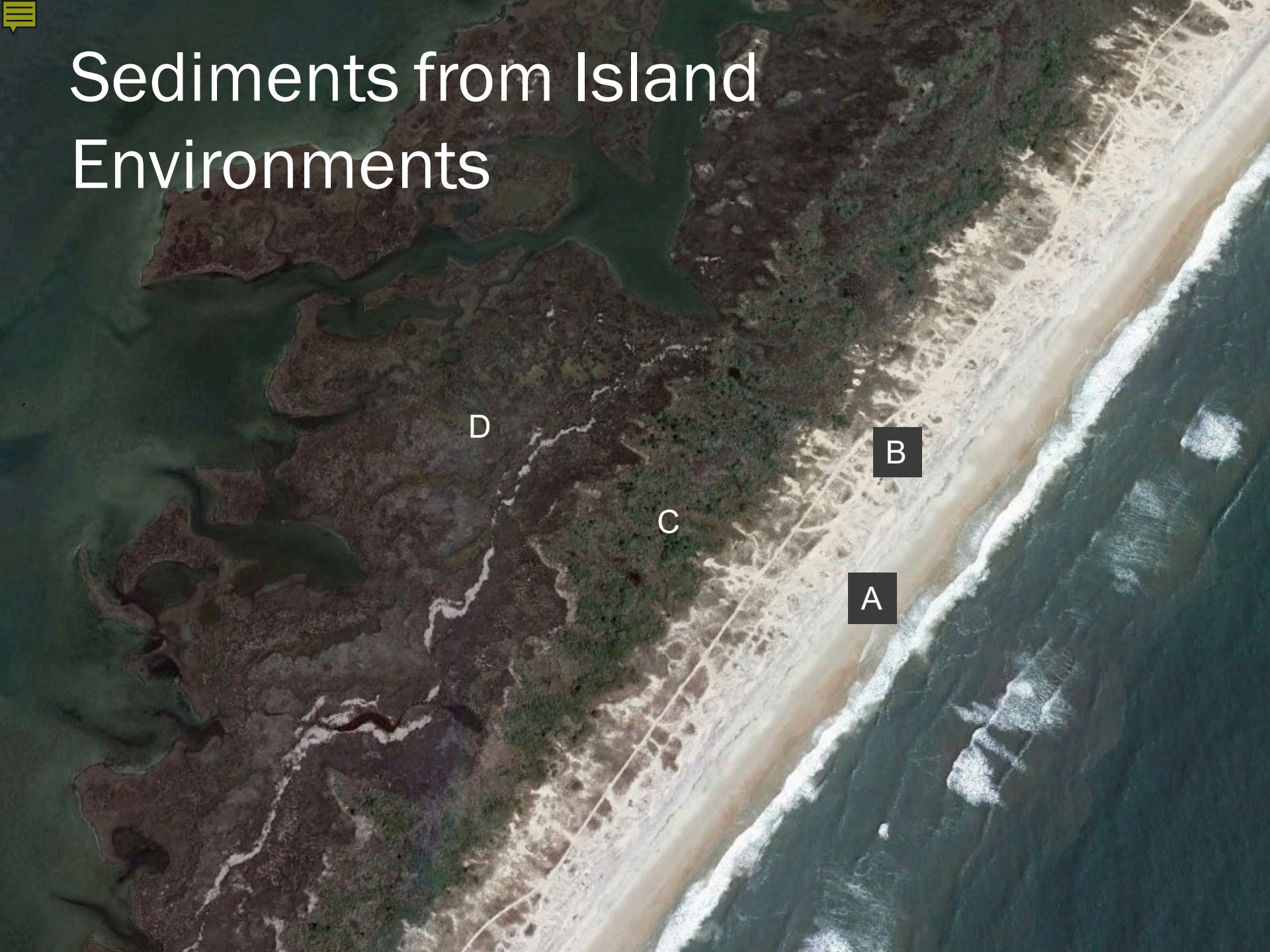


Section 2. Moving Islands

**EXPLORING EARTH SURFACE
CHANGES ALONG NORTH
CAROLINA'S COAST**

Sediments from Island Environments



D

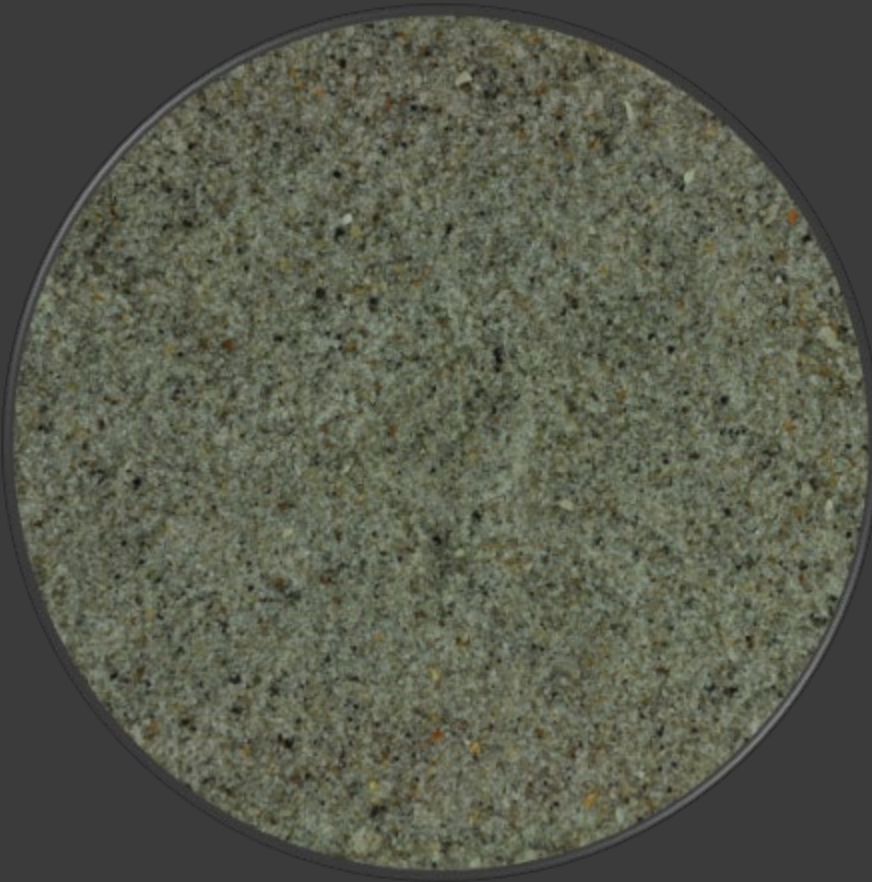
B

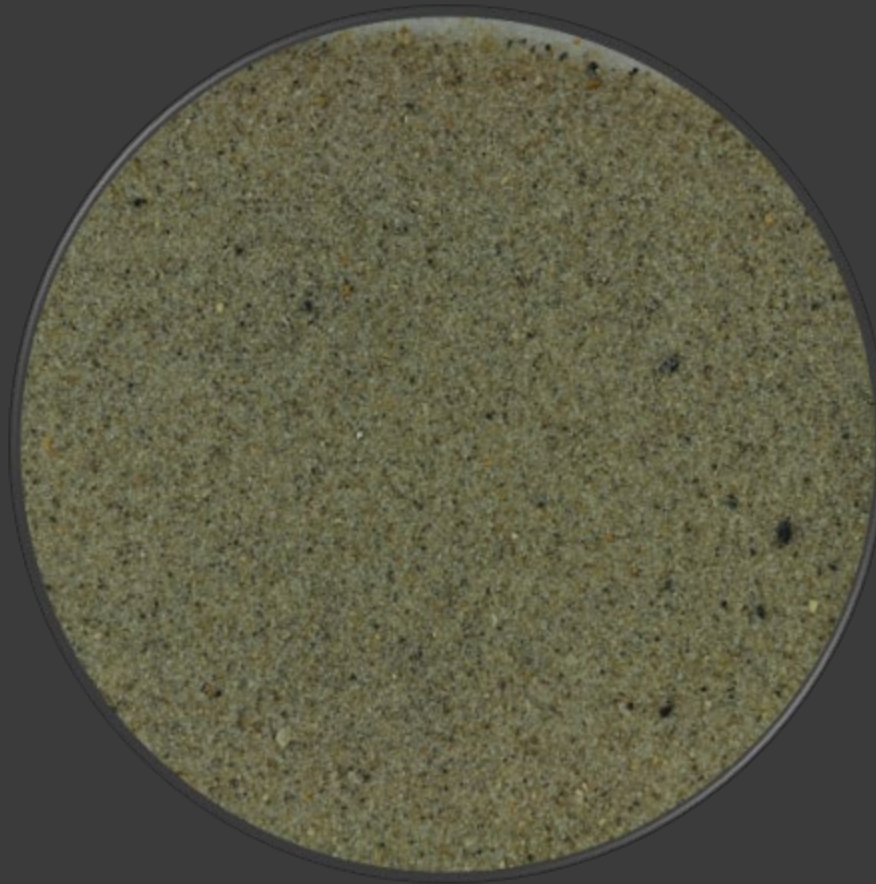
C

A

Beach

- Mostly quartz grains
- May have shell fragments or heavy (magnetic/black) minerals





Dunes

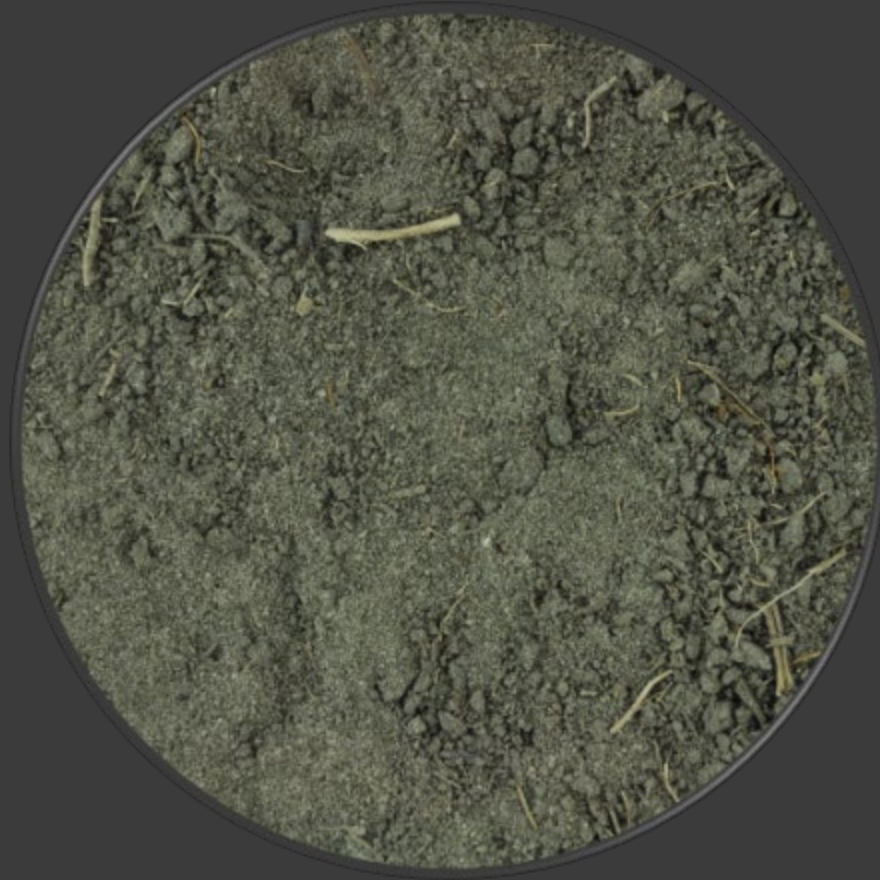
- Fine-grains; well-sorted
- Well-sorted because wind only moves certain sizes of grains
 - Wind cannot move boulders!



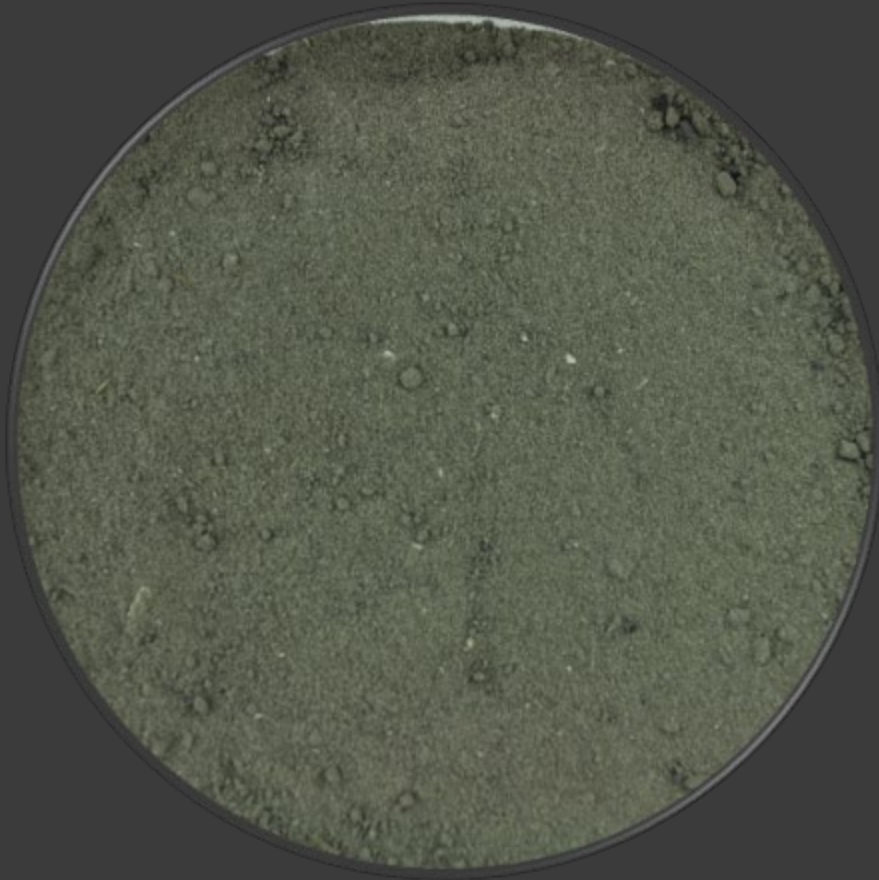
Maritime Forest

- Sandy, very organic material rich soil
- Forms from accumulation of plant material

Backbarrier Salt Marsh



- Muddy with lots of organic rich material
- May have substantial fraction of sand- from wind blow sand or overwash



Lagoon

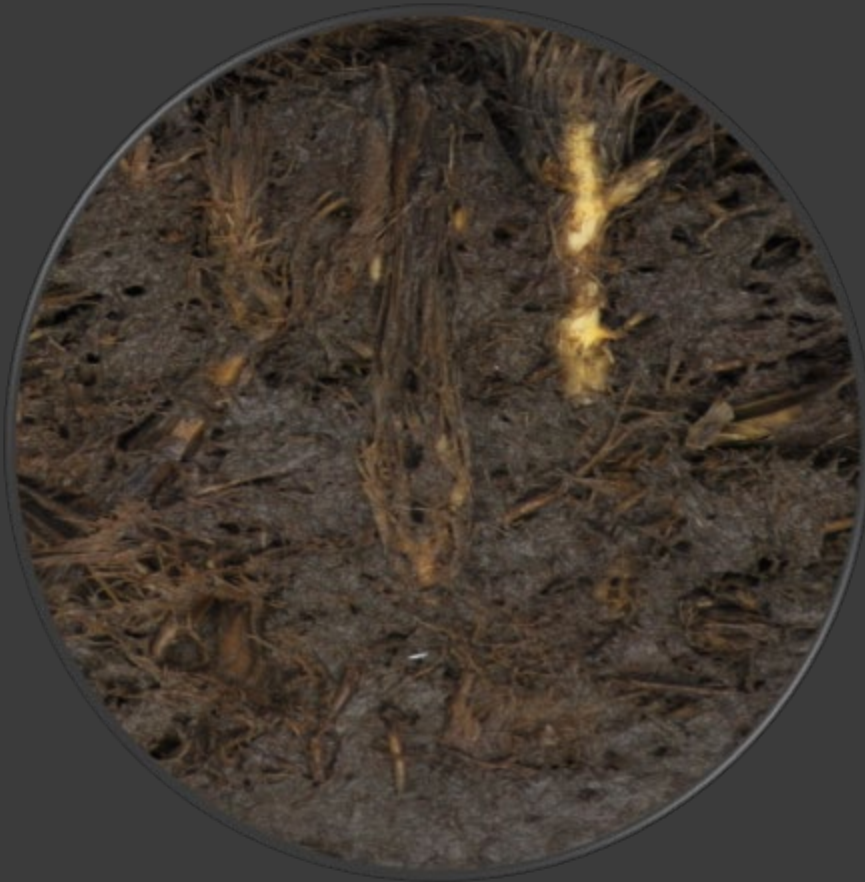
- Mud or muddy sand
- May have shell fragments, whole shells, oysters, clams, mussels



Now it's your turn!



Unknown Sediment 1





Unknown Sediment 2





Unknown Sediment 3





Let's examine some cores...



What does this core tell us?

Sea-level is rising
and the island is
moving landward!

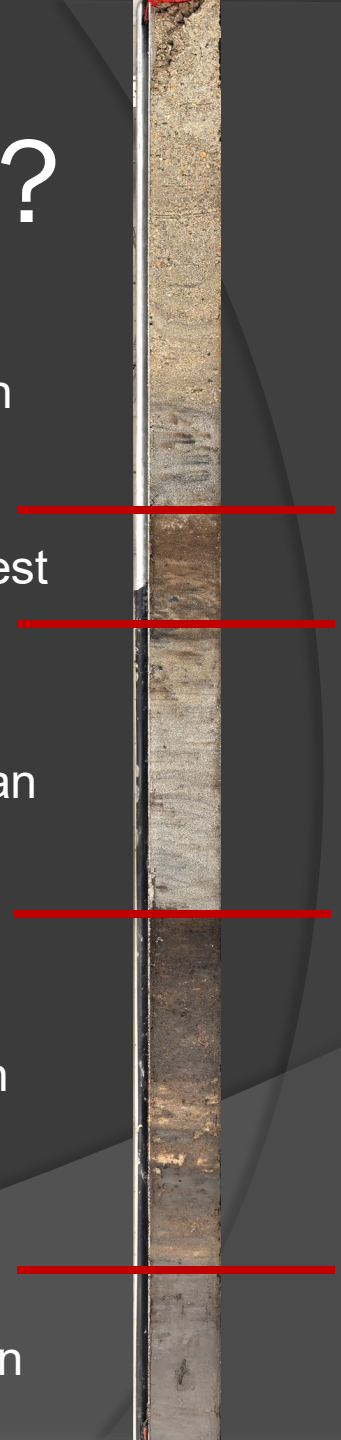
Beach

Maritime Forest

Washover Fan

Marsh

Lagoon



End of Section Final Discussion

- ◎ Break out group discussion-
 - How are humans impacting the natural evolution of barrier islands?
 - What should we do to mitigate this?

