

WETLAND EDUCATION THROUGH COOPERATIVE PROGRAMS BETWEEN COASTAL CAROLINA UNIVERSITY AND Horry COUNTY PUBLIC SCHOOLS

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Horry County, in the Coastal Plain of South Carolina, is approximately 50 percent wetlands. The Waccamaw Region (Horry, Georgetown, and Williamsburg Counties) has experienced a 58-percent population increase during the period from 1960 to 1990. Population growth trends suggest that from 1990 to 2020, the total daily population will increase by 125 percent, representing an additional 510,000 people (Horry County Comprehensive Plan, 1998). The impact of this on the remaining wetlands will be substantial. In addition to this problem, S.A.T. scores of South Carolina students, whereas certainly not the only measure of academic achievement, do consistently rank below national averages (South Carolina Dept. of Educ., 2000). For these reasons, it is necessary to create new enthusiasm for science education in general and for the value of wetlands in particular.

In an effort to address this issue, Coastal Carolina University (CCU) has initiated three programs. In 1998, the School of Science received an award for Integration of Research and Education from the National Science Foundation (NSF). This has provided funding for two of these programs. The first is a cooperative effort with the Playcard Environmental Education Center (PEEC), a local nonprofit organization run mostly by Horry County School District and located along a blackwater swamp. The grant has provided funding for me to work with science education students to assist with educational programs and conduct wetland research. It also funds minigrants for local high school teachers to bring their classes to PEEC for research.

The second NSF-funded program is The River Project, operated by CCU's Environmental Quality Lab in the Center

for Marine and Wetland Studies. All of our local high schools are within a 5-minute drive of a river, and, in this program, they monitor water quality with the assistance of CCU faculty and students. They report their data on a university Web site and discuss their findings at an annual student congress. Funding from Wal-Mart's Clean Air/Clean Water Program also supports this program. The Web address is: <http://www.coastal.edu/nsf-aire/river.htm>.

Finally, with assistance from the NSF-sponsored State Systemic Initiative, CCU offered a graduate course last summer entitled "Wetland Ecology for Teachers". This was an activity oriented course designed to give teachers the knowledge to incorporate wetland education into their classes in a way that meets the new South Carolina State Science Education Standards. We also took field trips to local wetlands, including PEEC, in order to show teachers how to take advantage of these environments to make science more alive and interesting for their students. Mostly middle and high school teachers attended the course. I am currently researching the extent to which the teachers were able to incorporate wetlands into their curriculum this year. The Web address for this course is: <http://www.coastal.edu/science/biology/sgilman/bio778.htm>.

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