr Lyle said.

"The reefs are subject to increasing ecological pressures from impacts of fishing to the broader consequences of climate change.

"In this study we will be focusing on areas open to fishing over the next year or so to better understand the ecological importance of such deeper reef ecosystems to fishing production.

"Recent studies of offshore Commonwealth marine protected areas provide some information about deeper areas on the continental shelf, but accessing these deeper reefs is much more of a logistical challenge."

-beam sonar data, in conjunction with underwater video and still imagery to provide high-resolution habitat maps of areas extending from the coast to the shelf edge.

Fish communities in these habitats will be surveyed using technology including baited remote underwater video stations (BRUVS) and remotely operated vehicles (ROVs) [illegible]

"[illegible] approach provides the ability to comprehensively describe fish communities and their associations with habitats," Dr Lyle said.

"Research into [illegible] impacts of fishing and environmental variability on reef ecosystems will be achieved

fisheries."

The study is supported by $227,000 funding from the Australian Government through the Fis

Dr Lyle will be joined by a team of IMAS academics including D[illegible]rs Neville Barrett, Nicole Hill and Vanessa Lucieer.

Information released by:
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