

## Rodriguez Key Field Trip

The transitional ecotone habitats within the Florida Keys often harbor diverse communities. The field trip will begin at the dock with a brief discussion on ecotones, the specific algal shoal habitat the group will be snorkeling, and examples of some of the organisms they can expect to see in the water.

*Neogoniolithon strictum* (“Gonio”) is a branching crustose coralline algae that creates a microhabitat for a diverse array of invertebrates. Students will snorkel the unique Gonio ecotone habitat and participate in a lab on the boat to observe, identify and discuss the invertebrate community that lives within the Gonio. Dependent on time and weather, students will be taken to a second snorkel site (North side of the island at the plane wreck or a patch reef.)

**Grade Level:** All

**Concepts Covered:**

- algal shoal habitat (food, shelter, substrate) with a focus on crustose coralline algae
- Diversity in different zones and ecotones
- Diverse invertebrate community found within crustose coralline algae

**Vocabulary:** ecotone, zonation, calcareous, coralline algae

**Extensions:** High school students who participate in our Diversity Indexing Lab can participate in our Advanced version of the Rodriguez trip during which they will calculate Simpson’s Diversity Index.

## **Standards Addressed:**

### ***Next Generation Sunshine State Standards***

SC.6.L.15.1: Analyze and describe how and why organisms are classified according to shared characteristics with emphasis on the Linnaean system combined with the concept of Domains.

SC.912.L.17.6: Compare and contrast the relationships among organisms, including predation, parasitism, competition, commensalism, and mutualism.

### ***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.

e. The ocean provides a vast living space with diverse and unique ecosystems from the surface through the water column and down to, and below, the seafloor. Most of the living space on Earth is in the ocean.