Objectives of Module

1. Build a strong foundation in ecology by focusing on basic concepts and definitions used in describing and comparing ecosystems.

2. Students will learn about three different marine habitats in Palau and use terms to describe and compare these ecosystems.

3. Students will learn about different habitats in Palau and be able to identify them on aerial or satellite images.

This module will take up at least two class periods. The 1st class will cover ecosystems and the marine habitats of Palau. The 2nd class will use the Habitat presentation to teach about other marine habitats found in the Palau lagoon.

This module is two parts and contains the following that are found in the appropriate folder:

Part 1. Ecosystems of Palau
   1. Presentation
   2. 7 videos on three different marine habitats in Palau
      a. Jellyfish Lake (3 videos)
      b. Nikko Bay (2 videos)
      c. Lighthouse Reef (2 videos)
   3. Activity Worksheet

Part 2. Habitats of Palau Identification and Maps
   1. Presentation with activity included

All these materials are also accessible on the Coral Reef Research Foundation website: https://coralreefpalau.org/education/teaching-science-in-palauan/

**YouTube Links**

Jellyfish Lake
https://www.youtube.com/playlist?list=PL7fSRQQIhx96Jix_jsSj_Mq73mzN9QM5v

Nikko Bay
https://www.youtube.com/playlist?list=PL7fSRQQIhx96lE-G8PqfGA-CE2j2jN8py

Lighthouse Reef
https://www.youtube.com/playlist?list=PL7fSRQQIhx949DAM6nNujCHdzctEh53d7
**CLASS 1**

**I. Introduction: Terminology, Time: 10-15 minutes**

Using presentation, teachers should go over each term so that students can understand them. At the end, there are three pictures that the teacher can use for students to identify each term. This is a practice exercise.

**II. Activity 1: Ecosystems videos Time: 25 minutes**

Students can watch the videos and answer questions on the Ecosystems worksheet. The worksheet answers can help guide students in comparing ecosystems. For critical thinking, they can also answer or write a report for the questions listed in the “Connecting the Dots” slide.

1. Jellyfish Lake: 3 videos
   a. An Introduction to Ongeim’l Tketau (Jellyfish Lake), 2:55 minutes.
   b. The Golden Jellyfish in Ongeim’l Tketau (Jellyfish Lake), 2:30 minutes.
   c. The Living Creatures of Ongeim’l Tketau (Jellyfish Lake), 2:55 minutes.

2. Nikko Bay: 2 videos
   a. An Introduction to Nikko Bay, Palau, 3:35 minutes.
   b. Sea Grass Beds in and Around Nikko Bay, Palau, 4:05 minutes.

3. Lighthouse Reef: 2 videos
   a. Lighthouse Reef, Palau – An Introduction, 4:45 minutes.
   b. The Impacts of Typhoon Bopha on Lighthouse Reef, 3:40 minutes.

**III. Wrap-Up for Activity 1. Time: 5 min**

Go over the slide “Connecting the Dots” with students. Emphasize that ecosystems are really the interaction of organisms with their environment, and that we are still learning new things about the living world.

**CLASS 2**

Class 2 covers the different Palau marine habitats in the Palauan language. Students should learn the names of these important habitats that show the change from coast to outer reef. Follow the presentation and have students complete the exercise in the presentation.

**Contact**

If you have questions, comments or suggestions, please call Coral Reef Research Foundation at (680)488-5255 or email sw.patris@gmail.com. You can talk to either Gerda Ucharm or Sharon Patris. We welcome feedback!