My work at the OFS began in early June 2014. I am currently a member of the permaculture team. I began with an interest in compost and permaculture. Permaculture is in a word, is an agricultural system that is self-sufficient, fosters biodiversity and can be sustained over long periods of time. I began with some permaculture knowledge but over the past several months I have learned a great deal in the theory and practice of permaculture.

The OFS has given me a great opportunity to work directly with a variety of permaculture features at the Gibbs house farm and visit other farm and garden projects across Michigan. Over past several months I have been given a general overview on several agricultural practices and techniques that are integrated into permaculture systems. Projects I have worked on include:

- Building hoop houses
- Constructing hugelkultur mounds.
- Maintaining the Vermicompost
- Maintaining hot compost
- Building pest fences
- Practicing intercropping methods with annual crops
- Harvesting produce and selling it to the local community
By working on these projects I have gained first hand experience on the challenges and the rewards of growing food organically. Over the course of the summer I have become familiar with the plans for the permaculture project. I have begun to conduct more in-depth research that will help progress our permaculture mission. Specifically I will be taking over the vermiculture project that was formerly the responsibility of intern Mike Lucas.

Vermiculture is a composting system that uses red wiggler worms (*Eisenia fetida*) to help breakdown food and paper waste. The end product is worm castings rich in beneficial bacteria. The castings can be amended back into the soil on the farm. We have been using Vermiculture to divert waste generated on campus from landfills. The ultimate goal is to combine the vermicompost with black soldier flies and aquaponics in the research hoop house, located on the Gibbs house farm. By combining these systems with our food production methods we will create a closed loop nutrient cycle where our waste will return directly to our production process.