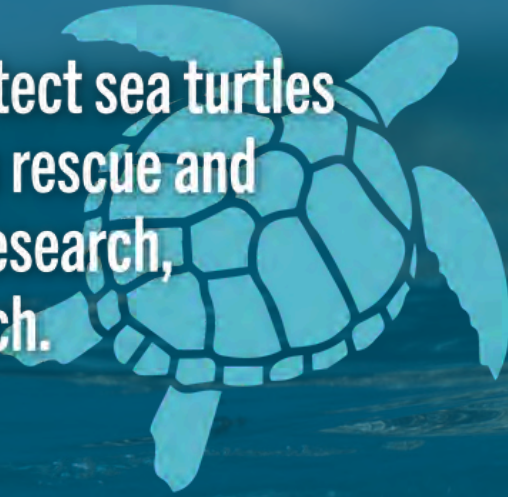




News From The Field
January - March 2024 Vol 1

Our Mission

ORP is on a mission to protect sea turtles and their habitats through rescue and rehabilitation, scientific research, and education and outreach.



Sea turtles have existed on Earth for over 120 million years and there are currently seven species left in the world. These incredible animals grace the waters of all the world's oceans except the Arctic.

Oceans play a critical role in sustaining human life by providing essential resources such as food, freshwater and oxygen. Therefore, preserving and protecting our oceans is crucial for the survival of our species.

As "keystone" species, sea turtles play a vital role in maintaining the health of the ocean, including protecting fish stocks, keeping coral reefs healthy, and preventing sea grass meadows from overgrowing and dying.

However, sea turtles face many threats to their survival.

Olive Ridley Project is a registered charity:
1165905 England & Wales
CR/04/2022 Maldives

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Our Work



Sea Turtle Rescue & Rehabilitation

We treat injured sea turtles rescued in the Maldives at our [Marine Turtle Rescue Centre](#), which has a fully equipped veterinary clinic and a resident veterinary team. We also operate a Sea Turtle Rehabilitation Centre. Both are located in the Maldives.

Scientific Research

We conduct research on sea turtle populations, distribution, health and threats to improve scientific knowledge and inform sea turtle conservation policy.



Environmental Education

Education is a powerful tool to increase awareness, engage people and stimulate action. We educate school children, communities, divers, fishermen, tourists, resort staff, biologists, and the general public, in person and [online](#). We also offer [volunteer](#) and internship programs

Collaboration & Community Outreach

To create long lasting change, we ensure that our conservation initiatives are practised from ground-up. We therefore collaborate with affected industries, communities, governments, local and International NGOs, in order to apply research to practice.

By the Numbers

Rescue, rehabilitation and scientific research



7,458

Sea turtles identified



>43.5K

Sea turtle sightings recorded in the Indian Ocean



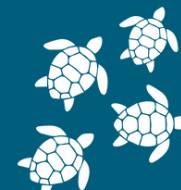
759

Sites w/sea turtles sighted



1,320

Nests recorded



42K

Hatchings counted



241

Turtle patients admitted



87

Turtle patients deceased



5

Rehabilitated olive ridley turtles satellite tagged

Environmental education, collaboration and community outreach



14.2K

Kgs of ghost gear removed



58K

Square metres of ghost net repurposed



300

Volunteers hosted at the Rescue Centre



30

Sea Turtle Guardian Programme Graduates



42.8K

Individuals educated



2.3M

YouTube views



29

Publications

Highlights from the field



Drone monitoring programme and surveys started in Kenya

[READ MORE ON PAGE 8](#)



Bycatch - sea turtles in peril in Oman

[READ MORE ON PAGE 14](#)



Long time no see - resighting of a nesting turtle on Félicité after five years

[READ MORE ON PAGE 16](#)

The ORP team started 2024 with new team members, old sea turtle friends, and uninvited ghost gear as well as entangled sea turtle findings.

Once again, the first three months of the year marked the peak of 'entanglement season' in the Maldives. Approximately half of all reported ghost nets during this period entangled sea turtles. While a large number could be released immediately, many of the entanglement victims required extensive veterinary care, resulting in the admission of 11 new patients to our Rescue Centre. This surge in entanglements pushed all rescue facilities in the country to their maximum capacity. Learn more about our new patients on page 11-12.

Although sea turtle nesting is currently at a low point in many places across the Maldives, our Sea Turtle Biologist Sarah in Noonu Atoll started seeing an aggregation of large previously undocumented male green turtles on the reefs around Medhufaru. Sea turtles mate in the waters close to their nesting beaches; therefore we suspect the large turtles seen by Sarah are arriving at the reef in anticipation of a great nesting season in the coming months.

We welcomed several new members to your our team in Laamu Atoll. Malsah Naeem will be assisting sea turtle ranger Ibrahim Inaan on L. Fonadhoo, and Ibaadh Hussain is expanding our community led conservation programme to the island of L. Maavah as our new sea turtle conservation officer. Together the team, which is jointly coordinated with the Environmental Protection Agency Maldives and the local island councils, will be focusing on community education, monitoring sea turtle nesting activity, and addressing the issue of illegal take.

ORP team members from the Maldives and Kenya attended the 42nd International Sea Turtle Symposium in Pattaya, Thailand, showcasing our research and rescue efforts, and connecting with the international sea turtle community. Joined by ORP Lead Veterinary Surgeon, Dr Max Polyak, Senior Project Scientist, Dr Stephanie Köhnk, and Spatial Ecologist, Rushan bin Abdul Rahman, this was the largest ORP team meet up to date, bringing together representatives from six different countries!

In Kenya, the team had a successful quarter taking advantage of great weather conditions to collect Photo-ID data. Additionally, we joint forces with our partners from Bahari Hai to conduct habitat studies in the environmentally rich area of

Watamu, aiming to identify habitat characteristics typical for sea turtle hotspots in southern Kenya. Lastly, the team was also excited to establish our drone monitoring programme in the Diani-Chale area, enriching our in-water monitoring work from another angle.

In the Seychelles, the hawksbill nesting season continued and kept our Sea Turtle Biologist Olivia Forster busy with hatching nests and ghost crabs living up to their reputation as the top hatchling predator on Félicité. Olivia also recorded a very welcome surprise guest on the beach - find out who it was one page 15!

The beginning of the year came with some challenging underwater conditions in Musandam Peninsula, Oman, due to microalgae blooms which severely impacted visibility. Despite that, Sea Turtle Biologist Davide recorded a very rare hawksbill turtle sighting! Another unexpected issue emerged in Sanat Bay, where Davide found a fishing net stuck on the rocks with unsuspecting sea turtles entangled in the net. Lucky for them, they could be released uninjured.

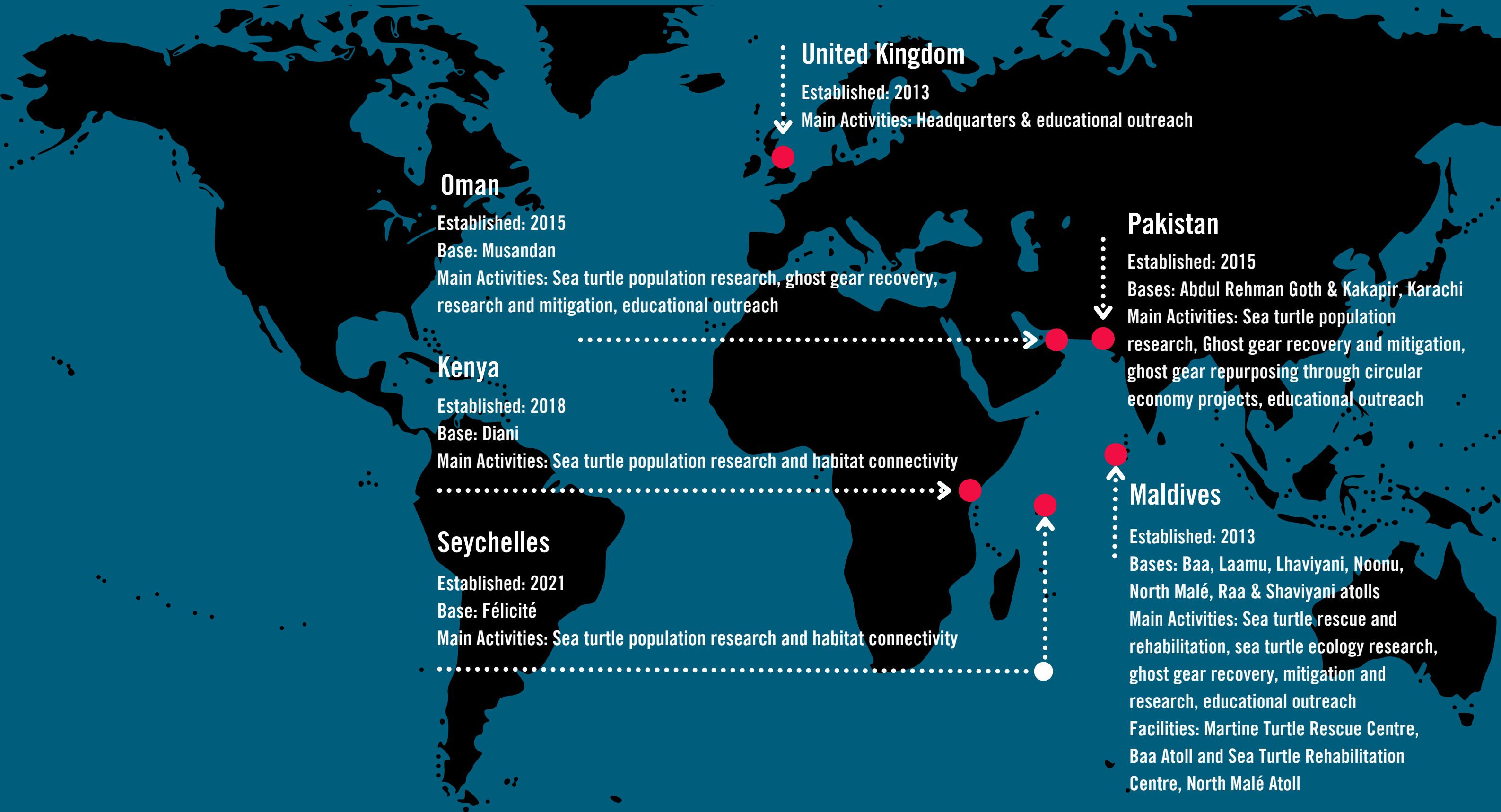
Over in Pakistan, the sea turtle nesting season was slowly winding down and we recorded fewer nesting tracks during our surveys over the past quarter. We did continue our outreach efforts, conducting two school education sessions and a university workshop. Read all about it on page 14.

Our education and outreach activities continued to reach a wide variety of people in the last months and included another highlight in the Maldives: ORP and the Environmental Protection Agency, with support from the British High Commission in the Maldives, officially launched the 'Handbook of Sea Turtles'. The book is a resource written in English and Dhivehi, which will be distributed to schools all across the country and provide a sound basis for sea turtle environmental education.

In Kenya, we were honoured to be invited by the Kenya Wildlife Service to create a sea turtle exhibit which is now displayed at their south coast headquarters in Shimoni. The exhibit combines information both in English and Kiswahili, which will be accessible and provide information for both tourists and residents about sea turtles and their habitats.

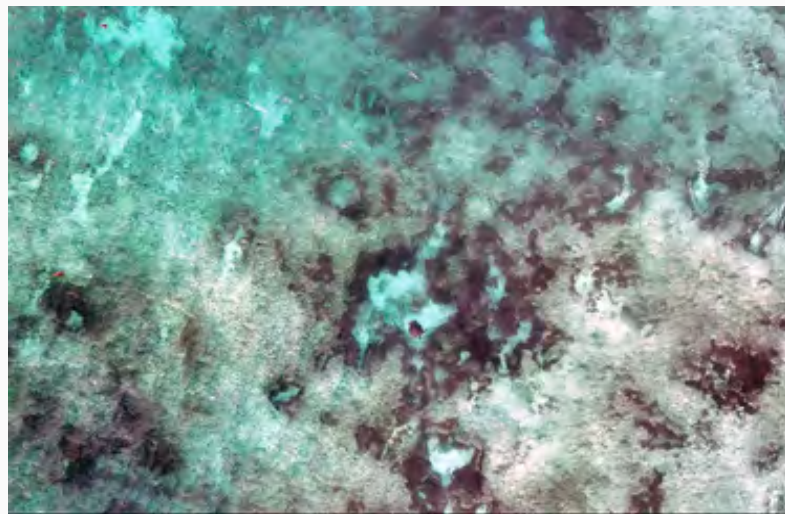
Read on for more details on all of these stories on the following pages!

Our Locations



ORP Kenya

In Kenya, the start of the year marks the beginning of the dry season, bringing in excellent diving conditions. Our team made good use of the weather and achieved some remarkable feats over the past three months, including documenting a whopping 300 sea turtle sightings.



One of many green sea turtle sightings during our drone surveys

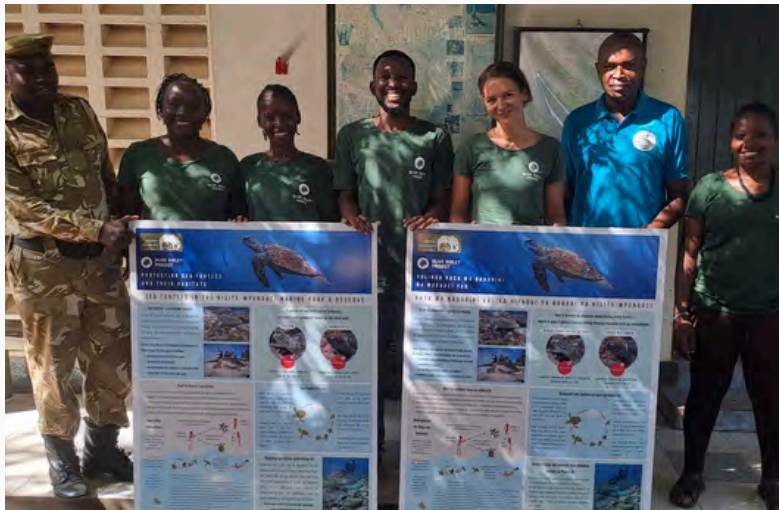
We successfully completed our first round of drone surveys, leading to exciting discoveries near Chale Island and identification of potential foraging areas within Diani's seagrass lagoon. We were also elated to encounter some long-lost individuals, Ruth (G003) from Galu and Umbra (G060) from Kisima Mungu, who had been absent from our monitoring efforts since 2020. Their significant growth is a compelling indicator of healthy marine ecosystems. Another particularly noteworthy event was an encounter with a loggerhead sea turtle during a dive near Chale Island, marking the first documentation of this species by our team in Kenya.

Furthermore, a case of complete regression of fibropapillomatosis (FP) in a green turtle from Mwanamochi reef offered a beacon of hope in our efforts to understand this debilitating disease.

In January, we welcomed Francisca Andati Matendechere as the first Sea Turtle Monitoring and Conservation Intern of 2024. Francisca is a Marine Biology and Fisheries graduate with prior experience in sea turtle conservation. She will be with us for six months.

In March, we embarked on a series of joint expeditions with Bahari Hai in Watamu, focusing our attention on Mida Creek. We consulted local fishermen to identify areas of high sea turtle activity, followed by underwater surveys to characterise these locations. These collaborative efforts yielded valuable insights into the habitat requirements and distribution patterns of sea turtles within this critical foraging ground. We also shared our expertise by training Bahari Hai members in deploying habitat surveys using belt transects and quadrats.

Above ground, our community education and outreach team made great progress through their tireless efforts. In the past three months, we organised productive stakeholder meetings, developed new initiatives with members of the four Beach Management Units (BMUs) from last year's BMU programme, and collaborated with the Conservation Education Society to host workshops for national and international students participating in Camps International programmes this year



The ORP Kenya Team presents KWS staff with a new sea turtle exhibit to be displayed in their headquarters

We were also honoured to be invited by the Kenya Wildlife Service to create a sea turtle exhibit at their South Coast headquarters in Shimon. This exhibit, available in both English and Kiswahili, educates tourists and residents about conservation initiatives and the importance of protecting sea turtles and their habitats.

Finally, our team attended the 42nd International Sea Turtle Symposium (ISTS) in Pattaya, Thailand, in late March. We participated in workshops on drone surveying and citizen science, and attended sessions on sea turtle in-water biology. We look forward to the next ISTS, which will be held in Ghana, marking the first time the symposium will take place on the African continent.



Identified Sea Turtles Kenya

Green Turtles

669

Since 2018

39

2024 Q1

41

Sites w/sea turtles sighted

Hawksbills

84

Since 2018

1

2024 Q1

753

Total sea turtles identified

ORP Maldives



The first three months of the new year continued a theme from the old: we once again recorded very high numbers of sea turtles in distress as well as ghost nets throughout the Maldives. 11 new patients were admitted to the Rescue Centre, including the rarely seen juvenile loggerhead turtle. In total, 38 entangled or distressed olive ridleys were reported in the Maldives – 12 of which were luckily released immediately. On a happier note, our veterinary team successfully released seven patients between January and March, including long-term patients Zeliya and Handhu. Read more on pages 11 and 12.

In North Malé Atoll, our long term patient Fida passed her first quarterly health check up with flying colours. We are happy to see her progress and continue to provide various enrichment devices in her tank to keep her active and further support the rehabilitation process.

Did you know?

Of the 19 ghost nets recorded in the Maldives in the first quarter of 2024, nine had sea turtles entangled in them!

In the first weeks of the year, #ORPTrack patient Shara swam another 420 kms towards the east coast of India until her satellite tag stopped transmitting. She is our longest tracked patient with almost 33 weeks of data collected, clocking in a total of 6,300 kms travelled! We are hopeful that, while we are no longer able to follow her movements, Shara is continuing her travels through the Bay of Bengal. We aim to deploy more tags to continue our #ORPTrack project in the coming months as our patients recover.

At the end of March, our Maldives Programme Manager, Isha Afeef, along with the veterinary team and Senior Project Scientist, Dr. Stephanie Köhnk, joined the annual migration of sea turtle experts to attend the 42nd International Sea Turtle Symposium in Pattaya, Thailand. During the symposium, our team conducted and attended workshops focusing on Photo-ID and sea turtle medicine, presented our research on sea turtle social networks and health, and established valuable connections with researchers and conservationists from the Indian Ocean and Southeast Asia.

We look forward to further collaboration within this regional network to facilitate the exchange of knowledge and resources in the future. Additionally, it was a rare and welcome opportunity for our Maldives team to meet ORP members from other locations, including Kenya and Singapore, fostering personal connections across various project sites.

Our Photo-ID programme continues to progress nicely thanks to many dedicated citizen scientists and supporters, as well as ORP team members. We have now identified a total of 6,512 sea turtles in the Maldives, including 1,607 greens and 4,905 hawksbills. Sea turtle biologist Philippa in North Malé is currently managing our largest atoll catalogue of hawksbills in the country; with 975 identified individuals, we are getting very close to the magic four digit number!



ORP team members with Enas Mohamed Riyaz from the EPA Maldives at the International Sea Turtle Symposium in Thailand.

Sea turtle nesting occurs year-round in the Maldives, although there are regional variations between atolls. While nesting persisted in Baa and Laamu, Sea Turtle Biologist Sarah noted a continued lull in nesting activity in Noonu Atoll. However, during snorkelling sessions near Medhufaru, Sarah and intern Athif observed a large number of male green turtles stalking the reefs. This led to numerous new identifications and observations of the seldom-seen adult males, sparking optimism within the team for an exciting upcoming nesting season over the next six months!

In addition to regular ghost net retrievals, sea turtle biologist Neus and the sustainability team at Sirru Fen Fushi in Shaviyani Atoll organised multiple beach cleanups. Teaming up with schoolchildren from Goidhoo, they cleared 75 kg of plastic debris from the island. This effort was further amplified when resort staff joined in, resulting in more than double the amount collected during a cleanup at the popular picnic spot, Fushifaru island.

In Laamu and Raa, we welcomed several new team members: Ibaadh Hussain, Sea Turtle Conservation Officer in L. Maavah, Malsah Naeem, Assistant Sea Turtle Ranger in L. Fonadhoo, and Hadin Musad, Sea Turtle Biologist Intern at JOALI BEING. We are looking forward to further expanding our community engagement and conservation efforts with their valuable contributions.

ORP Maldives Education & Outreach

This year started with a strong focus on education and outreach, marked by the launch of our book - the Handbook of Sea Turtles. This pioneering publication aims to provide accessible sea turtle knowledge. It was co-written with the Environmental Protection Agency (EPA) and was made possible with the support of the British High Commission in the Maldives. The book, written partly in Dhivehi and partly in English, with beautiful illustrations by Hawwa Umna Afeef and Rihaal Adil, was a huge success.



The ORP Maldives team with the chief guests at the Sea Turtle Handbook launch party

The book launch took place on February 19th at SME Hub, Malé. The ceremony featured two chief guests: Ms. Carol Rosler from the British High Commission and Mr. Mohamed Zahir, the Director General of the Ministry of Environment, along with other ministry members. The event drew 30 participants from schools and various government institutions. We would like to thank SME hub for hosting us and for the digital billboard of the cover of the book.

We aim to raise funds to print and distribute at least one copy to every school in the country. Thanks to support from Six Senses Laamu, we have already made a good start!

Continuing with Laamu: As part of the Laamu Sea Turtle Beach Guardian Programme, we collaborated with the Environmental Protection Agency of the Maldives (EPA) to conduct a successful one-week drone training programme. The workshop served as a vital platform for skill development and capacity building, attended by ORP's conservation officers and sea turtle ranger for Laamu as well as 23

participants from local councils and NGOs, including L. Maavah and Atoll Council, the Maldives Heritage Society, the L. Gan Youth Society, and members of the L. Fonadhoo Community.

The extensive training sessions encompassed drone operation for aerial imagery and data collection, monitoring environmental changes such as coastline erosion and sea turtle nesting behaviour, and utilising GIS and remote sensing software for data analysis.

Moreover, by empowering participants to recognise and monitor biologically significant sites, offering insights for habitat mapping and conservation planning, and assisting councils and NGOs in crafting effective resource management plans, the programme significantly bolstered data collection and monitoring capabilities for conservation.



The ORP Maldives team visiting Finland School to talk sea turtles




In addition, we teamed up with Moodhu Bulhaa Dive to visit Finland School, where we conducted a workshop on Photo-ID and sea turtle biology for eight new SQUA diving students, shining a light on the importance of citizen science. Our first ever Sea Turtle Guardian Programme training in a resort at Crossroads Maldives in January led to the successful rescue and release of an entangled olive ridley turtle near Hard Rock Hotel in March. And finally, we hosted a virtual tour of the Marine Turtle Rescue Centre for 41 students ranging from grades 7 to 11 from the local Dhangethi School and San Carlo School in Milan, Italy, as part of an exchange programme.

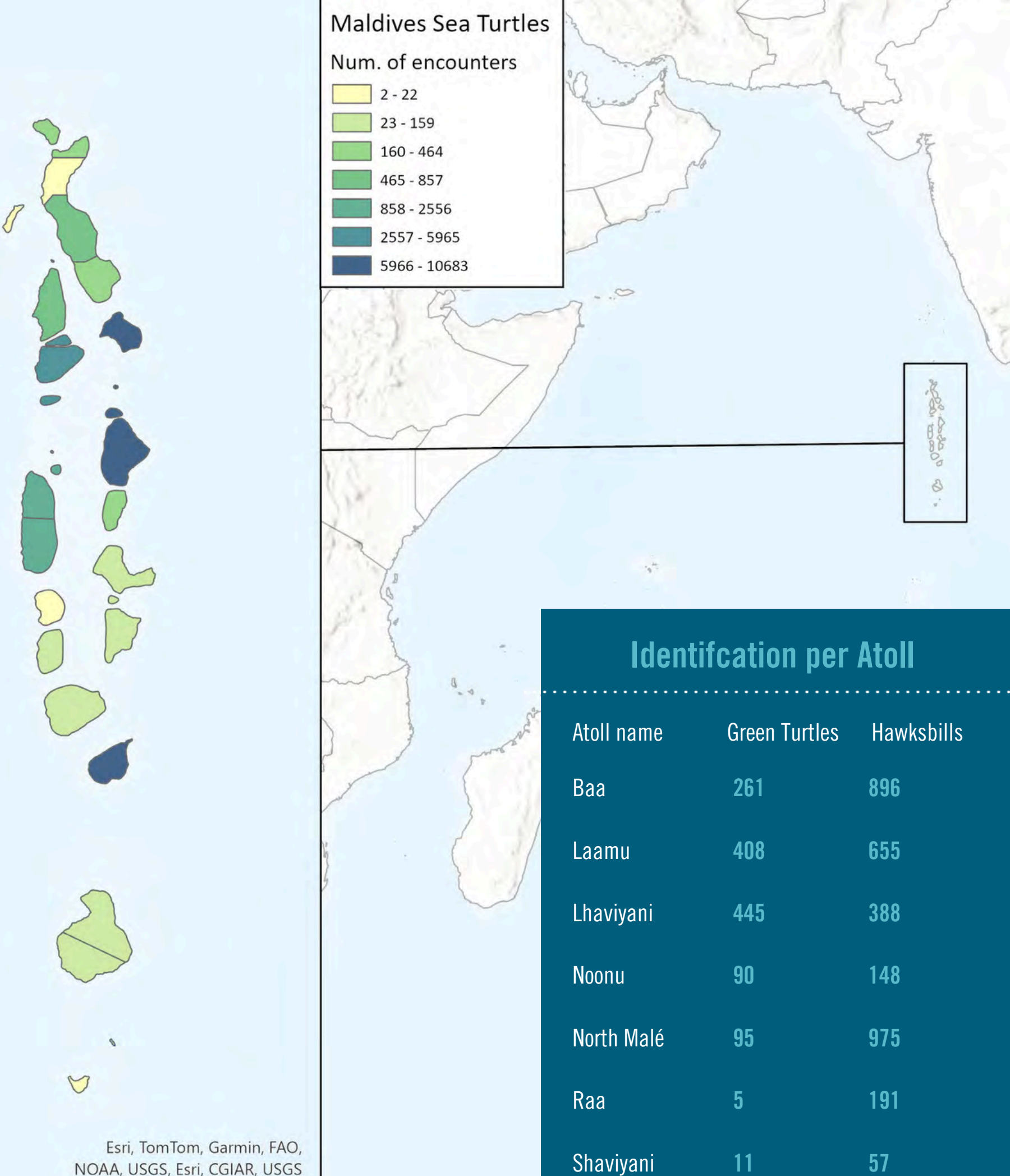


ORP Maldives Sea Turtle IDs



Identified Sea Turtles

Green Turtles	Hawksbills	New Nests Laid
1,607	4,905	2024 Q1
Total	Total	 22
59	83	 647
2024 Q1	2024 Q1	Hatchlings counted
 691		6,512
Sites w/sea turtles sighted		Total sea turtles identified



Identification per Atoll

Atoll name	Green Turtles	Hawksbills
Baa	261	896
Laamu	408	655
Lhaviyani	445	388
Noonu	90	148
North Malé	95	975
Raa	5	191
Shaviyani	11	57

ORP Maldives Rescue & Rehabilitation



The first quarter of this year proved to be exceptionally busy for our veterinary team, as anticipated. The northeast monsoon brought a surge of entangled sea turtles, pushing all rescue facilities in the Maldives to full capacity. We admitted a total of 11 new patients: Baraboa, Vilunoo, Usha, Saimaa, Kurumba, Hiyala, Avi, Paree, Karaa, Kadhuru, and Raalhu. With the exception of Usha and Baraboa, all are olive ridleys, with most being entangled in ghost gear. Usha, a juvenile hawksbill, was found immobile atop a reef with no visible injuries, while Baraboa, only the second loggerhead to be admitted since the Rescue Centre opened, was discovered floating. Additionally, little Kadhuru was found floating and covered in tar.

Despite our best efforts, we sadly lost Saimaa just over three weeks after admission. However, we celebrated the successful release of long-term patients Zeliya and Handhu, as well as shorter-term patients Dhontha, Moodhu, Vilunoo, Baraboa, and Hiyala.

We extend our heartfelt gratitude to all the compassionate individuals who assisted in rescuing the sea turtles admitted to us and other facilities over the past three months. Our work would not be possible without their invaluable support. Additionally, we express our appreciation to TMA for generously flying patients rescued from all over the country to the Rescue Centre in Baa Atoll.



Usha receiving nebuliser treatment in our hand-crafted nebulisation-chamber

Our veterinary team customises each patient's treatment plan according to their individual requirements. Upon examination, Usha, the juvenile hawksbill found immobile on a reef was diagnosed with severe pneumonia. To address this condition effectively, Usha received tailored antibiotic treatment targeting the lungs directly. We initiated nebulisation therapy, a method where medication is transformed into a fine mist, allowing sea turtles to inhale it.

Administered via a nebuliser, the mist is gently introduced into a nebulisation chamber, precisely targeting the respiratory issues and ensuring safe and comfortable inhalation of the medication. This approach has accelerated Usha's recovery, facilitating her return to good health more swiftly.

We are also currently collaborating with Purple AI on an innovative project to pioneer cutting-edge technology utilising artificial intelligence (AI) for sea turtle-specific complete blood counts (CBC). This essential diagnostic tool guides therapy and care planning for our patients. We are building a comprehensive database of images and videos showing various presentations of our patients' white blood cells. This database includes counts obtained through methods like the Neubauer chamber and blood smears.

The primary goal of this initiative is to deliver precise and reliable results while eliminating the time-consuming manual cell counting process. By harnessing AI, we aim to streamline operations, support our veterinary team's mission, and enhance accessibility to CBC results. This advancement will enable us to furnish timely and accurate information, bolstering the capabilities of our specialised personnel in conducting cell counts.



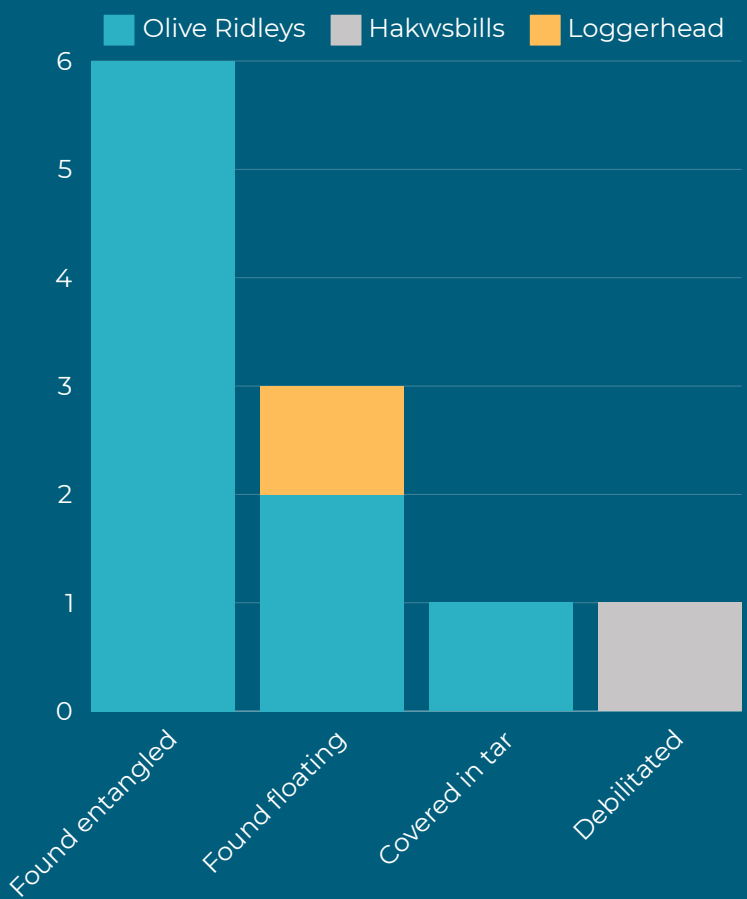
Rescue Centre Intern Nauha Ibrahim joined us in January

In January, we welcomed our new Rescue Centre Intern, Nauha Ibrahim, to the Rescue Centre. Nauha grew up in Fuvahmulah, with the ocean being a big part of her life, shaping who she is and how she sees the world. With the rise in threats to the vulnerable creatures in these oceans, she knew she needed to get involved in conservation. Nauha intends to pursue a career in veterinary nursing in the future and her dedication to wildlife conservation will undoubtedly contribute to our ongoing mission.

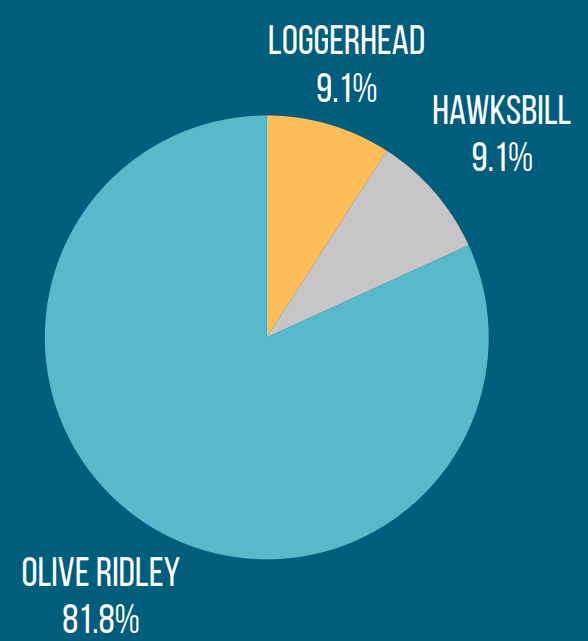
ORP Maldives Our Turtle Patients

	2024 Q1	2024	Since 2017
New patients admitted	11	11	241
Patients released	7	7	138
Patients deceased	1	1	88
Patients treated	21	21	241
Patients still in care	14		

Reason for admittance (New)



Patients by species (New)



New Patients Admitted

Baraboa, meaning ‘pumpkin’ in Dhivehi, is a juvenile loggerhead discovered floating. Despite having no external injuries and acceptable blood work, Baraboa's X-rays revealed some denser material in her gastrointestinal tract, raising concerns of potential abnormalities. Baraboa's rescue marked the first of the year and represents the second loggerhead sea turtle patient recorded since 2017. Admitted 09/01/2014. Released 29/01/2024.

Usha is a juvenile hawksbill who was found very emaciated and weak. She suffered from acute kidney failure, severe anaemia, pneumonia (lung infection), and an ocular infection. Admitted 26/01/2024

Vilunoo, or ‘light blue lagoon’ in Dhivehi, is a juvenile olive ridley who was discovered afloat. Admitted 20/01/2024. Released 29/01/2024.

Saimaa, ‘hibiscus flower’ in Dhivehi, was an adult female olive ridley who suffered a partial amputation of her right front flipper, and further traumatic injuries to her carapace, hind flippers, and right eye due to ghost net entanglement. Admitted 01/02/2024. Deceased 28/02/2024.

Kurumba, which means ‘young coconut’ in Dhivehi, is an adult olive ridley found entangled in a ghost net. She suffered abrasions and ligature injuries across all flippers, carapace, and head, with the right front flipper bearing the most severe damage. Admitted 19/02/2024.

Hiyala, named 'beauty' in Dhivehi, is a juvenile olive ridley discovered entangled in a plastic mesh bag, resulting in ligature injuries to all flippers. Admitted 23/02/2024. Released 13/01/2024.

Avi, meaning 'sunshine' in Dhivehi, is an adult olive ridley turtle discovered floating and unable to dive in Noonu Atoll. Her injuries are consistent with those of a previous entanglement: she is missing her right front flipper and has a partially amputated left front flipper, with ligature injuries to both hind flippers. Admitted 27/02/2024.

Paree, meaning ‘Fairy’ in Dhivehi, is an adult olive ridley discovered entangled in a ghost net, resulting in a profound ligature injury to her right front flipper. Additionally, she is suffering from a gastrointestinal condition. Admitted 01/03/2024.

Kadhuru, meaning ‘date’ (the fruit) in Dhivehi, is a juvenile olive ridley found covered in tar. Admitted 11/03/2024.

Karaa, meaning ‘Watermelon’ in Dhivehi, is an adult male olive ridley found entangled - unfortunately his left front flipper required amputation. Admitted 11/03/2024.

Raalhu, which means ‘wave’ in Dhivehi was found entangled in ghost net and suffered a partial amputation of her right front flipper, aside from ingesting fishing line and presenting with a plastic bottle cap stuck in her upper beak. Admitted 15/03/2024.

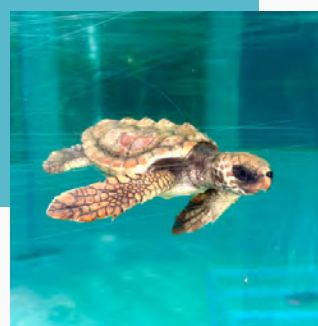
Released Patients

- Dhontha - 26th January
- Moodhu - 29th January
- Vilunoo - 29th January
- Baraboa - 29th January
- Zeliya- 4th February
- Handhu - 7th March
- Hiyala - 13th March

Deceased Patients

- Saimaa - 28th February

Baraboa, the second loggerhead to ever be admitted to the Rescue Centre



ORP Oman

Zighy Bay, situated within the picturesque Musandam Peninsula, is renowned for its stunning landscape and rich marine environment that is teeming with sea turtles. From January to March, the northeast monsoon gives rise to algal blooms (see cover image on the right), which in turn affect water visibility. Heavy rains and fluctuations in water temperatures result in the mixing of the sea, leading to the upwelling of nutrients such as nitrates and phosphates.

These nutrients serve as food for microalgae (phytoplankton), ultimately causing these blooms. Notably, the organism responsible is *Noctiluca scintillans*, which produces captivating bioluminescence at night but also turns the water a vivid green, making turtle spotting a challenging task. Consequently, we were only able to record 60 sea turtle sightings during our in-water surveys and add a single new identified sea turtle to our database in the last three months.



HM012, a rare hawksbill, seen here at Wonderwall

While all of our sightings were of green turtles, we were very excited to record one lone hawksbill - a very rare species sighting in this region. The hawksbill was spotted munching on some corals was around 55 centimetres in carapace length and was most likely a juvenile.

Throughout this trimester, fishing activities were abundant, particularly preceding Ramadan when people strive to catch as much fish as possible. In January, we recorded two nets with three entangled eagle rays entangled, in February 11 nets with four stingrays and six green turtles, and in March, five nets with four green turtles.



Squirt, GM072, was accidentally caught by fishers and later released


Most of these turtles were new to us, except for two: GM072 (known as Squirt) and GM118, both residents of Zighy Bay. The fishermen cooperate with us consistently. They report and release all sea turtles they come across and allow us to inspect their nets and documents sea turtle bycatch by taking Photo-ID and general measurements.



A green turtle entangled in ghost gear in Zighy Bay, Oman

At the end of March, we discovered a net stuck among rocks and corals at Sanat Bay, one of our dive sites. Upon closer inspection, we found three sea turtles entangled in the net. Although they were fearful and agitated, we managed to free them quickly. In Oman, ghost net removal requires government authorisation. Fortunately, we were able to confirm that the net was removed some days later, most likely by the owner themselves. Recognising the severity of such threats, the Environment Authority has decided to intensify sea clean-up efforts in the region for 2024, aiming to remove as much debris and ghost gear as possible to ensure a safer environment for all marine species.



Identified Sea Turtles	
Green Turtles	Hawksbills
183	9
Since 2020	Since 2020
16	0
2024 Q1	2024 Q1
Sites w/sea turtles sighted	Total sea turtles identified
 13	192



Ghost Gear Upcycling & Circular Economy

Ghost gear recovered

>6.4

Since 2018

Ghost gear repurposed

>54.3K

Since 2018

35

2024 Q1

0

2024 Q1

Pet leashes made

712

Pet Leashes Sold

641

214

2023

6928

2023

Flase Crawls

23

2024 Q1

Nests Laid

67

2024 Q1

Extra income generated

808,800

PKR

In early 2024, we continued our nesting beach surveys, conducting 21 visits and documenting a total of 92 nesting tracks. Among these, 24 were identified as false tracks, while 68 were confirmed as true nests. Excitingly, the largest track, measuring 120 cm wide and recorded in January at Sandspit Beach, is suspected to belong to a leatherback turtle. Although leatherback turtles have never been officially documented in Pakistan, fishermen have reported sightings, particularly along the Balochistan coastline. Conversely, the smallest track, measuring 84 cm wide, belonged to a green turtle, the most prevalent nesting species along Pakistan's beaches.



A green turtle nesting on Hawke's Bay beach

While we recorded a good number of nesting females in January, February saw a decline. This reduction in nesting activity was likely caused by storms along the coast. Strong winds caused considerable wave action, leading to the formation of sand barriers along the water's edge, hindering nesting females' access to suitable nesting areas. However, in March, female turtles resumed their visits to the coast, with sightings primarily recorded at Hawke's Bay Beach.

Additionally, we investigated a new site and possible nesting location – Somiani Beach. This beach exhibits typical characteristics of a sea turtle nesting site, including the appropriate sand texture. Furthermore, we received reports of deceased sea turtles washing ashore, prompting our visit to confirm whether it indeed serves as a nesting beach.

Despite spending six hours searching for signs of sea turtles in the water – identifiable by their heads emerging to breathe – we found no evidence of them in the water or any tracks, body pits, or nests on the beach. However, we did discover a deceased olive ridley turtle, likely washed ashore due to currents and tides.

We also continued our educational outreach activities in the last three months. In January, we arranged a beach excursion to a sea turtle nesting site at Hawke's Bay Beach for 35 kindergarten and grade 1 students from Ivy School, accompanied by 17 school staff members. The students were thrilled to be outdoors on the beach and they got to learn all about sea turtle tracks, nests, and the impact of plastic pollution on the environment. Sadly, they did come across a deceased juvenile green turtle which had washed up on the beach. This was quickly turned into an educational Q&A to try to determine the cause of death.

Then in February, we visited Ivy School and conducted an educational session on sea turtles in their natural habitat. 48 students from grade 1 and 2 watched videos of sea turtles from our field trips, samples of ghost nets, and our repurposed ghost net products. The students were particularly fascinated by the hatchling videos and cheered as the hatchlings made their way into the water.



ORP Pakistan Programme Manager Usman lecturing at LUAWMS

In March our team conducted a sea turtle awareness and conservation workshop at the Lasbela University of Agriculture, Water and Marine Sciences in Uthal. The 52 member strong audience included undergraduate and graduate students, lecturers, professors and the Dean. The workshop focused on the seven species of sea turtles, their habitats, species found in Pakistan, the importance of sea turtles as keystone species, threats such as ghost nets and ORP's conservation initiatives including our circular economy project.

Field Coordinators Asif and Hanif also managed to recover 35 kgs of ghost gear from Hawke's Bay Beach during their regular nest watch walks in the first three months of 2024.

ORP Seychelles

The beginning of the year in Seychelles is a busy one for us, full of beach patrols and nest excavations. The hawksbill nesting season runs from October to March, so during the months of January to March, we observe females coming to nest as well as nests hatching.



Ghost crab - a common hatchling predator

We recorded a total of 22 nests that hatched in the first three months of the year. Upon nest excavation, we found that hatching success rate ranged from 9.6% to 98.46% with a mean of 69.10%. The very low success rate for some nests was as a result of predation, as characteristic signs of ghost crab predation were evident. These signs included the presence of crab burrows, egg shells discovered on the sand surface, and instances of eggs being completely missing or found with shredded shells.



HS37, a hawksbill first documented in 2018, nesting in 2024

During this season, we made an interesting observation when a hawksbill, HS37 first documented in 2018, nested on Félicité. Remarkably, this individual had been previously tagged with

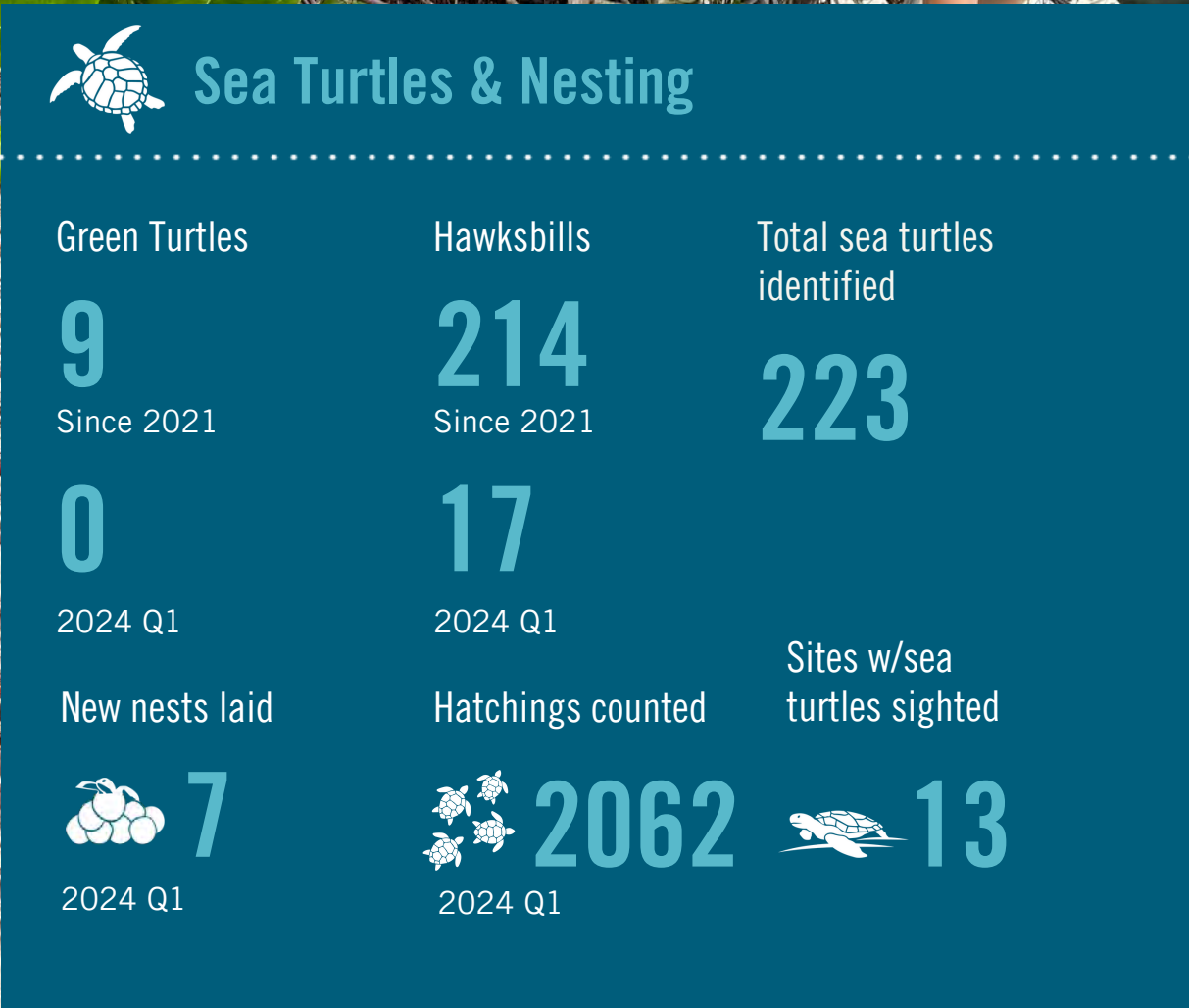
flipper tags five years ago. This incident adds to a series of 14 instances where individuals have been identified over two distinct nesting seasons, a result of combining our own findings and tag data from other organisations. What's particularly noteworthy is that ten out of these 14 individuals were initially tagged while nesting on different islands, indicating hawksbills' tendency for inter-island nesting.

Traditionally, sea turtles are believed to exhibit strong site fidelity to their natal beaches, returning to nest on the same beach where they were born every two to five years. However, this data demonstrates a pattern of nesting in multiple locations possibly as a result of less favourable conditions on the natal beach. This opportunism may be a survival technique adopted in response to increased disturbance or lack of available nesting area on other islands. Not only is this finding fascinating, but it underscores the importance of consistent monitoring of nesting beaches and knowledge sharing so we may further our understanding of Seychelle's nesting hawksbill population.

As nesting this season continued, so did our efforts to clear coconut palms from the beach, aimed at providing hawksbills with suitable space to nest and hatchlings to make their way to the sea uninterrupted. While coconut palms are indigenous to the Seychelles, their abundance exceeds natural levels on Félicité due to historical coconut plantation drives during the late 19th and early 20th centuries. The build up of fallen palm fronds can create dense mats, obstructing hatchlings' journey to the ocean.

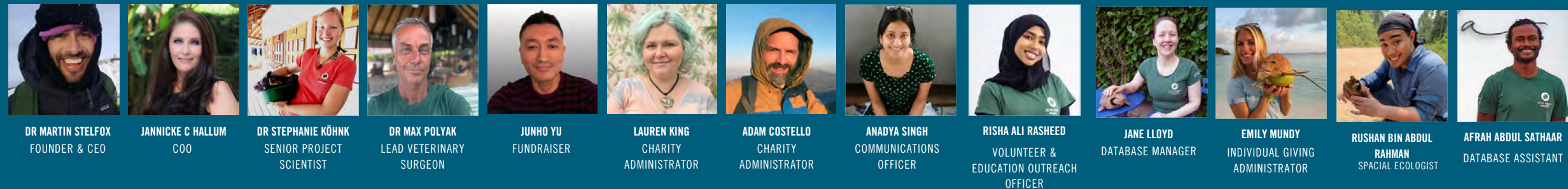
Continuing our commitment to engaging with guests on Félicité, nesting and hatching experiences remained the main guest activity this quarter, with 104 guests participating. Additionally, we provided sea turtle training sessions for Six Senses resort staff, offering many of them the chance to witness hatchlings emerge for the first time during hatching events.

In the 2022/23 nesting season, Alessia Lavigne conducted a research project on unhatched hawksbill eggs found during routine nest excavations. She collected the eggs to determine if they were unfertilised or had ceased development very early, making signs of growth invisible. Alessia recently presented intriguing findings: out of 12 samples, all were confirmed to be fertilised. This suggests that the lack of development was likely due to early embryo mortality rather than fertility problems.



Meet the Team

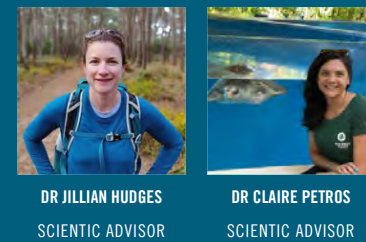
Charity Management & Operations



Trustees



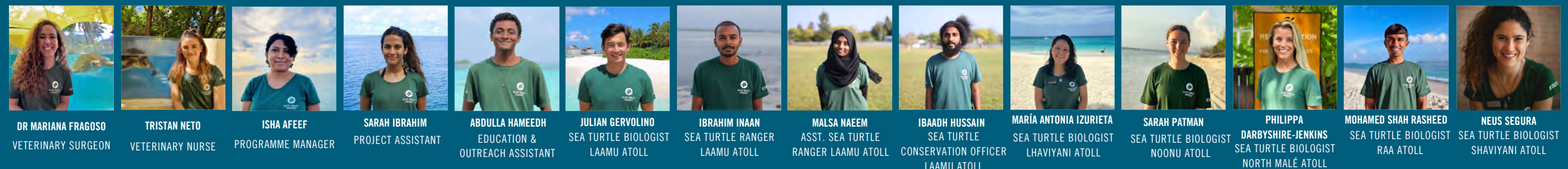
Scientific Advisors



Kenya Team



Maldives Team



Maldives Team



Pakistan Team



Oman



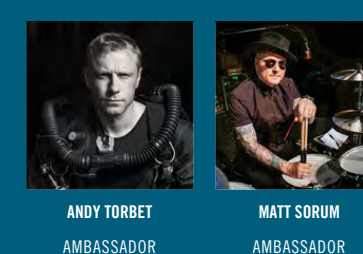
Seychelles



Volunteers



Ambassadors



Thank you

We extend heartfelt thanks to our donors, adopters, supporters, collaborators, and partners for their generous financial and logistical assistance, which enables our vital work. Gratitude also goes to the compassionate individuals who assisted in rescuing entangled and distressed sea turtles over the past three months, as well as the 19 volunteers from 8 countries who dedicated their time to caring for our patients at the Marine Turtle Rescue Centre.

Special appreciation goes to our citizen scientists for their invaluable Photo-ID contributions – please continue to share your photos with us! We deeply appreciate each and every one of you for your invaluable contributions. And last, but not least - a big thank you to Ocean Culture Life for awarding us a generous Story Teller Grant to showcase our BMU programme and community work in Kenya. Stay tuned for updates!

Partners & Collaborators





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