**GENERAL INTEGRATED SCIENCE– UNIT 3**

**TASK 2 – Introduced Species Extended Response**

**WEIGHTING: 7.5%**

**You must submit:**

* Your presentation, in whichever format you have decided upon. This can be handed in, in class or on Connect
* The presentation can be a powtoon animation, a poster, a powerpoint (with voiceover), or an infographic. It can also be in a different format – check with your teacher first
* A full list of the references you have used to complete your research.
  + It is expected that you will use at least five sources of information. Ensure you include the date, the author, and where you found the information (website, book, etc).

**Due Thursday week 5**

**Instructions:**

Choose **one** of the below species that have been **introduced** into an ecosystem. If you wish to do an introduced species not listed, ask your teacher first.

Australia:

* Cane toad
* European rabbit
* Feral cat
* Dromedary camel
* Common carp

South Africa:

* Feral pig
* Feral cat
* Prickly pear
* Cluster pine

New Zealand

* Catfish
* Common brush tail possum
* European wasp

Research answers to the questions below and develop a presentation that could be used to teach your peers about your chosen introduced species. Focus just on the country the animal is listed under (e.g. only discuss feral cats from the perspective of Australia or South Africa, not both)

**Background information**

1. Current species distribution and population (2 marks)
2. Explanation of how and why it was introduced to the new area (4 marks)
3. Description of ecosystem types it is found in (3 marks)
4. A food web of the ecosystem BEFORE the species was introduced (3 marks)
5. A food web of the ecosystem AFTER the species was introduced, including information about the trophic level and biomass of the introduced species (5 marks)

**Sustainability plan**

1. Explanation of the positive and negative environmental impacts the introduced species has had on the ecosystem (3 marks)
2. Explanation of the positive and negative impacts the introduced species has had on humans – social and economic impacts (4 marks)
3. Your own informed solution. Design a plan of action for the region that would be best for humans, the local native flora and fauna, and the introduced species (6 marks)

**Marking key**

**Background information**

1. Current species distribution and population (2 marks)

One mark per each

1. Explanation of how and why it was introduced to the new area (4 marks)

1 mark – one statement only, no detail

2 marks – some detail on either how or why

3 marks – some detail on the how and why

4 marks – lots of detail on the how and why, paragraph length response

1. Description of ecosystem types it is found in (3 marks)

1 mark - States official ecosystem type (e.g. Mediterranean forests, woodland and scrub)

1-2 marks - Describes ecosystem. Needs detail – two sentences – for two marks

1. A food web of the ecosystem BEFORE the species was introduced (3 marks)

1 mark – food web drawn

1 mark – multiple species names included (e.g. dugite rather than just stating snake)

1 mark – only includes native species

1. A food web of the ecosystem AFTER the species was introduced, including information about the trophic level and biomass of the introduced species (5 marks)

1 mark – food web drawn

1 mark – multiple species names included (e.g. dugite rather than just stating snake)

1 mark – is significantly different from *before* food web

2 marks – trophic level and biomass information given

**Sustainability plan**

1. Explanation of the positive and negative environmental impacts the introduced species has had on the ecosystem (3 marks)

1 mark – positive impacts given

1 mark – negative impacts given

1 mark – response is detailed

1. Explanation of the positive and negative impacts the introduced species has had on humans – social and economic impacts (4 marks)

1 mark – positive economic impacts given

1 mark – negative economic impacts given

1 mark – negative social impacts given

1 mark – positive social impacts given

1. Your own informed solution. Design a plan of action for the region that would be best for humans, the local native flora and fauna, and the introduced species (6 marks)

3 marks – plan includes explanation for how it would benefit humans, native species and introduced species

1 mark – not detailed, little information

2 marks – some detail

3 marks – lots of detail given, evidence of critical thinking

**References**

1 mark – references included, but not enough or does not include all key information

2 marks – five references included with key information

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| Total mark | /32  % |