!! CATCHING CLADOPTOSIS !!

Many of you have seen the old photographs of those canopied trees on Oak Island. Tall, lanky yet graceful, as Doug Crowell wrote about them in March 2016 "**When the Last Live-Oak Dies**." These comments by Frederick Griffin in 1934 do capture their ambiance when it was said, "You'd swear they were palms on a sand spit."

It is there look which has deceived us all. Oaks? **No**. Pines? **No**. Acacia? **No**. Are they dying from the salty mist along the seashore? **No**. Are they being ravaged by a swarm of insect infestation? **No**. Then why are they so strange and have so few branches? Well, this species of tree comes 'armed' (pun intended) with the ability to manage its own growth. Other species to name a few, like larches, poplars, maples, willows, ashes and others can effectively prune themselves. This "self-pruning" is a part of their normal physiology and is useful to them for managing things like stress. It is called **Cladoptosis!** No, not halitosis. If this is all **Greek** to you, you would be exactly right… clado = branch, ptosis = falling.

So the Oak Island canopy trees had the opportunity, by forming an abscission layer at the start of each branch, to drop them should they feel they were stressed or the branch was just not producing. Oftentimes, this is used by the tree, in a valiant quest to reach to emergent layer of the surrounding canopy. This species of tree on Oak Island, non-native and planted on purpose, was just the sort of tree to tower over the remaining forest canopy. And with having cladoptosis, they could readily marshal their resources and beat the taxonomic conditions of **Phototropism** and **Gravitropism**!

The image below depicts those canopied trees after the Spruce groves below were harvested for cribbing or firewood. If you look closely, each tree has a line drawn through it to mark the height of the tree where its primary branch was formed. Below those marks are stumps or dying branches – let go by the tree itself.

For more fascinating tidbits about the trees of Oak Island and their native and foreign look-a-likes, visit ‘plantlife’ at TAMU.edu.