



# Preliminary Earth and Environmental Science Assessment Task 2.

## Depth Study – Bell Miner Associated Dieback

### **The Task:**

To participate in a field trip and conduct a deep exploration into the environmental impacts of Lantana and in particular the contribution of Lantana to the problem of Bell Miner Associated Dieback. Students can communicate their findings, knowledge and understanding through their choice of medium:

- A report
- A poster
- Powerpoint presentation (including narration)
- A documentary

### **Due Date:**

Thursday 21<sup>st</sup> March (3:15pm)

### **Weighting:**

30% Preliminary Assessment mark

### **Assessor:**

Mr. Anthony Neenan

### **Syllabus Dot Points:**

Students:

- conduct an investigation into a local introduced species, including:
  - reason for introducing the species
  - biotic and abiotic effects of the species
  - area affected by the species
  - human impacts that favour the introduced species
  - control or mitigation methods
  - economic impact of the species
  - different views about the value of and/or harm caused by the introduced species, including the views of Aboriginal and Torres Strait Islander Peoples
- describe ways in which introduced species contribute to the decline or extinction of native Australian species

### **Outcomes Assessed:**

**EES11/12-3** conducts investigations to collect valid and reliable primary and secondary data and information

**EES11/12-5** analyses and evaluates primary and secondary data and information

**EES11/12-7** communicates scientific understanding using suitable language and terminology for a specific audience or purpose

**EES11-11** describes human impact on the Earth in relation to hydrological processes, geological processes and biological changes

### **Further details:**

Harvard style referencing is required, regardless of presentation medium. Harvard referencing includes in-text citations and complete reference list accompanying presentation.

## **Components of Report:**

Your “product” should include the following:

- Title
- Introduction – Introduce the topic, briefly explain the problem, include species name and diagram of Lantana, Bell Miner and Psyllids
- Reason for introduction of Lantana into Australia – why was it brought here? Include dates of introduction
- Biotic and abiotic effects of Lantana - this is an overview of the effects on environment (these may be positive as well as negative). Include how Lantana contributes to the decline or extinction of native Australian species
- Bell Miner Associated Dieback – go into detail of BMAD and the contribution lantana plays in this problem including effects on other species
- Human Impacts that favour Lantana – what human activities exacerbate the problems associated with Lantana and BMAD including deforestation
- Control or mitigation methods – Describe in depth the methods used at field trip sites, including any negatives of these methods
- Economic Impact of Lantana and BMAD
- Indigenous viewpoints of the introduced species Lantana
- References – a reference list of those cited in body of your work.

## **Making Rubric**

<b>Grade (mark)</b>	<b>Descriptor</b>
A (25-30)	<ul style="list-style-type: none"><li>• Extremely well researched, demonstrating deep understanding of the problems associated with Lantana including BMAD.</li><li>• Excellent use of Scientific language with explanations of key words.</li><li>• Well presented, highly engaging to audience with eye-catching formatting. Graphics are relevant and build understanding of topic. All components are included.</li><li>• No spelling errors, correct grammar and sentence structure. Verse flows well.</li><li>• All work is referenced using in-text Harvard (author, date) referencing with a variety of references including internet, books, journal articles etc. &gt;6 references.</li></ul>
B (19-24)	<ul style="list-style-type: none"><li>• Well researched, demonstrating strong understanding of the problems associated with Lantana including BMAD.</li><li>• Good use of Scientific language with explanations of key words.</li><li>• Well presented, engaging to audience with eye-catching formatting. Graphics are relevant and build understanding of topic. All components are included.</li><li>• Few spelling errors, correct grammar and sentence structure. Verse flows well.</li><li>• All work is referenced using in-text Harvard (author, date) referencing with a variety of references including internet, books, journal articles etc. &gt;4 references</li></ul>
C (13-18)	<ul style="list-style-type: none"><li>• Well researched, demonstrating reasonable understanding of the problems associated with Lantana including BMAD.</li><li>• Scientific language has been incorporated but some terms have not been satisfactorily explained.</li><li>• Reasonable presentation and formatting with some relevant graphics. Some components of task are not included.</li><li>• Some spelling and grammatical errors. Some sentences do not flow well or are hard to comprehend.</li><li>• Work is referenced using in-text Harvard (author, date) referencing but variety and/or number of sources is limited.</li></ul>
D (7-12)	<ul style="list-style-type: none"><li>• Only superficial research has been undertaken, demonstrating limited understanding of the problems associated with Lantana including BMAD.</li><li>• Some Scientific language has been used but many terms have not been satisfactorily explained.</li><li>• Presentation and formatting need to improve in order to engage audience. Important components of task are not included.</li><li>• Many spelling and grammatical errors. Sentences do not flow well or are hard to comprehend.</li><li>• Referencing is inadequate with few and limited range of sources.</li></ul>
E (0-6)	<ul style="list-style-type: none"><li>• Little effort has been made to satisfy requirements of task.</li></ul>