

Pinckney Island

History of Pinckney Island

The island was inhabited by Yemmassee Indians from about 10,000 BC until 1710 when Alexander Mackay received two grants from The Lords Proprietor for land on the island. Mackay grew rice and traded furs.

It was purchased from Mackay in 1734 by Charles Pinckney who grew long staple cotton and indigo and had about 120 slaves. He owned a home at White Point that was inherited by his son, Charles Coteswerth, and stayed in the family until 1937.

Charles Cotesworth Pinckney, was a man of considerable accomplishments and stature in colonial times.

- An aide to General Washington.
- A delegate to the U.S. Constitutional Convention.
- A signer of the U.S. Constitution.
- A minister to France.

He ran for vice president in 1800 and for president against James Madison in 1804. In both contests he was the unsuccessful Federalist candidate.

Charles Cotesworth Pinckney lived occasionally on the Island in the family home near White Point.

In 1861, during the Civil war, it was seized by the Union and was returned to the family afterwards.

Ellen Bruce bought it from the Cotesworths in 1937 and in 1954 Ed Starr and James Barker, Sears & Roebuck executives, bought it as a bunting lodge. The Barkers lived there full time until 1975 when James died and it was given to the U.S. Fish and Wild and Wildlife Service.

The Sea Island

Pinckney Island is a subtropical Sea, or Maritime, Island. It is not a Barrier Island. It is nearby Hunting, Fripp and Hilton Head Islands, ~ Those islands are directly on the open ocean and therefore have different characteristics. Typical of Sea Islands, Pinckney Island is surrounded by salt-water marshes and is sheltered from the wave action

of the ocean. Of the island's approximate 4;000 acres, about 2700 acres consist of salt marsh and small islands called tidal hummocks (colloquially, hammocks). Measures 3.8X1.75 mi., with 14 miles of trails.

The Walk

On our walk we'll examine three distinct ecosystems pointing out and discussing flora, fauna and lore.

- Subtropical sea island forest.
- Salt water marshlands.
- Fresh water pond in the sea island environment.

The Sea Island Forest.

Palmetto (Sabal. Cabbage) Palm: the end of the frond stem comes to a point around which the frond "leaves" emanate. The trees produce date like fruit but with a large seed and little meat.

As the fronds die, first the outer leafy portion falls off. Then the greater portion of the stem falls off; leaving the base of the stem still attached. In this condition the tree is referred to as "booted". Later, when the base of the stem falls off, the tree is referred to as "debooted". In cultivation, gardeners trim off the base of the frond stems to lend a "neat" appearance to the tree.

Because of their availability, Palmetto logs were used to build fort Moultry in Charleston, SC during the American Revolutionary War. The fibrous interior of the trunks enabled them to absorb the force of incoming, solid, cannon balls instead of splintering, as did hard woods or stone blocks. The splintering of other fort building materials was the cause of many more injuries than-were caused by the cannon balls themselves. Doctors of the time were inclined to amputate limbs that had severe splinter wounds because they weren't otherwise able to save them from gangrene. Either way the soldier was lost for combat. Pallmetto logs subsequent use for forts in the Civil War was responsible for its selection as one of South Carolinas state symbols.

At the top on-the rootball is the "Heart of Palm". When it's removed for use in salads the tree dies, but since they are very easy to raise they are farmed and the hearts are harvested.

Saw Palmetto: The ends of the frond stems from which the "leaves" emanate are straight across. It's also characterized by sharp saw like serration's on each side of the frond stem.

It has a horizontal, under ground trunk: from which new shoots emerge. This form of Palmetto, although it will spread profusely, will always remain a shrub. Extracts from its berries are, used to minimize prostate swelling, and early inhabitants peeled its leaves into thread-like strands used for sewing.

Live Oak Tree: The local species of Live Oak trees are native to only a narrow band of the southeastern coastline. They are named because, although they are deciduous, they have leaves all year round, the new leaves pushing the old ones off. Live Oaks have a very long life span, some estimated to be in the neighborhood of 1000 years.

Because of its very hard wood, and the sharp curves in some of the branches, they have been valuable to builders of wooden ships. In the area where the stem and the keel intersect they can eliminate the need to construct difficult joints. After hurricane Hugo many downed live oaks were shipped from the Charleston area to Boston and were used in an extensive over haul of the U. S. S. Constitution. The Mystic, Connecticut Seaport Museum used our live oaks in the reproduction of the slave ship Amistad built in their shipyard.

Spanish moss: (an epiphyte) Neither Spanish nor moss, it is found principally on Live Oaks, but also on Cedars, and other trees. It is an air plant deriving none of its nourishment from the trees. It has a dandelion-like seed that is released and carried by the wind, and has a "horsehair" core that helps hold it together. Nourishment collecting pockets on the plant can be observed under magnification.

Indians used Spanish moss as diapers, for bandaging wounds, and to make a tea that inhibited pregnancy. Early settlers used it for mattresses, and Henry Ford used it as seat stuffing for early model "T" autos. As Ford discovered in his first recall, by reason of bug bites, it's advisable to debug Spanish moss before using. Its mattress application is apparently responsible for the saying "sleep tight and don't let the bed bugs bite". It is also used a packing material and in floral arrangements.

Resurrection Fern: Grows on top of live oak branches and in very dry weather it will turn brown and appear to have died. After a good rainfall it will quickly green up again. It is not a parasite but lives on material trapped in the bark of the trees' horizontal limbs.

Sweet Gum Tree: Tall, straight trees with star shaped leaves. Yellow Bellied Sapsuckers (woodpeckers) make rings of holes around the trunks, but seldom girdle them. Sweet sap oozes from the holes attracting insects that are eaten by the sapsuckers and other birds. The seedpods, "Gumballs", are prickly and about one inch in diameter.

Water Oak: (Like a Post Oak) leaves with little cut.

Southern Bayberry: (Wax Myrtle) Crush and smell the leaves and berries. Their wax provides the scent for bayberry candles, and the plants are used as ornamental shrubs in this area. The leaf bottoms have yellow wax spots.

Smilax: "Wait-a-minute" plant, thorny vine with widely spaced thorns and "T" shaped leaves.

Southern Yellow Pine: (Loblolly) Predominating in tree farms by the coast, they have few branches till the crown, and are mostly grown for pulp. They have layers of bark that peels, helping the trees to survive in the heat of brush burning.

Yaupon Holly: (Ilex Vomitoria) A bush with small leaves and berries that turn red- in late summer or fall. From the-leaves, Indians made a tea used as a stimulant (Cassina). They also mashed the berries, diluted the juice with water and let it ferment. When drunk it produced a high and then vomiting and diarrhea, all of which the shamans claimed to be cleansing, and good preparation for battle. This plant is also used as a decorative shrub.

Golden Silk Spiders: The large (c. 3" diam.) ones in the web are the females. The small brown-bodied ones in the same web are the males.

Bracken Fern: Has a cinnamon colored stem. Very common along the road the road where there is shade.

.. Muscatine Grape: Has bitter skin and small leaves. It makes into muscatel wine. A cultivated version of this grape is called Scuppernong~ which has larger leaves.

Poscosin Pine: (post Pine) Has lots of pitch for producing pine tar and which helps to make it good for fence posts. Have tight, prickly, hanging cones.

Red Cedar: Named for the color of its wood. As its berries ripen in the late summer and fall they tend to ferment. Cedar Waxwings eat them, get intoxicated and even fall to the ground. If not eaten by predators, they sober up and are likely to go back up in the tree for more.

Rattlesnake grass: Found along the roadway. From the main stem it has others projecting radially with small seedpods at the ends. When the pods dry the seeds rattle. Being as small as they are we are not likely to be able to hear the rattle.

Prickly Ash: Has thorns and the Juice from its leaves has a numbing effect. Some times called "Tooth Ache" tree.

Bull Thistle: Leaves Can be eaten and taste something like lettuce. The trick is to get the thorns off. In the spring it produces a tall blossom stalk.

Scarlet Pimpernel: Small low growing plants with orange blossoms. Referred to as the "poor man's weather glass", it is alleged to cure melancholy.

OldMan's Beard: Was used by early inhabitants to stop bleeding.

Fleabane: Miniature daisy- like plant in the transition area and along the roadway. When crushed and rubbed on the skin it is alleged to fend off insects.

The Transitional Area between Forest and Marsh

Forest vegetation tends to downscale in size near the marshes due to increased exposure to salt. Plants, not found in the forest, appear because of the sunlight and the salt-water exposure.

- . Because the height of cordgrass is in proportion to the depth of the water that it is exposed to, it is shorter in the transitional zone.

Sea Myrtle: A fine leafed shrub found in the transition area between the forest and salt marsh. They bloom in late fall. The female's flowers are white, and the male's yellow. They are somewhat like dandelion seeds. They . will drift on the wind when they detach from the shrub.

Glass Wort: St. Pierre or "Pickle Weed" (*Salicornia*), ankle high, it is a succulent (contains water). Tasting both salty and a little sour, it can be cut up and used in salads. In Scandinavia a similar species is used to make pickles .

The Salt Water Marshes

About the Marshes: In developing new building sites and building homes on previously unimproved lots, you may have encountered the need for tests, and approvals by various government agencies regarding "wetlands" without realizing the significance, other than nuisance.

The following are some of the most important benefits provided by salt marsh ecosystems (wetlands), and they are some of the reasons that wetlands are carefully protected .

1. Salt marshes are the incubator of the first level of a food chain that ultimately feeds all the creatures of the oceans. There are more salt marshes on the Georgia and South Carolina coasts than anywhere else in this country.
2. They are helpful in slowing erosion because of the vegetation that they encourage.
3. They clean water by filtration through mud and by the feeding processes of oysters, clams, and mussels. .
4. By providing ample food, a place to avoid predators and protection from the effects of wind and tides, the marshes provide a nursery for hundreds of animals to live in after spawning.

Cord Grass (Spartina Alterniflora): Grows in the Marshes and makes up most of the flotsam that we see in the marshes and along the shore. This grass is an important element of the system providing the food chain for the whole Ocean. Without it we would not have about 90% of the seafood we enjoy. Other plants that contribute to the bottom of the food chain Ocean wide are sargassum from the Sargasso Sea, and mangroves from Florida.

The cord grass also helps to minimize erosion in the marsh and provides cover for small creatures. When it dies and floats to beaches it decomposes, and combines with the sand providing a place for transient seeds to take root. The resulting plants will be important in forming new dunes, which preserve the beaches. Floating mats of cord grass will sometimes provide nesting places for Marsh Hens (Clapper Rails)

Sea Oxeye Daisies (Yellow Ox-Eye) Yellow Succulents, knee high. It's the only plant in the marsh with a color other than green.

Salt Grass: (Spartina Patens) AKA Salt Hay, has broader leaves than cord grass and is shorter. Sometimes called Marsh Hay, it was harvested in the colonies for fodder, mostly north of Maryland.

Black Needle Rush: Found in tidal transition areas, it has a very sharp point, and is used in basket making. It was once used with palm thread for sewing. It's green during much of the spring and summer.

Pluff Mud: The black salt marsh mud contains very little oxygen and produces hydrogen sulfide, "rotten egg smell". It also produces diethyl sulfide and methane gases.

Fiddler Crabs: Those with one large claw, usually the right, are males.

Those with two small claws are females. The male uses his large claw to warn off other males and to attract females. In a fight the male can break off the large claw to make an escape. After several molts, he will grow a new large claw, usually on the opposite side.

We can see their burrows with piles of sand pellets next to them. These are the products of their burrowing operation. When the tide comes in they retreat into their burrows and plug them with sand pellets. The very small pellets are excretion.

Marsh Periwinkles: They climb marsh grasses eating algae. Go up as the tide rises, down as it recedes. They can tolerate about two hours under water.

Ibis Pond (fresh water)

About the pond: It is an excellent place to see varieties of water birds and others. The island in the pond is a rookery and is especially active during late spring and early summer nesting/mating periods. Ibis pond is not indigenous but is the result of a negotiation between the Highway and Natural Resources Departments. The construction of the new bridge needed a lot of soil and the D.N.R knew that the spring fed pond would attract birds, alligators, and us.

Ibis Pond (continued)

Cattails: Surround the edge of the pond.

Pennywort: Small (c. 2" diam.) floating leaves like miniature Lilly pads at the edge of the pond.

Duck Weed: Will tend to cover the ponds in the summer. It consists of many, very small, floating leaves. Ducks and other creatures eat it and it can help us to spot alligators.

Broom sedge:Grows near ponds. Used to make brooms. .

Chinese Tallow: (popcorn Tree) originally imported but spreading fast and apparently reaching nuisance proportions.

Burr (Marsh) Marigolds: Bright yellow blossoms about 1 Y2" in diameter. Mostly on the island.

Trumpet Vine: Orange blossoms, on the island and in the woods near the trail around the pond.

Fog (Frog) Fruit: Very small white blossoms on a stalk 2 or 3 inches high. Found along the roadway and the pond.

Alligators: Alligators may generally be seen from early March until . October, depending on the temperature. They are reptiles, cold blooded, and so need to get warmth and cooling from outside sources. When temperatures get much below 70 degrees they are seldom seen. They make burrows under swamp and pond banks and semi-hibernate. If the weather gets so hot that their body temperature approaches 90 F, they may temporarily migrate to cooler, brackish .or salt water. There are at least two large alligators in the pond that are the presumed parents of a fair number of babies. The mother stays with her young for about three years, and we have seen her with up to seven babies of several sizes. She seems to be eight plus feet long and the father perhaps as long as ten feet. Each inch between an alligator's eye and the end of its snout translates to about one foot in overall length.

On the Way Back

Indian Site: Oyster shells carbon dated to about 4,000 years ago. Oyster shell "rings" in other parts of Hilton Head Island are called shell middens Formed by Indians discarding the shells of oysters and clams. There are also remnants of a dock made of Palmetto logs, likely to be about 150 years old. On the path to the site are two Spanish Bayonet (Yucca) plants, CAREFUL, they are sharp!

Log Road Likely antebellum.

Pinckney Island is a National Wildlife Refuge managed by the United States Wildlife Service.

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