

UF/IFAS Center for Aquatic and Invasive Plants

To implement this tour, you will need:

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

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 (UF) Institute of Food and Agricultural Sciences (IFAS) Center for Aquatic and Invasive Plants (CAIP). Throughout the tour, students and educators can travel through the CAIP 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 center, to learn about the research happening on site in the mesocosm facility. There, visitors will also find multiple links to more information about invasive terminology, identification of invasive species, and other uses for mesocosm tanks.

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

Purpose Statement and Learning Objectives

This tour's purpose is to introduce learners to aquatic and invasive plant issues, scientists, and research.

Learning Objectives:

After completing this tour, students will be able to:

- Describe UF/IFAS CAIP and its purpose.
- Discuss the differences between native and non-native plant species.
- Define invasive plant species and the dangers they pose to a native habitat/environment.
- Name at least two different invasive plants found in Florida.
- Present potential pathways to starting a career in the plant sciences.
- Explain how scientists work with the Cooperative Extension Service to conduct research and educate stakeholders and target audiences.
- Outline the importance of having a communication team at a science/research focused center.

This material is based upon work supported by the National Institute of Food and Agriculture and the U.S. Department of Agriculture, under award number 2021-70003-35432. Created 2024.



Key Terms

Established Noxious

Herbicide Nuisance

Introduced Pesticide

Invasive Prohibited

Native Range Change

Nonnative

What You and Your Students Will See in the Tour

This virtual layout allows you to move through the inside and outside of UF/IFAS CAIP. 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 facility from beginning to end.
- 2. From the floorplan view, move to a specific area in the facility. 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.

CAIP Main Building- Offices and Lab

Starting point – Inside the front entrance of CAIP

- Begin the tour by viewing the informational "Welcome" icon
- View introduction and informational points
 - Welcome to the Center for Aquatic and Invasive Plants (CAIP)
 - UF/IFAS CAIP
- Move left to walk through the main building and visit the offices to learn about some of the careers, individuals, and research happening within CAIP.
 - o Dr. Candice Prince
 - Everyday invasive species monitoring
 - o Dr. Benjamin Sperry
 - o Dr. James Leary
 - Advice to Get Involved in STEM

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- o Dr. Jason Ferrell
- Kim Lottinville's Office
- o Dr. Stephen Enloe's Office
- Administrative Assistant Daisy Taylor
- Turn left before exiting the building into the shared lab space to learn about some of the research at CAIP and one of the graduate students who helps to conduct the science.
 - A shared lab space
 - Pursuing a Career Path in STEM
 - Exit the lab space and leave the building
 - o Where to next?
 - Choose your path!

Outdoor Mesocosm Facility

- Go left from the main building to learn about mesocosms, invasive plant species, and some of the research happening related to methods used to control them.
 - o Mesocosms: What are they? How do they work?
 - O Why is this research important?
 - Invasive Species Terminology
 - o Lost in the weeds?
 - Soft rush
 - Spatterdock
 - o Empty mesocosms: What other plants can we fill them with?
 - o Invasive plants in a new environment and the Lag Phase
 - Herbicide and Lake Plant Growth
 - Eel-Grass or Tape-Grass
 - o Can mesocosms only be used for aquatic plant research?
 - Fully grown Hydrilla tank
 - Dotted Duckweed
 - o Identify, Report, and Remove Invasives
 - Water lettuce
 - Pickerelweed
 - Invasive Plants and Water Hyacinth
 - o Emily Colson
 - o Dr. Travis Thomas
 - o Dr. Micheal Allen
 - Advice from Dr. Allen
- Once you finish exploring the mesocosm facility move back towards the main building to view the Communication Center. You can either go back the way you came or use the "View Dollhouse" button on the bottom left of the screen. media about the area. You can use the following outline to guide students through the tour.

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Communication Center

- Once you are back at the orange "Choose your path" point, turn left and go down the hall and turn into the open door on the right to explore the Communication center and learn about the communication team and their goals for getting the center's research findings out to the public.
 - Education and Training Specialist
 - Communications Manager
 - o Communication Team
- Explore the remainder of the facility at your own pace.

Acknowledgments

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