

# Ohio Wesleyan University



## **OWU Global Foot Print**

Geography Information Systems (GEOG355)

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**QUESTION:** How do my actions and experiences at Ohio Wesleyan University effect the environment on a Global Scale?

**PURPOSE:** Although OWU does not have the vast student body as other large universities do, does not mean that the actions of those in the OWU community will have a less detrimental effect on the environment. Most students and faculty at OWU do not realize that many of their everyday actions have an impact not just on the local environment, but on a global scale as well. Our goal is to display the environmental effects that our actions, here at OWU, contribute to. There are five topics we are going to concentrate on. We will focus on the consumption of coffee and bananas here and how the process of getting these goods to OWU has impacted the environment. We will also look at the clothing sold in the OWU Bookstore. We want to see where these clothes come from, the process used to make them, what is used to make them. We also will look at how the process of transporting these clothes has an impact. Another topic we are looking at is how the OWU community disposes of its electronic waste. Much electronic waste from this country is sent to foreign countries to be disposed of. Many of these countries do not take the correct steps to properly dispose of the electronic waste and it commonly has a negative effect on the environment. Finally, we are going to take a look at the flight travel that people use to get to and from OWU and how and where the CO2 emissions from these planes effect the environment.

We want to display, on a map, the regions and countries that are impacted by these five categories. Each topic will be differentiated when they are displayed. This will show where each one of these topics has an impact on the world.

**OBTAINING DATA:** collection, sources, classes, audience

Collection of data- as a group we will need data to map, this is data that we are going to have to go find. We will need to ask a variety of sources from people, websites, governmental data bases and print. Each class is going to need different sources.

Classes- Coffee, Bananas, clothes, E-waste, Flight travels.

**Coffee-** The coffee that is consumed in the United States is grown in other parts of the world, including Brazil, Colombia, Indonesia, and Vietnam. This production is done on large plantations where workers are paid minimal amounts. How is the Coffee consumed in at OWU tied to this large import?

**Bananas-** the Banana plant is also a large import into the United States. The Banana plantations are linked to deforestation of the Amazon, lack of bio diversity can take out large amount of nutrients from the soil. The chemicals that are also used when growing bananas in the rain forest are said to be harmful to people as well. How are the Bananas consumed at OWU tied to deforestation in the tropics?

**Clothes-** Ohio Wesleyan book store has clothes for purchase. Where are these clothes produced and what cost, is OWU indirectly involved in child labor, are the workers receiving livable wages?

**E-Waste-** every year electronics are incorrectly recycled. How does Ohio Wesleyan University recycle their used electronics? Do they do it in the United State or does it get shipped to a different country where the processes can be done at a cheaper cost? E-Waste is the fastest growing recycling problem currently in the world. Ohio Wesleyan does do some recycling with electronics, but where it is shipped to nobody knows. This map will show countries that are being hit the hardest with this problem.

Some Facts:

- E-Waste is the fastest growing component of municipal waste worldwide.
- E-Waste contains harmful components such as lead, mercury, and plastic polymers.
- 130,000 computers are thrown away EVERY DAY in the US.

- 100 Million Cell phones are thrown away annually in the US.
- 7 out of 10 children in Hong Kong have too much lead in their blood stream as a result of poor recycling methods.
- China banned the import of e-waste in 2000. However, the labor-intensive nature of electronics recycling has perpetuated a black market in the trade, taking advantage of China's abundant, cheap, and skilled labor force.
- In cities like Guiyu, China, E-Waste recycling has taken a huge toll on the people managing the effort because of the metal extraction of circuit boards and open dumping of waste and ash residue into open water. It's made the well water and ground water of Guiyu undrinkable, and has to be trucked in from other villages. The lead poisoning level in children is 69%

**Flight Travel-** Ohio Wesleyan spends a huge amount of money sending students and faculty around the world for a wide variety of reasons. Whether it be for recruiting or for a class trip to Costa Rica, the flight has an impact globally on the earth. In this section there will be a map showing all of the points where an OWU represented has flown to in a month's time period. With this information we will be able to use a carbon calculator to see how much of the greenhouse gases are emitted into the atmosphere. The map will show the negative effects on the environment and how Ohio Wesleyan has contributed to this. The OWU sustainability task force will also be able to help us out during this process.

**Audience-** Any students or faculty that is interested in OWU's relationships to global environments.

**PRESENTING THE DATA:** map format, method

- Do we want this to be a on the internet or do we want this to be a hard copy that students and faculty can pick up? This goes back to your audience and how much exposure this map is going to have.

Map formant- Our final map will consist of a world map showing arrows of how these classes are connected to the OWU campus. Brief explanations will also be added to why this matters to the OWU community. The back side may show a small more detailed map of OWU campus showing where to get these goods which we have highlighted. Also may include some data tables that can portray the data on the map in a different way to better show the effects of OWU's global footprint.

**Sources-** a variety of sources will be need. Food services that supply OWU's cafeterias with food. The clothes brands that are found in the bookstore. More will be added when we find the sources.

### **TIMELINE:**

Feb 21/23: Compiling info on where each of the topics come from or are sent to in the world.

Mar 1/3: Continue to work to find details about how the items are transported in and out of the country

Mar 14/16: Begin collecting data on certain regions of the affected countries that are impacted the most.

Mar 21/23: Finish data collection, construct map

Mar 28/30: Work on map, layout

April 4/6: Work on map, layout

April 11/13: Finish