Cumberland State Forest  
Geography Year 9  
Lesson Plan

Syllabus Links

Focus area: 5A3 Issues in Australia environments  
Focus: ways in which geographical understanding contributes to the sustainable management of sites affecting the Australian environment

Outcomes
A student:
  5.1 identifies, gathers and evaluates geographical information  
  5.4 selects and applies appropriate geographical tools  
  5.5 demonstrates a sense of place about Australian environments  
  5.6 explains the geographical processes that form and transform Australian environments  
  5.7 analyses the impacts

Geographical tools in this focus area: Maps
Construct a land use map

Fieldwork
Use a variety of techniques to collect and record primary and secondary data.

Photographs
Collect and use digital images

Students learn about:
Geographical issues affecting Australian environments: Land and water management

Students learn to:
  • Describe each geographical issue in relation to:  
    - Its nature  
    - Its impacts  
    - The responses by individuals, groups and governments to the issue  
  • Outline how a range of geographical issues are affecting Australian environments  
  • Evaluate the success of individuals, groups and the levels of government in managing the issue  
  • Apply fieldwork techniques
Activities and Lessons

Introductory talk
Talk about the forestry industry and Cumberland State Forest. Mention sustainability and decision making that needs to happen (this is a theme to be focused on when talking). The forest has been logged in the past – give some history of the forest.

Activity 1
Give students a base map of the forest. Along the trail, students mark on the map the different land uses in and around the forest, e.g. logged area, recent regrowth areas, houses next to track, picnic area, arboretum, and location of visitors centre. The output is a land use map of the forest.

Activity 2
Whilst walking the track, explain methods and reasons for weed management, fire management, pest management, use of this forest for recreation and research, e.g. arboretum. Students record this in their worksheets.

Activity 3
There are three main stopping points along the track. Site 1 is just after marker 3, in the area with log seating. Site 2 is the 1993 logged area (marker 4) and Site 3 is the arboretum. Explain each site as different examples of forestry i.e. near natural regrowth, recent regrowth and an arboretum for research. Explain why each site was chosen to be logged, not logged, as an arboretum.

Split the group into teams of 4 or 5 students. You will need to rotate the equipment between the groups to allow students to finish the activities in time.

At each site students are to:
- Take photos and/or do a field sketch of the area – particularly noting the difference in undergrowth between the areas
- Measure temperature and humidity
- Do a pH test
- Look and listen for the presence of animals, insects and birds. Note which site has the most and try to explain why.
- Evidence of erosion

Activity 4
Bring students back to the visitors centre and talk briefly about:
- What is sustainable forestry
- What environmental conditions need to be considered before and during logging – including legislative issues.
Timing

- Introductory talk: 10 minutes
- 15 minutes at each site
- 40 minutes walking time
- Final talk at visitors centre: 15 minutes

Resources and Equipment

- Base map – populated with trails and scale
- Worksheets
- Students need to bring clipboards and pencils.
- Wet/dry bulb thermometers or hygrometer
- pH test kits
- Shovel/hand trowel for soil
- Water to wash hands
- Camera/ camera phones to take photos
Cumberland State Forest Worksheet
Year 9 Geography

Name: ________________________________

1. Explain the reasons for the following in state forests. Describe ways in which each is carried out.

**Fire management:**

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**Pest management:**

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**Weed management**

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**People management e.g. recreation, research:**

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2. Make a field sketch of each site, particularly noting the undergrowth

<table>
<thead>
<tr>
<th>Site 1</th>
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<tr>
<th>Site 2</th>
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<table>
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<tr>
<th>Site 3</th>
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3. What differences do you notice between the undergrowth at the three sites?

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<thead>
<tr>
<th>Site description</th>
<th>Site 1</th>
<th>Site 2</th>
<th>Site 3</th>
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<tbody>
<tr>
<td>Temperature</td>
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<tr>
<td>Humidity</td>
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<td>Soil pH</td>
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<td>Is there erosion at the site? Where is it and how severe is it?</td>
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<td>Look and listen for any animals, birds and insects. Note down what you see/hear</td>
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4. What is sustainable forestry?

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5. What laws and decisions need to be considered before and during logging?

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