



**NATURE
FRIENDS**
OF MALDIVES

© Nature Friends of Maldives, 2022



**NATURE
FRIENDS**
OF MALDIVES

2025

ANNUAL REPORT



© Nature Friends of Maldives, 2022

Nature Friends of Maldives NGO
Anoanaage, Dhadimagu
Fuvahmulah 18011, Maldives

Nature Friends of Maldives (NFM) is a
registered non-profit organisation established
in 2022.

Registration Number: CR/59/2022

CONTENTS

FORWARD 3

INTRODUCTION 5

2025 HIGHLIGHTS 11

MISSION 15

TIGER SHARK
RESEARCH 19

HAMMERHEAD
RESEARCH 41

THRESHER SHARK
RESEARCH 47

ELASMOBRANCH
MONITORING 51

FUVAHMULAH
SAHRK LAB 57

SCIENTIFIC
INTERNSHIPS 71

CONTACT
INFORMATION 83

FORWORD

The past year has been one of growth, discovery, and collaboration for the science team at Nature Friends of Maldives and Pelagic Divers Fuvahmulah.

In 2025, we launched six new research projects, all focused on improving our understanding of threatened and endangered marine species. Alongside our ongoing collaborative long-term tiger shark monitoring, we identified more than 300 individual tiger sharks, making Fuvahmulah as the world's largest known tiger shark aggregation. Furthermore, We continued non-invasive laser photogrammetry on tiger sharks, deployed EOTR (Eye on the Reef) camera systems around cleaning stations,

We also expanded our methods, and introduced our new Insta360 EOTR setup. In addition, we began the first structured assessment of scalloped hammerheads. These efforts pushed the limits of what community-driven marine science can achieve in the Maldives.

None of this would have been possible without the dedication of our volunteers, interns, collaborators, and the Fuvahmulah community. Your support, trust, and enthusiasm drive our mission every day.

As we look toward 2026, we remain committed to ethical, transparent, and impactful marine research. With new partnerships forming and ambitious collaborative projects already underway, we are excited to continue shaping the future of marine conservation in the Maldives.

Thanks to the dedication of the Nature Friends of Maldives team, our incredible collaborators, and our generous supporters around the world, we were able to make remarkable progress in 2025. Many people have come to know our work through the commitment, outreach, and conservation leadership of those working on the ground in Fuvahmulah and across the Maldives.

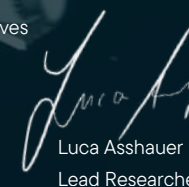
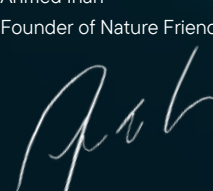
We are building a strong foundation for the future through the establishment of the Fuvahmulah Shark Lab, strengthening local research capacity, supporting young Maldivian students and scientists, and creating lasting opportunities for community-led marine conservation.

In 2025, we will be launching new projects, deepening scientific research, and continuing to grow our impact locally and nationally. We can't wait to share this journey with you.

Let's make 2026 an inspiring year for the sharks and marine life we protect, the extraordinary ecosystems they depend on, and the communities who live alongside them.

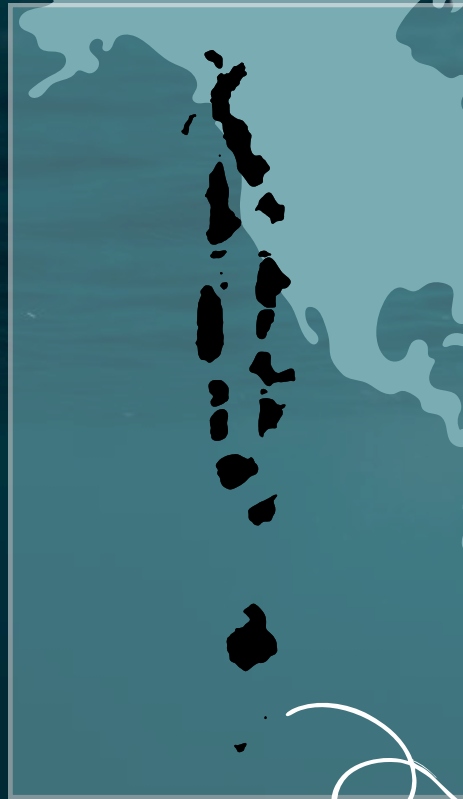


Ahmed Inah
Founder of Nature Friends of Maldives



Luca Asshauer
Lead Researcher





FUVAHMULAH, MALDIVES

In Fuvahmulah, we focus on strategic locations that support large or ecologically important populations of threatened marine species, including key feeding and breeding areas. Our work is dedicated to developing effective conservation solutions that reduce human pressures on marine life, while working hand-in-hand with local communities to create sustainable livelihoods that thrive alongside a healthy ocean. We place strong emphasis on building national scientific capacity, ensuring long-term monitoring, informed management, and lasting conservation success.



ABOUT

Nature Friends of Maldives (NFM) is a registered NGO established in 2022 and powered by Pelagic Divers Fuvahmulah. The organization supports shark research, conservation, and education in Fuvahmulah, Maldives, through science-led projects, long-term monitoring, and strong local partnerships.

NFM also offers internships and training opportunities, empowering the next generation of marine scientists and creating an open platform for global researchers to collaborate in one of the world's most remarkable marine environments. Locally driven and built on the experience of researchers, divers, and conservation practitioners, we work to empower the local community and ensure that knowledge from the water informs decision-making beyond it. We envision a future where local expertise and scientific evidence shape policy, guide media narratives, and safeguard Fuvahmulah's dive sites and shark populations for generations to come

THE MARINE ENVIRONMENT OF FUVAHMULAH SHAPES OUR LIVES

Fuvahmulah is surrounded by a rare and unique marine landscape. Our island sits at the edge of the deep ocean, creating a powerful pelagic–reef interface that supports a high diversity of marine life, including some of the most important shark populations in the world. For many of us, the ocean is not only a source of beauty, it is central to our way of life, our culture, and our community identity.

The waters around Fuvahmulah support local livelihoods through fishing, tourism, and diving. Shark encounters are part of our everyday experience, and they draw visitors from across the world. This connection to the ocean is part of what makes Fuvahmulah unique, and it is what motivates us to protect it.

OUR ACTIVITIES ARE CHANGING THE OCEAN AROUND US

Human activities both on land and at sea are placing increasing pressure on Fuvahmulah's marine environment. Coastal development, habitat disturbance, and changes in land use can affect water quality and marine habitats. Meanwhile, growing tourism and diving activity, if unmanaged, can disturb sensitive shark behaviours and critical sites such as cleaning stations.

These pressures are intensified by global climate change. Rising ocean temperatures, shifting currents, and changing storm patterns are already affecting the Maldives and our reefs. These changes impact the food web, the health of reef systems, and the behaviours of key species like sharks.

WHY IT MATTERS FOR SHARKS

Sharks play a vital role in maintaining healthy ocean ecosystems. Their presence supports ecological balance, helps regulate prey populations, and reflects the overall health of our marine environment. Protecting sharks and their habitats is not only about conserving a single species—it is about preserving the natural foundation of Fuvahmulah's marine identity, tourism, and community wellbeing.

FUVAHMULAH ATOLL – IMPORTANT SHARK AND RAY AREA (ISRA)

Fuvahmulah Atoll is an offshore island in the southern Maldives and consists of a single island surrounded by a fringing reef. Unlike most Maldivian atolls, it is an oceanic platform reef without a lagoon. On the southeastern edge lies a unique spur reef known as Farikede, which extends approximately 2 km from the shore as a gently sloping coral reef (0–20 m) with a prominent drop-off along its outer edge.

The area overlaps with the Thoondi Area–Fuvahmulah Marine Protected Area, Farikede Marine Protected Area, and the Fuvahmulah UNESCO Biosphere Reserve. It supports several important shark and ray habitats, including:

- **THREATENED SPECIES (E.G., SILVERTIP SHARK *CARCHARHINUS ALBIMARGINATUS*)**
- **REPRODUCTIVE AREAS (E.G., TIGER SHARK *GALEOCERDO CUVIER*)**
- **RESTING AREAS (E.G., WHITETIP REEF SHARK *TRIAENODON OBESUS*)**
- **AGGREGATION SITES (E.G., OCEANIC MANTA RAY *MOBULA BIROSTRIS*)**
- **DISTINCTIVE LOCAL POPULATIONS (E.G., PELAGIC THRESHER SHARK *ALOPIAS PELAGICUS*)**

WHY IT MATTERS FOR SHARKS

Six qualifying species considered threatened with extinction by the IUCN Red List regularly occur in the area. These include one Critically Endangered, two Endangered, and two Vulnerable shark species, as well as one Endangered ray species (IUCN 2023).

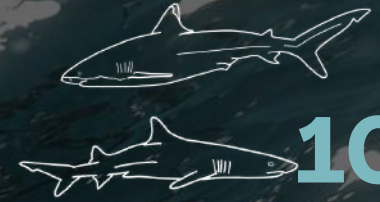
This Important Shark and Ray Area is benthopelagic and is delineated from inshore and surface waters (0 m) down to 500 m, based on the bathymetry of the region.



350+

DIVE SURVEYS

to monitor tiger sharks and other shark species



10+

ELASMOBRANCH SPECIES

currently monitored around Fuvahmulah Atoll



5

SCIENCE INTERNSHIPS

hosted in 2025

130+

THRESHER ENCOUNTERS

on RUV Footage

800+



SIZE MEASUREMENTS

of 80+ individual tiger sharks were collected

1000+ HOURS OF FOOTAGE



300+



TIGER SHARKS

are identified around Fuvahmulah Atoll

2025 HIGHLIGHTS

"EYE ON THE REEF" MONITORING

Remote Underwater Video surveys of different elasmobranch species at cleaning stations



MISSION



Conduct long-term scientific research on shark populations to support evidence-based conservation in the Maldives.



Protect sharks and their habitats through science-led conservation and local collaboration.



Educate and inspire communities, divers, and students to understand and protect sharks.

RESEARCH



**MONITORING DIFFERENT SHARK
SPECIES ACROSS FUVAMULAH**

TIGER SHARK MONITORING

Our ongoing long-term photo-ID monitoring, first started at Fuvahmulah Dive school and now conducted in collaboration between Pelagic Divers Fuvahmulah, Fuvahmulah Central Dive and Fuvahmulah Dive School, continues to reveal the remarkable scale and importance of Fuvahmulah's tiger shark population.

Fuvahmulah is home to the world's largest known tiger shark aggregation, a discovery of global scientific significance.

IN 2025 WE RECORDED
OVER

26

NEW INDIVIDUALS

This project stands as a testament to the dedication, consistency, and collective effort of colleagues and marine scientists across multiple dive centres.

Through shared commitment, field expertise, and coordinated data collection, this collaborative initiative continues to deepen our understanding of tiger shark ecology while setting a benchmark for community-driven marine research.

TIGER SHARK RESEARCH HIGHLIGHTS

OVER

300

INDIVIDUAL TIGER
SHARKS IN TOTAL

300+



TIGER SHARKS

are identified around
Fuvahmulah Atoll



35

PREGNANCIES
MONITORED



26

NEW TIGER
SHARKS
ADDED TO THE
CATALOGUE

143

FEMALES



9

MALES

SIGHTED IN 2025



In 2025, we identified a total of 152 different tiger shark individuals at Tiger Harbor. 143 females and 9 males. The highest number of individual identification were in April, with almost 90 different tiger sharks observed in a month.



The long-term monitoring project allows us to assess the seasonality and abundance of individual tiger sharks, track their presence and absence, evaluate site fidelity and residency patterns, and even monitor pregnancies and healing.

COLLABORATORS:



NEW PUBLICATION!

Titan triggerfish are among the most territorial reef fishes and will aggressively defend nests from intruders. In Fuvahmulah, Maldives, where tiger sharks gather year-round, we recorded 10 interactions between triggerfish and tiger sharks during dives in 2024.

Triggerfish initiated all aggression, mainly biting the sharks' tail fins, with chases following in many cases. Most encounters happened near the new moon, suggesting nesting territoriality may drive the behavior.

These findings show how even small reef fish can defend against large predators, and raise questions about how predator aggregation (often linked to ecotourism) may increase such interactions.



DEFENSIVE RESPONSES OF TITAN TRIGGERFISH TO TIGER SHARKS AT A PROVISIONED REEF

Bocchi F., Perisic N., Ahmed I., Ivanova T. (2025)

TIGER SHARK PREGNANCY MONITORING

35

TIGER SHARK PREGNANCIES
WERE MONITORED IN 2025

In a collaborative effort between Pelagic Divers Fuvahmulah and Fuvahmulah Dive School we have been monitoring over 160 tiger shark pregnancies in total.

In 2025, we identified a total of 35 completed pregnancies of mature female tiger sharks at Tiger Harbor. Females spend most of their gestation in areas with warm shallow coastal waters and then leave to give birth somewhere else. Females were absent for an average of 110 days, with the shortest period being 32 days and the longest period being 295 days.

COLLABORATORS:





PREGNANCY SCANNING OF
PREGNANT TIGER SHARKS

TIGER SHARK SIZE MEASUREMENTS

OVER

80+

UNIQUE TIGER SHARKS
MEASURED WITH HIGH
ACCURACY

Since 2022, we have been collecting tiger shark size measurements using laser photogrammetry through a collaborative effort between Pelagic Divers Fuvahmulah and Fuvahmulah Dive School.

This project allows us to track the size and growth of individual tiger sharks over time.

In 2025, we collected more than 820 non-invasive measurements, validating the method under varying field conditions and establishing a standardized calibration process to ensure measurement accuracy.

COLLABORATORS:



TIGER SHARK SOCIAL BEHAVIOR

In Fuvahmulah Island, Maldives, mature female tiger sharks show pair-wise social interactions

In our study, mature female tiger sharks show a size-based and dominance hierarchy.

7

**DISTINCT SOCIAL
BEHAVIORS IDENTIFIED**

In 2025, we published the first evidence of structured social behaviour in tiger sharks (*Galeocerdo cuvier*) from Fuvahmulah, Maldives. The study reveals non-random social interactions, size-based dominance, and newly described behaviours, challenging the view of tiger sharks as strictly solitary and advancing our understanding of their ecology and conservation.

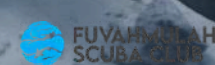
Our research team identified seven distinct social behaviors, including two never before documented in tiger sharks.

The newly discovered behaviors, termed "submission" and "push away," demonstrate a level of social complexity that surprised researchers.

COLLABORATORS:



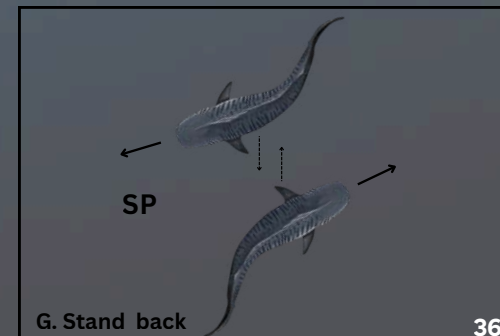
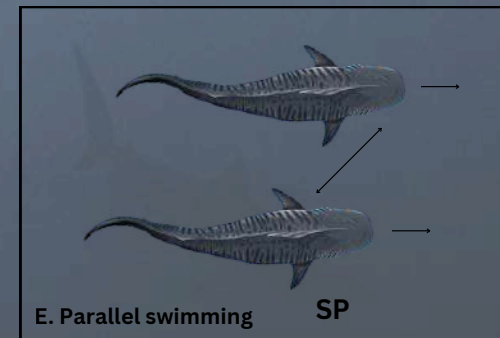
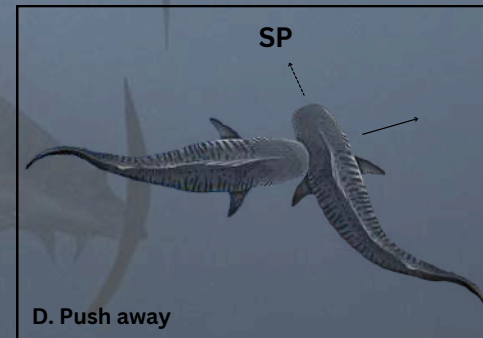
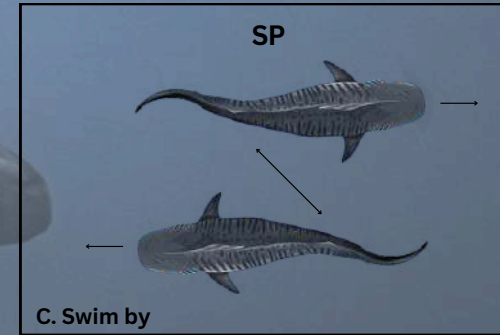
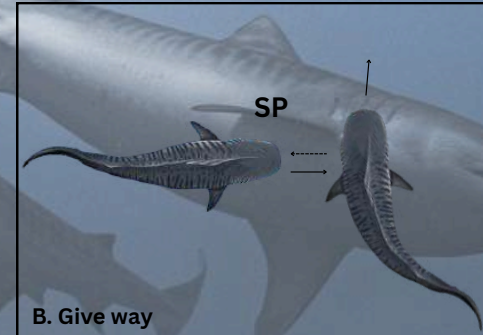
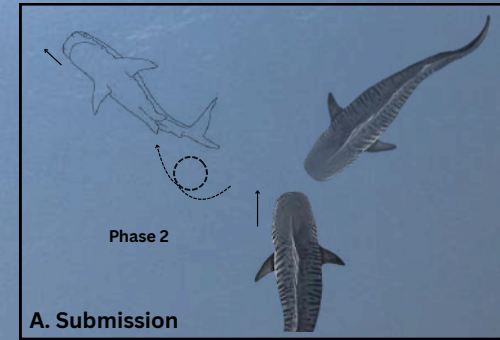
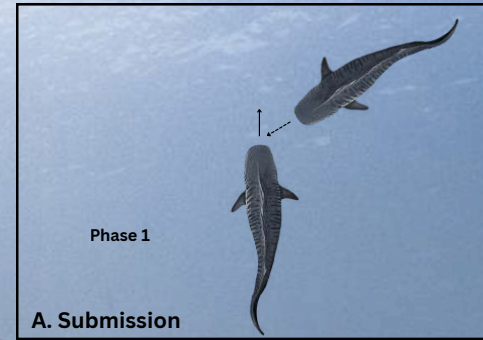
UNIVERSITÀ
DI SIENA
1240



NEW PUBLICATION!

FIRST INSIGHTS INTO SOCIAL BEHAVIORAL PATTERNS BETWEEN PAIRS OF BAIT-ATTRACTED MATURE FEMALE TIGER SHARKS FROM FUVAHMULAH ISLAND, MALDIVES

Reinero F.R., Bocchi F., Perisic N., Crouch J., Pacifico A., Asshauer L., Vicariotto C., Micarelli P. (2025)





**WANT TO LEARN MORE ABOUT SOCIAL
BEHAVIOR ON TIGER SHARKS?**

**SCAN THE QR CODE AND READ OUR
NEW PAPER!**



**FIRST INSIGHTS INTO SOCIAL
BEHAVIORAL PATTERNS BETWEEN
PAIRS OF BAIT-ATTRACTED MATURE
FEMALE TIGER SHARKS FROM
FUVAHMULAH ISLAND, MALDIVES**

***Reinero F.R., Bocchi F., Perisic N., Crouch J., Pacifico A., Asshauer L.,
Vicariotto C., Micarelli P. (2025)**



OONA (F-229), A FEMALE TIGER SHARK SWIMMING OUTSIDE OF TIGER HARBOR, FUVAHMULAH



**THE CRITICALLY ENDANGERED
SCALLOPED HAMMERHEAD AT
FARIKED DIVE SITE**

HAMMERHEAD ASSESSMENT

In 2025, we launched a comprehensive hammerhead Assessment aimed at monitoring sightings of scalloped hammerheads across Fuvahmulah Atoll from recent years.

This multi-year collaborative project brings together all local dive centres to collect standardised data on the abundance and population structure of schooling hammerheads.

OBJECTIVE

Monitoring endangered *Sphyrna lewini* around Fuvahmulah using EOTR, visual surveys, and citizen science.

- Identification and frequency of sightings
- Behavioral notes around cleaning stations and pelagic zones
- Preliminary population structure indicators
- Contribution to national listing & conservation priorities



**A PELAGIC THRESHER SWIMMING
IN FRONT OF OUR "EYE ON THE
REEF" CAMERA**

THRESHER SHARK MONITORING

We conduct continuous elasmobranch monitoring around the island, using Eye on the Reef (EOTR) camera systems to document behaviour, presence, and seasonality. This long-term effort provides valuable insights into population trends, habitat use, and individual health. Our data contributes to a growing understanding of Fuvahmulah's unique thresher shark population and supports broader conservation research in the region.

OVER

35

DEPLOYMENTS OF REMOTE
UNDERWATER VIDEO
SYSTEMS

- Study of cleaning behavior between thresher sharks and cleaner wrasse
- Abundance and demographics of thresher sharks
- Seasonality of occurrence

THRESHER SHARK MONITORING

AT
3

DIFFERENT CLEANING
STATIONS AROUND
FUVAHMULAH ATOLL



Fuvahmulah hosts ideal cleaning stations around the island, suitable for thresher sharks and other marine species to get parasites removed

COLLABORATORS:



“EYE ON THE ROOF” MONITORING

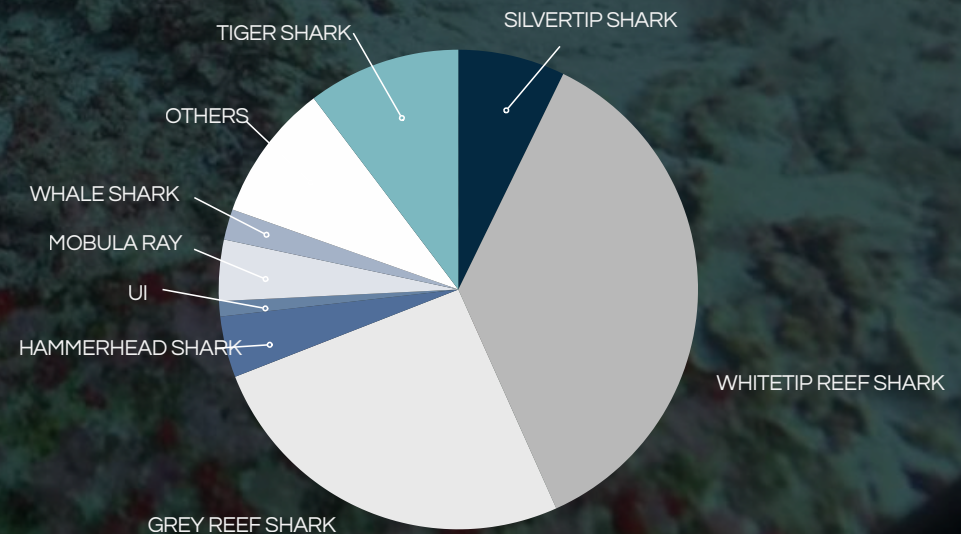
Besides the endangered thresher sharks, this non-invasive method enables us to monitor different marine megafauna species across different locations in Fuvahmulah, which makes it possible to establish an Elasmobranch assessment, unraveling the secrets of threatened and endangered species and how they use cleaning stations.

In 2025, we recorded over 10 different elasmobranch species, including tiger sharks, whale sharks, oceanic manta rays, eagle rays, white tip and grey reef sharks, silver tip sharks and the first sighting of an smalltooth sand tiger shark on an EOTR camera.

IDENTIFICATION OF

10

DIFFERENT ELASMOBRANCH SPECIES ON THE EOTR CAMERA



EOTR INSTA360 MONITORING



OVER
10

DEPLOYMENTS OF INSTA360
EOTR CAMERAS

We introduced a new Insta360 setup to the EotR camera system, which was originally developed by The Manta Trust to study thresher sharks and other elasmobranch species across multiple cleaning stations around Fuvahmulah, Maldives. The integration of the Insta360 now provides a significantly wider field of view, enabling a more comprehensive assessment of species movements, interactions, and behavioural patterns.

COLLABORATORS:







**TIGER SHARKS AGGREGATING
OUTSIDE TIGER HARBOR,
FUVAHMULAH**



FUVAH MULAH SHARK LAB





EDUCATION

INTRODUCING MARINE BIOLOGY
AND CONSERVATION TO YOUNG
MALDIVIAN STUDENTS

LAUNCH OF THE FUVAHMULAH SHARK LAB

In 2025, we officially launched the Fuvahmulah Shark Lab, an initiative to educate young Maldivian children and students.

We received a set of school materials from our collaborator and sponsor **ElasmOcean**, who generously provided us with shark tooth, jaw replica and much more.

These high-quality teaching tools allow us to give students a tangible and engaging introduction to shark biology and evolution.

MAIN TOPICS:



Marine ecosystems
and marine foodweb



Commercial and
sustainable fishing
practices



Shark anatomy and
awareness



Virtual reality dives



FUVAH MULAH SHARK LAB



WANT TO LEARN MORE?
SCAN THE QR CODE AND DOWNLOAD
OUR FLYER!

WE HOSTED OVER

50

RESEARCH
PRESENTATIONS

Our interactive science presentations showcase past and ongoing research, expand public knowledge on shark species, and highlight the vital role sharks play in marine ecosystems, as well as the threats they face from bycatch, commercial fisheries, shark finning, and other human pressures.



**OUR SCIENCE INTERN MEASURING A
3.85M TIGER SHARK**

SCIENTIFIC INTERNSHIPS



EXPANDING OCEAN KNOWLEDGE
FOR YOUNG SCIENTISTS

SCIENTIFIC INTERNSHIPS

In 2025, we
hosted

5

Scientific internships

- Support long-term photo-id monitoring of tiger sharks
- Collect non-invasive size measurements of tiger sharks
- Help deploy and analyse EotR camera systems
- Help assess healing journeys of individual sharks
- Support ongoing and new science projects



Our research internships provide national and international students with the opportunity to gain hands-on experience in field-based shark science.

Interns also develop analytical skills through R and Excel coding training, allowing them to actively contribute to our long-term datasets.

Each internship concludes with a final presentation, giving students the chance to showcase their progress and scientific understanding.

SCIENTIFIC INTERNSHIPS

Some words from our Interns:



"During my internship, I loved spending every day in the water observing tiger sharks up close and learning from the dedicated local dive team and scientists on Fuvahmulah. I gained deep insights into shark behavior, practical fieldwork techniques such as photo ID and laser measurements, and diving safely and confidently around large sharks. This experience strengthened my skills in the water and confirmed my passion for pursuing a career focused on sharks and marine conservation."

-Pia Hoffmann



'During my internship in Fuvahmulah, I had a highly rewarding and enjoyable experience that contributed significantly to my professional development. I gained valuable knowledge and practical skills while working in a beautiful, dynamic, and supportive environment that made learning both effective and motivating. Overall, this internship was an enriching opportunity and a meaningful step in my personal and career growth.'

-Thomas Cunial

SCIENTIFIC INTERNSHIPS

Some words from our Interns:



„This internship was a true deep dive into shark science, strengthening my field skills, confidence underwater, and motivation for science-based storytelling and shark conservation. PDF offered a highly supportive and professional environment with strong scientific standards. I am very grateful to have learned from such a dedicated team.“

-Max Baum



“During my internship on Fuvahmulah with Pelagic Divers I had the opportunity to support to ongoing research in one of the world’s most important shark hotspots. My work ranged from photo-ID surveys of the world’s largest resident tiger shark population, supporting long-term population monitoring, alongside laser photogrammetry and ImageJ analysis to track individual growth, health, and wound healing. I also contributed to a first-of-its-kind study on endangered thresher sharks, assisting with EOTR camera deployment at cleaning stations and analysing cleaning behaviour and interactions for the Fuvahmulah Thresher Project.

Grateful to the Pelagic Divers team and my mentors for the opportunity to contribute to meaningful shark research in such a wonderful and unique location!”

-Sarah Franke



SCIENTIFIC INTERNSHIPS



INTERESTED IN JOINING AN INTERNSHIP?
SCAN THE QR CODE AND FILL OUT THE
FORM!



WHAT'S ON THE HORIZON?

We are excited to continue with our science, conservation and outreach projects in 2026!

We'll be starting the year by welcoming two new collaborators into our photo-ID project and continue to enhance non-invasive research methods like Baited Remote Underwater Videos (BRUVs) and Visual Surveys. We're also expanding our impactful workshop and education program to empower young students and researchers to lead the way in shark science and conservation.



COMING
IN 2026

FOLLOW US ON INSTAGRAM!
@SHARKIDFUVAHMULAH



OR VISIT OUR WEBSITE!
NATUREFRIENDSOFMALDIVES.COM
NFMALDIVES@GMAIL.COM





**NATURE
FRIENDS**
OF MALDIVES