DeBordieu
Gateway To
NORTH INLET
INTRODUCTION

DeBordieu Colony borders on an extraordinary natural resource – the estuary known as North Inlet. DeBordieu provides the only practical access to this estuary and is thus the gateway to its many treasures.

I enjoy DeBordieu’s exclusiveness, its beach and its golf club facilities. However, like many of my neighbors, I came to DeBordieu because of its fourth asset - its unique access to North Inlet. Like DeBordieu, North Inlet is a very special place.

I wrote this because I am a “creek rat”. I love “the creek” and hope that greater knowledge of this remarkable estuary will promote its use and enjoyment by my neighbors, and encourage support for the Baruch institutions that work to protect it.

I have drawn heavily from DNR publications and those of the dedicated people, both staff and volunteers, who toil in the labs and in the pluff mud of the creeks at the Baruch Marine Field Laboratory next door to us at Hobcaw. This work has also benefited from my discussions with my DeBordieu neighbors who recreationally use North Inlet and from the USC personnel at the Marine Laboratory. To all of the contributors, knowing and unknowing, my personal thanks!

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DeBordieu Colony is located on the peninsula between the Waccamaw River and Winyah Bay on the west, and the Atlantic Ocean on the east. This peninsula was called “hobcaw” by the Waccamaw Indians, which means “between the waters”.

The Waccamaw River is a tidal river. The name Waccamaw” means “coming and going” with reference to the ocean tides which cause the fresh water level in the river to rise and fall, necessary for the rice growing to which this area was once dedicated.

An estuary is a coastal area where freshwater from the land meets the ocean. As shown, the Hobcaw peninsula helps define both the Winyaw Bay estuary and the North Inlet estuary.

Winyaw Bay is the third largest estuary on the east coast, in terms of watershed area, after Chesapeake Bay (MD & VA) and Pamlico-Albemarle (NC). It is fed by five different rivers and thus receives a great deal of fresh water. The mouth of Winyaw Bay is framed by two barrier islands – aptly named North Island and South Island, and North Inlet is between the northern tip of North Island and the southern tip of Debidue Island (Note the Anglicized French spelling of DeBordieu).

In contrast to the much larger freshwater dominated Winyaw Bay, North Inlet is an estuary of less than 13 square miles that receives relatively little freshwater runoff and is thus dominated by tidal exchanges with the ocean, i.e., it is a high-salinity salt marsh lagoon. The tides ebb and flow every 25 hours, with each successive high or low tide occurring about one hour later each day. The mean tide in North Inlet is about 4.5 feet with a maximum of about 8 feet when the sun, moon and Earth are aligned. Approximately half the water in North Inlet at high tide flows to the Atlantic on each falling tide, with the wind exerting considerable influence on this tidal exchange.
As shown on the map, the North Inlet estuary is bounded by land to the North and West, by North Island to the East, and by Mud Bay to the South. North Inlet is the only Atlantic Ocean entrance to the estuary, and it can be reached from Pawleys Island and Murrells Inlet only by boat, a long trip in the Ocean with two potentially dangerous bar crossings. There are three entrances opening southward into Mud Bay, i.e., Jones Creek, No Man’s Friend Creek and Haulover Creek, all of which can be reached from Georgetown by boat through Mud Bay. However, boat access from Georgetown to these creeks into the estuary is both long and over open water, and problematic due to the shallowness of Mud Bay and the tidal flows in the creeks which can be half a tidal cycle out of phase with the ocean.

The only land access to the estuary is from DeBordieu and from Hobcaw, and neither is open to the public. Because of the difficulty in accessing North Inlet, there is very little public use of the Inlet and it is de facto DeBordieu’s “private” estuary.

North Inlet is remarkably pristine. North Inlet's waters are classified by the State of South Carolina as an outstanding recreational or ecological resource, and one of only 28 estuarine sites in the U.S. designated to protect and promote coastal stewardship through research and education. Because it is relatively pristine with very limited development on its borders, North Inlet it is used as the standard against which the other estuaries are compared in evaluating the impact of human development on those other estuaries.

The Belle W. Baruch Institute for Marine and Coastal Sciences was established in 1969 by the Belle W. Baruch Foundation (the owner of Hobcaw Barony to whom those of us who reside and vacation here will forever be indebted) and the University of South Carolina. The USC College of Arts and Sciences, School of Earth, Ocean, and Environment operates a field laboratory at Hobcaw and engages in an ongoing and comprehensive estuarine and coastal research program in North Inlet.
Users of the estuary are probably familiar with the four strategically placed stations that monitor tide, temperature, salinity, etc. every 15 minutes and hourly communicate the data by satellite to the field laboratory. Some of that data is available on line in essentially real time at [http://www.northinlet.sc.edu](http://www.northinlet.sc.edu).

North Inlet is a nursery for hundreds of species. South Carolina’s shrimp and blue crab fisheries are absolutely dependent on estuaries as they require marshes to complete their life cycles.

DeBordieu residents enjoy essentially exclusive recreational use of this unique 13 square mile pristine estuary, and the community’s appreciation of its unique location contiguous to this extraordinary estuary is reflected by the infrastructure providing creek access.

There are well over 100 private boat docks and ramps, a community boat ramp, a community fishing and crabbing dock on Debidue Creek, and several designated community crabbing areas. The community provides ample trailer storage areas for the inshore cruisers, bay boats, flats boats and jon boats not on lifts in the creek itself. In addition, garage storage of kayaks and paddleboards is common.

**RECREATIONAL ACTIVITIES**

For those unfamiliar with the estuary, and possibly apprehensive about its use, you should know that the alligators you see in the neighborhood and in the golf course ponds are not salt tolerant and North Inlet generally has high salinity. Alligators can be seen in the estuary, even in the ocean, but only on rare occasions generally
following a heavy rain. You may also be happy to know that not one of the 22 species of snakes found on the Waccamaw Neck frequents the tidal salt marsh creeks.

**BOATING.** Because of the overall shallow depth, recreational boating is generally restricted to the larger creeks where water skiing and boarding is possible. In addition to the appeal of afternoon cruises, kayaks and paddle boards are very popular and are used even in the shallower creeks.

Boats provide access to the undeveloped southern tip of Debidue Island and to the undeveloped ten mile long North Island for extraordinary birding and shelling opportunities.
NATURE ON DISPLAY

Boating provides extraordinary opportunities to view wildlife. In addition to seeing schools of fish such as Menhaden and Mullet, a wide variety of birds, mammals and turtles are frequently on display.

Over the years, 276 species of birds have been observed in North Inlet, some of which are unique to the estuary. There are wading birds such as White and Glossy Ibises, Great Blue, American (white with yellow bill, black feet) and Snowy (white with black bill and yellow feet) Egrets, Tri-colored, Green, Night and Blue Herons. There are birds such as Oyster Catchers found only in an estuary, sea birds such as Gulls and Terns, and Bald Eagles, Osprey and other raptors.

Loggerhead sea turtles, and occasionally juvenile green sea turtles, have been spotted. The more common diamondback terrapin is one of the few terrestrial turtle species to live in brackish water and, on occasion, is accidentally drowned in crab traps.

There are a dozen or so resident bottlenose dolphins, the only completely aquatic mammal in the estuary, which feed on fish such as mullet, sea trout, red drum, and flounder.

Every visit to the estuary is an adventure. One never knows what wonders Mother Nature will share with us . . . . .

FISHING

Fishing is readily available for oysters, clams, shrimp, crabs and a variety of finfish. Individuals age 16 and older must purchase an inexpensive Saltwater Recreational Fishing License, available on-line and at most sporting goods stores and bait shops. See www//dnr.sc.gov for details as to size and limits. Many fish are “slotted”, i.e., they have to be a minimum size to protect the young but cannot exceed a maximum size to protect the breeding population. Crab traps are the only commercial fishery that is allowed in North Inlet, mostly during winter.
Shellfish - “Eat shellfish in months with an 'R' in them”. The season actually varies but is typically October 1 thru May 15, because shellfish spawn in the summer when the water is over 70° F.

Clams – The common clam in the Inlet is the Quahog or hard clam which is readily available on almost every tidal creek bank mixed with oyster shells and in creek bottoms. Find one clam, and you will likely find a lot in the immediate area. Generally raked at low tide, clams are classified as “chowders” (large) which are diced and used in New England and Manhattan chowders, as “Cherrystones” (medium) generally steamed on the grill and dipped in drawn butter, and as “Littlenecks” (small) generally seamed in clam broth and garlic butter.

Oysters – Oysters require attachment to a hard surface to grow. Because the only natural hard surfaces in the creeks of North Inlet are other oyster shells, oysters tend to grow in “clusters” and are found on “bars” or “reefs”. Picked up by a gloved hand at low tide, they are generally separated into “singles” for the bucket with the smaller oysters and shell residue returned to the creek.
DeBordieu features a “Creek Night” each fall where the identity of the community as a “creek community” is celebrated by its residents. Oysters are gathered for the community by boatloads of volunteers on the day before the event, steamed at the Community Center and enjoyed with other seafood from the creek.

Shrimp - Brown, White and Pink (relatively rare in the estuary because they prefer sand rather than a mud bottom) shrimp are, to most of us, indistinguishable as to identity and in taste. Shrimp spawn in the ocean, move into the estuary until about 4 or 5 inches in length and then move offshore.

Shrimp comprise the most valuable fishery in SC and may recreationally be taken by seine or cast net, with or without bait. See www.dnr.sc.gov for dates and limits, but shrimp can generally be harvested April thru December and, with bait September through November.
**Blue Crabs** are the most familiar of the swimming crabs, mating in the estuary with the larvae transported offshore by the tides for development on the continental shelf. Larvae return to the estuary and Blue Crabs from a fraction of an inch to the largest adults may be found in North Inlet during all but the coldest months.

Blue crabs molt (shed their shells) whenever they outgrow them. The new shell is 25-35% larger and, for a few hours, the crabs are known as “soft shells” or “soft crabs”. They are considered a delicacy sautéed or deep fried, and are eaten shell and all. At age two, they become the second most valuable commercial fishery in SC and an important recreational resource. Most blue crabs live less than three years.

Commercially, large males ("jimmies") are the No. 1 crab, smaller males are the No. 2 crab, and the females ("sooks") are the No. 3 crab. Identification is easy, for the watermen tell us that “the ladies paint their fingernails”, i.e., the tips of the claws are bright red on the females in contrast with the deep blue color of the male’s claws that give the Blue Crab its name.

The favorite of children, blue crabs are harvested with hand lines and dip nets. Any fish or chicken necks can be used as bait. There is a 5-inch minimum carapace width (point to point) and females with egg mass (sponge) must be immediately returned to the water unharmed. Baited traps are also used, currently two per person, which must identify the owner.
Stone Crabs are “mud” crabs, i.e., the rear pair of legs are not flattened for swimming. They have very thick shells and powerful claws used to crush the shells of oysters on which they feed. Only one claw may be taken, and only then if the crab has two claws and no egg mass, with the crab immediately returned unharmed to the water.

Stone Crabs are occasionally caught in traps set for Blue Crab and by the courageous at low tide by hand, i.e. by reaching your arm deep into a crab burrow in a mud bank, and grabbing the crab by the elbow of his crushing claw.

Finfish. Some fish occur almost exclusively in association with flooded structure, e.g., oyster bars and pilings, and larger fish tend to be found in deeper water. However, many are tidal migrants, moving onto the flooded flats to feed until ebbing tides force them back into deeper channels.
As to species, there are scores, and information as to tackle and angling techniques is readily available online and in the local tackle shops. Sheepshead, Black Drum, and Spots are often targeted, but the recreational “Big 3” are the Red Drum, Spotted Sea Trout, and Flounder.

**Red Drum** – This is the most sought after fish because of sheer numbers and sport, particularly for catch and release. Called “Redfish”, or simply “Reds” because of its coppery color (inversely related to salinity), it is known locally as “Spot-tail” or “Spot-tail Bass” because of the distinctive spot (sometimes several) near its tail. In other areas, it is the “Channel Bass”.

Spot-tails can live to over 50 years and grow to about 100 pounds. They may be taken only if larger than a minimum and not yet breeding, generally 1 to 2 years old and weighing 1.5 to 5 pounds. They weigh 8 to 13 pounds when they leave the estuary at age 3-5 years.

Spot-tails are bottom feeders and their diet consists of about half crabs and half fish such as menhaden, spot, “finger” mullet and the mummichog (muhm-i-chog) or “mud minnows”. Shrimp do not play much of a role despite being the first choice of many anglers. For mature spot-tails or “Bull Reds”, live Menhaden or chunks of blue crab seem the bait of choice.

This is great game fish and great sport when caught on light tackle or a fly rod. Spot-tails are generally fished along grass lines in the creeks or in the shallow pools at low tide. However, spot-tails routinely move into water only slightly deeper than their body, and are often caught by sight fishing on the flats at high tides when the fish can be seen “tailing”, i.e., head down with their tail out of the shallow water looking for crabs.
**Flounder** – Not a great game fish but a favorite food fish, the Southern Flounder is the largest and most plentiful of the three large flatfish species found in North Inlet.

All flounder hatch into the usual fish form, but one eye (the right for these 3) migrates over to the other side early in life making them “left eyed” flounder. However, there are species of flounders as well as halibut and sole with both eyes on the right side.

Flounders are ambush predators and automatically adjust their pigment to blend in with the bottom.

As flounders get larger, they don’t eat larger fish like most other predatory fish, but eat more small fish. “Mud minnows” are hardy and readily trapped, and are favored baits, generally trolled, but jigged artificial baits are often successful.
Flounder reproduce offshore in the late fall and, as larvae, enter the estuary in winter where they remain for 2 years. Mature flounders migrate, east-west rather than north-south, i.e., to deep water in the winter returning each spring to the estuary.

The Southern Flounder prefers muddy bottoms, whereas the Summer Flounder prefers sand. Females are larger than males at every age, and live about twice as long. Fish meeting current minimum length (“keepers”) are very likely to be female, two years old and weigh 1 pound. The SC record is 17 pounds.

**Spotted Seatrout** - This popular game and table fish is also known as “Speckled Seatrout” or “Specs” but it is also a drum. Seatrout tend to feed on shrimps and fish higher in the water column. Trout are an aggressive fish that will strike almost anything from top-water artificials, spoons, jigs, live bait and various fly patterns.

A trout is one, maybe two, years old and weighs about 1 pound when it meets the minimum size limit, living more than 10 years and growing to about 17 pounds. It adds about a pound for every two inches in length, i.e., 2 pounds at 18 inches, 3 at 20 and 4 at 22.
NORTH INLET AT NIGHT

North Inlet at night is a very different and magical place, like being on the dark side of the moon with a flashlight. Sounds seem magnified in the dark. Schools of mullet flashing out of sight up a shallow creek sound like a passing freight train. It is impossible to find your way back home without the aid of a tracking GPS – every bend in the creeks looks like every other bend, oyster banks are indistinguishable from one another, and a grass line is simply another grass line. While the creek names are on the charts, there are no street signs in the Inlet.

The magic is that on a dark night with the aid of lights, one can see down into the water, and a whole world not visible during the day comes into view. All of the Inlet’s water creatures, crabs, conchs, rays, dozens of species of not-normally-sought-after fish, as well as game fish suddenly appear in the light. While they can disappear from sight just as suddenly as they appeared, most do not appear to be afraid of the light and some may be attracted to it.

Fish can be harvested with the aid of lights, by rod and reel but generally by gig - a long spear with several points. The usual targets by gig are flounder, spot-tails, spotted seatrout, black drum and mullet.

ENJOY THIS VERY SPECIAL PLACE !