Eugenie Clark
HIDDEN HERO OF HISTORY

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Eugenie Clark, popularly and affectionately nicknamed The Shark Lady, was an American **ichthyologist** known for both her research on shark behavior and her study of fish.

In her youth, Ms. Clark found her passion for **marine biology** or the study of oceans and ocean life. At nine years old, she went to the New York Aquarium every Saturday while her mom worked at a nearby magazine stand. She dreamed of swimming with the fish in the aquarium. It's where she developed her love for the ocean and every creature in it–including sharks.

Her passion for ocean life deepened while at school, eventually receiving her doctorate in **zoology**, or the scientific study of animals. While she was studying, she was also doing research for incredible institutions, like the American Museum of Natural History in New York City.

Towards the end of her time in school, Ms. Clark received a Fulbright Scholarship, a prestigious award given to students so they can conduct research, teach, and share their talents in different countries. Her scholarship was to pursue **ichthyological** studies, or the study of fish, at the Red Sea in Egypt. This was an unexplored region of Egypt during Ms. Clark's time. While there, she observed and documented 300 fish species, including three that were previously undiscovered.

In 1955, Ms. Clark founded Cape Haze Marine Laboratory in Florida. It's now known as Mote Marine Laboratory. She was fascinated by sharks, and spent thousands of hours studying their habits and behaviors. For instance, she observed that some sharks don't move while sleeping, indicating that not all sharks have to continuously move in order to breathe.

Throughout her career, she conducted 72 **submersible** dives. Submersibles are small water vehicles that can go to great water depths. She also pioneered a new way of conducting underwater research through **scuba diving** in order to swim right next to sharks and observe their behaviors. Her research also proved that, while sharks can be dangerous at times, just like many other living things, they're not as fearsome as we think they are.

She would lead more than 200 field research expeditions around the world throughout her career. And she completed her very last dive at 92 years old. She even rode on the back of a 50-foot whale shark (the largest shark in the world) because she felt it was the best way to learn and observe.

Ms. Clark spent a lot of time educating the public about sharks, and tried to clear them of their bad reputation. She gave lectures and taught at a university, as well as wrote two books, over 175 articles, 24 television specials and one of the first IMAX films on this misunderstood species.

Here are some of important facts about sharks she covered:

- There are over 300 species of sharks in the ocean. And only about a dozen of those are actually known to have ever attacked humans.
- Sharks are often either confused or just investigating what they think are strange objects in the water when they attack.
- These occurrences are extremely rare and often survivable.
- In the media, many people focus on the bad and forget about all of the details surrounding these encounters.

Ms. Clark focused a great deal on studies that would keep sharks and humans safe. For instance, she discovered a fish in the Red Sea called the Moses Sole that secretes a natural shark repellent. It temporarily confuses them so the fish can get away unharmed. This discovery launched research aimed at preventing harmful shark and human interactions.

Current and future generations of scientists—marine biologists and ichthyologists—are inspired by her work and brave actions to "*swim with the sharks.*"

Glossary

Ichthyology – (ick-thee-O-lo-gee) the scientific study of fishes. The name comes from the ancient Greek language where "ichthys" means fish and "ology" means "the study of."

Ichthyologist – (ick-thee-O-lo-gist) the name of scientists who study fish. Ichthyologists work in research labs and museums, using high-tech fish tanks, diving equipment and other scientific tools to do their work.

Marine Biology – Marine biology is the study of all living things in saltwater habitats. Marine biologists might study larger animals like sharks and whales, or smaller organisms like algae and bacteria. Marine biology also includes the study of interactions between living things and the marine environment.

Zoology – Zoology is the study of animals of all shapes and sizes, from tiny insects to large mammals. Zoologists investigate what animals eat, how they live and how they interact with their habitats.

Submersible – a special type of watercraft that can submerge and operate completely underwater.

SCUBA Diving – SCUBA means Self Contained Underwater Breathing Apparatus, and scuba diving is a form of underwater diving in which a diver uses SCUBA to breathe underwater.

Sources: Britannica Kids, Study.com, Easy Science for Kids

Give it Some Thought

- Why do you think Eugenie Clark became so interested in studying and understanding sharks? What was so important about her research?
- What character traits helped Eugenie Clark become a pioneering ichthyologist who changed our understanding of sharks?
- Have your feelings about sharks changed after learning about Eugenie Clark's research and her time swimming with sharks? Why or Why not?

Use Your Imagination

Eugenie Clark grew up in a time when society had misconceptions about what a girl could or couldn't do. Ms. Clark proved to the world that sharks are smart, beautiful fish, and that she could learn and practice science. In doing so, Eugenie Clark made great contributions to the field of zoology and ichthyology.

- If you could practice or study anything you wanted, what would it be?

Write your response or draw a picture of yourself doing what you would love to do when you grow up in your journal or on a separate piece of paper.

(Activity Source: Activity Guide for The True Story of How Eugenie Clark Became the Ocean's Most Fearless Scientist, by Jess Keating)