

Lab Study: Subtropical Reef Analysis

Activity Outline

Year Level 9-10

In this activity students examine the benthic composition of two subtropical rocky reefs. Students gain an appreciation for the diversity of benthic life forms in these communities and observe the effect of depth on these reefs. Students will employ the same scientific methods and equipment used by underwater researchers, to compare their results gained from the computer analysis program and discuss the factors which help to shape the benthos at different depths.

Key Understandings

- Ecosystems consist of communities of interdependent organisms and abiotic components of the environment, matter and energy flow through these systems.
- Organisms have structural, functional and behavioural adaptations to live within an ecosystem.

Key terms

Abiotic, biotic, adaptation, benthic, taxonomy, phylum, class, community, diversity, abundance, distribution, ecology, subtropical, substrate, light, photosynthesis, data, factor, variable, trend analysis, dominant organisms, energy, management, ecosystem, environment, interaction, matter, water.

Student Outcomes

Science

Year 9: ACSSU176, ACSIS164, ACSIS165, ACSIS166, ACSIS169, ACSIS171, ACSIS174

Marine and Aquaculture Technology

Stage 5: Module 10 – Living together in the sea

Key competencies

- Working scientifically
- Collecting, analysing and organising information
- Communicating ideas and information
- Using technology
- Using mathematical ideas and techniques
- Working with others and in teams