ACE Basin Economic Development Project
A Community-Based Plan for Economic Growth

A project has begun to develop a professional assessment and strategic plan for economic development compatible with protecting the natural resources of the ACE Basin.

Co-sponsors of the project are Colleton County Council, Colleton County Resource and Development Board, Walterboro-Colleton Chamber of Commerce and The Nature Conservancy.

Gene Butler, director of the Colleton County Resource and Development Board, stated, "This project is particularly appropriate since a 1993 study commissioned by Colleton County called for development of a strategic plan and recognition of the ACE Basin Project as a vehicle for economic growth.

"We anticipate addressing a variety of economic development opportunities including: forest products production, nature-based tourism, wildlife-oriented recreation, commercial fishing and certain cottage industries."

The Nature Conservancy has recognized the ACE Basin as one of 40 world-class ecosystems designated as a Bioreserve under the organization's Last Great Places Program. Through the Bioreserve Program, the Conservancy seeks to achieve ecosystem conservation through traditional habitat protection means, and by working with local communities to develop their economies in a manner consistent with maintaining functional ecosystems.

The Conservancy recognizes that the key to large-scale conservation of nature lies in sustainability, in striking a balance between the needs of people and the needs of their environment.

The Conservancy seeks to help the Basin's residents strike this balance by working with them to envision a sustainable future and develop strategies to attain that vision," said Michael Prevost, ACE Basin Bioreserve director for The Nature Conservancy.

The new two-year project will be directed by a steering committee composed of members from the four co-sponsoring organizations. The steering committee will invite natural resource-dependent business interests, citizens of local communities and members of the ACE Basin Task Force to participate in an ACE Basin Economic Forum.

Assisted by professional consultants, the Forum would determine the most significant opportunities, strengths and limitations relating to economic, community and continued environmental health in the ACE.

"The fundamental premise of the ACE Basin Project is that long-term habitat conservation and economic development, including traditional recreational and commercial uses of natural resources are compatible," said Prevost. "We are
very pleased to have this opportunity to work with local government and citizens in developing a community-based plan for compatible economic development.”

Goals of the project include:

- Assess compatible development opportunities.
- Assess the benefits to the community provided by various conservation and compatible development opportunities.
- Recommend a priority agenda for community action, including responsibilities for implementation, and a long-term structure for continuity.

Reserve Contaminants Studies Underway

Assisted with a grant from NOAA’s sanctuaries and reserves division, Dr. Tommy Mathews (SCDNR) and Dr. Geoff Scott (NMFS) have begun a study to assess the distribution of man-caused pollution sources in the ACE Basin National Estuarine Research Reserve.

According to reserve manager Mike McKenzie, this study is addressing an issue which has been identified as a priority research topic.

“The degree to which nonpoint source runoff has affected the ACE Basin is presently unknown but needs to be determined in the early stages of reserve operations.”

Previous studies on the effects of agricultural nonpoint source runoff in the headwaters of several creeks just north of the ACE Basin did not address the distribution of pollutants in sediments throughout the drainage basin.

The study will be similar in scope and methodology to a recent study in the North Inlet/Winyah Bay National Estuarine Research Reserve which characterized sediment contaminant levels. ACE Basin sediment samples will be analyzed for trace metals, PAHs (pollutants associated with highways), and pesticides.

Dr. Elizabeth Wenner, reserve research coordinator, said the chemical characterization of sediments in the ACE Basin is important at this time for several reasons.

The proposed construction of a four-lane highway through critical areas of the ACE Basin would create a potential source of PAHs and trace metal pollution. In the North Inlet study, highest PAHs concentrations in sediments were found in marshes and tidal creeks adjacent to major roadways in urbanized areas.

The timing of this study will provide a before and after picture of such contaminant levels in the ACE.

The study also will compliment a major agriculture runoff control project being implemented among farmers within the region through the Soil Conservation Service.

The study also will provide pertinent information for other chemical contaminant surveys in the southeastern U.S. and establish baseline data for better management of the NERRS.

In another closely related study, the historical record of non-point source pollution input into the ACE Basin and Sapelo Island NERRs is being examined by Dr. Wenner and Dr. Clark Alexander at the Skidaway Institute of Oceanography. This cooperative study between the two reserves is jointly funded through the S.C. Sea Grant Consortium and NOAA.

The main objective is to determine the extent to which contemporary trace-metal concentrations in the two reserves reflect man-caused inputs and to evaluate historical trends in such concentrations.
Parker and Amy Connor have generously donated a conservation easement that permanently protects 380 acres, the historic house and eight acres of camellia gardens at Oak Island Plantation on Edisto Island.

The easement will protect the agricultural values and Oak Island waterfront, while providing each of the Connor's three children with a place to build his own home.

The easement established the Lowcountry Open Land Trust's campaign to preserve rural and historic properties along the North Edisto River and throughout the island.

Mr. and Mrs. Connor have prohibited any further construction or the cutting of any mature trees on the eight acres, thus preserving the integrity of the site, which is listed on the National Register of Historic Places.

The Oak Island plantation house was built in 1828 by William Seabrook II and the grounds were designed by an English landscape gardener. In the tradition of his Seabrook ancestors, Mr. Connor restored the grounds, which support 400 varieties of camellias under towering pines and mature oaks.

Mr. Connor has won so many awards for his camellias that one national organization named him "America's foremost outdoor camellia grower."

Musselboro Island Easement

Dorothy Donnelley has donated an easement on the 953-acre Musselboro Island to the Wetland's America Trust, a subsidiary of Ducks Unlimited Inc. The easement limits development on the island to one house and perpetually binds the land to traditional usages such as farming, forestry and wildlife management.

"This donation typifies the generosity and commitment of the Donnelleys in protecting lands of the ACE Basin," said Coy Johnston of Wetlands America Trust.

Since 1988, the Donnelley's have donated more than 6000 acres of land for an addition to Bear Island Wildlife Management Area and the formation of the ACE Basin National Estuarine Research Reserve. They have also placed conservation easements on their personal holdings totaling more than 10,000 acres.

Little Palmetto Island Easement

The Lightsey Grandchildren's Partnership has placed an easement with Wetland’s America Trust on the 41-acre Little Palmetto Island. The easement provides for no subdivision of the property. The property is located in a wetlands management complex near the Donnelley Wildlife Management Area.

Donnelley Wildlife Trails

Backwater Trail

The 1.5-mile long Backwater Trail is the most recently completed trail on the Donnelley Wildlife Management Area. Located near the Highway 17 entrance, the trail is open year round during daylight hours. Bordered on two sides by the freshwater reserves, or “backwater,” of an old rice plantation, the trail meanders through a representative cross section of upland habitats of...
Visitors can walk through upland and bottomland hardwood forests, pass through a small stand of longleaf pines, and skirt the edges of the old backwater. Woodlands along the trail support a variety of wildlife including white-tailed deer, wild turkeys, and many species of songbirds.

**Boynton Trail**

Named for the Boynton family which farmed the property during the early 20th century, this 2.5-mile long trail is located in the interior of the management area and provides visitors with excellent opportunities to view a variety of wildlife. The trail follows an old mail road across rice field banks, through upland hardwood forests and then circles a managed wetland impoundment. In season, visitors may see waterfowl, southern bald eagles, ospreys, and a variety of wading birds. Alligators, river otters and white-tailed deer are also common. The trail is open from January 21 to October 31 from 8:00 a.m. to 5:00 p.m. Monday-Saturday. It is closed during special hunts in April and October.

For more information on these trails call Donnelley Wildlife Management Area - 844-8957.

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**ACE Committee Expanded To Reflect New DNR Role**

The ACE Basin Committee, with representatives from the major divisions of the old S.C. Wildlife and Marine Resources Department has added two new members to reflect the S.C. Department of Natural Resources which came into existence on July 1, 1994 as a result of restructuring of state government.

Representing the Land Resources Division is Cary Chamblee, deputy director of the division which provides a variety of land resource information and conservation planning assistance.

The division collects, analyzes and compiles information used to promote wise land management decisions, careful development and effective resource planning efforts in the state.

The division coordinates the National Aerial Photography Program for the state, administers the National Flood Insurance Program for South Carolina as well as the state's 46 Conservation Districts.

Also joining the committee is Anne Hale Miglarese, chief of the Resource Assessment and Planning Section of the Water Resources Division.

The RAP Section contains the Geographic Information Systems and Cartography Branch and the River Conservation and Planning Branch. The GIS Branch is developing statewide natural resource information used in assessment, planning and management programs for the state's diverse natural resources.

The Rivers Conservation Programs Branch include the Scenic Rivers program, the Edisto River Basin project, river corridor planning programs and the Beach Sweep - River Sweep Program.
A catfish not native to South Carolina appears to be chewing up the Edisto River’s famed redbreast fishery.

Flathead catfish were originally brought into South Carolina in 1964 from Arkansas as a trade for South Carolina striped bass fry and were stocked into Lakes Marion and Thurmond.

Voracious predators that feed mainly on smaller fish, flatheads have flourished in these two lake systems and provide a substantial commercial and trophy sportfishery. Because of the tremendous fish populations of herring and shad for flatheads to eat in these systems, little impact has been seen on other sportfish populations there.

From 1989 to 1991, DNR surveys began finding flatheads in the Edisto River. Since the SCDNR did not stock flatheads in the Edisto they apparently were introduced by ill-advised individuals.

Edisto River anglers have noticed a decline in the sportfishery for redbreast sunfish in recent years, as well as a drop in harvests of American shad.

Flathead catfish have grown to a tremendous size in the Edisto River, with several fish reportedly more than 70 pounds harvested by anglers. Flatheads more than 30 pounds are common.

Flathead stomachs have contained redbreast and other sunfish, American shad, bullheads and other catfish including smaller flatheads. According to one report, a flathead catfish even ate a small alligator. The state record flathead catfish is a 74-pounder caught in 1991 in the Wateree River.

Freshwater Fisheries Section biologists with the DNR are now investigating the extent of the flatheads’ range in the Edisto River and gathering data on the basic biology of the species, including age and growth, food habitats and size classes. From this study a management plan will be developed.

Because of the flathead’s excellent recreational and food value, anglers are encouraged to fish the Edisto River for this species. Most successful flathead anglers fish live bait in the deep holes around snags at night. Very heavy tackle is required because of the large-sized fish that might be encountered, and the small area in which to play them. Flatheads appear to be most abundant in the Edisto River between Canadys (US 15) and Cottageville (US 17A).

Whether the flathead population will continue to expand in the Edisto River or appear in other rivers such as the Combahee is unknown.

Donnelley Wildlife Management Area Timber Sale

Collums Lumber Mill of Allendale was awarded the contract to selectively thin 590 acres of pine timberland on the Donnelley Wildlife Management Area.

Wildlife habitat will be improved by opening the forest canopy allowing more sunlight to reach the forest floor. Additional sunlight combined with prescribed burning will encourage the growth of plants utilized by white-tailed
ACE Basin Conservation Sites

Public Sites

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Private Sites

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TOTAL                                                      | 108,035|

Editor's Note

ACE Basin Current Events is a product of the S.C. Department of Natural Resources' ACE Basin Committee. This committee integrates the comprehensive habitat protection and enhancement concept to the ACE Basin Project with appropriate resource management responsibilities of the Department's various Divisions. Current Events is published twice annually and is intended to inform the public of the Department's role as a member of the ACE Basin Task Force as well as communicate overall activities and cooperative accomplishments of other Task Force members including: Ducks Unlimited, Private Landowners, The Nature Conservancy and the U.S. Fish and Wildlife Service. Address correspondence to: ACE Basin Project, SCNR, Rt. 1, Box 25, Green Pond, S.C. 29446. All articles may not necessarily represent views of the Department.

Public Lands in the ACE Basin

Bear Island WMA
Hunting - Archery and gun hunts for deer; waterfowl hunting by drawing; dove and small game hunts also scheduled.*
Fishing - Fish and blue crabs can be harvested from impoundments from April 1 to Sept. 30.
Camping - Primitive facilities available for deer hunters and conservation groups by appointment.
General Public Use - Designated areas open for bird watching, photography and wildlife observation from Jan. 21 through Oct. 31. Mon.-Sat.

Donnelley WMA
Hunting - Archery and gun hunts (drawing only) for deer; waterfowl and turkey hunts by drawing; dove and small game hunts scheduled.*
General Public Use - Designated trails; Mon.-Sat. 8 a.m. - 5:00 p.m., closed on Sunday and during special hunts.
For more information on Bear Island WMA and Donnelley WMA call (803) 844-8957.

ACE Basin National Estuarine Research Reserve
Research - Support and facilities are provided for qualified scientists to study estuaries and coastal ecosystems.
Education - Education cruises, marsh classroom adventures, workshops and training sessions provided to organized groups.
General Public Use - Accessible by boat; primitive camping in specified areas; some restrictions.
For more Information call (803) 762-5400.

ACE Basin National Wildlife Refuge
Hunting - Archery, primitive weapons and shotgun hunts for deer. Waterfowl hunts in designated areas.
General Public Use - Open for public use except during scheduled hunts.
For more information call (803) 889-3084.
Office hours - 7:30 a.m. - 4 p.m.
(* See SCNR current Hunting and Fishing Rules and Regulations)
deer, wild turkey, bobwhite quail and songbirds.

The harvest also will release dominant trees in 290 acres of longleaf forest. This natural stand is currently overstocked resulting in slow growth. After the thinning, the remaining trees will have a better growth rate due to reduced competition for resources.

The overall goal of the forest management plan on Donnelley is to maintain a forested landscape while improving wildlife habitat on the area through the use of selective thinning and other modern forest management techniques. Funds derived from the sale of forest products are used to offset normal operating costs and to make capital improvements to roads and structures.

Forest Stewardship Program Aids Small Landowners

As part of the 1990 Farm Bill, small landowners now can receive assistance in multi use management of their forestlands through the Forest Stewardship Program. The program was created by the Forest Stewardship Act of 1990.

The goal of the program is to assist private landowners in becoming active stewards of their forestland through a multiple resources management approach. Resources considered include timber, wildlife, soil and water quality, recreation, aesthetics, as well as cultural and archaeological aspects.

The program is specifically targeted towards private, non-industrial forest landowners who own 10 acres or more and who: 1) have not actively managed their land in the past, 2) have managed their forest only for a single resource and now want to diversify, or 3) have been managing according to the multiple use principles promoted by the Forest Stewardship Program and desire recognition for their efforts.

Landowner participation is voluntary and signifies a landowner's personal commitment to the use of sound forest management practices. In no way are private property rights jeopardized.

The program is administered by the USDA Forest Service through each state's forestry commission which acts as the lead agency in their respective state. In addition to the South Carolina Forestry Commission, other cooperating agencies and organizations in South Carolina include the S.C. Department of Natural Resources, the Soil Conservation Service, and the Clemson University Cooperative Extension Service.

A team of public and private natural resource professionals, working with the landowner develop a unique Forest Stewardship Plan for each property. The Plan addresses primary and secondary objectives of the landowner while maintaining and enhancing the overall integrity of the environment. Plans initially are written to cover a 10-year period, but the program encourages updates at least every 5 years.

Technical assistance and educational opportunities assist landowners to carry out the management practices suggested in the plan. Landowners who have had an approved Stewardship Plan prepared and own less than 1,000 forested acres can apply for cost-share assistance under the Stewardship Incentive Program (SIP). SIP was created as a companion program to the Forest Stewardship Program to provide monetary incentives for carrying out the management practices suggested in the Stewardship Plan.

Mike Van Brackle has been hired to help with Stewardship Plan wildlife management recommendations by SCDNR for the Coastal Plain. His office is at Donnelley Wildlife Management Area, 844-8957.
The Fifth Annual ACE Basin Christmas Bird Count, held on New Year’s Day, drew 41 participants who tallied almost 27,000 birds of 134 species.

Most abundant species seen during the count included green-winged teal 3579, American coot 3028, yellow-rumped warbler 2545, white ibis 2200, northern pintail 1912, American wigeon 1800 and hooded merganser 1700.

All seven parties reported seeing bald eagles for a total of 43 adult and immature birds.

One of 1700 Audubon Society Christmas Bird Counts conducted throughout North America, the ACE Basin count is held in a 15-mile diameter circle centered at Brickyard Landing on the Ashepoo River and Bennett’s Point Road.

Count participants met at Wood Brothers Store at 7 a.m. and worked until dark in seven field parties that covered Donnelley and Bear Is. WMAs, the Edisto Unit of the ACE Basin National Wildlife Refuge, the ACE Basin National Estuarine Research Reserve and a number of private plantations.

“Once again, we appreciate the cooperation from private landowners in allowing access to their properties and contributing to the success of the count,” said compiler David Chamberlain.

No rare or unusual species were seen, and all field parties reported very low numbers of wintering sparrows and other small birds. For example, counters found only 41 white-throated sparrows, normally a species abundant in most upland areas.

Numbers were low for mallard, blue-winged teal, shoveler, gadwall and black duck, although Canada geese, snow geese and tundra swans were seen.

Christmas counts, begun in 1900 provide a nationwide data base used to determine long-term changes in species abundance, range shifts and migration patterns. About 10 counts are held each year in South Carolina.