

Mangrove Propagule Lab

Which Habitat Video: Mangrove

Subject: Science

Duration: 1-2 hours

Location: Classroom/lab

Grades: 3rd, 4th, or 5th

Next Generation Sunshine State Standards:

SC.5.N.1.1; SC.5.P.8.1; SC.3.L.14.2

Key Vocabulary: mangrove, propagule, graduated cylinder, metric stick, volume, circumference, length, balance scale, weight, mass

Materials

- Mangrove propagules (not from a National Park)
- Balance scale
- Weigh scale
- Graduated cylinder
- Metric stick
- Journal / pencil

Objectives

The students will be able to compare results of experiments and other types of investigations, experiment with properties of matter, and discuss plant structure and function.

Method

Students will use science tools (graduated cylinder, metric stick, balance scale, weigh scale) to measure and record physical data about mangrove propagules. They will compare data with other students.

Background

Discuss with students the environmental importance of mangrove habitats.

Discuss with students the physical properties of mangrove propagules.

Discuss with students the life cycle of plants.

Suggested Procedures

1. Present Everglades Video "Mountains and Valleys: Mangrove" to students
<http://www.nps.gov/ever/photosmultimedia/mountainsandvalleys.htm>
2. Set up measurement stations – volume, mass, weight, length, circumference.
3. At each station have appropriate measuring tools and 1 mangrove propagule.
4. Have students create a data table in their journals that include the 5 stations, and if you want to include the extension – reflect this in the data table (attached).
5. Record monthly data for plant growth.
6. Compare data to other students in the class.

Evaluation

- Completed student data report.
- Written comparison with another student's data report.

Extension

Place mangrove propagules in recycled water bottles and observe growth. Repeat measurement lab once a month for 6 months.

Contact local universities (University of Florida) for opportunities to plant mangrove propagules in restoration areas.

	0 Months	1 Months	2 Months	3 Months	4 Months
Weight					
Length					
Circumference					
Mass					
Volume					