

Turpentine History Trail #2

The Pelican-Dogwood Loop

Prepared by Jim Mott

This walking loop is just under 1 mile in length; To start the trail, drive and park at the Pelican Lane tennis courts. For those of us who may find this distance perhaps still a little long, six excellent examples of turpentine trees sit within only a hundred feet or so of the Pelican Tennis Courts parking area. There is potable water and toilets at the Resort Village Pool. Stops listed are just good examples- there are 100's of turpentine trees.

Turpentine is a natural product, the distilled natural chemicals from which have been used for more than a hundred of years. Prehistoric Indians used pine resin as medicinal bandages, ointments and medical treatments; also to caulk and waterproof canoes and seal or mend vessels

Of the numerous pine species, in coastal settings the slash pine (*Pinus elliotii*) dominates over the taller and straighter inland longleaf pine. Slash Pine is uniquely suited to the coast; it is very flexible, it bends and survives breakage after high winds. For timber, slash pine is less desirable because it can be prove to be short, twisted and very knotty.

However large plantations of slash pine are made for timber harvest



because the species grows so quickly in many types of soils and is very resilient to windstorms. Turpentine scarring often would stunt or possibly kill the trees, so the most desirable trees for turpentine were those less desirable for timber harvest. Slash pine is a particularly resinous pine and delivers both high yield and high quality turpentine.

At least two periods of turpentine extraction have been documented from tree-ring dating at Cape St George; 1918-1921 (most trees first cut in 1917) and 1948-1956 (most trees first cut in 1949).

Walking Map with those described numbered stops highlighted



This is actual text circa 1807 describing turpentine harvesting methods:
In January and February, at the base of each tree, three or four inches from the ground, and of preference on the south side, a cavity or box is formed, commonly of the capacity of three pints, but proportionate to the size of the trunk, of which it should occupy a quarter of the diameter. On trunks more than six feet in circumference, two and sometimes four boxes are made on opposite sides. Notching is merely making at the sides of the boxes two oblique gutters about three inches long, to conduct into the box the sap that exudes from the edges of the wound. In the interval of a fortnight, the first boxes become filled with sap. A wooden shovel is used to transfer it to pails, which in turn are emptied into casks placed at convenient distances. The boxes fill every three weeks. The turpentine thus produced is the best and is called pure dipping.

The chippings extend the first year a foot above the box, and as the distances increase the operation is more frequently repeated, to remove the sap coagulated on the surface of the wound. The scraping is a coating of sap which becomes solid before it reaches the boxes. After five or six years the tree is abandoned.

It is reckoned that two hundred and fifty tree boxes yield a barrel containing three hundred and twenty pounds. Some persons charge a single negro with the care of four thousand or five thousand trees of one box; others of only three thousand, which is an easy task. In general three thousand trees yield, in ordinary years, seventy-five barrels of turpentine and twenty-five barrels of scrapings, which supposes the boxes to be emptied five or six times in a season. In November, 1807, the pure dipping was sold at \$3 a barrel, and the scrape a quarter less.

In September 1902, Dr. Charles Holmes Herty, a chemist at the University of Georgia, presented to an audience of six hundred members of the Turpentine Operators' Association his idea for an "Apparatus for Collecting Crude Turpentine." Herty proposed tacking an earthen cup of specific dimensions to the base of each tree for the pooling of gum rather than slashing deeply into the tree's membrane to create a box. A system of galvanized iron "gutters," positioned slightly above the clay cup on the face of the tree, would channel the dripping resin into the cup. While Herty's invention initially met significant hesitation and even ridicule on the part of producers and workers alike, cupping eventually proved a more environmentally friendly and financially profitable alternative to boxing. The "cup-and-gutter system," as it is known, thus became an industry standard and defined turpentering in twentieth-century Georgia and Florida.

Pelican lane Parking Area: there are at least 6 trees worth examining here; here labeled A-F



Pelican Lane
Parking Area

D

A

B

C

E

F

Leisure
Lane



Cut on a single face for Turpentine; the wound has slightly closed; tree A still has nails and metal imbedded in the cut face (arrow points to picture below)





Tree E: This slash pine survivor has two faces of scars from turpentine harvest; cut so badly that not only could the tree not heal but the trunk has split in two. And yet, the tree survives to this day! The cat face still has metal imbedded in the tree. The dark carbonized wood on the cat-face indicates a forest fire has come through and also burned the tree.

Detail image below

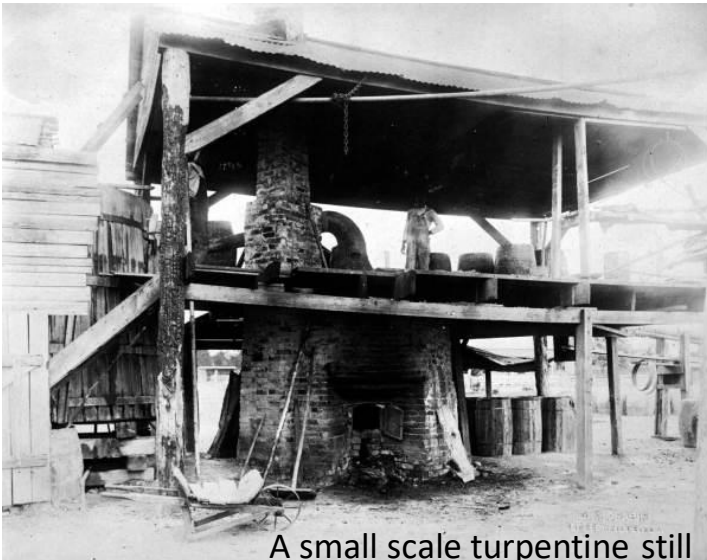


Tree F: A long scar on this side; this tree was also cut on both sides

Turpentine spirits are derived by distilling the collected raw resin (both pure dippings and scrape) in large copper retorts mounted above large wood ovens. The copper vessels, as a still, pinch upward into an overturned thin neck. Six barrels of raw turpentine were said to produce one cask of one hundred and twenty-two quarts of the spirit. The remainder of the raw Turpentine is poured



off the bottom of the still and solidifies as rosin. Rosin quality is graded principally by color as to purity. True gum turpentine spirit and gum rosin (what are called gum naval stores) derived from tree cutting are rare these



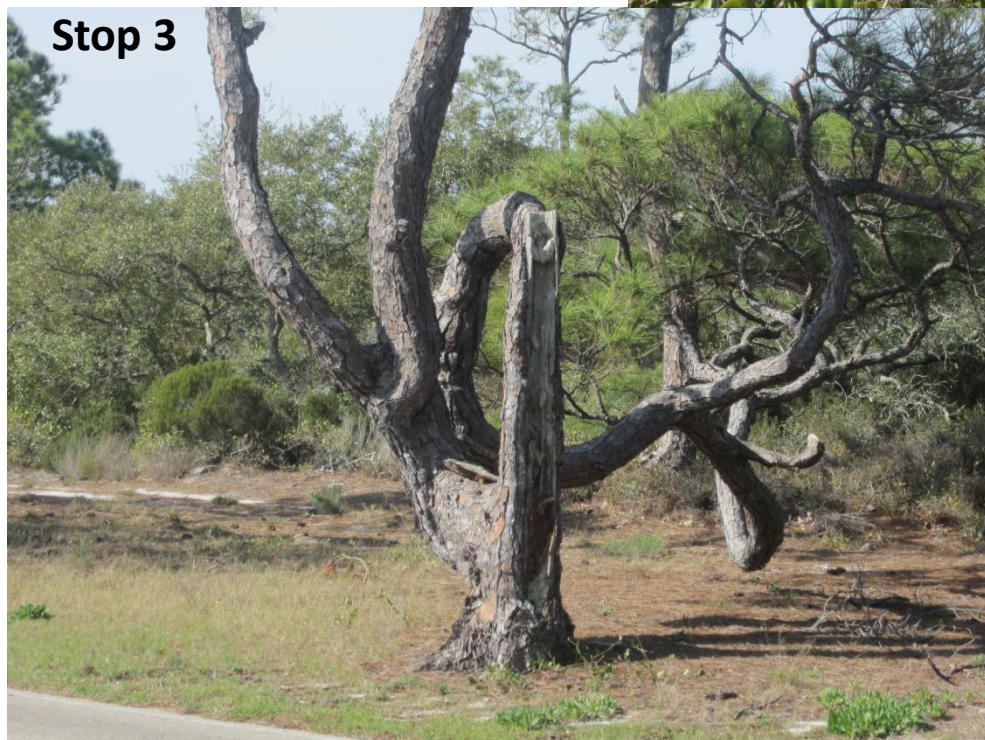
A small scale turpentine still

days; most turpentine spirit sold in stores today is a chemical extraction from pine pulpwood. Turpentine spirit distilled from tree cuts has only a pleasant (if strong) pine smell and no residual chemical odors.

To begin the walk- Cross Leisure Lane and follow the bikepath right (west); as the bikepath turns southward several turpentine trees will present themselves – visible across the street (Stop 1) and behind bushes (Stop 2)



Continue along the bikepath – at Resort Drive Stop 3 – look across the street . Many trees close to the beach have been severely damaged by windstorms – This spectacular twisted tree broke just above the turpentine scar – the tree has survived severe storms, turpentine scarring and forest fire – a SGI gem

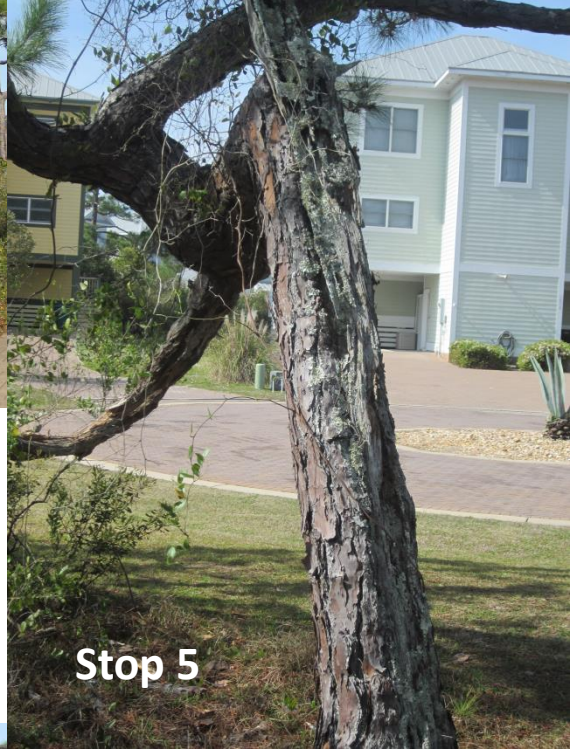




Stop 4

The path meets a 2nd traffic circle (there is a white fence); cross right, over sandy grass to **Stop 5**; then cross further to the gravel lane which connects to Blueberry Road. Numerous Turpentine trees will be visible (note arrows below)

Option now 1- continue on the bikepath- turning left on Gulf View Drive (few trees still stand there) or turn left now on Resort Village; in either case turn left again at the end of the road, follow the paver-lined pedestrian walk; broken trees, scarred by turpentine extraction, will show up on both left and right.



Stop 5



Looking at the gravel lane
(to NE) from the path

The trail continues east along Blueberry Road, past Elm and then turns left (north) on Dogwood.

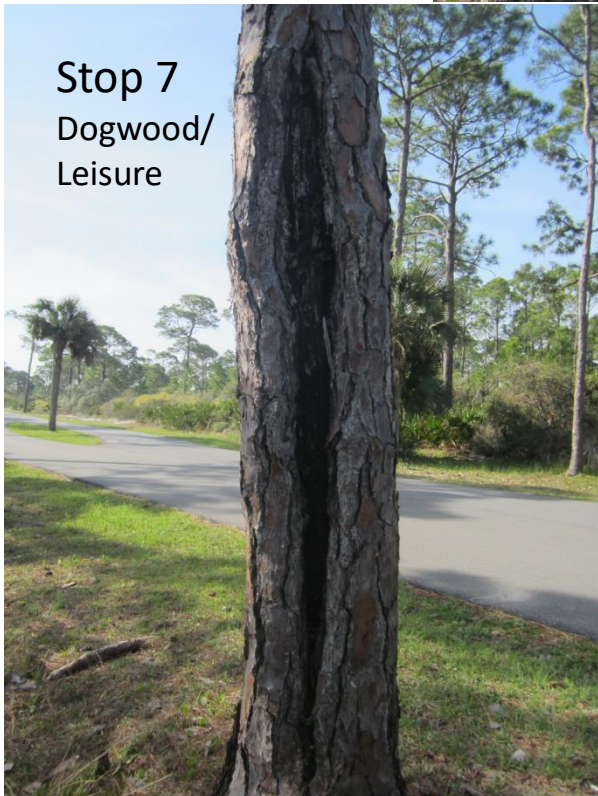
Various scarred trees are visible on both sides of the route; a few are largely healed- long slits in the bark show where trees have managed to wholly or partly heal wounds.

Stop 6: Blueberry just before Elm (SW corner)
Another tree basically split in two by turpentine scarring and yet still alive!
As you walk, numerous scarred trees line Blueberry and Dogwood

Stop 6 before Elm



Stop 7 Dogwood/ Leisure



Stop 7: where Dogwood meets Leisure Lane (SE corner) A tree with a forest-fire burned turpentine scar - still with metal in the scar shows very prominent.



Stop 8



Turn left and walk west again along the Bikepath. Stop 8 is on the bikepath; rusted nails are still visible in this cat-faced tree.



Continue west on the bikepath over the boardwalk (note the bathhouse standing up above the boardwalk); more turpentine trees are yet visible sitting right on the bikepath (Stop 9). The tennis courts and parking are now visible to the west, across the road. Thank you for taking this walking trail and learning about the Turpentine history of The Plantation and island.

