

Ecosystem Dynamics - Mangroves

Stage 6 Biology Module 3, 4 and Depth Study

Teacher Programming Guide

Timing	Working Scientifically Skills	Activity
2 hours Pre-excursion work	Knowledge and Understanding + Planning Investigation	Use resources on the Gibberagong EEC website to increase an understanding of: <ul style="list-style-type: none"> - The features of a mangrove ecosystem - Past, present and future human impacts on mangrove ecosystems - Features of the fieldwork site at Bobbin Head and how has it changed over time - Knowledge and skills required to undertake a safe and scientific study of the mangroves at Bobbin Head
5 hours Excursion fieldwork	Questioning and predicting + Conducting Investigations	Conduct field data collection <ul style="list-style-type: none"> - field study excursion with Gibberagong EEC - students will undertake measurements of abiotic factors, population sampling, observation to collect first hand data
4-5 hours Post- excursion depth study work	Analysing data and information + Problem solving	Analyse data from the field study day Commence depth study inquiry (suggested options below) Option 1 How will predicted changes to the global climate affect the mangrove ecosystem at Bobbin Head”. Option 2 Investigate or commence a particular inquiry or area of interest inspired or prompted by the original investigation.
1-2 hours Depth study assessment	Communicating	Prepare and deliver a communication piece. This could include: <ul style="list-style-type: none"> - creating a community education campaign outlining risks to mangroves (simple) - designing a long term scientific study (over 10 years) looking at the impact of rising sea levels on the plant and animals at a site (complex)