



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 four 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. 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 four 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 divided the categories up between ourselves. We collected our data from first hand sources as well as second hand sources. We contacted those in charge of Chartwell's, the bookstore, and information on school funded student plane travels. We also read many articles and studies that were on governmental as well as nongovernmental websites. We were able to find the sources of all the consumed goods.

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. The coffee here, at Ohio Wesleyan, is provided by Seattle's Best which is a subsidiary of the other provider, Starbucks. The countries of origin of the coffee are Brazil, Colombia, Costa Rica, Guatemala, Kenya, Ethiopia, Indonesia, and New Guinea. This production is done on large plantations where workers are paid minimal amounts.

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. The bananas provided by Chartwells are Del Monte brand. Del Monte has been under scrutiny lately for their newly instituted CRT, or controlled ripening technology. The environmental impacts of

the CRT have not been calculated yet, but there are some pros and cons associated with it.

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? The clothes in the OWU book store come from three main brands which are Nike, Jansport and Champion. These companies outsource their production in third world countries like china, Mexico, and Indonesia. They do this because labor law in these countries barely exists and the companies can produce their product for cheap.

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 is 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. We found that carbon trading was a great way for the airlines to offset their carbon emissions. This happens by them purchasing carbon credits which go to the reconstruction of forests and to build thousands of new trees.

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

PRESENTING THE DATA: map format, method

- We have created a hard copy, 11 x 17 pamphlets. On the inside, there is a global map displaying the impact points for each class. There is also a small blurb for each class surrounding the map. On the back, are located more detailed descriptions about each class and their global effects. Map format- Our final map will consist of a world map showing points of interest that are connected to the OWU campus. Brief explanations will also be added to why this matters to the OWU community. We did not include the e-waste information on the map because it would have been too much. We did decide to keep in the report though. The information is good for a global map and may be used later in the future.

Sources- We used a variety of sources. We talked to a variety of sources. We determined the source of Chartwells' bananas as well as OWU's coffee. We also found the sources of the clothes in the bookstore as well as the countries traveled to and from via flight by OWU students and faculty.