

Want to snorkel on coral reefs at Lizard Island for an Honours Project?

Honours Project: Call for expressions of interest

Optimising transect surveys for population assessment of commercially exploited reef invertebrates

Fishery management often relies on population surveys of exploited species using visual underwater census (UVC) methods. Belt transects are commonly used to enumerate exploited reef invertebrates, using swims or by towed divers using a manta-board. The specific methods have rarely been evaluated to give guidance to researchers about optimal configuration of transects in multi-species contexts.



In Oceania, sea cucumbers, giant clams and reef gastropods are among the most important of exploited invertebrates on tropical reefs. This study at Lizard Island in the northern Great Barrier Reef will examine the efficiencies of different lengths and widths of belt transects for assessing mixed populations of these important invertebrates.



The student will undertake a field trip to Lizard Island in February 2024 with supervisors. Different transect lengths and widths will be applied in different habitats and conditions to assess the abundance of multiple species of sea cucumbers, giant clams and trochus. The student will perform statistical analyses to examine the relative benefits of different transect configurations.

The student will need to possess, or be able to quickly obtain, the following:

Academic

- Ability to collect data, manage data and conduct statistical analyses
- Evidence of ability to write the work for publication to an international standard

Diving

- A good level of physical fitness
- Experience in snorkelling at shallow depths (<8 m)

Desirable: Valid Senior First Aid and CPR certificates

The student will need to enrol in the Honours program in Session 1 of 2024. Expressions of interest will be considered until the end of September 2023. For further information, contact Assoc.-Prof. Steven Purcell or Professor Brendan Kelaher, National Marine Science Centre, SCU.