

BLUE & GREEN LAAMU

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

MAY 2022

This month, the Six Senses Laamu research team began their annual survey of the seagrass meadows around the resort and also signed a very exciting partnership agreement with Blue Carbon Lab.



MUI 2021 ANNUAL REPORT

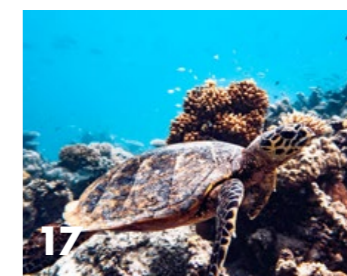
NOW AVAILABLE FOR DOWNLOAD ON THE [MUI WEBSITE](#)

Read all about what the team achieved last year in this bespoke, coffee-book-style, report.



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THE BIG STUFF



150 megafauna surveys were conducted by the MUI and DBD teams



536 sharks were sighted



296 rays were sighted



340 turtles were sighted

OUR EDUCATION



1,173 moments of education were shared with guests



145 moments of education were shared with hosts



427 moments of education were shared with the community



SIX SENSES CONSERVATION

THE START OF ANNUAL SEAGRASS SURVEYS

This May, the Six Senses Laamu research team started their annual seagrass monitoring surveys around the resort. Over 14 hours were spent underwater, monitoring the health and diversity in the large seagrass meadow between Jetty B and C, as well as investigating the fish diversity and abundance within the meadows. Stormy weather and strong currents didn't stop the team in surveying almost 120 data points in just one meadow! This year, the team is especially excited for the seagrass monitoring project as 2022 marks the fifth year of seagrass protection at Six Senses Laamu.

In July, MUI will host a student from the Maldives National University to help with these seagrass surveys as part of their final thesis project. Together with a team of international seagrass experts that have been helping and advising MUI from the start, the team is eager to find out what ecosystem benefits have resulted from five years of seagrass protection here at Six Senses Laamu. 🌊



14 hours were spent surveying Six Senses' seagrass meadows



119 data points were recorded



CARBON CARING- THE NEXT STEPS IN RESPONSIBLE TOURISM

In 2019, Six Senses Laamu hosted a visiting expert, Peter Macreadie, the Director of Blue Carbon Lab at Deakin University, Australia. During this visit, Peter worked with the team to take initial steps into investigating the value of blue carbon ecosystems in Laamu. The team extracted carbon cores from six mangrove forests and seagrass meadows in Laamu, which have since been analyzed to understand the ecosystems' capacity of capturing and storing carbon. However this visit was just the beginning of something much bigger...

This May, three years after Pete's visit, Six Senses Laamu signed a partnership with Blue Carbon Lab to conduct a feasibility study. Through this study, the Six Senses Laamu research team are working with the Blue Carbon Lab to develop a 'Carbon Caring' program which will provide guests with the opportunity to take accountability for the carbon emissions they use during their stay. Sustainability-conscious travelers will have the opportunity to see the emissions they produce and, in response, directly invest in blue carbon habitat protection, restoration, and carbon emission reduction schemes locally in Laamu. The program will consider social, economic, and ecological benefits, and will be fully transparent, locally relevant and scientifically sound.

With such an ambitious project, the team is happy to have the backing and help of this world-renowned organization to guide the way towards an effective and impactful program. 🌊



MEGAFAUNA DATA GOES DIGITAL

Every time a team member from MUI and Deep Blue Divers is in the water, they collect data on the megafauna (the big stuff, like rays, sharks and turtles) they sight. One of MUI's long-term goals is to expand their megafauna data collection efforts so that more people can log and view the data. This month, the team made a huge step towards fulfilling this dream.

Oliver Burdekin, a spatial analyst from the U.K., has started developing a megafauna data collection app especially for MUI, which will be able to be used by anyone, anywhere. In preparation for the launch of this app, ten hosts and two students were trained remotely by Oliver, in spatial analysis programs and QGIS, Mergin and Input tools. In June, Oliver will come to Six Senses Laamu as a Visiting Expert to trial out the developed app in the field and make sure the team is trained up to use the app on a daily basis.

In the future, MUI's aim is to teach other stakeholders across the atoll, and eventually across the whole of the Maldives, to use this app to report simple megafauna sightings data. Collecting open data on a larger geographical scale will be of immense interest to many research projects and provide an insight into the diversity and distribution of endangered megafauna across the country. 🌊



12 people were trained in spatial analysis programs and tools



8 hours of online training were conducted



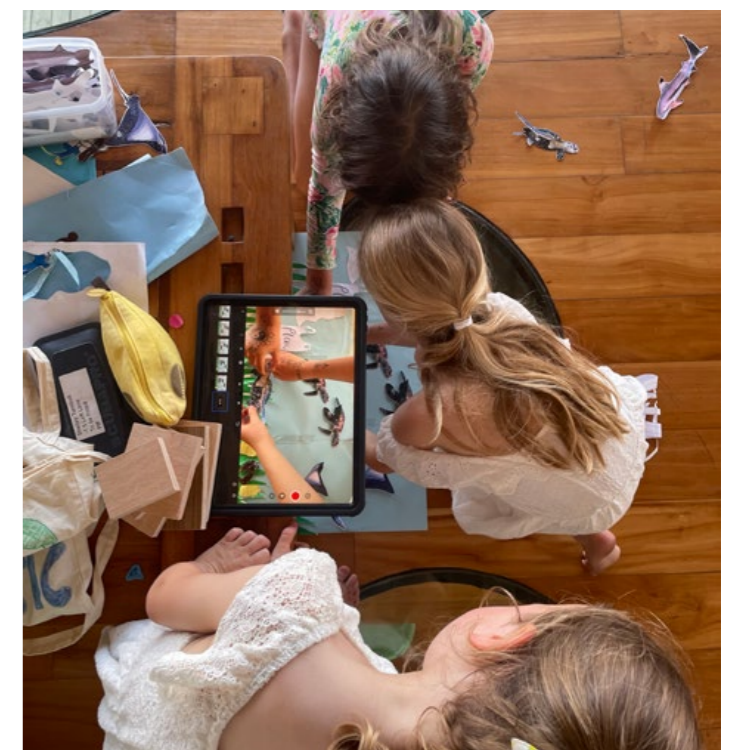
INSPIRED AND INSPIRING JUNIOR MARINE BIOLOGISTS

Once again, Junior Marine Biology proved very popular amongst the resorts' little VIPs this month. Congratulations to Lila, Julia, Katharina, Elisabeth, Peyton, and Sydney for becoming certified Junior Marine Biologist whilst on their holidays.

All the new Junior Marine Biologists showed passion, interest and knowledge during the sessions- we are sure that some of them will be coming back to take our jobs in the not-too-distant future! The MUI team is always energized and inspired after seeing such passionate children join the team, providing us with hope for the next generation of ocean guardians. 🌊



8 children joined Junior Marine Biology Sessions



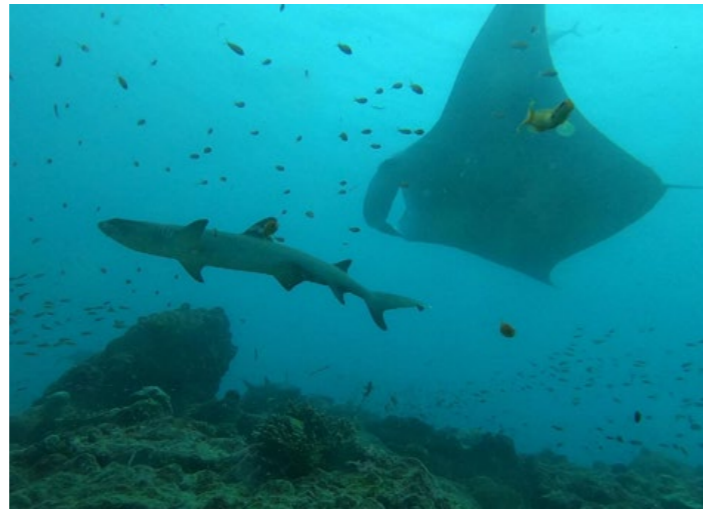
THE MANTA TRUST



SOCIAL SCIENCE SURVEYS SUCCESS

FIRST EYES ON THE REEF DEPLOYMENT AT FUSHI KANDU

The Manta Trust (MT) Laamu team were very excited to see lots of activity on their first "Eyes on the Reef" remote underwater camera deployment at Fushi Kanduu, a manta aggregation site in the Northeast of the atoll which was recently declared as a marine protected area. Not only did they record many mantas, but also shark aggregations, and a huge school of jacks!



The team will be consistently deploying a camera here, as part of an atoll-wide study to better understand the seasonality, habitat use, and behavior of Laamu's manta rays. This will be paired with environmental data such as current strength and direction, tides, lunar cycles, and temperature, to pinpoint what environmental conditions determine manta ray presence or absence at the site. 🌊

Following the start of the social science surveys at the end of April, the MT team completed the project in May, after conducting a total of 140 interviews. The team visited every inhabited island in the atoll to interview fishers, boat captains, and seafarers to discover their local ecological knowledge about manta rays.

The aim of the study was to find out information on manta ray abundance, hot spots, seasonality, and any potential threats manta rays may face. They were amazed by the incredible response they received and have gained so much local knowledge from the community of Laamu. Fishers from each island told fascinating stories about the manta rays encounters they have experienced over the years, and the team have started to form a much better understanding about Laamu's mantas.

Alongside the surveys, the team also conducted presentations to the community and council members on each island about the research that MT conducts, and their long terms goals for the atoll. All the islands were incredibly hospitable, many of which were enthusiastic to show the team their reefs and take them out on boat trips to potential manta aggregation areas. MT even got invited to future research collaborations, so the trip laid down the foundations for future community projects in the atoll. The MT team would like to say a huge thank you to everyone that took part, and to each island in Laamu for their hospitality and kindness, which made this project possible. The full results will be available in a published report in September 2022. 🌊



140 social science interviews conducted with Laamu atoll residents



69 attendants to meetings and presentations



12 council meetings and community presentations



THE MANTA RAY THAT GOT AWAY!

The MT Laamu team are continuously fascinated by the rare sightings they capture on their “Eyes on the Reef” underwater timelapse cameras. However, this month they received a very unusual sighting indeed... MV-MA-3428 “Batmanta”, an adult female manta ray, was seen with a large, fresh, predatory bite on her pectoral fin.



This was most likely from a tiger shark or a bull shark, which happen to have a taste for manta rays. Luckily for manta rays, their crucial organs are placed within the center of their body, so their large wingspan works in their favor when predators attack, who can usually only take a bite out of their fin. Manta rays (and other elasmobranchs, which includes sharks and rays) are considered to have high healing capacity, due to their unique adaptive immune system and cartilaginous skeletons which can regenerate quickly. In a study conducted in 2019, shark bites on manta rays were observed to have completely healed within 126 to 225 days!



The most exciting discovery is that Batmanta has only been seen 4 times in the last 4 years, making her one of Laamu’s rarest mantas. The last time she was spotted was in 2021, in which the shark bite was not present. To think that she happened to pass over the MT’s underwater camera at the exact moment that it took a picture (just once every minute), is pure luck, but proves the importance of the data that these underwater cameras provide to MT’s research. The team will continue to keep a look out for the rare Batmanta to monitor her healing process! 🌊

A RARE OCEANIC SIGHTING

The MT team were excited to receive news of a rare oceanic manta ray sighting at Munyafushi Kandu this month, one of the western channels of Laamu atoll. Despite getting frequent encounters of reef manta rays, their larger relatives – the oceanic manta ray – are rarely seen here. This trend is similar across all the Maldivian atolls, excluding Fuvahmulah in the far south of the Maldives, which has an influx of oceanic manta rays passing through between March-April each year.

Many of these oceanic manta rays are identified by the Manta Trust but never seen again. Due to their pelagic lifestyle, they are much more elusive and harder to track than the reef manta rays. We do not know exactly where they originate from, and where they are travelling to when they pass through Fuvahmulah. So, there is still a huge amount to discover about the oceanic manta rays in the Maldives, and every sighting the team receives helps to fill in pieces of this puzzle. The team would like to say a huge thank you to Hassan Hameez, local dive instructor, for capturing this rare encounter on video. 🌊

MANTA TRUST’S 2021 PROJECT ACTIVITIES REPORT



Following another successful year of partnership between the Manta Trust and Six Senses Laamu, the MT team are delighted to share their 2021 project report, covering all aspects of their project activities at the resort and within the Laamu Atoll community throughout the year. Click [here](#) to find out all the exciting things they got up to.

Soon, they will also be releasing their 2021 Laamu annual report, which gives an overview of their research and scientific findings...watch this space! 🌊

SIX SENSES HOST SURVEYS

Following the success of the Local Ecological Knowledge surveys throughout Laamu atoll this month, the MT team decided to interview some of the resort staff about their knowledge on manta rays too. As most of the resort staff are from Laamu atoll, and many are either boat captains or crew, or have worked on fishing boats before, it made sense to learn from them too!

The MT team hosted drop-in interview sessions at the resort, in which team members could take part in an interview between their work shifts. The response was great and contributed highly to the data that forms an atoll wide study. The team would like to say a huge thank you to the resort staff that took part! 🌊

 **18** social science interviews conducted with resort staff

MANTA RESEARCH

 **6** remote underwater photography deployments with 362 hours recording time

 **91** manta ray sightings confirmed through photo identification

 **9** manta rays measured



BLUE MARINE FOUNDATION

FIRST LAAMASEELU MASVERIYA FISHER MEETING OF 2022

This month, the Blue Marine Foundation and Maldives Resilient Reefs (MRR) team conducted the first Laamaseelu Masveriya fisher meeting of 2022. Established in February 2020, the Laamaseelu Masveriya program aims to ensure that Six Senses Laamu creates a market for sustainably caught fish in Laamu Atoll, through facilitating reef fishing methods which have a minimal impact upon local coral reef ecosystems. The meeting was the first of three to be conducted this year and are an important opportunity to work with fishers on program adaptive management.



Proceedings began with an in-depth presentation of the findings from a recent report into the socio-ecological effectiveness of the program across the past two years. Constructive discussions were had around the importance of releasing immature fishes and the population statuses of certain commercial species around the atoll. Fishers also discussed their perspectives on the current status of the program and were able to voice any concerns they had around programs' operational or ecological effectiveness.

Fishers then moved into a team building exercise, designed to increase fisher awareness of the importance of releasing undersized species. During the exercise, all fishers measured their forearms to provide a quick reference point when deciding whether a fish is of an adequate size to catch, then used this method to determine if life-size print outs of specific species were large enough to keep. The exercise was a resounding success, with all fishers actively engaged in furthering their understanding of fisheries sustainability.

The final section of the meeting was reserved for discussing program redevelopment. In light of the report analysis and discussions with fishers, the Blue Marine/MRR team have streamlined the operational aspects of the program to better

ensure effective data collection. Furthermore, the team have re-developed the points-based incentivization scheme to better incentivize committed and sustainable full-time local fishers. This includes an increase in the standard price fishers receive for their catch and a premium bonus for fishers who achieve certain sustainability and commitment criteria.

Going forward, Blue Marine and MRR will expand the pool of fishers signed-up to the Laamaseelu Masveriya program and develop an interactive educational program to build fisher awareness of the importance of sustainable fishing practices.



RECREATIONAL FISHING DATA COLLECTION

Throughout May, the team has continued their data collection on fishes caught during recreational fishing trips for guests. The data collection process involves identifying and measuring caught fish species once the trips have returned to the resort. Furthermore, location and fishing effort data are collected to help the team determine the most productive fishing locations around the atoll and assess the current status of Laamu's fish stocks. The team are using this data to develop a baseline understanding of the fish caught through the resort's guest fishing trips.



 **11** fish measured from 4 recreational fishing trips



 **7** local fishers attended the meeting



OLIVE RIDLEY PROJECT

THE OLIVE RIDLEY PROJECT

TURTLE EXPERTS VISIT SIX SENSES LAAMU

In May, Albert Taxonera, who is the founder and director of Project Biodiversity, visited Six Senses Laamu. Project Biodiversity is an NGO which works to protect the nesting loggerhead sea turtle population in Cape Verde. Claire Petros, the Olive Ridley Project (ORP)'s senior vet, accompanied Albert on the trip.

The aim of Albert's trip was to exchange knowledge and develop a strategy for how drones can effectively be used to deter poaching and identify sea turtle nesting in Laamu. During his time with the team, Albert conducted training for the MUI team, and assisted ORP's in-field biologist to develop community-conservation initiatives.

Whilst at the resort, Claire conducted turtle rescue and entanglement training for hosts, caught up with her Laamu-based colleagues and shared her experience being a turtle vet in the Maldives with guests.



3 training sessions were conducted for hosts by the visiting experts



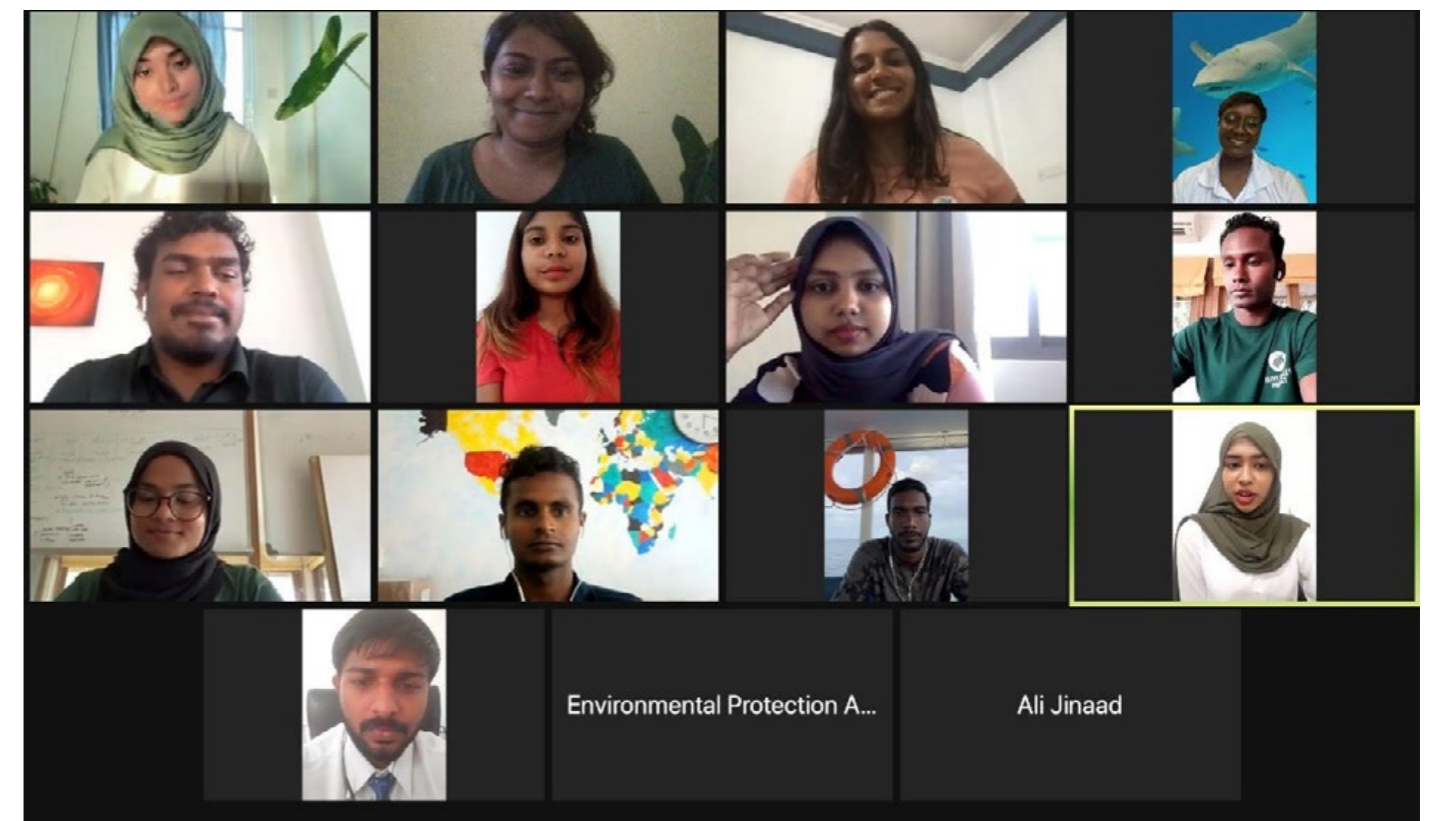
56 guests were reached through special activities conducted by the visiting experts



WORLD TURTLE DAY WEBINAR

On World Turtle Day 2022, ORP participated in a live webinar hosted by the Environmental Protection Agency, the organization responsible for management for sea turtle protection in Maldives, alongside many other turtle conservation advocates.

The webinar, which was hosted in Dhivehi, aimed to raise awareness amongst Maldivian nationals for sea turtle protection. It was great to see some familiar faces hosting the webinar, with six people on the panel having presently or previously worked at Six Senses Laamu!



WELCOME TO THE TEAM!

During May, some changes were made in the ORP Laamu team, when Isha, ORP's Laamu Sea Turtle Biologist was promoted to ORP Maldives Project Manager. Although the team in Laamu will miss her, they're happy they will have the opportunity to continue working with Isha on various projects. In addition, the team is delighted to welcome two new faces to the ORP Laamu team.

Meet Angeela

This month, ORP welcomed Angeela, who has replaced Isha as the Laamu Sea Turtle Biologist and Guest Educator based in Six Senses Laamu.

Angeela is from the southern, tuna-fishing, island of Gemanafushi in Huvadhu atoll. Despite growing up in the untouched nature of seagrass-filled lagoons and clear beaches, she didn't have many opportunities to see the underwater world due to the lack of access to snorkeling equipment. However, when Angeela was 14, she met a Marine Biologist at a career guidance program and immediately knew that was what she wanted to be!

While it was still a novel idea for a local to be a marine biologist, Angeela enrolled in a Bachelors of Environmental Management at the Maldives National University, which is the closest course to marine biology in the country. After graduating, she began doing internships at resorts to familiarize herself with working in the field. In 2020, she was part of the first research expedition by Noo Raajje as a researcher from Maldives Marine Research Institute. This paved the way for her to become a Marine Officer in a resort in South Male' atoll, where she spent a year looking after the marine environment and conducting guest activities.

Angeela had always wanted to work with sea turtles – so the opportunity to work with Olive Ridley Project is a dream come true. In this role she hopes to inspire others to love and appreciate sea turtles as much as does!



Meet Afrah

In May, ORP also welcomed their new intern, Afrah, who will be supporting Angeela in all turtle-related activities in Laamu.

Afrah's passion for the marine environment started when he went on his first snorkel in 2018. This first peek into life underwater had him hooked, and he quickly enrolled in SCUBA courses to spend more time with fish and coral reefs.

Prior to that, Afrah had only gone swimming in mandatory classes held by his school in Feydhoo, one of the southernmost islands in the country. He has worked in the tourism sector since 2018, working in various departments while finding the time to pursue his diving education to Advanced Open Water SCUBA Diver. The opportunity to work as an intern with the Olive Ridley Project is his first step into the field of marine conservation, and he hopes to learn as much as he can while working with the MUI team. 🌊

TURTLE OF THE MONTH

DOOTY

Dooty seems to be the only adult hawksbill turtle that hangs around the house reef of Six Senses Laamu. She is the coolest female turtle who loves to swim between Sip Sip & Chill bar. Dooty has a relatively clean shell compared to the usual hawksbill turtles we find at our house reef.

She loves to be photographed and is normally unbothered by humans, which makes it easy to capture an identification photo of her when you see her. However, despite her relaxed nature, we must always follow the code of conduct when swimming with any turtle, to let them decide if they're having an anti-social day! 🌊



196 encounters of turtles were recorded, including 5 from guests



1 false crawl was recorded at Six Senses Laamu



2 green sea turtle nests were laid at Six Senses Laamu



8 nests were recorded on L. Gaadhoo island over two surveys

OUR COMMUNITY

RETURN OF FACE-TO-FACE EKU EKY MEETINGS

On 11th May, the first Eku Eky meeting of 2022 was held in Laamu Fonadhoo. This was the first in-person Eku Eky meeting since the pandemic.

Eku Eky, meaning 'together' in the native Dhivehi language, is a quarterly atoll-wide community meeting that brings all leaders and stakeholders to one place to discuss the ongoing projects in Laamu Atoll and identify ways to work together. 35 members from all 11 inhabited islands representing the Atoll council, island councils, women development committees, schools, and other stakeholders attended the meeting.

During the meeting, highlights from 2021, ongoing sustainability fund projects, project updates from Six Senses Laamu's partner NGOs, and plans for the annual 'Laamafaru festival' were discussed. The meeting was successfully concluded with a tour

of Gan mangrove, locally known as 'Boda Fengada,' one of the six recently designated protected areas in Laamu. The area is an ecologically important site with a rich history that dates back thousands of years.

Since its inception in 2016, Eku Eky meetings have been an excellent platform for the team to network and build connections with the community to work towards the conservation goals set for the beautiful Laamu Atoll. 🌿



35 community members attended the meeting



LOCAL ISLAND EXCURSIONS RESTART

This month, the team at Six Senses Laamu re-launched local island excursions to one of our neighboring islands, Kunahandhoo - a unique experience which guests can book during their stay.

During this walk-around tour, guests see the local school, community offices, island mosque, and grocery stores, which provides guests with a glimpse of the Maldivian island way of life. Moreover, guests are welcomed into a local home and enjoy some genuine Maldivian hospitality with a fresh coconut in the garden. With this unique crafted experience, guests better understand how island communities function and learn more about the Maldives' rich history, culture, and tradition. For us, this is an extremely important activity to provide, given that the local culture of the Maldives is not well known and the international reputation of this island nation is built around resorts.

In May, it was a very popular activity among guests, with 39 guests joining to understand the essence of being a Maldivian living on a small island in the middle of the Indian ocean. 🌿



39 guests traveled to local islands in May



MALDIVES NATIONAL CHILDREN'S DAY CELEBRATION



May 10 is National Children's Day in the Maldives. To celebrate the day, Six Senses Laamu partnered with Hamad Bin Khalifa Al Thani School (Hamad School) in Laamu Gan Island to organize a fun run event that promotes a healthy and active life among the students. The run took place on the link road (the nation's longest road), and 560 students from Hamad School participated in the event.

This event was possible thanks to Six Senses Laamu's Sustainability Fund Proposal Forms. All local stakeholders have access to these forms which enables them to pitch ideas to the resort in return for funding and other support. When Hamad school reached out to the team with their proposal form, it was assessed, feedback was given and then the funds were transferred to the school to enable the event to take place. This form empowers the community to develop their own initiatives and also allows for the team at the resort to filter through the many different proposals they receive, ensuring the most impactful projects can take place. 🌿



560 students took place in the run

OUR HOME

PAPER MAKING WORKSHOPS

Upcycling paper is much easier than it sounds! Haashim, Six Senses Laamu's Earth Lab Assistant, is the mastermind behind the 'Paper Making Workshop', a brand-new Waste to Wealth activity at Earth Lab, available every day for guests and hosts.

On a regular basis, the Earth Lab team collects waste paper from the 'Heart of the House' to keep the Paper Making Workshop well stocked for any guests or hosts who wish to learn this simple but impactful process. "After launching this experience, I am looking forward to reducing our paper usage in Earth Lab and I foresee how it will benefit all of the departments in our operation" explains Haashim as he shares his waste to wealth goal for upcycling the paper. 🌱



Try it at home!

1. Tear up wastepaper into small pieces
2. Soak them in warm water for 5 hours
3. Use a blender to turn them into paper pulp
4. Pour the paper pulp into the large rectangular bowl
5. Mix the pulp well with water
6. Place a frame into the bowl and gather as much paper pulp into the screen as possible
7. Take the frame out of the bowl and let it sun dry for a few hours
8. Remove the paper out of the frame

If you wish, incorporate natural materials into your paper like flowers and leaves to add textures and colors.



3kg of paper was recycled in May

WASTE TO ART FROM DHANBIDHOO SCHOOL

In May, the Earth Lab team was delighted to showcase the 'Waste to Art' models donated by Laamu Dhanbidhoo School students. The models aim to inspire guests and hosts at Six Senses Laamu to upcycle and reuse the non-biodegradable waste materials thrown away daily, whilst also raising awareness of the amount of waste we produce as individuals.

Dhanbidhoo School donated 30 different art models made entirely out of waste materials such as water bottles, PVC pipes and Styrofoam boxes. The Earth Lab team is looking forward to receiving more new art models after the upcoming Laamafaru Festival 2022, forming an impressive exhibition of creativity, ingenuity and resourcefulness. 🌱



100 art pieces we're created by students for this project



70 students participated in this Waste to Art project



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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