

CAPE HATTERAS SECONDARY SCHOOL AND COASTAL WILDLIFE REFUGE SOCIETY PARTNER TO PROVIDE SPECIAL PROGRAMS

Buxton. The Coastal Wildlife Refuge Society (CWRS) has been a presence in Dare County since 1989 when it was established as a non-profit organization to provide support for Alligator River, Pea Island, and other National Wildlife Refuges in eastern North Carolina. It is one of the oldest "Friends" groups created to support the National Wildlife Refuges in the United States. This year, the group has partnered with Cape Hatteras Secondary School of Coastal Studies on two multi-faceted projects that are designed to link students with the outdoors in new and exciting ways.

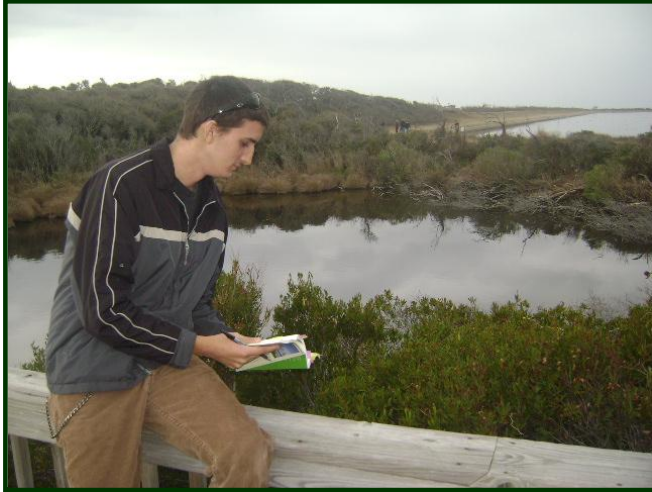
"We approached the schools last spring," said Joyce Bornfriend, CWRS board member, "to talk about ways we could partner on programs for middle and high school students. Linda Austin, Media Coordinator for CHSS, had a host of wonderful ideas. She collaborated with other staff members, developed a grant proposal for CWRS, and we were ready to hit the ground running when school opened this fall."

The Cape Hatteras Projects involves middle and high school students. A Young Naturalist Project for students in grades 6-8 provides an exploratory club which introduces students to the various fields of study in science through field experiences. Planned activities include animal tracking, animal marking, seine netting, nature walk, and the red wolf program. The structured field experiences will be paired with additional programs/activates at the school, including guest speakers from US Fish and Wildlife and application of field experiences on site.

"From the beginning we had students anxious to participate in the project," said Linda Austin, coordinator. "The individual interests of the 22 students participating shaped the direction, design, and development of each field study at Pea Island.

The high school component of the project, **Wildlife Research Design and Application**, provides a variety of exciting hands-on laboratory experiences. A number of students have been working on the creation of a nature trail at the school which can be enjoyed by the public as well as students and staff. Students have identified and determined the location of specific plants, mammals, aquatic animals, insects, birds, and soils. As they expand their research, they are beginning to create brochures and pamphlets for visitors to use along the

walk. Students will also develop power point presentations which can be shared at local elementary, middle and high schools. The project not only enables students to collect important data but to also translate, communicate, and educate others about what they have learned.



Senior Manley O'Neal identifies native plant species located on the Pea Island Nature Trail.

Christin Brown, science teacher at CHSS, has helped design and carry out many of the activities involved in the project, particularly those at the high school level. "We were excited about the possibility of partnering with the CWRS when the opportunity was first presented. This opportunity enables students to gain hands on experience in designing and carrying out field studies that are more in-depth than a typical high school science lab"



Christin Brown and Anna Fletcher are pulling a seine haul to collect juvenile fish at New Inlet.

A number of students in the project have been working on a Seine Net Study at New Inlet. Students have begun collecting invertebrates and fish samples at new inlet and several other locations, for research on the sounds viability in Pea Island. Students will collect fish and invertebrate data at New Inlet and will also conduct studies at several other sites in the surrounding area. These data will not only be informative for the public who visit the refuge, but will also be used in a comparative study. This portion of the study will allow students to compare differences in water samples and species and densities of both fish and invertebrates along the sound.



Darryl Hill, Deborah Roughton, Kevin Stowe, Foster Mattingly, Anna Fletcher and Josh Beveridge measure and determine fish species collected in the seine haul.

The CHSS project also includes the opportunity for students to discover techniques wildlife biologist use to track and estimate mammal populations, such as, deer, raccoons, and nutria. Students will be setting camouflaged camera boxes, or trail cameras, with the purpose to identify species that are frequenting the reserve. They will also create a catalog for each species captured by the camera traps in order to help identify different individuals. Once individuals have been identified, a separate study can be conducted, setting camera traps for a “mark-recapture” study. This will enable students to then apply the “mark-recapture” method to estimate the different mammal populations.



Seniors Gary Tolson and Eugene Clinton manage the animal marking project at the refuge. Pictured left to right, Cameron Whitaker, Robbie Easley, Asa Balance, Gary Tolson and Eugene Clinton work to align the height of the motion signals.

Joyce Bornfriend notes that the grant funds this year are just a beginning for the educational programs CWRS hopes to support. "Our board saw this project as an opportunity to begin a program that can serve as a model for other schools. While the project is a perfect fit for a 'school of coastal studies,' the independent study components, inter-agency collaboration, and the interface with community and on-going research projects have applications for almost every school. We hope this will be just the beginning"

The students at CHSS agree. With "real-life" field study opportunities, exploration activities, and collaborative research, they are gaining growing awareness and appreciation of their natural surroundings as well as increasing their knowledge of career opportunities in the sciences. Their projects this year are only scratching the surface of the work they hope to do!

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