



Lab Study: Subtropical Reef Analysis using CPCe software.

Activity Outline

Year Level 9-12

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 both living and non-living components.
- Living things can be differentiated and identified using various characteristics.
- Energy continually flows through ecosystems.
- Human development and natural events can impact on the flow of energy and matter through different ecosystems.
- Appropriate ecosystem management relies upon an understanding of the varying relationships both within and between ecosystems.

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.

Objectives and outcomes

This activity is designed to incorporate of outcomes from each of the five objectives contained within the Marine Studies Content Endorsed Course Stage 6 syllabus.

Subtropical Reef Analysis using CPCe software Activity Outline 4.1

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