Program Overview

The focus of the two day program is to undertake a scientific investigation of the ecosystems at Bobbin Head.

During program, the students will work collaboratively in small groups to explore the local environment, use equipment to study the ecosystems, observe the human impacts on the area and use technology to create a short film of their findings.

Key Syllabus Outcomes and Content

Geography

Biophysical Environments

students learn about:
the biophysical environment
• the nature and functioning of the four components: the atmosphere, hydrosphere, lithosphere and biosphere in a specific biophysical environment
• the interactions between, and the human impacts on, the functioning of the atmosphere, hydrosphere, lithosphere and biosphere.

Ecosystems at Risk

students learn about:
ecosystems and their management and case study of ecosystems
• spatial patterns and dimensions: location, altitude, latitude, size, shape and continuity
• biophysical interactions including:
  • the dynamics of weather and climate
  • geomorphic and hydrologic processes ....
• biogeographical processes: invasion, succession, modification, resilience
• adjustments in response to natural stress
• the nature and rate of change which affects ecosystem functioning
• human impacts (both positive and negative)
• traditional and contemporary management practices.

Suggested Timetable (subject to tides)

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1 Morning</td>
<td>Geography Fieldwork Investigation</td>
</tr>
<tr>
<td>Day 1 Afternoon</td>
<td>Canoe Exploration or Field Techniques</td>
</tr>
<tr>
<td>Day 1 Evening</td>
<td>Night Biodiversity Survey</td>
</tr>
<tr>
<td>Day 2 Morning</td>
<td>Filmmaker</td>
</tr>
<tr>
<td>Day 2 Afternoon</td>
<td>Depart</td>
</tr>
</tbody>
</table>

Learning Activities

Geography Fieldwork Investigation

The students will investigate the mangrove and other environments at Bobbin Head and look at the human impacts. Schools can choose to study Biophysical Interactions or Ecosystems at Risk.

Canoe Exploration

A canoe trip along the Cowan Creek allows the students to venture further into the estuarine ecosystem and enables them to compare studies areas to that which have less human impact.

Night Biodiversity Survey

During a night walk, students will learn about and employ a variety of techniques that can be performed at night time during a biodiversity survey.

Filmmaker

After all of their learning, the students will be asked to put a short film together about the local ecosystem at Bobbin Head.

For more information visit gibberagongeeec.nsw.edu.au w. 9457 8245