THE ALDABRA CLEAN-UP PROJECT
TACKLING OCEAN PLASTIC POLLUTION THROUGH ACTION, EDUCATION AND RESEARCH

JULY 2019: FINAL REPORT
THE SEYCHELLES ISLANDS FOUNDATION & THE QUEEN’S COLLEGE, OXFORD.
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25,750 kg of marine debris were removed from Aldabra over five weeks. A team of 12 people, assisted by SIF staff and SPDF staff in the final two weeks achieved this feat. The project has reached thousands, possibly millions of people all around the world and has shone a light on the impact of plastic pollution to small island nations. The Aldabra Clean-Up story has kick-started a wave of change both within Seychelles and internationally. Now it is time to learn from this and manage for the future. The plastic will continue to accumulate and Seychelles will have to continue these efforts and they are prepared to do so, with understanding and assistance at a global scale.
The Aldabra Clean-Up Project's sponsors, supporters and partners...
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Located in the Indian Ocean, Aldabra Atoll is an outstanding example of a raised coral atoll. Due to its remoteness and inaccessibility, the atoll has remained largely untouched by humans and is highly protected today. Aldabra is one of the largest atolls in the world and is home to a number of weird and wonderful species. The world's largest giant tortoise population roams the atoll and the beaches along the vast coastline host one of the largest populations of the endangered green turtle in the western Indian Ocean. The clean blue waters house near-pristine marine ecosystems, teaming with sharks, turtles and fish. The Seychelles Islands Foundation (SIF) manages and protects Aldabra and has the President of Seychelles, Danny Faure, as Patron.
The Global Problem and Aldabra

But... Aldabra is under siege. An estimated 8 million tonnes of plastic pollution is spewing out of rivers into our oceans each year. This plastic is moved around the oceans by currents and wind until it is intercepted by land. In the Indian Ocean, the coastlines of small island states like Seychelles act as nets where vast quantities of plastic pollution are captured.

As such, the Aldabra coastline, left untouched and almost un-visited, are clogged with plastic waste. The plastic is covering turtle nesting beaches and tortoise grazing habitat, impacting endangered wildlife. Aldabra’s isolation and the sheer quantity of waste and the extreme difficulty in accessing areas of this remote atoll meant the issue is too great for SIF to tackle alone. So, while SIF staff based on Aldabra make continuous efforts to contain and mitigate the problem, the dramatically increasing volume of marine plastic pollution arriving means that these efforts are insufficient.
Our Solution

The Aldabra Clean-Up Project (ACUP), a collaboration between SIF and The Queen’s College, University of Oxford, was conceived at SIF’s 2017 Annual General Meeting to tackle the issue of plastic pollution on Aldabra through action, education and research.

It united Oxford graduate students with Seychellois volunteers selected through a national video competition. The project was launched at the Royal Society in London in May 2018, and at the Seychelles Statehouse by the President of Seychelles in June 2018. The main action of the project was a five week clean-up expedition (22nd February - 29th March 2019) to the atoll to remove as much marine plastic pollution as possible. Alongside this the team worked throughout the year to build the project into more than just a clean-up and instigated wider actions in Seychelles and internationally.

To be a meaningful and holistic initiative ACUP took on four reinforcing objectives

1) FINANCE: raise at least £150,000 to cover key expedition costs
2) EDUCATE: raise awareness of plastic pollution locally & internationally
3) RESEARCH: conduct research to inform ongoing management of the threat
4) REPROCESS: find ways to re-use, re-purpose and recycle the waste
1. Finance

The International Union for Conservation of Nature (IUCN) estimates that there is annual global shortfall of $30-35 billion for protected areas such as Aldabra. Whilst SIF is fortunate to be able to twin Seychelles’ two UNESCO World Heritage sites, largely funding Aldabra’s protection through the Vallée de Mai’s entrance fees and management through local and international project grants, Aldabra’s operational costs are extremely high. Therefore, for a clean-up expedition to take place additional funding was needed. ACUP addressed the challenge that many conservation organisations face: to achieve multiple aims with limited funding.

It was estimated that at least SCR2.7 million / £150,000 would be needed to fund the expedition, the first of its kind. In April 2018 SIF and The Queens College, pledged SCR360,000 / £20,000 and SCR90,000 / £5,000 respectively to get the ball rolling. Over the next nine months a total SCR3.9 million / £222,000 or 148% of ACUP’s original aim was raised. It’s noteworthy that SCR1.54 million/ 41% of ACUP’s funds were raised in Seychelles and the remaining 59% raised internationally. By raising funds through alternative means, ACUP informed and engaged local and global actors of the impacts of plastic pollution on sites of international importance like Aldabra.

**Breakdown of funding sources**

- International Corporations: 44%
- Grants (local & international): 29%
- Seychelles Corporations: 11%
- Seychelles Islands Foundation: 9%
- Crowdfunding: 7%
To achieve this ACUP:

- **Approached over 50 Seychelles based businesses for Corporate Social Responsibility tax contributions.** Four corporations, the Mauritian Commercial Bank (MCB), Cable and Wireless Seychelles, Eden Island Development Company and Raffles Seychelles provided SCR540,000 / £31,800 of funding;

- **Approached Seychelles organisations for in-kind contributions:** The Seychelles People’s Defence Forces joined the expedition in its final two weeks to assist with 30 personnel onboard Etolie, the United Construction Products Seychelles (UCPS) contributed through an in-kind, a discount for hiring of the Spirit of Ton Joe vessel which transported the collected plastic pollution, the British High Commision pledged £2,000 and facilitated other fund raising activities;

- **Approached over 40 international corporations.** Five corporations, Ponant, Nobel Caledonia Charitable Trust, Utilita Energy, EV Bullen and Aspect Capital donated SCR1,716,000 / £101,200;

- **Applied to 15 grants locally and internationally of which four were successful:** Seychelles Conservation and Climate Adaptation Trust’s (SEYCCAT) Blue Grants Fund (BGF) SCR1,000,000 / £58,000, Schroder Charity Trust SCR83,000 / £5,000, British Birds Charitable Trust SCR25,000 / £1,500 and Wings World Quest SCR12,700 / £750;

- **Crowdfunded SCR 277,000 / £15,540 from 101 sponsors (individual donations ranging between £1 to £500).**

ACUP's financing strategy was published as an IUCN Panorama Solution for a Healthy Planet. If you like to see the submission please visit: [https://panorama.solutions/en/solution/funding-aldabra-clean-project-through-corporate-sponsorship-and-crowdfunding](https://panorama.solutions/en/solution/funding-aldabra-clean-project-through-corporate-sponsorship-and-crowdfunding)
2. EDUCATE

- A number of fairs and events in UK & Seychelles
- President Faure shared photos of Aldabra plastic to world leaders at the 21st G7 Summit in Canada
- Meeting with the UK Government to discuss the issue in the Commonwealth context
- Team presenting at SHAPE Africa in Nairobi
- National and international news and television
- Research targeted at understanding the source of the trash arriving in Seychelles
To date ACUP:

- Has organised or participated in over 50 education and outreach events, physically engaging with over 4,000 people in Seychelles, the UK and several other parts of the world, on the issue of plastic pollution and highlighting solutions;
- Has been followed closely in Seychelles through print, radio and television news reaching national prominence (90,000);
- Has reached over 102 million homes globally through Sky News' live coverage of the expedition and its 24 minute documentary entitled '50,000 flip-flops in paradise'.
- Has a growing social media presence across Facebook (over 1,800 followers), Twitter (over 300 followers) and Instagram (over 800 followers) translating into a reach of over 250,000 people as of July 2019
- Have a short documentary and animation in progress for use in awareness raising.
- Be part of the ‘Guardians of the future’ exhibition at the Eden Project, UK
3. RESEARCH:
Seychelles, with 115 islands stretching over a vast area of the South West Indian Ocean, has accumulated vast quantities of marine plastic pollution along its coastlines, although the amounts and types of plastic have not been formally quantified or documented.

Plastic pollution poses several threats to island ecosystems, not least the direct impact of entanglement, ingestion and smothering on a wide range of animals (Gregory, 1991; Murray, 2009; Rochman et al., 2016). In addition, once plastic pollution accumulates along coastlines it creates a barrier to critical habitats, like turtle nesting beaches. Seychelles is therefore at the forefront of this issue, battling the global marine plastic problem on all fronts. Information on how to manage this threat effectively is greatly needed.

The research component of ACUP is led by April Burt, ACUP co-lead, as part of her DPhil on island management and connectivity under the supervision of Dr Lindsay Turnbull at Oxford University. In the coming months ACUP’s research will be published in research journals and shared to inform policy and management of marine plastic pollution on Aldabra.
PRELIMINARY RESULTS:

ACUP estimates that there is at least 514 metric tonnes of marine plastic pollution on Aldabra;

On average one person could collect 27.65 kg of pollution per hour;

At the above rate it would take a team of 12, 172 days to completely clear Aldabra's shores marine plastic pollution;

It cost SCR 3.15 million / £186,000 to remove 25.75 metric tonnes;

So to remove it all would cost SCR 60.8 million / £3.6 million

52% of the collected marine plastic pollution is fishing gear whilst 22% is flip-flops!

ACUP collected 5,926.5 kg of flipflops, that's 59,265 individual flipflops!

ACUP estimates that accumulation rates for marine plastic pollution on Aldabra is currently 6.5 tonnes annually*

On average, 75% of all trash arriving had attached biota
ACUP aims to prevent as much of the 25.75 metric tonnes of collected waste from being landfilled as possible. At present there are very limited recycling facilities in Seychelles so the removed waste is currently stored and being sorted.

Local conservation organisations have utilized a large number of the fishing buoys to demark marine protected areas or as mooring buoys in marine parks. Flip-flops are already in use by schools for artwork or outside seating.

Already SIF is fortunate to have Seychelles’ Landscape and Waste Management Agency’s (LWMA) cooperation in the storage of the collected waste (from April to October 2019).

SIF has collected contact details of those interested and plans on running several sort out days that would allow interested parties to access the materials they want. Additionally, ACUP has engaged with several international corporations and non-profit organisations interested in reprocessing and researching the collected waste outside of Seychelles.

The degree of success or failure of this objective will be informative for future similar initiatives. Therefore, ACUP will monitor what waste is taken (type), how much (weight), how it is reprocessed, recycled or repurposed and for what reason (art, education, profit). The deadline for this objective is the 1st of October 2019.
The majority of the time was based on three remote field camps with no electricity, running water & limited communication with the outside world. From the 25 February the team was divided into two sub-teams. The first team deployed to Dune De Messe was led by April, included Ivan Capricuse, Craig Francourt, Rebbeca Goldberg, Sheena Talma and Thomas Zillhardt. The other team led by Jeremy was deployed to Dune Jean Louis and included Ashleighne Antao, Kalsey Belle, Josephine Mahony, Martyna Syposz and Samuel Ramkalawan.

On 22 February 2019, eight months after the project launched the team of 12 arrived on Aldabra for the five week intensive expedition. The expedition consisted of a team of 12 young people and was Co-led by April Burt (Oxford co-lead) and Jeremy Raguain (SIF co-lead).
The expedition’s aim was to remove plastic pollution from the endangered green turtle nesting beaches and key tortoise grazing areas along the south coast of Aldabra. The systematic clearing of turtle nesting beaches and tortoise turf was carried out in the first phase of the expedition.

Alongside this the marine debris collected was sorted as collected into the major categories, including fishing gear, (buoys, ropes), flip-flops, bottles and miscellaneous/fragments.

Aldabra’s size, extreme terrain, climate, tides and remoteness presented several serious logistical challenges as well as health and safety hazards.
The second phase of the project included moving of the trash to the designated access points. These were decided on by SIF’s expert logistical team.

The team were supported and assisted by the SIF staff based on Aldabra throughout the expedition. Plus 28 members of the Seychelles People Defence Forces on Coastguard vessel Etoile joined the expedition in its second phase of the expedition. Both teams were indispensable for the effective and safe removal of collected waste from shore to the collection vessel.
The last phase of the project was the most risky; moving trash from shore to ship with SIF team and Seychelles coastguard. Despite sea conditions being extremely calm there was strong onshore swell, which made things very challenging for all the teams.
Next steps

In the coming months ACUP will deliver:

- Publication of research results
- Internal Project report (inclusive of lessons learned and volunteer feedback)
- Continued outreach & education through film and media
- Hold meetings with Seychelles and UK government representatives
Acknowledgments and Special Thanks:

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