earthwatch expeditions
by Nat Hab

Explore with Purpose

Conserving Sharks in Belize

Where Commercial Fishing and Sharks Converge, Help Shape a Sustainable Future for Both

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Trip Details:

Days
7 Days / Jan, Apr, Aug, Oct

Price
From $7982 (+Air)

Conserving Sharks in Belize

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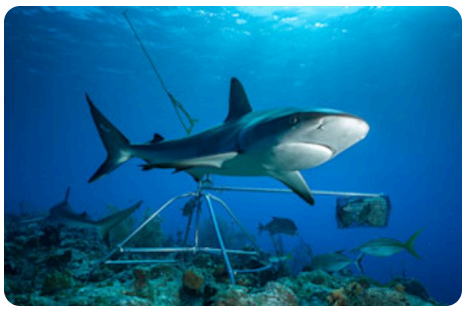
Just off the coast of Belize, the world's second-largest offshore barrier reef shelters the shoreline, creating wide, shallow stretches of turquoise water over seagrass flats and coral patches. These connected habitats support one of the Caribbean's most productive fisheries, including a healthy shark population. As apex predators, sharks help keep these systems in balance. They're also at risk. A long-standing coastal fishery sustains local communities, but it also puts pressure on shark populations. How these waters are fished and managed will determine whether sharks and fishing communities can continue side by side. For more than a decade, researchers have worked alongside fishers to track shark populations, movement and fishing pressure, defining what it will take to sustain them. Sharks are typically studied where they are protected. Here, the research happens where they are caught, offering rare insight into complex, real-world situations.

Research at a Glance

Your Role in Research



The Research Focus

Track shark numbers, movements and fishing pressure in Belize's coastal fisheries to understand what drives changes in their populations over time.

What You'll Do

Set and haul longlines in coastal waters, measure and tag sharks and record data to track where they go, how many there are and where they live.

Why It Matters

This research is already transforming Belize's fisheries—cutting shark catch nearly in half in its first year while strengthening livelihoods for coastal communities.

Trip Highlights

Head out in small boats to set and haul longlines, then measure, tag and release wild sharks while tracking where they move and how their numbers change over time.

Meet local fishing communities and learn how their knowledge, livelihoods and collaboration with scientists are shaping the future of shark conservation in Belize.

Swim in shallow coastal seas, snorkel along the barrier reef with rays, reef fish and sharks, the explore a protected rainforest reserve, watching for howler monkeys, parrots and motmots.

Itinerary At A Glance

Day 1
Belize City, Belize / Placencia

Day 2
Placencia / Cockscomb Basin Wildlife Sanctuary–Private Rainforest Hike

Day 3
Placencia – Reef Exploration

Days 4 - 6
Placencia – Shark Conservation & Coastal Fieldwork

Day 7
Placencia / Departure

Conserving Sharks in Belize Itinerary

Where Commercial Fishing and Sharks Converge, Help Shape a Sustainable Future for Both

Day 1: Belize City, Belize / Placencia

Guests will be met by a representative of our team at the Belize City airport and assisted with the transfer process and domestic flight check-in to Placencia, a coastal town set on a narrow peninsula between the Caribbean Sea and a sheltered lagoon in southern Belize. A pre-night hotel in Belize City is also available for guests arriving the day before the expedition begins. Upon arrival in Placencia, guests will meet the Field Guide and transfer to our hotel. After settling in, gather this evening for a welcome dinner and an introduction to the week ahead—how sharks use these waters, how fishing pressure shapes their populations and how this research works with local fishers to reduce catch while building the data used to manage Belize's shark fisheries.

Day 2: Placencia / Cockscomb Basin Wildlife Sanctuary–Private Rainforest Hike

Leave the coast and head inland into the Maya Mountains, where Cockscomb Basin Wildlife Sanctuary protects nearly 150 square miles of tropical forest, rivers and steep ridgelines. Established in 1986 as the world's first jaguar reserve, it remains a vital stronghold for the species. The idea is simple but powerful: protect a top predator, and you protect the ecosystem around it. This model has helped shape modern shark conservation, where these animals are often called the "jaguars of the sea."

Walk beneath a dense forest canopy alive with sound and motion. Howler monkeys call overhead. Toucans and motmots flash through the branches. Leafcutter ants move in steady lines across the trail. Streams run clear over rock and roots. Jaguars are rarely seen, but they are here; camera traps continue to capture their movement through the basin. An afternoon hike leads to a waterfall deep in the forest, where a shaded pool offers time to swim or rest before returning to the coast.

Back offshore, the Belize Barrier Reef is home to lemon sharks, nurse sharks, tiger sharks and Caribbean reef sharks. As top predators, they help keep the reef in balance. Like jaguars on land, their presence signals a healthy system. In Belize, scientists, fishers and fisheries managers work together to study shark populations inside and outside protected areas. Long-term surveys, combined with generations of local knowledge, help guide sustainable management and keep shark populations strong.

Day 3: Placencia – Reef Exploration

Just offshore, Belize's barrier reef stretches more than 180 miles, forming one of the largest reef systems in the world. It is part of a connected coastal network, linked to seagrass beds and mangrove lagoons that serve as nursery habitat for juvenile fish and sharks and support the fisheries that sustain life along the coast. Explore it today to familiarize ourselves with our rich research site.

In the water, coral formations are alive with movement. Parrotfish graze along the reef while angelfish and wrasse slip through the structure. Schools of snapper shift and tighten together. Rays lift quietly from the sand, and along channels and drop-offs, nurse sharks and reef sharks are sometimes seen.

Later, time with local fishers offers a closer look at how their livelihoods are tied to these waters. Snapper, grouper and lobster are caught using handlines and traps, with fishing shaped by seasonal cycles and a steady path from boat to market. This is where the research comes into focus. Fishers and scientists now work side by side to monitor shark populations, using the same knowledge and techniques once used to catch them. That experience now helps generate data that informs how these waters are managed.

Days 4 - 6: Placencia – Shark Conservation & Coastal Fieldwork

Belize's coastal fisheries support shark species that move between reef, seagrass and nearshore waters—areas where fishing pressure has long been highest. These are the same grounds where longlines have been used for decades, and where this work tracks how shark populations are changing over time.

Work alongside scientists and local fishers leading this monitoring effort. By combining standardized surveys with local knowledge, the team is building a clear picture of shark abundance, distribution and movement in Belize's coastal waters. Your participation in the research provides the vital third strand, incorporating western science, local and Indigenous knowledge and your participation into a more holistic, complementary system. Encounters may include blacktip, nurse and lemon sharks, among other coastal species. Some nights are active; others require patience.

Each afternoon, prepare gear and head out by small boat to set longlines in targeted areas. Lines are hauled after dark, following the same timing used in the fishery. Conditions vary—some evenings are calm, others shaped by wind and current. As sharks are brought alongside the boat, assist with measuring, tagging and recording each individual before release. Learn how repeated sampling builds the data used to assess populations and inform management.

This work is built in collaboration with local fishers, who apply their generational knowledge to locate sharks and carry out fieldwork—using that effort to collect data for fisheries management rather than catch. Time off the water may include reviewing data or preparing for the next outing.

Day 7: Placencia / Departure

This morning, transfer to Belize City for your onward flight home, leaving with a deeper understanding of how shark conservation takes shape here and a renewed appreciation for the research helping sustain Belize's coastal fisheries.

Accommodation Details:

Umaya Resort

For detailed descriptions, visit nathab.com/earthwatch-expeditions/belize-shark-conservation-research-trip/accommodations

Conserving Sharks in Belize Accommodations

Where Commercial Fishing and Sharks Converge, Help Shape a Sustainable Future for Both

Umaya Resort

Set between the Caribbean Sea and a mangrove-lined lagoon, this beachfront resort offers full-suite accommodations, waterfront dining and a poolside beach bar on Belize's laid-back Placencia Peninsula.

Meet the Scientists

Ph.D. Demian Chapman

Senior Scientist & Director, Center for Shark Research

Dr. Demian Chapman is a marine biologist and internationally recognized expert on sharks, whose research spans genetics, movement, reproduction and the global shark fin trade. He is an associate professor at Florida International University and serves as Senior Scientist and Director of the Sharks & Rays Conservation Research Program at Mote Marine Laboratory. He holds a Ph.D. in Oceanography and Marine Biology from Nova Southeastern University.

His work focuses on understanding shark populations and how they are affected by fishing pressure, trade and environmental change. By combining genetic analysis, tracking and fisheries data, he studies how shark populations move, reproduce and are exploited across regions, with a particular focus on areas where management is limited or complex.

His research has contributed to major conservation outcomes, including the establishment of a shark sanctuary in the Bahamas, improved management of sharks and rays in Belize, and international trade protections for multiple species under CITES. These efforts have helped shape how shark conservation is approached at both regional and global scales.

In the field, he works closely with local researchers and communities, particularly in Belize, where long-term partnerships support data collection and conservation efforts. His work also led the Global FinPrint project, a large-scale effort to assess shark populations worldwide and provide a baseline for conservation planning.

Through this work, he has helped advance the science and policy needed to protect sharks in a rapidly changing ocean, showing how research, management and international cooperation must work together to sustain these species.

Education

Ph.D. in Oceanography and Marine Biology, Nova Southeastern University, Florida
B.S. in Zoology and Ecology, Victoria University, Wellington, New Zealand

Ph.D. Jessica Quinlan

Founder, Fishers4Science

Marine Research, Belize

Science & Impact

Built over more than a decade, this research combines surveys, tagging and collaboration with local fishers to inform real-world fisheries management—first strengthening protections around Belize's atolls and now focusing on coastal grounds where most shark fishing occurs.

Research Focus

Along Belize's coast, sharks move between reef, mangrove and open water—the same habitats where fishing takes place. This project focuses on these fishing grounds, where pressure is highest and data are most limited. Researchers track how many sharks are present, how populations are changing and how different species use coastal habitats over time.

Standardized longline surveys provide a consistent way to measure numbers, while tagging and acoustic transmitters reveal how sharks move between coastal waters, the barrier reef and protected areas. This work produces data collected using the same methods each time, making it possible to detect real changes in shark populations—not just changes in fishing effort. The research is conducted in collaboration with local fishers, combining scientific methods with on-the-water knowledge to better understand both the fishery and the sharks within it. Your participation braids helps inform the work, creating a braided knowledge system that draws three strands together to strengthen the conservation impact of this work.

Conservation Impact

Shark populations are declining across much of the world, especially where there isn't enough data to effectively manage fishing. In Belize, our research is helping reverse that trend by turning what's learned on the water into concrete protection to help conserve sharks, their habitat, and all the other marine species that indirectly benefit.

- **Nearly 50% fewer sharks caught and kept** within the first year of working with local fishers (2019)
- **Better fishing practices shaped by consistent data** collected in the same coastal waters where fishing happens
- **Signs of recovery in some protected areas**, with shark numbers increasing after new rules were put in place
- **A growing record** of how shark populations are changing over time
- **Clearer understanding of how sharks move** between reef, coastal waters and protected areas

- **A model that reduces pressure on sharks** while still supporting local livelihoods
- **Ongoing monitoring** that continues to guide how these waters are fished and managed

This work continues year after year, with new data added to a long-term record that helps improve how sharks are protected across Belize's coastal waters.

Your Role in the Research

Each day begins on land, preparing gear, organizing equipment and getting ready for time on the water. By late afternoon, head out on small boats to set longlines in coastal waters, baiting hooks and positioning lines in known fishing areas. After the lines have been in the water, return to check and haul them, bringing sharks alongside the boat to measure, tag and record key data before release. Record species, size and condition, and help document how sharks are using these waters. Some individuals are fitted with tags to track their movements over time. Back on shore, clean and reset gear, assist with data entry and prepare for the next outing. Each step contributes to a long-term record used to understand how shark populations are changing along Belize's coast.

Life in the Field

Days are built around preparing gear on land and working on the water later in the day. Mornings start with rinsing and repairing lines, checking hooks and cutting bait, resetting everything after the previous night. By late afternoon, you head out by boat across shallow coastal waters, moving between seagrass flats and the reef edge. You bait hooks and set longlines in areas where sharks are known to pass. After the lines have been in the water, you return to check and haul them, working section by section in low light. Some evenings are busy, with multiple sharks brought alongside the boat. Others are slower, with long gaps between checks. Back on shore, you unload gear, rinse and reset everything for the next outing. Between field sessions, there is time to rest, review data or spend time in the fishing community before the next cycle begins.

Field Conditions

Fieldwork takes place on small boats in coastal waters and on land in a working fishing community. Conditions are often hot and humid, with full sun during the day and changing wind and waves on the water. Time on the boat can stretch for several hours. There's a mix of activity—handling gear, hauling

lines and working with sharks—and quieter stretches while lines are in the water. You'll be moving around the boat, standing for long periods and working in shifting conditions. After dark, visibility drops and the work slows. Locating lines, handling sharks and recording data takes more time and attention. Weather and sea conditions shape each day. Plans may change, and flexibility is part of the experience.

Discovery in the Field

1. **Take Part in Hands-On Shark Research**
   Spend multiple days on the water deploying longlines, then return after dark to haul them in. Work alongside scientists as sharks are brought to the boat for measuring, tagging and data collection before being released.

2. **Snorkel Along Belize's Barrier Reef**
   Enter clear reef waters to swim above coral, rays and schools of fish in the same habitats that support sharks and coastal fisheries.

3. **Discover a Rainforest Jaguar Reserve**
   Travel inland to Cockscomb Basin Wildlife Sanctuary to hike forest trails and see how protecting apex predators on land informs conservation at sea.

4. **Spend Full Days on the Water Along the Coast**
   Move between research sites by boat, spending hours on the water as conditions shift and the work unfolds across Belize's coastal seascape.

5. **Join Working Local Fishers Supporting the Research**
   See how local fishers read the water, choose sites and interpret conditions, adding depth and precision to the data being collected.

6. **Work Alongside a Leading Shark Scientist and Research Team**
   Join a global leader in shark ecology and supporting field team, many of whom are native to the research area, as data is collected and interpreted in the same waters he has studied for more than a decade.

7. **Understand the People and Ideas Behind the Research**
   Spend time with fishing communities and move between coast and forest to see conservation is put into practice.

8. **Learn From an Expert Field Guide**
   Your Field Guide ensures each day runs smoothly, coordinating logistics and providing personalized support throughout the trip.

Explore with Purpose

9 **Travel With an Intentionally Small Group**
Because we intentionally limit our group size, each participant is guaranteed quality time in the field, meaningful interactions with the scientific research team and an active role in daily research activities.

10 **Explore with Purpose**
Take part in fieldwork that supports ongoing conservation research, contributing to the protection of sharks and the marine ecosystems they depend on.

Dates & Pricing Summary:

Prices:
From $7982 (+Air)

Group Size:
Limited to 14 Travelers

Conserving Sharks in Belize Dates, Pricing & Info

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2027 Departures

Departure	Return	Notes
Jan 16, 2027	Jan 22, 2027	$7982 USD (+internal air) Habitat Club Pricing Available
Apr 16, 2027	Apr 22, 2027	$7982 USD (+internal air) Habitat Club Pricing Available
Aug 20, 2027	Aug 26, 2027	$7982 USD (+internal air)
Aug 23, 2027	Aug 29, 2027	$7982 USD (+internal air)
Oct 16, 2027	Oct 22, 2027	$7982 USD (+internal air)

Dates & Pricing Summary:

Prices:
From $7982 (+Air)

Group Size:
Limited to 14 Travelers

Departure	Return	Notes
Oct 19, 2027	**Oct 25, 2027**	$7982 USD (+internal air)

2028 Departures

Departure	Return	Notes
! Prices and dates not confirmed for 2028		
Jan 14, 2028	**Jan 20, 2028**	$7982 USD (+internal air)
Apr 14, 2028	**Apr 20, 2028**	$7982 USD (+internal air)
Aug 18, 2028	**Aug 24, 2028**	$7982 USD (+internal air)
Aug 21, 2028	**Aug 27, 2028**	$7982 USD (+internal air)
Oct 14, 2028	**Oct 20, 2028**	$7982 USD (+internal air)
Oct 17, 2028	**Oct 23, 2028**	$7982 USD (+internal air)

Pricing

See https://nathab.com/earthwatch-expeditions/belize-shark-conservation-research-trip/dates-fees for the latest pricing details.

Included

Trip price includes: accommodations, services of Nat Hab's professional Expedition Leader(s), local guides and research staff, all meals from dinner on Day 1 through breakfast on the final day, some alcoholic beverages, some gratuities, airport transfers on Day 1 and final day, all activities and entrance fees, all taxes, permits, and service fees.

Internal air cost includes: All fllights within the itinerary (this will be listed separately on our invoicing).

Not Included

Travel to and from the start and end point of your trip, alcoholic beverages, some gratuities, passport and visa fees (if any), optional activities, items of a personal nature (phone calls, laundry, etc.), airline baggage fees, airport and departure taxes (if any), required medical evacuation insurance, optional travel protection insurance.

Mandatory Insurance

Since the areas we travel to are remote and field-based, we require that all guests have, at minimum, medical evacuation insurance for this program. This is for the safety of all guests.

We require that your chosen independent insurance plan includes a **minimum of $250,000** in medical evacuation coverage.

To protect your investment and provide peace of mind while you travel, we also strongly recommend purchasing comprehensive travel insurance.

Getting There & Getting Home

This trip begins and ends in Belize City. You must arrive in Belize City on Day 1 in time to take an afternoon flight to Placencia, where you will meet your Field Guide. A pre-night at a Belize City hotel is available. A member of our team will meet you at the airport in Belize City, and assist you with the transfer process to Placencia.

On the final day, please schedule departing flights from Belize City no earlier than 2:00 p.m.

earthwatch expeditions
by Nat Hab

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