



## **My Internship at Back Bay National Wildlife Refuge through the Fish and Wildlife Service and the Mitigation and Adaptation Research Institute at Old Dominion University**

During the summer of 2019 I spent most of my time at Back Bay National Wildlife Refuge in Sandridge Virginia. There I completed field work for the Fish and Wildlife Service and looked at the possible futures that Back Bay National Wildlife Refuge might have with impending saltwater intrusion into their water sources and how they will uphold their mission.

### **My duties at Back Bay National Wildlife Refuge**

- ❖ Early morning sea turtle patrol
- ❖ Finding, and moving if necessary, sea turtle nests
- ❖ Bird surveys
- ❖ Removing invasive plant species, including; Johnsons Grass, Alligator Weed, and Beach Vitex
- ❖ Spraying pesticides on the sand hedge covering the dunes
- ❖ Pollinator surveys
- ❖ Removing wild hog traps
- ❖ Operating the entry fee booth

### **Impending saltwater intrusion into their water sources findings**

- ❖ Back Bay National Wildlife Refuge is a wind driven tidal system
- ❖ Water flow between the bay and impalements is controlled by several different water pumps
- ❖ Water levels are high in the summer for wading birds and low in the winter for winter fowl
- ❖ An increase in salinity would alter the migrating birds' habitat and reduce food sources



Figure 1. Back Bay National Wildlife Refuge C Pool

**“Small acts, when multiplied by millions of people, can transform the world.”**

*-Howard Zinn*

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