DPLR2\1016 Project DPL00049

Darwin Plus Local - Final Report (1)

Officer: Jessica Magnus

Section 1 - Darwin Plus Local Project Information (Essential)

Project Reference Number

DPL00049

Q1. Project Title

Beyond The Reef BVI - Ghost Gear Cleanup

Overseas Territory(ies)

British Virgin Islands (BVI)

Lead Organisation or Individual

Beyond The Reef

Partner Organisation(s)

British Virgin Islands gov

Value of Darwin Plus Local Grant Award

£46,395.00

Project Start Date

01 September 2023

Project End Date

28 March 2024

Project Leader Name

Kendyl Berna

Project Website/Twitter/Blog etc.

www.1beyondthereef.com

Report Author(s)

Kendyl Berna, Christopher Juredin, Kitty Daniels

Report Date

28 March 2024

Project Summary

Our project objective is to reduce and prevent the damage that is currently happening to the marine ecosystem of the British Virgin Islands as a result of abandoned, lost or otherwise discarded fishing gear (also referred to as ALDFG or "ghost gear") that continues to trap and kill marine species and smother coral reefs in an unregulated manner long after the fishing gears intended use.

Project Outcomes

Checked	Biodiversity: improving and conserving biodiversity, and slowing or reversing biodiversity loss and degradation;
Checked	Climate Change: responding to, mitigating and adapting to climate change and its effects on the natural environment and local communities;
Checked	Environmental quality: improving the condition and protection of the natural environment;
Checked	Capability and capacity building: enhancing the capacity within OTs, including through community engagement and awareness, to support the environment in the short- and long-term.

Section 2 - Project Outcomes (Essential)

On a scale of 1 (high – outcome substantially exceeded) to 5 (low – outcome substantially did not meet expectation), how successful do you think your project has been?

⊙ 2 - Outcome moderately exceeded

Project outcomes and justification for rating above

Our objectives were to 'reduce and prevent the damage that is currently happening to the marine ecosystem of the British Virgin islands as a result of abandoned, lost or otherwise discarded fishing gear (also referred to as ALDFG or "ghost gear") that continues to trap and kill marine species and smother coral reefs in an unregulated manner long after the fishing gears intended use' and to 'identify, analyze, and act upon all of the "ghost gear" that continues to cause harm to the marine ecosystems within the BVI'.

We have given our project a rating of 2. This is because whilst we did not quite meet our predictions of removing 21,250 lbs of waste, we have exceeded our impact expectations in other areas, such as by educating the community, involving local community members and removing far more plastic waste from beaches than predicted. Some volunteers noted that they would join more beach cleanups in the future and that they had

learned about the impacts of plastic waste, constituting a change in public opinion and awareness on these issues, however small.

Total plastic 4591.59 lbs Total fishing gear: 14,229.64 Total collected (including plastic, non plastic and ALDFG) - 19,113.31

Throughout the Darwin Grant we travelled 456.26 miles by boat (or around 396.48 nautical miles) since many of these beaches are on remote islands that are difficult to navigate and only accessible by boat.

Across our 17 cleanups, we covered 5.52 miles of shoreline. Assuming these cleanups covered 150ft in either direction, this would translate to approximately 40.62 hectares.

During our ocean (in-reef) cleanups, we covered 108.8 hectares.

So, our total cleanup zones covered approximately 149.42 hectares.

The beaches of the BVI are now 4591.59 lbs cleaner of plastic waste, 14,229.64 lbs cleaner of fishing gear, and 19,113.31 lbs cleaner of all materials that would otherwise become microplastics with devastating consequences for the environmental health of the territory. The change is also visible (pictures are attached in this report) which is significant since the natural beauty of the BVI is vital to its main industry: tourism.

These in-water and coastal cleanups have slowed the biodiversity loss and degradation within the BVI by protecting coral reefs and marine animals from ALDFG. The removal of ALDFG also supports coral reefs against the impacts of climate change by removing the additional threat of becoming smothered by nets, which would further weaken the reefs of the BVI. We have also improved the condition and protection of the natural environment in the BVI by removing plastics from beaches that would otherwise biodegrade and/or re-enter the water column.

Finally, we have engaged the local community in our efforts by involving local volunteers as well as hiring community members to assist. This had the unexpected but hugely beneficial impact of being an educational experience for many community members, who expressed that they were previously unaware of the sheer quantity of waste on our beaches. Their testimonials are attached in this report.

Supporting Evidence - file(s) upload

公	Darwin Local Mapped and Measured	公	Darwin Results
⊟	30/03/2024	⊟	28/03/2024
0	15:41:23	0	23:08:51
ß	pdf 618.12 KB	ß	pdf 53.37 KB
丛	Photos and evidence	샰	Darwin Volunteer Testimonials
і	28/03/2024	і	28/03/2024
0	22:47:47	0	22:46:22
ß	pdf 433.92 KB	ß	pdf 54.02 KB

Supporting Evidence - links to published document/online materials

Please see attached files.

Project Challenges

We were impacted by adverse weather conditions, which affected our ability to travel safely to various locations such as Anegada and navigate the complex reef systems in search for nets and ghost pots. Adverse weather is common in the BVI, and so we were able to account for this by visiting other harder to reach areas on these days, such as Norman and Ginger Island. Hazardous weather also hinders reef cleanup efforts, but we were able to accomplish beach cleanups instead on these days to ensure we were still making a difference.

Lessons Learned

1) Through volunteer cleanups we were able to clean much larger areas and local support allowed us to transport vast quantities of garbage for disposal. The use of our boats, Little Whale and Lady G were integral in the removal of larger nets and transport of waste to the main islands for disposal. For in-reef cleanups, our team is incredibly skilled in these recovery efforts and utilized both free diving and scuba diving to clean a tremendous amount from the reefs.

2) Weather windows were often hard to predict making it difficult to schedule these ahead of time. In particular, the in-reef ones require specific weather windows.

3) In the future we know that the community cleanups can retrieve alot more debris than the highly specialized and more dangerous in-reef cleanups that required trained commercial divers, but both are equally as important.

4) In terms of recommendations for others doing similar projects, we would recommend that they organise a schedule that is specific to numbers of cleanups per month, but not necessarily to locations.

Section 3 - Project Finance (Essential)

Project Expenditure



Overboad Costs				
Overneau costs				
Travel and				
Subsistence				
Operating Costs				
Capital Items				
•				
Others				
Total	46,396.00	48,395.00	0	

Please provide a short narrative summary on project finances.

Our actual costs reflected our projected costs. In the future we would add a line for overheads of office space, and boat and crew insurances. We would also like to add a line for when larger nets are discovered and a larger boat with crane is needed.

Section 4 - Contribution of Project to Darwin Plus Programme Objectives

Please select up to **one** indicator that applies within **each group/indicator list (A, B, C, D)** and report your results for that indicator in the text box underneath. If you do not have relevant results to report for any of the indicators in a particular group, you can leave them blank.

Please also submit some form of evidence (above) to demonstrate any results you list below, where possible.

Group A: Capability and Capacity - Core Darwin Plus Standard Indicators (select one)

Unchecked	DPLUS-A01: Number of people from key national and local stakeholder groups completing structured and relevant training.
Unchecked	DPLUS-A02: Number of secondments or placements completed by individuals of key local and national stakeholders.
Checked	DPLUS-A03: Number of local/national organisations with improved capability and capacity as a result of project.
Unchecked	DPLUS-A04: Number of people reporting that they are applying new capabilities (skills and knowledge) 6 (or more) months after training.
Unchecked	DPLUS-A05: Number of trainers trained reporting to have delivered further training by the end of the project.

Group A Indicator Results

While our project was more specific to cleaning ALDFG (abandoned, lost, discarded fishing gear) from the coral reefs of the BVI, we still had space for capacity building. Through social media and gov outreach we informed numerous people of the issues surrounding ALDFG in the territory.

Group B: Policies, Practices and Management- Core Darwin Plus Standard Indicators (select one)

Unchecked	DPLUS-B01: Number of new/improved habitat management plans available and endorsed.
Unchecked	DPLUS-B02: Number of new/improved species management plans available and endorsed.
Unchecked	DPLUS-B03: Number of new/improved community management plans available and endorsed.
Unchecked	DPLUS-B04: Number of new/improved sustainable enterprises/ community benefits management plans available and endorsed.
Checked	DPLUS-B05: Number of people with increased participation in local communities / local management organisations (i.e., participation in Governance/citizen engagement).
Unchecked	DPLUS-B06: Number of Local Stakeholders and Local Communities (people) with strengthened (recognised/clarified) tenure and/or rights.

Group B Indicator Results

On several occasions we were able to include volunteers as well as hire local workers to assist. We also sent consistent reports to government.

Group C: Evidence and Best Practices - Core Darwin Plus Standard Indicators (select one)

Unchecked	DPLUS-C01: Number of best practice guides and knowledge products published and endorsed.
Unchecked	DPLUS-C02: Number of new conservation or species stock assessments published.
Unchecked	DPLUS-C03: New assessments of habitat conservation action needs published.
Unchecked	DPLUS-C04: New assessments of community use of biodiversity resources published.
Checked	DPLUS-C05: Number of projects contributing data, insights, and case studies to national Multilateral Environmental Agreements (MEAs) related reporting processes and calls for evidence.

Group C Indicator Results

Not only did our project remove harmful fishing gear and plastics from our ocean, but also served as important data points for areas collecting the most debris. This will be passed along to our government to help future conservation management and planning

Group D: Sustainable Benefits to People, Biodiversity and Climate -Core Darwin Plus Standard Indicators (select one)

 Checked
 DPLUS-D01 Hectares of habitat under sustainable management practices.

 Unchecked
 DPLUS-D02: Number of people whose disaster/climate resilience has been improved.

 Unchecked
 DPLUS-D03: Number of policies with biodiversity provisions that have been enacted or amended.

Group D Indicator Results

Across our 17 cleanups, we covered 5.52 miles of shoreline. Assuming these cleanups covered 150ft in either direction, this would translate to approximately 40.62 hectares. During our ocean (in-reef) cleanups, we covered 108.8 hectares. So, our total cleanup zones covered approximately 149.42 hectares.

Section 5 - Project Partnerships, Wider Impacts and Contributions

Project Partnerships

1) Our key partners remained our hardworking team of commercial divers and Beyond The Reef staff as well as people of the British

Virgin Islands, it's fisherfolk, our marine tourism sector and the government including the Ministry of the Environment, Natural Resources & Climate Change. All were imperative to helping guide us to areas where the most ALDFG would be present, as well as giving support for the cleanups.

2) The government was involved in approvals and will also be receiving this data from us which can hopefully be beneficial to policy management and planning in the future.

3) Because we have been doing these cleanups prior to the Darwin Local grant, we had a fairly good relationship with the government and community already in regards to the cleanups as well as using local community boards to create an awareness of the issues at hand through photo documentation. It has also strengthened government awareness of illegal fishing in that some of the nets we could tell were very fresh, and likely the result of recent and nearby illegal fishing.

4) The local community got to be involved in our cleanups on several occasions and the results of our cleanups were always made aware to the public on social media accounts which get significant local traction.

Wider Impacts and Decision Making

We are hopeful that local community and government awareness of this issues being highlighted through the Darwin Local grant will help to increase pressure to create legislation against illegal fishing, and also continue to connect our NPO and the Government of the British Virgin Islands with regional groups also focused on helping to solve the ALDFG problem.

Sustainability and Legacy

Our team at Beyond The Reef will continue to do these cleanups now that our Darwin Local grant has been completed. Because we are a non-profit we will continue to seek funding for these cleanups as they are an integral part of our general mission statement. We will also continue to work with the government on these data sets as well as legislation to hopefully lead to prevention of illegal fishing which is responsible for at least a portion of the larger and un-broken nets.

Section 6 - Communications & Publicity

Exceptional Outcomes and Achievements

We would like to note a particular net cleanup that can be seen below labeled "large net"

On 11th October 2023, Beyond The Reef was alerted by a local resident that there was a net tangled in the coral on Little Camanoe Island. Upon arrival, our team discovered that the net was approximately 100ft long, 4ft thick and weighed 3305.50 lbs. We used our salvage boat, Lady G, and 10 staff to tow the net back to base, where we needed a crane to lift it onto our barge for cutting and weighing. Being able to retrieve this net in this condition before it could further break down will help to save numerous corals and animals from entanglement and smaller pieces from being ingested by fish, turtles and seabirds.

Photo, video or graphic to be used for publicity and communications.

Please upload at least one relevant and engaging image, video or graphic that you consent to be used alongside the above text in Defra, JNCC or NIRAS communications material.

盘 <u>1016 Tortola large net</u>	选 <u>1016 Cleanup beach</u>
≣ 28/03/2024	菌 28/03/2024
O 23:02:28	O 23:02:28
ipg 2.57 MB	jpg 1.52 MB
盎 <u>1016 Beach cleanup volunteers</u>	盘 <u>1016 back at base</u>
菌 28/03/2024	菌 28/03/2024
() 23:02:28	© 23:02:27
ipg 3.27 MB	jpg 1.87 MB
选 <u>1016 Cleanup haul</u>	盎 <u>1016 Nets on truck</u>
菌 28/03/2024	菌 28/03/2024
© 23:02:27	③ 23:02:26
ipg 636.61 KB	☑ jpg 354.79 KB
盘 <u>1016 Nets in water</u>	选 <u>1016 Large net</u>
菌 28/03/2024	菌 28/03/2024
(b) 23:02:26	③ 23:02:26
🖻 јрд 165.94 КВ	jpg 1006.85 KB
& <u>1016 Lady G cleanup</u>	选 <u>1016 Anegada nets</u>
₫ 28/03/2024	₫ 28/03/2024
© 23:02:26	© 23:02:26
🖻 јрд 263.6 КВ	ipg 203.12 KB
& <u>1016 reef nets</u>	
# 20/02/2024	

₫ 28/03/2024

③ 23:02:26

🗈 jpg 272.05 KB

Photo, video, and/or graphic captions and credits.

All photos will be:

Credit: Beyond The Reef, British Virgin Islands

I agree for the Biodiversity Challenge Funds Secretariat, Administrator, and/or JNCC to publish the content of this section.

● Yes, I agree for the BCFs Secretariat and/or JNCC to publish the content of this section.

Please list any accounts that you would like tagged in online posts here. This can include project pages, partners' pages or individuals' accounts for any of the following platforms: LinkedIn, Facebook, Twitter, or Instagram.

(on facebook and instagram)

Section 7 - Darwin Plus Contacts

Please tick here to confirm that you have read and acknowledge the BCF's Privacy Notice on how contact details will be used and stored and that you have sought agreement from anyone that you are sharing personal details with us on their behalf.

⊙ I confirm I have read the Privacy Notice and have consent to share the following contact details

Project Contact Details

Project Contact Name	Kendyl Berna
Role within Darwin Plus Project	Founder of Beyond The Reef
Email	
Phone	
Do you need further sections to provide additional contact details?	⊙ No