

# BLUE & GREEN LAAMU

*The Marine Conservation & Sustainability  
Newsletter by the Maldives Underwater Initiative*  
JULY 2023

  
SIX SENSES  
LAAMU



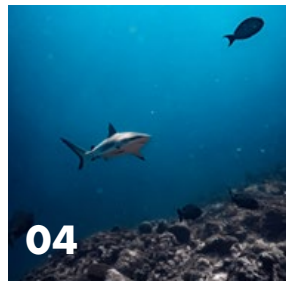
 MUI

MALDIVES UNDERWATER INITIATIVE by Six Senses Laamu







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## THE BIG STUFF

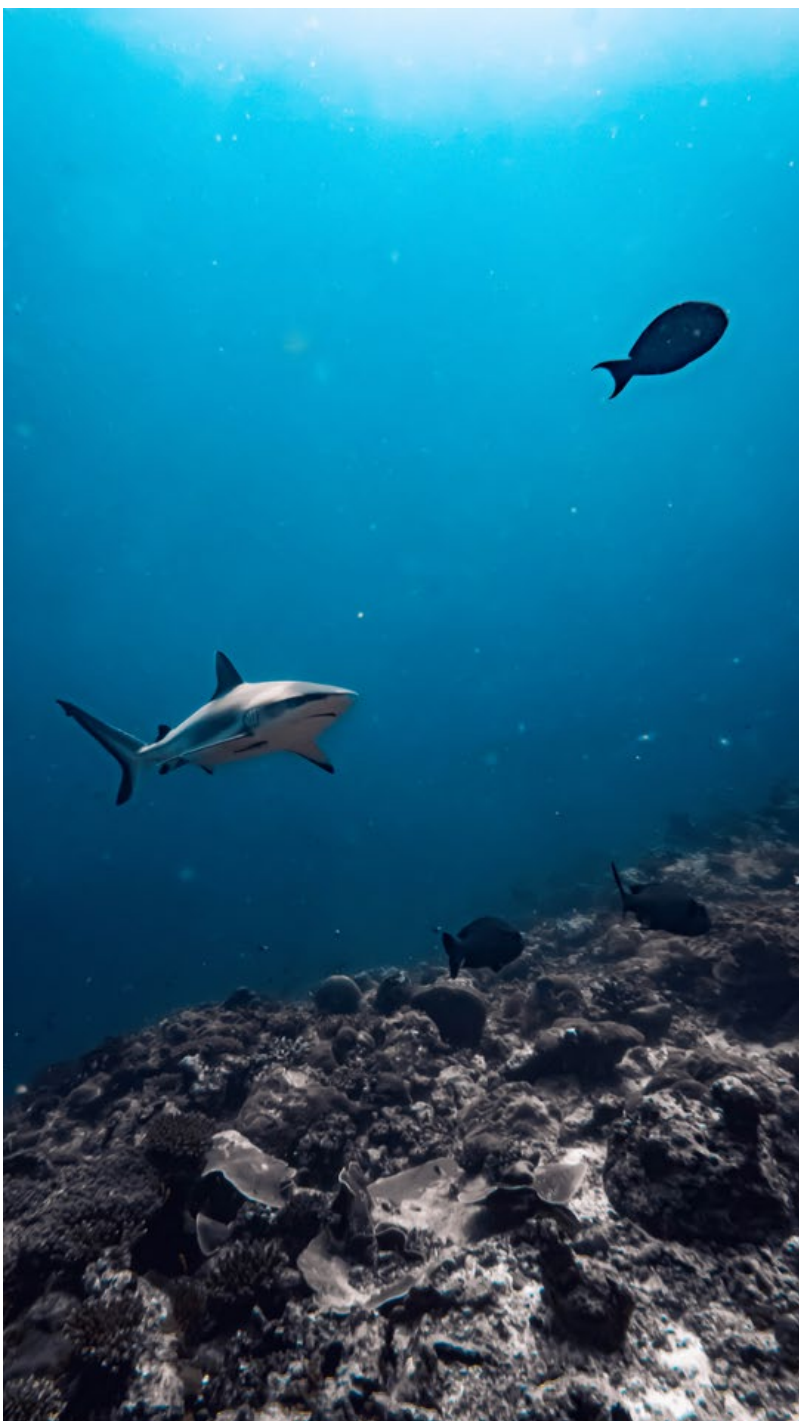
-  **280** sharks were sighted
-  **115** rays were sighted
-  **208** turtles were sighted
-  **213** Guests joined on megafauna surveys

## OUR EDUCATION

-  **1278** moments of education were shared with guests
-  **141** moments of education were shared with hosts
-  **160** moments of education were shared with the community

# SIX SENSES CONSERVATION

## SHELLEBRATING WORLD SHARK AWARENESS DAY



For World Shark Awareness Day, the MUI team celebrated this special event in the SHELL, dedicated to promoting the importance of shark conservation and their vital role in the marine ecosystem as a Keystone species. The guests who joined the event were treated to an array of educational talks by the MUI team, in which they shared fascinating insights into various shark species and the pressing need to protect them from threats like overfishing and unsustainable fisheries and habitat destruction. The SHELL was abuzz with a brand new Glass Bottom Boat Video and a virtual experience from a VR which allows them to have a shark experience without getting their feet wet. Through fun-filled kids' activities and informative displays, we aimed to foster a deeper understanding and appreciation for sharks among all age groups. We hope our celebration will ignite lasting passion and action to safeguard sharks and their habitats for generations to come.



# RESPONSIBLE DOLPHIN WATCHING



**30** Cruises of data collection conducted by Chloe

**04** years of data collected by MUI used in study

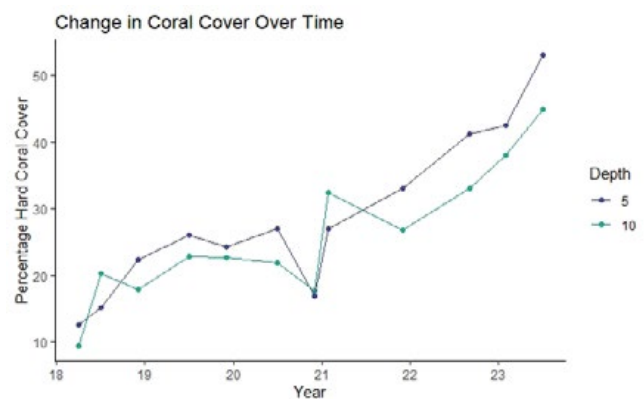
Chloe, a Masters student from the UK, has completed her data collection through an internship here at Six Senses. She has been collecting data on dolphin behavior, distribution, and interaction with cruise boats in order to update the Code of Conduct followed by Six Senses Laamu during dolphin cruises. By combining this data with a literature review of existing Code of Conducts from other organizations worldwide and previous research conducted on dolphin behavior, it allows the efficacy of our Code of Conduct to be assessed and to make any of the recommended changes. With the hope of sharing our updated Code of Conduct with other tourism operators throughout the Maldives, additional points have been added regarding situations in which there are multiple boats around the same pod of dolphins. Chloe has also assessed how the presence of calves and the length of the interaction can impact the stress levels of the dolphins and MUI has updated the Code of Conduct accordingly. This will be followed up by training for the crews on each of the boats and other hosts at Six Senses Laamu.

We look forward to sharing this Code of Conduct with others to ensure that the natural behavior of dolphins throughout the Maldives is not negatively influenced by the presence of tourism operators and that we can enjoy sharing our environment with these beautiful animals in a responsible and sustainable way.

## CORAL COVER IS INCREASING!

The results of our bi-annual CCAP survey indicate that the coral cover on Six Senses Laamu House Reef is continuing to recover. Our latest results suggest that on average our house reef is at around 49% coral cover, this is up from 40% in January! This is calculated using a PIT transect in which the substrate underneath every 0.5 m is recorded and this is done for four 20 m transects so that an average can be taken. This is repeated at 5 m and 10 m depths. Although this data is approximate, it is really encouraging to see that our house reef is healthy and recovering well after the 2016 bleaching event, after which it was down to ~ 10% coral cover.

We will continue to monitor the changes on our house reef and use this information to inform future restoration plans and our understanding of natural reef recovery here in Laamu.



**49%** Coral Cover on our house reef

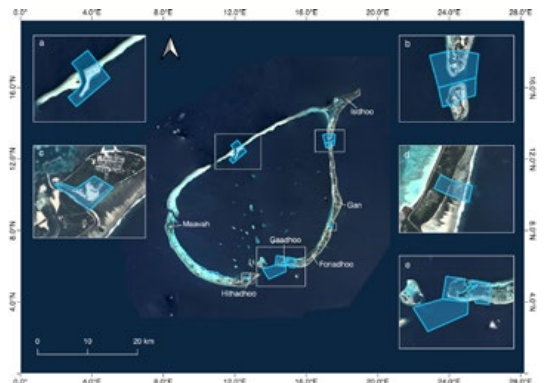
**31%** has grown since June 2018

# 5 YEAR MUI-VERSARY



5 years ago in July, the Maldives Underwater Initiative (MUI) was formed!

Over these 5 years the MUI team's work and projects have developed and grown resulting in increased protection and awareness of the incredible marine environment in Laamu. One of MUI's founding principles has always been collaboration and this has continued to be a core driver in MUI's work and achievements. Not only have the partnerships with our three NGO's, Manta Trust, Blue Marine Foundation and Olive Ridley Project gone from strength to strength but our collaboration with various other scientists and organizations continues to develop and support our work in Laamu. Over the 5 years, MUI has made collaborations with over 50 institutions and individuals to create change on a local and global scale.



MUI's three pillars of Research, Education and Community are still at the core of everything the team does. Over this 5 years the MUI team has had an incredible 72,000 interactions with guests at Six Senses Laamu. These interactions take form in many different ways, from snorkels, dolphin cruises, dives and turtles hatchings to spontaneous discussions while spotting an eagle ray from the jetty and evening presentations showcasing MUI's work.

Community outreach and collaboration has always been at the heart of MUI's big goals to protect the environment of Laamu, and this is shown in the incredible events and activities that MUI has undertaken with the community; MUI has had nearly 13,000 moments of education with the community since 2018.

Some of MUI's biggest achievements to date include:

- Contributing to the designation of 6 Marine Protected Areas around Laamu Atoll
- Laamu Atoll being designated as a Mission Blue Hope Spot by Sylvia Earle's Mission Blue
- Featuring on BBC's Our Changing Planet with 3.4 Million live views
- The opening of the Sea Hub on Environmental Learning in Laamu
- A successful #ProtectMaldivesSeagrass campaign, resulting in 1 million square meters of seagrass pledged to be protected.

None of this would be possible without the incredible support from Six Senses Laamu and each of the NGO's we partner with, as well as every guest who has visited, joined activities or talked to the MUI team over the 5 years and we thank you all for being part of MUI's journey so far.



 **72,000** interactions with guests

 **13,000** moments of education with the community

 **50+** collaborations and partnerships made with organizations, institutes or individuals.

## A WHALEY RARE SIGHTING!

In July a few of the team members along with a few guests were lucky to have a very unique and rare encounter with one of the largest animals on earth.

On the way out to a dive site on the outside edge of the atoll the entire boat party were met by a playful Humpback Whale. After a few minutes of watching the boat carried on to the dive site. But when everyone was back up on board the Humpback Whale was still around and performing for them. Everyone on the boat was lucky enough to witness this amazing animal breach a few times relatively close to the boat.

This kind of sighting is extremely rare in Laamu and in the Maldives. It is not clear exactly how many times Humpback Whales have been spotted in the Maldives but it is clear there have been very few recordings of Humpback Whales in the Maldives, making this an incredible special event.



**1** Humpback sighting since MUI started

# BLUE MARINE FOUNDATION



BLUE MARINE  
FOUNDATION

## SEAGRASS WORKSHOP HITHADHOO RESIDENTS

This month the Blue Marine and Maldives Resilient Reefs (MRR) team organised and ran a citizen science seagrass workshop for the residents of Hithadhoo island as part of their work to support the establishment of a Community Conservation Area there. This was the first of three capacity building workshops to train interested residents in ecosystem monitoring – coral reef and mangrove workshops are also planned for this year. Eight locals attended, three of which were women, the youngest attendant was only 11 years old. The



day began in the classroom with theory sessions on species identification, how to estimate percentage coverage of both seagrass and algae, how to measure the canopy height and assessing seagrass health. The importance of seagrass was discussed and the participants shared their perceptions of it. The practical in-water session began after lunch, each of the two groups had a quadrat, ruler, species identification sheet, a guide to estimate coverage and epiphyte growth and a slate to record the information. Each person in the group had a turn doing all the different tasks. The participants demonstrated great teamwork by helping each other to collect data in the water. In the future they will have the opportunity to collect data on annual monitoring surveys to assess the health and extent of their seagrass.



**1** citizen science  
workshop conducted



**1** Hithadhoo residents  
attended



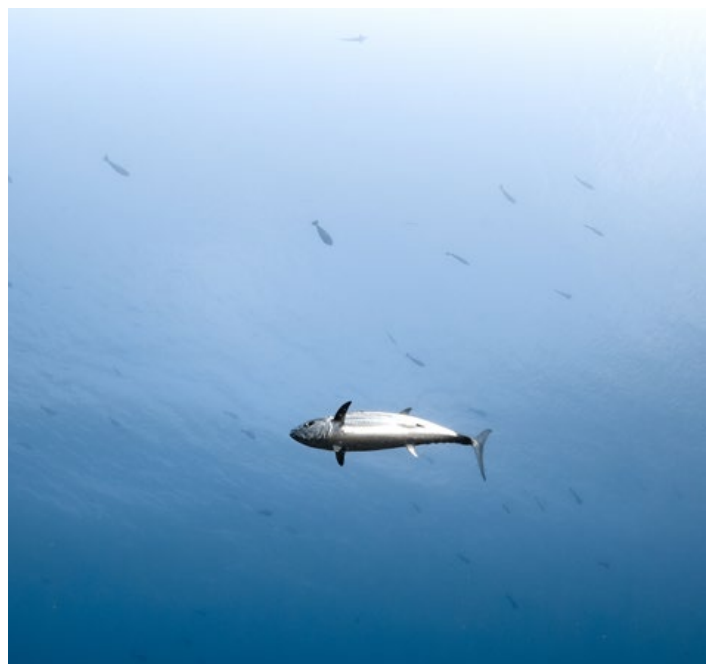
# SUSTAINABLE TOURISM COALITION

Following on from their meeting in May with Rahaa resort, the MRR and Blue Marine team met with the owner (Zaki) and manager (John) of Nazaki guesthouse on the island of Gan to discuss the establishment of the STC in Laamu. Nazaki is a small guesthouse with 12 rooms and a private beach. The team explained the purpose and importance of the coalition to Zaki and John and discussed their willingness to adopt sustainable practices such as refillable bathroom amenities and glass bottles for water to reduce single use plastic. Laamu atoll has a relatively low level of tourism with only 2 resorts and 2 guesthouses currently in the atoll, the team aims to establish sustainable tourism best practice standards and Codes of Conduct with the existing tour operators, which future resorts can join to protect the special marine life found here. The meeting stimulated an interesting discussion and both Zaki and John are willing for Nazaki to be part of the coalition. The next step is to have an in-person coalition meeting with all the tour operators.



# FISH OF THE MONTH DOGTOOTH TUNA

The dogtooth tuna, with its sleek, torpedo-shaped body and metallic blue-green hue is one of the top predatory species found in the Indian Ocean. Growing up to 250 pounds and reaching lengths of over 6 feet, the dogtooth tuna boasts immense power and agility, making it a prized catch among sport anglers, commercial and local fishermen alike. Its unique name is derived from its elongated, conical teeth, which resemble those of a dog. Living in warm tropical waters, this species is known for its impressive speed and voracious appetite, often preying on smaller fish and squid. Though the dogtooth tuna plays an essential role in maintaining the delicate marine ecosystem, its populations have faced increasing pressure due to overfishing. Conservation efforts such as the Laamaseelu Masveriyaa programme where they are allowed to be caught with a strict minimum landing size limit, are crucial to ensure the sustainability of this majestic creature and its vital place within the ocean's biodiversity.




# THE MANTA TRUST



 **04** Acoustic Listening  
Devices deployed

 **21** confirmed  
manta sightings

 **11** Remote Underwater  
Video Systems deployed



## NEW MANTAS IN LAAMU

In the last two months, the team have been able to photograph and identify not just one, but three new reef manta rays in Laamu, right near the resort at our local manta ray aggregation site Hithadhoo Corner. Sometimes the confirmation of these new mantas takes some time, as the Manta Trust has a rigorous confirmation procedure in which Photo-IDs will be checked by usually at least two people and of course AI. This is to prevent any double counting and therefore misinterpretation of population size. Maldives wide the Manta Trust has so far identified over 5700 individual manta rays, and the three new mantas in Laamu let the Laamu database grow to 145 reef mantas!

 **03** new  
mantas identified

## MEET PONTOS

The newest manta in Laamu is a special one indeed. So far, we have only encountered her once, but what an encounter that was! She was sighted at Hithadhoo Corner, and behaved as confident and calm as a well-known Laamu manta would. The team like to think that the regular Laamu mantas are very used to divers at this site, while new mantas can often behave either very shy and elusive or very curious and playful. This beautiful large manta ray, however, was not only happily cleaning on one of the cleaning stations, she was also pregnant! And just when you think this encounter couldn't have been any better, our team even



managed to obtain ultrasound scans of this new individual. This manta deserved a rightful adoption, so the team offered one of our lovely guests Caroline who had supported the Manta Trusts' efforts largely already, to name and adopt it. We are delighted to introduce you to ... Pontos! Thank you, Caroline, for your continued support and interest in our work. We hope to see both you and Pontos again soon!



 **01** manta  
adopted

# SNORKELING WITH THE KING

This month, the Manta Trust team and KING (Kunahandhoo Island Nomination Group), one of the local NGOs of the island Kunahandhoo, collaborated to organize an exciting Snorkelling event for the children of Kunahandhoo. With the help of other MUI members and resort staff, the Kunahandhoo snorkel was a great success!

The day began with an engaging talk about mesmerizing marine life and safety precautions, followed by warmups and instructions of how to use the snorkel gear. The snorkel equipment had been donated through Manta Trust by BlueYou and the team was happy to see them being used and in action! Extra life jackets and equipment were thankfully provided through Ocean Wings and Deep Blue Divers.



Under the guidance of skilled instructors, the team set out to a nearby inside reef away from the island. A total of 26 participants, including 19 kids and their parents, joined the snorkelling adventure. The children were amazed by the abundance of marine life just around their island, encountering hawksbill turtles, eagle rays, lots of fish and corals and even some sharks. As soon as the teams returned to the boats, the first kids asked when we could come back to do this again!

The event proved to be a great success, with everyone having a wonderful time. Both parents and kids are eagerly looking forward to more snorkelling sessions. In response to their request, the team is planning to arrange a separate snorkelling session exclusively for the parents in the future. The enthusiasm and positive response have inspired the team to continue organizing such engaging activities for the community. We'd like to thank everyone involved for making this possible, and in particular the Kunahandhoo Island Nomination Group for inviting us!

 19 children taken for snorkel


## NEW PADI MANTA SPECIALTY DIVERS

In July, the team was excited to teach two students the PADI manta specialty course, together with Deep Blue Divers. In the course they really dived into manta ray biology and conservation, were trained on how to be a manta biologist for a day and how to identify key features on manta rays such as their general health, sex and maturity. Sam wrote this about his course:

“It was great, I was really happy to have completed it. It meant something to me to have it cap end my manta and dive experience. I wasn't entirely sure why the qualification had meant so much to me, but there was a layer of context that it peels back and deepens what I'm seeing. Maybe I felt like the mantas deserved to be learnt about and supported? I suppose it might have been better for me to do the course at the start of the holiday, but in my case I'm just glad finding out that I could do the little learning at the end of our time there.”

The team is very proud of our two new qualified Manta Specialty Divers and we hope to have them return again.



 02 new specialty divers certified



**OLIVE RIDLEY  
PROJECT**

# THE OLIVE RIDLEY PROJECT



**04** new turtles  
identified



**135** submissions by  
MUI and DBD



**27** in-water surveys



**963** turtles in Laamu



**90** hours of Nestwatch

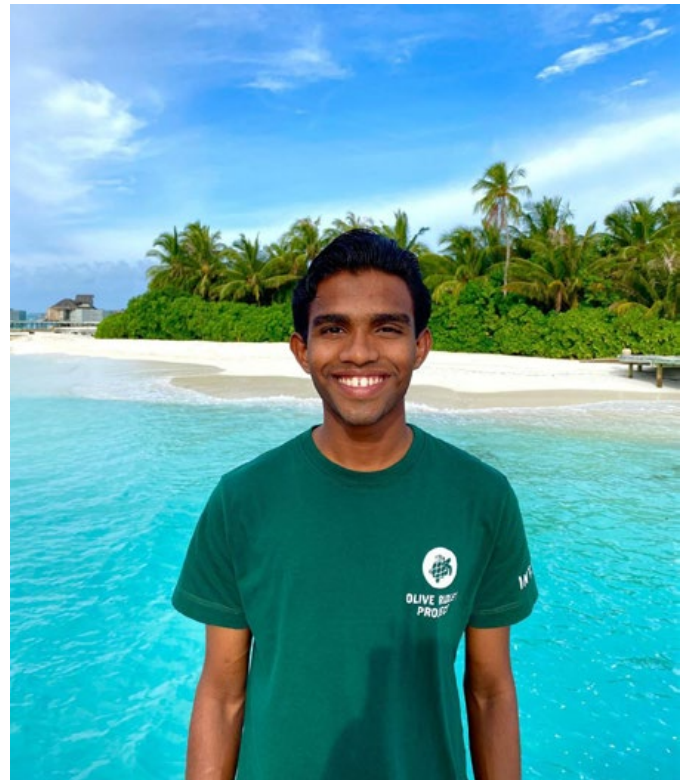
## WELCOMING ATHIF TO ORP

Meet Athif, our new Sea Turtle Biologist Intern at Six Senses Laamu!

Athif graduated from Maldives National University this year with a bachelor's in Marine Science, where he was involved in conducting fieldwork across a number of marine ecosystems. His hope is to see more students getting into the marine and environmental fields because there are so many opportunities for research and conservation in the Maldives.

He has spent the last 6 months interning with the Six Senses marine biology team at MUI, providing support on research and other educational activities in Laamu Atoll. He has a passion for seagrass and helped coordinate a series of seagrass monitoring surveys around Olhuveli island both last year and this year.

His love for turtles grew during his time with MUI, where he had the opportunity to get up close and personal with greens and hawksbills in the water, and witness both nesting and hatching turtles on the beach. Athif has now finished his internship at MUI, and is eager to learn more about sea turtles and all the work ORP does!



Athif feels that it is important to learn more about the marine life in our oceans, such as turtles, to better understand the role they play in the ecosystem. He wants everyone to love our planet and all the creatures that live in it, and to be more conscious of our influence on them and their habitats.

# TIDES SPRING ONTO TURTLE NESTS

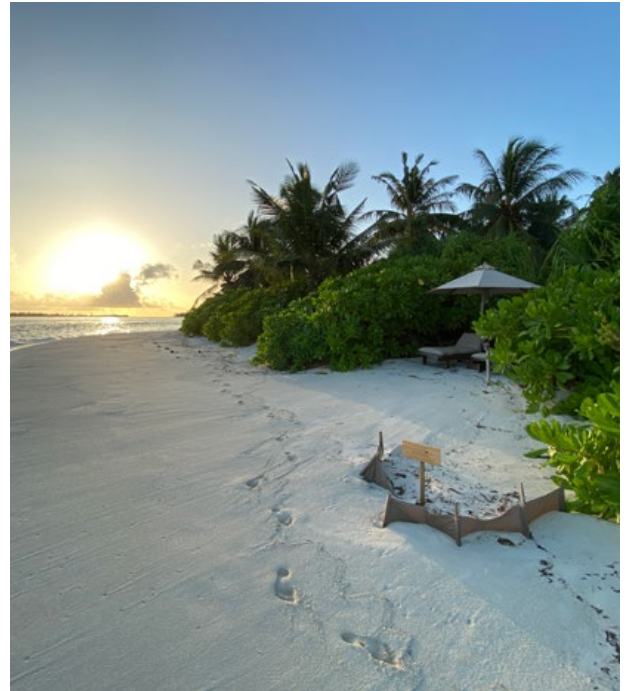
The month of July saw two especially strong spring tides, where the waterline had reached the very back of the beach on multiple occasions during the high tide. As a result, two nests on the island were washed over and inundated. However, as these nests were located close to the vegetation line and far up the beach, they only experienced some light inundation. The team will be monitoring the nests closely to see how they have been affected by these rising tides.

Sea turtle nests are naturally able to withstand some light flooding, but prolonged inundation can damage the nest and stop egg development entirely. This is a major concern with the increasing threat of sea-level rise and increased storm surges driven by climate change. As turtles demonstrate fierce loyalty to their nesting beaches, the loss of suitable nesting space from these impacts might leave them with nowhere safe to lay their eggs. This can potentially cause long-term declines in future turtle populations.

With the Maldives being one of the lowest lying nations in the world, the work that ORP does to protect nests against other threats such as poaching and beach development will be vital in buffering turtle populations against climate-associated threats such as these.



02 nests flooded

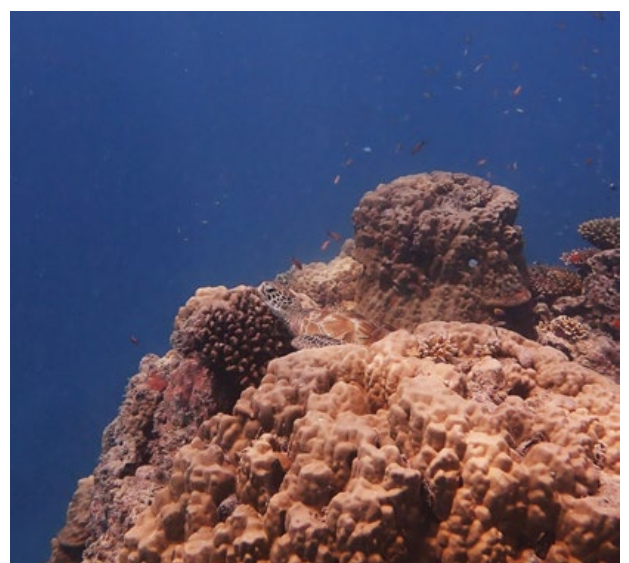


# TURTLE IN THE SPOTLIGHT MEET SMELLY (GR1561)

Smelly was first encountered on the resort's house reef on 21st of February this year. This juvenile green sea turtle has since been encountered more than 20 times, almost always seen resting on one of the nearby underwater pinnacles.

With a carapace length of about 50cm, we know that Smelly is still a very young turtle! Green turtles like Smelly usually reach adulthood at 65cm carapace length, and can even grow much larger up to 120cm in size. This makes green turtles the largest species of hard shelled turtle.

She even has a favourite spot on top of the pinnacle, where we can always see her resting or sleeping for hours. Green turtles do this by slowing their heart rate down so they can hold their breath underwater longer. Smelly can be very shy and swim away when we get closer, but if she is in a good mood she usually sticks around while we snorkel. We hope to continue seeing Smelly on our house reef for many more snorkels to come!



20+ Sighted times

# OUR COMMUNITY



**43** items guests  
donation received



**60** items of Guest donation  
delivered to community.



**60** items of Guest donation  
delivered to community.



**31** guests joined the island  
excursion experience.

## WELCOMING PROF JAMES RUSSELL AND DR. STEIBL STEILB.

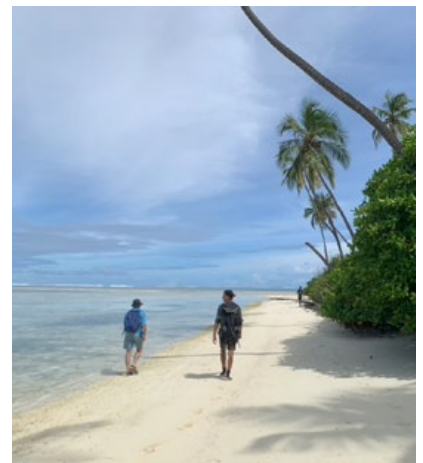
Healthy Ocean is connected to healthy islands. To bridge the gap, Six Senses Laamu hosted conservation ecologists Dr. Sebastian Steilb and Professor James Russell from the University of Auckland, New Zealand, to examine the island ecology of Six Senses Laamu and neighboring islands in Laamu.

The Maldivian Atoll island provides an enormous opportunity space for island-based conservation and ecological restoration. Before implementing restoration projects or operations, it is essential to survey the status quo. During the visit, Dr. Sebastian and Prof James conducted several surveys on 17 islands in southern Laamu Atoll to assess the bird population and key invasive species. Furthermore, Genetic samples of rodents were collected to analyze the population connectivity of the invasive mammal species found on the islands. This information is crucial for island conservation as controlling invasive rodents is one of the most powerful tools to restore and conserve island ecosystems.

The visit provided the MUI team, guests, and community with an excellent opportunity to learn and exchange knowledge. Dr. Sebastian and Prof James provided information sessions to the MUI team, the island council of Hithadhoo, and AgroNAT (State-Owned Enterprise) working on Gaadhoo island. Dr. Sebastian also gave a special presentation to guests at the arrival jetty about coral island atoll ecology and conservation.



**17** island Surveyed.



# HITHADHOO CULTURAL DANCE GROUP

Six Senses Laamu welcomed the cultural dance women's dance group from neighboring Hithadhoo to perform at the Management cocktail party every Tuesday in July to celebrate and share the Maldivian culture with the guests.

Dhandi Jehun is a popular cultural dance form of the Maldives. Usually performed during the Eid festival in the island communities, this style of Maldivian folk dance varies from island to island. A group of 14 women dances in parallel rows using the decorated props to the song of rich poetry about love, nationalism and takes of folklore.

At Six Senses Laamu, we believe in the power of authentic cultural exchange to create memorable and enriching experiences for visiting guests. Through this, Six Senses Laamu hopes to incentivize the revival of the diverse Maldivian cultural dance forms in Laamu to sustain it for generations in an era of rapid modernization and cultural shift in the Maldives.



# PADI WOMENS DIVE DAY

On PADI Women's Dive Day 2023, the MUI team and Deep Blue Divers came together to celebrate and empower women in the world of diving. With an enthusiastic spirit, the team organized a special event where women and girls from across Laamu Atoll were invited to celebrate the day by participating in a Discover Scuba Dive (DSD) session. Fifteen women from the islands of Maamendhoo, Isdhoo, Dhanbidhoo, Hithadhoo, Gan, and Fonadhoo joined the DSD on 15th of July. The day was made even more special to the team as we could show and share our love for the marine ecosystem with these women from the community, some of whom were taking their very first breaths underwater. Laughter and excitement filled the air (or shall we say water) as these women and girls immersed themselves in the beauty and serenity of the ocean. The highlight of the day was a 9-year-old girl who participated, proving that age doesn't matter when it comes to adventure and exploring the ocean. This celebration would not have been such a huge success without the generous donation of Erin Quigly, who is an avid diver herself. PADI Women's Dive Day 2023 was a resounding success, leaving an indelible mark on the participants and inspiring a newfound love for the ocean and its diverse marine life. Maryyam Niuma, one of the women who participated wrote: "I did not expect so many women in Laamu Atoll to turn up for the dive, many of them who had joined previous years as well. The organizing team was very professional, and I felt so at ease. I haven't been diving too many times before, but this was my most relaxing dive to date. I was also inspired to do more diving and hopefully certify up to Divemaster level one day."



**15** women and girls  
learned diving

# OUR HOME



**95** Kg Chicken manure produced



**337** eggs produced



**3410** Kg Homemade Compost produced



**174** guests joined earth lab education sessions



**10.5** Liters Coconut Oil produced

## MAAMENDHOO MEETING

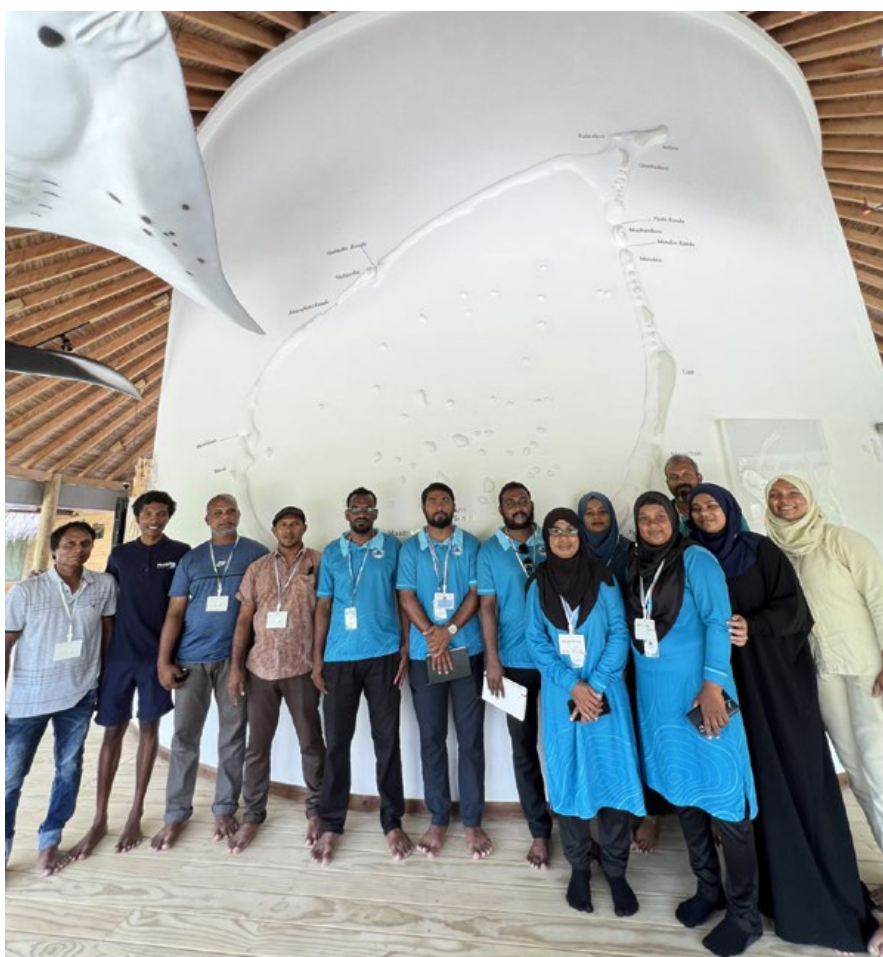
Sustainability team held a collaborative meeting on July 3rd, 2023, brought together key stakeholders from one of the closest local islands (Maamendhoo). Maamendhoo Council, Maamendhoo School, Maamendhoo Police, Waste Management Center, and Women Development Committee were invited to strategize and find sustainable solutions that will eliminate open burning at the Maamendhoo Waste Management Center. Together, we are determined to create a healthier and greener community for generations to come. Together, we can make a difference!



**17** attendees



**02** hours





# KUKULHU VILLAGE UPDATE



The Earth Lab team, passionate about finding innovative and sustainable solutions, has recently embarked on a new project aimed at improving the Kukulhu village. In an effort to enhance the overall cleanliness and wellbeing of the chickens, the team has introduced the use of sawdust in the Kukulhu village. Sawdust serves as an excellent absorbent, effectively soaking up any excess moisture or waste present in the farm. By doing so, it not only reduces odors and prevents the spread of harmful bacteria but also provides a more comfortable and sanitary living space for the chickens. In addition, the sawdust can be easily disposed of and repurposed as fertilizer, making a valuable contribution to composting efforts.

To learn more about marine conservation and sustainability initiatives at Six Senses Laamu please contact:

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To stay up to date with the latest news, events and visiting experts follow the Maldives Underwater Initiative and Six Senses Laamu on social media.

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