

PIGEON KEY FOUNDATION & MARINE SCIENCE CENTER

ADDITIONAL EDUCATION PROGRAMS

PIGEON KEY HISTORY

The island of Pigeon Key is the single most historically significant location in the Florida Keys. Since Henry Flagler's original turn-of-the-century work camp, the island has seen some unbelievable uses and changes. In this program, students learn the fascinating story that brought this one-of-a-kind island treasure from a work camp, to a vacation destination, to the Historical Foundation and Marine Science Center that it is today. Students then explore Pigeon Key's on-island museum during a scavenger hunt, which allows them to discover a piece of Pigeon Key History for themselves.



MARINE ADAPTATIONS

In this program, the staff introduce students to the plethora of adaptations that marine organisms have developed for survival. From obvious features like fins and gills, to the more obscure such as protective setae of a fire worm, students are immersed in this fascinating topic! After discussing everything from claws, camouflage, night vision, and bioluminescence, students are given the opportunity to design their own marine creature! An optional evening tide-pooling session can be added to hunt for creatures with nocturnal adaptations, creatures found are brought back to our touch tanks for a more in-depth explanation and hands-on learning experience.



SQUID ANATOMY AND DISSECTION

Squid belong to a family of unique creatures! This program examines the amazing adaptations squid exhibit in order to survive and how this relates to their morphology. By exploring the idea that different species live in different environments and therefore have different morphological characteristics, students realize how well adapted each creature is to its unique environment. Following the short presentation, students dissect a squid in order to better understand their anatomy and why each feature is important.



CONSERVATION ANGLING



If your students already enjoy fishing, or want to try it for the first time, this is an invaluable course for them. After a brief fishing tutorial, students head to the Pigeon Key dock with rod and reel in hand. Pigeon Key Staff members oversee all fishing to help bait hooks and catch and release caught fish. Notable species caught and released include grunts, barracuda, tarpon, snapper, grouper, and a variety of shark species!

INVASIVE SPECIES OF SOUTH FLORIDA

Florida is a hotspot for invasive species. The most popular case of invasion for the Florida Keys is the lionfish. Pigeon Key staff explain the difference between nonnative and invasive species while exploring some of the more common cases in Florida. We then focus on lionfish and why this particular invader is such a problem. We frequently collect lionfish around the island and house them in our live-tanks.



EARTHDIVE RESEARCH PROJECT



Citizen Science is a growing form of data collection by members of the general public in collaboration with professional scientists. Your students become a part of this Citizen Science when they participate in the EarthDive Research Project, which helps create a database of indicator species in the Florida Keys. A great activity to add another level to all of the snorkeling done while on Pigeon Key. Students snorkel in teams with a dive slate and record certain species of marine creatures they observe and in what quantity. Once back on island, students aid staff with entering the data into a global database.

PLANKTON LAB

****Recommended for High School or older****

Plankton produce nearly 70% of the oxygen in the atmosphere (more than all land plants combined!), yet students tend to know little about them. Plankton are fascinating; from microscopic algae, to larger-than-human-sized jellies, they comprise a dizzying array of animals and plants. After discussing what qualifies an organism as a plankton, and how they are ecologically important, students collect plankton from the waters around Pigeon Key. Samples are brought back to the classroom to be examined under a microscope, where students discover the mysteries of tiny plankton for themselves. Students typically find planktonic crabs, fish, and nudibranchs in their samples!



Marine Mammals

*****Recommended for High School or older****

In this program, students will learn what attributes make marine mammals unique including some key adaptations that help them survive in the ocean. Staff will also talk about their ecology, morphology, feeding behaviors, and more. Finally, students will learn about the major threats these organisms face along with ways we can help protect them, finishing off with a competitive game of Jeopardy!



SEA TURTLES OF SOUTH FLORIDA

South Florida is home to five of the seven species of sea turtles found worldwide. This fun program dives into the different species, their anatomy, quirks and ecological importance. Your students will leave Pigeon Key with a large appreciation for these amazing animals and the small steps that can be taken in order to protect them in the wild.



CONSERVATION TOWN MEETING

What would happen to Pigeon Key if the foundation that works to preserve it was threatened? Your groups get to find out when half of your students become Developers lobbying for change, while the other half act as Conservationists hoping to preserve the island. A group of students acting as the Board of Directors gets to make the ultimate decision after both sides present their ideas and strategies for Pigeon Key's future. Recommended as the last program before groups leave, this is a great closing activity that keeps students talking about Pigeon Key the whole way home.



3-day/ 2-night trips starting at \$540



QUESTIONS?
CONTACT EDUCATION DIRECTOR
JILL HAYDEN
jill@pigeonkey.net