



Android



iPhone



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# Agenda

- Introductions
- Fact or Fiction!
- History and Partnerships of the Coastal Eco Explorer Mobile Application Project
- Demonstration
- Q & A



**Fact or Fiction?**

# Fact or Fiction?

Venus flytraps, a carnivorous plant, eats only flies.



# Fiction!

Venus flytraps grow close to the ground, so most of the insects they eat are ants.



# Fact or Fiction?

Children today devote only 4-7 minutes to unstructured outdoor play per day.



# Fact!

Children today spend **less time outdoors than any other generation**, devoting only 4 to 7 minutes to unstructured outdoor play per day while spending an average of 7.5 hours in front of electronic media.

- National Recreation and Park Association



More than a decade of smartphone madness has produced apps that help us navigate, identify, and share our experiences with the natural world.

- Kate Lockhart, Hexagon UX



# Fact or Fiction?

Carolina Beach State Park is a 761-acre park located on a triangle of land known as Pleasure Island, which lies between the Atlantic Ocean and the Cape Fear River. **The small State Park is home to 5 distinctly different ecosystems.**



# Fiction!

**There are 13 different ecosystems in the state park.**

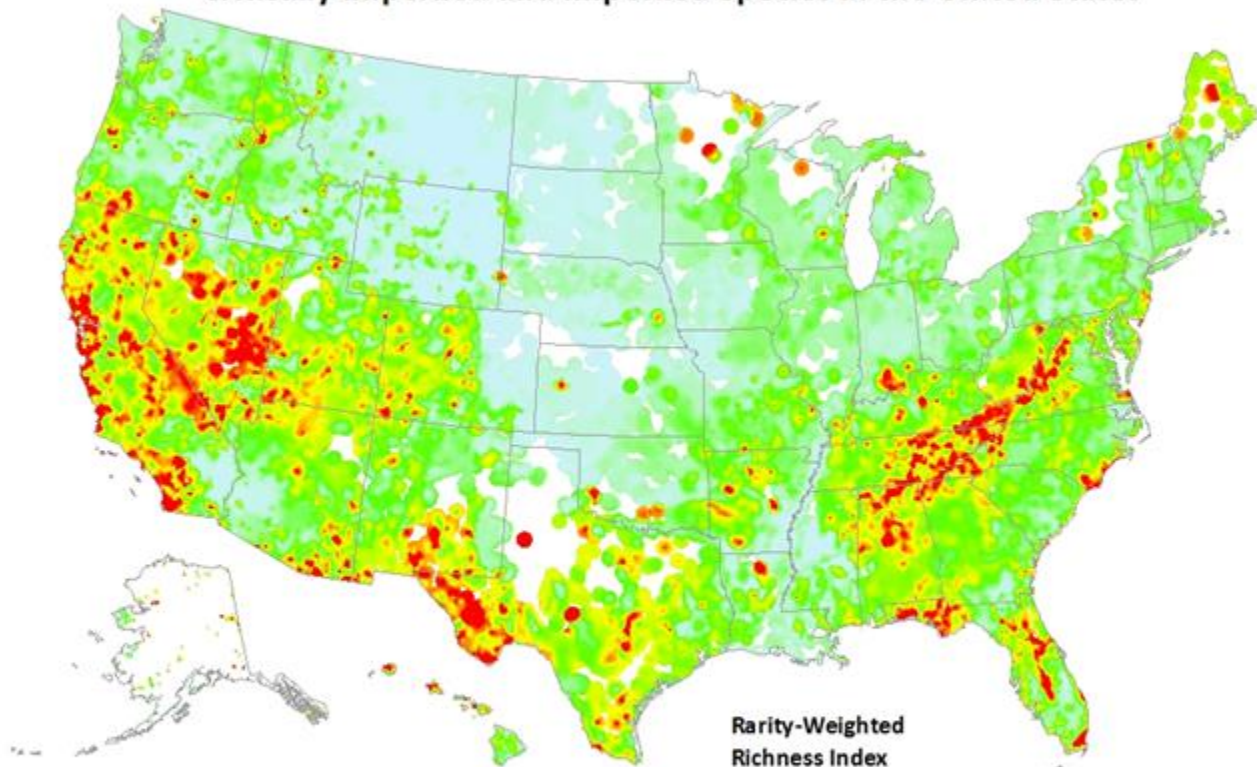
“Several coastal ecosystems are present in the park.

**Forests** dominated by longleaf pine, turkey oak and live oak occupy the dry, coarse soil of a series of relict sand dunes. Between the dunes are dense shrub swamps,

called **pocosins**, populated by pond pines, loblolly and sweet bay, yaupon and evergreen shrubs. **Brackish**

**marshes** consisting primarily of cordgrasses and sedges can be found beyond the relict dunes adjacent to the river.”

## NatureServe Rarity-Weighted Richness Model of Critically Imperiled and Imperiled Species in the United States



The continuous surface model representation of Rarity-Weighted Richness (RWR) of critically imperiled (G1) and imperiled (G2) species provides a picture of areas that represent concentrations of limited-range species and highlights locations with species composition different from adjacent areas. By combining overall species richness and the relative rarity (based on restricted distributions) of the species, this analysis points to locations that are essentially irreplaceable, and which present conservation opportunities that are found in very few other places.

0 100 200 Miles



Source: NatureServe and its Natural Heritage member programs 2013  
Produced by NatureServe, October 2013

Sundews

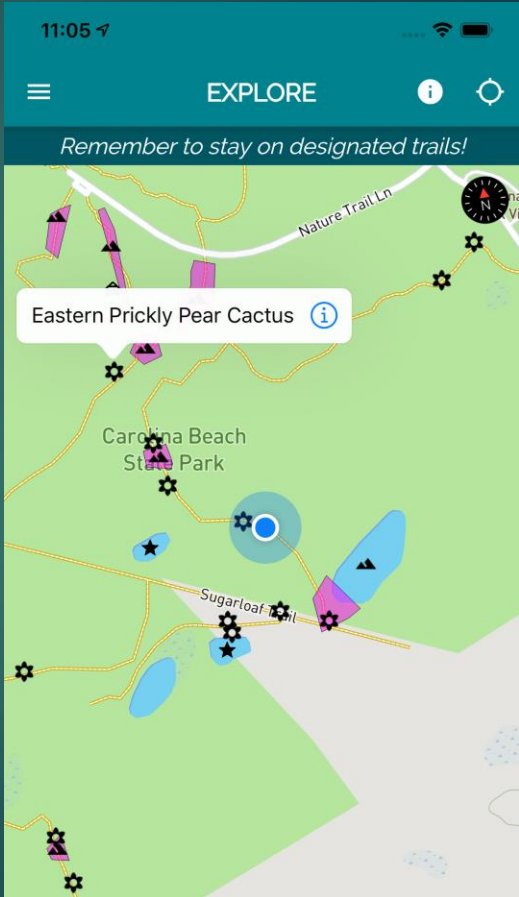




# Science Education: Island Ecology for Educators Course



# Computer Science: Mobile Application Development Course



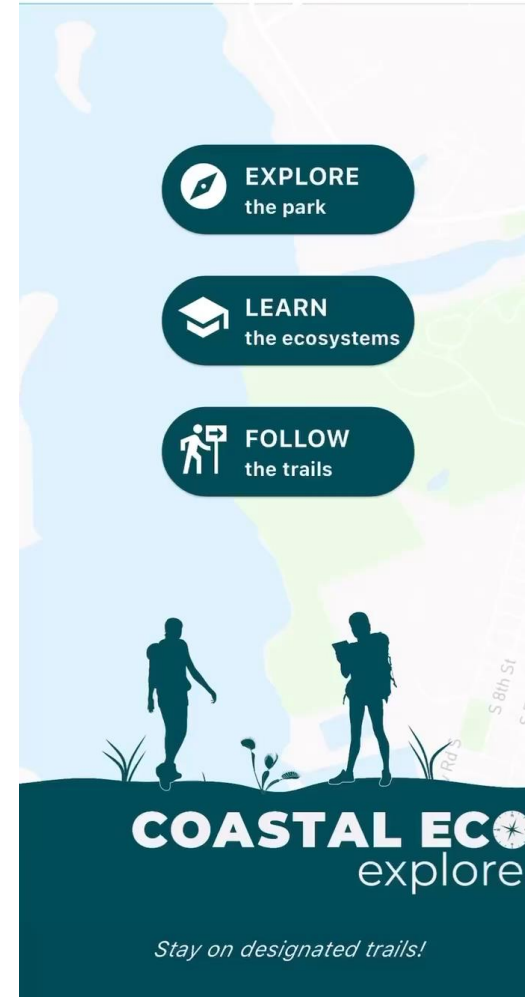
# Community Partnerships





# Coastal Eco Explorer

- Mobile application for both Android and iOS.
- <https://uncw.edu/academics/colleges/wce/partnerships-centers/coastal-eco-explorer/>
- Many vignettes showcased within the app!
  - [Limesink Ponds \(Lily Pond\)](#)
  - [Pine Savanna](#)
  - [Xeric Sandhill](#)



# Interactive Community Partnerships

Students will collaborate with guest speakers as well as peers each week.

Jesse Anderson, Carolina Beach State Park Ranger

Becky Savage, NC Wildlife Resource Commission

Emily Abernethy, Fort Fisher SRA Park Ranger, Sea Turtle Biology

Roger Shew, UNCW Lecturer of Geology

Dr. John Taggart, UNCW Associate Professor of Environmental Studies

Hannah Seibert, Education Coordinator at Airlie Gardens

Gail Lemiec, Outreach Educator, NC Aquarium at Fort Fisher

Andy Fairbanks, Education Coordinator, Halyburton County Park



**THANK YOU!**



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