

OLIVE RIDLEY PROJECT

Protecting Sea Turtles and Their Habitats



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ABOUT THE OLIVE RIDLEY PROJECT



The Olive Ridley Project (ORP) is on a mission to protect sea turtles and their habitats through:

- Rescue and Rehabilitation
- Scientific Research
- Education and Outreach

OUR RESEARCH

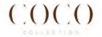
Our research areas include:

- Biogeography (population dynamics)
 - Reproductive biology
 - Population ecology
 - Threats to sea turtles
 - Sea turtle conservation
 - Sea turtle veterinary science



OUR PARTNERS

The Olive Ridley Project (ORP) is a charity established in 2013, registered in England & Wales and in the Maldives. We have partnered with resorts, organisations and local NGOs to host our rescue and rehabilitation centres and research teams, and to maximise the effectiveness of our reach in local communities. We would like to extend our gratitude for their backing, help, and support.



































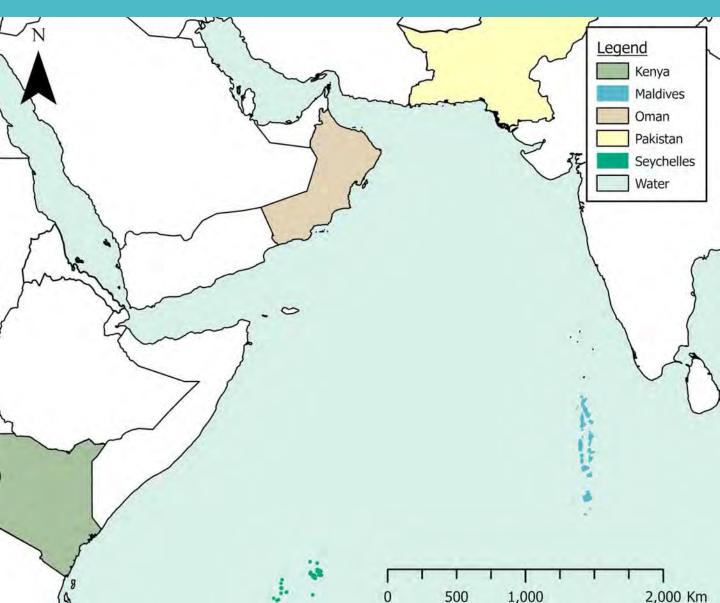








OUR BASES



Kenya

Established: 2018 Base: Diani Beach

Main Activities: Sea turtle population and habitat

connectivity research.

The Maldives

Established: 2013

Bases: Baa, Laamu, Lhaviyani, North Malé, Noonu & Raa

atolls

Main Activities: Sea turtle rescue and rehabilitation; sea turtle ecology research; ghost gear recovery, mitigation and research; educational outreach.

Facilities: Martine Turtle Rescue Centre, Baa Atoll and Sea Turtle Rehabilitation Centre, North Malé Atoll.

Oman

Established: 2015 Base: Musandam

Main Activities: Sea turtle population research; ghost gear recovery, research and mitigation; educational outreach.

Pakistan

Established: 2015

Base: Abdul Rehman Goth, Karachi

Main Activities: Ghost gear recovery, mitigation, and

repurposing; educational outreach.

Seychelles

Established: 2021 Base: Félicité Island

Main Activities: Sea turtle population, habitat connectivity

and threats research



EXECUTIVE SUMMARY

It was a very busy second quarter of 2022 for all ORP team members! During this time of the year, we always join the global conservation community in celebrating many internationally recognised environment days, such as World Sea Turtle Day, and organise exciting outreach activities on site and online. You can find all the details in our special extended Education & Outreach section of this report!

This quarter, 33 turtle nests were laid in the Maldives. As expected, most of the nests belonged to green sea turtles, but we also observed hawksbill nesting activity- great news for this critically endangered species! We share our findings with the international community and you can find our work in reports like the most recent SWOT special feature on hawksbills.

The rescue and rehabilitation team saw the handover from Dr Minnie to our new Resident Veterinarian Dr June. We would like to thank Dr Minnie for her exceptional work and dedication since joining us in September in 2020! In addition to Dr June, we have welcomed Lauren to the team as our first Resident Veterinary nurse, who brings valuable support to the Rescue Centre.

We admitted a total of 8 new patients in Q2, with an unusual green turtle entanglement case. Currently, nine patients are still in our care and keep everyone busy. The Rescue Centre saw many volunteers, interns and

visiting experts as well.

Additionally, we started our satellite tracking project #ORPTrack which follows the movements of rehabilitated olive ridley patients, and released our first tagged patients Autumn and Pickle in April and May. We would like to thank all generous donors, especially Legend Bracelet, Marine Life Protectors and Thorsten Albrecht for the initial sponsorship to kickstart the project.

We continue to receive reports of ghost gear from across the country. With 14 reported incidents, less nets were found than last quarter, which is in agreement with our records from the past.

Our team in Kenya continued their consistent monitoring efforts to collect as much data as possible before the start of the low season with bad weather and low visibility. During Q2 the team took up several networking opportunities with various organisations along the coast and discussed joint future campaigns, including strategic photo-ID data collection and coordinated outreach projects.

Project Manager Dr Joana Hancock represented ORP Kenya at the UN Oceans Conference in Lisbon.

We continued our photo-ID and outreach efforts in the Seychelles, successfully networking through different opportunities, conducting underwater surveys whenever the weather permits it during the wet season, and initiating the Seychelles Turtle Adoption Campaign.

EXECUTIVE SUMMARY

After working through our first and very interesting nesting season with our partners at Six Senses Zil Payson Seychelles, we have compiled a nesting report summarizing what we learned and have developed recommendations for the upcoming season.

Along with that, the second quarter of 2022 was another successful one for our Sea Turtle photo-ID research project. We recorded a total of 119 new individuals in the Maldives (20 green turtles and 89 hawksbills) and 875 identified turtle encounters were logged and uploaded to the Internet of Turtles. This was in part possible due to our amazing citizen scientists throughout the country, who share their turtle encounters with us. We would like to thank them for the continued support!

We are constantly working on improving our database and re-validate historical and new photo-ID alike.

In Kenya, 511 new sightings were recorded, with 41 new turtles (38 greens and 3 hawksbills) being added to the database from Diani.

Our Sea Turtle Biologist in Oman recorded 153 turtle encounters, including 12 new individuals, all of which were green turtles. We are observing less sea turtles in on our house reef, which might be a result of higher water temperatures during this time of the year, as has been reported from other parts of the Arabian Gulf.

In the Seychelles we have recorded 158 turtle sightings - 70 hawksbill and 6 green turtles. We have added another 33 hawksbill encounters to our database and are very thankful to our collaborateurs for sending us photos from different parts of the country!

The ORP team in Pakistan recovered 26 kg of ghost gear from beaches and the sea in the first quarter, and has been working on extending and improving our ghost leash program.

Our various turtle adoption programs continue to be popular and generate a substantial amount of donations for us. Our longer term patients, such as Heidi, have built up quite the fan club!

In the second quarter of the year, 161 new students enrolled in our online courses and we have a total of 149 "graduates" to date. We are currently working on refreshing e-Turtle School, which will be relaunched in the next couple of months.

In the upcoming months we are looking forward to continuing our community engagement initiatives as well as starting and advancing several interesting studies regarding poaching, genetics and spatial ecology.

- Dr Stephanie Köhnk, Senior Scientist



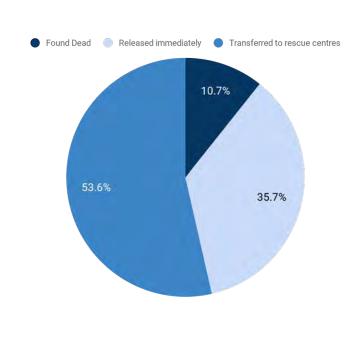


MALDIVES

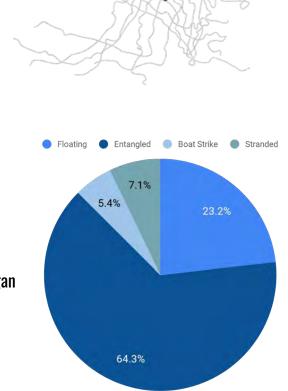




STRANDED TURTLES REPORTED - MALDIVES

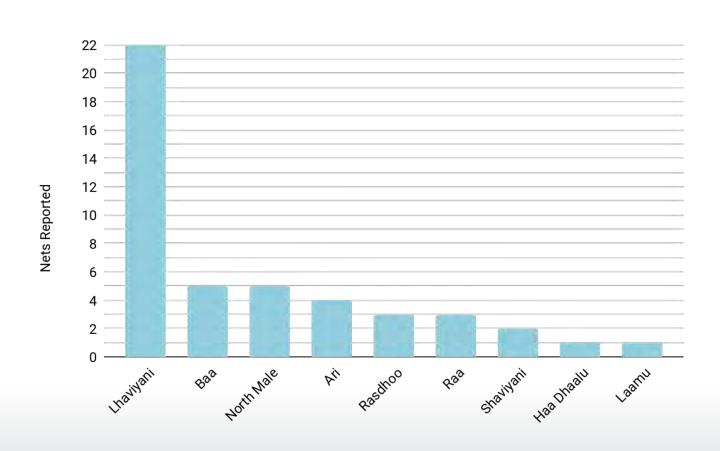


Species	This Quarter	This Year	Since Project Bega
Olive Ridley	6	49	960
Green	1	3	35
Hawksbill	2	4	99
Other	0	0	4
Total	9	56	1098





GHOST NET REPORTS



GHOST NETS REMOVED - MALDIVES

	This Quarter	This Year	Since Project Began
Ghost Net Conglomerates Removed	14	45	587



TURTLE RESCUE & REHABILITATION

We welcomed Dr June Ang in April, who takes over Dr Minnie's duty as our new Resident Veterinarian. A handover period was supported by Lead Veterinarian Dr Claire. Dr June joined as the 6th Resident Veterinarian at the Rescue Centre in the Maldives. We're very grateful to Dr Minnie, our longest serving Resident Veterinarian, who will be missed at the centre, but luckily she will remain with the ORP team by focusing on education and outreach from the UK.

The Rescue Centre has also welcomed our first Veterinary Nurse, Lauren Valentine, whose presence now completes our clinical team.

We had a total of eight new patients admitted this quarter - with turtles still arriving in May and June, which is usually less common. Five olive ridleys with entanglement related injuries, two hawksbills found floating and a green found entangled in a ghost net.

The release of our very first satellite-tagged patient, Autumn, followed quickly by our second,

Pickle, marked is the beginning of our ORP Track research project, which will help us understand the migration journeys of our released olive ridley sea turtle patients. Our current patients are undergoing extensive wound care and regular diagnostic follow-ups at the centre. We are also in the midst of a busy nesting season at Coco Palm Dhuni Kolhu with a total of 10 nests on the island so far.

We had new tank pumps installed at the Rescue Centre this quarter, thanks to the generous support from Blue Banana Label! This helped tremendously with the maintenance of water quality, which is crucial for optimal wound care and welfare of many of our patients suffering from external injuries due to ghost net entanglement.

Moving into the second half of the year, we hope to continue providing the very best care for our patients, which has been made possible over the years with your tremendous support.



TURTLE PATIENTS

	This Quarter	This Year	Since Project Began
New Patients Admitted	8	26	196
Patients Treated	8	33	190
Turtles Released	3	7	99
Turtles Deceased	4	12	69
Patients Still in Care (ORP only)	10		

TURTLE ADOPTIONS

	This Quarter	This Year	Since Project Began
Patient Adoptions	55	138	1,205
Maldives Adoptions	42	105	567
Kenya Adoptions	16	16	118
Seychelles Adoptions	5	6	6
Famous Turtle Adoptions	9	15	115



CURRENT TURTLE PATIENTS REASON FOR ADMITTANCE

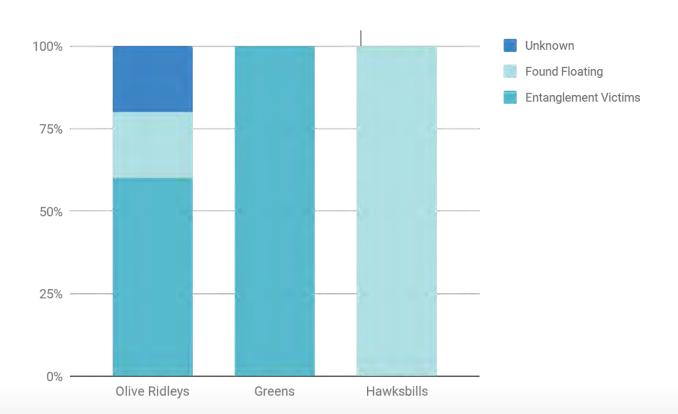


Figure 1. Reason for admittance by species



Olive ridley turtles make up 62% of all patients
Patients requiring flipper amputation (this quarter): 2
Average length of stay (all patients): 47 days

CURRENT TURTLE PATIENTS



New Patients at MTRCs: Gus, Finihaka, Pepe, Jazeera, Uno, Basil New Patients at One&Only Rehabilitation Centre: Kalo Released: Sumo, Minnie, Autumn, Pickle, Xena Deceased: Juanita, Discovery, Tibby, Laetilisa

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INTERNSHIPS, VOLUNTEERS, AND VISITING VETS & EXPERTS

Since 2017 we have hosted 15 interns at the Rescue Centre, many of whom, we are very pleased to report, have continued working in the marine conservation field. Some are now working for the government, others for other NGOs or at resorts as marine biologists and educators. We are also working on getting the internship accredited so that our interns will leave with both a wealth of experience and a formal qualification to assist them in their future careers.

Our current intern, Adam Naahi, will be completing his internship at the Rescue Centre at the end of July. Naahi has contributed in many ways to the veterinary rescue team and has recently been featured on local Maldivian news for his contribution to sea turtle conservation and medical treatments at the Rescue Centre. We are proud of our team for all their work towards sea turtle conservation and look forward to nurturing many budding marine biologists and veterinary colleagues both locally and internationally in this field.



Our volunteer programme remains very popular and is running at full capacity. In the last three months we have hosted twenty volunteers from various parts of the world including Canada, Czech Republic, France, Germany, Australia, and the UK.

Since the start of April we have also had a number of visiting experts to the centre including Project Biodiversity, Dr Max Polyak and two visiting vets, Dr Sonya from the UK and Dr Javi from Spain, sharing their knowledge and experience with our team.

ORP Track - A Satellite Tagging Programme



(Left) In April, we initiated our satellite tracking program #ORPTrack, which will allow us to follow the movements of rehabilitated and released olive ridley turtles. In addition to location, the logger also records dive depth and dive time. Future analysis will allow us to identify swimming patterns and foraging areas for the species in the region.

Sea Turtle Biologist Joe and Lead Vet Dr Claire visited the Rescue Centre and helped fit Autumn with a satellite tag. She was followed in May by our second tagged patient, Pickle.

While Autumn swam in a northeastern direction towards the Bay of Bengal, Pickle (right) took a different route, swimming south-east out into the open ocean. She has since turned back and is heading to the Maldives. We are looking forward to see if she enters the country again!

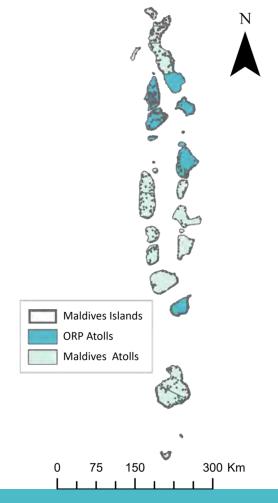
Arribada Initiative, a UK based not-for-profit conservation technology research and development organisation, visited the Rescue Centre to pilot a new "Horizon" satellite tag.



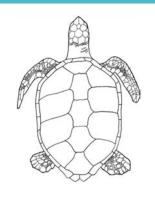


By working on site with the patients and veterinary team, Alasdair Davies and Cat Bell (left) were able collect data that may otherwise have taken years to obtain working in the wild.

This new partnership between ORP and Arribada Initiative can dramatically increase the speed in which new tag technology can develop. We are hopeful that this will enable tags to become more affordable allowing for researchers to collect data worldwide. These satellite tags come in various sizes, are lightweight and can be equipped with different sensors for different research questions.

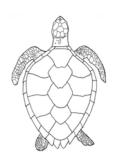


TURTLE SIGHTINGS & NEW INDIVIDUALS MALDIVES



GREENS

Total Sightings: 10,397 Total Individuals: 1,248



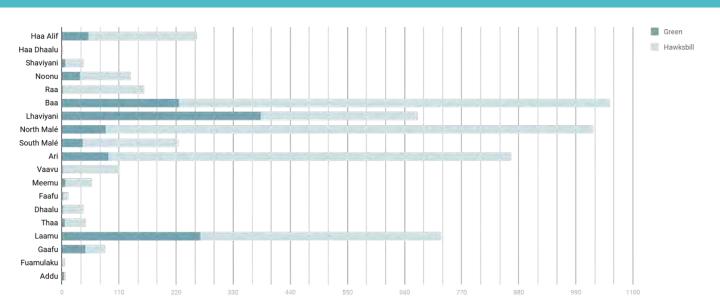
HAWKSBILLS

Total Sightings: 21,180 Total Individuals: 4,304

	This Quarter	This Year	Since Project Began
Total Number of Turtle Sightings	875	2,076	31,577
Total Number of New Individuals	119	285	5,552



TURTLES IN MALDIVES



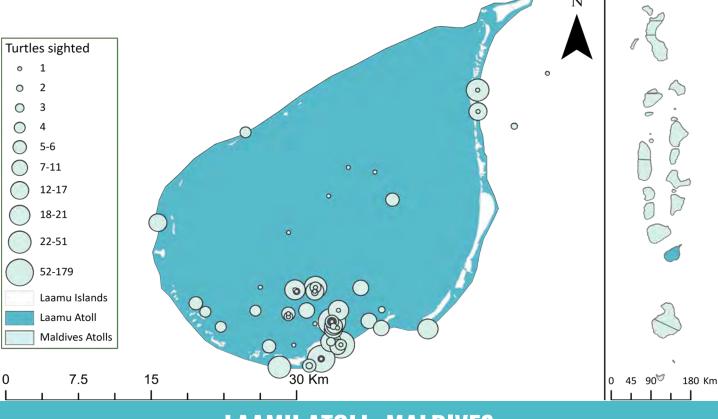
In the past three months we recorded 875 identified turtle encounters in the Maldives thanks to the efforts of the ORP in field team, but also our highly motivated group of collaborateurs and citizen scientists. We would like to thank you all for your continued support!

The largest population of turtles has been identified in Baa Atoll with a total of 1056 individuals, 831 of which are hawksbill turtles. A close second remains North Malé Atoll with 1024 individuals, out of which 939 are hawksbill turtles - that is the largest number of recorded hawksbills in the country to date. The majority of these are juveniles, or individuals of unknown size and sex. Ari Atoll still is the home to the third largest group of identified hawksbills - 776 - with a total of 865 individuals, including 89 greens.

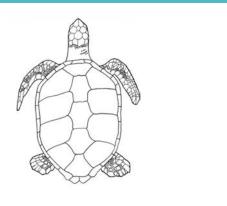
The resident green turtle population is smaller than the hawksbill population. The largest number of green turtles can still be found in Lhaviyani Atoll with 383 identified individuals, out of which 215 are juveniles. Including hawksbills, 686 turtles have been identified in the atoll. Second and third largest green turtle populations have been registered in Laamu (266) and Baa (225) atolls, with a resident hawksbill population of 465 and 776 individuals respectively. Thus Lhaviyani Atoll remains the only well documented atoll with a larger green than hawksbill turtle population.

The large number of resorts in the central atolls, as well as a relatively consistent effort by our team members in certain atolls has resulted in better data coverage there. The northern and southern atolls still have few turtles photographed and we greatly appreciate all submissions from citizen scientists to extend our knowledge of these areas.

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LAAMU ATOLL, MALDIVES



GREENS

Total Sightings: 3,104 Total Individuals: 266 **HAWKSBILLS**

Total Sightings: 2,476 Total Individuals: 453

	This Quarter	This Year	Since Project Began
Total Number of Turtle Sightings	207	475	5580
Total Number of New Individuals	30	39	731



LAAMU ATOLL

Olhuveli beach on Six Senses Laamu has been quite busy with nesting green sea turtles this year - we have recorded a total of twelve nests so far! This number is expected to rise as we are also still recording false crawls. We are now gearing up for nestwatch as we approach the hatching season, starting mid-July till end of September. The new nestwatch volunteers have been recruited and are being trained by ORP's on-site Sea Turtle Biologist.

We continue our bi-weekly beach surveys in Gaadhoo, and, unfortunately, a lot of the nests are still poached in the most prominent nesting hotspot in the country, that is also a protected beach. We are continuing our efforts to establish a beach protection program on the island.

In celebration of World Turtle Day, we joined a public webinar hosted by the Environment Protection Agency. We had the chance to share our experiences along with many other local organisations who are active in conservation, and discussed the future and importance of turtle turtle conservation in the Maldives.

For World Sea Turtle Day festivities we organsied turtle themed activities for the guests and staff at our partner resort Six Senses Laamu. We held an information session during breakfast followed by a sea turtle safari dive and a snorkel. Fun educational games were organised for the kids. The day ended with a guest presentation on sea turtles.

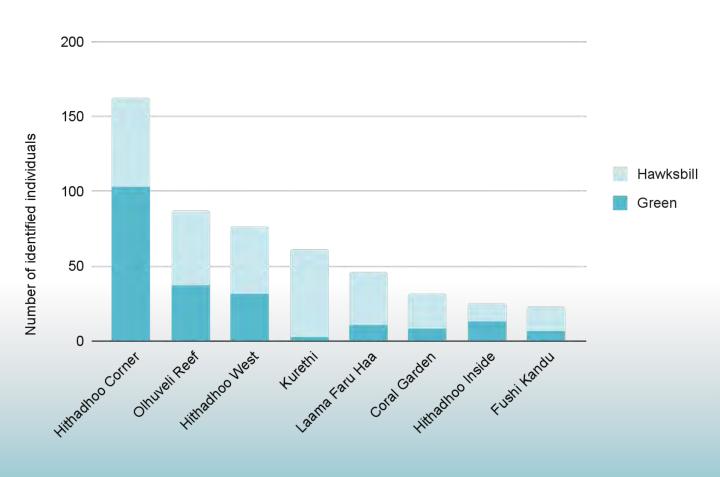
Our Laamu Sea Turtle Biologist also participated in the 2nd annual World Sea Turtle Day webinar titled "Sea Turtle Science in the Maldives". Our Sea Turtle Biologist's presentation focused on general Sea Turtle Biology. The webinar reached a significant audience online and we are thankful for their active participation.

Thanks to the efforts of the Maldives Underwater Initiative, guests, and dive center staff, 344 turtle encounters were submitted for identification. We now have a whopping 727 individual turtles identified in Laamu!

- Aminath Angeela, ORP Sea Turtle Biologist, Laamu Atoll



TURTLE SIGHTINGS & NEW INDIVIDUALS: LAAMU ATOLL



LAAMU



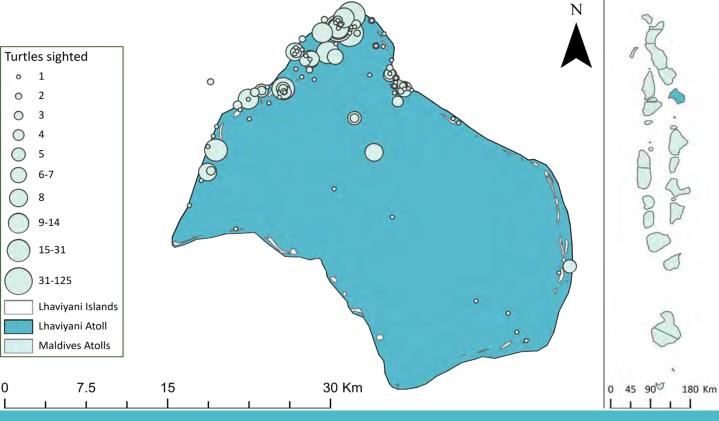
(Left) We welcomed two new team members in Laamu this quarter! Angeela is our new Sea Turtle Biologist at Six Senses Laamu, supported by intern Afrah. Angeela and Afrah both wanted to get into conservation, and chose very different paths. While Angeela completed her Bachelor's degree in Environmental Science, followed by internships working in the field with resorts, Afrah started diving in 2018 and fell in love with the underwater world and wanted to learn about protecting it. Now both are working towards the conservation of sea turtles in Laamu!

(Right) We assisted Maamendhoo School in conducting a snorkeling camp for primary and middle school children. A total of 42 school children joined the camp who, much to their delight, were introduced to the underwater world for the first time. The camp was very successful and we hope it inspired the school children to snorkel again!

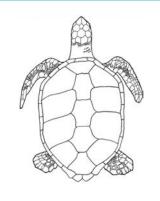


ADDITIONAL INFORMATION

	This Quarter	This Year
Hours Spent Surveying	43.16	75.27
Sites Surveyed	17	21
Nests Laid	7	11
Nests Hatched	0	7
Live Hatchlings Counted	0	422
Ghost Nets Removed	2	2



LHAVIYANI ATOLL, MALDIVES



GREENS

Total Sightings: 5,474 Total Individuals: 383 **HAWKSBILLS**

Total Sightings: 1,060 Total Individuals: 298

	This Quarter	This Year	Since Project Began
Total Number of Turtle Sightings	386	937	6,537
Total Number of New Individuals	15	51	681



LHAVIYANI ATOLL

We saw no nesting activity on Kuredu Island Resort, our base in Lhaviyani Atoll, in the last three months - just like in the previous three months. This year, therefore, has seen the lowest nesting activity on the island since our records began in 2017. During the same period last year we recorded three nests laid and two attempts made.

Green sea turtles nesting in the Maldives may have an inter-nesting period of three years. Looking back at the data from 2019, no nests were laid between April - June then either.

Despite no nesting activity, regular beach surveys were conducted throughout the quarter, and will continue into the year. Atoll Marine Center is continuing beach surveys on the Kanuhura islands while the resort remains closed for renovations.

With April came the start of the south west monsoon season, during which ghost net and entangled turtle encounters typically drop very low. As such, no sea turtles were found entangled in ghost gear in Lhaviyani Atoll, however a staff member from our partner Prodivers did retrieve one ghostnet conglomeration onshore an uninhabited island in May.

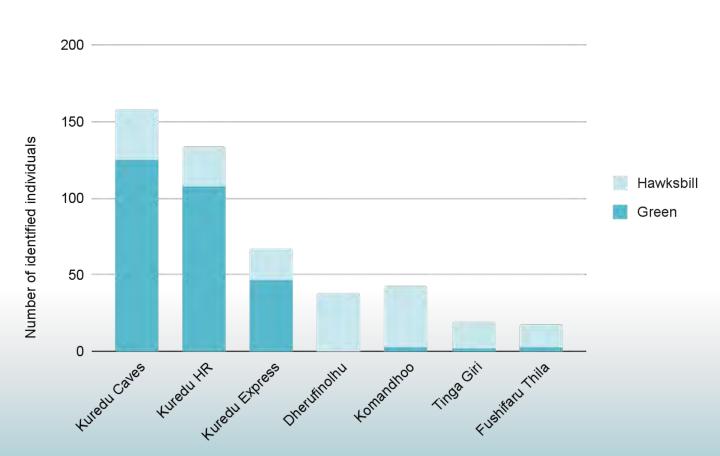
Moving into June, we celebrated World Sea Turtle Week and World Sea Turtle Day in collaboration with our partner Prodivers. Many educational and outreach activities took place, and we received a lot of positive feedback about our work on Kuredu and across all our bases.

In the last three months we surveyed 23 dive and snorkel sites across the atoll, and recorded 386 wild turtle encounters, which include ID photos sent from our partner Prodivers' staff, guests and marine biologists from other resort islands. Of these sightings, 15 new individuals were added to our growing database. The majority of sightings continue to be of green sea turtles, and most are found on the reefs and lagoons surrounding Kuredu island itself. Between April and June, ten wild turtles were named and adopted from Lhaviyani Atoll and we would like to thank all those who generously supported our work.

- Emily Mundy, ORP Sea Turtle Biologist, Lhaviyani Atoll



TURTLE SIGHTINGS & NEW INDIVIDUALS: LHAVIYANI ATOLL



LHAVIYANI

(Right) We celebrated World Sea Turtle Week from the 8th of June, culminating with World Sea Turtle Day on the 16th of June. With the support of our partner Prodivers, we offered sea turtle snorkeling and diving trips, and our Sea Turtle Biologist Emily gave a presentation about our work on Kuredu and in conserving sea turtles at the main bar to a large crowd of guests. Throughout the week guests were able to take a bracelet, made of ghost gear collected in Lhaviyani Atoll and crafted by our Sea Turtle Biologist and Prodivers' team members, in exchange for a small cash donation. One enthusiastic guest also helped to make bracelets during her stay!





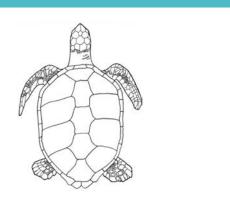
(Left) Our Sea Turtle Biologist Emily and a group of divers from Prodivers Kuredu had a fantastic encounter during the dive trip on World Sea Turtle Day, June 16th. For 40 minutes they were able to watch two large green sea turtles mating, while a second male swam around them biting and attempting to push off the mating male. In order to not disturb the mating process, our Sea Turtle Biologist kept the dive group at a minimum distance of 8 to 10 m from the turtles. Unfortunately, the videos and photos of the turtles are not clear enough to allow for photo identification of the individuals, but we do hope that successful mating may lead to nesting activity in Lhaviyani soon!

ADDITIONAL INFORMATION

	This Quarter	This Year
Hours Spent Surveying	54.25	98.75
Sites Surveyed	23	30
Nests Laid	0	0
Nests Hatched	0	0
Hatchlings Counted	0	0
Ghost Nets Removed	1	24



NOONU ATOLL, MALDIVES



GREENS

Total Sightings: 36 Total Individuals: 35 HAWKSBILLS

Total Sightings: 131 Total Individuals: 98

	This Quarter	This Year	Since Project Began
Total Number of Turtle Sightings	6	11	167
Total Number of New Individuals	3	4	133



NOONU ATOLL

It has been a busy quarter in Noonu Atoll. Nesting activity kicked off in June with nine and six nests respectively on Soneva Jani and neighbouring island, Budufushi. Though there has been nesting activity all year round, this has been our busiest month so far - as such we are expecting next quarter to be filled with hatching events! Thanks to our partnership with Reolink, we are able to monitor nests for hatching with our infrared security camera, which is especially useful since many nests are not easily accessible on Soneva lani.

With so much nesting activity, we were able to deploy the first temperature logger in Noonu Atoll next to one of our green sea turtle nests. This data logger will record the temperature and humidity of the nest every 12 hours, which will give us insight into incubation temperatures in Noonu Atoll and allow us to monitor any changes in the future.

In June, we conducted training with the marine team, teaching them how to recognise different types of nesting activity and how to collect important scientific data on beach patrols. The training came in handy when our Sea Turtle

Biologist was off the island and a nesting female was found stuck in the trees! The marine team did a great job of digging around her so that she could make her way to the sea. The same day a large ghost net was also found in the lagoon.

As part of our ghost gear project in partnership with the International Pole and Line Foundation (funded by <u>SatLink</u>), we have retrieved a total of seven ghost nets this year in Noonu Atoll alone - three of which were found in the last three months. We plan to visit the nearby island of Lhohi to carry out a workshop on sea turtle rescue with local fishers in the next couple of months.

The rehabilitation centre construction is coming along well and should be completed by the end of July/early August. Our Sea Turtle Biologist Rosie has been busy making sure everything we need is on site so that we can welcome our first sea turtle patient in Noonu Atoll very soon!

-Rosie Brown, ORP Sea Turtle Biologist, Noonu Atoll

NOONU



There were smiles all around on World Sea Turtle Day! Thanks to the involvement of so many teams on Soneva Jani, there was a full day of turtle-themed activities, despite the bad weather. Turtle pancakes were served at breakfast; kids learnt how to make ghost net bracelets; hatchling-shaped chocolates were offered during turn down service; sea turtle cocktails were available at all outlets in the evening and our Sea Turtle Biologist Rosie finished the day with a sea turtle presentation and quiz for both guests and hosts!

One nest hatched on Soneva Jani this quarter but sadly the excavation revealed that very few eggs developed successfully . Just 17 hatchlings made it to the surface, out of a nest of 110 eggs. The remaining 93 included 91 undeveloped eggs and two hatchlings that were predated on by crabs. Many of the undeveloped eggs were discoloured and diseased and likely faced inundation early on in development since, in most cases, there was no visible embryo. With strong storm surges and high tides, this is the sad reality of many turtle nests in the Maldives at the moment.

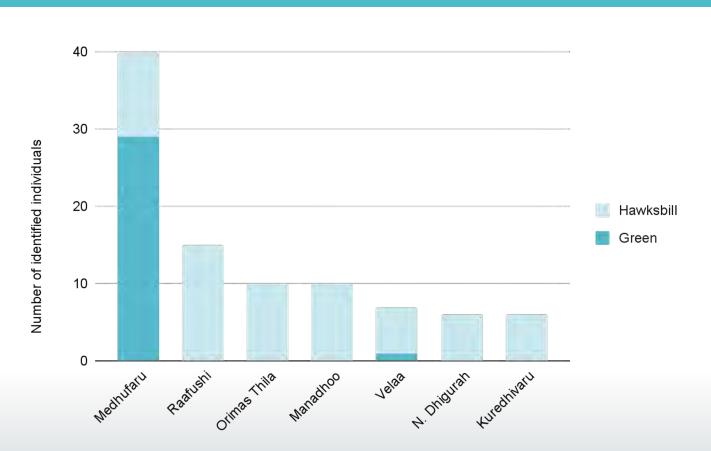


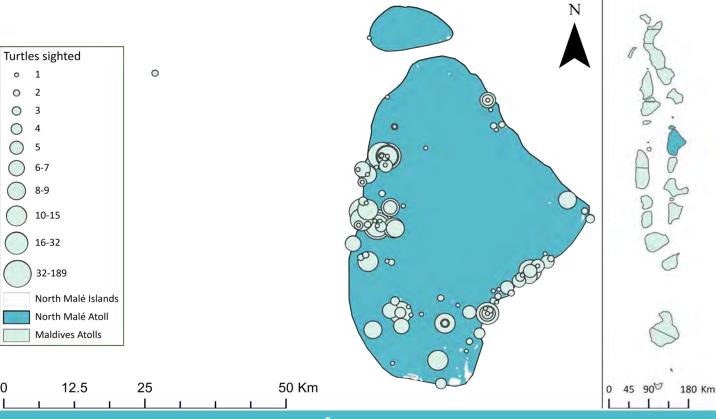
ADDITIONAL INFORMATION

	This Quarter	This Year
Hours Spent Surveying	10	10
Sites Surveyed	4	6
Nests Laid	21	23
Nests Hatched	1	1
Hatchlings Counted	18	22
Ghost Nets Removed	3	7

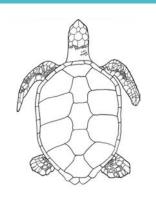


TURTLE SIGHTINGS & NEW INDIVIDUALS: NOONU ATOLL





NORTH MALÉ ATOLL, MALDIVES



GREENS

Total Sightings: 91 Total Individuals: 85 **HAWKSBILLS**

Total Sightings: 10,137 Total Individuals: 939

	This Quarter	This Year	Since Project Began
Total Number of Turtle Sightings	37	122	10,228
Total Number of New Individuals	10	28	1,024



NORTH MALÉ ATOLL

We added a total of 37 sightings to our database and spent 120 hours in the water conducting surveys across North Malé this quarter. Most of the sightings recorded were hawksbill sea turtles with 3 new individuals being identified. We have also identified another amputee turtle at Makunudhoo reef! There are now two amputees living on the same reef, both missing their front left flipper. Both seem healthy and are always eating when we see them, which is a great sign!

The Rehabilitation Centre has been quiet this quarter with Tibby being the main patient up until the middle of May when she began to refuse food and was losing weight rapidly. She was quickly transferred to the Rescue Centre to receive veterinary care from Dr June but she continued to refuse food and get worse. Eventually a feeding tube was the only option to get her nutrients, but unfortunately she was too weak and did not recover from the anesthesia. Due to her condition, missing two flippers and severe liver damage discovered during the feeding tube procedure, the

difficult decision was made by the veterinary team to not resuscitate her. We want to thank TMA, One&Only and Coco Palm Dhuni Kolhu for their continued support in transferring our patients like Tibby, quickly and efficiently around the country.

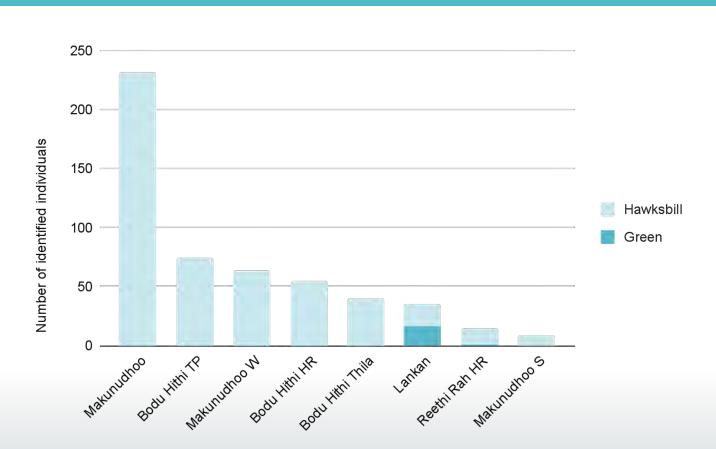
As Tibby was returned to the Rescue Centre, Kalo was sent out to the Rehabilitation Centre to make full use of the big tank for his diving practice. He has made amazing progress, increasing his weight to 33.5 kg, and slowly improving his ability to dive, sometimes getting his entire shell under the water. He still has a long way to go but we are very hopeful for his release in the not too distant future.

Our Sea Turtle Biologist, Joe, shall soon be leaving the Maldives to further his studies into Veterinary Medicine so keep an eye out for his replacement who we shall introduce you to very shortly!

> -Joe Rigby, ORP Sea Turtle Biologist, North Malé Atoll



TURTLE SIGHTINGS & NEW INDIVIDUALS: NORTH MALÉ ATOLL



NORTH MALÉ



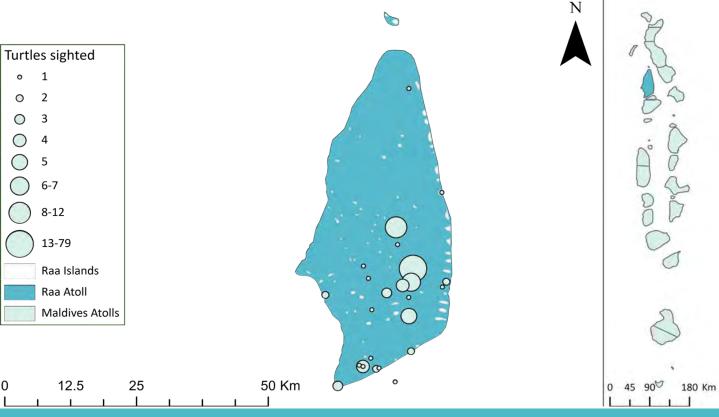
(Left) We welcomed Dr Claire as she returned to the Rehabilitation Centre in May to check on all our patients including Tibby and the booby we were rehabilitating. During her stay, plans were finalised for a second tank to be built at One&Only Reethi Rah in the coming months along with refurbishment of the current tank. We are also beginning to take a closer look into enrichment for our turtle patients and how it can aide their recovery. This research will take place at all our rescue and rehab centres with the help of our lead scientist Dr Stephanie who, we are excited to say, is visiting the Rehabilitation Centre in September.

(Right) In April, our Sea Turtle Biologist Joe visited the the Rescue Centre to help attach the first satellite tag deployed by ORP. He also trained Dr Claire and Dr June on the procedure, so that more turtles can be tagged in the field by our onsite veterinary team. Two patients, Autumn and Pickle both had tags on, with Pickle's tag still transmitting just off the coast of the Maldives. Unfortunately Autumn's tag stopped sending data as she was swimming through the Bay of Bengal. You can see their journeys on our website.

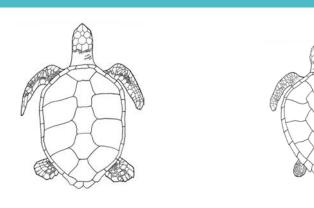


ADDITIONAL INFORMATION

	This Quarter	This Year
Hours Spent Surveying	120	324
Sites Surveyed	12	22
Nests Laid	0	0
Nests Hatched	0	0
Hatchlings Counted	0	0
Ghost Nets Removed	2	5



RAA ATOLL, MALDIVES



GREENS

Total Sightings: 1 Total Individuals: 1 **HAWKSBILLS**

Total Sightings: 464 Total Individuals: 158

	This Quarter	This Year	Since Project Began
Total Number of Turtle Sightings	22	87	465
Total Number of New Individuals	6	25	159



RAA ATOLL

We are pleased to announce that construction of ORP's third rehabilitation centre at JOALI BEING began in late May and is well underway - despite the poor weather that came with the change in monsoon. Each year during the high season (November to March), the Marine Turtle Rescue Centre reaches full capacity, so the additional tanks will be essential in continuing our rehabilitation efforts, by providing more room for patients.

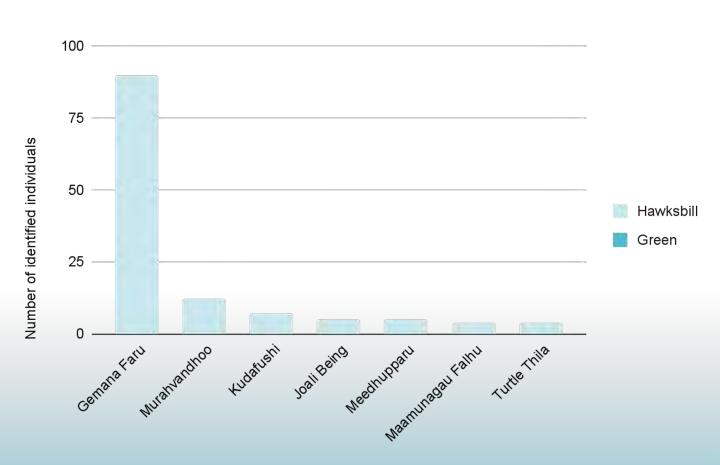
A total of 26 sightings were added to the Raa Atoll database this quarter from four surveyed sites. The nearby turtle reef, Gemana Faru, continues to be regularly monitored and shows high numbers of re-sighted individuals, with six newly identified individuals this quarter. We had two new contributors from neighbouring resorts add their sightings to our database, all of which were hawksbill turtles. Although there are green sea turtles present in Raa Atoll, very few have been documented so far.

Despite there being no nesting activity on JOALI BEING so far this year, a lone green sea turtle hatchling was found on the island in May. The hatchling was found disoriented in the middle of the island, but fortunately unharmed and full of energy, so it was released. At the time Sea Turtle Biologist, Liv, was off the island but upon her return, a thorough search of all the beaches was carried out incase a nest had been missed. No signs of nesting were found on our island, but a neighbouring resort did report some hatching activity on the same day. It is entirely possible that the hatchling had come from there.

-Olivia Forster, ORP Sea Turtle Biologist, Raa Atoll



TURTLE SIGHTINGS & NEW INDIVIDUALS: RAA ATOLL



RAA



(Left) During the month of May, two ghost nets were recovered from JOALI BEING's house reef with the help of the Best Dives Maldives team. One in particular was fairly large and had caused some serious damage to the reef due to the attached wooden pallet and large metal frame. Thankfully, no sea turtles were entangled. We would like to thank the Best Dives team for all their help without whom we would not have been able to remove the net.

(Right) Regular training sessions for resort hosts were carried out over the past few months as part of JOALI BEING's Learning and Development series. Our Sea Turtle Biologist Liv conducted a total of five sessions on sea turtle conservation in the Maldives and the work of the Olive Ridley Project. In total, more than 50 hosts from different departments joined the sessions. Additionally, specific sea turtle rescue and first aid training was given to the boat captains, dive and watersports instructors.



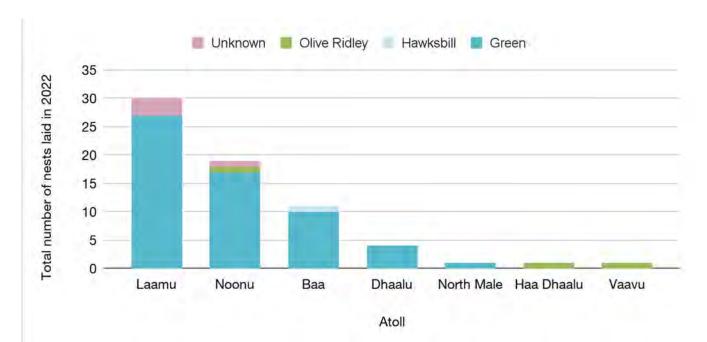
ADDITIONAL INFORMATION

	This Quarter	This Year
Hours Spent Surveying	7	31
Sites Surveyed	4	11
Nests Laid	0	0
Nests Hatched	0	0
Hatchlings Counted	0	0
Ghost Nets Removed	2	4



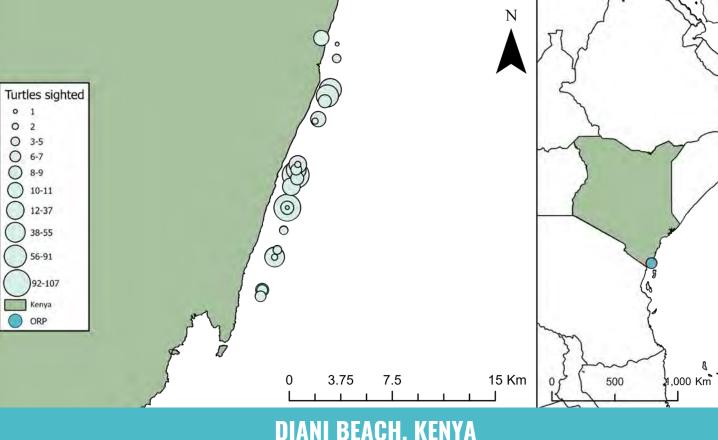
RECORDED SEA TURTLE NESTING ACTIVITY

*		This Quarter	This Year
~ L	True Nests Laid	37	67
市東	False Crawls	49	91
*	Nests Hatched	2	5
	Live Hatchlings Counted	228	297
	Average Hatching Success	87.6%	87.6%
	Average Incubation Time	55	53

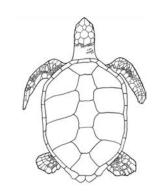


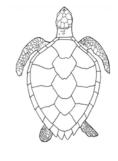






DIANI BEACH, KENYA





GREENS

Total Sightings: 2,906 Total Individuals: 647

HAWKSBILLS

Total Sightings: 464 Total Individuals: 81

	This Quarter	This Year	Since Project Began
Total Number of Turtle Sightings	511	854	3,370
Total Number of New Individuals	41	97	728



DIANI BEACH

The team conducted a total of 57 diving surveys in Diani-Chale area between April and June, which resulted in the recording of 381 green and 130 hawksbill turtle sightings, with 76 new turtles added to the database (70 greens and 6 hawksbills). Snorkel surveys of the lagoon were also conducted, with survey locations matching the sea turtle "hotspots" on the adjacent reef, although no turtles were sighted.

In April, the team travelled to the north of Kenya to meet other NGOs working in marine conservation in the country. The trip allowed us to exchange ideas and to present our work to potential partners, while identifying possible future partnerships in terms of implementing sea turtle photo-ID programs along Kenya's coastal sea turtle foraging areas. The NGOs we met include Bahari Hai and A Rocha (Watamu) and Oceans Alive (Vipingo). Our Project Manager also undertook a follow-up trip to Watamu in May to assist the NGO Bahari Hai with some technical training on sea turtle nesting and in-water monitoring.

On June 18th, ORP hosted a multi-stakeholder meeting in Diani, where sea turtle conservation was discussed at a national level. The need to

re-implement a sea turtle conservation network and harmonize data collection along the Kenyan coast, was tabled at the meeting.

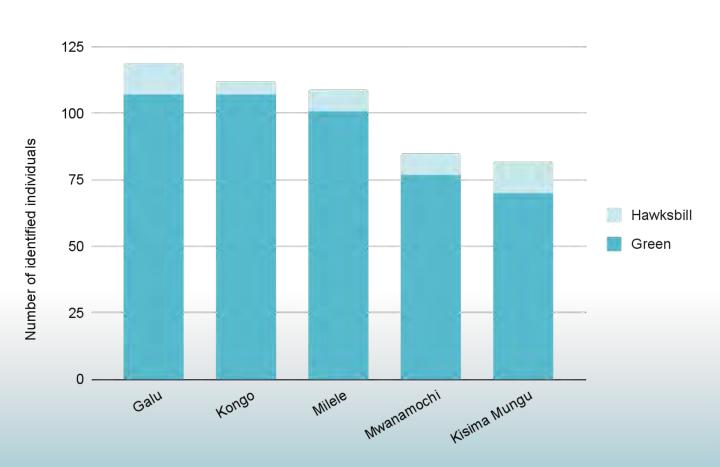
The third edition of the popular Diani Sea Turtle Festival, organized by our partners Conservation Education Society (CES), took place on June 19th. ORP was one of the participant NGOs, running an exhibitors' table where visitors could find out more about our work, and students could complete their activities during the popular scavenger hunt. The day after the festival we participated in a meeting organized by CES, where priorities for environmental education and best approaches were discussed in light of different project's aims, experiences and capacities.

Finally, our Project Manager participated in the UN Oceans Conference held in Lisbon from June 27th-July 1st, representing ORP in a series of side events and a variety of networking opportunities.

- Dr Joana Hancock, ORP Project Manager Kenya



TURTLE SIGHTINGS & NEW INDIVIDUALS: KENYA



KENYA



(Left) The Diani Sea Turtle Festival was a huge success! The team showcased the work of Olive Ridley Project in Kenya and helped run the scavenger hunt during which teams had to try their hand at matching sea turtle faces. Over 300 students participated different schools from and organizations showcased work. their included Festival activities art competition, sand sculpture competition, scavenger hunt, student performances, arts and crafts, and egg and spoon races!

(Right) Snorkeling surveys on the Diani seagrass lagoon didn't result in any sea turtles sightings, but a handful of suspected grazing areas were found. Eight species of seagrass and seventeen species of macroalgae have been successfully identified and catalogued, with different areas of the lagoon exhibiting different distributions and abundances. The team will use these findings to plan more substantial surveys for the next calm season.

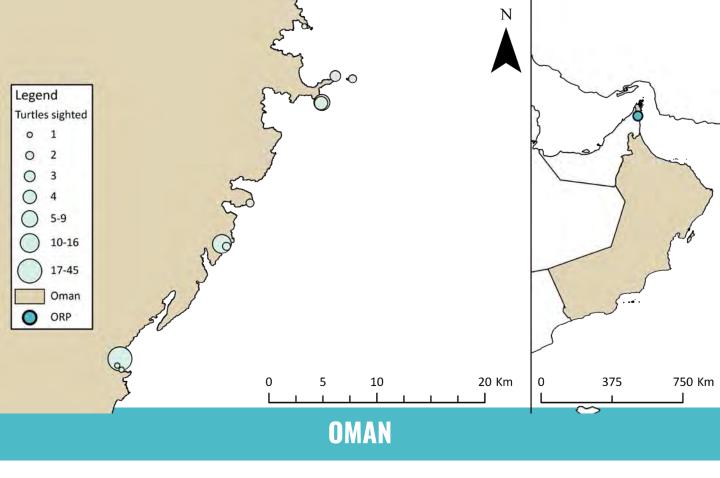


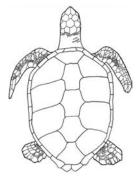
ADDITIONAL INFORMATION

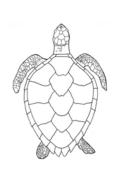
	This Quarter	This Year
Hours Spent Surveying	55.6	124.8
Sites Surveyed	15	18
Adopted Turtles	8	17











GREENS

Total Sightings: 141 Total Individuals: 70 HAWKSBILLS

Total Sightings: 12 Total Individuals: 7

	This Quarter	This Year	Since Project Began
Total Number of Turtle Sightings	36	87	153
Total Number of New Individuals	12	44	76



MUSANDAM

This quarter saw the end of a busy period for the resort, which means that there have been far fewer diving surveys done. Our main focus was on the house reef, which still has a good population of both resident and transient turtles. Yet again we saw GMOO4 who has been resident here since 2019. Of the 36 turtle sightings this quarter, all have been juvenile green turtles and the number of new turtles was only three for April to lune.

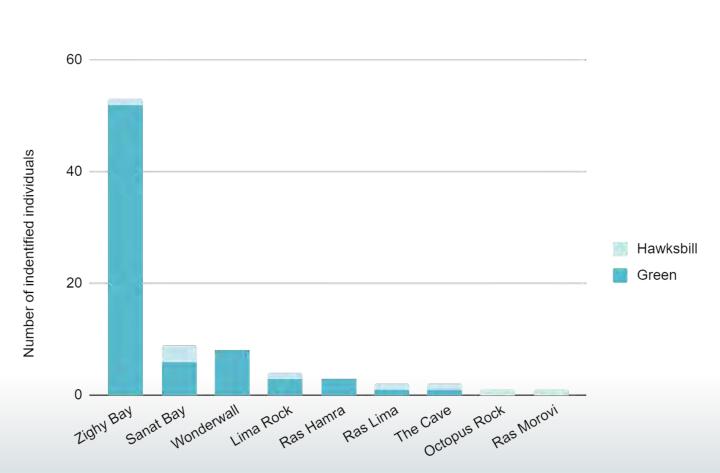
Following the success of last quarter's ghost net clean-up, we had local fishermen reach out to us with areas that they knew needed some attention. Over the course of two days we managed to remove 23 ghost nets of varying size in a combined effort between Six Senses Zighy Bay, the Environment Authority, Ministry of Fisheries and local fishermen. During the net removal we found the remains of four different turtles, ranging from a juvenile that had recently died, to an adult green turtle that had it's bones picked clean.

Discussions about implementing a turtle rescue centre in Oman have been reignited, involving 5 Oceans, an environmental services company based in Muscat. We are currently trying to identify the most viable location for a rescue centre, with the idea that once that is in place, we can establish a rehab centre at Zighy Bay.

-Tom Osborne, ORP Sea Turtle Biologist, Oman



TURTLE SIGHTINGS & NEW INDIVIDUALS OMAN



OMAN



(Left) During the quarterly ghost gear clean up, we found the remains of four different turtles, including this skull from an adult green turtle. This really helped highlight to both the locals and the representatives from the Environment Authority the importance of removing these nets. We hope it will lead to more engagement in the future.

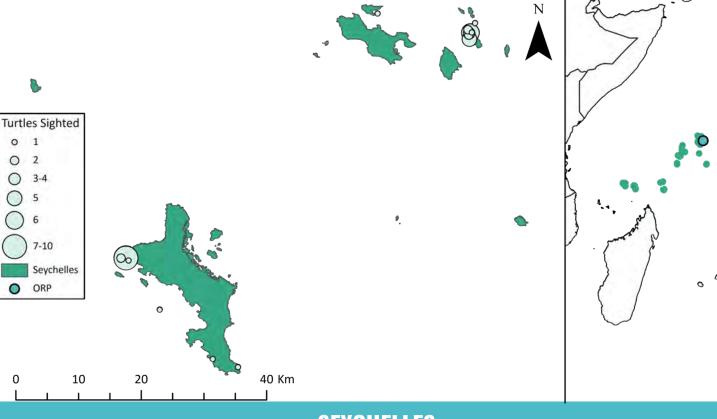
(Right) Over the Easter holidays we had a lot of school age children visiting, which gave our Sea Turtle Biologist Tom a perfect opportunity to host fun and educational lessons about sea turtles and why we want to protect them. The children asked lots of questions about turtles diet and what different species like to eat. The children were especially thrilled to find out that turtles can grow far larger than what they usually see in pictures.



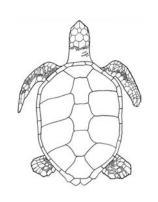
ADDITIONAL INFORMATION

	This Quarter	This Year	Since Project Began
Hours Spent Surveying	95	185	1684
Sites Surveyed	6	9	9
Ghost Nets Removed	23	37	65





SEYCHELLES



GREENS

Total Sightings: 7
Total Individuals: 6

HAWKSBILLS

Total Sightings: 151 Total Individuals: 70

	This Quarter	This Year	Since Project Began
Total Number of Turtle Sightings	90	158	158
Total Number of New Individuals	33	76	76



FÉLICITÉ ISLAND

This quarter was blessed with some calm and crystal clear waters during April and May, allowing us to spend many hours in the ocean with the guests of Six Senses Zil Pasyon. We enjoyed constant resightings of hawksbill turtles around Felicité Island with HS1 and HS23 being the most sighted individuals. Both turtles exhibit a strong site fidelity at Anse Peniche and Anse Ia Cour respectively.

June marked the beginning of the southeast monsoon, bringing stronger currents and reduced visibility. Turtle sightings hence dropped to a total of nine. Turtles that were previously observed at sites towards the south of the island were now recorded in the north of the Island and our most famous Turtle, HS1, also known as Fibi, was not seen. This indicates that hawksbill turtles around Felicité Island migrate with the shift in monsoons. Continuous research over the next years will shed more insights into this observation. Overall we sighted 33 individual hawksbill turtles during this quarter and were also fortunate enough to add our first green turtles to the database, which were sighted on Mahé Island.

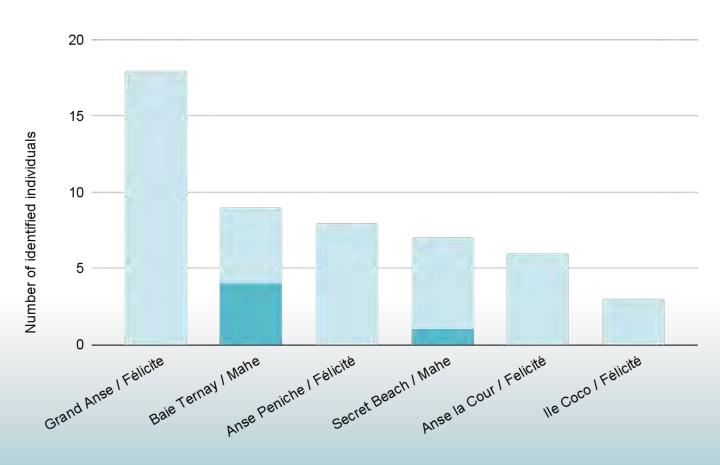
The nesting season for hawksbill turtles came to an end in March. We reflected on the last season, identified challenges and developed a list of best practices for the upcoming season starting in October. We are hoping to increase monitoring effort through innovative research techniques such as using drones.

Sea turtle conservation and photo-ID training is being continued with hosts of Six Senses Zil Pasyon. In water training was also conducted with the marine park rangers from the Seychelles Parks and Gardens Authority.

We were invited to a biodiversity workshop held by the Ministry of Environment on the 7th of June. All major NGOs working in Seychelles were present, discussing challenges faced in conservation and possible mitigation measures such as monitoring turtle poaching with the use of drones. We also took the opportunity to reach out to local school children, educating them about sea turtles and our work, and we are looking forward to forge relations with the next generation!

-Lara Kalisch, Sea Turtle Biologist, Seychelles

TURTLE SIGHTINGS & NEW INDIVIDUALS: SEYCHELLES



SEYCHELLES



We are excited to announce that we have launched our sea turtle adoption program for the Seychelles. The first Turtle to be adopted was Seychilly (HS23) at the end of march. The name Seychilly perfectly represents the relaxed behaviour of this turtle. Seychilly is usually observed feeding on the reef or relaxing at the ocean's surface taking a few breaths.

The month of June was highlighted by several important global environmental awareness days such as World Environment Day, World Ocean Day and World Sea Turtle Day! We organised several activities for these days including a clean-up hike and photo-ID lessons. We also created a sea turtle appreciation board where all of the resort hosts are able to share why they value and love sea turtles!



ADDITIONAL INFORMATION

		This Quarter	This Year
Hours Spent Surveying		34	64
Sites Surveyed	-53-	7	7



Pakistan





PAKISTAN

ORP Pakistan has been working on expanding our circular economy and outreach projects to other villages off the coast of Karachi. One of our primary aims is to involve local stakeholders in conservation action. It can take time to identify the right candidates but we are now excited to announce our newest team member - Muhammad Hanif.

Hanif, a fisher, free diver and the owner of several boats, will be representing us in Kakapir. Having spent his entire life in the village, Hanif has strong ties with the community.

Hanif will assist in collecting nesting data and photo-ID for sea turtle population surveys as well as educate the fishers of Kakapir on plastic and ghost gear pollution.

In addition, he will work on building up our circular economy project in the village. This project repurposes ghost gear into pet leashes, bracelets and other products, with all proceeds going directly to the villages participating.

Our ghost gear pet leashes are quite popular, and we are currently working on a new strategy for increasing sales in Pakistan. ORP Community Leader Waqar, a sustainable fashion designer, has initiated contact with several stores and popup markets to create avenues for local sales.

Waqar is also working redesigning the leashes and its packaging to give the product a fresh new look that might appeal more to in-person shoppers.

-Usman Iqbal, Project Manager, Pakistan

PAKISTAN

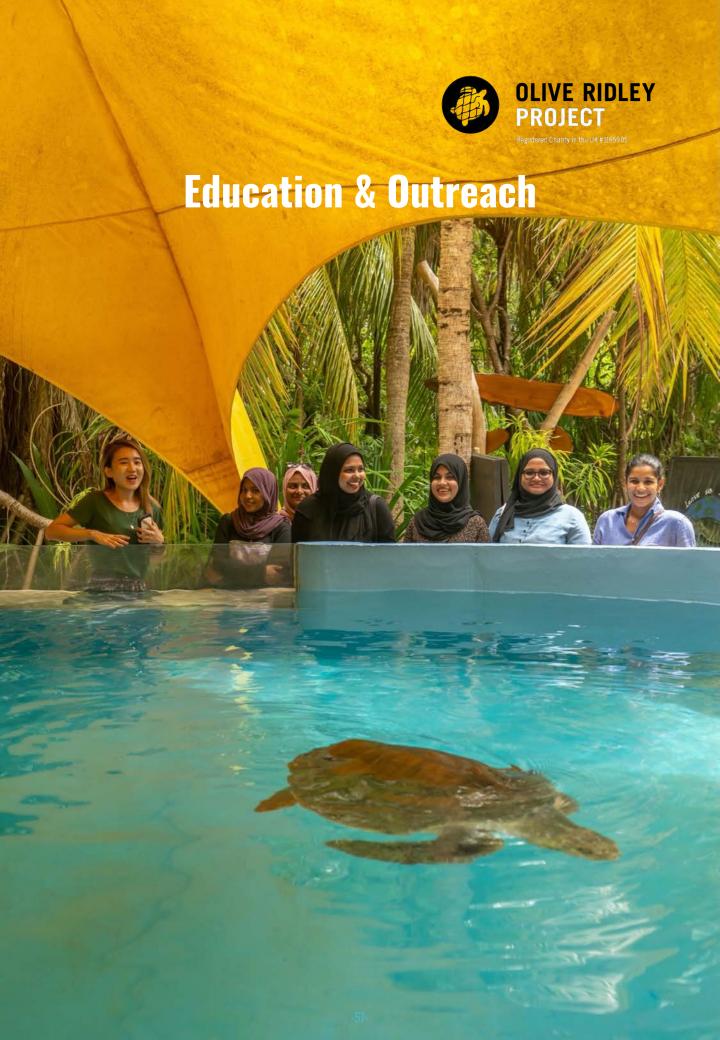
(Right) We set up a stall at The "Commons Karachi", a local pop up market that was held just before the Eid holidays. The event was visited by 20,000 people over two days and was was a resounding success for the organizers and for ORP as well: we sold out our entire stock of ghost gear pet leashes! Many people also visited our stand to learn more about ORP's work and mission.





Left: In June, we received yet another report of a ghost net on Hawke's Bay Beach. The net was washed up on the beach and half buried under the sand with a large amount of other trash attached to it. ORP Field Coordinator Asif removed the net with help from his brother and the net has been cleaned and will be used to make dog leashes.

	This Quarter	This Year	Since Project Began
Ghost Nets Recovered (kg)	26 kg	88 kg	5226 kg
Overall Growth Ghost Net Recovery	29%	1.6%	0.5%
Ghost Leashes Made/Sold	35/20	132/89	580/499
Ghost Net Jewellery Made/Sold	0/0	100/73	565/438



EDUCATION & COMMUNITY OUTREACH



(Left) In May, Maldives Underwater Initiative hosted the 1st quarterly meeting with Laamu stakeholders. This is the first in-person meeting since the pandemic began, and it observed participation from 35 different stakeholders - including council members, women's development committee members, school officials, police and army. ORP provided project updates and presented future opportunities for collaboration. The event ended with a visit to one of Laamu's marine protected areas.

(Right) Dr Claire Petros and the team in Laamu hosted a visiting turtle expert from Cape Verde - Albert Taxonera, founder and director of Project Biodiversity. During his time at Six Senses Laamu, Albert conducted three different educational sessions on the use of drones for research and conservation. He also worked with our infield team to develop community-conservation initiatives via the use of drones. Albert and Dr Claire also hosted educational presentations, reaching 56 guests at the resort.





(Left) Jasmine Stone and Henri Arnulphy, the marine biologist and general manager at Constance Moofushi South Ari Atoll, Maldives visited the Rescue Centre on May 24, 2022 and presented us with a cheque in person - a group donation from the staff members of the resort in support of Jazeera and our rescue work. Jazeera was rescued by Jasmine on April 24, 2022, when he was found entangled in a ghost net by his left front flipper, bleeding from struggling in the net. It is heartwarming to meet a rescuer, like Jasmine, who would take time off to visit an injured turtle that they have rescued. We are very grateful for Jasmine and her colleagues' support and would like to express our sincere thanks for their efforts to raise funds to cover the expenses and medical supplies needed for our patients.

EDUCATION & COMMUNITY OUTREACH







(Right) Our Expedition & Community Leader in the Maldives, Moosa Mohamed, gave a talk about sea turtles to students of grade 5 in the capital city of Malé, Maldives, as part of a joint exhibition by the MoECT, EPA, Oevaali Art Shop and ORP to celebrate World Sea Turtle Day. The exhibition included submissions for a sea turtle photography competition, which was held in association with Malé Art Gallery. On behalf of ORP, Moosa and our Volunteer Coordinator Rish attended the exhibition's opening ceremony.

WORLD SEA TURTLE DAY

(Left) On the occasion of World Sea Turtle Day, we hosted a delegation of the Maldivian government at the Marine Turtle Rescue Centre. H. E Sabra Ibrahim Noordeen, Maldives Special Envoy for Climate Change visited the centre, along with staff from the Ministry of Environment, Climate Change and Technology; and the Environment Protection Agency.

Dr June gave the delegation a tour of the Rescue Centre and the veterinary clinic, where they got to see the diagnostic and surgical options available at the Rescue Centre, as well as a demonstration on how anti-biotic and fluid treatment is administered to the turtle patients. We also taught them about the threats that sea turtles face in the wild, as well as the process of recovery for ghost-gear victims.

Our Maldives Project Manager, Isha Afeef, along with Dr June, also presented ORP's work to the delegation, with the aim to discuss future opportunities for collaboration.

The delegation also happened to see first-hand a sea turtle nest that was inundated by seasonal swells, illuminating the threats sea turtles face from from climate change. Additionally, they observed a nesting turtle on the beach on the night of their visit and got to learn about in-field data collection from our team.



VIRTUAL AWARENESS AND OUTREACH

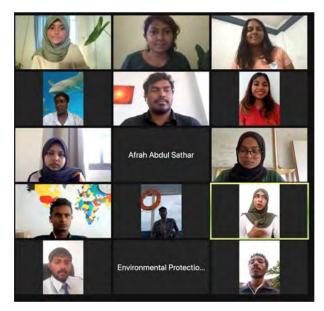
(Right) In May, the Environment Protection Agency of the Maldives marked World Turtle Day by hosting a webinar 'Maldivian Youth in Sea Turtle Conservation'. The event aimed to educate students around the country about the careers in sea turtle conservation, and act as a career guidance for those interested.

Our project team, Sea Turtle Biologist Isha, and current and former interns attended on behalf of ORP. The event highlighted the importance of collaboration, looking out for different opportunities, using different skills in the field, and also addressed the challenges for sea turtle conservation in the country. Former interns of Naifaru Juvenile and Marine Savers, who work for turtle rehabilitation in Maldives, also attended.



(Right) We hosted our 2nd annual World Sea Turtle Day webinar in the Maldives with co-hosts Ministry of Environment, Climate Change and Technology; and the Environment Protection Agency of the Maldives. The webinar, 'Sea Turtle Science in the Maldives', highlighted key milestones in turtle conservation since last year, and presented ongoing projects by organizations working for sea turtle research and rehabilitation.

This year's webinar featured key speakers from Marine Savers (MS) at Four Seasons resorts, and Atoll Marine Centre (AMC) in Naifaru in Lhaviyani Atoll. ORP presented population and nesting research key stats, and an overview of the satellite tagging project. MS presented statistics from their rescued turtles and AMC presented the findings and future goals for their sea cages for turtle rehabilitation. EPA presented guidelines and legal framework, and MoECCT presented the findings from the national Marine Turtle Red List Assessment. Opening remarks were given by H. E Sabra Ibrahim Noordeen, Maldives Special Envoy for Climate Change, while closing remarks were given by ORP's Founder and CEO Dr Martin Stelfox.



(Left) ORP was featured in the World Wildlife Fund's web-series 'Too Wild Maldives' in their episode on seagrass. In this episode, our former Sea Turtle Biologist in Laamu, Isha Afeef, describes the crucial role of sea turtles in maintaining healthy seagrass ecosystems which in turn benefit the coastal communities as well as coral reef ecosystems.







VIRTUAL AWARENESS AND OUTREACH

In June, we joined the global community in celebrating World Sea Turtle Day. On the day, we used art as a medium to launch a three- part illustration series titled 'Why are sea turtles important to YOU'. This series exemplified the myriad ways in which sea turtles contribute to the welfare and enrichment of human societies - including protection of fish stocks, securing islands and coastlines, as well as their cultural significance in different countries. The posts reached 14K people on social media, and received high engagement throughout the month.





(Left) Leading up to World Sea Turtle Day, we marked World Sea Turtle Week by highlighting the current and imminent threats to sea turtle populations worldwide. By taking lessons and examples from all our bases, we demonstrated how sea turtles are impacted by climate change, coastal development, ocean pollution, and even unsustainable and illegal harvesting.

Sea Turtle Week, held from 8th June - World Oceans Day - till 16th June, is an annual event where organisations and communities come together to celebrate sea turtles and raise awareness on the threats they face.

RECENT PUBLICATIONS

Kalisch L, Köhnk S and Stelfox M 2022. Nesting on Felicité - Technical Report 2022. Olive Ridley Project.

Köhnk S and Stelfox M 2022. <u>Still swimming with Turtles: Tourist-Turtle Interactions in the Maldives Pre- and Post-COVID-19</u>, IOSEA Marine Turtles Newsletter June 2022.

PARTNERS, COLLABORATORS & DONORS 2022











































































We would like to express our sincere gratitude to all our partners, supporters, fundraisers, donors, adoptive parents, and volunteers! We are only able to do this work thanks to your generosity and support.