

Student Project Possibilities Associated with the NC Coastal Reserve

Masonboro Vegetation Catalogue and Seed Collection Project

This project will be conducted in conjunction with the seed collection coordinator for the Millennium Seed Bank project housed at the NC Botanical Gardens. All naturally occurring plant species on Masonboro Island will be catalogued, photos and specimens taken, species identified, and seed collected. Skills and topics used/developed: plant taxonomy & identification, field specimen collection, seed collection and storage.

Masonboro Fox/Predator Population Survey and Control Planning

The predator population on Masonboro Island is believed to be negatively impacting bird and turtle nesting success. Two dens have been identified, but a thorough survey needs to be conducted to identify other potential sites and assess the population number and makeup before management efforts can be planned or initiated. Skills and topics used/developed: animal tracking and identification, biological monitoring, predator control planning, natural resource management.

Masonboro North End Access Plan

The north end of Masonboro Island has been receiving heavy visitor use. In order to minimize the impact of this use, a visitor access plan needs to be developed and implemented. GPS coordinates of typical use areas and GIS mapping of these areas needs to be conducted. Trails and camping areas need to be designated and marked. Locations for use guidance signage need to be identified. Skills and topics used/developed: GPS, GIS, natural resource management, recreation management planning.

Masonboro Volunteer Stewardship Monitor Program

A citizen force needs to be developed to assist with routine monitoring of visitor use and natural resource management at Masonboro. This program needs to be developed and implemented. The island needs to be divided into zones, training materials and monitoring protocols need to be created, and scheduling and reporting mechanisms need to be designed. Skills and topics used/developed: GPS, GIS, graphic design, environmental education materials development, program development, database development.

Bird Island Diamondback Terrapin Survey

A population of species of concern, Diamondback Terrapins, exists at the Bird Island component. No surveys have been conducted to assess the population. This is a basic field survey project to determine the number and distribution of this species on the Reserve. Individuals may also be marked on shells for identification in future studies. Skills and topics used/developed: GPS, GIS, field survey methods, reptile identification and marking.

Zeke's Island Post-fire Vegetation Recovery Survey

An escaped campfire led to a small wildlife at the Zeke's island component Labor Day 2007. Assessment of regeneration of vegetation is needed to determine whether composition has been altered, whether opportunistic species have benefitted from the fire, and whether expected species have recovered. This project would involve installing permanent photo monitoring locations and conducting vegetation surveys. Skills and topics used/developed: GPS, GIS, field survey methods, plant identification and natural resource management planning.