

UF/IFAS Nature Coast Biological Station

To implement this tour, you will need:

The tour link: https://my.matterport.com/show/?m=aubrcnCotZh

A way for your students to view/interact with the tour:

- Option 1: smartphones with Google Cardboard or other viewers
- Option 2: students view the tours via personal computers or tablets with individual headphones
- Option 3: project the tour on a screen at the front of the room for students to view together

Background Information

This tour showcases the University of Florida / Institute of Food and Agricultural Science's (UF/IFAS) Nature Coast Biological Station (NCBS) Building located in Cedar Key, Florida. Throughout the tour, students and educators can travel through the NCBS offices and labs to learn about the different staff members working at the center, what their jobs entail on a day-to-day basis, and why the research and work they do is important. Learners may also travel outside, to the back of the station, to see the boat dock and see and learn about living shorelines.

Website Link: https://ncbs.ifas.ufl.edu/

Purpose Statement and Learning Objectives

The purpose of this iVisit tour is to introduce learners to coastal and fishery issues, scientists, and research.

Learning Objectives:

After completing this tour, students will be able to:

- Name the key roles of the NCBS team.
- Explain how the community can interact with NCBS and contribute to conservation.
- Discuss research happening at NCBS.
- Describe UF/IFAS NCBS and its purpose.
- Discuss a coastal estuary
- Define and explain the importance/purpose of a living shoreline
- Define bycatch and the dangers they pose to a native habitat/environment.
- Name at least two different native aquatic species found in Florida.
- Present potential pathways to starting a career in STEM.



Key Terms

Aquaculture Extension Specialist

Bycatch Living Shoreline

Coastal Estuary Native

Diamond Back terrapin Oyster recruitment dome

Ecology Tides

What You and Your Students Will See in the Tour

This tour includes all three floors of NCBS and the boat dock behind the station. You can click the white circles along the floor to navigate the lab. You may also utilize the arrows at the top of your screen to maneuver through the different "stations". Information points throughout the tour can be selected by clicking on the floating icons. Each icon provides additional information and media about the area. Refer to the following outline to guide students through the tour. You can navigate the tour using different options:

- 1. Navigate to the first stop, then use the arrows to progress through the station from beginning to end.
- 2. From the floorplan view, move to a specific area in the station. This button is found in the bottom left side of the screen.
- 3. Using the mouse to simply move and look around. You can click the white circles along the floor to move through the tour.

Throughout the tour, you can click on information points to learn more and view additional media about the area. You can use the following outline to guide students through the tour.

First Floor – Discovery Center – Wet Lab – Boat Dock

Starting point - Front door of NCBS

- View introductions points outside and move into the front door
- Explore points in the first room (discovery center) This room is where visitors and guests of NCBS can learn about research happening at the station and interact with some of the scientists working on the research.
 - Suwanee river exhibit
 - Coastal Estuary
 - Shellfish Aquaculture
 - What is a Living Shoreline
 - o Touch tank
 - Suwannee Valley Map
- Move down the hall and enter the doorway on the left into the Wet Lab



- Explore the wet lab to learn about a grad student conducting research in the lab and the research being conducted on Blue Crabs, Diamondback Terrapins, and crab traps
 - The Wet Lab
 - Shellfish Aquaculture Tank
 - o Graduate Student: Shea Husband
 - Diamondback Terrapin
 - o Blue Crabs in Tank
 - Blue Crab Trap Desing and Measurement
 - Research in Action
 - Pump System
- Exit out the garage style doors on the left side of the Wet Lab to move towards the boat dock
- Explore the outside area and boat dock to learn about some of the equipment and facilities utilized by NCBS faculty and graduate students
 - Boat and Dock Use
 - Pace Ervin Taylor Learning Pavilion
 - Oyster Recruitment Dome
 - o A Living Shoreline
 - Dock at NCBS
 - Seahorse Key
 - NCBS on the Water
 - Captain Kenny
- If you end the first floor at the end of the boat dock, use the button on the bottom left of your screen called "Floor Selector" and select "Floor 2" and it will take you up to the second-floor balcony where you can enjoy a different view of the water. You can use the "Floor 2" button wherever you end on the first floor, it just may not take you to the balcony on the second floor. You may also make your way back inside the building and go up the stairs across from the elevator, which is in the hallway right outside of the wet lab.

Second Floor – Balcony – Conference Room – Offices - Workspaces

- Move inside the second floor from the balcony or the stairs to explore the conference room and assorted offices and workspaces to learn about the people working in the station and some of the resources available at the station
 - The Conference room
 - NCBS Team: Extension, Faculty, and Staff
 - NCBS Affiliated Graduate Students
 - Rose Cantwell
 - Scientists Have Fun Too
 - Emily Colson
 - o Dr. Travis Thomas
 - o Dr. Micheal Allen
 - o Advice From Dr. Allen



• Wherever you end on the second floor you may use the "Floor Selector" button to move up to the third floor by selecting "Floor 3" or you can find the entrance to the staircase on the second floor and make your way up, use the button on the bottom left of your screen called "Floor Selector" and select "Floor 2" and it will take you up to the second-floor balcony where you can enjoy a different view of the water.

Third Floor - Offices - Workspaces - Classroom Area

- Starting
- Move through the third and final floor of the station to explore an extension specialist's office, student workspace, and classroom teaching area
 - o Dr. Savanna Barry
 - Advice from Dr. Barry
 - NCBS Unique Facility Resources
 - Leslie Sturmer
 - o Classroom Area
 - Why Build NCBS in Cedar Key
- Explore the remainder of the station at your own pace

Acknowledgments

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