

Jesse Keetle

Summer 2016

Overview

This summer I was fortunate enough to return to St. Catherine's Island, Georgia, for an environmental studies internship. The St. Catherine's Island Foundation made this possible for us by allowing us residency for the summer and providing us with housing, utilities, and transportation. A year ago, while students of Sewanee's Island Ecology Program, Wil Rainer and I initiated a research project with Christa Hayes, a resident of the island, who has been working with us this summer. At the start of June, the three of us had several meetings with Professor Ken Smith to discuss the course of action for our research. This was when we committed to engage in three areas of study - butterflies, bees, and Hickory trees.

Our butterfly research has been designed to explore the impacts of sea level rise on butterfly prevalence in dune and marsh regions. Butterflies, as pollinators, play an important role in the integrity of these fragile ecological systems. Our bee research has been a tag-along as part of a greater survey within the region led by Sam Droege. The purpose of the survey is to document and discover what bees would be lost or threatened by habitat shifts in Coastal dune areas. Our third project in the Hickory ridge is updating a database started

by Hali Steinmann and Elise Landreaux. Its purpose is to monitor regeneration of the Hickory trees.

Development & Progress

This research internship has required, first and foremost, communication since the beginning. Strong communication is the nature of the island and working with a professor that is mostly located in Sewanee poses further challenges to keep everyone involved and on the same page. Other challenges such as off-island emergencies and logistical issues in the field have taught us how to adjust and work together to keep the studies on track.

Another lesson acquired was strategic planning. Our current butterfly study is a morph of a similar one conducted in 2012, and with the added components it took the first couple weeks to establish effect survey sites and create a daily schedule following the tides. Living on an undeveloped island, things we would normally take for granted, now take great coordination. For example, in order to stock up on food for the week we have to align our work schedule with the boat schedule so we can make it on and off island according to when others are already going. That also means that we don't spend much time on the mainland so we have to make good use of the time that we do have.

On a personal level, I accomplished designing and executing a scientific study, established professional connections, and was able to enjoy another summer on a very unique and somewhat exotic barrier island. In the broader scope, we initiated two studies to be continued for future years to come, and

contributed to a larger, regional study in the Southeast Coastal region. The scientific community seems to rely on collaboration and being able to expand on one another's work, so we were happy to make contributions to the larger scientific community.

Future Goals

While this was a great opportunity to learn more about research and the scientific community in the field, I now realize that I would like to apply my future efforts to different areas of environmental work. I see myself working in the field of environmental activism for environmental and social justice amongst all species.

Words to the Donors

This internship was made possible for me because of the help from several people and organizations. First, I am very appreciative to have been granted funding by Sewanee. The stipend provided an allowance for food and transportation to and from the island. I would also like to thank the St. Catherines Island Foundation for allowing us to perform research on St. Catherines Island this summer and for providing us with housing, utilities, and transportation. Sewanee's connection with St. Catherines Island allowed us the privilege to participate in the Island Ecology Program during the summer of 2015 and form the connection with Christa Hayes. Wil and I extended a more comprehensive

and detailed thank you letter to the St. Catherines Island Foundation upon our exit from the island.