

# MARINE MEGAFAUNA BIOLOGY

Mondays, September 13-December 13 (no class October 11, November 22; 12 weeks) 9:30am-10:45am Ages 8-10

Students explore the biology and ecology of sea turtles, dolphins, sharks, penguins and other marine megafauna as they learn how scientists study their behavior and map their worldwide distribution. All lab costs are included in registration fee.

Instructor: Diana Rodriguez, BEd Location: Science Center (suite 5) Course fee: \$220 OR \$20/lab Early registration (10% off) through August 6 10% sibling discount beginning August 7 Register for full semester or individual labs.

#### LAB SCHEDULE:

#### Science of Whales – Monday, September 13

Students explore the biology and behaviors of cetaceans as they use a dichotomous key to identify whales and learn about passive acoustic tags (PATS) that are used to study them.

#### Dolphins and Porpoises – Monday, September 20

We focus on smaller cetaceans this week as we investigate similarities and differences between dolphins and porpoises and learn about echolocation and how they use it to find food.

#### Manatee Science – Monday, September 27

Kids study the biology and behaviors of manatees as they learn about using ethograms to understand why they do the things they do.

#### Big Bony Fish – Monday, October 4

This week, we look at the adaptations and noteworthy behaviors of large telosts (bony fish) including grouper, tarpon and billfish, and map the distribution of fish tagged for scientific research.



#### Benthic Rays and Sharks – Monday, October 18

We investigate what benthic species are and the adaptations many benthic rays and sharks have in common, then use their creativity to build a "frankenfish" by combining adaptations of unique benthic rays and sharks.

#### Pelagic Shark Research – Monday, October 25

Students explore adaptations and behaviors of pelagic sharks and learn how scientists study them as they map their movements recorded from satellite tracking data.

## Gentle Giants of the Sea – Monday, November 1

Today, we study the feeding behaviors of manta rays and whale sharks and learn how each individual can be identified by their markings and color patterns as we learn how scientists study these gentle giants.

#### The Extinct Megalodon – Monday, November 8

We investigate shark teeth and create a model of a Megalodon jaw as we compare the size, shape and function of Megalodon teeth with those of modern sharks.

## Sea Turtle Science – Monday, November 15

Kids study the seven species of modern sea turtles, learn their distinguishing characteristics and collect data from a mock turtle nest excavation.

#### Pinniped Biology – Monday, November 29

Students learn the differences among leopard seals, elephant seals, sea lions and walrus, including their physical and behavioral adaptations that allow some of them to get really large.

# Science of Penguins – Monday, December 6

We work on our geography skills as we map the distribution of penguins throughout the world, and conduct a behavioral analysis of penguins from different locations.

# Giant Squid – Monday, December 13

Students study squid anatomy as they dissect common squid (if they want to) and compare and contrast anatomy, habitat and behaviors of common squid with giant squid.