

An Ancient Baldcypress Forest in the Northern Gulf of Mexico

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Wallace
Research
Foundation

Baldcypress cross section



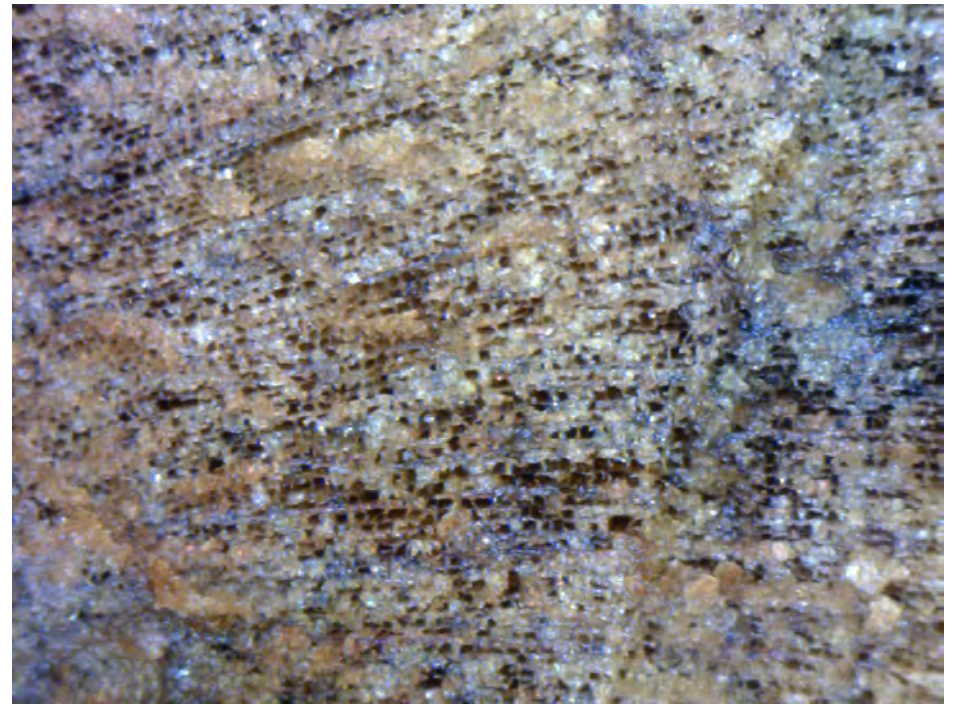
(c) Mark Minasi

Let's go diving





Well preserved baldcypress wood from the site



Project Goals

- Map site and determine the extent of the forest.
 - high-resolution swath bathymetry, side scan sonar, and chirp subbottom profiler
- Document and characterize the sediment and depositional environment - sediment cores
- Establish a chronology for the age and formation.
- Provide a depositional history and geomorphology.
- Develop a model to predict other buried forest sites on the continental shelf.
- Develop climate reconstructions using pollen and tree-rings.

How does sea level change impact coastal wetland forests?

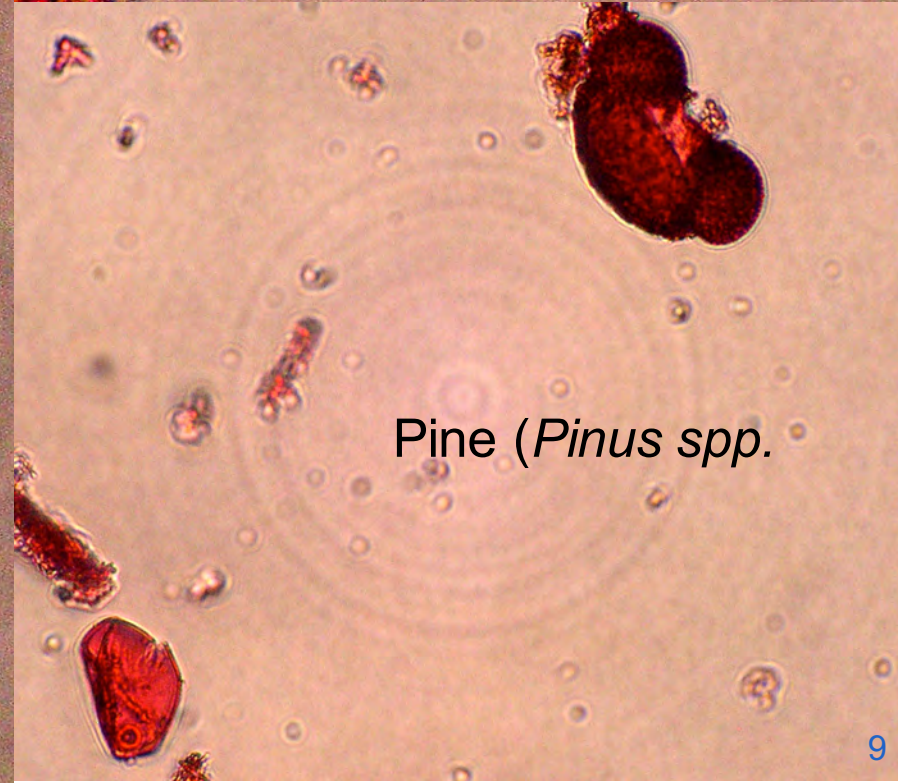
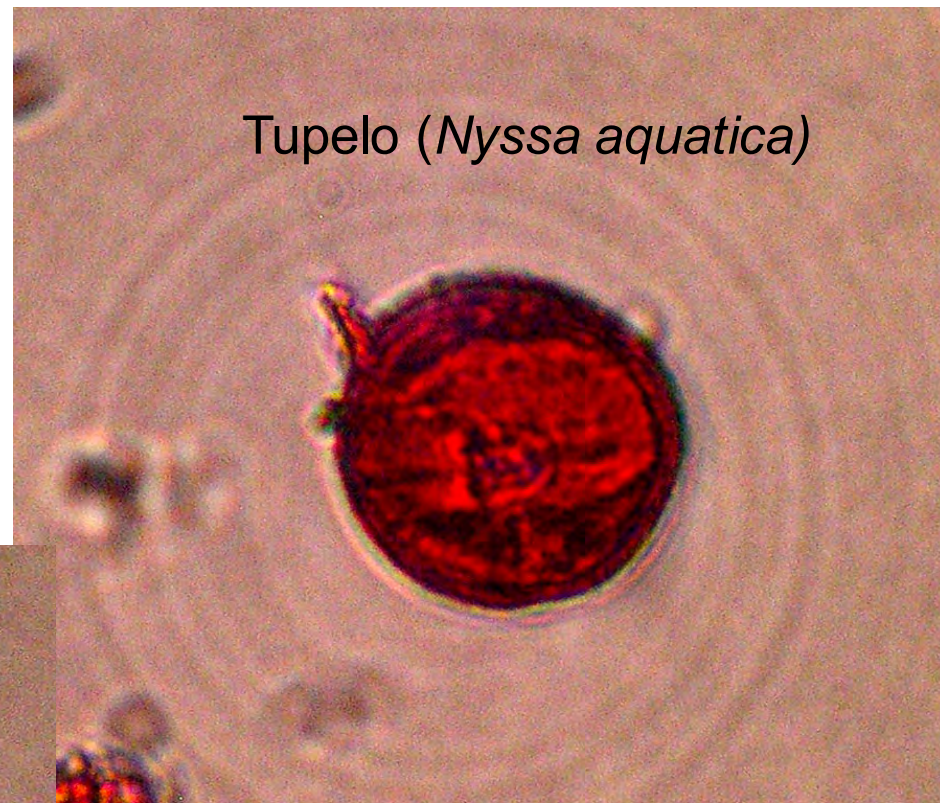


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Organic mud with roots 4.9 m down core



Preliminary Pollen Results



Seeds



Marsh St. Johnswort
(*Triadenum*)



Sweet Gum
(*Liquidambar styraciflua*)



Bald Cypress
(*Taxodium distichum*)



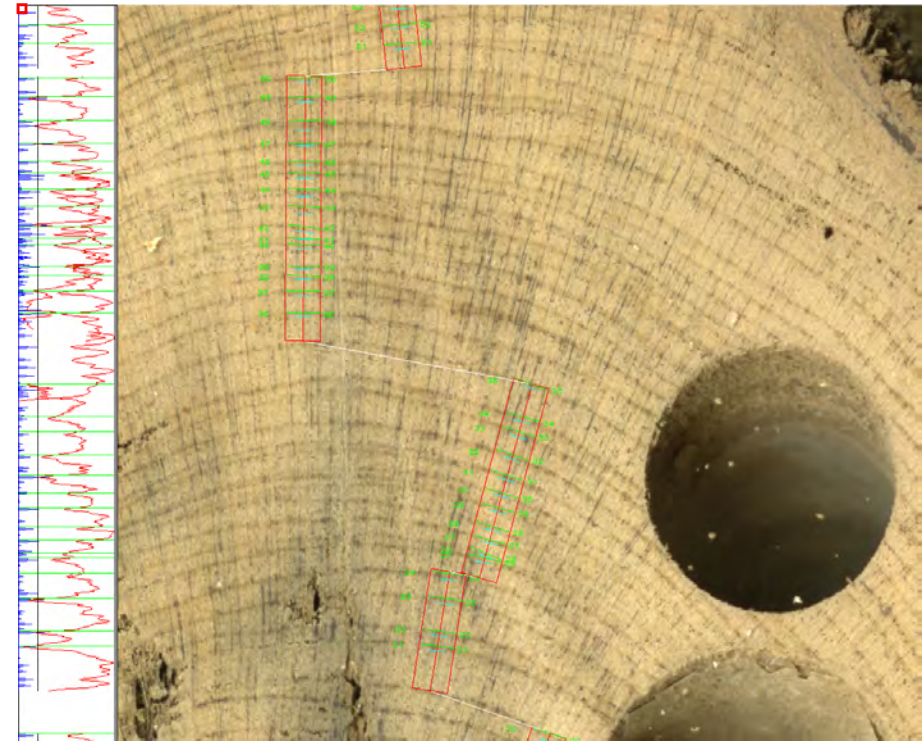
Button Bush
(*Cephalanthus occidentalis*)



Rose Mallow
(*Hibiscus lasiocarpus*)

Tree-ring results

Harley et al., in prep



Bald cypress sample with ring width measurements.

This sample (ID: GOM100) was included in the tree-ring chronology from the main study site (Figure 3). Full sample image is shown (left) with a zoomed inset displayed with the width measurement path (right).

Questions?

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