

BEFORE AND AFTER: SEA LEVEL RISE ALONG CORE SOUND



Image courtesy of Google Earth

Pictured above is the coastline near the Harkers Island Visitor Center in 2019 compared to that of 1978, which is outlined in a red line.

Sea-level rise is one of the main causes of ghost forest formation. As saltwater intrudes on low-lying coastal regions, healthy coastal forests are lost and pushed further inland.

INTERESTED IN LEARNING MORE?

RESOURCES



<https://go.ncsu.edu/friry4s>

QR Code to our 'Glideshow': A Deeper Dive into all Things Ghost Forests:



<https://go.ncsu.edu/zgv2lhv>

QR Code to Chronolog Website: A Citizen Science Initiative

CONTACT INFO

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GHOST FORESTS

What are they and how can you spot one?



Photo taken at Soundside Loop Trail, Harkers Island N.C., 2023

NC STATE

WHAT ARE GHOST FORESTS?

Ghost forests are regions where previously healthy coastal forests are being lost and converted to salt marsh habitat due to repeated exposure to saltwater. Dead tree trunks and stumps are common signs of a once healthy forest which is now in decline and retreating further inland. Ghost forests are found throughout Down East Carteret County and many other low-lying NC shorelines.

WHAT CAUSES GHOST FORESTS?

Ghost forests form due to the gradual rising of sea-levels associated with climate change. Saltwater intruding further inland negatively impacts sensitive species within coastal forests which cannot tolerate certain salinity levels. Extreme weather events, such as hurricanes and droughts, can also increase rates of ghost forest formation.



*Photo taken at Soundside Loop
Harkers Island, N.C., 2023.*

HOW TO SPOT A GHOST FOREST

1. TREE DISCOLORATION?

Have the tree trunks turned a pale white or gray color instead of the typical brown?

2. LOSING BARK AND BRANCHES?

Are there no leaves? Are there few or no branches left? Is the bark patchy and peeling off?

3. INTRUDING MARSH GRASS?

Are there any signs of marsh grass starting to grow around the base of the tree? Are there signs that the habitat is transitioning from maritime forest to marshland, such as greater abundance of grasses and shrubs as opposed to trees?