



## “Dive” 3 - Magnificent Mangroves

### Module Summary

This module is not an underwater dive, but a “dive” into the heart of a mangrove forest on Little Cayman. Students are taken on a terrestrial tour of some mangrove “mangles” where they are encouraged to ask questions to our CCMI Educator and host in real time. Students will be given an in-class activity to assist with their learning about the specialized adaptations of mangroves and what makes them so important to us. This RGL module will include a short hands on demonstration and a trip to Kingston Bight.

### Year 5

#### Learning Objectives

- Describe how mangroves adapted to their harsh environment
- Know the life cycle of a flowering mangrove tree
- Explain why mangroves so important to humans
- Demonstrate the impact of destruction to mangrove forests
- Prepare a letter of suggestion to the DoE on how to preserve mangroves

#### Science National Curriculum Alignment

- Learn about the life cycle of a flowering plant including how pollen is taken from the stamen into the stigma, fertilized in the ovule and a seed produced which is dispersed in a variety of ways (Year 5)

#### Description of Live Lesson

This module will take place terrestrially in front of a dense mangrove forest on Little Cayman. The educator will communicate constantly with the live lesson host (who will be behind the camera) and with the engaged remote class. The educator will take the students through a series of fun facts and learning objectives regarding our magnificent mangrove mangles, all in alignment with the Science National Curriculum of the Cayman Islands. Students will have an in-class activity to complete during the live lesson, which they are welcome to ask questions about to our educator at any time during the duration of the broadcast. Pre-recorded footage and images will be used to show the diversity and connectivity of the mangrove forest, should these observations not be discovered naturally during the live broadcast. During this module students will learn the importance of the mangrove forests, why we should leave them intact, and what we can do to ensure they remain a part of our connectivity to coral reefs in our future. The module will include a trip to Kingston Bight, on Little Cayman, Cayman Islands.



### **Live broadcast outline (45 mins)**

- 00:00 - 03:00 Host welcomes students and outlines the lesson
- 03:00 - 05:00 Host introduces the Educator and the in-class activity sheet
- 05:00 - 10:00 Educator introduces and describes a mangrove forest
- 10:00 - 15:00 Educator explores the mangroves and points out their importance to humans
- 15:00 - 20:00 Questions
- 20:00 - 25:00 Educator explains some threats to mangrove forests
- 25:00 - 30:00 Educator demonstrates mangrove reproduction and restoration
- 30:00 - 35:00 Educator gives hopes for the future and how the students can help
- 35:00 - 40:00 Questions
- 40:00 - 45:00 Host recaps the live lesson and concludes the module

### **In Class Materials Needed**

Internet connection, laptop, projector, speakers, paper, pencils/pens, CCMI activity sheet, and CCMI fun fact sheet.

### **Useful Additional Resources**

- [www.reefresearch.org/reefs-go-live](http://www.reefresearch.org/reefs-go-live)
- [www.projectaware.org](http://www.projectaware.org)
- [www.doe.ky](http://www.doe.ky)
- [www.education.gov.ky/education/curriculum](http://www.education.gov.ky/education/curriculum)
- [www.oceanservice.noaa.gov/kids/](http://www.oceanservice.noaa.gov/kids/)
- <http://marvellousmangroves.org/>
- <https://www.nationaltrust.org.ky/mangroves>