Dear Garden Club of America,

I would like to report on my progress this summer on my project, **Coastal Wetland Resilience: Investigating How Land Use History and Feedbacks Drive Response to Sea Level Rise.** The first part of the summer was spent perfecting methods and acquiring supplies. To begin with, I explored the characteristics and costs of different corers. After this comparison, I decided on using and bought a Russian Peat Corer. The corer can collect samples to depth of 3 meters and is simple to use in the field (does not require a boat mount, unlike the Vibracorer). I also used the funds to buy supplies for field trips such as boots, camera, and GPS unit.

After acquiring the necessary field equipment, I collected a set of cores from the White Oak River in North Carolina. These cores have helped me to refine my protocol and develop my methods. I was able to collect the cores successfully and retrieve the full marsh stratigraphy up to the basal peat layer (which indicates the beginning of marsh sediment). The cores are between 1 and 1.5 meters in length, which is shorter than I expected for these systems.

Once collected, I began to analyze the cores in the lab for sediment characteristics. I have been working on determining the organic matter content for the sampled sections of the core. This involves drying, weighing, combusting and then reweighing the samples in order to determine what percentage of the samples is inorganic (mineral sediment) and what percentage is derived from organic matter. I have also begun to learn the methods for pollen analysis and started collecting supplies for that component of the project.

Going forward with my project, I have planned more trips to collect samples. I have two more field trips planned for September (one to the North Carolina coast and one to South Carolina) and am looking forward to getting a set of cores from South Carolina. Additionally, I will continue to analyze the sediment characteristics and pollen of the cores. The funds you have provided have allowed me to complete part of my dissertation that I would otherwise not been able to. I really appreciate your generosity and confidence in my work and am looking forward to reporting my results in the final report.