



ORANGE HIGH SCHOOL

ASSESSMENT TASK 2

Subject	Earth and Environmental Science
Topic	Human Impacts
Class Teacher	Ms J Mansur
Head Teacher	Ms J Huggett
Year	11
Date Given	Monday 7 th August 2023 (Week 4, Term 3)
Date Due	Monday 21st August 2023 (Week 6, Term 3)
Weighting	30%

Assessment Outline

As part of the Year 11 Earth & Environmental Science course, students will be required to conduct a second hand investigation to evaluate how introduced species affect the Australian environment and ecosystems.

The Task:

Part 1: Research report (max 10 pages including the images and the bibliography)

1. Introduction- Identify the species you are researching including: the common name; scientific name and clear labelled image.
2. Background information- Provide context such as when, where (include a map of point of entry) and explain the reason for introducing the species.
3. Outline- (what are features and characteristics) how the species effects the biotic and abiotic components of the environment in which it lives.
4. Describe the area affected by the species- Include a clearly labelled map displaying the area affected. Compare the current distribution map with the one in the second section.
5. Explain how human activities favour the introduced species- include how and why giving examples.
6. Discuss the control or mitigation methods- include explaining the impact of the methods, how and why these methods work, the history were different control strategies used in the past?
7. Examine the economic impact of the species including:
 - i. The amount in AUD.
 - ii. Name the industry impacted by the introduced species.
 - iii. Explain why an economic cost can be calculated.
8. Evaluate the ways in which the introduced species have contributed to the decline or extinction of native Australian species including:
 - i. How effective the introduced species is at leading to the decline/ extinction of native animals/ plants. Provide examples.
 - ii. What characteristics of the introduced species made it an effective predator. Provide examples.
 - iii. What made native plants/ animals vulnerable leading to a decline in numbers. Provide examples.
 - iv. Provide a final judgement of your introduced species contributing to the decline and or extinction of Australian natives.

Part 2: Submit a podcast (max 3 minutes)

Create a podcast about your chosen introduced species from the viewpoint of a selected stakeholder ie local politician, scientist or expert on the introduced species, a farmer or owner of a plant nursery or a journalist from a media organisation running a story on the outbreak

You should use multiple sources of information and all should be correctly cited in text using the APA style (got to: <https://www.citethisforme.com>). We will spend time in class discussing how to format your report.

The task is worth 30% of your course marks.

Non-completion of Task:

If you know you are going to be away on the day that the task is due, you must make alternative arrangements with your teacher beforehand. If you are suddenly away on the day that the task is due, you must contact your teacher or Head Teacher on your return to school. Documentation will be required in both cases.

Plagiarism:

Plagiarism, the using of the work of others without acknowledgement will incur serious penalties and may result in a zero award. Any cheating will also incur penalties.

Failure to follow the above procedures may result in a zero award.

The policies and procedures that are outlined in the OHS Higher School Certificate Assessment Booklet will be followed regarding the non-completion of assessment tasks.

Outcomes Assessed

This task will evaluate a student's ability in the following course outcomes.

- **EES 11.1 Questioning and predicting**
 - develops and evaluates questions and hypotheses for scientific investigation
- **EES 11.3 Planning investigations**
 - conducts investigations to collect valid and reliable primary and secondary data and information
- **EES 11.6 Problem solving**
 - solves scientific problems using primary and secondary data, critical thinking skills and scientific processes
- **EES 11.7 Communicating**
 - communicates scientific understanding using suitable language and terminology for a specific audience
- **EES 11.11 Students**
 - describes human impacts on the Earth in relation to hydrological processes, geological processes and biological changes

Podcasts are an audio platform designed to entertain or inform an audience about a subject in bite size chunks. The format of a podcast allows the creator to communicate with a given purpose or audience about their desired subject area. Scientists can communicate a scientific understanding of a topic in many ways.

“While many of us may not be inclined to sit and read a 2000 word length article, many will listen to a Podcast while doing other tasks such as commuting to work or completing housework” (Forbes, 2018).

This task is designed to allow you to develop your skills in communicating scientifically. You are to create a PODCAST (maximum 3 minutes). It needs to be submitted to your classroom teacher via the shared google classroom or other.

The Scenario

This scenario has been created to allow you to base your Podcast on the information that you researched. There has been an outbreak of an introduced species. What introduced species? The introduced species you have researched and collected information on in the previous section. There are concerns that your introduced species has evolved and it will turn into a natural disaster.

You need to choose one and take the role of one of the following key stakeholders:

- Local politician with an interest in informing the local community
- A Scientist or expert on the introduced species
- A farmer or owner of a plant nursery
- A Journalist from a media organisation running a story on the outbreak.
- Other of your choice (talk to your classroom teacher)

Your podcast should be given from the viewpoint of the stakeholder you have chosen. In your podcast, you need to outline the role you (as the stakeholder) would play in preventing the introduced species from spreading and becoming a natural disaster.

Make sure that you respond to each point on page 1. For example, “The reason for introducing the species”, explain this for your introduced species in your podcast.

Marking Rubric: Depth Study Research and Podcast
NAME: _____

Outcomes Assessed:	Task section	Extensive (A)	Thorough (B)	Sound (C)	Basic (D)	Total
ESS11 – 1 Develops and evaluates questions and hypotheses for scientific investigation	Part 1 Research 1 2 3	<ul style="list-style-type: none"> Introduction includes 3 components and both names written correctly Background information includes all 4 components Abiotic/ biotic includes all 4 components 12-10 Marks	<ul style="list-style-type: none"> Introduction includes 3 components Background information includes 3 components Abiotic/ biotic includes 3 components 9- 7 Marks	<ul style="list-style-type: none"> Introduction includes 2 components Background information includes 2 components Abiotic/ biotic includes 2 components 6- 4 Marks	<ul style="list-style-type: none"> Introduction includes 1 component Background information includes 1 component Only 1 component included 3-1 Marks	
ESS11 – 3 Conducts investigations to collect valid and reliable primary and secondary data and information	Part 1 Research 4 5 6	<ul style="list-style-type: none"> Extensive description includes 3 components Explain human activities includes 3 components with 4 named examples Control methods includes all 4 components 12-10 Marks	<ul style="list-style-type: none"> Description includes 3 components Human activities includes 3 components and named examples Control methods includes 3 components 9- 7 Marks	<ul style="list-style-type: none"> Description includes 2 components Human activities includes 2 components with a named example Control methods includes 2 components 6- 4 Marks	<ul style="list-style-type: none"> Description includes 1 component Human activities includes 1 component OR a named example Control methods includes 1 component 3-1 Marks	
ESS12 – 6 Solves scientific problems using primary and secondary data, critical thinking skills and scientific processes	Part 1 Research 7 8	<ul style="list-style-type: none"> Examine the economic impact including 3 components with extensive explanation Decline of Australian species includes 4 components, each with an example 12-10 marks	<ul style="list-style-type: none"> Examine the economic impact including 3 components Warning systems information includes 4 components 9-7 marks	<ul style="list-style-type: none"> Examine the economic impact including 2 components Warning systems information includes all 2-3 components 6-4 marks	<ul style="list-style-type: none"> Examine the economic impact including 1 component Warning systems information includes all 1-2 components 3-1 marks	
ESS11 – 7 Communicates scientific understanding using suitable language and terminology for a specific audience	Part 2 Bibliography and use of scientific terminology	<ul style="list-style-type: none"> Report organisation followed correctly and is 100% the same as the scaffold Bibliography (minimum 15 supplied) In text referencing linked to a completed bibliography (minimum 10 sources) No grammatical errors Use of scientific terminology is at an exemplary level 10-9 Marks	<ul style="list-style-type: none"> Report organisation followed correctly and mostly the same as the scaffold Bibliography (10-14 supplied) In text referencing linked to bibliography (5-9 sources) Minimal grammatical errors Thorough use of scientific terminology 8-6 marks	<ul style="list-style-type: none"> Report organisation is followed Bibliography (5-9 supplied) In text referencing linked to bibliography (5 sources or less) Some grammatical errors Some use scientific terminology 5-3 marks	<ul style="list-style-type: none"> Report is somewhat organized Bibliography (less than 4 supplied) No intext referencing Report has significant grammatical errors Minimal use of scientific terminology 2-1 marks	
	Podcast	<ul style="list-style-type: none"> Delivery of podcast is logical and coherent Includes a clear introduction and conclusion Volume of voice, music and effects enhance the presentation AND podcast is recorded in a quiet environment without background noise. Well-rehearsed, smooth delivery in a conversational style Demonstrates extensive knowledge of introduced species 10- 9 marks	<ul style="list-style-type: none"> Delivery of podcast is logical and has structure Includes an introduction and conclusion Volume of voice OR music OR effects enhance the presentation AND podcast is recorded in a quiet environment Rehearsed in conversational style Demonstrates extensive knowledge of introduced species 8-6 marks	<ul style="list-style-type: none"> Delivery of podcast has structure Includes an introduction OR conclusion Volume of presentation is considered, background noise is present but low Delivery is flat Demonstrates extensive knowledge of introduced species 5-3 marks	<ul style="list-style-type: none"> Limited podcast 2-1 marks	
					Total Marks	___/56

Teacher Feedback: