



OLIVE RIDLEY PROJECT

The Olive Ridley Project

Annual Report and Financial Statements

Year ending: 31st December 2023

Charity no: 1165905

Reference and Administrative Details

Trustees	Dr Mike Sweet Lee Cannan Cliona Kirby Amanda Costain Zacari Edwards (until 11 February 2023) Dr Martin Stelfox Jannicke C Hallum Dr Stephanie Köhnk Dr Max Polyak Junho Yu Lauren King Adam Costello Anadya Singh Risha Ali Rasheed Jane Lloyd Emily Mundy Lauren Valentine Dr Jillian Hudgins Dr Claire Petros
Chief Executive Officer / Founder Chief Operating Officer Senior Project Scientist Lead Veterinary Surgeon Fundraiser Charity Administrator	
Communications Officer Volunteer & Educational Outreach Officer Database Administrator Individual Giving Administrator	
Scientific Advisors	
Kenya: Project Manager Infield Supervisor Project Coordinator Community Education & Outreach Officer Sea Turtle Monitoring Assistant Intern	Dr Joana Hancock Jenni Choma Leah Mainye Juma Gwerenya Diana Kerubo Nyakuni Valarie Nangila Silali
Maldives: Veterinary Surgeon Veterinary Nurse	Dr Mariana Fragoso Lauren Valentine Tristan Neto
Sea Turtle Biologists	Julian Gervolino Afrah Abdul Sathaar Maria Antonia Izurieta Sarah Patman Rosie Brown Philippa Darbyshire-Jenkins Mariyam Niuma Mohamed Shah Rasheed Neus Segura Olivia Forster
Project Manager Project Assistant Education & Outreach Assistant Sea Turtle Ranger Interns	Isha Afeef Dan Nasheed Abdulla Hameedh Ibrahim Inaan Mohamed Athif Adam Mohmed Ziyen Sarah Ibrahim Asha Ahmed Ali Nishan
Master Student	Amy Feakes

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Sea Turtle Biologist

Tom Osborne
Davide Panarese

Pakistan:
Project Manager
Sea Turtle Biologist
Community Leader
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Usman Iqbal
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Seychelles:
Sea Turtle Biologist

Lara Kalisch
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Volunteers:
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Educator & Ambassador
Communications Assistant
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The Olive Ridley Project

Trustees' Report

For the year ending 31st December 2023

Structure, governance and management

This Charitable Incorporated Organisation (CIO), the Olive Ridley Project (ORP), is regulated by its constitution whose only voting members are its trustees. The CIO was established by Dr. Martin Stelfox (CEO and founder) in 2013 and then became the CIO on the 7th March 2016.

New trustees are appointed by the existing trustees and serve for three years after which they may put themselves forward for re-appointment. The Charity provides for a minimum of 3 trustees, to a maximum of 7 trustees.

At the quarterly trustee meetings, the trustees agree on the broad strategy and areas of activity for the charity, including consideration of grant making, investment, reserves and risk management policies and performance. The day to day administration of grants and the processing and handling of applications prior to consideration by the trustee is delegated to the Chief Executive Officer.

The trustees formally approved arrangements complying with the CC30 guide 'The recruitment, appointment and induction process for new charity trustees and how to set a framework for recruitment.' and recruit new trustee(s) for their experience, empathy and knowledge of the charity and to keep the skills and composition of the trustee body and succession planning under review. The trustees have also developed a code of conduct for trustees including formal statements of role and responsibilities and provision for trustee training. New trustees may be sought by open advertisement or through peer to peer dialogue. The ultimate decision on selection is a matter for the trustees.

On appointment, new trustees sign a constitution committing them to giving of their time and expertise. The induction process includes an initial meeting with the trustees, followed by a series of short meetings with the Chief Executive Officer on day to day activities within the charity, current projects, grant making process and powers and responsibilities of the trustee board. The welcome pack includes a brief history of the charity, a copy of the trustee board minutes, a copy of the constitution, 5-year plan and a copy of the Charity Commission's guidance 'The Essential Trustee: What You Need to Know' and 'Charities and Public Benefit'.

All trustees give their time freely and no trustee remuneration was paid in the year. Trustees are required to disclose all relevant interests in accordance with the charity policy and update all policies including, 'Bullying and Harassment', 'Code of Conduct', 'Conflicts of Interest', 'Equal Opportunities', 'Financial Management', 'Health & Safety' and 'Safeguarding Children and Young people'.

Objectives and Activities

ORP takes a multidimensional approach to protecting sea turtles and their habitat. The charity's objects are:

To promote for the benefit of the public the conservation, protection and improvement of sea turtles and their habitats, in particular, but not exclusively by:

- (a) promoting humane behaviour towards sea turtles by providing appropriate care, protection, treatment and

security for animals which need care and attention by reason of sickness, maltreatment, poor circumstances or ill usage and to educate the public and veterinarian community in matters pertaining to sea turtle welfare in general and the prevention of cruelty and suffering to sea turtles.

- (b) advancing the education of the public in the conservation, protection and improvement of the physical and natural environment of sea turtles, by provision of talks, workshops, online courses and training; and
- (c) advancing the education of the scientific community by filling scientific data gaps in sea turtle research.

Public Benefit

All trustees follow the guidance issued by the Charity Commission on public benefit. By closely following this guideline we ensure the charity stays true to its purposes and focuses resources in direct relation to the charitable purposes.

We focus on protecting sea turtles and their habitats through rescue and rehabilitation, education and outreach and scientific research worldwide. We achieve this in the following ways:

1. Conducting workshops, informal meetings and seminars with local communities, governments, schools and the public to promote sea turtle conservation;
2. Hiring infield project coordinators that can disseminate our research findings and promote awareness to local communities;
3. Working with local fishing communities to mitigate threats to sea turtles including marine plastics, bycatch and safe release education;
4. Operating a Marine Turtle Rescue Centre and a Sea Turtle Rehabilitation Centre that allow Maldivian nationals, local schools and veterinarian surgeons from under resourced regions to work alongside qualified professionals to increase personal development and awareness;
5. Establishing relationships with research institutes to advance our research capacity and subsequently increase knowledge within the sea turtle scientific community;
6. Continue to maintain a citizen science projects, specific to sea turtles, that allows people from all backgrounds to contribute to scientific research and develop personal skills;
7. Offering paid internships to Maldivian and Kenyan nationals to develop in-country capacity;
8. Providing open access resources such as educational videos and an e-learning platform on our [website](#), with the addition of a Frequently Asked Turtle Questions page and educational blogs. This resource provides information on everything you need to know about sea turtles, including free publications such as our Sea Turtle and Nesting Beach Code of Conducts and Finding An Entangled Turtle Protocol. Our protocols explain how to behave around foraging, nesting, and hatchling turtles, and what to do when finding an entangled sea turtle and are published in several languages. The aim of the publications is a) to reduce human disturbance, whether it be intentional or accidental, to sea turtles in all of their habitats while still allowing people to have an enjoyable wildlife encounter, and b) to increase the chances of survival for entangled sea turtles;
9. Maintaining very active social media channels and engage with our followers through various messaging platforms;
10. Working with a number of journalists from TV channels/programs, newspapers and magazines to further spread our message about sea turtle conservation; and
11. Contributing to scientific journals to advance the scientific community knowledge on sea turtles and the threats they face.

Risk management

The Trustees have identified the major risks applicable to the charity and believe that appropriate action has been taken to manage and mitigate against these risks. Furthermore, the Trustees have assessed the major risks to which the Charity is exposed, in particular those relating to the operations, reputation and finance of the Olive Ridley Project. The CEO assesses and updates the likelihood and impact of material risks and ensures controls are in place, such as special risk assessments for general fieldwork and working at the rescue centre.

The trustees accept that to achieve our objectives some areas of our work require the acceptance and management of risks.

Achievements and Performance 2023

This reporting period is running from January to December 2023 and captures our charitable activities across Kenya, Maldives, Oman, Pakistan, and the Seychelles.

2023 marked a significant year for ORP as our sea turtle conservation efforts achieved major breakthroughs across Kenya, Maldives, Oman, Pakistan and the Seychelles. Our success lies in a multifaceted approach, combining rigorous research, community engagement, capacity development, and innovative projects. This approach underscores our dedication to safeguarding sea turtle populations and their habitats for future generations.

Launched in 2018, ORP Kenya has grown significantly over the past five years. Initially a one-person operation, the project now boasts a five-member team and a robust research and education programme. The expansion has allowed us to grow our Photo-ID database to include over 700 individual sea turtles and identify health issues like fibropapilloma prevalence in our monitored population to assess occurrence and recovery rates.

Beyond research, we have prioritised community engagement and outreach as a cornerstone of our conservation efforts in Kenya. In 2023 we made exciting progress through programmes fostering future conservation leaders and empowering local communities. We launched paid internships with Diving the Crab and a student attachment programme with Kenyatta University, nurturing young professionals dedicated to protecting sea turtles. Additionally, our Beach Management Unit (BMU) Programme educates local communities to become guardians of their coastal ecosystems. Through interactive workshops we equipped 57 individuals to champion sea turtle conservation, driving grassroots change from within.

ORP Kenya embodies a commitment to science based and collaborative sea turtle conservation. By empowering local communities and fostering inclusive and sustainable practices the project aims to ensure the long-term health and well-being of sea turtle populations along the Kenyan coast.

2023 also marked significant progress for ORP's research team in the Maldives. The Maldives' sea turtle Photo-ID database, launched in 2013, has grown exceptionally thanks to our expanding in-field team (from one to 11 since 2017) and invaluable contributions from citizen scientists. Our Photo-ID data, incorporated in the first Maldives Red List Assessment in 2022, formed the basis for a key April 2023 paper, shedding light on critical aspects of sea turtles ecology and behaviour. Furthermore, in August, we joined forces with the Environmental Protection Agency Maldives (EPA) on a research expedition to delve into uncharted territory; the genetics, health, and habitat preferences of sea turtles in the Maldives. The valuable data collected during the expedition, along with our sea turtle Photo-ID data, will facilitate more precise and targeted conservation strategies.

By expanding our internship programmes to include more comprehensive training, we aim to foster a new

generation of sea turtle conservation leaders. Alongside this we established vital partnerships with local organisations and communities across various atolls. This collaborative approach has yielded enhanced nesting beach monitoring significantly amplifying our impact. This will undoubtedly contribute to the long-term of sea turtle populations in the Maldives.

Last year, our veterinary practice underwent a transformative shift towards a Conservation Medicine Model. Integrating conservation goals into patient care for injured or sick sea turtles, we've achieved significant improvements in treatment outcomes. We further bolstered our capabilities by adopting new therapies, expanding our workspace and acquiring advanced equipment. Fostering international collaboration we hosted workshops and participated in global conferences, promoting best practices in conservation medicine.

In Oman our in-water research efforts have successfully identified 167 green turtles and nine hawksbills since 2019. Educational outreach initiatives, including ocean clean-ups and sea turtle training sessions, were well received by local communities and authorities alike. Through collaborative efforts with local fishers we have achieved reductions in bycatch, ensuring the safe release of unintentionally caught sea turtles and fostering sustainable fishing practices.

Pakistan joined the ranks of regions experiencing significant growth for ORP in 2023. Since 2015, our focus has been tackling ghost gear through a circular economy project, repurposing retrieved materials. This year was a turning point as we welcomed a dedicated sea turtle biologist to the team, allowing us to launch vital research on sea turtle populations in the region. Our initial primary nesting beaches monitoring efforts were promising, yielding over 200 green sea turtle track identifications - a strong indicator of nesting activity and crucial data for ongoing research projects. Proactive measures to mitigate ghost gear threats also saw success, with over 560kg of marine debris removed from local waters and beaches, directly reducing risks to marine wildlife. Further expanding our impact, ORP Pakistan was featured in a documentary series on climate change funded by the US Consulate. Additionally, we engaged with hundreds of individuals through educational events, fostering awareness about marine conservation and inspiring action at the community level.

In Seychelles we recorded 238 new sightings and documented 42 nests, adding to our growing knowledge base. Our successful nest relocation efforts, aimed at countering erosion and predation, showcased our adaptive and proactive approach to conservation challenges. We also expanded educational initiatives to reach more resort guests and local communities, fostering a culture of conservation awareness and community engagement.

Our accomplishments are a testament to our dedicated team, funders, strategic partnerships and generous supporters. Sea turtle conservation is a collaborative endeavour and we are proud of the supportive community we've built.

Kenya

Research

When we began operations in Kenya back in 2018, our objective was to assess sea turtle abundance and distribution in the Diani-Chale Marine National Reserve on the country's southern coast using Photo-ID. We began our research efforts with just one sea turtle biologist and the assistance of Diving the Crab, a dive centre based on Diani Beach. Fast forward five years, our Kenya team has grown to five members, and our activities now encompass extensive education and outreach initiatives aimed at fostering local capacity for sea turtle research and conservation, including an internship programme.

Collaborating with local stakeholders and conservation partners like Kenya Wildlife Services (KWS), Bahari Hai, and

Shimoni Turtle Watch (STW), we have expanded our work along the Kenyan coast in the Watamu Marine National Park and Reserve and Kisite-Mpunguti Marine National Park and Reserve. Our efforts have paid off and we have gained valuable insights into Kisite Marine Park's sea turtle population and developed a comprehensive monitoring plan for the area, paving the way for long-term monitoring of sea turtles in this marine protected area.

Our collaborative efforts aim to establish scientifically sound monitoring protocols for crucial foraging grounds and embody our commitment to inclusive, sustainable conservation. By actively training and engaging local communities in sea turtle monitoring, we empower them to become stewards of their own marine environment.

We now have a robust database of green and hawksbill turtles residing in Diani-Chale Marine National Reserve. In 2023 alone, we conducted 14,922 minutes of underwater surveys, which resulted in 875 sea turtle sightings yielding 84 new individuals. This brings the total number of recorded sea turtle sightings in our database to nearly 4,000 and the number of identified individual sea turtles to over 700.

The expansion of the team allowed us to start analysing the first five years of data collected from Diani-Chale, which led to a surprising discovery: a high prevalence of fibropapillomatosis (FP) in the resident green turtle population. This prompted us to delve deeper, culminating in a scientific publication 'Using Photo-ID to document and monitor the prevalence of fibropapilloma tumours in a foraging aggregation of green turtles'.

FP, a disease caused by the ChHV-5 virus, manifests as wart-like growths on both external and internal soft tissues (see right) that can impair vision, feeding, and movement, ultimately jeopardising the survival of affected turtles. Global research efforts prioritise mapping the distribution and prevalence of FP, identifying factors influencing its occurrence and severity, and developing effective management strategies to mitigate its impact.

Using Photo-ID data, we analysed photos of 515 individual green turtles recorded between July 2018 and December 2022 and confirmed 75 cases of FP (13% prevalence in the population), primarily in juveniles (81%). We were also able to track the progression or regression of tumours on individual sea turtles over time; our preliminary observations suggest that recovery from FP can take over a year.

Although visual inspection for FP identification has limitations such as varied tumour presentation, difficulty in detecting internal cases, and limited data on disease dynamics the method offers advantages like low costs, non-invasiveness, potential for citizen science involvement, and the ability to track individual sea turtles over time. These benefits make it a valuable tool for assessing FP's impact on sea turtle health and guiding future conservation strategies.

Thanks to our generous Giving Tuesday 2022 donors, we acquired a drone in 2023. Project Coordinator Leah Mainye has successfully obtained her remote piloting licence and we are ready to launch drone surveys in 2024. These surveys promise to uncover new sea turtle hotspots in diverse marine habitats like seagrass lagoons and mangrove channels. By analysing sea turtle behaviour and habitat utilisation patterns, we aim to understand how sea turtles use different coastal habitats, and identify threats to sea turtles in the region, to inform targeted conservation efforts.

Kenya Sea Turtle Photo-ID Research Results

To date, ORP in Kenya has recorded 3,973 sea turtle sightings over 25 sites, with 714 unique sea turtles identified. 631 individual green turtles and 83 individual hawksbill turtles. 77 new green turtles and 7 new hawksbill turtles were identified in 2023.

Education & Outreach

In 2023, we celebrated remarkable growth and impact in our community education and outreach efforts in Kenya, focusing on capacity development, outreach and awareness, international collaboration, and knowledge sharing.

We launched an internship programme with Diving the Crab to train Kenyan university graduates in sea turtle monitoring and conservation. The programme equips participants with diving skills, fieldwork training, and participation in educational outreach programmes. Diana Kerubo Nyakundi, our first intern, later joined our team as a sea turtle monitoring assistant, highlighting the success of the programme in fostering skilled professionals.

Collaborating with Kenyatta University, we extended a 2.5- month attachment programme to two students. They gained valuable experience in sea turtle monitoring, education, and conservation, contributing to the building of a network of informed individuals dedicated to marine conservation.

Community-led conservation remains at the core of our programmes, ensuring sustainability in the region and fostering environmental stewardship and community involvement. Engaging with diverse communities, we planted mangroves with the Mwazaro Women's Group, participated in beach clean-ups, and inspired students at local primary schools. Our World Sea Turtle Day and International Coastal Cleanup Day activities mobilised hundreds of volunteers, resulting in the collection of over 678 kg of debris. These events served as educational platforms, enlightening participants about plastic pollution and its detrimental impact on sea turtles.

A significant achievement this year was the initiation of the Beach Management Unit (BMU) Programme. Spearheaded by Juma Gwerenya, Community Education and Outreach Officer, and Leah Mainye, Project Coordinator, this programme empowers local communities to become guardians of our coastal ecosystems through interactive workshops and aims to minimise threats in vital marine habitats. We equipped 57 individuals from four communities with the knowledge and tools to become sea turtle conservation ambassadors and spread awareness and inspiration for sea turtle conservation among their community members, organisations, and officials on Kenya's south coast.

We also collaborated with the Conservation Education Society to host 20 marine workshops for over 300 students from the UAE, USA, and UK. Led by Juma, these sessions covered topics like plastic pollution, sea turtle conservation, and coastal habitat significance. Leah captivated over 250 students at the Oshwal Academy Model UN conference in Mombasa with a talk on conserving sea turtles, showcasing our ability to bridge divides for effective conservation. Leah also virtually presented at the Tropical Marine Biology Conference hosted by Essex University. Her plenary talk reached hundreds of master students, serving as a showcase of our impactful work and an inspiration for the next generation of marine biologists and conservationists in the UK.

These initiatives underscore our commitment to spreading awareness and fostering collaboration for the conservation of sea turtles and marine ecosystems. Through our multifaceted approach, we strive to make a lasting impact on the preservation of our oceans and marine life.

Maldives

Research

The first Red List Assessment for Maldives, published in 2022, incorporated ORP's Photo-ID data, as well as nesting and threat monitoring data. Using this valuable data, we published a scientific paper in April 2023, analysing the abundance, distribution, and population trends for both hawksbill and green turtles on selected reefs in the Maldives. Employing statistical models, we analysed nearly four years' worth of Photo-ID data (predating the Covid-19 pandemic) collected from ten sites spanning four atolls. This pioneering study in the Maldives offers an empirical estimation for sea turtle population trends while considering variations in survey effort and detectability dynamics.

Our findings indicate that many populations of both hawksbill and green turtles have remained stable or exhibited signs of increase throughout the study period. While our analysis offers a glimmer of hope regarding the upward trend of sea turtle populations in the Maldives, we urge caution with this interpretation given that not all populations analysed were stable, and our study period is relatively brief for such long-lived species. Overall, our research highlights the importance and value of long-term data collection, particularly through cost-effective methods such as engaging citizen scientists in data collection, for monitoring of sea turtles populations.

While Photo-ID is an excellent method for investigating certain aspects of sea turtle biology, there are still many unknowns concerning these magnificent creatures in the Maldives. For instance, their genetic diversity, overall health, and their ecological associations with other organisms still puzzle researchers. In a first-of-its-kind expedition in the Maldives, scientists from ORP partnered with personnel from the Environmental Protection Agency of Maldives (EPA) to shed light on some of these mysteries in August 2023.

Under the guidance of ORP's Senior Project Scientist, Dr. Stephanie Köhnk, and EPA's Senior Environmental Analyst, Enas Mohamed Riyaz, the team embarked on a twelve-day journey, visiting key sea turtle habitats identified through our Photo-ID research in North Malé, Lhaviyani, Baa, and North Ari atolls.

The primary objective was to hand-capture sea turtles for sample collection. Each captured sea turtle yielded small tissue samples, earmarked for population genetics studies to answer questions such as "Which nesting population are the foraging sea turtles found in the Maldives related to?" and "How diverse is the genetic makeup of the foraging population?" The team also collected epibionts from each sea turtle to assess the diversity of organisms associated with their hosts. We can already say, there sure were a lot of barnacles!

Each captured sea turtle also underwent a comprehensive health evaluation conducted by Lead Veterinary Surgeon, Dr. Max Polyak, including physical and neurological examinations, as well as blood sample collections. Additionally, we took cloacal and gut samples to analyse the microbiome of wild animals, which we will compare to our Rescue Centre patients. Lastly, we performed ultrasonic studies to assess organ health and identify the sex of each individual sea turtle.

Aiming to discern the characteristics of an optimal sea turtle habitat in the Maldives, we also documented details regarding the seafloor composition and the presence of other marine life at sea turtle hotspots. In the forthcoming

months, we will be very busy with sample processing and analysis for each of the studies. We anticipate numerous groundbreaking discoveries concerning Maldivian sea turtles. This expedition was made feasible through the generous contributions of Friends of Frontiers.

We are planning a second expedition next year to increase our sample collection for more robust research findings.

Maldives Sea Turtle Photo-ID Research Results

We saw record growth in our sea turtle ID database in 2023. We established Maldives' sea turtle Photo-ID database in 2013 with the help of many dedicated citizen scientists and resort marine biologists. Since 2017, ORP's in-field team, which has since grown from one to 11, has consistently collected data to grow our knowledge of sea turtles.

To date ORP have identified 1,549 Green Turtles and 4,824 Hawksbills across 678 sites in the Maldives. In 2023 we identified 210 new Green Turtles and 390 new Hawksbills..

Turtle Nesting

ORP is continuing to collect data on sea turtle nesting. Data for nesting is limited due to the small number of sea turtle biologists collecting nesting information.

In 2023 we recorded 223 new nests laid and counted 6,097 hatchings.

Education & Outreach

In 2023, ORP Maldives witnessed significant expansion, fostering partnerships with national and atoll-level stakeholders dedicated to sea turtle conservation. Beyond providing support for the national guidelines on sea turtles gazetted in 2023, our collaborative efforts included projects addressing sea turtle conservation in local communities and establishing a pioneering sea turtle ranger programme in Laamu Atoll.

L.Gaadhoo is home to one of the Maldives most significant green turtle nesting sites. However, the beach is plagued by illegal egg harvest despite being designated a Protected Area in 2021. ORP conducted ad-hoc monitoring on L.Gaadhoo between 2018 and 2021. In 2022 we began regular monitoring with the Environmental Protection Agency (EPA) Maldives and AgroNat (a government-subsidised company leasing L. Gaadhoo for agricultural development), which led to the establishment of a crucial partnership with the support of Laamu Atoll and Laamu Fonadhoo councils in 2023, giving rise to the Laamu Sea Turtle Beach Guardian Programme.

This programme is a pioneering effort where field staff are hired from and based in local communities. Maldives' first Sea Turtle Ranger & Community Officer, Ibrahim Inaan, now conducts regular surveys, addressing the need for consistent monitoring to prevent illegal take, on L.Gaadhoo. He also focuses on education and awareness initiatives in the inhabited islands of L. Gan and L. Fonadhoo. In 2023, the first nest excavations on L.Gaadhoo provided crucial data, revealing a hatching success rate of 94.7%, highlighting the beach's significance.

ORP and EPA conducted stakeholder sessions to address the concerns of the community, and has worked towards integrating other community groups into the project. In July, partnerships were established between ORP, EPA, Fonadhoo Environment and Sustainable Development (FESD), Maldives Heritage Society, and Gan Youth Society to

bolster community engagement and backing for the preservation of Gaadhoo's nesting beach. These NGOs will play an active role in conducting surveys, facilitating educational sessions, organising events, and offering invaluable local insights and advice for the project. The Laamu Sea Turtle Beach Guardian Programme serves as a pilot for community-based conservation efforts everywhere and exemplifies ORP's commitment to innovative and community-driven conservation strategies.

On Vandhoo Island in Raa Atoll, one of 14 sea turtle nesting hotspots identified by the government in 2006, we joined forces with government stakeholders to establish another vital nesting beach monitoring programme. The island is managed by the Ministry of Environment, Climate Change, and Energy (MOECCE) and hosts a regional waste facility operated by the Waste Management Corporation (WAMCO). Through this partnership, ORP staff trained and supervised WAMCO personnel, led by Assistant Environment Safeguard Officer Nasih, in conducting regular beach surveys and marking nesting sites. The efforts paid off: 2023 saw a successful nesting season with ten documented nests and seven false crawls. Notably, nesting activity spanned all beaches on the island, underlining the importance of comprehensive protection efforts. However, due to the demand for a boat building yard on an uninhabited island nearby, a slipway for boat-building is presently under development on R. Vandhoo. Consequently, Nasih's responsibilities now extend to monitoring the area to ensure minimal disruption to nesting turtles, in addition to his regular duties.

Furthermore, we completed our first atoll-wide scoping tour for sea turtle conservation in Raa Atoll. This comprehensive study provided valuable insights into community attitudes and identified key areas of focus for effective sea turtle conservation in the atoll. The tour was made possible by funding from JOALI MALDIVES.

These accomplishments reflect our unwavering dedication to sea turtle conservation in the Maldives. Through collaborative projects, community involvement, and strategic expansion of our team, we strive to make a lasting impact on the preservation of sea turtles and their habitats in this ecologically significant region. While much has been achieved in the past year, there is still a long way to go and we will continue working on strengthening our partnerships with various stakeholders in 2024. We are also looking forward to hosting Vaavoshi Festival again next year, as well as completing a cultural study to reveal more about the historical custodianship of Gaadhoo's nesting beach.

Internship Programme

As part of our commitment to provide training and job opportunities in sea turtle conservation for Maldivian youth, we opened up one new paid internship position and launched a comprehensive 9-month sea turtle conservation internship programme in 2023. We successfully trained seven interns through our programmes, with our first 9-month intern set to graduate in April 2024. Notably, two former interns joined the ORP team in 2023.

One of ORP's goals is to build local and national capacity for sea turtle conservation and rehabilitation in all our locations. Our internship programmes, only open to residents of our host country, offer great opportunities to gain hands-on experience in many aspects of sea turtle conservation.

Our first intern joined us in 2017 for a three-month stint at the Marine Turtle Rescue Centre. Here interns learn about sea turtle care and husbandry, sea turtle conservation and the running of a rescue centre. They also assist with educational outreach and, if lucky with their timing, with nest monitoring and hatching events. We have since trained 26 interns at the Rescue Centre and at our other locations, some of which have gone on to work full-time for ORP, other conservation NGOs, and even the government.

All ORP interns receive a stipend, as well as meals and accommodation for their duration of stay.

Sea Turtle Rescue & Rehabilitation

Led by Dr. Max Polyak, our Lead Veterinary Surgeon since January 2023, our veterinary practice has matured significantly in the last year. Thanks to the generous support of our donors we have been able to shift our focus towards a Conservation Medicine Model, moving away from traditional rescue and rehabilitation methods. This shift aligns with our role as a training centre and our commitment to providing the most advanced clinical modalities available as part of our mission to conserve protected and endangered sea turtles.

In June, we transitioned to a larger and more functional workspace with separate clinical and surgical areas, along with a combined office and laboratory area, doubling the previous clinic's size. This, along with the addition of cutting-edge equipment to our clinic, have enabled us to introduce novel therapies focusing on limb salvaging protocol to enhance patient care, significantly improving our treatment outcomes.

These therapies include Platelet Rich Plasma (PRP) for wound healing, Photobiomodulation Therapy (PBM), also known as cold laser therapy, for tissue healing and pain management, Aquapuncture for effective pain relief and aiding nerve damage improvement, and Targeted External Weight Therapy (TEWT) for buoyancy syndrome. Furthermore, our new Idexx Catalyst One, the only blood biochemistry machine validated for sea turtle blood and the first within the region, allows analysis of over 17 blood biochemistry parameters in our patients, aiding therapy refinement and improvement. These biochemical parameters are instrumental in developing our #SeaTurtleHealth database, the region's first comprehensive database of clinical indices of sea turtle health. This invaluable data will help provide a crucial baseline for what is considered normal in the sea turtle species found within the Indian Ocean and inform therapeutic and conservation approaches moving forward.

We thank Coco Collection for their continued support, facilitating the expansion of our facilities at the Rescue Centre on Coco Palm Dhuni Kolhu. This has enabled us to further develop our Clinical Research Programme that includes the Morris Animal Foundation grant for sea turtle microbiome research, the first blood transfusion-based study on olive ridley sea turtles, and an artificial intelligence platform to aid in microscopic clinical blood cell evaluation. We plan to accelerate our clinical research efforts in 2024 as part of our Conservation Medicine Programme.

In 2023, our patient influx deviated from the norm, with fewer arrivals during the 'entanglement season' (November - March) but a steady flow throughout the year. We treated a total of **37 turtle patients**, with **34 new** admissions, bringing the tally since our Rescue Centre's inception in 2017 to **230**. Among the newcomers, **44% were entanglement victims** (all olive ridleys), and an additional **41% were found floating**. As with every previous year, most of our patients were **olive ridley** turtles, but we also treated six **hawksbills** and four **green** turtles. We successfully **released 13 patients**, bringing our overall release rate to **57%**. Three of these, Shara, Muraka, and Hawwa (all olive ridleys), were tagged as part of our satellite tracking research **#ORPTrack**.

Currently, we have two patients who present a unique condition: Fida and Aisha are both single-side double-amputees. Traditionally, patients in such a condition would be considered candidates for humane euthanasia. However, we've recently been provided with videographic evidence from colleagues in India showcasing patients with similar conditions thriving two years post-release. This revelation has prompted us to reframe our clinical approach towards selected patients facing similar challenges. Together, they represent the first ever olive ridley single-side double amputee to undertake a thorough rehabilitation plan aiming for release. Their progress

emphasises the success of our combined therapeutic strategies and their own resilience in adapting to the challenges they face.

In late 2023, we reopened our refurbished North Malé Atoll Sea Turtle Rehabilitation Centre based at One&Only Reethi Rah. We expect to open two new rehabilitation facilities in 2024. The first one, Raa Atoll Sea Turtle Rehabilitation Centre, is located at JOALI BEING whereas the second one is located in Noonu Atoll. We hope that these newly introduced facilities will alleviate the patient burden at the Rescue Centre while also enabling a comprehensive rehabilitation journey for our long-term patients that require prolonged care.

We remain dedicated to fostering local expertise in sea turtle care and raising the standard of sea turtle medicine regionally. This is evident in our upcoming Veterinary Nursing Training Programme in collaboration with the College of Animal Welfare (UK). Additionally, our Visiting Veterinary Programme is evolving into a comprehensive Veterinary Training Programme, where we sponsor veterinary surgeons from the Indian Ocean region to train at our Rescue Centre. These initiatives provide rigorous clinical and didactic training while fostering collaboration and knowledge exchange between developed and developing nations.

Volunteer Programmes

Volunteers are essential in the everyday running of the Marine Turtle Rescue Centre. They assist with all aspects of sea turtle rescue and rehabilitation, including treating wounds, helping with routine medical exams, observing surgeries, diet preparation, feeding, tank and turtle cleaning. Some lucky volunteers even get to experience hatching events! We welcomed 61 volunteers from 12 countries to the Rescue Centre in 2023.

Visiting Veterinarian Program at the Marine Turtle Rescue Centre

Our Visiting Vet Programme continued to run at full capacity in 2023. This programme has three main aims: to give exotic animal veterinarians the opportunity to work with wild sea turtles and learn from us; for our resident veterinary team to learn new techniques from other experts and continue their professional training; and to provide training to veterinarians who work with sea turtles in locations where no sea turtle training is available. We welcomed nine visiting vets from four countries in the last year.

#ORP Track

#ORPTrack, or satellite tagging research project, follows rehabilitated olive ridley turtle patients on their return to the wild, aiming to pinpoint foraging areas for this species in the Northern Indian Ocean. Over the past year, we deployed tags on three of our patients: Shara, Muraka and Hawwa. Collectively, they have transmitted information for a combined 275 days so far. Each sea turtle has travelled more than 1,000 km, exhibiting typical diving behaviours with recorded maximum depths ranging from 275 to 300 metres, which is the maximum detection capability of the tags.

Released on July 1st, 2023, Shara averaged 1.12 km/hr, reaching a maximum speed of 7.22 km/hr likely by catching fast currents off Sri Lanka as she entered the Bay of Bengal. By year's end, Shara had travelled 4,950.6 km, primarily within the Bay of Bengal near Konaseema, Andhra Pradesh, in India.

Released on August 1st, 2023, Muraka averaged 1.65 km/hr with a top speed of 3.48 km/hr, travelling westward for 43 days before satellite transmissions ceased on September 13th, 2023.

Released on September 12th, 2023, Hawwa initially swam north towards Lakshadweep at a steady 1.07 km/h, covering 1,272.2 km in 49 days. However, her satellite data took a worrying turn in early November. Dives stopped, and she remained motionless for days in an area 85 km off the west coast of India. When movement suddenly resumed, it was abnormally fast, circling fishing grounds before making a beeline for a west Indian fishing harbour. Subsequent data reveals regular movement between the harbour and the same open-sea location. Fishing activity along the entire Indian coastline is abundant, so it is possible that Hawwa was caught in a fishing net. The tag remained on the fishing vessel explaining the recent tracklines.

At the end of 2023, Shara's tag remained active, allowing us to follow her journey for over 5,000 km. We are excited to continue this project and aim to conduct a preliminary analysis of the recorded dive behaviours in 2024.

Oman

ORP initiated its work in Oman in 2015. Since 2018, we've partnered with Six Senses Zighy Bay resort at the Musandam Peninsula, where we have established a field base. Our efforts in Oman are centred on protecting the sea turtle populations through in-water research, bycatch reduction, threat removal, educational initiatives, and advocating for the establishment of a rescue and rehabilitation centre.

Zighy Bay is a significant sea turtle foraging ground and we have documented a sizable resident green turtle population here. Our research identified 167 individual green turtles and nine hawksbills from 718 sightings between 2019-2020 and 2022-2023, with 56 greens added to the database in the last year. Most encounters occurred in Zighy Bay, however, we also explored Stingray Bay, Sanat Bay, Wonderwall, and Lima Rock, uncovering a substantial sea turtle presence in Wonderwall.

While nesting sea turtles are rare, 2023 brought an unexpected highlight: a sea turtle nest hatched on the resort's beach. Approximately 70 green turtle hatchlings emerged, an extraordinary event given that the Musandam Peninsula's rugged coastline makes for unsuitable nesting conditions.

The primary fishing method used by fishers in Zighy Bay is a technique called beach seine where they deploy large nets with small holes to catch herring, snappers, and trevallies. Unfortunately, this method can result in significant bycatch of non-target species, such as sea turtles and stingrays. In partnership with Six Senses Zighy Bay, we work closely with the local fishermen to reduce the effects of bycatch. The fishers permit us to inspect their nets for bycatch and eagerly help us release any non-target species caught. Larger species inadvertently caught are able to swim inside the pool created by the net and avoid entanglement, so we can usually release them unharmed.

During an inspection in June, our sea turtle biologist, Davide Pansare, found four green turtles trapped in a net. Remarkably, one turtle, 'Amir' (GM004), was already registered in our database - first identified in 2019. Then, in October, another familiar face, 'Squirt' (GM056, identified in 2022), was among two green turtles and two stingrays accidentally caught. Thankfully, all the animals were unharmed and promptly released. These re-sightings highlight the importance of monitoring sea turtle populations and maintaining close collaboration with fishermen to ensure bycatch is released safely.

We also collaborate with the local authorities in Oman. Two productive meetings with the Environmental Authority - Oman (EA) resulted in a joint ocean clean-up near Haffah, a fishing village near Zighy Bay in May, and a sea turtle

training session for EA staff in June. Together, we removed approximately one ton of ghost gear and debris from the sea.

Given the extensive fishing activities in this region, incidents of boat strikes, bycatch, and entanglements are unfortunately common, often resulting in fatal outcomes, as we have sadly observed multiple times. Situated near the heavily trafficked Strait of Hormuz, a vital passage for oil ships, the area faces continual risks of oil spills and tar leaks, as witnessed most recently in October. The lack of nearby veterinary facilities or a dedicated rescue centre in Oman hampers our ability to provide medical care to injured and sick sea turtles, as well as to determine the causes of death for deceased animals. In our ongoing discussions with the EA, we consistently highlight these threats and stress the urgency of establishing a rescue and rehabilitation centre in Oman, conducting more ghost gear clean-ups, and providing comprehensive marine biology training for both authorities and the local community.

The year ended on a positive note with a visit to the all-girls' school in Dibba, the nearest town to Ziggy Bay. Davide gave a comprehensive lesson about all things sea turtles to 25 young students, who showed a remarkable level of interest in protecting the marine environment in the Musandam region. It's inspiring to see the potential impact of this generation!

Going forward, we will persist in our push for a sea turtle rescue centre in Oman, crucial for promptly aiding injured or sick turtles. We will also bolster educational outreach, engaging communities, schools, and authorities. Our collaboration with local fishermen will focus on sustainable

practices, bycatch monitoring, and training programmes to empower them in conservation efforts.

Oman Sea Turtle Photo-ID Research Results

This year we identified 56 new individuals, all green turtles. This brings the total number of sightings since the project began to 175 individuals identified across 13 sites. 105 individual green turtles have been identified and 9 individual hawksbills.

Pakistan

ORP has been working in Pakistan since 2015. Until this year, our main activities have focused on ghost gear mitigation and repurposing, and education and outreach. In 2023, however, we reached a huge milestone by adding a sea turtle biologist to our team and initiating sea turtle population research to our conservation efforts here.

In September, we launched continuous nest monitoring on Pakistan's primary nesting beaches, spanning approximately nine kilometres along Hawke's Bay and Sandspit. These beaches, near Kakapir village, have a rich historical reputation as a sea turtle nesting zone. In the past, green turtles and occasionally olive ridleys have been recorded nesting here year-round with a peak in July to December. More recent anecdotal evidence hints at a shift in peak nesting activity towards October to February.

So far, our surveys have identified over 200 green sea turtle tracks, indicating high nesting activity. We also observed the hatching of four out of 119 suspected nests and noted 51 sightings of green turtles nesting. The nests are currently left unmarked to protect them from unwanted attention as these beaches are popular with tourists and visitors.

Our nest monitoring aims to provide sound scientific data on contemporary nesting numbers, species, and nesting

season timing. This can be compared to past records to allow for informed decisions on sea turtle population status and conservation measures. We are also working on a collaboration with local and governmental stakeholders to establish standardised monitoring practices and eco-friendly management on these beaches. In addition, we have been conducting scoping dives of known sea turtle feeding and foraging grounds and will begin in-water Photo-ID surveys next year.

Ghost gear remains a significant threat to sea turtles in the Karachi region, both in the sea and on the beaches. In 2023, we successfully removed 560 kg of ghost gear from various areas, including popular dive sites like Charna Island, Chakowl, Dushiram, and Tankiram. Since the project's inception, we've cleared over six tons of ghost gear from the region's beaches and waters. The recovered ghost gear serves as the cornerstone of our circular economy initiative in Abdul Rehman Goth, a fishing village in Keamari Town, Karachi. After cleaning and preparation, local artisans transform the ghost gear into pet leashes and ghost net bracelets. These products are sold locally in Pakistan and online via ORP's website, with all proceeds benefiting the community. In Pakistan, the ghost leashes are available at Pets Mania pet stores and Healthy Tails pet hospital, as well as at pop-up markets and festivals, generating sales of 222,000 PKR in 2023. Additionally, the US Consulate in Pakistan purchased 160 bracelets for their 4th of July Independence Day celebration, raising over 160,000 PKR for the fishers and artisans involved in their creation.

The US Consulate also funded a documentary film series produced by SOC Films, which premiered in the summer of 2023. Among the films, "Hamara rishta samandar say." ("Our bond with the sea") highlights the remarkable efforts of ORP Pakistan's Usman Iqbal (Programme Manager) and Asif Baloch (Field Coordinator), showcasing ORP Pakistan's impactful work in ghost gear mitigation and marine environment protection.

We are not only expanding our online presence but also actively engaging with schools, universities, and local communities. We host interactive educational and sales booths at various local events, including carnivals, markets, and dog meet-ups, with attendance exceeding thousands of people per event. Our sea turtle Photo-ID and ghost gear removal games draw crowds and provide an excellent opportunity to connect with the public.

In the coming year, we're teaming up with the Lasbela University of Agriculture, Water and Marine Sciences, Uthal, to survey beaches in Baluchistan for sea turtle nesting. These remote and pristine beaches hold potential nesting grounds that we're eager to explore. Additionally, we will be organising workshops for marine science students to train them in field surveys and data collection. By involving them in our efforts, we aim to identify nesting sites and gather scientific data more efficiently. We are also planning to investigate mudflats and sandbars in the Indus Delta for potential sea turtle nesting activities.

Seychelles

Our Seychelles project commenced two years ago in partnership with Six Senses Zil Pasyon. Located in the western Indian Ocean, the Seychelles Archipelago comprises 115 islands, categorised into the granitic inner islands and the coralline outer islands. Our conservation efforts focus on Félicité, an inner island near the renowned Ile Coco Marine Park. This area hosts a thriving population of critically endangered hawksbill turtles, known for their unusual daytime nesting behaviour. Our main objectives include establishing a Photo-ID database for Seychelles, conducting nesting research on Félicité, and implementing education and outreach initiatives.

Since then, our work here has allowed us to contribute to the understanding of population connectivity within the Seychelles and build a detailed population database for sea turtles in the waters surrounding Félicité island. In 2023,

we added 238 sea turtle sightings to our Seychelles database. Three of these sightings were green turtles and the rest were hawksbills. In total, we identified 37 new individuals (all hawksbills) out of which 13% were adult females. This brings the total number of identified sea turtles in Seychelles to 214 since the project began.

We also documented 43 nests (41 hawksbill and two green turtle nests), resulting in a total of 1,711 hatchlings. To assess hatching success, we excavate all nests two days after hatching. This year, our excavations revealed an interesting finding: a rare hawksbill twin embryo that unfortunately perished before hatching. Twinning in sea turtles is extremely rare, occurring in only 0.1% of embryos. Although both hatchlings displayed normal development and were similar in size, they did not survive due to insufficient yolk nutrients to sustain two individuals. The reasons behind twin embryos in sea turtles remain unclear, but some studies suggest that low incubation temperatures and genetic factors may contribute to this phenomenon.

Furthermore, we documented a case of leucism in a deceased hawksbill turtle embryo. Leucism is a congenital disorder characterised by reduced pigmentation, distinct from albinism, which entails a complete absence of melanin. While this particular embryo did not survive to full development, sea turtles with leucism can potentially survive in the wild. All nest excavations are conducted under the research permit issued by the Seychelles Bureau of Standards.

The primary nesting beach on Félicité Island faces significant erosion during the Northwest monsoon season, coinciding with the hawksbill nesting period. Each year, numerous nests require relocation to ensure their safety. This year, eight nests were successfully relocated, resulting in the rescue of 283 hatchlings out of 798 eggs. Although relocated nests typically have lower hatching success rates, the observed rate of 35.5% is relatively low. Two relocated nests were entirely predated by crabs, resulting in zero hatchlings. Despite these challenges and the lower success rate, relocation efforts were crucial. Without relocation, all nests would have been lost to high tides or erosion, resulting in no hatchlings surviving. Given the circumstances, we are satisfied with the positive impact of the relocation process.

To better understand tidal patterns, and anticipate and document the need for nest relocations, we initiated a new research project this year, using drone footage for beach profile monitoring. Our gratitude extends to our partner resort Six Senses Zil Pasyon and Gitta Raulin, a resort guest, for their generous support of this initiative.

A paper detailing our findings from the 2022-2023 nesting season and addressing the challenges faced on the island, especially regarding the restricted nesting space for sea turtles, has been submitted to the Marine Turtle Newsletter and is expected to be published soon!

This year, we expanded our education and outreach initiatives. To mark World Sea Turtle Day in June, we hosted an event at the La Digue school to raise awareness about sea turtle conservation. Moreover, our dedication to educating resort staff and guests remained strong, with 504 guests actively engaging in sea turtle conservation activities. These activities included presentations, turtle snorkelling trips, and observing nesting and hatching events.

Going forward, we aim to enhance our collaborations with local stakeholders and expand our conservation efforts to the Outer Islands of the Seychelles. Additionally, we plan to extend our survey activities to include Takamaka Beach, located about 2 km from our primary nesting site at Grand Anse..

Seychelles Sea Turtle Photo-ID Research Results

This year we identified 37 new individuals, all hawksbills, over 43 sites. This brings the total number of individuals identified since the project began to 214. Total individual green turtles identified since the project began is 9 and total hawksbills is 205.

Turtle Nesting

Data is only recorded on Félicité Island. In total we recorded 43 new nests during the reporting period. We counted 1,881 hatchings.

Publications

In 2023 ORP published 20 scientific publications (peer reviewed articles, theses and official reports) as well as 17 technical reports and six conference presentations. Two particularly impactful scientific manuscripts highlighted the value of Photo-ID in understanding sea turtle populations. The first, published in April 2023 in PLoS One, analysed Photo-ID data collected in the Maldives from 2016 to 2019. This study estimates abundance and population trends for sea turtles at selected sites. The applied models suggested stable or increasing populations of hawksbill and green turtles on many reefs in the short term. This research demonstrates the cost effectiveness of Photo-ID for evaluating population which acknowledges potential biases inherent in community science data.

The September 2023 publication in Frontiers in Marine Science explored the use of Photo-ID for documenting and monitoring fibropapillomatosis (FP), a tumour disease, in the green turtle population in southern Kenya. While FP is widespread in sea turtles globally, its cause remains unclear. Through Photo-ID research, we documented tumours in 75 individuals and tracked their progression in 47 affected sea turtles.

We are also proud to present the Handbook of Sea Turtles, a pioneering bilingual publication (English and Dhivehi) co-written with the Environmental Protection Agency Maldives. Beautifully illustrated by Hawwa Umna Afeef and Rihaal Adil, this handbook aims to provide accessible sea turtle knowledge for distribution to schools and educational institutions across the Maldives. The publication was made possible with the support of the British High Commission in the Maldives.

Technical Reports

- Gervolino J, Afeef I, Köhnk S and Stelfox M 2023. **Laamu Yearly Report 2002**. Olive Ridley Project, p. 1-45.
- Gervolino J, Afeef I, Köhnk S and Stelfox M 2023. **Nesting in Laamu**. Technical Report 2022. Olive Ridley Project, p. 1-28
- Kalisch L, Köhnk S and Stelfox M 2023. **Nesting on Félicité**. Technical Report 2023. Olive Ridley Project, p. 1-29
- **Olive Ridley Project Annual Review 2022**. Technical Report 2023. Olive Ridley Project, p 1-65
- Afeef I, Rasheed RA, Riyaz EM, Leevan A, Köhnk S, Polyak M, Hallum JC & Singh A. **Handbook of Sea Turtles**. Olive Ridley Project and Environmental Protection Agency, Malé, Maldives, p. 1-36

Peer-Reviewed Articles and Theses

- Hancock J, Choma J, Mainye L, Wambi P, Stelfox M, Polyak MMR, Wambua SM and Köhnk S 2023. [Using Photo-ID to document and monitor the prevalence of Fibropapilloma tumours in a foraging aggregation of green turtles](#). Frontiers in Marine Science 10: 1217683
- Hudgins JA, Hudgins EG, Köhnk S, Riyad EM and Stelfox M 2023. [A brighter future? Stable and growing sea turtle populations in the Republic of Maldives](#). PLoS One 18(4): e0283973.
- Feakes A 2023. **Coming out of their shells: Repeatable social preferences in Green sea turtles, *Chelonia mydas***. Masters Thesis, Imperial College London, UK.

Sea Turtle Population Research

Photographic identification (Photo-ID) is a non-invasive technique used to identify individual animals in a population and track them over time from natural marks on the body. For sea turtles, it relies on capturing photographs of the unique patterns of scales on the animal's face.

Photo-ID can be used as a non-invasive alternative to tagging, and data may be analysed through Capture-Mark-Recapture (CMR) methods. This technique allows researchers to conduct longitudinal studies of individuals, yielding information about home range, survival rate, migration patterns, life cycle and includes groups that are less studied, such as juveniles and males.

We collect sighting data for both nesting and foraging green (*Chelonia mydas*) and hawksbill (*Eretmochelys imbricata*) sea turtles in Kenya, Maldives, Oman and Seychelles. Olive ridley (*Lepidochelys olivacea*), loggerhead (*Caretta caretta*), and leatherback (*Dermochelys coriacea*) sea turtles are present in these countries, but less regularly sighted.

ORP began collecting new and historical photographs of foraging and nesting turtles from the Maldives in 2013. We have a ten-year data set for some atolls. We started collecting Photo-ID data from Kenya in 2018 and Oman in 2019. Unfortunately, the project in Oman was put on hold in 2020 due to the Covid-19 pandemic, but we successfully reinstated it in 2022. ORP also started a new chapter in the Seychelles at the end of 2021, establishing our Photo-ID database in the country.

ORP aims to help fill the gaps in scientific knowledge by providing detailed information on abundance, distribution, population growth rate, apparent survival, and nesting frequency of hawksbill and green sea turtles. We continue to use the Internet of Turtles (IoT) platform to analyse all turtle sightings from Maldives, Kenya, Oman, and Seychelles. The IoT platform combines data analytics with individual animal tracking and uses computer vision to compare new IDs to the existing database.

In the Maldives we have identified 6,373 individual turtles across 678 sites. This year we have had 4,467 sightings with 598 new sea turtle IDs. Thanks go to all of our citizen science contributors for their valuable support, extending the scope of our data collection into areas where no ORP staff were present!

In Kenya, there were over 3,973 sightings of 714 identified turtles, including 84 new individuals in 2023 across 25 sites. In Oman in 2023 we have identified 56 new individuals, across 13 different sites, bringing the total number of

encounters to 332 and identified turtles to 175. In the Seychelles, we identified 37 new turtles over 43 sites, bringing the total number of individuals to 214.

Global Education & Outreach

Education is an integral part of our multifaceted approach to protecting sea turtles and their habitats. We believe that education is a powerful tool for fostering curiosity, increasing awareness, engaging people - particularly young people - and encouraging action at the local, national, and global levels. Our educational initiatives are tailored to meet the needs of all our audiences, both at our field sites and across our digital platforms. We conduct various in-person educational and interactive workshops, talks, and festivals on a broad range of topics, from sea turtle biology to conservation. Additionally, we host and attend webinars and have a vast repository of sea turtle educational resources on our website - including free courses on our website.

Digital Reach - Global Community

A major part of our strategy to increase awareness about the plight of sea turtles and the deadly consequences of ghost gear is a digital and social media presence. We continue to grow our web and social media channels to keep the public engaged with new content and regular updates. Our online learning platform with free courses and resources about all things sea turtle and sea turtle conservation remains popular. Our sea turtle protocols have been translated into multiple languages, and our Sea Turtle FAQ pages are extremely popular, with thousands of visitors every month.

In 2023 our digital presence continued to grow across Instagram, Facebook, Twitter and Youtube. We also expanded our reach on Tik-Tok and LinkedIn. We place a strong belief in education and knowledge-sharing, and are grateful to be able to reach out to our ever-growing global audience on social media. This interconnectedness has helped us spread the message of sea turtle conservation far and wide, and we look forward to forging new connections in 2024, when we plan to launch a new podcast series focused in sea turtle science and conservation.

Conferences And Talks

At ORP, we actively organise and engage in conferences and webinars to disseminate our research findings to the scientific and conservation communities, as well as to learn from fellow professionals. Here's a look at some of the events we participated in throughout 2023:

- In March 2023, four members of the ORP Team participated in the 41st International Sea Turtle Symposium (ISTS41) held in Cartagena, Colombia. The event provided an excellent platform for us to exhibit our organisation's initiatives on sea turtle rescue and treatment, nesting activity, and research in the Maldives, as well as Photo-ID and health monitoring in Kenya. During the symposium, our team engaged in many discussions with experts from across the world and addressed several enquiries about the technical aspects of Photo-ID and its potential applications.
- Also in March, we hosted a talk titled "Satellites & Surgeons" at the Maldives National University, featuring ORP's Lead Veterinary Surgeon, Dr. Max Polyak, and Spatial Ecology Researcher Rushan bin Abul Rahman. Dr Max shared fascinating updates from the field of sea turtle medicine, including recent breakthroughs that could potentially be applied to sea turtle rehabilitation in the Maldives. Rushan, a PhD candidate, discussed the challenges and benefits of satellite tagging sea turtles and provided updates on the journeys of ORP's

first two satellite-tagged turtles, Autumn and Pickle. While satellite tagging has been done in the Maldives before, it remains a relatively new concept, which sparked a great deal of interest and prompted some insightful questions from the audience. The event had an amazing turnout with over 70 participants keen to learn about opportunities for sea turtle research and medicine in the country.

- In May, to celebrate World Turtle Day, we hosted an online Nesting Workshop for local councils, NGOs, resort operators, and marine biologists in the Maldives. The workshop focused on best practices for protecting sea turtle nests and managing nesting and hatching interactions across the country. We also discussed how attendees could collect vital nesting data under the required research permits, contributing to a deeper understanding of sea turtle nesting patterns in the Maldives. We're pleased to report that several new data contributors signed up following the webinar. Over 50 participants attended live, with an additional 1,200 tuning in via livestream!
- In June, we celebrated World Sea Turtle Day with a webinar titled "Community in Sea Turtle Conservation: Perspectives from the Global South," featuring Dr. Kartik Shanker (India), Kahindi Changwa Galo (Kenya), Dr. AA Yaptinchay (Philippines), and M. Muralidharan (India), who shared their experiences with locally empowered, participatory sea turtle conservation. Dr. Shanker delivered the keynote speech, discussing conservation imperialism, the history of conservation, parachute science, and the interconnectedness of humans and nature. Mr. Kahindi Changwa Galo presented on empowering fishermen to reduce sea turtle bycatch in Watamu, while Dr. Yaptinchay highlighted community-led conservation initiatives in the Philippines. Muralidharan M. shared insights on the varied meanings of marine and sea turtle conservation. The webinar sparked engaging discussions and questions from participants, with 30 joining live and an additional 781 watching the livestream on Facebook.
- Later in June, we hosted another webinar called "The World of Sea Turtle Medicine" with Lead Veterinary Surgeon, Dr Max Polyak and Veterinary Programme Officer, Dr Claire Petros, taking the audience through an introductory journey into the world of sea turtle medicine.
- In Kenya, we had the honour of inspiring young minds at the Oshwal Academy Model UN conference in Mombasa in November. Over 250 students from various schools came together to discuss global issues under the theme "Many Worlds, One Planet." ORP's Project Coordinator in Kenya, Leah Mainye, delivered an engaging talk on sea turtle conservation, highlighting how we bridge divides to achieve effective conservation efforts. The students' thoughtful questions demonstrated their keen interest and desire to learn more about sea turtles and the environment.
- At the same time, ORP's Programme Manager in Kenya, Dr. Joana Hancock, gave a talk to members of the East African Wildlife Society at the esteemed Muthaiga Country Club in Nairobi. Her presentation, "Sea Turtles: A Symbol of Our Shared Homes," shed light on the threats facing these remarkable creatures and highlighted our efforts to protect them. Around 50 guests attended, gaining valuable insights into sea turtle conservation.
- We also participated in Blue Ventures' "Let's Chat" discussion in Mombasa, where Project Coordinator Leah Mainye, along with other emerging marine conservation leaders, engaged in discussions on networking, collaboration, and career development. This forum promotes community-driven strategies, mentorship, and the exchange of innovative ideas for safeguarding our oceans.
- Our impact extended globally through a partnership with the Conservation Education Society, where we

hosted 20 marine workshops for over 300 students from the UAE, USA, and UK throughout the year. Led by ORP's Community Education & Outreach Officer in Kenya, Juma Gwerenya, these interactive sessions delved into topics such as plastic pollution, sea turtle conservation, and the vital role of coastal habitats.

- Meanwhile, Project Coordinator Leah delivered a virtual plenary talk at the Tropical Marine Biology Conference, hosted by Essex University. Her presentation reached hundreds of Master's students, highlighting our work and inspiring the next generation of marine biologists and conservationists in the UK.

Collaborations

Kenya

Bahari Hai

Bahari Hai aim to help create and support a community conscious of the marine environment and actively involved in protecting & establishing healthy ecosystems. Our partnership aims to improve sea turtle research and conservation along the Kenyan coastline.

Conservation Education Society (CES)

The Conservation Education Society believes that, through education, empowerment and collaboration, everyone, big or small, can play a role in preserving our natural world. CES was officially established in March 2019 and operates out of the Marine Education Centre in Diani, Kenya. CES regularly organises educational events which ORP participates in and contributes to, as well as provides administrative and logistical support.

Diani Turtle Watch (DTW)

DTW, a turtle conservation monitoring group, surveys the beach to spot any turtle nesting activities, mortality and turtle stranding cases throughout the day. DTW collaborates with ORP by sharing photos of by-caught turtles and stranded turtles for ID purposes, enriching our database and assisting with information about the threats that affect the turtles feeding off Diani's reef.

Diving The Crab (DTC)

Widely recognised as the best dive centre in both Diani and in Kenya, Diving the Crab (DTC) is one of the main sponsors of the Marine Education Centre. DTC is also very supportive of marine biodiversity related activities in Diani, including ORP's in-water work. Since ORP first arrived in Kenya, DTC has been instrumental in providing logistical support allowing ORP to conduct in-water surveys and explore Diani's reefs, as well as actively participating in guest education, in-water surveys, ghost nest reporting and removal, and staff training.

Kenyatta University

This collaboration focuses on conducting studies on the use of Diani-Chale National Marine Reserve (DCNMR) seagrass lagoon by sea turtles, using a combination of monitoring techniques. In addition we explore the impact of plastic pollution on DCNMR and its potential threat to sea turtles.

Msambweni Beach House

Msambweni Beach House and ORP are working together to advance the research of sea turtles and their

environment in the country and provide educational outreach to international guests. ORP guides tourists to collect citizen scientist data to help understand sea turtle distribution and abundance and provides educational presentations to local staff and guests on sea turtle conservation and their challenges in general.

Pwani University

The partnership between ORP and Pwani University encompasses several key initiatives: conducting population assessments through photo-ID and genetic markers, investigating population connectivity along Kenya's coast and the western Indian Ocean, and analysing the health of juvenile green turtles, particularly the incidence of fibropapillomatosis and its correlation with environmental stressors. Additionally, the collaboration emphasises higher education by offering formal training for undergraduate, graduate, and postgraduate students, alongside technical supervision in sea turtle research. It also focuses on outreach to build local community capacity in conservation efforts and mobilising resources for research and student support.

Shimoni Turtle Watch (STW)

The collaboration between Shimoni Turtle Watch and ORP focuses on the implementation of activities and data sharing to study the sea turtle populations within Kisite-Mpunguti National Park and Marine Reserve through photo identification methods. This joint project leverages the strengths of both organisations, with ORP providing strategic oversight and expertise, while STW takes the lead on field data collection and assistance. STW will organise and conduct field trips to gather critical data on sea turtle behaviour and populations, utilising photo ID techniques to monitor individual turtles over time. The collaboration emphasises effective communication and data sharing between the two organisations, ensuring that insights gained from the field are systematically analysed and utilised for conservation efforts. Together, STW and ORP aim to enhance the understanding and protection of the sea turtle populations in this vital marine ecosystem.

Maldives

AgroNational Corporation Pvt (AgroNat)

In 2023, ORP and the Environmental Protection Agency signed a Memorandum of Understanding with Laamu Atoll Council, L. Fonadhoo Council, and AgroNat (AgroNational Corporation) outlining the plans to protect the sea turtle nesting beach on L. Gaadhoo, Maldives. The first year of the Gaadhoo Protection Program saw significant strides for the protection of the main green turtle nesting beach on L. Gaadhoo - *Velaa Heylhi* in the Maldives

Amilla Maldives

Our new partnership with Amilla Maldives Resort in Baa Atoll, Maldives aims to provide a central hub for data collection in Baa Atoll along with community engagement. Moreover ORP plans to identify local stakeholders in Baa to extend its data collection activities on sea turtle populations in the region. Finally ORP plans to work alongside identified local stakeholders to minimise threats to sea turtles such as poaching in the region.

Coco Collection

Our long standing partnership with Coco Collection Resorts continues. Our Marine Turtle Rescue Centre is located on Coco Dhuni Kolhu in Baa Atoll. We would like to thank Coco Collection for all their support and for hosting the Marine Turtle Rescue Centre, our staff, volunteers and interns.

Environmental Protection Agency Maldives (EPA)

In 2023, ORP and EPA signed into an Memorandum of Understanding with Laamu Atoll Council, L. Fonadhoo Council, and AgroNat outlining the plans to protect the sea turtle nesting beach on L. Gaadhoo, Maldives. The first year of the Gaadhoo Protection Program saw significant strides for the protection of the main green turtle nesting beach on L. Gaadhoo - *Velaa Heylhi* in the Maldives.

Fairmont Maldives Sirru Fen Fushi, Shaviyani Atoll

In April 2022 we embarked on a new partnership with Fairmont Maldives Sirru Fen Fushi Resort in Shaviyani Atoll, Maldives. This partnership aims to provide a central hub for data collection in the region along with community engagement. Moreover ORP plans to identify local stakeholders in Shaviyani to extend its data collection activities on sea turtle populations in the region.

Fonadhoo Council, Laamu

In 2023, ORP and EPA signed into an MoU with Laamu Atoll Council, L. Fonadhoo Council, and AgroNat outlining the plans to protect the sea turtle nesting beach on L. Gaadhoo, Maldives. The first year of the Gaadhoo Protection Program saw significant strides for the protection of the main green turtle nesting beach on L. Gaadhoo - *Velaa Heylhi* in the Maldives.

Hadhdhunmathi (Laamu) Council

The primary focus of the project is to protect nesting sea turtles and their eggs, while collecting consistent data on nesting and poaching from the southwestern beach on L. Gaadhoo, Maldives.

International Pole and line Foundation (IPNLF)

International Pole and Line Foundation - Maldives, registered NGO in Maldives in October 2020 (CR/62/2020), is the local chapter of International Pole and Line Foundation founded in 2012, with the aim of promoting sustainable management of the world's responsible pole and line, handline and troll (collectively known as 'one- by-one' tuna fisheries while also recognizing the importance of safeguarding the livelihoods they support. IPNLF and ORP partnered together alongside N.Lhohi Council AND zero Waste Maldives to establish a makerspace recycling facility on Lhohi Island complemented by organising a waste upcycling competition and creating a circular economy project focused on ghost gear recycling. Additionally, there will be training and capacity building for upcycling, along with offering basic jewellery-making training.

Joali Being, Raa Atoll

In 2022, we partnered with Joali Being Resort in Raa Atoll. This partnership has allowed ORP to have a presence in the atoll through education and outreach initiatives in the local community as well as collecting data on sea turtles

residing and nesting here. In addition, we are opening a second rehabilitation facility here in 2024 to expand our capacity to care for injured and sick sea turtles rescued in the Maldives.

Maldives Underwater Initiative (MUI)

MUI (Maldives Underwater Initiative) is a marine conservation initiative from Six Senses Laamu, Maldives, which unites the resort and its three NGO partners under one umbrella, with the aim to consolidate shared research, science communication, community education and outreach goals. The NGO's are Olive Ridley Project, Manta Trust and Blue Marine Foundation.

Ministry of Climate Change, Environment and Energy (MoECCT)

WAMCO, in collaboration with MoECCT, are working with the ORP to oversee sea turtle nesting on the beaches of R. Vandhoo, Maldives and to protect sea turtles and their eggs on the island. The staff at MoECCT and WAMCO will receive training and co-supervision from ORP. Key responsibilities include conducting training and awareness sessions for WAMCO staff about sea turtles, as well as reporting any illegal take incidents to the Environmental Protection Agency of Maldives (EPA). The overall goal of the project is to enhance monitoring efforts and gather comprehensive data on nesting patterns at R. Vandhoo, allowing for comparisons with historical records to better understand the current situation on the island.

Ocean & Reefs (formerly Marine Life Protectors)

Continues to financially support ORP for rescue and rehabilitation efforts in the Maldives and along with our education and outreach efforts in Kenya.

Olive Ridley Project Maldives

In 2023 Olive Ridley Project Maldives was established as a separate NGO in the Maldives. Whilst they share our objectives and we work closely together they are independently managed under Maldivian law. We made our first grant to Olive Ridley Project Maldives in 2023.

One&Only Reethi Rah, North Malé Atoll

Our partnership with One&Only Reethi Rah focuses on advancing research of sea turtles in North Malé Atoll. In addition, we opened a Sea Turtle Rehabilitation Centre here in 2019 for turtle patients in need of long-term rehabilitation without veterinary care. This frees up tank space at the Marine Turtle Rescue Centre to allow admittance of more injured sea turtles that require urgent veterinary attention. Additionally, neighbouring resorts in a resort-dense atoll have a local point to send injured sea turtles.

Prodivers & Kuredu Island Resort & Spa, Lhaviyani Atoll

We continued our partnership with Prodivers, a German dive centre operator based on Kuredu Island Resort & Spa in Maldives, to work together to advance the research of sea turtles in Lhaviyani Atoll and provide educational outreach to international guests and Maldivian nationals. We would like to thank Prodivers for their support.

Secretariat of N.Lhohi Council

Secretariat of N. Lhohi council is an island institution established under the Decentralised Act of Maldives to rule, govern and serve the citizens of South Noonu Lhohi. N.Lhohi Council and ORP partnered together alongside Zero Waste Maldives and International Pole And Line Foundation to establish a makerspace recycling facility on Lhohi Island complemented by organising a waste upcycling competition and creating a circular economy project focused on ghost gear recycling. Additionally, there will be training and capacity building for upcycling, along with offering basic jewellery-making training.

Six Senses Laamu, Laamu Atoll

We continue our partnership with Six Senses Laamu, a resort in Laamu Atoll to work together to advance the research of sea turtles in Laamu and provide educational outreach to international guests and Maldivian nationals. Here we work closely with two other not-for-profit organisations and resort staff under the umbrella Maldives Underwater Initiative (MUI), with the ultimate goal of creating a network of locally managed marine protected areas, in consultation with the community. We would like to thank Six Senses Laamu for their support.

Six Senses Kanuhura, Lhaviyani Atoll

This partnership, established in 2023, helps continue collecting long term data sets of sea turtle population and habitat use in Lhaviyani Atoll, along with education and outreach efforts amongst the local community and resort stakeholders. The long term goal of this partnership is to foster collaboration between local NGOs, ORP and commercial partners.

Soneva Jani, Noonu Atoll

Having been long-time data contributors to the ORP, we officially went into partnership in 2021. This partnership aims to expand rehabilitation efforts in the country by providing additional rehabilitation facilities in Noonu Atoll. In addition, our team will collect data on sea turtle populations, sea turtle health, and nesting in the region.

WAMCO (Waste Management Corporation Limited)

WAMCO, in collaboration with MoECCT, are working with the ORP to oversee sea turtle nesting on the beaches of R. Vandhoo, Maldives and to protect sea turtles and their eggs on the island. The staff at MoECCT and WAMCO will receive training and co-supervision from ORP. Key responsibilities include conducting training and awareness sessions for WAMCO staff about sea turtles, as well as reporting any illegal take incidents to the Environmental Protection Agency of Maldives (EPA). The overall goal of the project is to enhance monitoring efforts and gather comprehensive data on nesting patterns at R. Vandhoo, allowing for comparisons with historical records to better understand the current situation on the island.

Zero Waste Maldives

Zero Waste Maldives (ZWM) (CR/143/2018) is a registered NGO working in the Maldives on waste reduction, circular economy and climate change issues. The organisation works on changing the perception of waste as something to be discarded to something of value through circular economy and waste-to-wealth initiatives. Zero Waste Maldives and ORP partnered together alongside N.Lhohi Council and IPNLF to establish a makerspace recycling facility on Lhohi Island complemented by organising a waste upcycling competition and creating a circular

economy project focused on ghost gear recycling. Additionally, there will be training and capacity building for upcycling, along with offering basic jewellery-making training.

Oman

Six Senses Zighy Bay

The aim of this partnership, established in 2018, is to use non-invasive research techniques to better understand sea turtle population health in the region. Additionally, we work with local fishers to reduce the impact of bycatch on sea turtles and conduct educational outreach in the Musandam region. We hope to work with existing sea turtle conservation groups to assist with ongoing research and conservation in the country.

Seychelles

Six Senses Zil Pasyon

Extending our relationship with Six Senses, we started working in the Seychelles in late 2021. The aim of this partnership is to use non-invasive research techniques to better understand sea turtle population health in the region. Additionally, we hope to work with existing sea turtle conservation groups to assist with ongoing research and conservation in the country.

World

International Sea Turtle Symposium (ISTS)

We regularly attend international symposiums including the ISTS. We also co-organised the sea turtle photo-ID workshop to develop standard protocols and new methods of analyses.

NGO Tuna Forum

The NGO Tuna Forum brings together NGOs and other individuals and organisations that work comprehensively on global tuna sustainability issues. ORP currently sits on three working groups: Bycatch Mitigation, Data and Transparency and Well-Managed FAD Guidance. The aim of this involvement is to ensure ghost gear and ghost fishing are brought into the conversation of global tuna fisheries at the policy level. We hope our experience and expertise will help guide stakeholders to make informed decisions on the issue and ensure it remains firmly on the agenda.

Ocean Care

OceanCare has been raising its voice on behalf of marine life since 1989. The international marine conservation organisation, based in Switzerland, holds Special Consultative Status with UN ECOSOC and contributes to Agenda 2030 and the achievement of the Sustainable Development Goals. ORP and Ocean Care continue their long standing partnership to help rescue and rehabilitate injured and sick sea turtles in the Maldives.

Satlink

Satlink, a Spanish company focused on the development of technological solutions that foster the sustainability of the fishing industry and ocean resource protection, has partnered with ORP and the International Pole And Line Foundation (IPNLF) to establish a programme for the removal and reuse of abandoned, lost, or discarded fishing nets and other fishing gear (known as ALDFG) in Noonu Atoll. This project began in 2022 and builds on lessons learnt

from previous pilot projects in Gemanafushi. If successful, we hope to scale this project nationwide to address the ALDFG issue in the country.

Sea Turtle Rescue Alliance (STRA)

STRA, registered Charitable Incorporated Organisation #1197327 in England & Wales, is a global network for sea turtle rescue and rehabilitation centres to share clinical knowledge and data to enhance medical practices at facilities worldwide, supporting the global conservation effort for these endangered species. ORP's Marine Turtle Rescue Centre was the first rescue facility to pilot ProVet Cloud, a patient management software adapted specifically for sea turtles.

University of Derby

The University of Derby in the UK is collaborating with the ORP and the Environmental Protection Agency (EPA) to enhance our understanding of the genetic makeup of sea turtles in the Maldives. This partnership aims to conduct comprehensive genetic studies that will provide valuable insights into the population structure, diversity, and health of sea turtle species in the region. By analysing genetic data, the partnership hopes to identify distinct populations, assess their resilience to environmental changes, and inform conservation strategies.

Financial Review

The Olive Ridley Project (ORP) experienced a dynamic financial year in 2023, marked by substantial growth in both income and expenditure, driven by the continuous improvement of our fundraising efforts and the post-Covid resumption of our charitable programmes. This section provides a summary of our financial performance, highlighting the key elements that shaped our financial landscape over the reporting year.

Income

In 2023, ORP achieved a total income of £694,038, representing a significant increase from the previous year's £559,797. This growth was driven primarily by an increase in individual donations, which rose to £320,355 from £197,569 in 2022. The breakdown of income sources is as follows:

Donations, Grants, and Legacies: £525,858, with unrestricted funds contributing £268,584 and restricted funds adding £257,274.

Charitable Activities: £164,038, an increase from £133,993 in 2022.

Investment Income: £4,142.

Expenditure

Total expenditure for the year amounted to £617,357, up from £383,117 in 2022. The major areas of expenditure were:

Raising Funds: £50,554, which covered costs associated with fundraising activities, compared to £10,814 in 2022, facilitating the generation of £694,038 in income. This represents a return on fundraising investment (ROI) of approximately 13.73, meaning that for every pound spent on fundraising, ORP generated approximately £13.73 in income.

Charitable Activities: £566,803, a substantial increase from £372,303 in 2022. This expenditure includes staff costs, equipment and medical supplies, other charitable activities, and donated services and facilities.

Net Income and Fund Balances

ORP reported a net income of £76,681 for 2023, down from £176,180 in 2022. This was after accounting for net gains on investments of £518. The net movement in funds was a positive £77,199, leading to a closing fund balance of £583,463, up from £506,264 at the beginning of the year.

Unrestricted Funds: Decreased slightly to £462,533 from £474,097.

Restricted Funds: Increased significantly to £120,930 from £32,167, reflecting the receipt of targeted grants and donations.

Financial Position

As of 31 December 2023, ORP's total net assets stood at £583,463. The balance sheet highlights include:

Fixed Assets: £78,598, including tangible fixed assets and investments.

Current Assets: £565,776, comprising cash at bank and in hand, and debtors.

Creditors: £60,911, representing amounts falling due within one year.

The charity remains in a strong financial position with adequate resources to continue its operations and support its mission of protecting sea turtles and their habitats through rescue and rehabilitation, scientific research, and education and outreach.

The financial performance of ORP in 2023 reflects our successful fundraising efforts and prudent financial management.

Fundraising

ORP is currently funded entirely through donations and grants, with the vast majority of our income being from private donations from our adoption and rescue centre volunteering programmes, as well as generous contributions from our corporate partnerships. We extend our heartfelt gratitude to all our supporters, partners and donors for their invaluable support in furthering our mission.

In 2023 ORP's cost-to-income ratio for fundraising remained low, underscoring our ability to manage resources effectively and ensuring that more funds go directly to our sea turtle conservation projects.

Additionally our registration with the Fundraising Regulator this year highlights our dedication to transparency, ethical fundraising practices, and maintaining the trust of our donors.

To enhance our fundraising capabilities, ORP recruited a full-time fundraiser, which has already resulted in increased donor engagement and expanded fundraising activities. Moving forward, we plan to diversify our funding streams, enhance our digital and public fundraising activities, build local fundraising capacity, and cultivate new long-term

relationships with corporate partners and major donors.

Commercial Partners

In order to diversify our fundraising income, the charity has formed partnerships with carefully selected Commercial Partners. We would like to thank all our long term commercial partners for their support:

10 International (Sea Change Wine), All Scrubbed Up, Bracenet, Dhiraagu, Follow Your Legend, Fourth Element, , Kind Traveller, Mimie Reed, Oevaali Art Shop, and Reolink. We would also like to thank Honu, Yoga Tage, and Manta Reisen for raising funds for us.

Reserves Policy

The appropriate level of financial reserves held by ORP is considered each year by the Trustees. In order to operate effectively in the event of unforeseen circumstances, the Trustees have agreed that financial reserves should be maintained to cover a minimum of 3 months of essential operating costs. Essential operating costs are defined as the costs of key personnel within the organisation (CEO, COO, Lead Scientist, Veterinary Team and Project Leads), essential medical supplies, IT costs and governance costs. This amounts to £56,000 at the end of 2023.

Given the growth in income received over the past 2 years, current funds within ORP are in excess of the minimum reserve requirements. However, with the acceleration of key initiatives and expansion plans, our total fund position is forecast to reduce to levels more aligned with our reserving policy within the next 3 years.

Investment Policy

The trustees have general power of investments and have freedom to invest in assets as they see fit. The trustees aim to diversify any investments including low risk investments where capital is not put at risk and lower risk listed securities.

Plans for Future Periods

Our strategic plan is a living document, constantly evolving to meet new challenges and opportunities in sea turtle conservation. A key focus in 2024 is to refine it based on the latest science, community needs, and our goals. This update will ensure we prioritise efforts, optimise resource allocation, and strengthen impact measurement - all crucial for remaining at the forefront of sea turtle conservation.

To achieve this, we are establishing regional NGO affiliates and branches. This expansion boosts our agility, local responsiveness, and overall impact, while strengthening our presence across jurisdictions for more effective outreach.

We are also taking a two-pronged approach to elevate regional expertise in sea turtle care. First, we are relaunching our Visiting Veterinary Programme as a comprehensive Veterinary Training Programme. This initiative sponsors Indian Ocean veterinary surgeons working in sea turtle conservation to come and train at our Marine Turtle Rescue Centre in the Maldives. Additionally, we're collaborating with the Royal College of Veterinary Surgeons for a

Veterinary Nursing Training Programme. Both programs offer rigorous training and foster knowledge exchange between developed and developing nations.

Furthermore, we are expanding our capacity with two new sea turtle rehabilitation centres in the Maldives - one each in Raa and Noonu atolls - in partnership with JOALI BEING and Soneva Jani, respectively. We will also keep advocating for and contributing to the establishment of a dedicated Rescue and Rehabilitation Center in Oman.

Statement of Trustee's Responsibilities

The trustees are responsible for preparing the financial statements in accordance with applicable law and United Kingdom Generally Accepted Accounting Practice.

Charity law requires the trustees to prepare financial statements for each financial year. Under that law the trustees have elected to prepare the financial statements in accordance with the United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards and applicable Law). The financial statements are required by law to give a true and fair view of the state of affairs of the charity and of the surplus or deficit of the charity for that period. In preparing those financial statements, the trustees are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and estimates that are reasonable and prudent;
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the charity will continue in business.

The trustees are responsible for keeping proper accounting records that disclose with reasonable accuracy at any time the financial position of the charitable company and enable them to ensure that the financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the charitable company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The trustees are responsible for the maintenance and integrity of the corporate and financial information included on the charity's website. Legislation in the United Kingdom governing the preparation and dissemination of the financial statements may differ from legislation in other jurisdictions.

Approved by the trustees on and signed on their behalf by:



Amanda Costain
Trustee



Lee Cannan
Trustee/Treasurer

REGISTERED NUMBER: 1165905

THE OLIVE RIDLEY PROJECT
PERIOD ENDED 31ST DECEMBER 2023

SEGRAVE & PARTNERS LLP
TURNPIKE HOUSE
1208/1210 LONDON ROAD
LEIGH ON SEA
ESSEX
SS9 2UA

Statement of Financial Activities – Year ended 31st December 2023

The statement of financial activities includes all gains and losses recognised in the year ending 31st December 2023. All income and expenditure derive from continuing activities.

	Notes	2023			2022
		Unrestricted Funds £	Restricted Funds £	Total Funds £	Total Funds £
Income					
Donations and legacies	3.1	268,584	257,274	525,858	425,601
Charitable activities	3.2	105,780	58,258	164,038	133,993
Income from investments	3.3	4,142	0	4,142	203
		378,506	315,532	694,038	559,797
Expenditure					
Raising funds	5.1	50,554	0	50,554	10,814
Charitable activities	5.2	352,254	214,549	566,803	372,303
		402,808	214,549	617,357	383,117
Net income/(expenditure) before investment gains/(losses)		(24,302)	100,983	76,681	176,680
Net gains/(losses) on investments	3.3	518	0	518	(500)
Net income / (expenditure)		(23,784)	100,983	77,199	176,180
Transfer between funds	11	12,220	(12,220)	0	0
Net movement in funds		(11,564)	88,763	77,199	176,180
Reconciliation of funds					
Fund balance brought forward		474,097	32,167	506,264	330,084
Fund balance carried forward		462,533	120,930	583,463	506,264

The notes on pages 4 to 10 form an integral part of the financial statements.


Balance Sheet – As at 31st December 2023

	Notes	31/12/2023 £	31/12/2022 £
Fixed assets			
Tangible fixed assets	7	71,580	27,917
Investments	8	7,018	6,500
		78,598	34,417
Current assets			
Debtors	9	6,445	13,345
Cash at bank and in hand		559,331	512,939
		565,776	526,284
Creditors – amounts falling due within one year	10	(60,911)	(54,437)
Net current assets		504,865	471,847
Total net assets		583,463	506,264
Funds of the charity			
Restricted income funds	11	120,930	32,167
Unrestricted funds		462,533	474,097
Total funds		583,463	506,264

The notes on pages 4 to 10 form an integral part of the financial statements.

The financial statements were approved and authorised for issue by the Board of Trustees on 24th April 2024.

Signed on behalf of the charity's trustees:

Signed: 
 Lee Cannan
 Trustee & Treasurer

Dated: 
 Amanda Costain
 Trustee

Notes to the financial statements for the year ended 31 December 2023

1. Basis of preparation

The Olive Ridley Project (“ORP”, “the Charity”) is on a mission to protect sea turtles and their habitats through rescue and rehabilitation, scientific research and education and outreach.

ORP is a Charitable Incorporated Organisation in the United Kingdom (charity number 1165905). The address of the registered office is 91 Padiham Road, Sabden, Clitheroe, BB7 9EX.

The financial statements have been prepared in compliance with applicable United Kingdom accounting standards, including Financial Reporting Standard 102, Charities SORP (FRS 102) and the Charities Act 2011.

The financial statements are prepared on a going concern basis under the historical cost convention. They are prepared in pound sterling, which is the functional currency of the charity, rounded to the nearest £1.

Accounts have been prepared on an accruals basis.

2. Accounting Policies

The significant accounting policies applied in the preparation of these financial statements are set out below.

Going Concern

The Charity meets its day-to-day working capital requirements primarily through the cash generated from its fundraising activities. The trustees have performed a detailed review of future forecasts and projections, and have a reasonable expectation that the Charity has adequate resources to continue in operational existence for the foreseeable future. Thus, the trustees adopt the going concern basis of accounting in preparing the financial statements.

2.1. Income recognition

All incoming resources are included in the Statement of Financial Activities (“SoFA”) when the charity is legally entitled to the income after any performance conditions have been met, the amount can be measured reliably and it is probable that the income will be received.

Income from grants is recognised when the Charity has entitlement to the funds, any performance conditions attached to the grants have been met, it is probable that the income will be received, and the amount can be measured reliably and is not deferred.

Legacies are included in the SoFA when receipt is probable, that is, when there has been grant of probate, the executors have established that there are sufficient assets in the estate and any conditions attached to the legacy are either within the control of the charity or have been met.

Gift Aid receivable is included in income when there is a valid declaration from the donor. Any Gift Aid amount recovered on a donation is considered to be part of that gift and is treated as an addition to the same fund as the initial donation unless the donor or the terms of the appeal have specified otherwise.

Donated services and facilities are included in the SOFA when received at the value of the gift to the Charity, provided the value of the gift can be measured reliably. Donated services and facilities that are consumed immediately are recognised as income with an equivalent amount recognised as an expense under the appropriate heading in the SOFA. In accordance with the SORP (FRS 102), general volunteer time is not recognised as income.

Investment gains and losses include both realised and unrealised gains and losses resulting from the sale or revaluation of investments at market value at the end of the year.

2.2. Expenditure recognition

Expenditure is recognised once there is a legal or constructive obligation to make a payment to a third party, it is probable that settlement will be required and the amount of the obligation can be measured reliably.

Raising funds expenditure comprises costs directly associated with fundraising activities. Charitable expenditure comprises costs directly attributable to the delivery of ORP charitable objectives. Other support costs comprise indirectly attributable overhead costs incurred to support the delivery of the Charity's objectives.

2.3. Assets held on the balance sheet

Tangible fixed assets costing more than £1,000 are stated at cost or valuation less accumulated depreciation and accumulated impairment losses.

Depreciation is applied to all tangible fixed assets. Depreciation rates are calculated to write down the cost or valuation, less estimated residual value, on a straight-line basis over the expected useful lifetime of each asset. Depreciation rates used are disclosed in note 7 of the notes to the financial statements.

Fixed asset investments in quoted shares, traded bonds and similar investments are valued initially at cost and subsequently at fair value (their market value) at the reporting date.

Debtors and creditors are measured on initial recognition at settlement amount after any trade discounts or amount advanced by the charity. Subsequently, they are measured at the cash or other consideration expected to be received.

Unrestricted funds are funds which are available for use at the discretion of the trustees in the furtherance of the core objectives of the charity, and which have not been restricted to other purposes.

Restricted funds are funds which are to be used in accordance with specific restrictions imposed by donors or which have been raised by the charity for particular purposes. A breakdown of the restricted funds is provided in note 11.

2.4. Judgements and estimates

In the application of the Charity's accounting policies, the trustees are required to make judgements, estimates and assumptions about the carrying amount of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised where the revision only affects that period, or in the period of the revision and future periods where the revision affects both current and future periods.

3. Analysis of income

3.1. Income from donations, legacies and grants

	2023			2022		
	Unrestricted Funds	Restricted Funds	Total Funds	Unrestricted Funds	Restricted Funds	Total Funds
	£	£	£	£	£	£
Individual donations	197,254	123,101	320,355	186,063	11,506	197,569
Corporate partner donations	32,623	0	32,623	32,013	0	32,013
Resort partners donations	36,475	0	36,475	34,335	0	34,335
Gift aid	2,232	0	2,232	2,733	0	2,733
Legacies	0	0	0	37,000	0	37,000
Grants (non-government)	0	35,767	35,767	0	27,458	27,458
Donated services & facilities	0	98,406	98,406	0	94,493	94,493
	268,584	257,274	525,858	292,144	133,457	425,601

Further details on donated services and facilities are provided in note 4.

3.2. Income from charitable activities

	2023			2022		
	Unrestricted Funds	Restricted Funds	Total Funds	Unrestricted Funds	Restricted Funds	Total Funds
	£	£	£	£	£	£
Resort partner income	0	57,767	57,767	0	51,355	51,355
Rescue centre volunteers	105,780	0	105,780	81,978	0	81,978
Ghost gear product sales	0	491	491	0	660	660
	105,780	58,258	164,038	81,978	52,015	133,993

ORP receives restricted donations from partner resorts to support the provision of on-site marine biologists and general project management costs.

ORP operates a volunteer scheme at our rescue centre within the Maldives. The donations associated with this scheme contribute to unrestricted income to support all charitable objectives.

3.3. Income from investments

	2023			2022		
	Unrestricted Funds	Restricted Funds	Total Funds	Unrestricted Funds	Restricted Funds	Total Funds
	£	£	£	£	£	£
Interest income	4,142	0	4,142	203	0	203
Unrealised gains / (losses)	518	0	518	(500)	0	(500)
	4,660	0	4,660	(297)	0	(297)

4. Donated goods, services and facilities

	2023			2022		
	Unrestricted Funds	Restricted Funds	Total Funds	Unrestricted Funds	Restricted Funds	Total Funds
	£	£	£	£	£	£
Biologist fees paid directly	0	57,006	57,006	0	46,978	46,978
Accommodation & Board	0	27,070	27,070	0	30,711	30,711
Transportation	0	14,330	14,330	0	16,804	16,804
	0	98,406	98,406	0	94,493	94,493

In carrying out its charitable activities, ORP maintains partnerships with selected resorts across Maldives, Oman, Kenya and the Seychelles. As part of these contractual partnerships, ORP provides on-site marine biologists and also veterinary services and volunteers to run the turtle rescue centre. In return, partner resorts provide accommodation, board and transfer flights to ORP representatives. Within some resorts, marine biologist fees are paid directly by the resort partner.

The value of accommodation and board for ORP representatives is estimated based on the wholesale cost incurred by the partner resorts. The value of transfer flights is approximated based on the average flight costs over the financial period.

5. Analysis of expenditure

5.1. Costs of Generating Funds

	2023			2022		
	Unrestricted Funds	Restricted Funds	Total Funds	Unrestricted Funds	Restricted Funds	Total Funds
	£	£	£	£	£	£
Fundraising agents	24,642	0	24,642	9,875	0	9,875
Advertising and marketing	0	0	0	55	25	80
Incurred seeking donations	25,912	0	25,912	859	0	859
	50,554	0	50,554	10,789	25	10,814

5.2. Expenditure on charitable activities

	2023			2022		
	Unrestricted Funds	Restricted Funds	Total Funds	Unrestricted Funds	Restricted Funds	Total Funds
	£	£	£	£	£	£
Wages & consultant fees:						
Rescue and rehabilitation	39,001	15,061	54,062	19,787	16,663	36,450
Scientific research	101,782	45,779	147,561	28,451	48,513	76,964
Education and outreach	27,568	8,368	35,936	19,720	0	19,720
Charity operations	85,511	0	85,511	57,192	0	57,192
Equipment & medical supplies	22,975	22,561	45,536	44,382	5,140	49,522
Other charitable activity expenditure	63,090	23,541	86,631	27,807	2,372	30,179
Donated services & facilities	0	98,406	98,406	0	94,493	94,493
Support costs	12,327	833	13,160	7,394	389	7,783
	352,254	214,549	566,803	204,733	167,570	372,303

5.3. Analysis of support costs

	2023			2022		
	Unrestricted Funds	Restricted Funds	Total Funds	Unrestricted Funds	Restricted Funds	Total Funds
	£	£	£	£	£	£
Bank charges	3,963	0	3,963	2,530	0	2,530
Postage & stationery	2,238	833	3,071	2,613	389	3,002
Office costs	861	0	861	0	0	0
Legal fees	2,835	0	2,835	0	0	0
Independent examination	450	0	450	500	0	500
Insurance	1,980	0	1,980	1,751	0	1,751
	12,327	833	13,160	7,394	389	7,783

6. Employees & Trustees

6.1. Employees

The average monthly number of full-time equivalent persons employed by the charity during the year was 1 (2022: 1).

	2023	2022
	£	£
Wages and salaries	40,000	32,917
Social security costs	0	0
Pension costs	1,013	800
	41,013	33,717

6.2. Trustees

No trustees received any remuneration or expenses from the Charity during the financial year (2022: £nil).

7. Tangible fixed assets

	Rescue Centre Equipment £
Cost:	
Fixed assets cost at the beginning of the year	46,562
Additions	52,786
Fixed assets cost at the end of the year	99,348
Depreciation:	
Depreciation at the beginning of the year	18,645
Depreciation	9,123
Depreciation at the end of the year	27,768
Net Book Value:	
Net book value at the beginning of the year	27,917
Net book value at the end of the year	71,580

Veterinary equipment at our rescue centre within the Maldives is assumed to depreciate on a straight-line basis at 10% per year, reflecting the average useful life of the equipment.

8. Investment assets

	Listed Investments £
Carrying value at the beginning of the year	6,500
Net gain / (loss) on revaluation	518
Carrying value at the end of the year	7,018

The investments held by ORP are all in listed securities, and are valued at market value at the reporting date.

9. Debtors

	2023 £	2022 £
Partner resort donations - debtors	6,445	13,345
	6,445	13,345

10. Creditors: amounts falling due within one year

	2023 £	2022 £
Partner resort donations – creditors	23,650	21,634
Volunteer advance deposits	36,614	32,185
Other creditors	647	618
	60,911	54,437

11. Restricted funds

	Balance at 31/12/2022 £	Income £	Expenditure £	Transfer to Unrestricted £	Balance at 31/12/2023 £
Rescue centre	0	12,257	(27)	(12,230)	0
Genetics study	0	76,993	(38,748)	0	38,245
Sea turtle hospital	0	45,000	0	0	45,000
Partner resorts	15,622	156,173	(150,312)	0	21,483
Kenya project	142	3,049	(3,191)	0	0
OceanCare grant	0	15,134	(14,746)	0	388
Expedition funding	12,534	6,435	(3,246)	0	15,723
Pakistan circular economy	152	491	(552)	0	91
Turtle festival funding	3,717	0	(3,727)	10	0
	32,167	315,532	(214,549)	(12,220)	120,930

During 2023 a restricted donation of £12,230 was received to fund the purchase of a new piece of medical equipment within our rescue centre. This equipment was purchased, with the value being held as a fixed asset within the accounts. Given the nature and use of the new equipment, the value of the fixed asset was transferred from a restricted fund to an unrestricted fund.

THE OLIVE RIDLEY PROJECT
INDEPENDENT EXAMINER'S REPORT ON THE ACCOUNTS
PERIOD ENDED 31ST DECEMBER 2023

Independent examiners report to the trustees of The Olive Ridley Project in respect of the year ended 31st December 2023.

This is a report in respect of an examination carried out on the financial statements set out on pages one and two under Section 145 of the Charities Act 2011 and in accordance with the directions given by the Charity Commissioners under sub-section 5(b) of that section.

Responsibilities of trustees and independent examiners

As described in the annual report, the charity's trustees are responsible for the preparation of the financial statements. It is our responsibility to carry out procedures designed to enable us to report our opinion.

It is our responsibility to:

- 1) examine account under Section 145 of the Charities Act 2011
- 2) follow the procedures laid down in the general directions given by the Charity Commission under Section 145(5)(b) of the Charities Act 2011
- 3) state whether particular matters have come to my attention.

Basis of opinion

Our examination was carried out in accordance with general Directions given by the Charity Commission. An examination includes a review of the accounting records kept by the charity and a comparison of the accounts presented with those records. It also includes consideration of any unusual items or disclosures in the accounts, and seeking explanations from you as trustees concerning any such matters. The procedures undertaken do not provide all the evidence that would be required in an audit, and consequently no opinion is given as to whether the accounts present a "true and fair view" and the report is limited to those matters set out in the statement below.

Opinion

No matter has come to our attention in connection with our examination which gives us reasonable cause not to believe that in any material respect:

- 1) proper accounting records have been kept in accordance with Section 137 of the Charities Act 2011, and;
- 2) the financial statements accord with those records.



Segrave & Partners LLP
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Date: 25th July 2024