

Why Sharks Matter



Learn, Respect, Conserve
with One Ocean Diving

**Sharks play a crucial role in keeping
ocean ecosystems balanced by
controlling species populations—
they're like the ocean's natural
regulators.**



Lets Dive In

- Biology of Sharks
- Shark Behaviors
- The importance of Sharks
- Shark Conservation



Different Types of Sharks

Just a few of MANY...



Great White Shark



Whale Shark



Hammerhead Shark



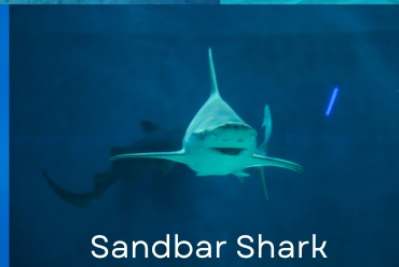
Tiger Shark



Oceanic Whitetip Shark



Galapagos Shark



Sandbar Shark



Leopard Shark



Blacktip Shark

A large, realistic-looking shark is swimming towards the viewer in a deep blue ocean. Several smaller fish are swimming around it. The scene is dimly lit, suggesting an underwater environment. The text "Biology Time!" is overlaid in a large, white, sans-serif font across the center of the image.

Biology Time!

How Do Sharks See?

- Sharks have **monochromatic vision**, which means they see mostly in shades of gray and very limited color. Certain colors, like **yellow** and white, are especially noticeable to them.
- They have a **nictitating membrane**, a protective layer that covers their eyes when they bite or feed.
- Their **tapetum lucidum** is a reflective layer behind the retina that enhances their vision in low-light conditions, helping them hunt effectively at dawn, dusk, or in deep water.



How Do Sharks Smell?

- Sharks have **nares**, or “swimming noses,” that aren’t connected to their mouths. They can detect tiny amounts of substances, like blood, from far away. This helps them find prey, navigate the ocean, and sense their environment.
- Humans aren’t their target, so sharks aren’t interested in us.

Nose or
“Nares”



How Do Sharks Hear?

- Sharks can hear through their inner ear and lateral line system.
- Sharks hear loud noises from around a mile away (like a boat, or helicopter).
- Sharks can hear splashing noises from around 300 feet away.



Sharks Have a WHAT?



“Ampullae of Lorenzini”

- Sharks have special sensors called ampullae of Lorenzini.
- They're on their head and snout and help sharks feel tiny electrical signals.
- They can sense stuff like: cameras, boat motors, heartbeats, and even movement in the water.



Shark Teeth!

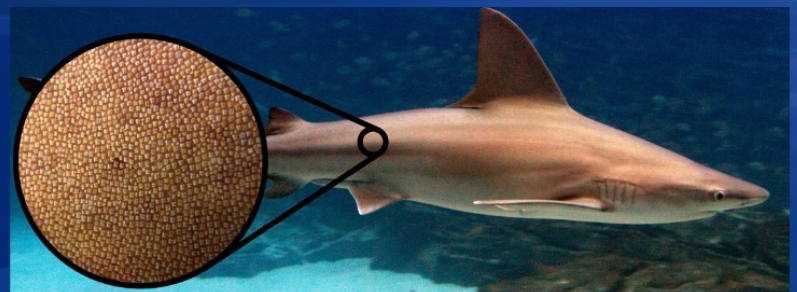
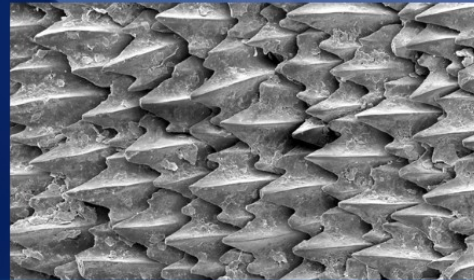
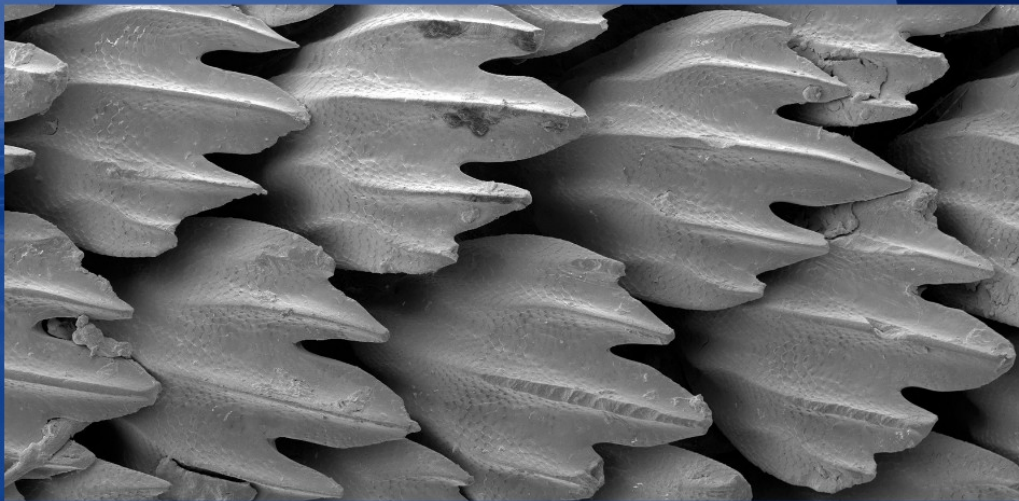


- Sharks have rows of teeth that are constantly being replaced.
- How many teeth do you think a shark can lose in his/her lifetime? (Sharks can lose up to 30,000 teeth in their lifetime)
- Many different types of teeth for different types of prey.



Shark Skin

- Shark skin is called “**dermal denticles**”
- Dermal - skin, denticle - teeth, “Skin teeth”
- Instead of scales like fish, sharks have dermal denticles to help them swim really fast



An underwater photograph of three sharks swimming in clear blue water. The sharks are seen from above, with their dorsal fins and tails visible. The water is bright blue with some ripples on the surface. The title 'Shark Behaviors' is overlaid in white text in the center of the image.

Shark Behaviors

Noticeable Behaviors

Body Language



Following

Piggy backing



Parallel swimming



Why Are Sharks Important?

- Across the world's oceans, there are over **500 species** of shark!
- Sharks have inhabited our oceans for over **400 million years**.
- Some are **top predators**, others are the **clean-up crew** of the ocean.
- Their diverse roles are part of a balance needed for **healthy oceans**.

More Reasons Why Sharks Are Important



'Aumākua

- Sharks - Manō
- 'Aumākua-a dead ancestors spirit reincarnated into a living entity.
- An 'Aumākua could be a shark, dolphin, whale, turtle, owl, the list goes on.
- Sharks that are 'Aumākua will protect and give wisdom as long as they are respected.



A vibrant underwater scene featuring a variety of marine life. In the upper left, a large shark swims towards the right. Below it, a sea turtle is seen swimming. The foreground is filled with a diverse array of colorful fish, including striped tangs, blue tangs, and a spotted pufferfish. The seabed is covered in a complex coral reef structure with various types of coral and sea anemones. The water is a deep blue, and the overall scene is rich in detail and color.

Conservation Time!

About One Ocean

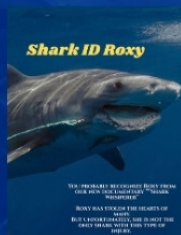
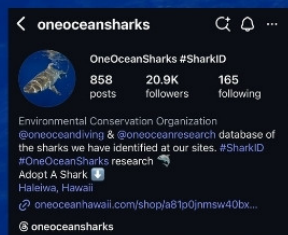
One Ocean Diving educates people about shark biology, behavior, and conservation, while highlighting how fascinating and vital these misunderstood apex predators are to ocean ecosystems.



More Divisions of One Ocean

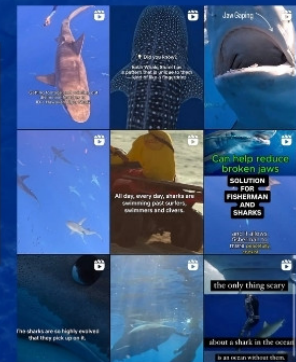
@ONEOCEANSHARKS

Marine conservation and education organization rooted in shark research, respectful shark encounters, and community engagement.



@ONEOCEANRESEARCH

Highlights marine research around the globe, sharing fascinating science & facts that support conservation & community.



@ONEOCEANDIVING

Shark tours guided by shark safety specialists & biologists.



@ONEOCEANCONSERVATION

A group focused on protecting sharks and the ocean. They educate the public, run campaigns, and work to create rules that keep oceans safe.



@SAVETHESEATURTLESINTERNATIONAL

A group that protects sea turtles and other ocean animals. They remove trash and fishing gear from beaches, host monthly beach cleanups, care for turtle habitats, and teach people how to help keep the ocean safe.

@ONEOCEANGLOBAL

A marine conservation network that connects global communities to protect ocean health. Through the Global Ambassador Program, it supports local conservation efforts, educational outreach, and policy advocacy worldwide.



Founders of One Ocean

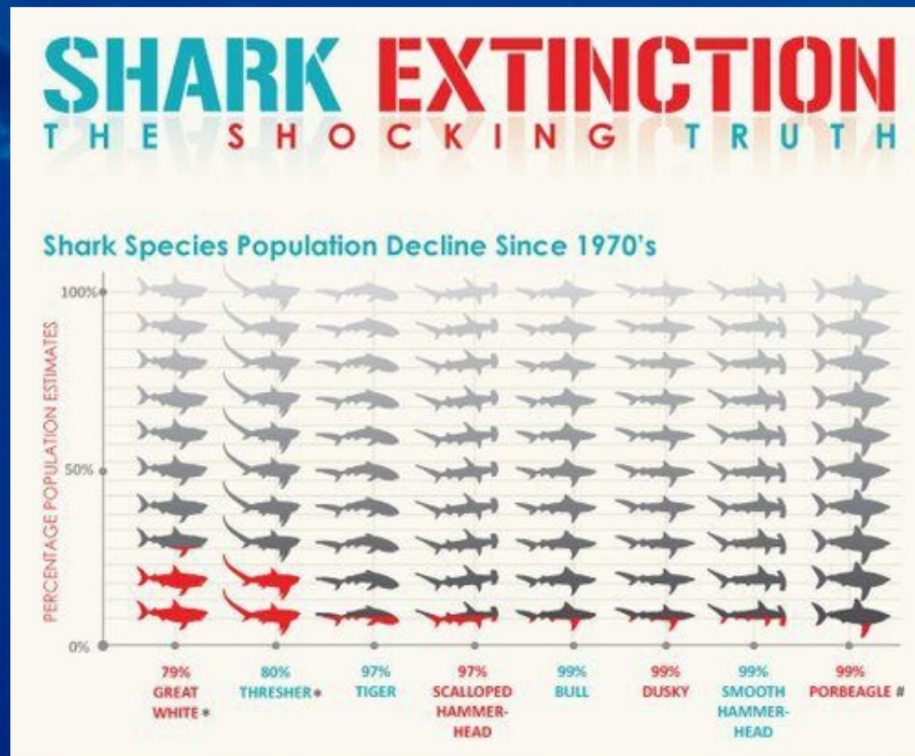
Ocean & Juan created One Ocean to:

- Help teach the world about sharks
- Reverse the stigma around them
- Promote ocean conservation
- Collect data about shark abundance and behavior
- Support the field of shark science
- Offer safe interactions with sharks
- Monitor local populations-saving them from entanglement and fishing line!

Learn more at <https://oceanramsey.org> & <https://juansharks.com>



The Sad Truth...



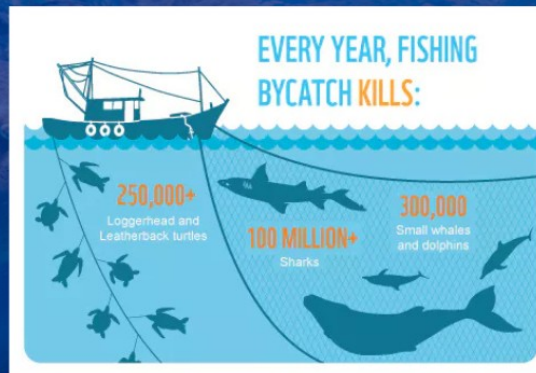
In recent years over **90%** of Shark species populations have declined.

How many sharks are killed each year?



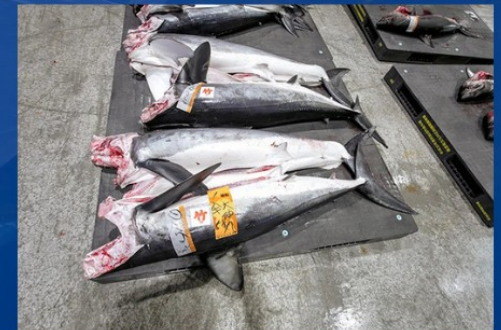
What Kills Sharks?

- Shark Finning
- Bycatch
- Marine Debris
- Shark Culling
- Shark Fishing
- Pharmaceutical
- Souvenir Trade
- Pet Food



How Can We HELP

- Don't eat shark fin soup.
- Don't feed your pets shark meat.
- If you are eating fish, eat locally spearfished fish.
- Reduce your plastic intake.
- Support sustainable tourism
- Support marine protected areas
- Donate or volunteer
- Avoid cosmetics or supplements containing shark-derived ingredients
- Report illegal shark trade
- Sign and share petitions



Get Involved!

- Join One Ocean Conservation and Save the Sea Turtles International every month for a Reef & Beach Cleanup.
- Can't make it? Do your part by picking up trash next time you're at the beach
- Spread the word!



Want to Learn More?



- Visit OneOceanDiving.com and OceanRamsey.org to learn more.
- Take Oceans' Course online or read her books!
- Watch "Shark Whisperer" and "Saving Jaws".

A large shark is swimming in the center of the frame, facing right. The water is a deep, solid blue. In the background, there are many small, silvery fish swimming in various directions, creating a sense of a large school or a busy underwater environment. The lighting is even, highlighting the shark's sleek body and the movement of the smaller fish.

Questions?