**HUMAN IMPACT WEBQUEST 2017-18**

**DIRECTIONS: Research the provided web sites and thoroughly answer the accompanying questions for each topic. You will be responsible for this information on your Ecology Test.**

**I. Acid Rain**

Go to <https://www.epa.gov/acidrain> Use links along the left hand sidebar.

1. Describe how acid rain is formed.

1. What types of human activities are causing acid rain?
2. Click on “Why is Acid Rain Harmful?”. Give four different reasons why acid rain is harmful.
3. Click on “What is Being Done?”. List four different things that are being done to reduce acid rain.

Go to <http://www.epa.gov/acidrain/>

1. Click on “Measuring Acid Rain”. Give the pH of normal rain and the pH of most acid rain.

Normal Rain pH →

Acid Rain pH →

**II. Ozone and CFC’s**

<http://eschooltoday.com/ozone-depletion/what-is-ozone-gas.html> Visit this link and explore the tabs on the left to find the answer to the following questions.

1. Where is the ozone layer and what is it’s function?
2. What is ozone layer depletion?
3. What are chlorofluorocarbons (CFCs)?
4. CFCs are produced as a direct result of the manufacturing of what materials?
5. How does ozone depletion affect the following groups:
	1. HUMANS:
	2. PLANTS:
	3. MARINE (WATER) ECOSYSTEMS:
	4. BIOGEOCHEMICAL CYCLES:
6. What is the only thing humans can do to stop ozone depletion?

**III. Non-Native Invasive Species**

Go to <http://www.nwf.org/wildlife/threats-to-wildlife/invasive-species.aspx> and answer the following:

1. Define non-native invasive species:
2. How do invasive species spread?
3. What negative impacts does the introduction of a non native species have on an ecosystem?

Go to <http://myfwc.com/wildlifehabitats/nonnatives/reptiles/burmese-python/> Burmese pythons are an example of a non-native species. Read the information about these reptiles and answer the questions.

1. What is the native range of Burmese pythons?
2. Why is there believed to be an established population of these snakes in the everglades of Florida despite the fact that they are not native to the area?
3. How are Burmese pythons disrupting the ecosystem in the Florida everglades?

**IV. Global Warming & the Greenhouse Effect**

https://www.epa.gov/ghgemissions/overview-greenhouse-gases

1. How do greenhouses gases like carbon dioxide contribute to global warming?
2. What are some additional greenhouse gases other than carbon dioxide?

https://www3.epa.gov/carbon-footprint-calculator/

1. Calculate your own carbon footprint.
2. What is a carbon footprint?
3. How can you reduce yours (use personal decisions just not generic answers)

https://www.nature.org/ourinitiatives/urgentissues/global-warming-climate-change/threats-solutions/index.htm

1. List and discuss at least 5 problems that are/will be related to climate change/global warming:
	1.
	2.
	3.
	4.

**VII. Endangered Species in North Carolina**

Research and find 3 examples of endangered species in North Carolina. List what kind of organism they are, where they are naturally found, population status in North Carolina, & what efforts are being done to protect them.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Name and what kind of organism** | **Where?** | **Population Status?** | **What is being done to protect them?** |
| **1** |  |  |  |  |
| **2** |  |  |  |  |
| **3** |  |  |  |  |