Night Snorkel in Emerald Lagoon

The community of organisms observed while snorkeling at night is vastly different than the community seen during the day. Specific adaptations allow these organisms to live and survive nocturnally. Students will have the opportunity to observe these adaptations firsthand during an evening snorkel in Jules' Emerald Lagoon. Program begins with a short discussion about the concepts and vocabulary listed below. Instructor will then go over proper night snorkeling guidelines and techniques and review some of the organisms students can specifically look for while in the Emerald Lagoon.

Grade Level: All

Timing: 1 hour

Concepts Covered:

- Nocturnal versus diurnal communities
- Adaptations of common nocturnal organisms: bioluminescence, eye adaptations, sound, species-specific adaptions such as parrotfish cocoons
- Common behaviors of diurnal organisms after sunset
- Night snorkeling

Vocabulary: nocturnal, diurnal, bioluminescence, adaptation, cones/rods, counterillumination, compound eyes, tapetum lucidum

MarineLab
Marine Resources Development Foundation
Marine Science education in the Florida Keys

Standards Supported:

Next Generation Sunshine State Standards

SC.5.L.17.1: Compare and contrast adaptations displayed by animals and plants that enable them to survive in different environments such as life cycles variations, animal behaviors and physical characteristics.

Ocean Literacy Principles

Principle 5. The ocean supports a great diversity of life and ecosystems.

d. Ocean biology provides many unique examples of life cycles, adaptations and important relationships among organisms (symbiosis, predator-prey dynamics, and energy transfer) that do not occur on land.