

Sharks are charismatic wildlife, and tend to get a lot of attention in the media. However, they are often misrepresented and misunderstood. AWSC is working to change that by providing shark education to school-age children.

Our in-school programs are designed for all grade levels. Programs can be customized for an individual class, grade level, or full school. Our more hands on programming is best executed on a class by class basis to ensure all students have the opportunity to engage.

INTRODUCTION TO SHARK BIOLOGY**

Students will assemble a life-size puzzle of a juvenile white shark and a life-size puzzle of an adult white shark. Students will then discuss how sharks grow and change from juvenile to adult and what is required for them to grow. With examples of shark teeth to discuss how feeding and diet change, this program will demonstrate how sharks need food to grow and swim! Students will then take their investigation a step further by exploring the similarities and differences between white sharks and whales, boney fish, seals, and more. Through this, students will develop an understanding of how marine animals utilize and travel the Cape waters in various ways.

Extension: Educators will be provided with a supplemental activity to use in the classroom as a post-program lesson.

- Cost: \$195
- Program Type: Interactive Lecture
- Length: 60 Minutes (includes time for Q/A)
- Age: Elementary
- This program is best done in a large room (cafeteria, library, or gym) due to the puzzles being 6 ft and 18 ft in length and the presenter has access to a projector.
- MA Standards:
 - K-LS1-1: Observe and Communicate that animals and plants need food, water, and air to survive.
 - K-LS1-2: Recognize that all plants and animals grow and change over time.
 - 1-LS1-1: Use evidence to explain that different animals use their body parts and senses in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water, and air.
 - 2-LS2-3: Develop and use models to compare how plants and animals depend on their surroundings and other living things to meet their needs in the places they live.
 - 3-LS4-1: Use fossils to describe types of organisms and their environments that existed long ago and compare those to living organisms and their environments.

^{**}This program can only be done with groups of 20-25 students at a time



SHARK TAGGING AND TRACKING**

The focus of this program is on technology and current shark tagging that is taking place off Cape Cod. Students learn about a shark workup and what research practices are used and get to apply model tags to inflatable sharks to conduct a full workup themselves. Information is provided on how the tags are a part of a communication system and how the data is transferred to the researchers.

Extension: Educators will be provided with a supplemental activity to use in the classroom as a post-program lesson.

• Cost: \$200

• Program Type: Interactive Lecture

• Length: 60 -75 Minutes (includes time for Q/A)

• Age: 4th grade through Jr. High

• This program is best done in a large room (cafeteria, library, or gym) due to the size of the inflatable sharks and the presenter has access to a projector.

• MA Standards:

- 4.3-5-ETS1-5 (MA): Evaluate relevant design features that must be considered in building a model or prototype of a solution to a given design problem.
- 7.MS-ETS3-1 (MA): Explain the function of a communication system and the role of its components, including a source, encoder, transmitter, receiver, decoder, and storage.
- 7.MS-ETS3-2 (MA): Compare the benefits and drawbacks of different communication systems.



^{**}This program can only be done with groups of 30 students at a time



SHARK BIOLOGY AND SPINY DOGFISH DISSECTION LAB**

Learn the basics of shark biology and develop an understanding of shark anatomy. Students participate in a locally caught, spiny dogfish shark dissection, and learn what makes them unique, including characteristics that enable them to hunt well and swim fast. Students will also learn about the local spiny dogfish shark commercial fishery and sustainable fishing practices.

- Cost: \$15 per student
- Program Type: Interactive Lecture and Lab
- Length: 75-90 Minutes (includes time for Q/A)
- Age: 3rd grade to High School
- This program is best done in a classroom or a lab setting
- MA Standards:
 - LS4.C Adaptation (3-5): Particular organisms can only survive in particular environments. In any environment, some kinds of organisms, and some individuals of a given species, survive better than others.
 - LS1.A Structure and function (6-8): All living things are made up of cells. An organism can be made of one cell (unicellular) or many cells (multicellular) Within cells, specialized structures are responsible for specific functions. In multicellular organisms, cells work together to form tissues and organs that are specialized for particular body functions.

**This program can only be done with groups of 30 students at a time

WHITE SHARK IDENTIFICATION

Learn how the AWSC Research Team identifies individual white sharks. By using AWSC's online app, The White Shark Logbook, and by using the video footage provided, students will learn the id process by identifying white sharks on their own.

Extension: Educators will be provided with a supplemental activity to use in the classroom as a pre-program lesson.

- Cost: \$165
- Program Type: Interactive Lecture
- Length: 60 Minutes (includes time for Q/A)
- Age: Jr. High High School
- This program can be done in a large group setting or class by class and the presenter has access to a projector.
- Youth should have access to internet to access the White Shark Logbook



LEARNING THE FACTS ABOUT SHARKS

This program takes students through a series of true and false statements to address some of the common misconceptions about sharks. The statements included will cover the basis of shark biology and local shark research.

• Cost: \$165

• Program Type: Interactive Lecture

Length: 60 Minutes (includes time for Q/A)

• Age: Elementary - Jr. High (Program is altered depending on grade level)

• This program can be done in a large group setting or class by class and the presenter has access to a projector.

• MA Standards:

- K-LS1-1: Observe and Communicate that animals and plants need food, water, and air to survive.
- K-LS1-2: Recognize that all plants and animals grow and change over time.
- 1-LS1-1: Use evidence to explain that different animals use their body parts and senses in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water, and air.

SHARK STORY TIME

Enjoy a reading of a shark-themed story! Our education team will provide a list of books that can be read to your students. After the story has been read, our educator will lead youth through a shark song, followed by an activity or craft.

- In-Person Cost: \$100 for story reading, Q/A, and supplementary materials to coincide with the story
- Program Type: Interactive Reading and Q/A

• Length: 30 - 45 minutes

Age: Pre K and K



AWARENESS INSPIRES CONSERVATION

This program provides an overview of the Atlantic White Shark Conservancy. The lecture covers a wide range of topics - from the public perception of sharks to the role sharks play in our ecosystem. This also covers the history of white sharks and seals in the New England area and how it connects to current-day research. The ongoing white shark research taking place off of Cape Cod is explained in detail, as well as how that research is connected to white shark conservation. The lecture wraps up with a discussion on how the presence of white sharks close to shore has specifically affected the Cape Community.

Extension: Educators will be provided with a supplemental activity to use in the classroom as a pre-program lesson.

• Cost: \$165

• Program Type: Lecture

• Length: 60 Minutes (includes time for Q/A)

• Age: Jr. High - High School

• This program can be done in a large group setting or class by class and the presenter has access to a projector.



IN-SCHOOL PROGRAMMING FURTHER INFORMATION



We hope that these programs will provide a learning experience for youth as they progress through school. As the students grow, their knowledge of white sharks will as well, leading to them being a steward of white sharks and our oceans. All of the programs outlined will be presented and led by an Atlantic White Shark Conservancy educator.

ADDITIONAL COSTS AND PROGRAM DISCOUNTS

- If the program takes place off of Cape Cod, a travel fee will be applied based on mileage. Our mileage fee is based on the national mileage rate.
- A 20% discount is applied when booking multiple programs.

VIRTUAL PROGRAM OPTIONS

- Our fee for virtual programs is \$150 per program.
- A 20% discount is applied when booking multiple virtual programs.

WHAT WE NEED FROM YOU

- All of our programs are conducted via a Powerpoint presentation. To ensure success, we ask you to provide:
 - Projector with cables
 - AWSC will bring adaptors to directly connect our laptop, as well as a USB file containing the presentation
 - Screen
- Some of our programs require ample space. We ask to have proper space accommodations to ensure the success of the program.
- We ask that a teacher or supervising adult is present at all times during the program
- We ask for a grade level contact (Name and Email) to whom we will send a program overview prior, and the supplemental lesson after the program.

The Atlantic White Shark Conservancy strives to engage all students and meet the needs of all students. In preparing for programs we like to speak with educators onsite to learn the needs of students so handouts can be modified or materials can be added or adjusted to ensure all youth can participate and learn in the best environment.

Did you know? YOU can also visit us!



IN PERSON VISIT TO THE SHARK CENTER CHATHAM

The Atlantic White Shark Conservancy offers hands on programming for students at our Shark Center Chatham location. Students are invited to tour the museum and participate in an experiential lesson in our learning lab during their time at the facility.

We are happy to change up programs for grade levels to provide a program that connects with your curriculum. Please ask for information about programming at the Shark Center Chatham.





