ANNUAL REPORT

2021-2022

ISLAND CONSERVATION SOCIETY

Biodiversity conservation is our pride and we value your support

Cover photo by Aurelie Duhec
Current photo by Annabelle Cupidon

FOREWORD

by Adrian Skerrett, Co-founder and Chairman of ICS

> *This is in itself an enormous achievement for ICS, its management and ICS island staff.*

Producing a stimulating conservation annual report that is accessible to everyone is a tricky business. It needs to speak to businessmen and scientists, to investors and staff, to school children and teachers and to donors and volunteers. It needs to present data and analysis in an interesting way and should be no means appear dry and boring. This 2021/2022 annual report is the first produced by Island Conservation Society that attempts this monumental task of universal appeal. It coincides with a year in which each of the five islands of ICS have also produced their own detailed annual reports. This is in itself an enormous achievement for ICS, its management and ICS island staff.

The year to March 2022 has been one of recovery following the huge impact of the Covid-19, which in a flash, took away more than half the income of ICS. The abolition of CSR took away another substantial portion. But ICS survived thanks to its staff and thanks to the generosity of IDC and our partners in the outer islands and in particular the Cadbury family on Aride plus other donors who all stepped up to redouble their support for conservation work in our islands.

In particular, I congratulate our CEO Norman Weber who has shown enormous resilience in the face of difficult times not least the trying staff issues thrown up by Covid and other factors. I congratulate Matthew Morgan, who picked up the reins of coordinating ICS science projects at very short notice and took our science output to new heights. And I congratulate all our Conservation Officers and Rangers on the frontline of conservation work in the islands.

ICS has come a long way in the last two decades. But to be fair we have had some pretty good material to work with. In the words of the estate agent, the three most important aspects to the value of a property are "location, location, location". The location of Seychelles makes these islands priceless. Our locations: Aride, Alphonse, Desroches, Farquhar and Silhouette are individually and collectively some of the most stunning on Earth. I hope readers will find in this report a wealth of storytelling, data visualisation, and design that does them justice through a stunning, eye-catching and informative account of the year gone by of the conservation work in our islands.

ICS AT A GLANCE

OPERATING SINCE 2001

Our CORE ACTIVITY is CONSERVATION &

REHABILITATION

OUR CONSERVATION CENTRES

OUR Head Office is located on MAHE & oversees all island operations. We have CONSERVATION CENTRES located across FIVE ISLANDS

KEY 2021-2022 ACHIEVEMENTS

- Actively participated in the planning and implementation of the First National Sooty Tern Census
- Produced its first detailed annual island reports for all five islands
- Actively participated in the *Seagrass Mapping & Carbon Assessment Project*
- Produce two position papers on issues of national and international importance, namely on the use Fish Aggregating Devices and collection of Sooty tern eggs

CONTENTS

Current photo by Gail Fordham

ABOUT US

Promoting the conservation and restoration of island ecosystems, their sustainable development, and raising awareness of their vulnerability and their vital importance to the planet's biodiversity.
This is our mission.

COMMITTED TO PROTECTING THE ECOSYSTEMS OF TROPICAL ISLANDS

ICS is a **not-for-profit organisation** in Seychelles, registered as an NGO since 10th April 2001. We implement conservation programmes endorsed by the Ministry responsible for Environment, on several outer and inner islands of Seychelles.

On 29th January 2007 an agreement was signed between the Islands Development Company (IDC) and ICS. This formalised an already existing collaboration between the two parties, endorsed by the Ministry of Environment. Through the agreement ICS became the biodiversity advisor for IDC and appointed ICS to run conservation centres on islands managed by IDC. Hence a mutually beneficial partnership was created ensuring the sustainable development of the islands.

DID YOU KNOW?

ICS became a member of IUCN (International Union for the Conservation of Nature) in November 2007.

Current photo by Shanè Emilie

OUR STRATEGY

PROTECT OUR NATURAL ASSETS

We are preserving, restoring, and enhancing island ecosystems and associated marine environments.

ADVOCATE FOR SUSTAINABILITY

Through agreements with IDC and other partners we are ensuring the sustainable development of islands.

BUILD AWARENESS

We are promoting the biodiversity value of Seychelles islands and highlighting their vulnerabilities through awareness programmes.

BUILD COMMUNITIES OF PRACTICE

We are building a multi-disciplinary group of people, empowered to work together for the benefit of our islands.

DEVELOP COMMUNITY PARTNERSHIPS

Community partnerships are important for us. We are encouraging communities to participate in our work.

RAISE FUNDS FOR CONSERVATION

Conservation efforts comes at a cost. We are raising funds to finance our programmes and research projects.

MAINTAIN ECOLOGICAL DATA

We are maintaining ecological databases to assist people engaged in research on the islands of Seychelles.

STRENGHTEN INTERNATIONAL COOPERATION

We are collaborating with international organisations to exchange experience, expertise and information.

DEVELOP EDUCATIONAL FACILITIES

With the support of our partners, we are developing educational programmes to offer hands-on learning experiences to island visitors.

Current photo by Kiran Bhageerutty

OUR CORE PRINCIPLES

Our core principles are built upon three pillars **guiding our decisions and actions.**

PILLAR 1
BIODIVERSITY CONSERVATION

Island ecosystems comprise of habitats and species of which some are endemic to Seychelles or are critically endangered. Biodiversity monitoring and conservation programmes have been established to conserve, rehabilitate, and enhance island ecosystems on Aride island and islands managed by IDC.

PILLAR 2
SUSTAINABILITY

We strive to ensure that islands managed by IDC are sustainably managed ensuring the implementation of only non-intrusive and non-damaging activities. Hence, we protect fragile island ecosystems and associated species, ensuring their long-term survival.

PILLAR 3
EDUCATION

Education remains at the forefront of what we do. Through our Education for Sustainability Programme, we are able to target a wider audience, influencing people to join the conservation efforts and help us to protect the islands unique ecosystems.

THE FOUNDERS

ICS was founded by a diverse group of conservationists and businessmen, driven by a common passion for biodiversity conservation for the benefit of Seychelles and beyond.

Adrian Skerrett, Founding Chairman
Motivated by conservation interests particularly ornithology, Adrian has been involved with the management of Aride Island since 1981. He was inspired to create ICS by travelling to the outer islands and seeing the potential for conservation programmes.

Glenny Savy, Founding Vice Chairman
Glenny was motivated to support sustainable development of the outer islands by protecting their environments to enhance their value for the long-term benefit of Seychelles and Seychellois.

Dr. Gerard Rocamora, Founding Trustee
A scientist, motivated by the conservation of endemic and native birds, Gerard has a particular interest in rehabilitation of island ecosystems, eradication of invasives and the translocation of native and endemic species.

Professor Rolph Payet, Founding Trustee
Rolph is particularly interested in the study of the fragile nature of the oceans and the dependence of Seychelles on fisheries and tourism. He grew up in a remote island archipelago and saw the urgent need to conserve their island ecosystems.

Current photo by Shane Emilie

AN EFFECTIVE GOVERNANCE MODEL

Foundations have been formed as partnerships with IDC and investors on all IDC islands. They focus on promoting the conservation, rehabilitation, and enhancement of the islands' ecosystems. The Foundations also support conservation programmes and projects funded by means including environmental levies from visitors to hotel establishments, landing fees collected by IDC from visiting vessels and revenue collected from eco- tourism activities. Donations are encouraged from both visitors and businesses operating on the islands. Funds are also secured from grants received to finance projects on islands addressing particular thematic areas or ecological issues.

At present there are 11 Foundations, officially registered since 2008, under the provisions of the Registration of the Associations Act. Representatives from IDC, ICS, Ministry responsible for Environment and tourism investors are members of each Foundation.

Active Foundations hold regular meetings to set budgets and approve conservation projects implemented by ICS conservation centres. Inactive Foundations will be activated once funding has been addressed and further ICS conservation centres established.

ACTIVE FOUNDATIONS

Alphonse Foundation
Desroches Foundation
Farquhar Foundation
Silhouette Foundation

INACTIVE FOUNDATIONS

Assumption Foundation
Cosmoledo & Astove Foundation
Marie-Louise & Desnoeufs Foundation
Platte Foundation
Poivre Foundation
Providence Foundation
Remire & African Banks Foundation

Current photo by Gail Fordham

DID YOU KNOW?

Management Plans have been approved for islands where ICS has a presence. Funded by local and international agencies, they strengthen efforts to promote the conservation and sustainable use of terrestrial and marine biodiversity in Seychelles.

We also manage Aride Island Special Reserve - owned by Island Conservation Society UK (ICS UK) - and leased to ICS. The island is one of the jewels of the Indian Ocean because it is an important sanctuary for seabirds and for endemic flora and fauna.

NATURAL BEAUTY OF THE ISLANDS RULE SUPREME

More than half of the landmass of Seychelles is protected by law, notably under the National Parks and Nature Conservancy Act of 1969. These are Seychelles greatest natural assets because of the natural beauty and rich biodiversity. The table below provides a summary of the protection status of each island where we operate.

Islands	Designation	Year
Aride Island	Special Reserve	1979
Alphonse Group	Area of Outstanding Natural Beauty (Marine)	2020
Desroches Atoll	Area of Outstanding Natural Beauty (Marine)	2020
Farquhar Atoll	Area of Outstanding Natural Beauty (Marine)	2020
Silhouette Island	National Park	2010

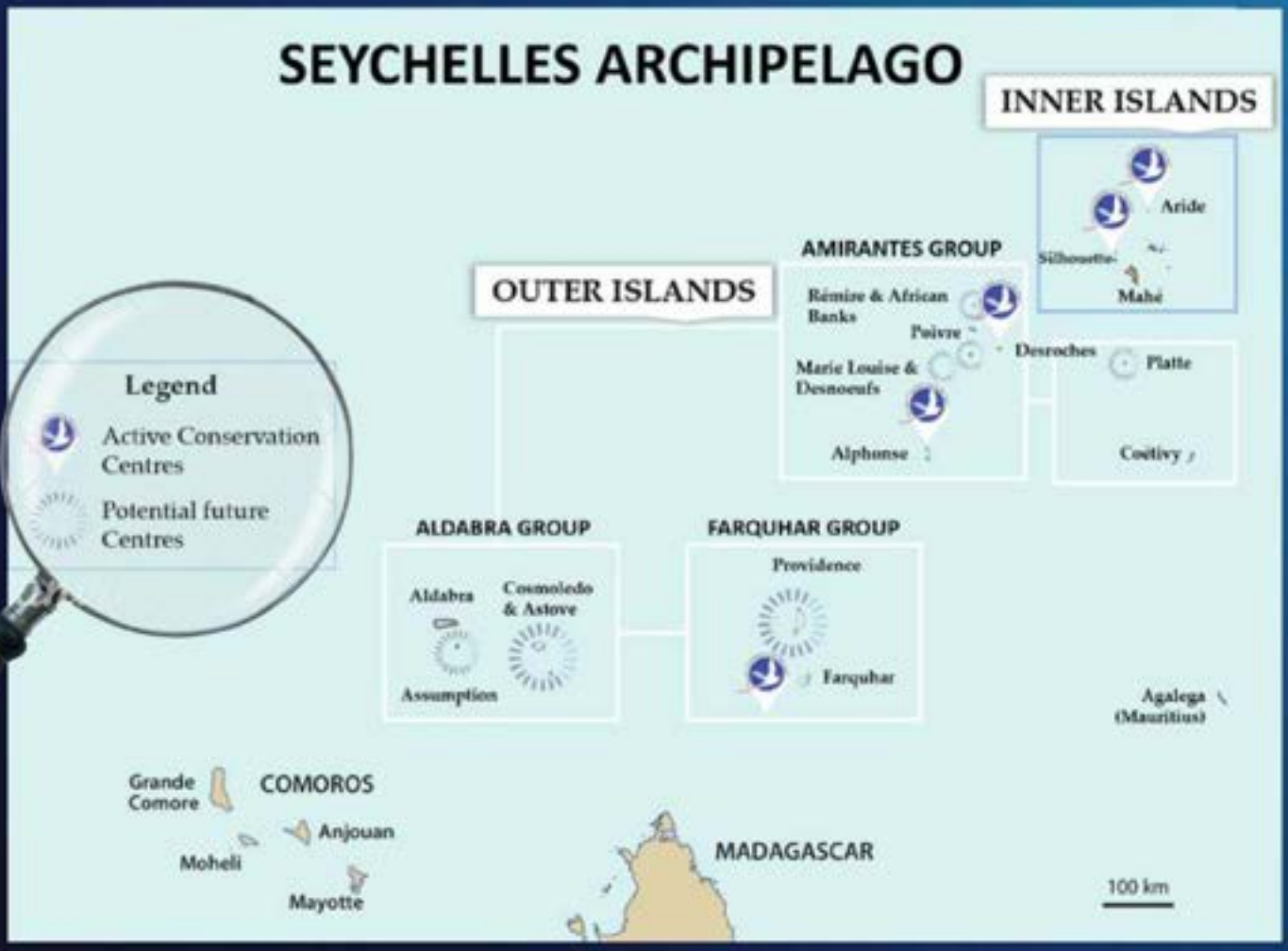
Current photo by ICS

Following the repeal of the 1969 environmental legislation, replaced with the Nature Reserves and Conservancy Act of 2021, the protected areas will now be designated under new categories. We will be involved in the drafting of new regulations to ensure that all of these islands are protected anew. Early in year 2021, we submitted nomination files to designate the following islands as either National Parks or Special Reserves. These are yet to be finalised by the Government of Seychelles (GoS).

Islands	Designation	Submission year
Within Alphonse Group:		
St. François Atoll	Special Reserve	2021
Within Farquhar Atoll:		
Ile aux Goëlettes	Special Reserve	2021
Bancs de Sable	Special Reserve	2021
Ile du Sud	National Park	2021

Current photo by ICS

The map below shows the islands where we have established conservation centres and those where we plan to do so in the future.



READ MORE

Use your device camera to scan the code and read more about the islands or alternatively visit http://www.islandconservationseychelles.com/islands.html

Current photo by Shane Emilie

OVERVIEW OF THE ISLANDS IN YEAR 2021-22

ARIDE

Aride reopened to visitors this year after being certified Covid Safe, with two cruise ships being welcomed to the island in December 2021. Staff turnover was high this year on Aride, with a total of 24 employees and 4 volunteers / interns on the island over the course of the year and only 4 of those staff were still present at the end of March 2022. The lack of a Conservation Officer since the departure of Estella Snowden in January 2021 meant that several Assistant Conservation Officers had to oversee conservation efforts on the island with support and assistance from multiple Conservation Rangers and Assistant Conservation Rangers. Despite this unsettling staff turnover monitoring work continued, with the seabird census and shearwater census completed on time and regular monitoring activities continuing.

Trends in seabird populations show all species are in decline over a 19-year period. Most species, however, have shown a slight recovery since particularly low census results in 2020. Breeding success and recent trends were calculated where possible. For both breeding success and census results, there are caveats to consider based on protocols not being adhered to and data recording and data entry not being completed correctly.

Seychelles Magpie-robins continue their struggle to expand as a breeding species on Aride, with the species still struggling to recover from a significant population crash in 2014. A census of other endemic land birds was scheduled for 2021 in the Environmental Management Plan, but due to staff turnover this is postponed to 2022. Hawksbill Turtle emergences and nests also declined this year with fewer than in any year since 2015. The most notable marine sightings this year were of Whale Sharks, which were seen on three occasions: once in October and twice in December. A review of monitoring protocols is now underway, with Head of Science and Projects, Matthew Morgan and former Conservation Officer Nasreen Khan contributing to this. Acting Conservation Officer Craig Nisbet reviewed the shearwater breeding success and census protocols, and these have been contributed to by Dr Gerard Rocamora and Dr Licia Calabrese.

Current photo by Thomas P. Peschak

ALPHONSE

Positive developments this year included the addition of Assistant Ranger Annie Gendron to the team in January, boosting our ability to balance the needs of our work plan. Thanks to IDC some renovation was completed on the Conservation Centre which created extra space – necessary as our portfolio of projects has expanded. Another highlight of the year was the presence of several groups of visiting scientists, giving ICS the chance to strengthen partnerships, which has been key to the success of much of our research.

Seabird surveys were conducted several times a week on Alphonse, and at least twice per month at the other islands. Some species have increased in abundance, including Saunders's Tern, Brown Noddy, Lesser Noddy, Fairy Tern and frigatebirds. However, Greater Crested Tern and Black-naped Tern appear to have declined, while the Red-footed Booby population across the Alphonse Group has remained stable.

Since 2019 we have improved on the frequency and consistency of turtle monitoring surveys, and can be confident in comparing years. In 2021/2022 nesting was reduced by 68% for hawksbills and 45.9% for greens on the year prior - which appeared to be a peak in activity. As per ICS turtle protocols, we continued flipper tagging, with 11 tagged, 5 recoveries and 5 DNA samples collected.

During December 2021, we conducted coral reef surveys following the methodology outlined in the ICS Coral Reef Monitoring Protocol manual. Fortunately, our data indicates that coral cover has remained relatively stable throughout the Alphonse Group in recent years. Projects conducted during the year were the Alphonse Underwater Tracking Observatory (AUTO), Giant Trevally Spatial Ecology and Conservation, Milkfish Spatial Ecology and Physiology, Bonefish Catch and Release Study, Rapid Fish Assessment, Seychelles Manta Ray Project, Citizen Science Programme, Acoustic Tagging and Seagrass Mapping. ICS maintains a database of catches for five of the main fish species which are targeted by recreational fly-fishing. Compared to the previous five years, we see positive trends in catch rates for several species. Most notably Giant Trevally, which have increased from around 100 to more than 400 this season. Milkfish catches are also up, but this can be largely attributed to the research projects carried out, rather than increased pressure from angling clients.

Current photo by ICS

DESROCHES

After 16 months without Conservation Officers, the new CO and ACO of Desroches arrived in August 2021. Most projects were on hold except for some routine work including beach patrol, tortoise feeding, plant nursery and general maintenance of the premises. Since then, the team was able to restart projects. Tortoise monitoring was resumed, and many juveniles were released into the wild.

In September, rat control close to the north-east (NE) colony was restarted and the team selected 60 burrows in the south-west (SW) Wedge-tailed Shearwater colony and 10 in the north-east for breeding success monitoring. The census of both colonies in January 2022 revealed that the NE colony still struggles presumably due to the high density of rats, but the SW colony seems stable.

From October onwards, the beach outline and dynamic zones were monitored every 3 months to assess coastal erosion around the island. It has been ascertained that the erosion close to the hotel is worsening. The wooden walls which were positioned on the beach in front of the villas, spanning about 1km seem ineffective and jeopardize marine life, trapping rays and turtles. A new solution consisting of concrete reef balls will be installed in 2022 and will hopefully reduce or stop beach erosion, allowing the removal of the wall. Besides the wall, another deadly phenomenon occurred with an unusually high mortality of turtles recorded from October 2021 to January 2022. The exact cause still needs to be determined but it has been hypothesized that a seasonal algal bloom was responsible.

The Desroches team also participated in the Seagrass Mapping Project led by the University of Oxford in November 2021. Coral reef monitoring planned for October had to be postponed and could only start in March 2022. Turtle tagging was placed on hold as no proper training could be provided until December 2021.

Recommendations highlighted for future years include water quality testing for a better understanding of seasonal turtle mortality, the re-evaluation of the use of Brodifacoum for rat control, the preparation of proper monitoring protocols for the reef balls and the necessity of a better internet package for the office.

Current photo by ICS

FARQUHAR

ICS maintained a high monitoring standard on Farquhar Atoll during the year despite challenges in particular the global Covid-19 pandemic. The team doubled to four staff, however high turnover slowed the progress of projects. Nevertheless, monitoring efforts were in line with the annual plan, including gathering data on nesting turtles, seabirds, land and shorebirds, climate, marine pollution, fishing, coconut crabs, invasive plant control, sea surface temperature and seagrass monitoring. The Farquhar team successfully completed annual seabird censuses on Ile aux Goëlettes and Ile du Sud, applying technology to help get a better understanding of breeding populations, including camera trapping and drone flying. Satellite tracking of foraging seabird movements were due to take place this year but had to be rescheduled for April 2022 due to travel restrictions.

Outreach activities with guests resumed in 2021, presenting the work undertaken on Farquhar and its importance as well as guiding a coconut crab tour every Monday night. Moving forward the team have identified ways in which the organisation can streamline and update data collection methodologies for a number of monitoring programmes; aiming to improve workflow and accurate data reporting.

In other important news, since its emergence in 2015, Derrick Sandbank has continued to grow in 2021/2022 in spectacular fashion. ICS continued removing FADs where possible, undertaking marine litter surveys, monitoring the catch of the local fishery and controlling the growth of invasive plants. The team were unable to undertake reef monitoring, but they rediscovered two sea surface temperature probes that were lost for four years and deployed five more to understand more about the surrounding marine environment.

During the late stages of the year, the team supported national projects involving seagrass and carbon mapping on Farquhar, Astove and Cosmoledo Atoll. Before the year was over, ICS welcomed a seabird researcher, Jennifer Appoo, looking into the transfer of oceanic nutrients to islands/atolls via seabirds. ICS acquired a more permanent storage space from IDC and Blue Safari, enabling ICS to safely keep equipment, spares, engines and bikes together in one room.

Current photo by ICS

SILHOUETTE

In 2021-2022, wildlife monitoring activities on Silhouette Island centred on sea turtles, giant tortoises, seabirds and shorebirds, Sheath-tailed Bats, invasives (rats and cats) monitoring and control, the native plant nursery development, forest restoration, marine monitoring (benthic macrofauna, fish biomass and diversity, coral recruitment and disease), the coco-de-mer and amphibians.

The global reduction in the spread of Covid-19, led to the tourism sector returning to a more normal standard, resulting in an increase in occupancy at Hilton Labriz Resort and Spa (HLRS), and a positive impact on funds collected as conservation levies, donations from guests, contribution from activities with guests as well as sale of items. Eco-tourism activities increased with programmes including Campcation and Hilton's Academy.

Monitoring of sea turtles, seabirds and shorebirds was conducted on a weekly to monthly basis or opportunistically with some beaches receiving more attention due to their ease of access. Beach clean-ups were combined with each patrol. Monitoring of Grand Barbe occurred on average twice per month. Boat assistance to Grand Barbe was provided by IDC during the north-west season and when sea conditions were favourable.

Silhouette Island has 8 free-ranging Aldabra giant tortoises at Grand Barbe, and 11 captive juvenile Aldabra giant tortoises at La Passe. At the end of 2021, the captive juvenile tortoises moved to HLRS's newly constructed tortoise sanctuary. Roost counts for the Sheath-tailed Bat colony occurred monthly, and rat traps were set up around the roost on a weekly basis to control for rats. The team continue to conduct opportunistic exploration of Silhouette, adding to the Key Biodiversity Area inventory data whenever possible. These exploratory surveys of the island add to a significant increase in knowledge on the status of the many globally threatened species of plants and animals present on Silhouette. Marine monitoring was delayed until January 2022 due to the departure of Pierre-Andre Adam, which reduced capacity. However, with a full complement of staff in September 2021, the team have been successful in implementing and completing maximum of the intended annual targets for the year.

Current photo by George Curd

THE CHALLENGE OF COVID-19

The outbreak of Covid-19 was declared a pandemic by the World Health Organisation on 11 March 2020 and Seychelles declared its first cases just 3 days later. The country went into lockdown on 9 April and cruise ships were banned from the country on 9 May 2020. This was at the start of the financial year 2020/2021, when ICS budgets had been agreed and the future looked bright. Suddenly, the very existence of ICS was at stake.

Most of the income of ICS is tourism-related. The difficulty in obtaining Gainful Occupation Permits (GOPs) left Aride and Desroches without a Conservation Officer for an extended period. ICS Council met and agreed painful measures including a veto on the purchase of all but the most essential equipment. However, by the end of the financial year 2021/2022, ICS can say proudly that it not only survived Covid-19 it has prospered. Conservation work has continued unbroken.

ICS was fortunate in engaging the services of highly experienced Norman Weber as Chief Executive Officer (CEO) in 2020/2021, his skills complemented by the arrival of Shane Emilie as Deputy Chief Executive Officer (DCEO). On Aride, Megan O'Brien, who had arrived as a volunteer for 3 months in March 2020 provided much needed stability, remaining on the island until April 2022. The experience of Matthew Morgan and Annabelle Cupidon in the outer islands was of immense value and following the departure of Pierre-Andre Adam in late 2021, their transfer to Head Office provided superb scientific and administrative support.

Financial stability was ensured in part because ICS pioneered the creation of endowment funds and built up considerable reserves as a buffer against emergencies such as Covid. Above all, ICS has survived thanks to the generosity of its partners and sponsors. Particular thanks go to the Cadbury family for their superb support to Aride, the support of Hilton Labriz Resort and Spa to Silhouette, Blue Safari and Alphonse Island Lodge to Alphonse, Four Seasons and Desroches Islands Development Limited to Desroches and IDC to all the outer islands of Seychelles. Aride also benefited in 2021/2022 from generous donations from Lena Christensen and incredibly, even former volunteers, James Wareing and Elisabeth Hein. All of them deserve our sincere thanks for their commitment to conservation of our islands.

Current images by Freepik

We are the only NGO to operate across all five groups of Seychelles islands

Current photo by Gail Fordham

OUR ACHIEVEMENTS

It has not been an easy journey for us to continue to protect and restore the island ecosystems as well as ensure their sustainable development throughout the financial year ended March 2022. It has been a year filled with challenges but also a year of achievements. We remained resilient and agile, planning and taking strategic actions to support our staff across the islands but above all ensuring that our conservation programmes and associated projects are successfully managed.

IT WAS!

One of our major highlights in year 2021-2022 was the 20th anniversary of the organisation. We had a lot to celebrate, and our Founding Chairman had this to say:

"ICS can be proud of what it has achieved in its first twenty years but at the same time we have barely scratched the surface. A great deal remains to be done, and there is room for everybody to contribute to this"
- Adrian Skerrett.

READ MORE

Use your device camera to scan the code and read more about the 2 decades of achievements from ICS or alternatively visit: http://www.islandconservationseychelles.com/newspaper-articles-archive.html

The achievements for the past two decades are considerable and some major ones are highlighted below.

Year 2001

Technical expertise was provided to the Seychelles White-eye Recovery Programme with the intention introducing the species to some granitic islands and ensure its survival.

Year 2001-2002

Eradication of rats on several inner and outer islands.

Year 2001-2010

Production of scientific papers, many newspaper and magazine articles and three books: Zwazo Sesel, Aride Island Tread Lightly and The Outer Islands of Seychelles.

Year 2004

Acquisition of the management of Aride Island Special Reserve, home to the largest number of breeding seabird species, endemic reptiles, and other flagship species.

Year 2008

Island Foundations established to foster partnerships on all IDC islands to approve projects and finance conservation in the outer islands.

Year 2008-2015

Conservation centres established on three outer islands and an inner island managed by IDC.

Year 2011-2018

Secured funding for projects aimed at understanding the ecology of certain species, their movements and impact of certain human activities on their populations in the Outer islands.

Year 2013

Participated in the Pangaea Project. This strengthened understanding of key environmental threats related to climate change and other anthropogenic pressures determining conservation management actions in the outer islands.

Year 2014

Embarked on awareness raising campaigns to protect endemic species in Seychelles. These include the endangered Sheath-tailed Bat monitored on Silhouette and the Aldabra Giant Tortoise found on all five islands.

Year 2014

Participated in the Outer Islands Project. The Project promoted the conservation and sustainable use of terrestrial and marine biodiversity in the Seychelles' Outer islands.

Year 2016

Partnered with SIOTI and IDC in the FAD Watch Project. The aim of the Project is to intercept and remove FADs on the islands of Aride, Silhouette, Alphonse, Desroches and Farquhar. This project is still ongoing.

Year 2017

Embraced the use of technology to record and generate data for our conservation programmes.

Year 2019

Participated in a project to develop a better understanding on the regional value of the British Indian Ocean Territory Marine Protected Area to seabirds during the non-breeding period. This project is still ongoing.

Year 2020

Developed our first Education for Sustainability Programme to raise awareness on various critical issues affecting the fragile island ecosystems towards a call for action from different groups in society in favour of environmental stewardship and advocacy. Special acknowledgement goes to Shane Emilie for developing the programme.

Year 2020

Following resurgence in poaching events on Aride, partnered with the Seychelles Coast Guard to counter poaching in the reserve, the first MoU between the Coast Guard and a non- governmental organisation.

Year 2020

Partnered with IDC and tourism investors to maintain clean beaches on the islands where we operate. In 2020, a total of 674 kg of litter was collected on Farquhar Atoll in collaboration with The Ocean Project and IDC.

Current photo by Droid

A GLIMPSE OF OTHER ACHIEVEMENTS IN 2021/2022

Continuing in 2021/2022, ICS accomplished the following milestones, demonstrating its constant ability to remain committed to its core mission amid the pandemic and other challenges.

We reviewed our volunteer programme to keep abreast with new developments. The programme is scheduled for implementation in year 2022.

We produced position papers on two national issues: the use of FADs in the Seychelles' Exclusive Economic Zones and cropping of birds' eggs. ICS's firm positions received support from government agencies and other organisations.

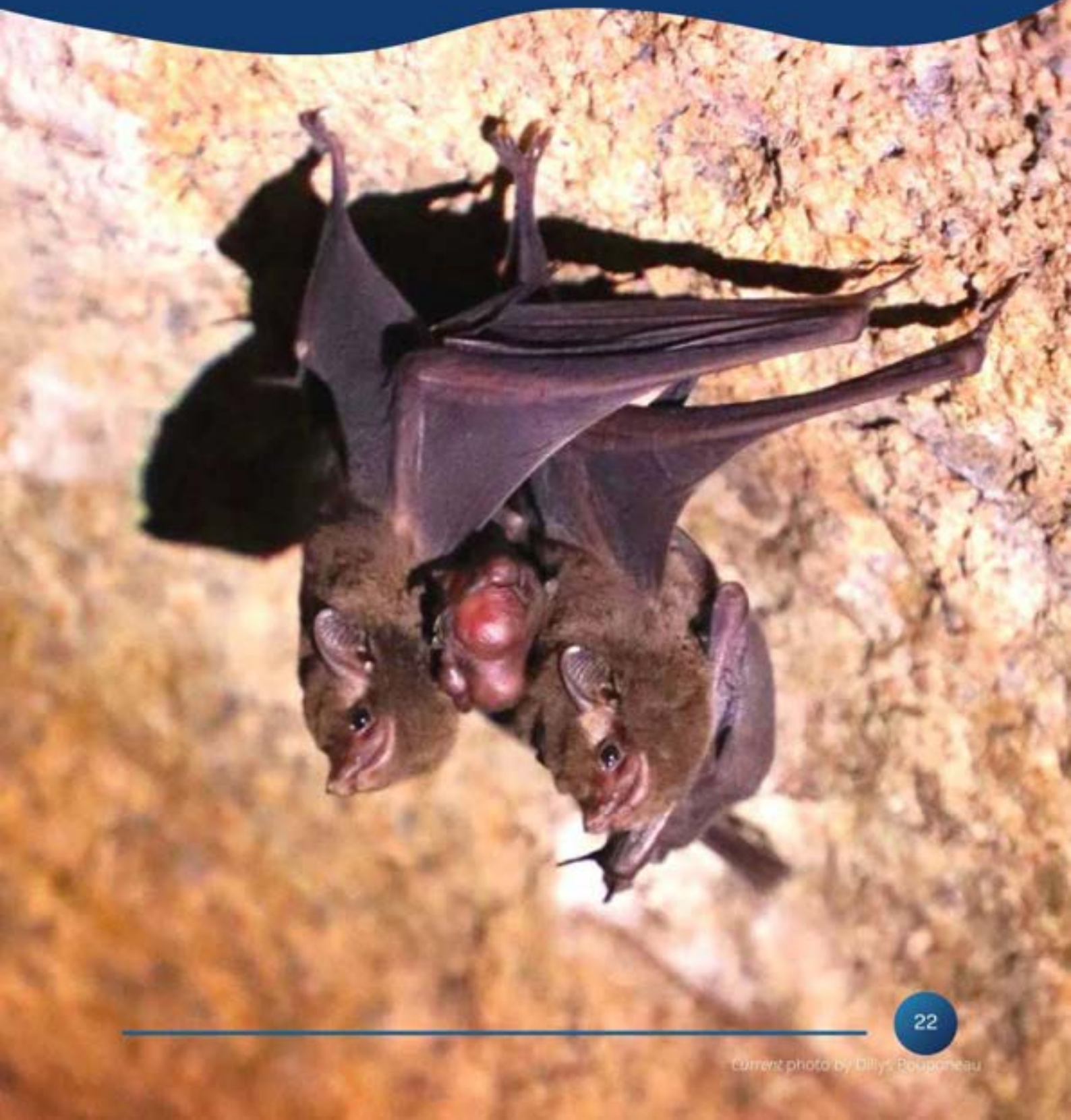
Our conservationists produced several videos to commemorate environmental theme days and the unique biodiversity of the islands. Currently present on the ICS YouTube channel and its Facebook page.

Implemented a mix of activities designed to increase our profile and raise awareness on conservation issues. We received more local applications for vacant posts, more social media visits, and greater interests in the outer islands.

We actively participated in the planning and implementation of the first National Sooty Tern Census on Seychelles islands. Considering the decline in Sooty Tern population, we declared our position on the cropping of birds' eggs.

With the support of IDC, we commenced negotiations with tuna fishery stakeholders on the sustainable use and management of FADs deployed in the Seychelles' EEZ.

ICS monitors a wide range of endemic and native species in Seychelles



Current photo by Dilys Bouchereau

Published a large number of social media posts based on contributions from our conservationists. One particular post regarding a lemon shark pup chased by a barracuda, received more than a million views.

Increased our presence on social media platforms namely Facebook and Instagram. With a percentage increase of 14% page likes and followers recorded on our Facebook page. The highest number of page likes was recorded in the previous fiscal year, at 131% increase from 1st April 2020 to 31st March 2021 – a year where ICS started implementing its new Media and Communications Strategy Programme approved by the ICS Board of Trustees with new targets and strategic actions.

Participated in the formulation of the Marine Spatial Plan and enabling legislation.

Participated in several local and international media programmes with the aim of promoting the conservation work undertaken in Seychelles and to promote the unique biodiversity of the islands where we operate.

We commenced planning to open Conservation centres on:

- Platte Island
- Cosmoledo and Astove

We maintained a strong track record of implementing the final phases of two projects funded by SeyCCAT.

Strengthened the use of technology to record and generate data for our conservation programmes, for example the use of drones to conduct seabird census on Farquhar.

Participated and authored several peer-reviewed scientific articles, for example ICS co-authored peer-reviewed articles on the problem of plastic pollution for pelagic seabirds and catch-and-release recreational fishery in the Alphonse Island group.

Revised the Articles of Association for some Foundations. Special acknowledgement goes to Bernard Georges and Shane Emilie for taking charge of the revisions.

Regular Foundation meetings were held by active Foundations to discuss on important governance and conservation matters. As a result, Foundation members were more engaged in the conservation work undertaken by ICS on islands.

Revised the structure for annual island reports. Special acknowledgement goes to Shane Emilie for having led the charge to revise the report structure.

In March 2022, we completed all the allocated fieldwork on Mahe, Praslin, Desroches, Alphonse, Farquhar and Cosmoledo required under the PEW/Oxford funded Seagrass Mapping and Carbon Assessment Project.

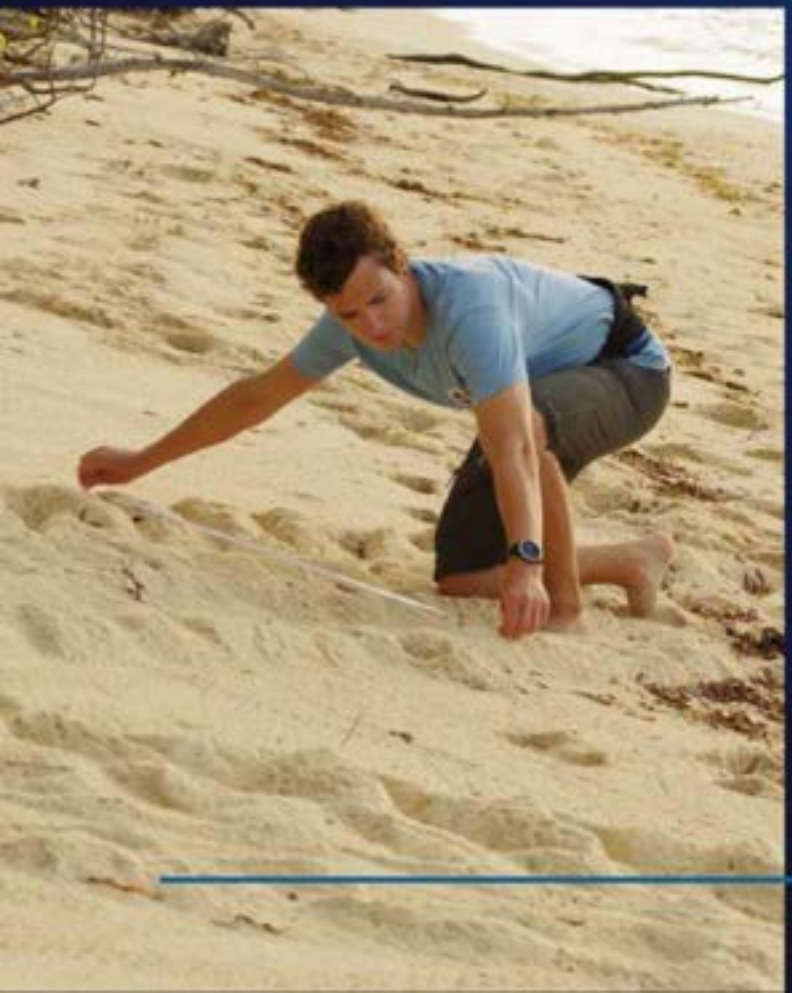
ICS produced comprehensive and visually appealing island reports guided by approved guidelines. A special mention goes to our island conservation teams for compiling the report. Moreover, our special gratitude go to Matthew Morgan for overseeing the annual reports assisted by Shane Emilie and Annabelle Cupidon.

ECOLOGICAL OUTLOOK

LONG-TERM MONITORING AMID THE PANDEMIC MANTAINED

Throughout the year, despite the huge challenges including the Covid-19 pandemic, staff shortages and funding shortfalls, ICS maintained its long-term monitoring of the natural resources of the five islands where we are active. Monitoring enables ICS to quantify and document population trends in species of interest and the status of natural features such as terrestrial vegetation, beaches, coral reefs, seagrass meadows, among others, all of which contribute to the biodiversity of the islands as well as to their economic value and value to the national heritage.

We continued our support for low-impact, small-scale ecotourism, through agreements with IDC and investors. We supported public awareness of the biodiversity value of Seychelles islands through publications, papers and social media. We also strengthened the maintenance of our databases to assist our staff and others engaged in research.



Current photos by Elena Levorato and Jake Letori

THE FAUNA

Current photos by Kiran Bhageerutty, Annabelle Cupidon, Matthew Morgan & Shane Emilie

We monitor Sea Birds

Our work includes

- The study of long-term population trends, breeding success and ecology of some of the most important seabird colonies of Seychelles including populations of national, regional, and global importance.

Seabirds are top predators in the marine food chain and key components of the food web. Monitoring seabirds is a cost-effective and informative tool to monitor the health of our oceans. It enables us to study the status of their habitat, their food supply and the impacts of climate change and overfishing. Seabirds show a high degree of site fidelity, and we have a crucial role to play in understanding effective seabird conservation and better management of ocean resources.

Aride island hosts the world's largest colonies of two species (Lesser Noddy and Tropical Shearwater), the largest population of Roseate Tern race *arideensis* (named after the island) and the largest roost of frigatebirds (of two species) of the granitics. During the year, ICS redoubled efforts at a difficult time to complete the annual seabird census. Results appear to confirm a worrying decline in numbers of most species.

At Alphonse, there are few breeding seabirds, but the ICS team are also responsible for monitoring seabirds breeding at neighbouring St François, home to two species that meet BirdLife criteria to qualify the atoll as an Important Bird Area (IBA): Black-naped Tern and Saunders's Tern. Data collected during the year was mixed, indicating increases in abundance for some species (notably Saunders's Tern, Fairy tern and both noddy species) but declines in others including Black-naped Tern.

The smaller islands of Farquhar were recognised as an IBA in the first BirdLife inventory of sites, authored by two of the founding trustees of ICS (Dr. Gerard Rocamora and Adrian Skerrett), based on populations of Black-naped Tern and Sooty Tern. We were unable to conduct a census in 2020 due to Covid-19 travel restrictions preventing staff returning to the atoll. This made the 2021 census even more important. A worrying decline in the population of Sooty Tern is highlighted elsewhere in this report.

Current photo by Matthew Morgan

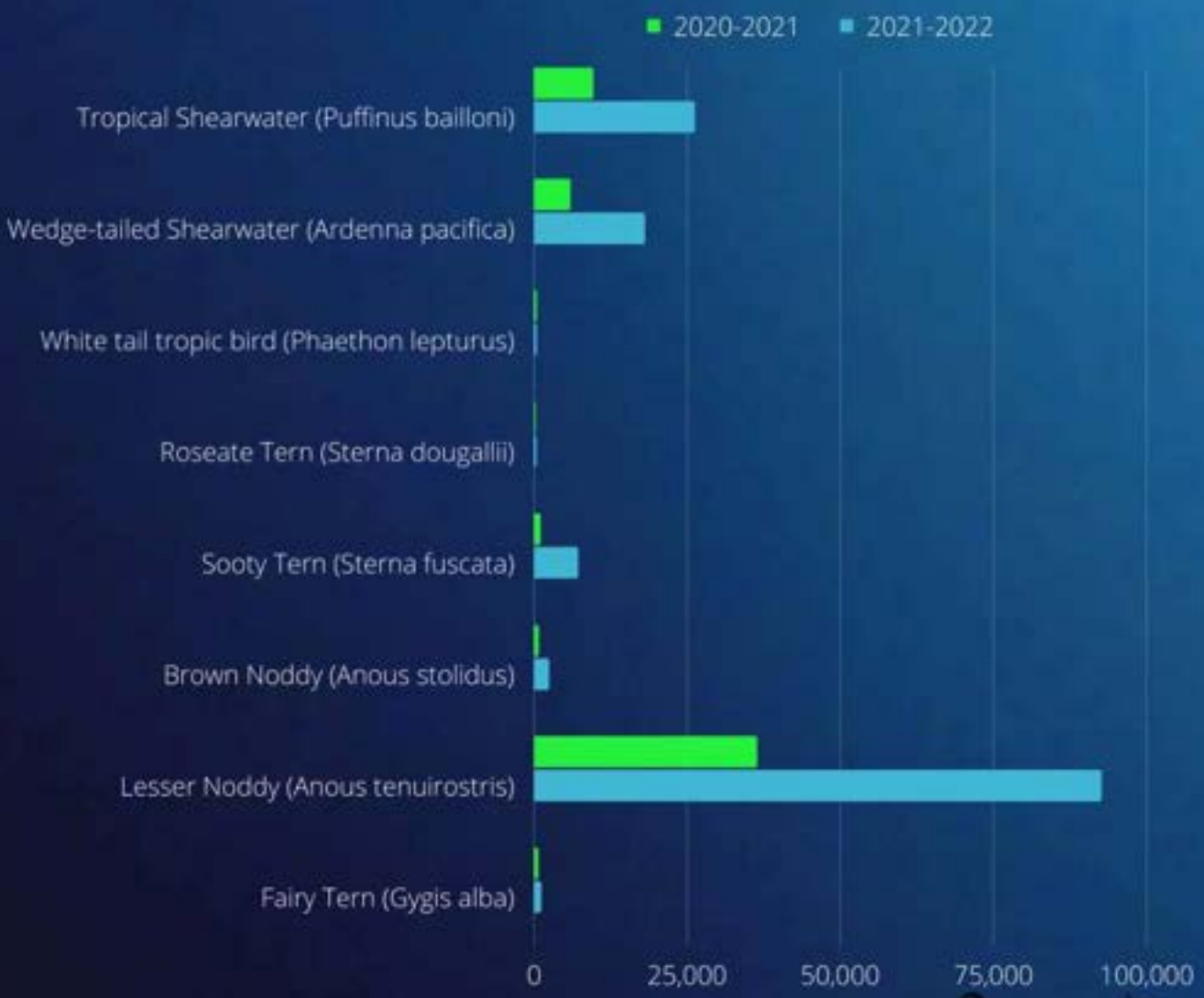
While Aride and Farquhar collects information on breeding pairs, Alphonse collects the total count per species only. These are represented below.

Number of sightings on Alphonse

Current **photo by Thomas P. Peschak**

We monitor breeding pairs of several seabird species, including some that only breed on Aride. See below the 2021-2022 results compared with the previous year.

Number of breeding pairs on Aride



Current photo by Aurelie Duhec

We monitor other birds

Our work includes

- Monitoring five endemic land birds at Aride Island including a small population of Seychelles Magpie-robin, one of Seychelles' flagship species. At the end of March 2022, there were just 8 birds surviving on Aride, a matter of great concern to ICS. No population estimate was made for other species, but populations of Seychelles Fody, Seychelles Warbler, Seychelles Blue Pigeon and Seychelles Sunbird all remain healthy.
- The recording of migrants and vagrants at all islands.

Current photo by Estella Snowden

The 2021 Annual Report of Seychelles Bird Records Committee showed that ICS staff were the major contributors of sightings of rare vagrant birds in Seychelles. Ten vagrant species were recorded on Alphonse including pipit, wagtails, cuckoos and pratincoles. On Desroches, the highlight was the first Seychelles record of Oriental Honey-buzzard *Pernis ptilorhynchus*, shown below, remaining on the island for more than 6 months. At Silhouette, another large bird of prey, an Osprey on 13 December 2021 was a sixth record for Seychelles. Aride recorded a Pacific Swift *Apus pacificus* on Christmas Eve 2021.

Current **photo by Elena Levorato**

We monitor Sea Turtles

Turtle conservation in Seychelles has been a huge success following their protection in 1994. However, Green Turtles remain Endangered, and Hawksbills remain Critically Endangered.

ICS has played a key role in their recovery and has one of the largest turtle datasets in Seychelles.

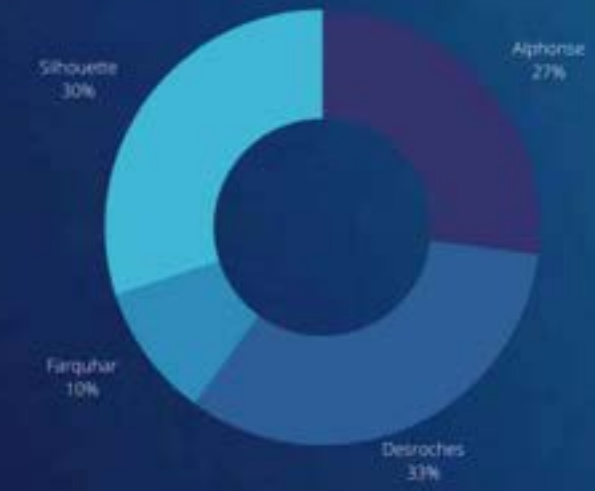
Our work includes

- The study of turtles across all our locations.
- We gather turtle track data collected from the beach. Turtle tagging is also performed to provide us with the required data for turtle identification. This combination allows us to estimate population size and evaluate the population dynamics.

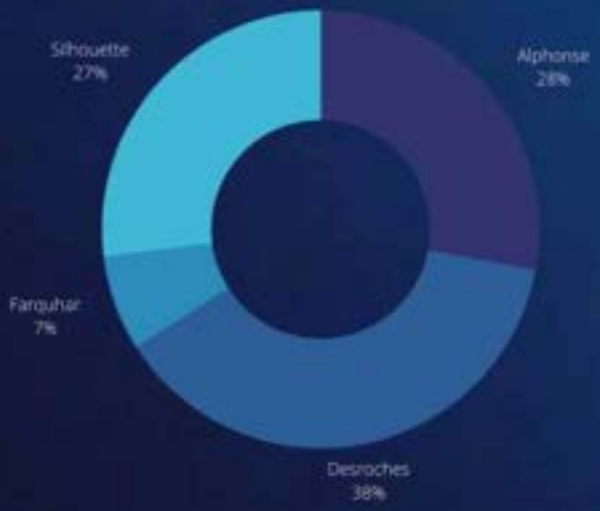
Current photos by Estella Snowden

Hawksbill turtle (Eretmochelys imbricata) data

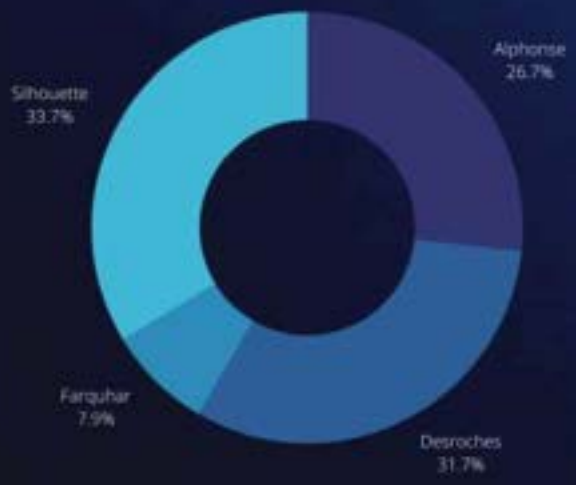
Total Emergence across four islands



Total Eggs laid across four islands



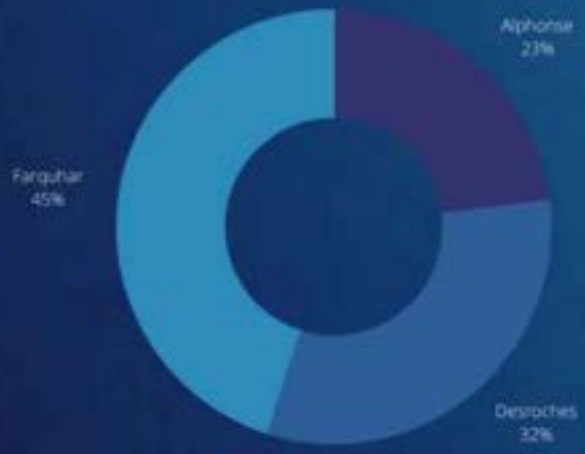
Total Number of pits dug across four islands



Current **photo by Matthew Morgan**

Green turtle (Chelonia mydas) data

Total Emergence across three Islands



Total Eggs laid across three islands

Total Number of pits dug across three islands

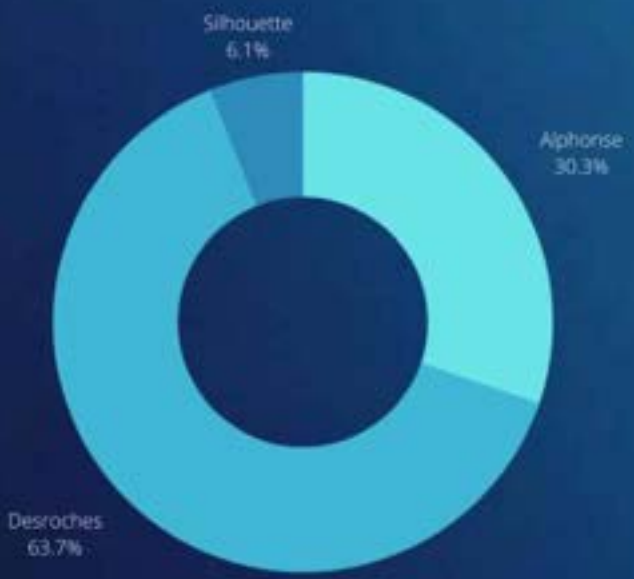
We monitor Tortoise

Our work includes

- Monitoring the population status and overall health of Aldabra Giant Tortoises (*Aldabrachelys gigantea*) on Aride, Alphonse, Desroches, and Silhouette.

Tortoise monitoring is not done on Farquhar. While on Desroches the wild tortoise population is so large that definite figures are not available. It is estimated that the population is well above 200. The below chart represents the number of tortoise found on three islands as a percentage of the overall count (Desroches represented as 200).

Aldabra Giant Tortoise population on three islands



DID YOU KNOW?

In 2012, a tortoise adoption programme was introduced on Desroches Island by the Desroches Foundation to benefit the wellbeing of Aldabra Giant Tortoise (Aldabrachelys gigantea) on Desroches, a species endemic to Seychelles. The programme was designed to assist ICS with the breeding and rearing of tortoises before they are released into the wild. Money raised through the adoption programme helps to cover the financial costs to run and maintain the current Tortoise Sanctuary and juvenile rearing units.

- On Aride, Aldabra Giant tortoises were introduced in 2018 as part of the Seychelles Magpie-robin recovery programme. Mating was observed on several occasions in January and February 2022, but as yet no other breeding activity has been observed. Interactions between the Seychelles Magpie-robins and tortoises were recorded but were rare.

- On Silhouette, ICS monitored 8 free-ranging Aldabra Giant Tortoises at Grand Barbe, and 11 captive juveniles at La Passe. At the end of 2021, the captive juvenile tortoises were moved to HLRS's newly constructed tortoise sanctuary. ICS staff performed regular upkeep of the tortoise enclosure and ensured tortoise food is available.

- On Alphonse, the population remained healthy with 95 individuals at the end of 2021. The juvenile nursery was maintained throughout the year and ICS implanted Passive Integrated Transponder tags into 11 juveniles which were then released into the wild.

- On Desroches, the ICS team engaged with visitors to join tortoise feeding, adopt tortoises and on two occasions during the year, guests were invited to participate at the tortoise release. A total of 33 juveniles were released into the wild.

- On Farquhar, ICS monitored captive tortoises and released 2 young tortoises into the wild.

Current **photo by William McNeely**

Current photo by Dillys Pouponeau

We monitor other fauna

Our work includes

- The monitoring of Thomasset's Frog, Seychelles Tiger Chameleon, Seychelles Tree Frog and Sheath-tailed Bat on Silhouette Island.
- The monitoring of three species of skink, three species of gecko, two snake species and one terrapin species on Aride.
- Casual observations of terrestrial and marine invertebrates on all islands and pitfall trapping on Aride, to monitor the plateau for invasive Big-headed ants.

The Critically Endangered endemic Seychelles Black Mud Terrapin was reintroduced to Aride after an absence of more than a century in 2012. Ongoing monitoring of the population has been challenging but in February 2022 a hatchling was discovered, the sixth known to have hatched on Aride.

A Coconut Crab observed during the year at Alphonse raised hopes that this species may one day recolonise the island. On Desroches, a high number of dead sea urchins and small crustaceans were found on the beach in November 2021 and again in February 2022; the cause of death is unknown.

Current **photos by Said Harryba, ICS & Matthew Morgan**

We monitor corals

Our coral reefs have high socio-economic and ecological value, therefore annual monitoring of their status is a key component of our work plan.

Coral reef surveys are carried out across all locations. The range of locations provides a unique insight into the differences found between the coral found around the inner and outer islands. The data obtained is shared with the Seychelles Fishing Authority (SFA). This gives rise to collaboration with the aim of developing a better understanding on fisheries.

Out of all five locations, coral surveys and the follow-up analysis were only completed for 2 locations: Alphonse and Desroches. This as a result of several factors including seagrass mapping, staff shortage, and bad weather.

Dive transects of '2 x 40m' were used on both islands with a zone depth ranging from 2.5m to 16m.

Our work includes

- Coral monitoring to understand how coral reefs are adapting to climate change and increased fishing pressures. This also includes the collection of Live Hard Coral Covering (LHCC) information.

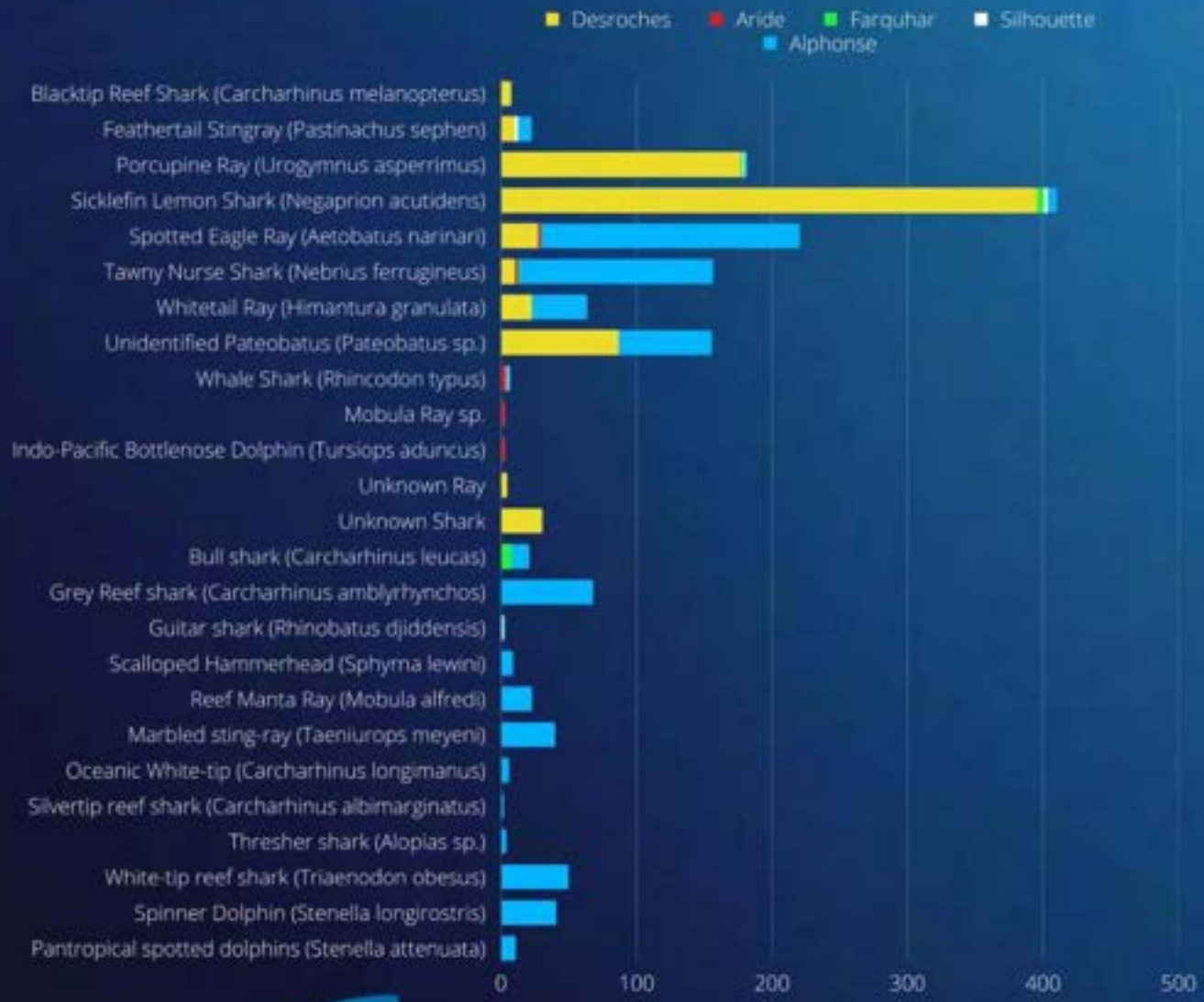
Island	Number of Sites Surveyed	Recorded LHCC (2021 -2022)	Most Abundant Coral	Least Abundant Coral	Coral Bleaching	Algae percentage Cover
Desroches	4	8.4%	Stylophora 5.4%	Gardineroseris 0.04%	Coral bleaching observed on Pocillopora, Pavona, Porites, Acropora, Fungia, Stylophora.	3.8%
Alphonse	6	46.0%	Porites 15%	Seriatopora <0.5%	Slight bleaching of pocillopora	10 - 20%

Current photo by ICS

We monitor other marine life

Our work includes

- Casual observation of certain marine species whilst conducting beach patrols and various dives across the islands. Given that data collection is done through mixed methods, direct comparison cannot be done. However, the data does allow us to have a glimpse and record various species in the marine protected area surrounding the islands. The below is a summary of the species we have encountered.

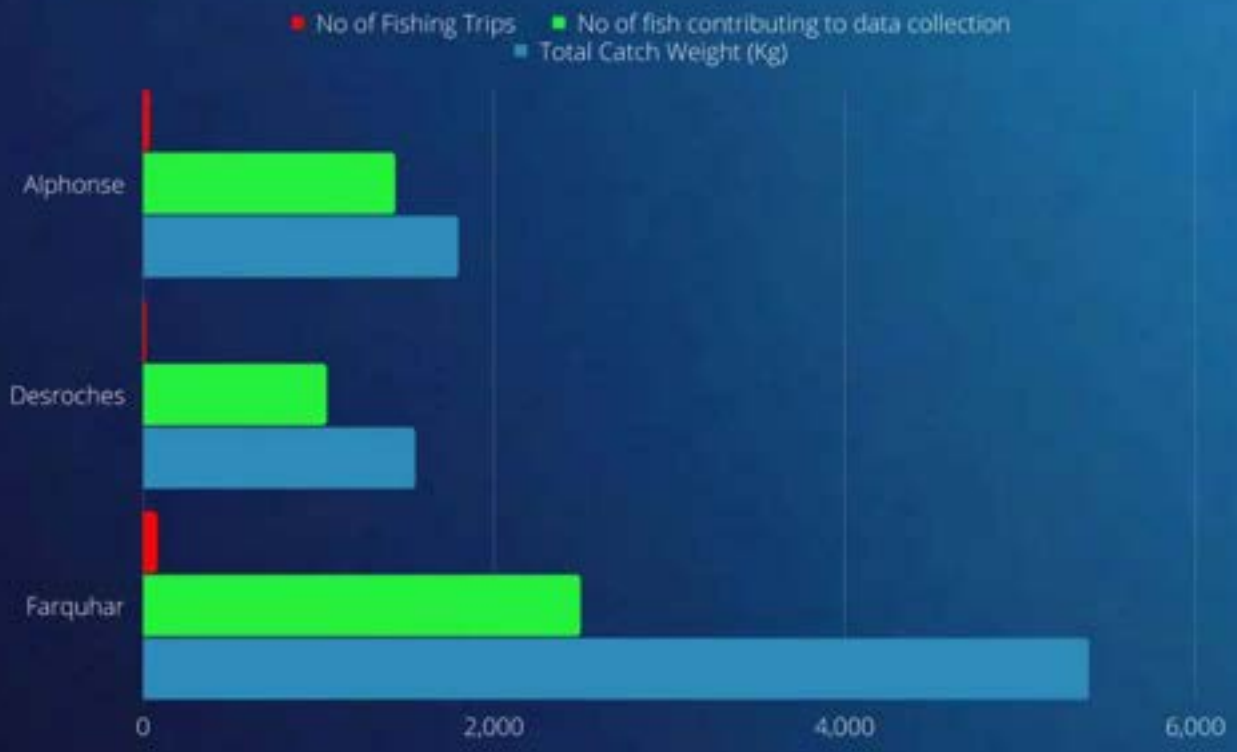


Current photo by Annabelle Cupidon

We monitor fishing activities

Our work includes

- The monitoring of subsistence fishing to record catch number, average fish weight, and their fork length. This is carried out on Alphonse, Desroches, and Farquhar only.
- We keep track of fishing trips and the most caught species.



The fish species caught at these locations may differ.

Current photos by Gail Fordham

Find below the top 3 fish species caught per location with their recorded data.

Alphonse

The total number of fishing trips was 37 and altogether 1436 fish were caught. The total catch weight recorded was 1795 kg.

	1	2	3
Fish Species	Rosy Jobfish	Brown-spotted Grouper	Lyretail Grouper
Average Weight (Kg)	1.36	1.26	1.51
Fork Length (cm)	44.4	45.3	44

Desroches

The total number of fishing trips was 16 and altogether 1046 fish were caught. The total catch weight recorded was 1548.85 kg.

	1	2	3
Fish Species	Spangled Emperor	Twin-Spot Snapper	Spotcheek emperor
Average Weight (Kg)	1.5	0.5	2.3
Fork Length (cm)	43.8	30.9	45.9

Current photo by Shane Emilie

Farquhar

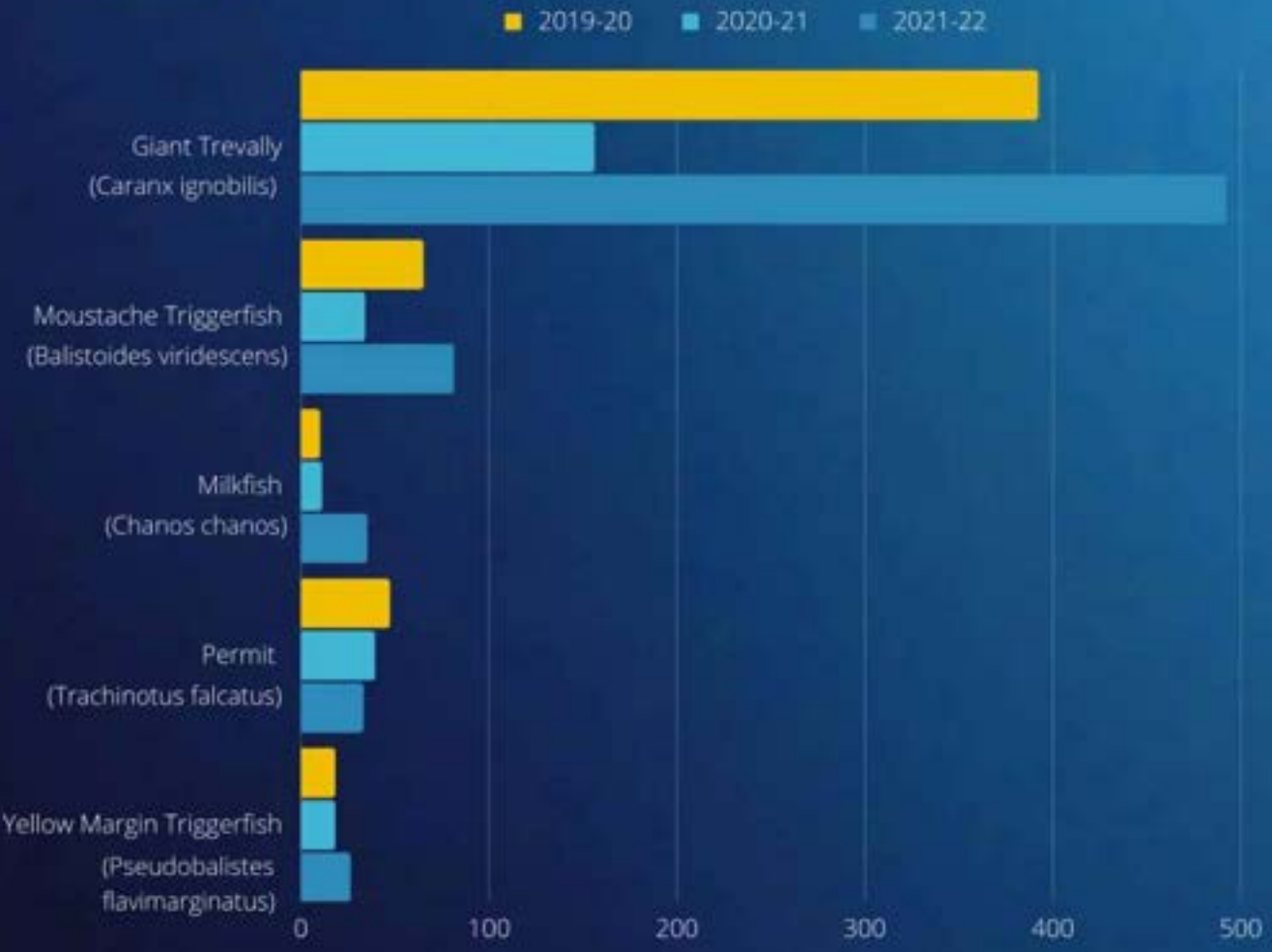
The total number of fishing trips was 82 and altogether 2494 fish were caught. The total catch weight recorded was 5391 kg.

	1	2	3
Fish Species	Spangled Emperor	Twin-Spot Snapper	Camouflage Grouper
Average Weight (Kg)	1.5	0.5	2.3
Fork Length (cm)	42.6	29.8	45.9

Current photo by Shane Emilie

Fly Fishing

- We monitor fish caught and released by anglers on Alphonse. This is part of the SeyCCAT funded project on fly fishing activities in the Alphonse Group, entitled 'Spatial ecology & response to catch and release of recreationally targeted fish species on St. François & Alphonse Atolls: Implications for conservation & management'.



READ MORE

Use your device camera to scan the code and read more about the SeyCCAT funded project: Alternatively visit: https://seyccat.org/spatial-ecology-and-response-to-catch-and-release-of-recreationally-targeted-fish-species-on-st-francois-and-alphonse-atolls-implications-for-conservation-and-management/

Current photo by Said Harrybe

THE FLORA

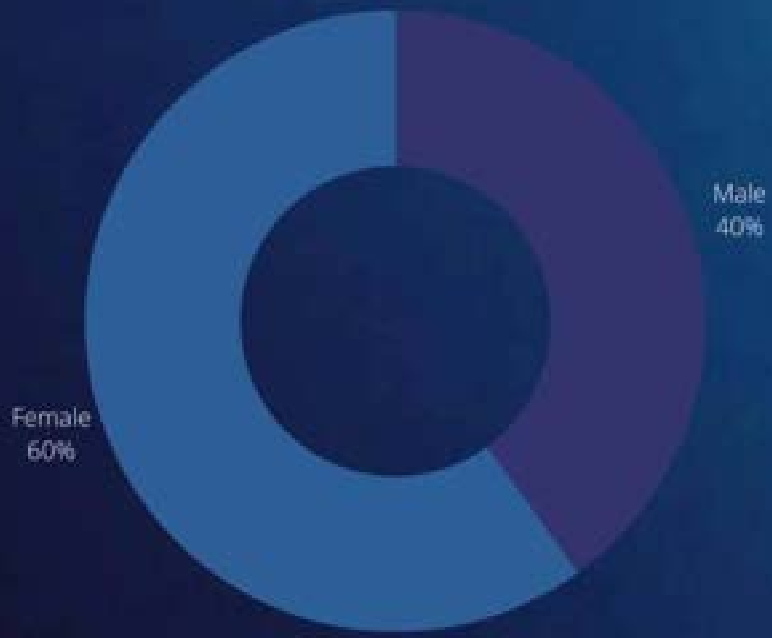
Current photos by Said Harryba and ICS

We monitor Coco-De-Mer

Our work includes

- Conducting census of Coco-de-mer to effectively monitor the population on Silhouette.
- Determining the number of male and female trees, germination success rate and the overall growth of Coco-de-mer palm trees.

The adult population of Coco-de-mer on Silhouette is currently at 20, with the majority being female.

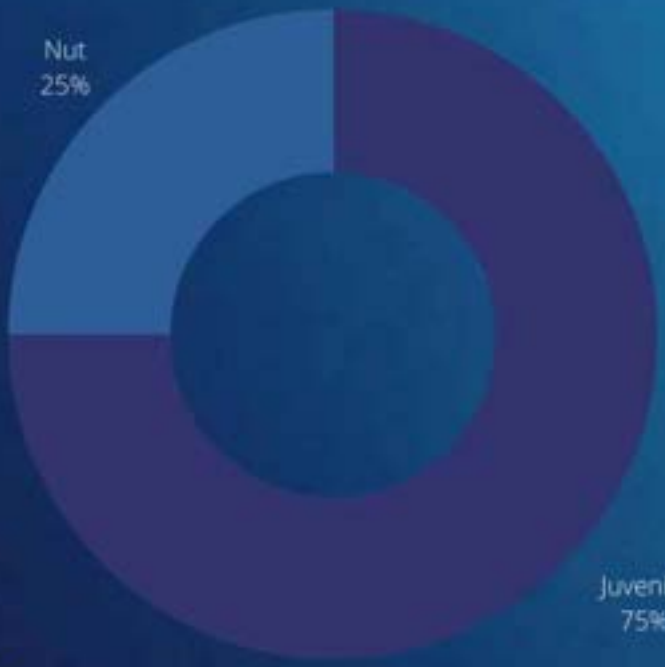


Through monitoring and research, it was found that the diameter breast height (DBH) of both male and female trees increased on average by 0.2 cm over 5 years.

According to Dr. Fleischer-Dogley *et al* (2010), this similarity was the same for Praslin and Curieuse, which contradicts the suggestions that the trunks of female trees are broader to support the weight of several mature nuts.

Current photo by Said Harryba

An average of 3.9 nuts per tree is recorded each year from fertile females. The maximum yield for a single tree was 11. The juvenile population stands at 12. The collected nuts are yet to germinate.



***Current* photos by Said Harryba**

We monitor other Plants

Our work includes

- Monitoring of the population health of native and endemic plants.
- Monitoring and control of invasive plants.
- Conducting research on the impact of Pisonia trees on Aride Island, which offer nesting habitats to birds, but also pose a potential threat of entanglement to seabirds due to their sticky seeds.

On Aride, ICS studied the phenology of three species of tree throughout the year: Wright's Gardenia, Peponium vogelii and Pisonia.

On Silhouette, collection of endemic and native species seedlings and seeds continued throughout the year and plants were grown in the ICS native plant nursery to distribute in suitable areas on the island. In February 2022, a habitat restoration/trail clearing took place at Anse Lascar in collaboration with Hilton and IDC. The team removed large portions of the invasive creepers that were hindering the growth of surrounding trees.

On Desroches, control of invasives included the removal of Castor Oil plants in October 2021 with 262 trees taken out. Vegetation Restoration was placed on hold to be carried out by IDC at a future date.

DID YOU KNOW?

Aride is home to a small population of Wright's Gardenia, endemic to Seychelles. The sweet, scented plant was named after Edward Percival Wright who visited Seychelles in the 19th century.

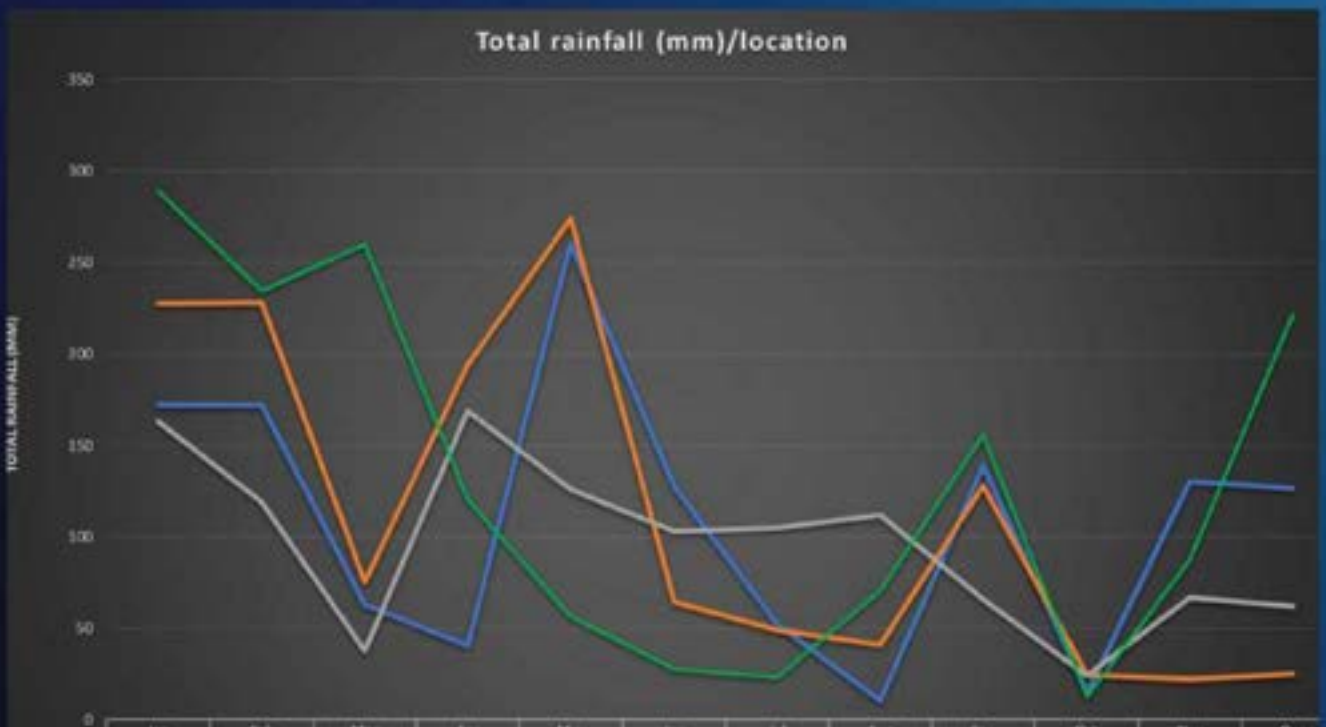
We monitor physical parameters

Our work includes

- Daily monitoring of ambient weather patterns, including temperature, relative humidity, and precipitation across the islands.
- The data collected is essential in weather predictions, assessing variation in weather conditions, atmospheric model simulation and is important in the study of marine ecosystems.
- Monitoring of sea surface temperature across the islands of Alphonse, Desroches, and Farquhar.
- Beach monitoring to record coastal morphologic changes overtime influenced by tides, wave power and climatic changes.

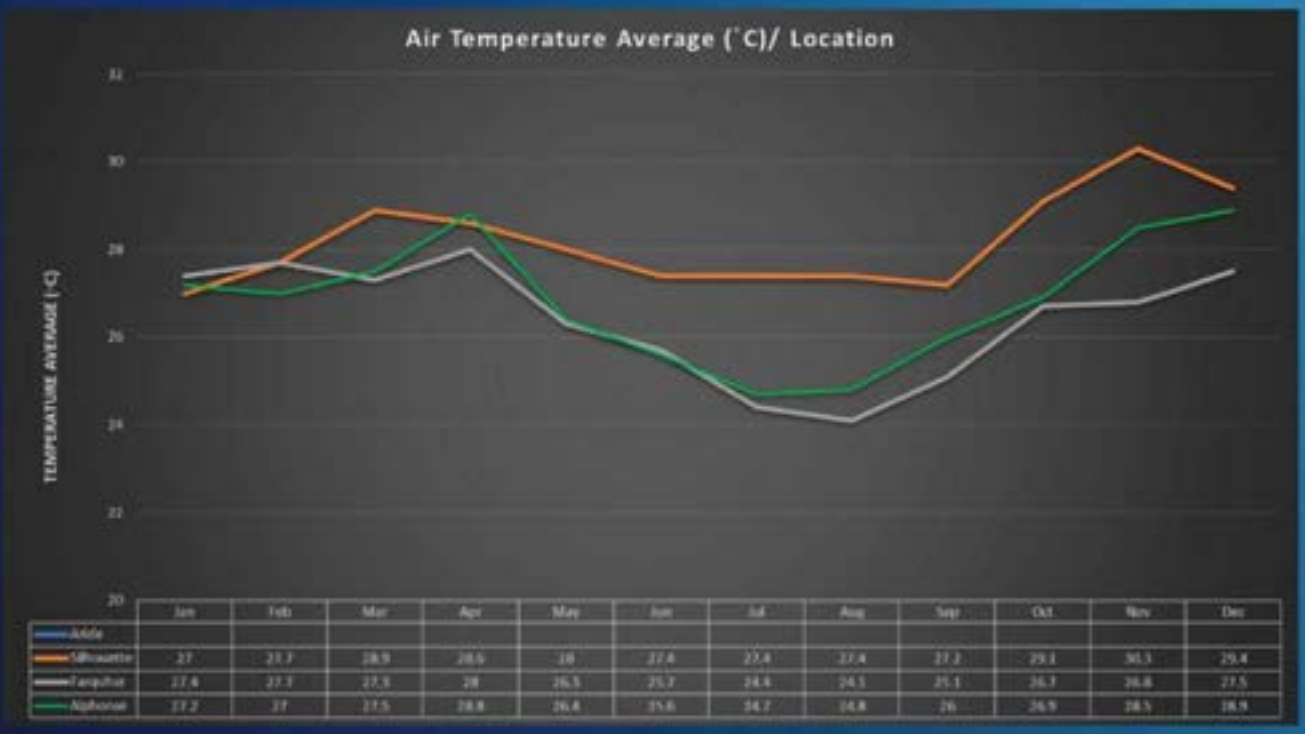
Rainfall

Rainfall volume measured in January 2021 was the highest, while October 2021 recorded the least volume of rainfall.



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Aride	171.9	172	63	80.7	240.3	127.5	52.1	10.25	138.6	14.5	130.1	126.6
Silhouette	227.7	228	75.5	198	274	64.4	49	41	126.1	24.5	22	25
Farquhar	163	139	57.6	169	126	109	105	112	66	24	67	62.3
Alphonse	289.2	234.7	260	130.5	56.5	28	23	70.8	155.5	12.5	87.75	221.5

Air temperature



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Aride												
Silhouette	27	27.7	28.9	28.6	28	27.6	27.4	27.4	27.2	29.1	30.3	29.4
Farquhar	27.4	27.7	27.5	28	26.5	25.7	24.4	24.1	25.1	26.3	26.6	27.5
Alphonse	27.2	27	27.5	28.8	26.4	25.6	24.7	24.8	26	26.9	28.5	28.9

The findings from the graph above shows the average temperature recorded on three islands only, namely Alphonse, Farquhar, and Silhouette. The lowest temperature was recorded in August 2021, while the highest temperature was recorded in December 2021.

Cuirasric photo Jake Letorie

Sea surface temperature

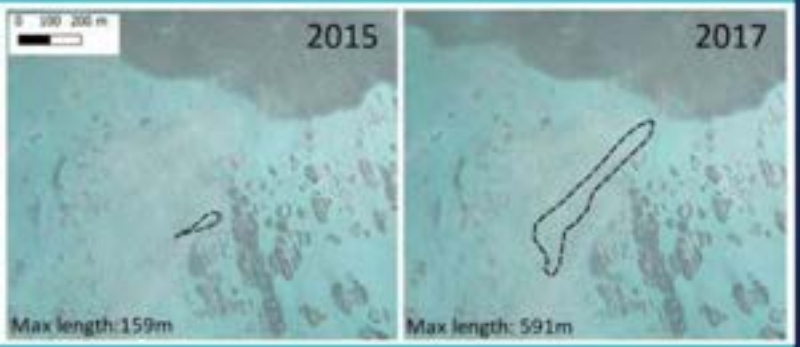
We monitor sea surface temperature (SST) whenever possible.

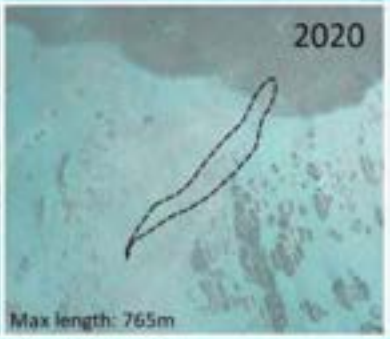
Location	Number of probes deployed	Deductions
Alphonse	10	The data collected was in line with ICS expectations, with the lagoons holding the warmest water, followed by medium temperatures on the shallow reef, and then the coolest water recorded on the deeper reefs. the new deep SSTs appears to show a detectable up-welling of cool water in January 2022. Also, water temperatures were lower in April 2022, compared with April 2021. It is possible that this was connected to the tropical cyclones which passed over the western Indian ocean early in the year, exerting a cooling effect.
Desroches	4	Data recovered only from one probe. The data from the probe at Oxy Rock revealed that the average temperature was 28.2˚C from February 2020 to March 2022.
Farquhar	5	Looking at SST probes where data has been downloaded (Main Channel and Ile aux Goëlettes); mean sea surface temperatures ranged from 24°C to 29.5°C during 2017 to 2021, with lowest mean values detected in the southeast monsoon in May-September, highest mean values were recorded in the northwest monsoon during November to March. In 2020, Goëlettes was generally subjected to higher mean temperatures when compared to the Main Channel 7m probe. This is likely due to its location in the lagoon and sheltered within a bay, whereas the Main Channel probe is subjected to vast quanitities of fast flowing water and tidal currents that flow in and around the channel mouth.
Silhouette	4	4 SST probes was deployed in the Silhouette MPA in March 2019. Data was retreived in March 2020, the ropes attached was replaced and the buoys was cleaned. Black rock sst probe at 12m deep recorded a Max of 30.5°C and a Min of 24.4°C with an average of 27.1°C. Black rock sst probe at 7.9m deep recorded a Max of 30.6°C and a Min of 24.8°C with an average of 27.3°C. La Passe sst probe at 14.1m deep recorded a Max of 30.4°C and a Min of 24.5°C with an average of 27.3°C. La Passe sst probe at 6m deep recorded a Max of 30.7°C and a Min of 25.1°C with an average of 27.4°C.

Coastal morphology

Beach monitoring is conducted at selected locations on Aride, Alphonse, Desroches, Farquhar, and Silhouette. The coastal zones around the islands are naturally dynamic and exposed to the changing climatic conditions and human activities, hence are not sparred from the harmful effects of coastal erosion. Guided by beach-profile monitoring protocols, our staff collects data on coastal changes and provides the information to key stakeholders to explore solutions to protect and minimise the vulnerability of the coastlines from further degradation. We use various methods to record patterns of erosion overtime, such as beach outline tracks, aerial photographs and dynamic zones monitoring.

Based on data collected, we have observed beaches that continues to lose their pristine character and social appeal. This has a negative impact on several fauna that depends on the coastlines to breed, especially the significant populations of sea turtles that are using the beaches as nest-sites. We have also observed the formation of sandbanks and an increase in the size of some beaches due to sand accretion. For example, on Farquhar, the ICS team continues to monitor Derrick's Sandbank, observing changes in its size and length since it was established in 2015, as shown below.





Current photos by Matthew Morgan and Annabelle Cupidon

The table below provides a summary on coastal erosion across monitored beaches on all five islands and mitigation measures undertaken to tackle the coastal degradation.

Location	Status	Mitigation
Alphonse Group		
Pointe Huteau beach on Alphonse Island	The beach is growing outwards through sand accretion, however, the same beach is narrowing slightly just in front of the runway.	A sea wall made up of casuarina bollards was installed in 2019
Pointe Dot beach on Alphonse Island	Eroding and accreting over the years. The shape of the corner has changed since 2017, growing on the northern edge, but retreating landward from the southern aspect.	No further mitigation measures undertaken
Bijoutier Island	Sand is eroding on the western side, and being deposited on the eastern side. However, the rate of accretion is higher than the rate of erosion – resulting in a 36% increase in total land area since 2008. The island has also shifted more than 40m in an easterly direction.	No further mitigation measures undertaken
Pointe la Courte beach on St. François Island	The island extended north by 379 meters in 13 years, an average of approximately 30 meters a year. It is speculated that St François and One Palm island might merge together.	No further mitigation measures undertaken
Desroches Atoll		
Several beaches around the island such as opposite the airstrip and Four Seasons (FS) hotel	The beach outline reveals that most of the beach around Desroches seems stable with seasonal sand erosion and accretion. However, some parts of beach get more erosion than accretion most probably due to human constructions and modification of the coastal vegetation (clearing in front of the FS villas, swimming pool and airstrip)	Wooden walls have been placed from the airstrip (North side) to FS hotel, to try to prevent/reduce coastal erosion.
	The dynamic zones data (distance from a fixed point to the erosion point) shows that 2 zones are stable (bombay and villa 11). One slightly decreased until a concrete wall was built (Muraille bon dieu), one decreased until the wooden wall was built (swimming pool) and the other almost disappeared completely until reaching the fixed point (Pointe Helene).	The construction of 800 - 1000 reef balls has started by IDC in February 2022 and they will be positioned along the Northern side of the island to help prevent/reduce coastal erosion.
Farquhar Atoll		
	As previously mentioned on the previous page, when there is erosion, sand is naturally deposited elsewhere. This can lead to the build up of spits and sandbanks that may eventually form into islands, for example, the Derrick's Sandbank.	No further mitigation measures undertaken
Silhouette Island		
Several beaches around the island	Beach crest vegetation on both sides of the island appears to be healthy and abundant. However, in some parts there are areas where massive erosion events displace and remove the beach crest creepers and shrubs, particularly in front of HLRS's beach-facing villas. Anse Lascar mangroves also have infiltration of sea-sand during high tides.	In 2020 the beach in front of the villas was strongly impacted by very high tides and strong erosions. Around 15,000 sand bags was filled and placed in front of the villas to block the sand erosion temporaly. The beach needs to be further maintained and enhanced in these areas, to prevent further erosion.

READ MORE

Use your device camera to scan the code and read more about the Reef Balls Project on Desroches: Alternatively visit: http://www.seychellesnewsagency.com/articles/16993/%22Reef+balls%22+New+ways+to+stop+beach+erosion+tested+on+Desroches+Island

Current photo by Elena Zeprato and William McNeely

Current photo Dillys Pouponeau

ECOLOGICAL CONTRIBUTIONS

Despite the cessation of the Corporate Social Responsibility Programme in April 2021 and the challenges of COVID nationwide, we maintained our conservation programmes and associated projects. With the support of our partners, we were determined to address ongoing socio-ecological issues that continues to impact the fragile island ecosystems.

TACKLING FISH AGGREGATING DEVICES

ICS produced a position paper shared with the people of Seychelles and our partners overseas on the use of Fish Aggregating Devices (FADs). Drifting devices (dFADs) in particular, are having a devastating impact on the marine and coastal habitats in the outer islands. Mostly made from non-biodegradable materials, these man-made structures are used by purse seiners in the tuna fishery to attract pelagic fish, making them easier to catch. We are the only not-for-profit organisation implementing the FAD Watch Programme in the Seychelles' Exclusive Economic Zone, funded by the Sustainable Indian Ocean Tuna Initiative (SIOTI) and OPAGAC (Organización Productores Asociados Grandes Atuneros Congeladores) since 2016. Implemented across all five islands where we currently have conservation centres, the programme is aimed at preventing and mitigating dFADs from beaching.

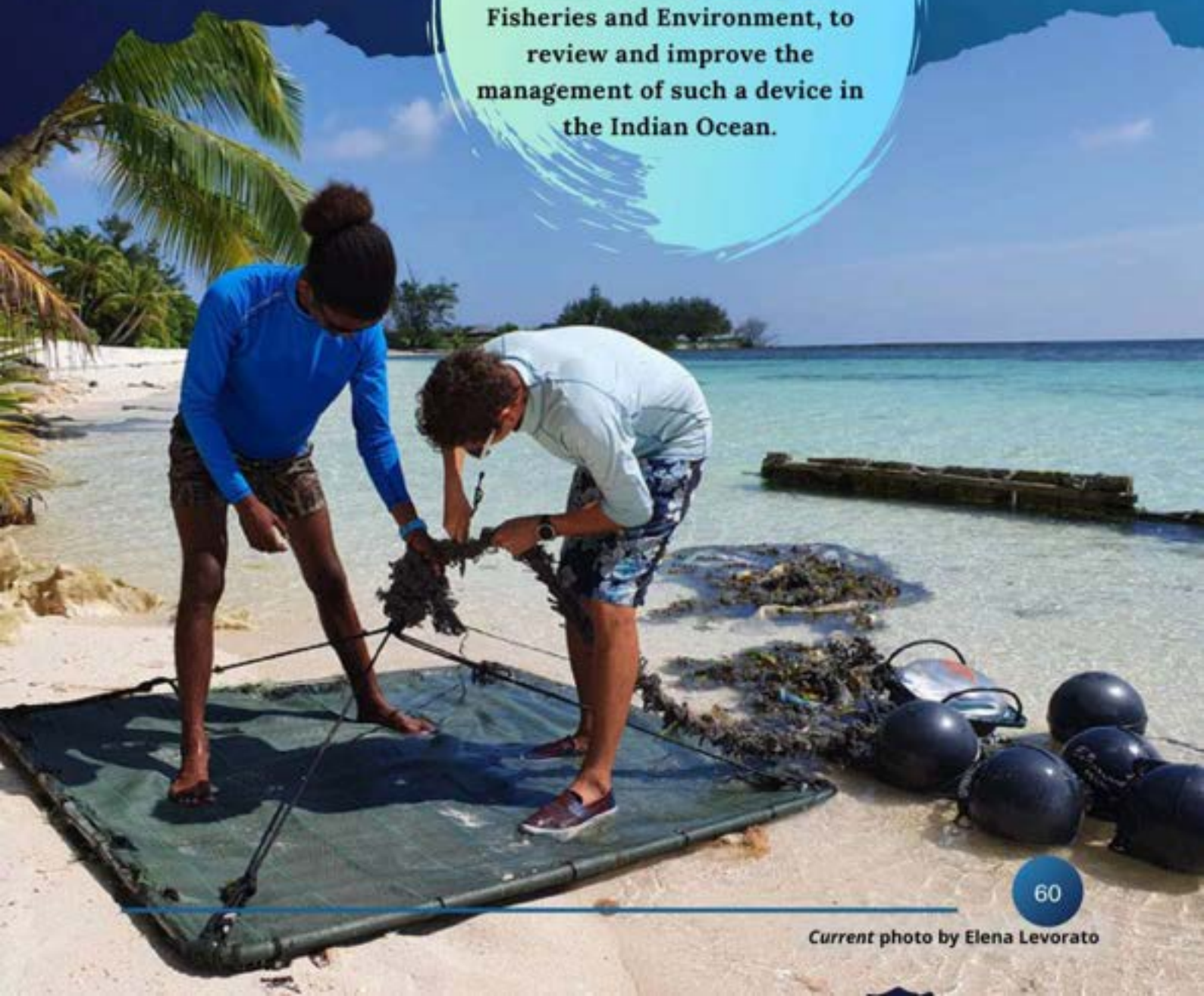
""We are inundated with dFADs all year round" states Gail Fordham, the Alphonse Conservation Officer".

In most cases when the dFADs are not recovered, they inflict considerable damage to coral reefs, entangling marine life and cause more marine pollution. We recorded a surge of dFADs from the online tracking system which has been installed to alert the conservation teams once the dFADs are approaching the surrounding marine protected area. However, quite often, our teams do not receive alerts for dFADs that are usually long abandoned because of the absence of satellite buoys attached to them. Conservation Officers have reported observing many dFADs drifting in the vicinity of the islands. For example, a total of 113 dFADs were recorded drifting pass Desroches Atoll, while 144 were recorded at Silhouette Island.

Current photo by ICS

In collaboration with our partners, notably IDC, we managed to intercept, remove, and dissemble a total of 34 dFADs in 2021-2022. This meant reduced collision with fragile habitats and marine life entangled in the nets attached to the devices. We still encounter difficulty to remove the devices, because of the islands' topography and strong weather conditions during the south-east trade winds. During a trip conducted by ICS and IDC Executives to Cosmoledo and Astove in 2021, a substantial number of dFADs were observed stuck on corals and beaches. Subject to funding, we plan to expand our presence on these islands to remove the accumulated artificial structures with the support of our partners.

With the noticeable increase of dFADs around islands, we call upon all partners, namely the Ministries responsible for Fisheries and Environment, to review and improve the management of such a device in the Indian Ocean.

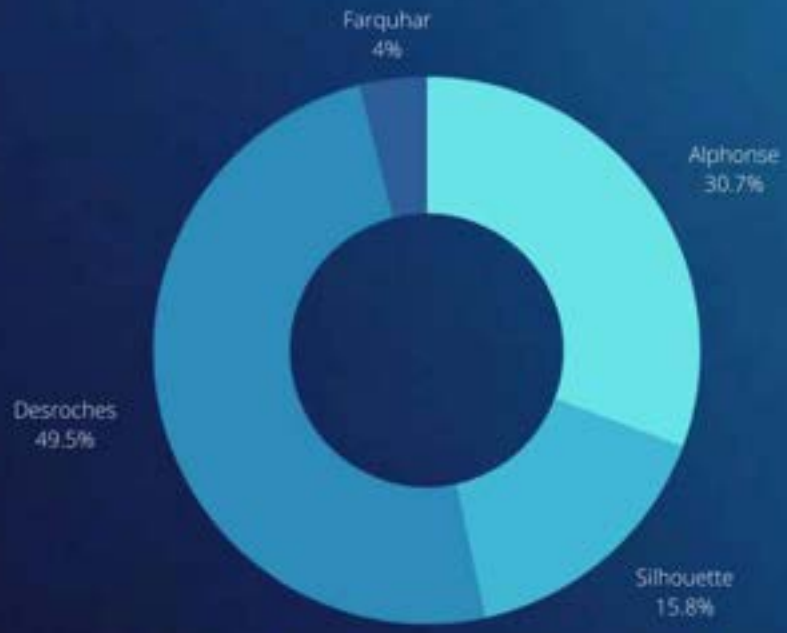


Current **photo by Elena Levorato**

Current photo by ICS

MAINTAINING CLEANER COASTAL HABITATS

Throughout the year, we partnered with key partners such as IDC, Parley and the tourism establishments to maintain cleaner beaches. For example, on Alphonse, we partnered with Blue Safari to conduct regular beach cleans with hotel guests. The litter collected are from marine debris washed ashore, usually more so during the south-east trade winds. Non-biodegradable materials are sorted, weighed and recorded for monitoring purposes. The illustration below shows the total volume of marine litter collected during beach cleans across four islands.



Beach cleans do not only result in cleaner beaches for use by island visitors, but also for a variety of species, especially nesting seabirds and nesting turtles. We hold interactive talks with hotel guests on the islands with tourism establishments. This raises awareness of the environmental impact of marine litter and invitations are extended to guests to participate in beach cleans.

HLRS on Silhouette partnered with us to introduce a new initiative called 'Trash for lunch'. In this initiative, hotel guests are invited to collect at least one full bag of beach debris in exchange for a lunch voucher for two persons at one of the resort's restaurants on Silhouette.

On Farquhar, we partnered with The Ocean Project (TOP) and IDC to investigate the abundance, composition, and accumulation of marine litter across the atoll for a period. This project dates back to 2019.

Quite often, some of the litter collected was recycled or reused by our staff to create informative displays and works of art to raise environmental awareness on the issue. These displays are appreciated by many island visitors, especially children. Conservation Officers have reported that most visitors have expressed their concern on the constant rise of marine pollution and the fact that this is largely originating from beyond Seychelles. Due to moving currents, litter from distant lands drift to Seychelles, accumulating on islands where there is a lack of ICS presence. Considering the success of our participation in the Outer Islands Clean-up Project in 2019, whereby 10.627 tons of litter were collected, we welcome a similar initiative spanning across weeks to remove litter on the outer islands, especially the ones where there is no conservation centre.

READ MORE

Use your device camera to scan the code and read more about the Outer Islands Clean-up Project or alternatively visit:
http://www.idcseychelles.com/news/outer-islands-clean-up-106-tons-of-marine-debris-collected

Current photos by ICS, Annabelle Cupidon and Parley Seychelles

PROTECTING WIDLIFE AGAINST POACHING

We maintained a very firm foundation on tackling poaching of wildlife and illegal fishing in marine protected areas with the support of IDC and the Seychelles Coast Guard (SCG). Out of the five islands, two of them recorded poaching incidents, namely Aride Island Special Reserve and Silhouette Island. Poaching activities doubtless take place in the outer islands, however, mainly in locations with no ICS conservation centre. Once detected, our conservation teams endeavour to collaborate with IDC to deter the poachers and document the incidents for the attention of the Ministry responsible for environment.

Aride Island Special Reserve

Following the agreement between ICS and the Seychelles Coast Guard to collaborate on tackling a resurgence of poaching incidents in 2020, there has been more patrols conducted by both parties in year 2021-2022. Concurrently, ICS introduced an Anti-Poaching Programme on Aride and appointed a Senior Anti-Poaching Ranger to coordinate the patrols. Various tactics were employed to deter poachers from removing wildlife protected under the regulations governing the reserve, especially during the seabird breeding season. Aride recorded only 8 poaching incidents – five in the marine protected area and the rest on land. The incidents were detected by ICS rangers and the remainder by SCG whilst they were patrolling the marine protected area surrounding the island.

'The anti-poaching procedures will involve varying the times of patrols by foot and conducting more patrols by boat, particularly when seabirds are nesting and fledging. Some anti-poaching equipment has already been received to facilitate this concerted effort, but more staff and potentially a new boat will help to increase anti-poaching efforts in 2022' says Megan O'Brien, Aride Assistant Conservation Officer.

Current photos by ICS

We are strong believers in preserving nature's diversity of life, hence why we uphold environmental and conservation ethics in all our undertakings.

Silhouette Island

Marine poaching takes place in the marine protected area surrounding Silhouette, mostly octopus fishing, however, shark fishing was observed once. 6 poaching incidents were recorded from April 2021 to March 2022. All boats were identified, and the information was passed on to the Ministry responsible for Environment. We have partnered with IDC to deter boats in the marine protected area and plan to make use of technologies such as drones to detect poaching activities promptly.

PROTECTING AND ADVOCATING FOR THE SEYCHELLES' ENDEMICS AND NATIVE SPECIES

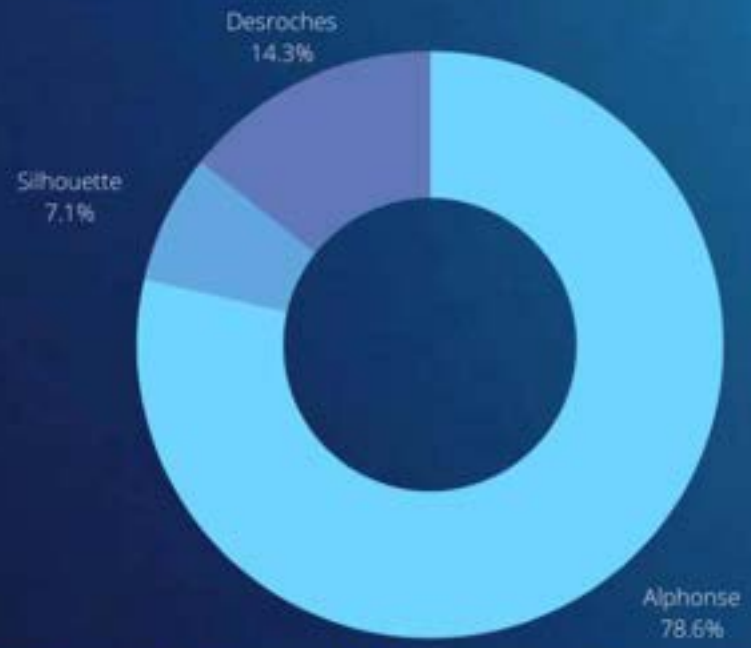
Seychelles biodiversity is home to numerous endemic species, many of which feature on the International Union for Conservation of Nature (IUCN) list of threatened and vulnerable species. These include the Aldabra Giant Tortoise found on all five islands, Sheath-tailed Bat on Silhouette, and Seychelles Magpie-robin on Aride, all flagship species of Seychelles. This is a natural heritage that deserves to be protected from anthropogenic damage for future generations to come.

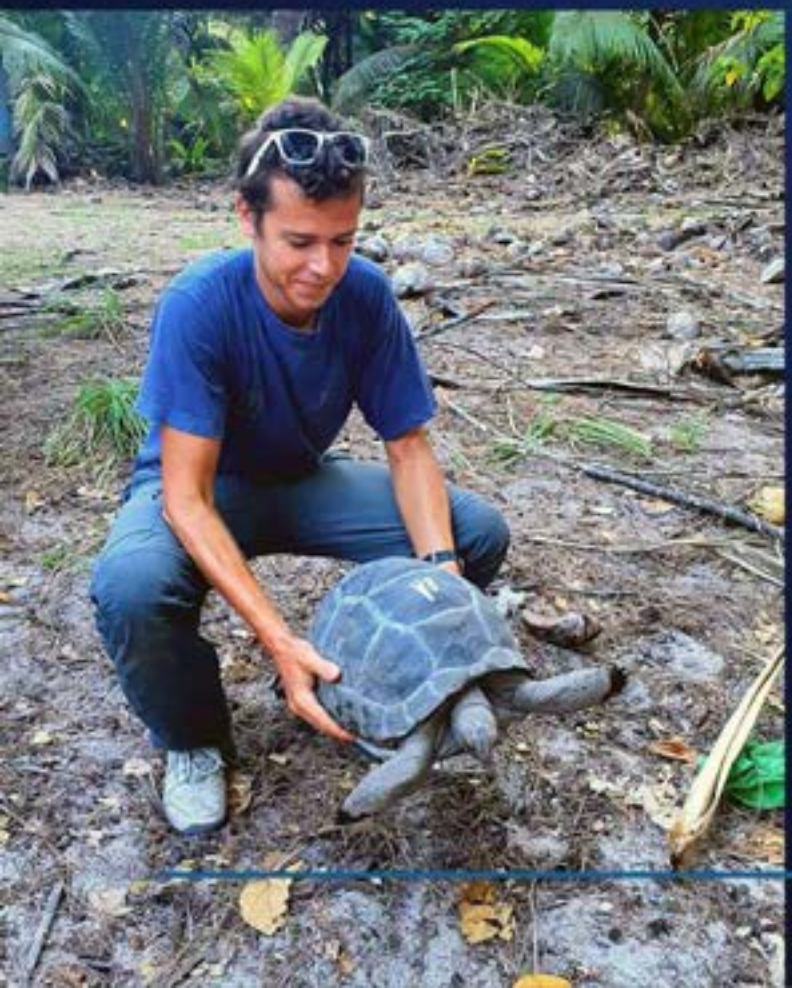
READ MORE

Use your device camera to scan the code and read more about the unique biodiversity of the islands with ICS presence or alternatively visit: http://www.islandconservationseychelles.com/islands.html

Use your device camera to scan the code to read more about the endemic species of Seychelles or alternatively visit: http://www.meecc.gov.sc/index.php/endemic-species/

With the support of partners, we have established tortoise sanctuaries on Alphonse, Desroches and Silhouette. These sanctuaries comprise of a nursery for baby tortoises, keeping them safe from predators such as cats. The sanctuaries host a small population of adult tortoises, reproducing a variable number of hatchlings in support of the breeding programme on the islands. Once the hatchlings reach a certain size (approximately 9kg), and are able to fend for themselves, they are released into the wild. Consequently, they populate the islands including for further research. Fortunate island visitors were invited to participate in the release of tortoises. The illustration below indicates the percentage of juveniles released into the wild on three islands.





Current photos by Elena Levorato and William McNeely

The sanctuaries are major attractions on the islands since they enable visitors to learn more about the giant tortoises and interact with them guided by strict protocols. On Desroches, island visitors can also adopt tortoises, and receive updates on their general wellbeing for the period of adoption. In the same year, the Tortoise Adoption Programme was reviewed and approved by the Desroches Foundation. Funds raised from the adoption programme are used towards the general upkeep of the tortoise sanctuary and the breeding programme. We plan to introduce similar adoption programmes on the islands of Alphonse and Silhouette.

Guided by existing translocation protocols for tortoises, a total of 10 adult tortoises were translocated from Desroches to Remire Island – another outer island managed by IDC.

Current photo by William McNeely

Our resident team on Silhouette continues to partner with HLRS to educate the hotel guests on the species through night trips at locations where they feed and during interactive sessions at the hotel. Occasionally, awareness activities are also conducted with school children and other island visitors at the conservation centre.

Silhouette hosts a variety of endemic flora and fauna, for example, Sheath-tailed Bat, Seychelles Tiger Chameleon, Coco-de-mer, *Latannyen Fey*, Seychelles Palm Frog and Seychelles Kestrel, to name but a few. The IUCN lists Sheath-tailed Bat as Critically Endangered, and we continue the conservation programme for this species. Among the activities are:

- Installation of traps for cats and rats near roosts to protect the species from predation.
- Installation of camera traps to monitor the movements of the bats and disturbances.
- Ban of fogging on the island to avoid accumulation of toxins in the atmosphere and improve food availability for the species.
- Conduct regular patrols near the roosts to collect data on the species population, state of the roosting habitat, and effectiveness of traps.

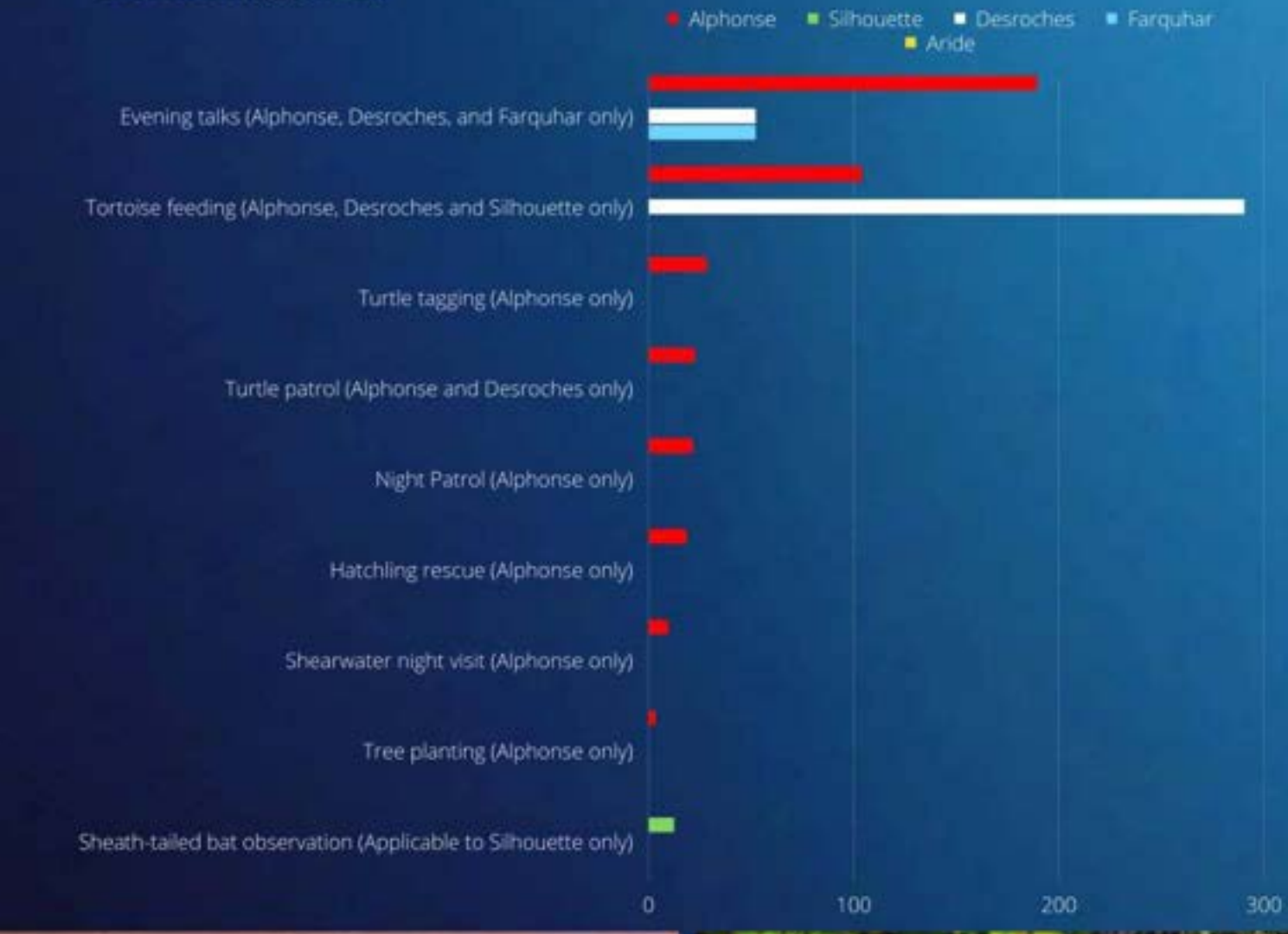
Current photos by Said Harryba and Nasreen Khan

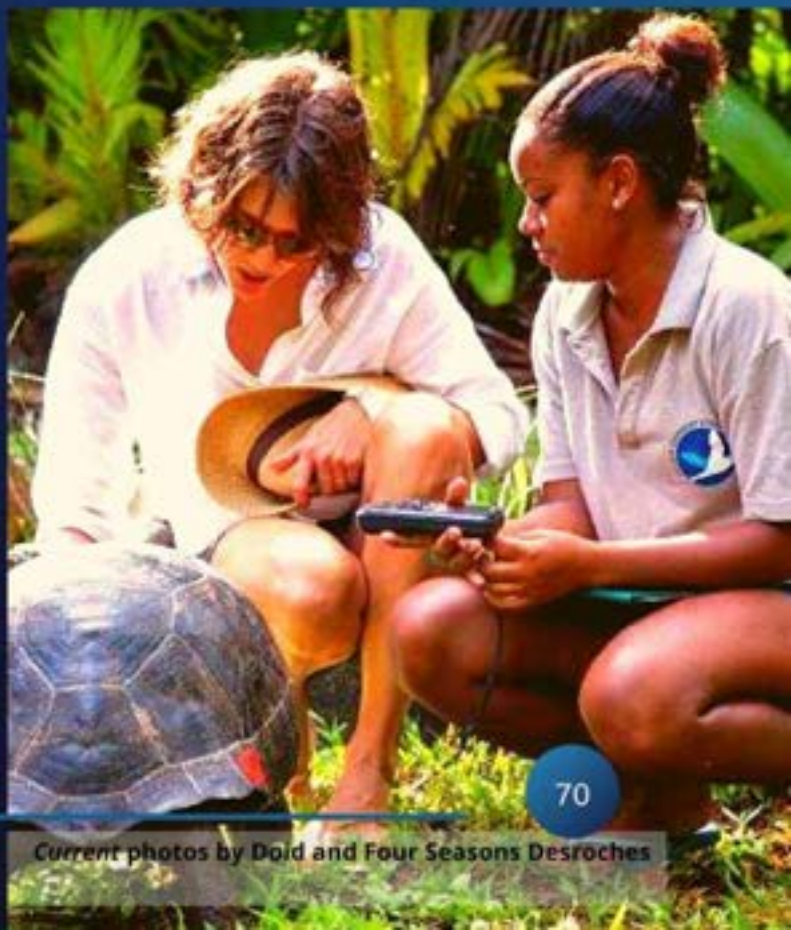
Aride is managed by ICS for the conservation of native ecosystems. Its main biodiversity values lie in its seabird and endemic land bird populations, endemic reptiles, native woodland, rare plant species and a marine environment which is classed as High Biodiversity. The absence of rats is key to the richness of the terrestrial environment. There is a history of research, monitoring and conservation management stretching back to 1984, unparalleled in the granitic islands. Aride is striking for its elevated, heavily wooded topography and granite cliffs which evoke a powerful sense of naturalness.

Controlled, low-impact tourism provides income towards management of the reserve. Around 10 staff are employed by ICS to manage research, conservation and tourism, assisted by 1-2 volunteers.

Current photo by Shane Emilie

Find below a breakdown of various guest activities across islands and the activities with the most engagement.





Current photos by Doid and Four Seasons Desroches

Current photo by Droid

REHABILITATING HABITATS

To benefit species that thrive in various habitats, rehabilitation work is implemented across the islands. Endemic or native plants are planted in areas where invasives or other non-native plants are removed. These are grown in nurseries maintained by ICS across the islands of Aride, Alphonse, and Silhouette. Rehabilitation of Aride's native woodland has been broadly successful, but the increase in extent and density of trees and canopy cover has reduced the open areas required as breeding habitat by Sooty and Roseate Terns in particular and numbers have declined significantly.

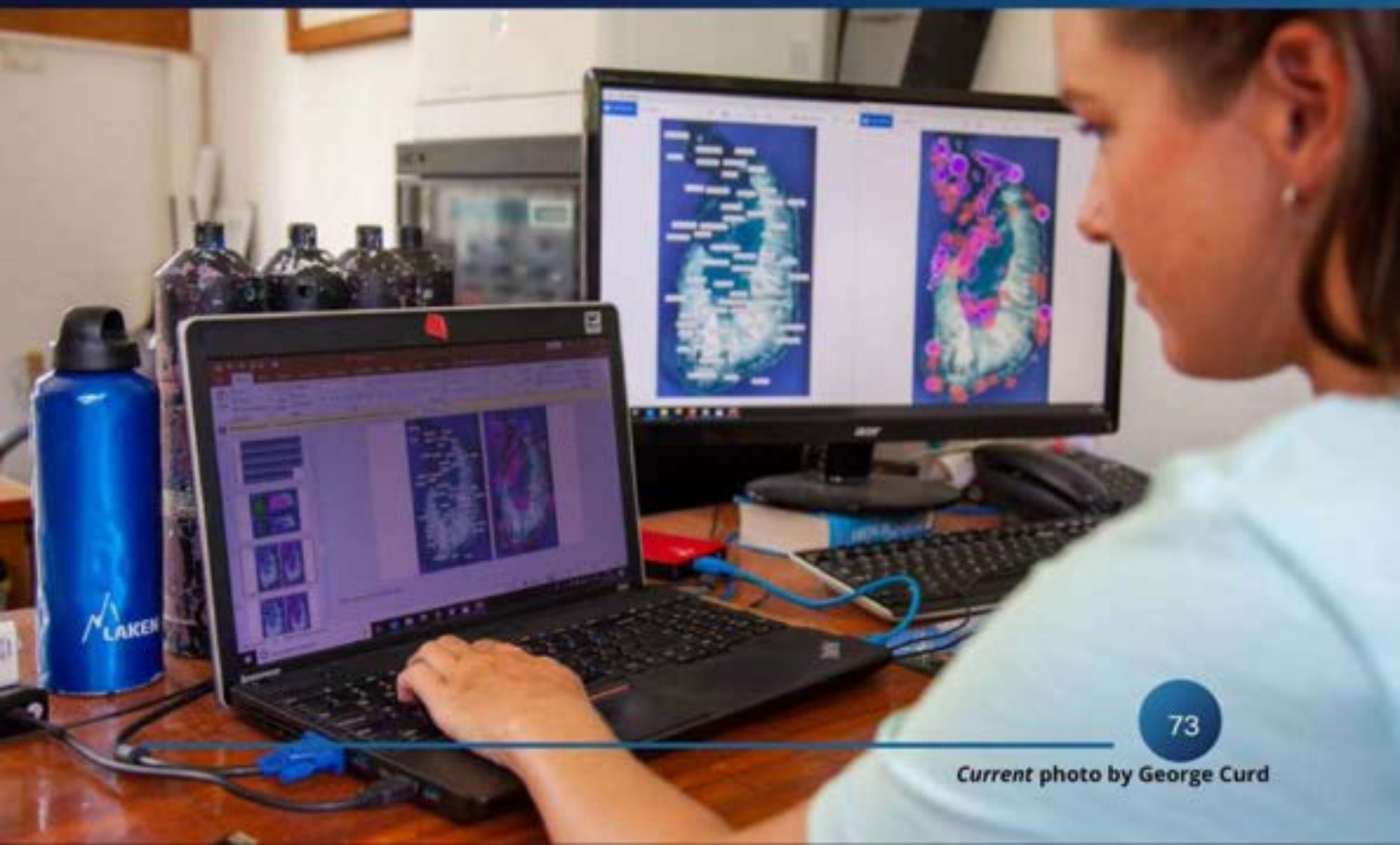
In 2021, Silhouette cultivated several endemic and native plant species in its plant nursery before distributing in suitable areas. More than 30 plants from the nursery were planted at areas cleared of invasive plants in collaboration with IDC and HLRS. Amongst the plants introduced in key biodiversity areas were Wright's Gardenia (obtained from Aride Island Special Reserve) and Badanmyen (Indian Almond).

DID YOU KNOW?

- Most island locations were negatively impacted by human activities in some way, including: land cleared for farming/settlement/coconut plantations, introduction of alien species (such as rats, cats, and invasive plants).
- To help restore natural flora on the islands, there is a series of vegetation management which guides rehabilitation work.
- To reduce the effects of invasive species, we carry out predator control together with IDC.

CONTRIBUTING ECOLOGICAL DATA FOR RESEARCH AND POLICY DECISIONS

Following the Ministry responsible for environment endorsing the agreement between ICS and IDC in 2007, all ecological data is provided to the Ministry for their national ecological database. The data collected provides useful insights on the population status of key species and overall health of ecosystems. These are used by the government to make informed policy decisions, enact important regulations to protect fragile ecosystems and vulnerable species, and development of national programmes for effective natural resource management.



Current **photo by George Curd**

OUR POSITION PAPERS

During the year, ICS produced two major position papers that were unanimously endorsed by the Board of Trustees. The papers were made available to government and the media and were for download to everyone on the ICS website. This is the first time ICS has publically stated its views and recommendations on major topics of national and international importance. The subjects tackled by ICS are both difficult and controversial given the diverse views and the existence of vested interests. They are the use of Fish Aggregation Devices (FADs) and the collection of Sooty tern eggs.

POSITION PAPER ON FISH AGGREGATION DEVICES (FADs)

The problem

The use of FADs has expanded greatly since the turn of the millennium. Many thousands of FADs are dumped in the Indian Ocean each year and in most cases are not recovered. This has increased the productivity of the fishing fleet but has brought significant environmental costs. The average FAD-caught fish is smaller and the catch includes a substantial number of juveniles. There is a relatively large bycatch including several species of pelagic sharks. The Indian Ocean FAD-based purse seine fishery has the highest percentage of bycatch in the world, 25%, compared to a global average of 16% (Daghorn *et al* 2013). Turtles also become entangled by ropes and netting beneath FADs and drown. FADs inflict considerable damage when they wash ashore at coral reefs.

ICS Recommendations

ICS will actively engage with the relevant parties to carry out a review and revision of (i) the existing FAD MANAGEMENT PLAN and (ii) the new FAD WATCH Agreement. Discussions should focus around:

- the acknowledgment and enforcement of the principle that that the polluter must pay for the environment damage and the subsequent clean-up at all islands, not only the 5 ICS islands;
- the funding of serious and ongoing research into minimizing the environmental impact of FADs through electronic tracking and more environmental-friendly FAD design and construction; and
- The role of ICS and/or IDC in the mitigation of environment damage to marine flora and fauna and subsequent clean-up operations at all islands where they operate.

ICS shall commence and lead discussions with the relevant parties with a view to achieving a comprehensive revision of the two agreements mentioned. These discussions began in July 2021 with a view to finalisation and execution in 2022.

Current photo by William McNeely

POSITION PAPER ON THE CROPPING OF SOOTY TERN EGGS IN SEYCHELLES

The problem

Sooty Tern is one of world's most abundant seabirds with a global population probably in excess of 20 million pairs. However, many colonies have been extirpated or severely reduced in size by factors including egg collection, human development, habitat change and introduced predators. Sooty Tern eggs have been collected in Seychelles since the earliest days of settlement. Seychelles has also been at the cutting edge of Sooty Tern research particularly through the work of ICS Honorary Member Dr. Chris Feare, providing insights into subjects including breeding cycles, longevity, natal site fidelity and migration. However, the populations and status of Sooty Terns at some islands are poorly known (especially the two major colonies of Cosmoledo and Desnoeufs that have not been censused for about 20 years) and there had never been a national all-island census of birds in a single year. There are increasing concerns regarding sustainability of the harvest.

ICS Recommendations

Therefore, to assist conservation actions and informed decisions, ICS calls for:

- Full support to the annual population assessments using a consistent and precise methodology in order to better understand long-term population trends.
- Continued monitoring of Sooty Tern biology and ecology including breeding success, survival and recruitment of juveniles into the breeding population, movements and foraging at sea.
- Research into how changes in the marine ecosystem may be impacting the food supply for Sooty Terns and other seabird populations.
- Renewed government support to make legislation for the protection of seabirds effective, respected by the public and enforcement adequately funded.
- An annual assessment of scientific evidence and changing conservation requirements leading to a revision of lawful Sooty Tern egg collection.
- A national debate to sensitise the general public about the relevance and justification for Sooty Tern egg cropping in Seychelles in the 21st century.

READ MORE

Use your device camera to scan the code to read more about the position paper on FADs or alternatively visit:
http://www.islandconservationseychelles.com/position-papers.html

Current photo by Matthew Morgan

NATIONAL SOOTY TERN CENSUS

ICS worked in collaboration with the MACCE and IDC to implement the first National Sooty Tern Census in June 2021. In the past, this species has been intensively studied only at Bird Islands and rarely in further afield, resulting in fragmented and incomplete datasets, spread over a discontinuous timeline. The lack of information at a national level, has made it almost impossible to understand and manage this important species, which has several irreplaceable ecological and cultural links in Seychelles.

The final report was produced by Matthew Morgan and Annabelle Cupidon with major contributions from Adrian Skerrett, Dr. Gerard Rocamora and Dr. Chris Feare. This indicates there has been a hitherto unrecognized massive decline in the number of breeding pairs of Sooty Terns in Seychelles. In 2007, the Seychelles population was estimated to be about 3 million pairs. The 2021 National Census result is a population of just 1.2 million pairs. This is a staggering population decline of nearly 60% in just 14 years.

The population at Cosmoledo has declined by about 80% since the last census in 1998. The main drivers of population trends in the past have been habitat change and unregulated human exploitation. Regulated harvesting of eggs can no longer be claimed with certainty.

The 2021 National Census suggests the steep decline in Sooty Terns is similar to what has already happened to many seabird populations in the Atlantic, where crashes have been linked to changes including the consequences of large predatory fish depletion on marine ecosystems. Clearly, the population is in decline, and although reasons are unclear, the most plausible include overfishing, egg harvesting and habitat modification.

Current photos by Shane Emilie & Matthew Morgan

Current photo by ICS

OUR GRATITUDE

Collectively, we are more than 50 people, advocating for nature. Whether you are donating to ICS, volunteering, advocating, sensitising, promoting, and partnering, we thank you for being part of the energetic and dynamic ICS community. Your contributions are highly valued, and you are part of the driving force to support us in our work across the islands. On the following pages we list some of the individuals, groups, and organisations whose constant valuable support pushed us to work harder.

Why I give

Andre is the Area General Manager at Hilton Seychelles, and a Trustee of the Silhouette Foundation.

"The future of Seychelles and its economy depends on how we protect the environment today"

- Andre Borg

When I started my journey in the Seychelles I quicklyrealised that this is a unique environment and that Nature is thriving. I embarked on a learning journey that was driven by the team of ICS on Silhouette. We created a very strong bond and since then our partnership has grown from strength to strength.

The support to ICS has been there since the opening of Hilton Labriz Resort and Spa on Silhouette in 2008, however we have improved the awareness of our efforts to protect the biodiversity with our guests and since 2018 we are taking an eco-contribution from every guest that has been very fruitful for ICS and broadened the scope of our environmental efforts.

ICS have the experience, the knowledge and the passion to drive the sustainable management on Silhouette. The presence is felt by the team and our guests. There are still many projects that ICS are ready to start, research as well as the constant protection of the biodiversity.

The future of Seychelles and its economy depends on how we protect the environment today. We need to make NGO's like ICS stronger and we should support by ensuring we spread the best practises around the world.

Current photo by Hilton Seychelles

Why I give

Dr. Andy Danylchuk is a Professor of Fish Conservation at the University of Massachusetts Amherst, and a valued collaborator and contributor to ICS research and conservation efforts.

"Conservation efforts are much stronger through productive collaborations like the one with ICS"

- Professor Danylchuk

I literally cried tears of joy after snorkeling the reef during my first visit to the Alphonse Island Group, Seychelles, in 2018. Although I've been fortunate to travel and do research in many other tropical locations around the world, I was simply blown away by the health of the corals, expansive coral cover, rich seagrass beds, and diversity of fishes and other marine life. I was ecstatic that there are places left on our planet where coral reef ecosystems are still so robust, but this experience also left me very frightened about the future of such gems in our vast seas. It was these feelings that inspired me to use whatever capacity I have as a scientist to help those who are fighting to protect the broader island ecosystems of the Seychelles, especially ICS.

I have immense respect for ICS, especially given their breadth of activities and the vast geography of Seychelles where they work. During my early interactions with ICS staff, it was also quite apparent that there was a recognition that protecting island ecosystems does not have to occur in isolation from economic development but only if such development can be done sustainably and with a common understanding that a healthy environment can bring prosperity for all. This is at the root of our collaboration which focuses on recreational fisheries in the Alphonse Island Group – a collaboration that includes the Alphonse Fishing Company. Conservation efforts are much stronger through broader collaborations, making me even more inspired to help write grant proposals, pull together resources, and contribute my time and effort to conduct research that is helping to inform conservation and sustainable development objectives simultaneously. I am incredibly honored and proud to be a part of this collaborative effort, working together with ICS to ensure the island ecosystems of the Seychelles remain vibrant and productive for future generations to enjoy and cherish.

Current photo by Andy Danylchuk

Why I give

Dean is the Managing Director of Bodco Limited, and one of the ICS's generous donors.

"Hence, the short answer to why I donated to ICS is for sustainability"

- Dean Soundy

As a child born and bred in Seychelles, being in nature was one of my greatest delights. I grew up on Mahe island and have visited other tropical islands – all unique places of extraordinary beauty and wonder. Every opportunity my family had; we would travel to several neighbouring islands, spending time outdoors and giving back to the community whenever we can. We went out for walks on nature trails and snorkeled in the turquoise waters. We seized every opportunity to collect litter on nature trails and on beaches, something which my son of 6 years, have often expressed his discontent to such malpractice.

Most of my adult life was spent working at the family company in Seychelles, Bodco Limited, established since 1966. Bodco Limited has always been giving back to the community through the former repealed Corporate Social Responsibility Tax and as part of its community programmes. Bodco has supported several individuals and not-for-profit organisations in times of need. Although, what we give to the community is not often publicly advertised, we donate towards worthy causes for various reasons.

One of them is to support not-for-profit organisations with their projects either to enhance island ecosystems or to support the well-being of employees. We were delighted to support ICS with their projects on Aride Island Special Reserve. It was not a difficult choice because we were aware of the conservation efforts that are sustained by ICS on several islands from one of our family members who use to work as the Deputy Chief Executive Officer for the organisation.

My awareness of climate change and its devastating impact on small island developing states is something I've been worrying about a great deal lately and wondering how as an individual I can make a difference. Part of what drew me to ICS is being aware that they are making a real difference alongside other conservation organisations. What impresses me about ICS is the way in which they are working with key stakeholders on systemic change. They are working directly with the government and other key organisations to ensure our laws are in favour of environmental protection and advocacy.

It is because of my interest in sustainable development that I am aware of how ICS works at a high level to conserve and protect the islands and to prevent serious damage to sensitive ecosystems. Hence, the short answer to why I donated to ICS is for sustainability.

Sustainability is the future, and I am aware of how vulnerable the tropical islands are, especially the ones that still look untouched. By working on sustaining ecological systems, ICS is not just reacting to the current challenges, they are being proactive in an impressive way. I really fear for the future of the island states and other countries. It is urgent that we do everything in our power to preserve and nurture the planet for future generations.

Current photo by Dean Soundy

Why I give

Rob is the Chairman of ICS UK and formerly worked in Seychelles for BirdLife International. He is now a freelance ecological consultant and leads wildlife holidays in the UK and overseas.

"I am confident that ICS Seychelles will go from strength to strength protecting the unique wildlife of the Seychelles"

- Rob Lucking

For as long as I can remember I've been interested in birds and wildlife and so it was natural that I should go on to study ecology at university. In my final year, a friend told me about the Aride Island volunteering scheme and so I applied, together with Vicki my partner, to travel to Aride in March 1992. We were instantly captivated by the island and its wildlife, so much so that we returned later that year to work in Seychelles for the next four years, initially on Aride monitoring recently translocated Seychelles Magpie-robins and then moving across to Fregate Island to manage the Seychelles Magpie-robin Recovery Programme for BirdLife International. After returning to the UK I worked in nature conservation for the RSPB in a variety of roles including species recovery, habitat creation & management and business planning but I kept in touch with Aride and Seychelles via ICS Seychelles Chairman Adrian Skerrett.

When he asked me if I'd be interested in joining ICS UK as a trustee in 2019, I jumped at the chance. ICS UK is the UK-based charity that owns Aride and manages the endowment fund set up by the Cadbury family (who originally purchased Aride) to support the running costs of the island. Since 2004, ICS UK has leased Aride to ICS Seychelles who manage the island on our behalf and we support the management through donating income generated by the endowment fund and other private donors.

Although a relative newcomer to ICS Seychelles, I have been impressed with the scope of their work from managing conservation centres on the outer islands in partnership with the IDC, carrying out island restoration projects and species re-introductions, and research & monitoring projects on a wide range of marine and terrestrial taxa. An impressive output from a small charity.

I am looking forward to working with ICS Seychelles over the coming years. Island biodiversity faces many challenges from introduced species, climate change and over-exploitation of marine resources but with continued support, I am confident that ICS Seychelles will go from strength to strength protecting the unique wildlife of the Seychelles.

Current photo by Rob Lucking

Why I give

Keith is the Managing Director of Blue Safari Seychelles, Alphonse Fishing Company, Beyond The Reef (Alphonse Island Lodge LTD) and conservationist.

"We are blessed to have the Seychelles Outer Islands in a pristine state that has changed very little since the early days, and now it's up to us humans to protect it"

- Keith Rose-Innes

I have a genuine passion and willingness to hold the natural world above all else, which might be somewhat unusual for a managing partner of a successful luxury travel company. My background in fly fishing is well-known, but lesser known is the journey to establish Alphonse Fishing Company (AFC), which began nearly 25 years ago on one of many globe-spanning fishing trips: I realized Seychelles has these amazing outer islands. Experiencing something special I hadn't found elsewhere, I set about creating fly-fishing expeditions on the island nation's secluded outer atolls.

I wanted to establish sustainable ecotourism in line with the blue economy and to conserve and monitor the area, but also to deter illegal commercial fishing activities which have been taking place. As such, my focus was to safeguard the pristine environment while welcoming an increasing number of guests to the unique Indian Ocean landscape. It was then, in 2018, that the Blue Safari brand was officially established. As a luxury experiential travel company that spans five islands: Alphonse, Cosmoledo, Astove, Farquhar and Poivre. For visitors, it is a chance to witness the unique wildlife of this corner of the Indian Ocean close up, with the environmentalist describing Blue Safari as the "marine version" of a game safari.

Recreational fishing is a growing tourism sector; if done sustainably, such as through catch-and-release (C&R), where fish are released rather than harvested, the impact on the ecosystem can be lessened. More than that, collaborative efforts between AFC and the ICS to collect more detailed information began in 2017. They proved beneficial as they allowed for the initiative to develop conservation strategies and management guidelines and establish monitoring programmes of the resources they use.

AFC opened the Alphonse Foundation (AF) to raise funds and lead the conservation efforts on these atolls. This was also in line with the National Parks and Nature Conservancy Act requirements, which Seychellois President Danny Faure signed into law. This Act demarcated 30% of the territorial waters of Seychelles as Marine Protected Areas. The Alphonse Group of Islands, Desroches, Farquhar, Poivre, Cosmoledo, and Astove are all included in the gazette, culminating in a five-year project led by the UNDP-GEF with ICS, Blue Safari, and AFC as some of the key partners amongst others who are specifically focused on protecting

the unique and pristine tropical marine ecosystems of these remote atolls. We are blessed to have the Seychelles Outer Islands in a prestige state that has changed very little since the early days, and now, it's up to us humans to protect it.

With the cooperation of ICS, spatially explicit data is collected through a geographic positioning system (GPS). Considering all targeted species are largely data deficient regarding catch and release (C&R) and broader management, AFC adopted a proactive precautionary management strategy involving the fishery. Even though AFC/Blue Safari has developed conservation strategies and management guidelines and uses C&R methodology instead of harvesting, we still need effective management practices and conservation tool science-based best practices. As such, stakeholder collaboration, such as with ICS, for scientific research similar to this stakeholder-driven initiative, other monitoring programmes carried out by a consortium of stakeholders have been helpful for management and generating scientific questions related to the health of animal populations and their ecosystems. Data has been collected from Garmin Quatix III GPS watches which aid in recording the capture location of fish, with this data managed using the Garmin BaseCamp software. Collected catch data were then used to produce generalized density maps by ICS to help examine potential high-pressure angling areas.

All of this is due to data collected by AFC and ICS, which has indicated there are variable levels of overall and seasonal fishing pressure across the Alphonse Group. Also, research on some target species stated a change in behaviour around the islands. In particular, giant trevally is often reported to be increasingly timid and more difficult to catch than before intensive fishing pressure occurred in prior years. As giant trevally C&R fishing operations expand to other Outer Islands, the initial exceptionally high catch rates may lead to severe declines in catchability, followed by a continued slow deterioration, as observed in other fisheries. ICS, therefore, plays a vital role in closing the knowledge gap of local fish species by collecting data that will advise on best practices and angling capacity for the fishery. Moreover, the research findings generate a conversation among stakeholders to grasp the spatial ecology intersects with fishing pressure.

With the multiple academic partners, ICS is a critical part of the partnership that has the expertise to fully interpret the findings and build upon the existing programme with scientific rigour. The ICS plays an integral role, including identifying potential problems and management needs, proposing and implementing precautionary management practices (i.e., code of conduct) and monitoring programmes, and data analysis and interpretation. Such initiatives may lead to formal co-management structures that benefit multiple stakeholder groups and

help to advance economic prosperity while establishing sound management and conservation strategies.

Moreover, even those the AFC is passionate about preserving the destinations; we can't do this alone, hence the support of Islands Development Company and ICS which joined together to form a partnership to manage and execute strategies and projects to protect the species and environment through means of public funding, which is collected via donations and fundraising initiatives. As such, the Alphonse Group, through its structures such as the Alphonse, Farquhar, Cosmoledo, and Astove Foundations, assists in funding the projects operated by ICS. ICS monitors and rehabilitates these areas by focusing on the below current and continuous monitoring projects, from sea birds and wader monitoring to native vegetation restoration.

Our partnership with ICS is key. We prefer to be guided by an independent partner in conservation. We are blessed to have the Seychelles Outer Islands in a pristine state that has changed very little since the early days, and now it's up to us humans to protect it. However, to accomplish all of the conservation efforts needed on the outer islands of Seychelles, ensure the areas are protected for generations to come. This can't be done alone.

You need a strong partnership with various and diverse groups, including funders. Without the proper support, limited and occasional commercial fishing vessels (primarily long-liners and sea cucumber harvesters) along with charter fishing yachts that take part in conventional angling along the reef edge do not move to a more sustainable fishery there are five main targeted fish species were we still lack data – would become endangered. That said, we have already seen a documented decrease in body size for giant trevallies and triggerfish species due to changes in the ecology. This also highlights the need for continued monitoring of the Alphonse Group of islands to determine if fishing-induced behaviour/size selection could occur. We, therefore, need growing support for our conservation efforts, from different donors.

Current **photo by Keith Rose-Innes**

We extend our sincere gratitude to the additional donors below. Your kind donation is exemplary and deserves a special recognition.

Lena Christensen
James Wareing
Elisabeth Hein
PESTEA
Nouvobanq
Amalgamated Tobacco
Kalverboer
Christiaan Scheffer
Kytola
Aquarius & Pieces
Islands Development Company

FUTURE PLANS

We continue to work hard towards achieving more for nature and everyone. We are pleased to present to you some of our future targets.

- Open new centres on Platte, Cosmoledo and Astove.
- Implement and review island management plans.
- Improve infrastructure on Aride specifically upgrading the existing solar PV system and water treatment plant.
- Installation of mooring and demarcation buoys in the marine protected area surrounding Aride.
- Renovate the Cadbury Lodge on Aride and open it to visitors.
- Translocate endemic species to Cosmoledo and Silhouette.
- Further research to understand the ecology of the Sheath-tailed Bat.
- Secure funding to extend the FAD watch programme on other outer islands,
- Participation in the GoS-UNDP-GEF7. Project entitled 'Prioritising Biodiversity Conservation and Nature-based Solutions as Pillars of Seychelles' Blue Economy. ICS will be implementing a series of sub activities for the national project on Aride, including population census of nesting seabirds, improvement to field data collection tools, and improvement to ecological database.
- Partner with the government and other organisations to develop a specialised training programme for conservation rangers.
- Under the banner of the Silhouette Foundation, develop and implement an environmental education programme for secondary school students to take place on Silhouette during school holidays. Interested individuals or businesses are invited to donate towards the development and implementation of this programme.

Current photos by Aurelie Duhec, Shane Emilie, & Pierre-Andre Adam

FINANCIAL SUMMARY

Find below the financial summary for two financial years.

Income & Expenditure for the year ended 31 March 2021

	Alphonse Foundation	Desroches Foundation	Farquhar Foundation	ICS HO & Aride Special Reserve	Silhouette Foundation	Total
Income						
Project/Programme Grants	692,822.00	220,000.00		3,637,229.00	204,685.00	4,754,736.00
Operating Grants	1,947,925.00	438,826.00	390,026.00	1,648,647.00	823,401.00	5,248,825.00
Miscellaneous Income	114,589.00	319,878.00		1,427,907.00	567,069.00	2,429,443.00
Govt FA4jR assistance				1,486,750.00		1,486,750.00
Total Income	2,755,336.00	978,704.00	390,026.00	8,200,533.00	1,595,155.00	13,919,754.00
Expenditure						
Conservation Programmes	671,257.00	615,200.00	263,532.00	2,742,232.00	490,370.00	4,782,591.00
Depreciation of Assets	119,981.00	93,057.00	94,601.00	221,686.00	92,283.00	621,608.00
General & Administration	117,797.00	168,829.00	185,701.00	741,488.00	122,239.00	1,336,054.00
Staff costs	670,040.00	231,252.00	459,957.00	2,384,516.00	351,454.00	4,097,219.00
Total Expenses	1,579,075.00	1,108,338.00	1,003,791.00	6,089,922.00	1,056,346.00	10,837,472.00

Income & Expenditure for the year ended 31 March 2022*

	Alphonse Foundation	Desroches Foundation	Farquhar Foundation	ICS HO & Aride Special Reserve	Silhouette Foundation	Total
Income						
Project/Programme Grants	234,825.00	240,000.00	577,064.00	4,490,729.68	435,185.00	5,977,803.68
Operating Grants	2,421,952.70	1,735,376.74	328,349.65	1,745,494.25	1,704,963.90	7,936,137.24
Miscellaneous Income	20,060.20	147,986.96		1,610,041.05	114,345.83	1,892,434.04
Govt FA4JR assistance						0.00
Total Income	2,676,837.90	2,123,363.70	905,413.65	7,846,264.98	2,254,494.73	15,806,374.96
Expenditure						
Conservation Programmes	612,000.00	567,200.00	175,000.00	948,165.72	612,000.00	2,914,365.72
Depreciation of Assets	120,000.00	93,000.00	94,000.00	221,000.00	92,000.00	620,000.00
General & Administration	279,733.58	260,918.09	121,492.56	2,053,549.27	164,330.46	2,880,023.96
Staff costs	688,316.11	543,608.16	490,562.07	4,875,873.75	586,977.00	7,185,337.09
Total Expenses	1,700,049.69	1,464,726.25	881,054.63	8,098,588.74	1,455,307.46	13,599,726.77

*subject to edit

Current **photo by Ronny Antat**

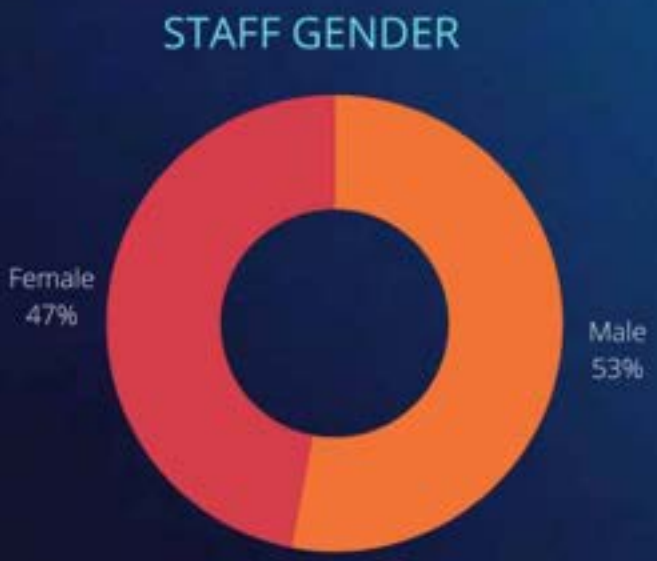
ICS STAFF

During the year, a total of 30 employees were employed by ICS. The Head Office team comprised of:

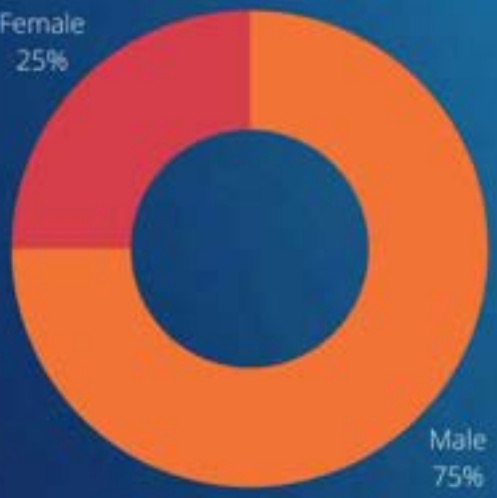
- Norman Weber, Chief Executive Officer, employed since August 2020.
- Shane Emilie, Deputy Chief Executive Officer, employed since August 2020.
- Keni Mangroo, Head of Finance and Administration, employed since February 2017.
- Matthew Morgan, Head of Science and Projects, employed since March 2017.
- Annabelle Cupidon, Science and Database Officer, employed since March 2017.
- Harini Naidu, Science and Database Officer, employed since December 2021.
- Marie-Anette Alcindor, Human Resource Coordinator, since April 2021.
- Ian Bonne, Asset and Inventory Controller, employed since January 2021.
- Rahim Hypolite, Purchasing Officer, employed since May 2013.

ICS acknowledges the following manager who retired during the year:
Pierre-Andre Adam

The pages to follow provides a summary of the staff employment status, gender employed, percentage of gender in managerial position and staff immigration status.



GENDER IN MANAGEMENT



STAFF EMPLOYMENT STATUS

STAFF IMMIGRATION STATUS

BOARD AND COUNCIL

Our Board of Trustees

ICS is governed by a Board of Trustees who volunteer their time and expertise to the organisation. They are a mix of professionals dedicated to ensuring the financial stability of the Society, approving plans, setting performance targets, regularly review progress, and ensuring that the Society complies with its legal and regulatory requirements.

The Board consist of three co-founders who are also Councilors, and the remaining are ordinary members.

Adrian Skerrett, *Chairman and co-founder*
Glenny Savy, *Vice-Chairman and co-founder*
Dr. Gerard Rocamora, *Trustee and co-founder*
Helena Sims, *Trustee*
Hon. Bernard Georges, *Trustee*
Joanna Prosper, *Trustee*
Pat Matyot, *Trustee*
Edwin Palmer, *Trustee*
Suketu Patel, *Trustee*

ICS acknowledges the Board members who retired during the year:
Dr. Jeanne Mortimer and Michelle Murray

Our Council

The Council have delegated responsibility for overseeing the implementation of the strategy of the Society agreed by the Board within approved budgets. Council members are also ICS Trustees.

Adrian Skerrett, *Chairman and co-founder*
Glenny Savy, *Vice-Chairman and co-founder*
Dr. Gerard Rocamora, *Trustee and co-founder*
Edwin Palmer, *Trustee*

Honorary members

ICS Board of Trustees elect Honorary members for having excelled in international conservation, who are consulted for their expertise and invited to participate in the annual general meeting of the Society.

Dr. James Cadbury
Lucy Cadbury
Dr. Chris Feare
Carl Lundin
Dr. Lars Kristoferson
Murray Collins
Tim Sands
Eddie Belle

READ MORE

Use your device camera to scan the code and read more about the ICS Board and Council or alternatively visit:
http://www.islandconservationseychelles.com/board-of-trustees.html

LIST OF ACRONYMS

Alphonse Fishing Company	AFC
Alphonse Island Lodge	AIL
Assistant Conservation Officer	ACO
Blue Safari	BS
Conservation Officer	CO
Conservation Ranger	CR
Chief Executive Officer	CEO
Critical Ecosystem Partnership Fund	CEPF
Deputy Chief Executive Officer	DCEO
Drifting Fish Aggregating Devices	dFADs
Fish Aggregating Devices	FADs
Government of Seychelles	GoS
Global Environment Facility	GEF
Hilton Labriz Resort & Spa	HLRS
Island Conservation Society	ICS
Islands Development Company	IDC
Island Conservation Society United Kingdom	ICS UK
International Union for Conservation of Nature	IUCN
Ministry of Agriculture, Climate Change & Environment	MACCE
Ministry of Fisheries	MF
Seychelles Coast Guard	SCG
Seychelles Fishing Authority	SFA
United Nations Environment Programme	UNEP
University of Seychelles	UniSey
University of Massachusetts	UMASS

Working together for nature and for our future generation.

Island Conservation Society
PO Box 775
Pointe Larue
Mahe, Seychelles

Phone: +248 4375354
Email: ceo@ics.sc
Website: www.islandconservationseychelles.com
www.arideisland.com

ICS Seychelles
ics_seychelles
@ICSSeychelles
ICS Seychelles

ISLAND CONSERVATION SOCIETY