

Ecotourism initiative being explored in A-P region

Ecotourism is a term that people in eastern North Carolina may be unfamiliar with today. But if all goes well, it won't be long before the residents not only know what the term means, they will also recognize it as something that bears good news for both the environment and the economy of the Albemarle-Pamlico estuarine region.

Ecotourism is the concept of basing a tourist trade on the exploration of and education about a region's natural systems. The goal is to create substantial economic activity that depends directly on the natural systems being healthy, and in so doing give residents a financial incentive to manage the systems wisely. In essence, ecotourism seeks to build a bridge between environmental stewardship and economic development.

In the past few years ecotourism initiatives have sprouted not only in various part of the U.S., but in countries throughout the world. The potential for a successful ecotourism initiative in the A-P watershed is favorable given the fact that there are already more than 25 natural areas (wildlife refuges, state parks, etc.) and nature centers in the region. Perhaps more important, however, is the pending development of three new facilities specifically

devoted to ecotourism and estuarine education.

If these centers are completed, a number of related activities such as hiking and biking on special paths, camping, canoeing, fishing and hunting, and birdwatching could be promoted along with them. Economic growth could in turn be fostered through businesses that support these activities, such as bed-and-breakfast inns, camping outfitters, and environment-oriented gift shops.

For an ecotourism initiative to succeed, however, a balance that must be struck between ecosystem protection and economic growth. Too much traffic would put the ecosystems in danger of being "loved to death," while too little traffic would defeat the economic incentive for protecting the environment. The critical job of coordinating the initiative and trying to make sure that balance is attained will be the responsibility of a newly-formed nonprofit organization called the Partnership for the Sounds. A funding request for this organization has been submitted to the state and was awaiting approval as the newsletter went to press.

For a closer look at the Partnership and the three new estuarine education and ecotourism facilities, see page 2 of the *Advocate*.

ALBEMARLE-PAMLICO ESTUARINE STUDY

Initiated in 1987, the Albemarle-Pamlico Estuarine Study is a program of research and education on the Albemarle and Pamlico sounds and the rivers that feed them. The Study is charged with developing a Comprehensive Conservation and Management Plan (CCMP) to help guide long-term environmental protection of the estuary. The projected schedule for drafting, review and completion of the CCMP is as follows:

First draft completed, reviewed	July 1992
Second draft completed, reviewed	February 1993
Third draft to internal review	June 1993
Third draft to public review	August 1993
Public meetings on third draft	September 1993
Final revisions completed	November 1993
CCMP approved by Policy Committee	November 1993
CCMP submitted to Governor, EPA	December 1993

Coming together is a beginning; keeping together is progress; working together is success

Focus group meetings held on third draft of CCMP

Early feedback on the third draft of the Comprehensive Conservation and Management Plan (CCMP) was received at a series of "user group" meetings held by APES in late June. These meetings brought together citizens from constituencies that would likely be affected by the CCMP and got their insight on the plan's recommendations.

Six meetings were held in different areas of the watershed, each attended by representatives of agriculture, silviculture, fishing, development, dischargers, environmental groups, and local governments. This format not only gave the representatives a chance to express their own views, but also allowed to them hear the opinions of other groups.

Full public review of the third draft will begin with the

release of the third draft in August. Formal public meetings on the plan will be held near the end of the comment period.

The third draft has been reorganized in an effort to make the plan more accessible to the public. The benefits, costs, and steps necessary for implementation are now included with each recommendation, rather than in separate sections.

In other news about APES, the US Environmental Protection Agency has approved \$294,000 in funding for the Study to complete essential tasks remaining in development of the CCMP and help the state make the transition to implementation of the plan. While further EPA monies will be available to the state for the next four years of implementation, the primary financial responsibility will be the state's.

New organization, education centers may anchor ecotourism plans

The dual role of promoting ecotourism and estuarine education will be the responsibility of a newly-formed organization called the Partnership for the Sounds. Though not a direct outgrowth of APES, the Partnership combines several ideas on the creation of a public education foundation which have been developed through Study outreach programs.

The Partnership has already established a multi-interest board of directors and, as of late June, was awaiting word on a funding appropriation from the state. If funding is approved, the Partnership would also serve as the central administrative unit for the three proposed facilities described below:

**** Estuarine Education Center, Washington, NC** -- This center is envisioned as being similar to the the marine aquariums on North Carolina's coast, except it would focus on the estuarine environment rather than the ocean. Aquarium displays and hands-on exhibits would attract student groups and tourists. Local funds are being raised to cover half of the Center's \$3 million cost; the other half is being sought from state and federal appropriations.

**** Walter B. Jones Sr. Center for the Sounds, Columbia, NC** -- This facility is planned as a visitor's center that will interpret the natural systems contained in the closely-linked Pocosin Lakes, Alligator River, and Lake Mattamuskeet national wildlife refuges. Directed particularly at tourists headed for the Outer Banks, the Center will be complemented by a network of boardwalks and hiking trails nearby. A \$7 million federal appropriation is being sought to establish the Center.

**** Refurbishment of the Lake Mattamuskeet pumping station** -- When farmers tried to drain Lake Mattamuskeet several decades ago and turn it into cropland, a massive pumping station was built along the lake's shores. Now abandoned, the structure could be restored for use as a research facility and conference center. While not exclusively devoted to estuarine education, the facility would be complementary to the ecotourism initiative. A \$3 million federal appropriation is being sought for this effort.

As discussions on these facilities progressed this spring, the NC Department of Environment, Health and Natural Resources (DEHNR) issued a release confirming the Governor's support for the ecotourism effort. The release noted, "For too long, outsiders to the Albemarle-Pamlico Region have viewed it as something of a wasteland that was to be endured by vacationers on their way to the Outer Banks and avoided by serious investors in economic development efforts. The people who

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live there know and are proving otherwise, however... Their vision will bring more investment and more jobs to their communities, and develop within all who are touched by it a greater appreciation for the beauty and importance of the Albemarle-Pamlico."

The third draft of APES' Comprehensive Conservation and Management Plan expresses support for the Partnership and three new facilities in light of the emphasis they give to environmental education and awareness of the estuarine region.



RESEARCH FOCUS

Regional Inventory for Critical Natural Areas, Wetland Ecosystems, and Endangered Species Habitats, Phase II -- Harry LeGrand, et al, NC Natural Heritage Program APES Report #92-07

Project Goal - This was the second phase of a project designed to identify and prioritize important natural areas in the Albemarle-Pamlico region. Identification of these areas will help focus efforts to protect ecosystems in the watershed that play a critical role in estuarine function or are rare. This phase of the project looked at habitats in the Pamlico Sound region (Pitt, Jones, Craven, Beaufort, Pamlico, Hyde and Carteret counties). Phase I concentrated on the Albemarle Sound region (results of Phase I are detailed in the September 1991 *A-P Advocate*, Vol. 3, No. 4; APES report #90-01).

Procedure - Over 200 ecosystem complexes were evaluated in the seven-county region. Factors such as uniqueness and maturity of the ecosystem, size, lack of disturbances, and presence of endangered species were used to determine which sites were the most significant. Sixteen areas were ultimately rated as having "national" significance, meaning they represented some of the best examples of their habitat type in the country.

Sites of national significance - The sites below are listed in priority order from the most important. Also noted is the current protected status of each site:

1. **Southern Croatan savannas, flatwoods, bays and limesinks.** Carteret County. Located almost entirely in the Croatan National Forest; protected from development but subject to logging and other disturbances.

2. **Croatan pocosins and natural lakes.** Also in Croatan Forest. Special Wilderness Area designations and other agreements make this site well protected.

3. **Trent River/Neuse River marl outcrops.** Sites scattered along banks of the Neuse and Trent rivers above New Bern in Craven and Jones counties. Marl is a limestone soil laced with fossil seashells. Some of the outcrops are protected, but four important sites are not.

4. **Hyde County nonriverine forests.** Undisturbed forests remaining in the northern half of Hyde County. About half the area is in the Alligator River or Pocosin Lakes national wildlife refuges (NWRs). The Roper Island area is an important section not now protected.

5. **Hyde County/Pamlico Sound marshes and forests.** Essentially the area along Hyde County's Pamlico Sound shoreline. Much of the area is protected within the Alligator River or Swan Quarter NWRs.

6. **Cedar Island/Piney Island marshes and forests.** Northern/eastern Carteret County. About

half the area is in the Cedar Island NWR.

7. **Lake Mattamuskeet wetlands.** Basically the area included in the Lake Mattamuskeet NWR.

8. **Goose Creek/Pamlico Point marshes and forests.** Southeast Beaufort, northern Pamlico counties. About 45% protected as state Game Lands.

9. **Southern Pamlico County nonriverine forests.** Lowland forests inland from Bay River. Unprotected.

10. **Estuarine islands, Carteret County.** Natural islands just off the Beaufort waterfront. Protected in the Rachel Carson Estuarine Research Reserve.

11. **Northern Pamlico/eastern Beaufort county nonriverine forests.** Inland forests on the south side of the Pamlico River. Unprotected.

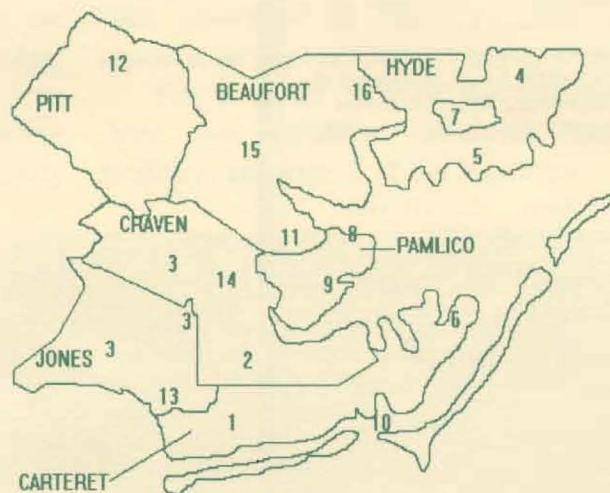
12. **Grindle Pocosin, Pitt County.** Remnant inland pocosin, with most of the original system now converted to pine plantation. Unprotected.

13. **White Oak River forests.** Hardwood forests east of the White Oak River in Jones/Carteret counties. Lies mostly within Croatan Forest.

14. **Neuse River wetlands.** The forested floodplain of the Neuse River above New Bern into Pitt County. Only small areas are protected.

15. **Tar River wetlands.** The Tar River floodplain above Washington into Pitt County. Small areas protected.

16. **Pungo River wetlands.** Blackwater marshes that mark the headwaters of the Pungo River. Unprotected.



The numbers above correspond to the areas noted in the text, indicating the approximate site of each one. There are several occurrences of site #3.

SOUND BITES

News and notes about environmental issues in the Albemarle-Pamlico region



REMOVAL OF MIGRATORY OBSTRUCTIONS NEAR

The first project in a multi-agency effort to remove obstructions to migratory fish (river herring, shad and striped bass) is set for this summer. The low dam on the Little River near Cherry Hospital in Goldsboro (Neuse River basin) will be taken out, opening up about 25 miles of freshwater streams which the fish can utilize as spawning habitat. The US EPA, which is funding the effort, is continuing to work with state and federal agencies to locate other removable obstructions in the Albemarle-Pamlico watershed in order to make it easier for the fish to get upstream.

"THEY CALLED IT FISHTOWN"

A look at the social and environmental changes taking place in North Carolina's coastal region can be seen in the documentary, "They Called It Fishtown," which airs on PBS stations Thursday, August 19, at 7:30 p.m. The show examines the conflicts which have arisen between traditional and newer ways of life in Carteret County, where groups with very different goals face the age-old problem of sharing a finite resource. The program suggests that sophisticated new planning systems may help promote cooperative solutions.

TOXIC ALGAE GETS NATIONAL PRESS

Pfiesteria piscimorte, the toxic dinoflagellate algae thought to be responsible for a number of massive fish kills in the Albemarle-Pamlico system in the past decade, was the subject of two national media reports last Spring.

First, the April issue of *Discover Magazine* carried a six-page article on *Pfiesteria* and the researchers at NC State who identified it. The article called the algae "one of the most bizarre creatures this world has ever seen."

Then, in May, ABC's "Good Morning America" filmed a segment on the algae with Dr. JoAnn Burkholder of NC State and Kevin Miller of the NC Division of Environmental Management. Burkholder discovered *Pfiesteria*, and Miller has been working extensively on it.

(*Pfiesteria* was also described in the March 1993 issue of the *Advocate*.)

MAILING LIST CHANGES

To get on or off the *Advocate* mailing list, or to have a mailing address changed, send the necessary information to *ADVOCATE*, Albemarle-Pamlico Estuarine Study, 1424 Carolina Avenue, Washington, NC, 27889.

THE ADVOCATE

is the newsletter of the Albemarle-Pamlico Estuarine Study, a project funded jointly by the US EPA and the State of North Carolina. The Study is intended to develop a Comprehensive Conservation and Management Plan for the Albemarle-Pamlico sounds and the rivers that feed them. The Study is part of the EPA's National Estuary Program. It is being conducted within the NC Department of Environment, Health and Natural Resources (DEHNR), POB 27687, Raleigh, NC, 27611-7687.

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