Section 2. Moving Islands

EXPLORING EARTH SURFACE CHANGES ALONG NORTH CAROLINA'S COAST
Sediments from Island Environments
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 3
Let’s examine some cores...
What does this core tell us?

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