South Carolina
Department of Natural Resources
www.dnr.sc.gov

DNR

The ACE Basin Project

The Ashepoo, Combahee and South Edisto (ACE) Basin represents one of the largest undeveloped estuaries on the east coast of the United States.

Dean Harrigal

The ACE Basin consists of approximately 350,000 acres of diverse habitats including pine and hardwood uplands, forested wetlands, fresh, brackish and salt water tidal marshes, barrier islands and beaches. The basin's unique estuarine system, the largest of its type in the state, provides invaluable habitat for a rich diversity of finfish and shellfish resources. The basin hosts a wealth of wildlife resources, including such endangered and threatened species as bald eagles, woodstorks, ospreys, loggerhead sea turtles and shortnose sturgeon, and offers a variety of recreational uses.

In the mid-1700s tidal swamps bordering the rivers were cleared and diked for rice culture. After the rice culture declined in the late 1800s, wealthy sportsmen purchased many of the plantations as hunting retreats. The new owners successfully managed the former ricefields and adjacent upland areas for a wide range of wildlife. This tradition of land stewardship has continued throughout the 20th century. Because of their importance to waterfowl, these former ricefields have been identified for protection under the North American Waterfowl Management Plan. The ACE Basin also has been designated as a world class ecosystem under The Nature Conservancy's Last Great Places program.

In 1988, the ACE Basin Project was launched when Ducks Unlimited (DU), The Nature Conservancy (TNC), the South Carolina Department of Natural Resources (SCDNR), the U.S. Fish and Wildlife Service (USFWS) and private landowners formed a coalition known as the ACE Basin Task Force. Westvaco Corporation, the Lowcountry Open Land Trust (LOLT) and Nemours Wildlife Foundation joined the Task Force in 1998. The mission of the ACE Basin Project is to maintain the natural character of the basin by promoting wise resource management on private lands and protecting strategic tracts by conservation agencies. A major goal of the protection efforts is to ensure that traditional uses such as farming, forestry, recreational and commercial fishing and hunting will continue in the area.

Task Force members provide each other with technical and logistical support in all phases of the Project. Ducks Unlimited and TNC worked closely with public resource agencies in acquiring many of the lands available for public access. Through the Private Lands Program, private landowners are provided technical assistance in wildlife habitat management by representatives of the Task Force members.

SCDNR manages Donnelley and Bear Island Wildlife Management Areas and the ACE Basin National Estuarine Research Reserve. The USFWS manages the ACE Basin National Wildlife Refuge. These areas provide public access to nearly 50,000 acres.

Ducks Unlimited, The Nature Conservancy, and the Lowcountry Open Land Trust work with private land owners in protecting their properties through conservation easements and stewardship agreements. The biologists of the nonprofit Nemours Wildlife Foundation conduct research and educational programs in wildlife conservation and resource stewardship. Westvaco corporation is the largest private land owner in the basin and formally endorsed the concepts of the Project with a memorandum of understanding in 1991.

Private property owners play the largest role in the protection of the Basin. Landowners have protected more than 60,000 acres through measures including conservation easements. Easements are perpetual restrictions to preserve the natural values and protect wildlife habitat, while sustaining traditional land uses such as timber management, agriculture, hunting and commercial and recreation fishing. In addition to providing landowners with the satisfaction of protecting lands for future generations, conservation easements may entitle landowners to certain charitable benefits. Easement properties may be sold or inherited, but conservation easements remain in place.

Publicly managed lands serve to maintain and enhance habitat diversity (uplands, forested wetlands, fresh, brackish and salt marshes) while improving recreational and educational opportunities. Public ownership of property is an essential element of the Project because unique resource components and critical habitats require intensive management and protection efforts. Public land acquisition constitutes only a limited portion of the total basin project.

In addition to the ecological value of the basin, the region is rich in history. Historic and cultural landmarks such as old plantation homes, forts, cemeteries and churches are being preserved through the ACE Basin Project.

Large-scale protection of these exceptional natural resource and cultural values represents our generation's contribution to the enhancement of society in the 21st century.

Private Landowners

DNR

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NEMOURS WILDLIFE FOUNDATION

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Donnelley Wildlife Management Area

The 8,048-acre Donnelley Wildlife Management Area (WMA) is located in eastern Colleton County near Green Pond. The main entrance to the area is immediately north of the junction of SC 303 and US 17. All guests are required to check in at the kiosk located near the main entrance.

Donnelley WMA is named in honor of the late Gaylord Donnelley and his wife Dorothy for the contributions they made to the ACE Basin Project and conservation across the continent. Donnelley WMA is managed by the SCDNR through agreements with Ducks Unlimited, and the U. S. Army Corps of Engineers, the principal landowners of the management area.

The National Wild Turkey Federation purchased and donated additional land to the Donnelley WMA. Other groups cooperating in the establishment of this WMA include The Nature Conservancy, the United States Fish and Wildlife Service, Dow Elanco and the National Fish and Wildlife Foundation.

This unique property is a cross section of the lowcountry, encompassing a diversity of wetland and upland habitats: managed ricefields, forested wetlands, tidal marsh, agricultural lands, and a variety of upland forest types, including a natural stand of longleaf pine.

The area is intensively managed by the DNR to provide optimum habitat for a wide variety of wildlife and to provide public recreation and education. The area has two designated nature trails and miles of dirt roads for hikers and bicyclists. Late winter through early spring provides bird watching opportunities to observe a variety of species including waterfowl and migratory songbirds. Alligators are abundant in the managed wetlands and are most often seen from late February through mid-November. Hunting opportunities are available to the public for white-tailed deer, wild turkey, waterfowl, dove, small game and furbearers.

Except during special hunts, this area is open durng daylight hours. Boynton Nature Trail is closed November 1 through February 9. Office telephone 843-844-8957. Address: SCDNR, 585 Donnelley Dr., Green Pond, SC 29446.

Dean Harrigal

Bear Island Wildlife Management Area

Bear Island Wildlife Management Area is owned and operated by the South Carolina Department of Natural Resources. The 12,021-acre property consists of 5,385 acres of managed wetlands, 5,005 acres of tidal marsh, 1,227 acres of woodlands and 404 acres of agricultural lands.

The area is managed to provide quality habitat for wintering waterfowl, and other wetland wildlife including threatened and endangered species such as woodstorks and bald eagles; to provide habitat for upland game and nongame species; and to provide recreational opportunities for the hunting and nonhunting public.

Public hunting on the WMA includes waterfowl (by special drawing only), white-tailed deer, mourning dove and small game. The diverse area provides excellent bird watching, attracting waterfowl, bald eagles, wading birds, shorebirds and song birds. Two observation platforms and miles of dikes provide access. The area is open for general public visitation in designated areas from Feburary 9 - October 31, during daylight hours. Telephone: (843) 844-8957. Address: SCDNR, 585 Donnelley Dr., Green Pond, SC 29446.

ACE Basin National Wildlife Refuge

The ACE Basin National Wildlife Refuge is managed to provide a complex of habitats for a diversity of wildlife. Habitats are maintained and managed for endangered species, wintering waterfowl, other migratory and resident birds, mammals, reptiles, amphibians, and plants.

Impoundments (formerly rice fields) are managed for habitat conditions favored by various wetland wildlife species. Forest management includes selective thinning of trees, clearing to create edge zones, hardwood and shrub planting, and burning of some forest understories.

The refuge office, a former rice plantation house built in 1828, is one of only three antebellum mansions in the ACE Basin that survived the Civil War. Former owners ensured its preservation by placing it on the National Register of Historical Places.

The public is permitted to visit the refuge year-round, during daylight hours. Access to tidal waters by boat is permitted throughout the year. Recreational opportunities include fishing in the tidal creeks and fresh water streams, a limited hunting season, wildlife observation, photography, and nature study.

For more information write: Refuge Manager, ACE Basin National Wildlife Refuge, P.O. Box 848, Hollywood, SC 29449, or call (843) 889-3084, Monday-Friday, 7:30 a.m. - 4:00 p.m. http://ACEBASIN.fws.gov

U.S. Fish and Wildlife Service

Dungannon Heritage Preserve

The 643-acre Dungannon Heritage Preserve in Charleston County was acquired to protect one of the top nesting colonies of the federally endangered wood stork in South Carolina. It also provides nesting and feeding habitat for numerous other birds including osprey, anhinga, great egrets, and great blue herons.

Dungannon Heritage Preserve consists of two primary habitat types: 320 acres of bald cypress-tupelo gum swamp and 323 acres of mixed upland forest. The bald cypress-tupelo gum swamp was created in the 1800's to provide a freshwater reserve for downstream rice fields. The reserve now provides nesting habitat for the wood stork.

Dungannon Heritage Preserve contains several excellent trails where the visitor can walk through the property with ease. The best months for viewing nesting birds are April – June. For information contact (843) 844-8957.

For more information on these and the rest of the DNR managed lands, please visit ***https://www.dnr.sc.gov/mlands/lookup/***.

S.C. Department of Natural Resources

National Estuarine Research Reserve

The ACE Basin National Estuarine Research Reserve (NERR), designated in 1992 and managed by the Marine Resources Division of the DNR, encompasses more than 140,000 acres, including 60,000 acres of open water, 70,000 acres of salt marsh, along with freshwater wetlands and upland communities of pine and maritime forests.

The core area is comprised of seven marsh and barrier islands, encompassing more than 13,000 acres of wetlands and uplands, accessible only by boat. The buffer zone is 128,000 acres of diverse natural and managed communities. Habitat diversity coupled with the absence of industrial pollution and commercial development, contribute to the Reserve's importance for many terrestrial and aquatic species.

For more information contact the Marine Resources Division, P.O. Box 12559, Charleston, SC 29422, (843) 953-9001

Caw Caw Interpretive Center

Charleston County Parks

The Caw Caw Interpretive Center is comprised of several former rice plantations that operated during the 18th and most of the 19th century. Still evident today are the earthen dikes, rice trunks, and canals. Today, the site is a wildlife sanctuary for over 350 species of plants, over 230 species of birds, and many other animals such as otters and alligators. Hours are Wed-Fri 9am-3pm. Sat & Sun 9am-5pm. Closed Mon & Tues. No pets or bicycles allowed. Individual admission is $1.00. 5200 Savannah Hwy., Ravenel, SC 29470. (843)889-8898.
www.ccprc.com/cawcaw.htm

Edisto Interpretive Center

The Edisto Interpretive Center is a joint effort between the South Carolina Parks, Recreation and Tourism and the South Carolina Department of Natural Resources. The 8,000 square foot facility is located on Edisto Beach State Park property near Live Oak Landing. The Center opened to the public in May 2004 with the purpose of educating tourists, residents, school groups and the general public about the ecological, cultural and historical aspects of the ACE Basin.

Philip Jones

The Center contains an exhibit hall with videos, hands-on exhibits and aquaria for educating visitors about the ACE Basin. The Center has a conference room and classroom for formal and informal education programs that are offered by both Edisto Beach State Park and Department of Natural Resources staff.

The Edisto Interpretive Center offers a range of programs. Please call (843) 869-4430 to inquire about current programs, times and fees. There is no admission to the center and it is open Tuesday through Saturday 9 a.m. - 4 p.m.

Great Swamp Sanctuary

Located within the city limits of Walterboro and only 5 minutes from Interstate 95, the Great Swamp Sanctuary forms the headwaters of the Ashepoo River, one of the 3 rivers that make up the ACE Basin drainage. The swamp consists of a braided stream bottomland hardwood swamp along with adjacent areas of upland hardwoods and spruce pine/mixed hardwoods. The area has a large degree of diversity and supports a large population of wildlife including white-tailed deer, beaver, bobcats and numerous bird species. The hardwood areas support abundant warbler populations during spring and fall migration. The endangered American wood stork utilizes the area for foraging grounds. There is a canoe trail and well developed 3 mile woodland trail system. The area is located adjacent to US Hwy 63 (South Jefferies Blvd) just north of its junction with Interstate 95. The area is open from sunrise to sunset. For more information contact the City of Walterboro at 843-549-2545

Paddling the ACE

Paddling a canoe or kayak on one of the ACE Basin's three rivers and assorted tributaries offers one of the best ways to observe wildlife, and the area's abundant natural beauty and cultural heritage.

Some of the more spectacular wildlife species vary with season.

During the winter, nesting bald eagles soar over all these areas and on sunny days alligators bask on the banks. In the summer, ospreys fish in the creeks, and both Mississippi and swallow-tailed kites glide above the treetops. In spring and summer, tropical migrant songbirds sing from forested creek banks.

Some of these trips begin or end in places without boat ramps, requiring paddlers to "throw-in" or "haul-out" their boats.

The following half-day trips rank among the most popular and accessible to ACE paddlers:

Dean Harrigal

Combahee River

The Combahee River and its tributaries are well known for abundant bird life (see Cruising the Combahee - "SC Wildlife" - Jan-Feb '95). During the fall and winter, eagles and waterfowl are common. Spring brings migratory songbirds and numerous ospreys and Mississippi kites. Cruising alligators are common during the warmer months. The river borders several segments of the ACE Basin National Wildlife Refuge and there are many old broken-banked ricefields available for exploration. Visitors may recognize scenery from the movie "Forrest Gump" as they paddle the river. Freshwater fishing for redbreast and largemouth bass is excellent.

Trip: US 17-A to Line Canal

Launch: County Landing, US 17-A, Yemassee
Land: Line Canal bridge-Road 66 just beyond Bluff Plantation near White Hall, Colleton County
Length: 5 hours
Tide: Put in on falling tide. Tides are 5-6 hours behind Charleston Harbor.
Highlights: River view of Cherokee Plantation, boat house and main house, and large expanses of broken ricefields. The bluff at the junction of Line Canal and the Combahee River is where Forrest fished with his son. Several sand bars offer swimming opportunities.

Trip: Line Canal to Steel Bridge

Launch: Throw-in at Line Canal bridge on Road 66 at Bluff Plantation near Whitehall, Colleton County
Land: Steel Bridge Landing, U.S. 17, Beaufort County
Length: 5-6 hours by kayak. Experienced canoers, 8 hours. Not recommended for inexperienced canoeists.
Tide: Recommended early falling tide only. Tides are 5 hours behind Charleston at launch site.
Highlights: "Forrest Gump" scenery of Bluff Plantation, view of Parkers Plantation on Beaufort side (former home of W. Somerset Maugham).

Trip: Cuckhold's Creek to US 17

Launch: Cuckhold's Creek Landing, Road 66 near White Hall, Colleton County
Land: Steel Bridge Landing, U.S. 17, Beaufort County
Length: 5-6 hours
Tide: Launch on early falling tide. Tides at Cuckhold's landing are 5-6 hours behind Charleston Harbor.
Highlights: Excellent bird habitat in Cuckhold's Creek with broken bank ricefields available for exploring. During late spring and early summer spider lilies bloom along the banks. A view of the Combahee Plantation house on the right is available shortly after put in. Once Cuckhold's Creek enters the Combahee, wind and tides can make for difficult paddling.

Ashepoo River

The Ashepoo River is the smallest of the three rivers in the ACE. The upper reaches of the river flow through bottomland hardwoods which give way to small tidewater ricefields. As the river nears US 17, it widens into a classic meandering tidewater river. Bird life on the river is abundant and freshwater fishing excellent.

Trip: SC 303 to US 17

Launch: Throw-in at SC 303 bridge near Ritter in Colleton County. Parking is restricted to roadside near the bridge.
Land: Joe's Fish Camp east of US 17. Ample parking - fee charged.
Length: 4-5 hours by canoe.
Tide: This trip can be accomplished during any tide. However, putting in on a falling tide is recommended. The tide at SC 303 is 5-6 hours behind Charleston Harbor.
Highlights: The early stretches of the paddle flow through densely canopied bottomland hardwoods. A late October, to mid-November trip can be highlighted by beautiful fall foliage. About three-quarters of the way through the trip take the large canal to the left which leads to historic Bonnie Doone Plantation. Now owned by the Charleston Baptist Assoc., the grounds and house may be viewed from the canal. Just below Bonnie Doone broken dike ricefields offer opportunities for exploring.

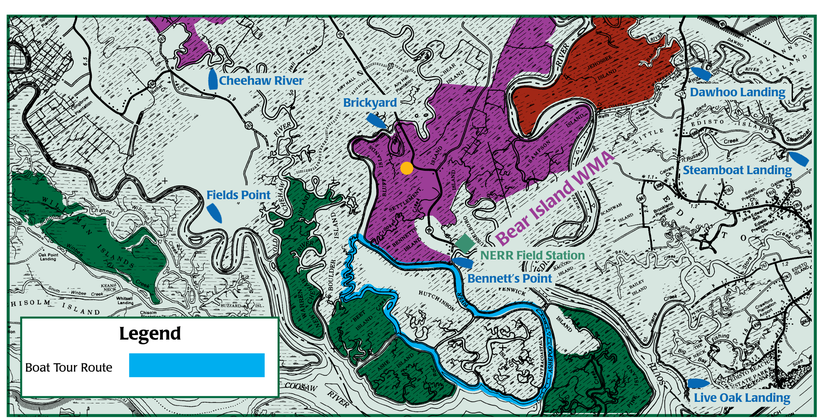
Trip: SC 64 to US 17

Launch: Throw-in at SC 64 bridge on Horseshoe Creek near Jacksonboro, Colleton County. Roadside parking only.
Land: Joe's Fish Camp just east of US 17. Ample parking; fee charged.
Length: 3 hours. Price's Bridge landing offers a convenient lunch ground as well as an opportunity for a shorter trip.
Tide: Tides do not affect the upper reaches of Horseshoe Creek but planning a trip to coincide with the falling tide in the Ashepoo may be advisable. High tide at the US 17 bridge is 4-5 hours after Charleston Harbor.
Highlights: The upper reaches flow through closed canopy bottomland hardwoods then open into old tidewater ricefields.

Trip: Feefarm Creek to Brickyard Landing

Launch: Throw-in at Feefarm Creek Bridge on Bennett's Point Road (Road 26). Roadside parking only.
Land: Brickyard Bridge Landing on Road 26.
Length: 5-6 hours. Recommended for kayaks only.
Tide: It is important to travel on early falling tide. Tides at Feefarm are 4-5 hours after high tide in Charleston Harbor.
Highlights: Feefarm Creek was named because a lawyer in earlier days was given a farm bordering the creek as a fee for services rendered. This relatively deep creek offered schooner access for plantations bordering the creek. After entering the Ashepoo, notice the changes in vegetation as you pass from fresh into more saline environment. The old Seaboard Coast Line which crosses the river above Airy Hall Plantation marks the official fresh/salt dividing line. Airy Hall Plantation house is located on a bluff overlooking the river. In the lower reaches of the river, wind and currents can make paddling more difficult.

Dean Harrigal



Edisto River

The Edisto is the largest of the three rivers forming the ACE Basin and is the longest true blackwater river in North America. While there are numerous float trip opportunities, the two below are easy one-half day trips.

Trip: Martins Landing to Westbank

Launch: Martins Landing off Road 38 in Charleston County
Land: Westbank Landing off Road 30 in Colleton County
Length: 3-4 hours by canoe depending on river currents and tide
Tide: Tide is 3-4 hours behind Charleston Harbor
Highlights: This stretch of the river flows through bottomland hardwoods. A late fall float may offer beautiful autumn colors.

Trip: Penny Creek to Willtown Bluff

Launch: Penny Creek Landing off Road 38 in Charleston County
Land: Willtown Bluff Landing at the end of Road 55 in Charleston County
Length: 3 hours by canoe
Tide: Put in on early falling tide. Tides at Penny Creek are 2 hours behind Charleston Harbor.
Highlights: The small creek widens and empties into the Edisto. There are numerous small creeks to explore. Large rice plantations border the river along this section. Willtown Bluff is the site of one of the earliest settlements in South Carolina.

Boating Trail

This 15-mile route allows small boat operators to view much of the ACE Basin National Estuarine Research Reserve (NERR), and the flora and fauna typical of this environment. The trail should not be attempted by boats more than 20 feet in length, and a navigational chart and depth finder are highly recommended. Because of shallow water in some sections, the trail should be run on a rising tide to avoid being stranded.

The trail offers good fishing at several spots. A Marine Recreational Fisheries Stamp is required to fish from a private boat or to gather oysters and clams in this area.

Depart from Bennett's Point Public Boat Landing on Mosquito Creek and head south, entering the Ashepoo River. Turning east, or seaward, travel approximately 1.4 miles to the intersection of the Intracoastal Waterway on the right at Day Marker #166. At this location you can see North Fenwick Island on the left and North Hutchinson Island - South Hutchinson Island on the right. Privately-owned Hutchinson Island is divided by the Ashepoo/Coosaw Cut, dug by the U.S. Army Corps of Engineers in the 1940s.

Continue east on the Ashepoo River for approximately 1.6 miles to privately-owned Fenwick Island divided by Fenwick Cut which connects the Ashepoo River to the South Edisto River.

Dean Harrigal

Continuing east on the Ashepoo River, travel another 1.3 miles until Pine Island becomes visible across the marsh grass on the left. About 1.5 miles farther south on the Ashepoo River, Otter Island, part of the NERR, appears on the left at Day Marker #2. Otter Island faces the Atlantic Ocean and St. Helena Sound.

From this same spot you can see Harbor Island and Hunting Island State Park to the south and Morgan Island to the west. Continue south into St. Helena Sound for approximately 0.4 miles to Day Marker #1. During spring and summer the open waters of the sound provide good fishing grounds for pelicans, royal terns, Caspian terns, and Forster's terns, as laughing gulls cruise overhead. In the winter, look for double-crested cormorants, common loons and scaup, while herring gulls, ring-billed gulls and Boneparte's gulls mostly replace the laughing gulls of summer.

Turn west (or right) around Day Marker #1 and enter a narrow channel into Rock Creek. This channel should be navigated with the aid of a compass and chart. At low tide look for a variety of shorebirds foraging on the extensive mud and shell flats on both sides of the channel. This area can experience rough water during bad weather.

Continue up Rock Creek approximately 1.6 miles to Ashe Island, a natural shell mound to the west (left). The marsh expanse on the right is part of South Hutchinson Island. Another mile farther along the creek the trail passes the other end of Ashepoo/Coosaw Cut at Day Marker #173. Here the trail follows the Intracoastal Waterway for about 0.9 miles to Day Marker #177. The impoundments on the left drain the dredge spoil pumped from the Intracoastal Waterway during maintenance.

Turn north, or right, at Day Marker #177, leave the Intracoastal Waterway, and again enter Rock Creek. This section of Rock Creek becomes narrow and shallow, meandering for approximately 5.6 miles until rejoining the upper Ashepoo River. Boats greater than 20 feet should use caution and attempt this section only on an incoming tide.

NERR-owned Beet Island can be seen and accessed on the left. The marshes, waterfowl impoundments and uplands on the right throughout the remainder of Rock Creek are part of North Hutchinson Island, privately-owned and used for hunting and recreation by its owners and guests. Approximately 0.5 miles past Beet Island and on the left, the backside of the Boulder Island complex can be seen. This section of Rock Creek is abundant with estuarine life, including wading birds, shrimp, crabs and alligators. In this area of lower salinity, salt marsh cord grass (spartina) which dominates higher salinity areas, changes to black needle rush (juncus) which is not as tolerant of high salinity.

Rock Creek eventually returns to the Ashepoo River. Here, turn right with a view of Bear Island Wildlife Management Area on the left. North Hutchinson Island continues on the right. Approximately 1.4 miles down stream the Ashepoo River passes the dock, club house and barns of Hutchinson Island on the right. Approximately 1.1 miles past these structures is the entrance to Mosquito Creek, returning you to Bennett's Point Landing.

This trip is an ideal half-day outing with stops along the way to fish or view wildlife.

Driving the ACE Basin

West Side

Begin this driving tour by turning off US 17 onto SC 303 about 10 miles south of Jacksonboro. After about 2.5 miles the road passes through the tiny town of Green Pond. Along the roadsides just beyond Green Pond look for a variety of lowcountry wildflowers blooming in season such as leopard's bane, brown-eyed susan, partridge pea, goldenrod and many others.

The highway then crosses the upper Ashepoo, just a tiny trickle of water through bottomland hardwoods. In the open areas on both sides of road grow blackberries, elderberries, arrow weed, and across the old bridge on left, native wisteria blooms in spring.

After about another mile turn left onto state road Road 41, also known as Ritter Road.

This road soon crosses the upper Ashepoo again. At the bridge and in the cypress/tupelo swamp just beyond look for red-shouldered hawks, yellow-crowned night herons, and in the spring listen for the ringing songs of prothonotary and hooded warblers. At dawn and dusk the raucous calls of barred owls echo from the dark swamp.

Continue a mile and a half to the little settlement of Catholic Hill, dominated by the quaint St. James Catholic Church. The historical marker in the church yard tells of settlers from Ireland that emigrated to the area and built the first church here in 1832.

Two miles beyond Catholic Hill turn left onto White Hall Road (Road 119). On the right, a cattle pasture dotted with isolated live oaks provides good habitat for blue birds, loggerhead shrikes, cattle egrets, and Mississippi kites. Well off the road on the right, a wood stork rookery has developed in recent years and these large wading birds regularly soar overhead during the spring and early summer.

Farther along the road a white fence on the right leads eventually to the entrance to White Hall, a former rice plantation. The historic house with it avenue of live oaks can be observed from the road but is private property.

After crossing the railroad tracks, turn right onto Combahee Road (Road 66) at the sign for Cuckhold's (locally pronounced "Ker-kel's") Creek landing. To reach the landing, turn left onto the dirt road at a country church. The landing lies just a few yards beyond at a languid eddy on a bend of the creek which eventually empties into the Combahee River. A large beech tree grows on the right of the landing, and on the left a red cedar embraces a water locust. A dense stand of arrowhead lines the far side of the narrow creek.

On leaving the landing take the dirt fork to the left back to the paved road and turn left, crossing the creek. Broken-bank rice fields, dominated by cattails, wild rice and plume grass crowd against the roadway on both sides. In late summer look for the tall pink blooms of seaside mallow, a type of wild hibiscus.

Perpendicular to the road, a canal which probably once served to flood the upper field (on the right) runs straight off the creek through a cypress covered break in the original dike along the creek. The canal passes under the road bed, originally a cross dike during the rice planting days.

The remainder of this driving trail now skirts first the east side and then the west side of the upper Combahee River, once the major rice growing area of the present ACE Basin. Most of this area consists of private plantations, many formerly owned by Nathaniel Heyward, who conducted the state's largest rice growing operation.

Just past the entrance to Combahee Plantation the road passes through a stand of spruce pine mixed with hardwoods and then crosses a managed wetland growing in giant foxtail grass, smart weed and other waterfowl food plants. This area will be kept dry in spring and summer to encourage growth of these plants, then burned in the fall and flooded to attract waterfowl during the winter. Well off to the right and just visible from the road sits the live oak made famous in the movie "Forrest Gump."

The route then passes the entrance to Bluff Plantation with a spectacular avenue of live oaks behind an ancient brick fence. Continue to the entrance of Cherokee Plantation, a huge private holding, and notice the other old canals used to move water from the tidal river inland to the old rice fields. Eventually hardwoods give way to planted pine as Combahee Road approaches US 17A. Here turn left and after crossing the Combahee, proceed to the little town of Yemassee, a distance of about 7 miles.

At the flashing light in Yemassee, turn left and drive about three-tenths of a mile, then left again just before the double railroad tracks. After less than half a mile, turn right onto River Road and cross the tracks. River Road traces the west side of the Combahee, passing several old rice plantations and eventually ending at US 17.

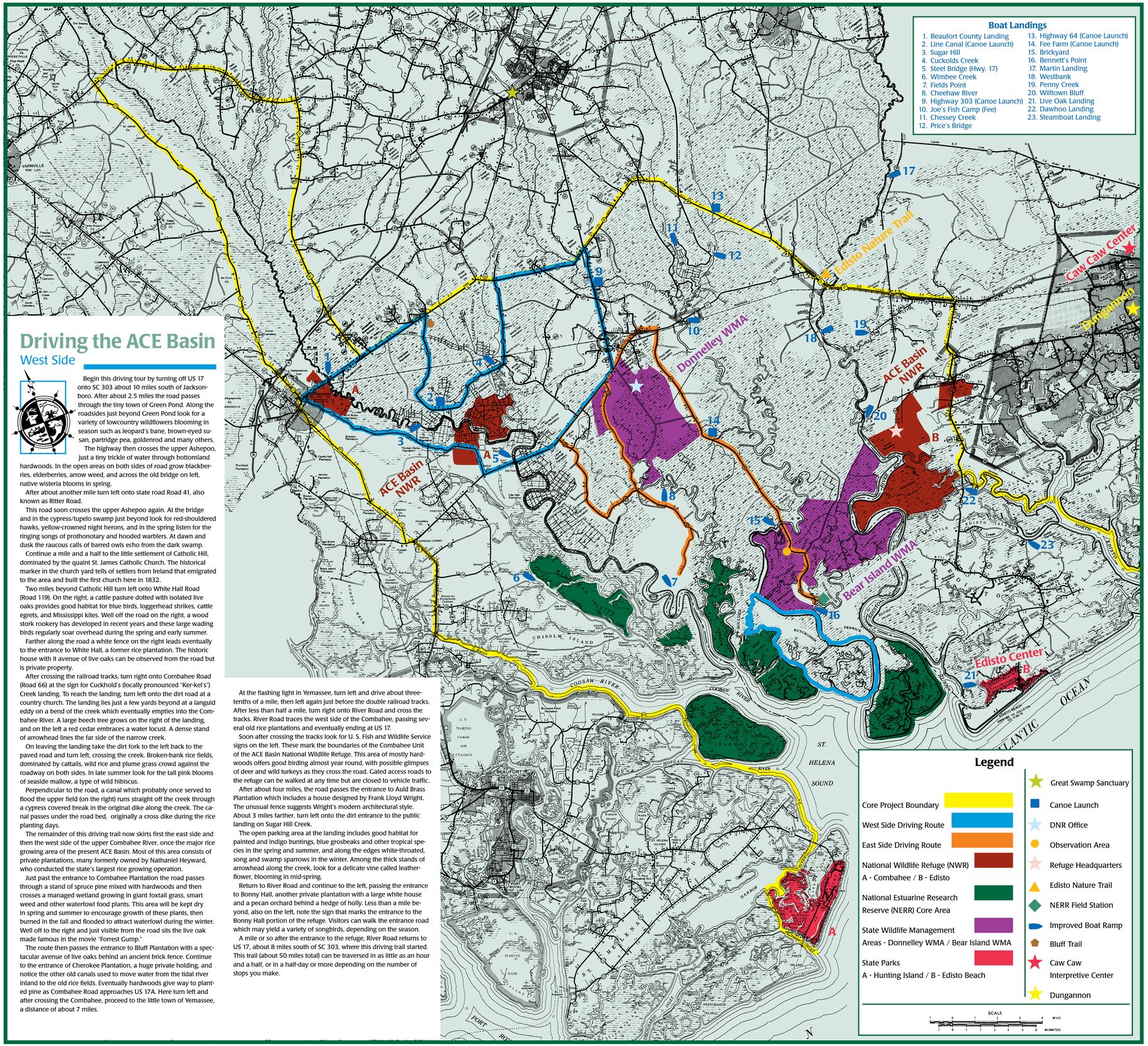
Soon after crossing the tracks look for U. S. Fish and Wildlife Service signs on the left. These mark the boundaries of the Combahee Unit of the ACE Basin National Wildlife Refuge. This area of mostly hardwoods offers good birding almost year round, with possible glimpses of deer and wild turkeys as they cross the road. Gated access roads to the refuge can be walked at any time but are closed to vehicle traffic.

After about four miles, the road passes the entrance to Auld Brass Plantation which includes a house designed by Frank Lloyd Wright. The unusual fence suggests Wright's modern architectural style. About 3 miles farther, turn left onto the dirt entrance to the public landing on Sugar Hill Creek.

The open parking area at the landing includes good habitat for painted and indigo buntings, blue grosbeaks and other tropical species in the spring and summer, and along the edges white-throated, song and swamp sparrows in the winter. Among the thick stands of arrowhead along the creek, look for a delicate vine called leatherflower, blooming in mid-spring.

Return to River Road and continue to the left, passing the entrance to Bonny Hall, another private plantation with a large white house and a pecan orchard behind a hedge of holly. Less than a mile beyond, also on the left, note the sign that marks the entrance to the Bonny Hall portion of the refuge. Visitors can walk the entrance road which may yield a variety of songbirds, depending on the season.

A mile or so after the entrance to the refuge, River Road returns to US 17, about 8 miles south of SC 303, where this driving trail started. This trail (about 50 miles total) can be traversed in as little as an hour and a half, or in a half-day or more depending on the number of stops you make.



Driving the ACE Basin

East Side

Although the majority of the ACE Basin's 350,000 acres are in private ownership or accessible only by boat, several roadways probe the heart of the basin, offering glimpses of the area's varied habitats. The route we have chosen requires some backtracking, but return trips present new viewing angles and another chance to observe the abundant wildlife. Because most of the ACE Basin consists of private property, our tour follows public roads with stops at boat landings and other public access points. Older or physically impaired wildlife watchers may easily enjoy the sights and sounds of the wetlands that surround us on this driving tour.

Our journey begins 7 miles below Jacksonboro on US 17 and ends about 60 miles later just a few miles farther south, again on US 17. The entire trip requires at least half a day with plenty of opportunities to stop and observe the ACE Basin's unique collection of habitats.

Traveling out of Jacksonboro, turn left off US 17 onto Bennetts Point Road (Road 26). After driving 10.5 miles through mostly mixed pines and hardwoods, park at Brickyard Boat Landing on the right of the roadway. A short walk to the top of the bridge over the Ashepoo River provides one of the few elevated views of the ACE Basin's tens of thousands of acres of managed wetlands and tidal marshes.

The Ashepoo River bisects the wedge-shaped ACE Basin, while the Combahee and Edisto rivers more or less define the basin's borders. This driving tour crosses only the Ashepoo among the namesake rivers. Swirling beneath the bridge the dark, muddy waters flow seaward (to the right) on the ebb tide and inland (to the left) on the flood tide. Nutrients trapped by this ebb and flow sustain the basin's abundant flora and fauna. Barn swallows nest on the bridge supports, and migrating tree swallows, rough-winged swallows, and occasionally bank swallows and cliff swallows dart and swoop beneath the bridge or rest on the adjacent powerlines. Watch these wires throughout our trip, as birds perch along them like clothespins on a laundry line.

On the right along the brackish river, black needle rush dominates the wet, Irregularly flooded landscape. Slightly higher hummocks support thick forests of palmetto, pine, oak and wax myrtle. To the left of the roadway, stretching to the east, the natural environment has been altered to create impoundments where water levels can be controlled. Giant cord grass grows abundantly along the dikes that hold these brackish waters, while thick stands of cattails emerge from the shallows.

The entire vista, on both sides of the road, encompasses just part of the 12,000-acre Bear Island Wildlife Management Area, a state-owned property managed for wintering waterfowl and other wetland wildlife. In the vast expanse of sky above this watery, grassy plain look for soaring eagles, anhingas, wood storks and vultures. In fall and winter active flocks of wigeons, teals, pintails, mallards, black and other puddle ducks crisscross these productive marshes.

One mile from Brickyard Bridge a viewing platform provides a close up view of a managed wetland. The ACE Basin contains some 26,000 acres of managed wetlands, many created during the colonial rice cultures of 17th-19th centuries. Flocks of waterfowl, wading birds and coots can be seen from this vantage point.

Driving another 1/4 mile along Road 26 we arrive at the main entrance (on the left) to Bear Island WMA. The area offers a variety of public recreational opportunities and a full visit takes several hours (see section on Bear Island WMA). A quick stop at the kiosk allows a view of a variety of wildlife in the wetlands on either side. The many species of waterfowl, abundant in the fall and winter, dwindle mostly to mottled ducks during the remainder of the year. The gate area, however, often provides a good look at herons, egrets, cormorants, coots, willets, yellowlegs, wood storks, terns, gulls and many other birds, dependent on season and water levels. Bald eagles (at least 37 pairs nest in the ACE Basin) regularly soar overhead and perch sometimes in the trees on the far edge of the impoundment to the right of the gate.

Here, as in many of the basin's old rice fields, alligators sun on the banks or float partially submerged, just their eyes and nostrils showing. Blue crabs patrol the shallow edges of the dark waters, and mullet occasionally jump in the canal on the left of the access road. Juvenile saltwater fish and invertebrates ride the flooding tides into impoundments; those capable of tolerating a wide range of salinity survive and grow, establishing a highly productive food chain.

At the edge of this wetland, a water control structure, built of heavy treated timbers, regulates flow to maintain precise water levels. These primitive-looking trunks, developed by the early rice planters for use throughout the coastal area, and needing few refinements in 300 years, can be adjusted to manipulate movement of the tide into or out of the impoundments. Waterfowl managers, by controlling water levels, enhance the growth of wigeon grass and other food plants preferred by wintering waterfowl. Given the basin's very flat topography, so close to sea level, just a few feet of tidal rise or fall will submerge or drain hundreds of acres in a matter of hours.

Returning again to the paved road, drive 3 miles and follow the road to the right another quarter of a mile to Bennett's Point Landing. On the left, just before the landing is the field station for the ACE Basin National Estuarine Research Reserve. This facility provides quarters and dockage for scientists studying the pristine waters of the St. Helena Sound. Adjacent to the landing, B & B Seafood Co. typifies the many small, isolated commercial seafood docks along the South Carolina coast. Across Mosquito Creek (a tributary of the Ashepoo River), acres of saltmarsh stretch into the ACE Basin's National Estuarine Research Reserve. From the landing look for brown pelicans, several species of gulls and terns and, in the fall and winter, such typical saltmarsh inhabitants as horned grebes, red-breasted mergansers and double-crested cormorants.

Having reached the end of Road 26, we now must retrace our route back to US 17, watching for deer, turkeys, gray and fox squirrels along the wooded areas, and in the spring and summer along the open areas, the azure flash of indigo buntings and blue grosbeaks. The shoulders of the roadway support, in season, a variety of wildflowers including colic-root, skullcap, orange milkwort, coral bean, wild sweet potato and phlox.

Road 26 passes the gates to several large plantations, most developed to grow rice but, since about the turn of the century, managed for wildlife. Many private landowners in the ACE Basin have signed conservation easements which ensure that these ecologically significant properties will remain undeveloped.

Back at US 17 turn left. After about three miles pass (on the left) the entrance to Donnelley WMA managed by the Department of Natural Resources. Donnelley is a cross-section of the lowcountry and encompasses a variety of habitats. The area provides a variety of wildlife-related opportunities. (See section on Donnelley WMA).

After another .7 mile, we turn left onto Stocks Creek Rd (Road 161), known locally as Dirt Wiggins Road. This well-maintained dirt road runs about 5 miles until it intersects with Road 162. Part of 161 follows a hardwood bluff offering an occasional glimpse of the Donnelley wetlands off to the left. Much of this area, burned regularly to control the underbrush, supports oaks and hickories and scattered spruce pine. On the right of the road grow typical lowcountry shrubs such as devil's walking stick, with its huge compound leaves, and dwarf palmetto, a miniature relative of our state tree. Hermit thrushes in winter and wood thrushes in summer haunt the quiet woods. As with most of this driving field trip, property along the road belongs to private landowners. Do not trespass.

Wiggins Road (Road 162) joins our road from the right. Continue on 161 and within a few hundred yards turn left down a short dirt road to Old Chehaw River Boat Landing. Black needle rush borders the Old Chehaw on the marsh side; small live oaks of the maritime forest stand on its highland side. A brackish tributary of the Combahee, this stream, like most in the basin, flows with the tide, reversing direction four times daily.

The many waterways, marshes and swamps of the ACE Basin have prevented easy development of the area, maintaining the natural pristine character of much of the basin's 350,000 acres. Because such a great variety of plants and animals thrive in and around wetlands, preserving these habitats ensures the continued existence of the region's diverse flora and fauna.

Leaving the landing, we continue (to the left) on Wiggins Road another 2.2 miles to the end of the pavement. After less than a mile a small former railroad building on the left proclaims the town of Wiggins at the entrance to a private plantation. Bear right at the small green sign that reads Public Boat Landing. After about a mile the road passes through an open stand of maturing longleaf pine reminiscent of the 90 million acres of virgin longleaf that once covered the Southeast. Producing more heartwood than other local pines, this durable heart pine provided the early South with structural timbers and flooring. Fallen longleaf cones, by far the largest of the southern yellow pines, litter the roadsides and the fern-covered forest floor. In the spring and early summer look for the blooms of coral bean and sand milkweed, and listen for the plaintive whistle of wood peewees and the squawks and cackles of yellow-breasted chats.

The narrow road continues through stands of mixed oaks and hickories where the sandy soil retains the tracks of deer, wild hogs and turkeys. About 3 miles from Wiggins the road ends at Fields Point Boat Landing on a low bluff of live oaks. We have reached one of the two most seaward parts of the ACE Basin accessible by public road, with Bennett's Point similarly situated. The steep concrete landing slices through the bluff to melt into the pluff mud-laden waters of the Combahee River. Here transition vegetation such as sea ox-eye and groundsel-tree all but vanishes as the overhanging live oak limbs droop into the paler green of spartina grass.

Beyond the hazy horizon lies St. Helena Sound and beyond the sound the ocean, some ten miles to the east of the boat landing. This large, pristine estuary, which includes the seven islands that make up the core area of the ACE Basin National Estuarine Research Reserve, annually produces millions of dollars of commercial seafood and provides outstanding recreational fishing.

High tide here covers all but the emergent spartina stalks, while low tide exposes acres of mud flat crisscrossed with the three-toed tracks of tricolored herons and snowy egrets and the meandering trails of countless mud snails. Racks of dead spartina at the high tide mark await bacterial breakdown to begin the highly productive saltmarsh food chain. Amid the cries of laughing gulls, royal terns and clapper rails, listen for the insistent song of slow moving yellow-throated warblers and the quiet yank of white-breasted nuthatches in the live oaks around the dirt parking lot.

Having once again driven as far into the ACE Basin as possible, we now return to US 17, following the paved Road 162, rather than retracing the original route on unpaved 161. Along 162 look for bluebirds, painted buntings and fox squirrels. The road passes the attractive entrance gates to several of the ACE Basin's large and historic private plantations. About 7 miles from the intersection of 162 and 161, we return to US 17 where this trip concludes.

The ACE Basin also extends on the other side of this highway and includes bottomland hardwood swamps and other habitats not on this driving tour. Driving the ACE West gives a view of this area.

The public can enjoy additional glimpses of the basin at The Grove Plantation on the Edisto River south of Adams Run and Bonny Hall on the Combahee River (both parts of the ACE Basin National Wildlife Refuge call (843) 889-3084 for information) and Westvaco's Edisto Nature Trail at Jacksonboro. Visitors can schedule a guided tour of Westvaco's new Bluff Trail, thirteen miles south of Walterboro on US 17A, by calling Westvaco's Walterboro office at (843) 538-8353.

For information on Bear Island and Donnelley WMAs, call (843) 844-8957; for National Estuarine Research Reserve information, call (843) 795-6350.