Memorandum

To: Dr. Reese

From: Amelia Miller

Date: September 22, 2009

Subject: Internet Research Assignment

This document includes the answers to all of the questions contained in the Internet Research Assignment, followed by a Bibliography of the websites consulted to complete this project. All of the census data is of St. Clair County, Michigan, the county of my permanent residence.

1. In the year 2000, in St. Clair County, Michigan, 8,681 people between the ages of 20 and 24 were reported to live in the county. Of those people, 4,417 were males and 4,264 were females. In July of 2008, 6.1% of the population was projected to be in the same age bracket. 5.8% of those people were female and 6.4% were male. Only percentages were reported in the estimates for the population in 2008.

2. In 2002, the category of Engineering Services career field contained twenty-three establishments in St. Clair County. The Veterinary Services field reported twelve establishments. I was not sure what to expect for the number of engineering services in the county. I know that they exist, and I know there are many types of engineering groups, from structural and construction to automotive. However, the number of veterinarians did surprise me. I would have guessed the number might have been higher. Our county is still a fairly rural area. Though, each vet clinic I am familiar with does employ more than one veterinary, so maybe the number of actual veterinarians is higher, but they are employed by only a few businesses. The Retail Trade sector reported to have the most locations of employment in St. Clair County. St. Clair County is over all a fairly rural county, however, it is home to the city of Port Huron, which has many retail stores. It is the city which most residents, from the rural areas, go to for large “box store” shopping and receives a large number of shoppers from near-by Sarnia, Ontario.

3. Arbitron is marketing and media research group. They are able to provide data measuring the number of people listening to a radio station at a particular time. They measure in an AQH Persons, which is an Average Quarter-Hour Person or the average number of people listening to a radio station for a five-minute time block during a larger 15-minute time frame. The AQH share is the percent of all of the radio listeners in that particular area, which are listening
to that one station. The latest rating for the Classic Rock station, WCSX in the Detroit listening area, is 2.8 AQH Persons.

4. I am not surprised the average size of farms has been decreasing over time. St. Clair County is not a suburb of Detroit, however more and more people are moving north, out of the suburbs to the ‘country’. This has caused a division of land, turning many large farms into smaller lots, suitable for single-family houses or in some cases, subdivisions. I am surprised to see the number of farms has increased. However, I know of several large farms, in my area, which had been divided among family members and continued on as separate smaller operations. In my opinion, it has become extremely difficult for the small-scale farmer to survive in today’s market. Business costs have driven large farms to get bigger and small farms to become endangered species. Without several hundred head of livestock or acres of land, it is difficult to make one’s entire living off the farm. Many farmers in my county are hobby farmers, continuing to hold a “day job” off the farm. I think this is one of the biggest influences in the size trends seen in the census information.

<table>
<thead>
<tr>
<th>Year</th>
<th>Farm Number</th>
<th>Farm Size (acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>988</td>
<td>184</td>
</tr>
<tr>
<td>1997</td>
<td>940</td>
<td>173</td>
</tr>
<tr>
<td>2002</td>
<td>1260</td>
<td>145</td>
</tr>
<tr>
<td>2007</td>
<td>1027</td>
<td>150</td>
</tr>
</tbody>
</table>

5.

<table>
<thead>
<tr>
<th>nonpoint source pollution</th>
<th>Google</th>
<th>Google Scholar</th>
<th>Yahoo! Search</th>
<th>Ask.com</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>515,000</td>
<td>47,300</td>
<td>1,720,000</td>
<td>135,000</td>
</tr>
<tr>
<td>“nonpoint source pollution”</td>
<td>401,000</td>
<td>17,500</td>
<td>120,000</td>
<td>135,000</td>
</tr>
</tbody>
</table>

The number of results is different for each website because each search engine is different. Each searches from a different large index and each has a different database to search from. Yahoo! and Google retrieved the most results when I searched without quotations. This is most likely because the search engines were looking for each word to be used individually, placing an ‘and’ between each word thus retrieving more results. The quotation marks ask the search engine to search for the words in quotes together in its index, as opposed to searching for the words independently, without quotes.
6. There were 204 results on Google Directory for nonpoint source pollution. Some of the subjects this topic is associated with are Science, Environment, Water Pollution, Water Quality, Kids and Teens, and Education. One of the resources I found was the EPA’s Kids Resource Page on Nonpoint Source Pollution at http://www.epa.gov/nps/kids/. Different from the indexes of search engines, a subject directory involves humans in its indexing process. Its lists have human input as to the relevance of its results. A subject directory is more likely to have the results you hope to find when searching a topic, especially in an academic area.

7. One of the related terms I could have used to search for information about nonpoint source pollution was polluted runoff. This term was used on an EPA website which was the top result in my Google search. Another term that I could have used was water pollution. This was a suggested term on Wikipedia, which was the top website suggested in my Yahoo! Search.

8. When a word or phrase is typed into a search engine, the search engine searches through a large index of the Internet, for the word or words entered. It doesn’t search the entire web, only sites it has placed ‘hits’ on and included in its index. Each search engine searches its own database, thus the results for the same word can vary between search engines.

9. The relevance of the results are based on where the word or phrase searched is located on the web page, whether its in the URL, title, or the body of the document. It also can be dependent on how many hits the webpage has.

10. An advanced search allows you to be very specific in what you are searching for. You can choose where the word you are searching for is located in the web page. It also allows you to specify multiple words to search for and words that should not be included in the search. On some advanced search options, you are allowed to declare the domains you wish to appear in the results language, and document formats. An advanced search I tried was to search Yahoo! for Camp Sites in any part of the webpage looking for State Parks in the title and the words Lake, Sand, and Michigan some where on the webpage.

Summary

Through this assignment, I was able to compare several methods of searching for information on the Internet. I became familiar with information from my own county by using public resources provided by the U.S. Census Bureau. Also, I was able to locate local radio information through the ARBITRON website. This is a website I had not heard of before and wouldn’t have known without this assignment. Finally, I was able to compare the results of different search engines. I now know how to better narrow my searching and
I understand which websites will provide the most general and most specific information.

**Bibliography**


