Summer Research Summary

This summer I have done research on coastal sand dunes in the Geology, Geography and Environmental Studies. The study was of a dune area in South Haven, Michigan for Van Buren County and I with under Professor Deanna van Dijk. I spent time collecting data in the field and also time in the GEO dept. doing preparation and follow up. Van Buren County enlisted the help of myself and another student to study the stated dune area because it was threatening to cover 3 homes at its base. For the summer I focused on the physical characteristics of the dune area.

My objectives for the summer project were to map and document all of the physical and anthropogenic feature of the dune area. I used a Trimble GPS device to map the trails and blowouts as well as the physical attributes of those features. Using that information I figured out where the most active sections of the dune area were. The other student working on the project along side me, James Karsten, was focused more on how people use and perceive the dune area. The two halves of the research would be used to get a full idea of what is going on with the dune area. Another objective of the project was to suggest a management plan to try and stabilize and slow the inland advance of the dune area.

I had to accumulate a detailed result of the features on the dune area which required a lot of different methods. The primary method I used was mapping features with a GPS device and later loading that into GIS software. Along with the locations I also wanted to gather attributes of the features such as widths and use of trails or the level of activity of blowouts. Other researchers and myself spent a good amount of time in the field gathering all of this information. The next big step was analyzing the information I had gathered and using it to figure out the overall condition of the dune and present that in a report to Van Buren County.

The steps that took the most time were writing and fine-tuning the methods as I had a lot of information to collect. Figuring out the best method was difficult to get in writing and make practical in the field. Another area that has taken a lot of time was writing all the sections of the report. It has been time consuming and tedious work to edit everything to say exactly how I want. Though this has been time consuming the final product is well written and delivers what I am saying very well.

This summer I have learned much more about specifics of dune research and how to plan methods, collect data and post process but also have gained a more broad skill of how to write a report of my findings. Before this summer I had never done anything like this and was rather inexperienced. I expect to be able to use these skills all throughout my life and in future classes and jobs. I believe it has been a great learning experience to be a large part of a research study from start to finish. Overall this summer has been a great experience, from the aspect of not only watching my work grow but my knowledge as well. I would love to do something of this nature again and hope the opportunity presents itself.