**ECOLOGY HUMAN IMPACT PROJECT**

**Due Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

For this project you will create PowerPoint Presentation that showcases human impact issues in North Carolina. In your presentation you will research, explain, and provide examples of major human impact issues that plague North Carolina ecosystems. Your presentation must reference the topics/questions below. Be sure to include at least 1 graphic per topic and provide a minimum of one in-text citation per topic. Each topic should have a minimum of one presentation slide. The first slide should include your name and block. Use MLA format for your works cited page/slide on the last slide of the presentation.

**TOPIC 1: HUMAN OVERPOPULATION / URBAN SPRAWL**

* How many people live in North Carolina?
* How has overpopulation and urban sprawl affected NC?
* How are us humans impacted by our population size? (specific to NC)
* How are other species impacted by human population sprawl? Be specific.
* How is the environment being impacted?
* *Include citation at bottom of last topic slide*

**TOPIC 2: GLOBAL WARMING**

* What is global warming?
* How has global warming affected NC?
  + Give a specific example and illustration.
  + Describe the effects that affect our state specifically.
* What can be done currently or in the future to solve/prevent this problem?
* *Include citation at bottom of last topic slide*

**TOPIC 3: ACID PRECIPITATION**

* What is acid precipitation?
* How has acid precipitation affected NC?
  + Give a specific example and illustration.
  + Describe the effects that affect our state specifically.
* What can be done currently or in the future to solve/prevent this problem?
* *Include citation at bottom of last topic slide*

**TOPIC 4: INVASIVE SPECIES**

* What is an invasive species?
* Describe an invasive species that has impacted NC.
  + Give a specific example and illustration.
  + Explain the history of this species and its implications on the environment.

**TOPIC 5: BIOLOGICAL MAGNIFICATION**

* What is biomagnification?
* Describe an example of a toxin that is biomagnified in a North Carolina ecosystem.
* Explain where that toxin comes from and/or how it gets introduced to the ecosystem.
* Provide a sample food chain and illustrate the concept of biomagnifiaction within that food chain.
* Describe the specific micro-ecosystem that is affected (lake, mountain, marsh, plain, etc.)
* What organisms are most affected by this biomagnification and in what way?
* What can be done currently or in the future to solve/prevent this problem?
* *Include citation at bottom of last topic slide*

**TOPIC 6: POLLUTION**

* Give specific examples of:
  + A water pollutant and how it affects a NC ecosystem.
    - What organisms are most affected and how?
    - How is the pollutant getting in to the ecosystem?
  + An air pollutant and how it affects a NC ecosystem.
    - What organisms are most affected and how?
    - How is the pollutant getting in to the ecosystem?
  + A land pollutant and how it affects a NC ecosystem.
    - What organisms are most affected and how?
    - How is the pollutant getting in to the ecosystem?
* *Include citation at bottom of last topic slide*

**GRADING RUBRIC**

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **CRITERIA** | **5** | **4** | **3** | **2** | **1** | **0** | **Points Scored** |
| **Format**:  - Slide show  - Correct spelling & grammar  - Works Cited in MLA format on last slide  - Min of 6 in-text citations  - Min of 6 images | All formatting components are accurate and aesthetically pleasing | One formatting component is missing or inadequate | Two formatting components are missing or inadequate | Three formatting components are missing or inadequate | Four formatting components are missing or inadequate | Slide show not submitted |  |
| **Topic 1: human overpopulation / urban sprawl** | All components are present, complete, and accurate. | One topic component is missing, inadequate, or incorrect. | Two topic components are missing, inadequate, or incorrect. | Three topic components are missing, inadequate, or incorrect. | Four topic components are missing, inadequate, or incorrect. | Topic 1 was not addressed in the presentation. |  |
| **Topic 2: Global Warming** | All components are present, complete, and accurate. | One topic component is missing, inadequate, or incorrect. | Two topic components are missing, inadequate, or incorrect. | Three topic components are missing, inadequate, or incorrect. | Four topic components are missing, inadequate, or incorrect. | Topic 1 was not addressed in the presentation. |  |
| **Topic 3: Acid Precipitation** | All components are present, complete, and accurate. | One topic component is missing, inadequate, or incorrect. | Two topic components are missing, inadequate, or incorrect. | Three topic components are missing, inadequate, or incorrect. | Four topic components are missing, inadequate, or incorrect. | Topic 1 was not addressed in the presentation. |  |
| **Topic 4: Invasive Species** | All components are present, complete, and accurate. | One topic component is missing, inadequate, or incorrect. | Two topic components are missing, inadequate, or incorrect. | Three topic components are missing, inadequate, or incorrect. | Four topic components are missing, inadequate, or incorrect. | Topic 1 was not addressed in the presentation. |  |
| **Topic 5: Biological Magnification** | All components are present, complete, and accurate. | One topic component is missing, inadequate, or incorrect. | Two topic components are missing, inadequate, or incorrect. | Three topic components are missing, inadequate, or incorrect. | Four or more topic components are missing, inadequate, or incorrect. | Topic 1 was not addressed in the presentation. |  |
| **Topic 6: Pollution** | All components are present, complete, and accurate. | One topic component is missing, inadequate, or incorrect. | Two topic components are missing, inadequate, or incorrect. | Three topic components are missing, inadequate, or incorrect. | Four or more topic components are missing, inadequate, or incorrect. | Topic 1 was not addressed in the presentation. |  |
| **Total Points Scored** | | | | | | | \_\_\_/ 35 |