

Darwin Plus: Overseas Territories Environment and Climate Fund Annual Report

To be completed with reference to the "Writing a Darwin Report" guidance:
(<http://www.darwininitiative.org.uk/resources-for-projects/reporting-forms>). It is expected that this report
will be a **maximum** of 20 pages in length, excluding annexes)

Submission Deadline: 30th April 2020

Darwin Plus Project Information

Project reference	DPLUS100
Project title	DPLUS100: Sustainable solutions for Sargassum inundations in Turks & Caicos 2019-2021
Territory(ies)	Turks & Caicos
Lead organisation	University of Greenwich
Partner institutions	The Turks and Caicos Island Government (TCIG) Department of Environment and Coastal Resources; The School for Field Studies, Centre for Marine Resource Studies, South Caicos; The Chartered Institute of Ecology and Environmental Management (CIEEM) UK Overseas Territories Special Interest Group (OTSIG).
Grant value	£94,618
Start/end dates of project	1/4/19 - 31/3/21
Reporting period (e.g. Apr 2019-Mar 2020) and number (e.g. Annual Report 1, 2)	1/4/19 - 31/3/20 Annual Report 1
Project Leader name	Dr Debbie Bartlett, University of Greenwich
Project website/blog/social media	n/a
Report author(s) and date	Dr Debbie Bartlett, University of Greenwich

1. Project summary

Where text is reproduced from the application form this is provided in italics

Sargassum drift on the beaches of Turks & Caicos is detrimental to the tourist-based economy.

This investigation of the issue will involve students/citizen scientists in assessing the extent and composition of macroalgae on the shoreline contributing to finding a solution while promoting biodiversity/environmental awareness.

The feasibility for exploiting the macroalgae, specifically the potential for anaerobic digestion for biogas and composting as an alternative to disposal as waste will be explored; this could reduce current dependence on oil as a fuel (Q12 in submission).

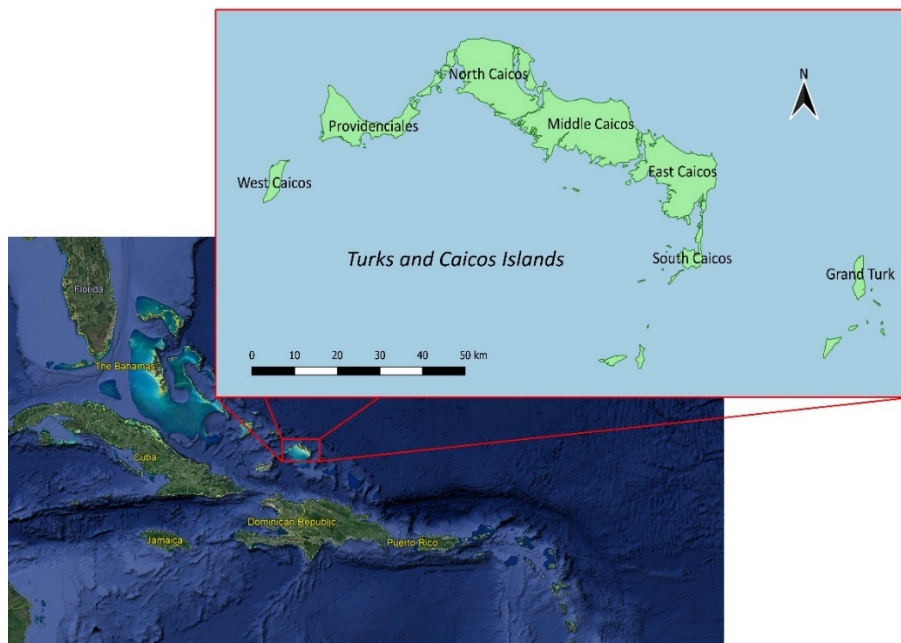


Figure 1 Showing the location of the Turks and Caicos Islands in the Caribbean Sea

The Turks and Caicos Island Government recognises the Sargassum invasion and negative impacts on tourism – the most economically important industry – fishing and socio-economic development. Several stakeholder meetings have been held on this issue with consensus sustainable management is needed.

The Environment Charter (2001) policy #7 is "to safeguard and restore native species, habitats and landscape features, and control or eradicate invasive species", As Sargassum is considered an invasive species threatening the biodiversity and sustainability of the TCI marine environment, potential solutions are required. This is reinforced by the National Tourism Strategy and Policy (2015), acknowledges that natural environment protection must be at the core tourism development.

Turks and Caicos is almost 100% reliant on imported fossil fuel, leaving it vulnerable to global oil price fluctuations. Processing Sargassum for energy generation is consistent with TCI Energy Policy (draft, 2017) to "promote the implementation of economically viable renewable energy, that will reduce the TCI's dependency on imported fossil fuels. It further states that greater use of economically viable renewable energy technologies that would stabilize the cost of electricity service in the TCI, and increase sustainability" (Q13 in submission).

2. Project stakeholders/partners

The bid was developed as a partnership with active collaboration and in response to demand from the host territory, as demonstrated in the partnership statement in the application form and included below.

Department of Environment and Coastal Resources (DECR) Ministry of Tourism, Environment, Heritage, Maritime and Gaming (MTEHMG) Turks and Caicos Islands Government The Turks and Caicos Island Government (TCIG) Department of Environment and Coastal Resources have put together a team consisting of seven officers, spread across the different islands, to deliver this project on the ground. The team members, with their respective roles are listed and CVs demonstrating competence have been provided. The TCIG team have local experience and capacity to conduct the fieldwork necessary to provide information for the impact assessment and have strong links with local communities that will enable them to engage stakeholders, including teachers, students and citizen scientists, to engage in long term coastal survey and monitoring activities. The project will be overseen at the highest level by Lormeka Williams, Acting Director, with day to day supervision of activities the responsibility of Dr Eric Salamanca, Deputy Director. It is the latter who will be

responsible for liaising directly with the PI and producing quarterly reports of progress including evidence to draw down budget as appropriate.

DECR made commitments in the application with respect to staff time that would be committed to the project and the roles and responsibilities, see below.

<i>Lormeka Williams TCIG</i>	<i>Project Oversight</i>	<i>3%</i>
<i>Dr Eric Salamanca TCIG</i>	<i>Project oversight/ lead partner; fieldwork</i>	<i>5%</i>
<i>Kathy Lockhart</i>	<i>TCIG Technical lead; sampling, education, etc. (South Caicos)</i>	<i>10%</i>
<i>Alexander "Roddy" McLeod</i>	<i>TCIG field work, sampling, education, etc. (Providenciales & West Caicos)</i>	<i>5%</i>
<i>Bryan Manco</i>	<i>TCIG field work, sampling, education, etc. (North-Middle Caicos)</i>	<i>5%</i>
<i>Amy Avenant</i>	<i>TCIG Awareness and Education</i>	<i>3%</i>
<i>Environmental Officer</i>	<i>TCIG field work, sampling, education, etc (Grand Turk)</i>	<i>5%</i>

This compares to the contribution of the lead partner, University of Greenwich, contribution from Dr Debbie Bartlett as Project Leader (10%) and Dr John J Milledge, Research Scientist responsible for laboratory work (5%). The two additional partners, the School for Field, based on South Caicos, and Mike Barker of the CIEEM UKOT Special Interest Group/RPS committed to contributions in kind.

The School for Field (SFS), a partner contributing in kind, had significantly greater involvement than anticipated in the application actively engaged in monitoring and educational outreach, with their students and local schools. They plan to send samples and funding for a freeze drier to facilitate this has been agreed (see Section 13).

Wider stakeholder engagement has been successful with 100 island-based respondents engaged in the research into the impact of Sargassum, carried out during the June visit. Both SFS and UofG have engaged with the Sargassum Network (SargNet, initiated during an Association of Marine Laboratories of the Caribbean meeting late May 2019) and the sargassum monitoring network (<http://sargassummonitoring.com/>). This is to some extent making up for the lack of monitoring by DECR staff and at the same time linking this project in with Caribbean wide initiatives.

3. Project progress

3.1 Progress in carrying out project Activities

Overall the proposed project activities, including information gathering, awareness raising, monitoring and sample collection for analysis have all been progressed although the contribution from DECR staff, outlined in the application, has not been realised (see Section 2) . Progress with activities against specific outputs are summarised below.

Output 1 Integrated Ecosystem Service, Ecological/Environmental Impact and Natural Capital Assessment of the coastal zone

1.1 Capacity building workshop & scoping exercise An initial kick off meeting was help with DECR and SFS staff on arrival on island in June 2019. This was followed up at the end of the visit with the meeting notes circulated for agreement'

1.2 Developing fieldwork protocol(s). completed and being used by SFS

1.3 Field work. This was being carried out by SFS staff and students until Covid restrictions were introduced. It is anticipated that this will resume late summer 2020.

1.4 Collation of data/information two student theses have been completed and these, combined with the data collected from the 100 respondents involved in the Impact Report

1.5 Report drafting see above – the intention is to gather more information in year 2 to enable this to be completed.

1.6 Stakeholder workshop: discussion of draft report – year 2 activity

1.7 Final report year 2 activity

1.8 Protocol for citizen science shore monitoring developed in conjunction with SFS staff, for use by schools and SFS students

1.9 Ongoing shoreline survey/monitoring this was being carried out by SFS staff and students until Covid restrictions and will hopefully resume late summer 2020. It was envisaged this would be carried out on all islands rather than just on South Caicos

1.10 Report updating to follow 1.6 in Year 2

Output 2 Education and awareness raising

2.1 Engaging students/citizen scientists/naturalists in field work UofG MSc students and SFS students successfully engaged. It was anticipated that DECR would provide contacts with local citizen groups and naturalists. As this has not happened it is hoped that requests made to the UKOT SIG and OTCF will generate some contacts

2.2 MSc students contributing background material/literature review completed

2.3 Developing educational materials Identification sheets prepared and distributed

2.4 Workshops for teachers and students during the visit in June with the UofG students holding workshops in two schools on South Caicos and gave presentations to SFS students and to the wider partnership on Providenciales

2.5 Evaluation of material re relevance to other OTs planned for Year 2

2.6 Engagement with local/national press and media article in Times of the Island, In Practice and interview given to the Guardian (not published to date)

2.7 Exploration of social media engagement potential Whatapp was initially used to collect saragassum location data and photographs to assess impact. This was discontinued later summer 2019 as it was duplicating SargNet data collection across the region.

2.8 Shore search guided walks, events and activities it was anticipated that this would be part of the DECR outreach programme. This has not been progressed but may, if engagement with local naturalists can be established, be picked up in Year 2.

Output 3 Characterisation of Sargassum spp

3.1 Development & testing of a collection protocol completed during the June visit of the UofG team working with SFS staff

3.2 Collection & dispatch of samples to the UK one set of samples taken on return after June visit. It had been anticipated the DECR staff would dispatch regular samples; SFS intend to collect samples, freeze dry and dispatch them in Year 2.

3.3 Characterise the Sargassum arriving at the beach initial samples have been characterised. It is hoped that more will be completed in Year 2 however the UofG labs are closed and Dr John Milledge is recovering from serious illness and will not be returning to work until August at the earliest.

3.4 Assess the seasonal variability of Sargassum and effects of weather and time: this is effectively being carried out by all those involved in SargNet with records being gather across the whole Caribbean region

3.5 Establish experimental methane potential of fresh beach-cast Sargassum

initial lab work has been done on the samples brought back after the June visit. More samples are required to establish potential for alternative uses for Sargassum.

Output 4 Dissemination

4.1 Distribution of educational materials to other OTs the identification sheets have been made available as downloads on the SargNet forum. These were also promoted at the Guadeloupe conference on Sargassum, October 2019.

4.2 Technical report on suitability of Sargassum for potential biorefining biogas production This will be done by UofG at the end of the project after more samples have been analysed. There is increasing interest globally in a wide range of potential uses for Sargassum so the focus of this report might be wider than biogas potential

4.3 Webinar for professionals – OTSIG Year 2 as this will focus on the findings in the final reports

4.4 Management Options Appraisal workshop was envisaged that this would be organised by DECR and involve the Sargassum Task Force, to be hosted by DECR but that has not yet been convened. The contact details of the 100 local tourism operatives involved in the impact assessment have been shared with DECR as these are clearly stakeholders who could be interested in being involved.

4.5 Open Access journal article drafting Year 2

4.6 Conference presentation (potentially beyond the timeline) This project features in poster presentations at the Guadeloupe conference on Sargassum, October 2019, and it is highly likely that there will be another similar event in 2020/21.

3.2 Progress towards project Outputs

Output 1: Integrated Ecosystem Service, Ecological/Environmental Impact and Natural Capital Assessment of the coastal zone. Specific focus will be on the tidal strand line and macroalgae, such as Sargassum spp, deposited as drift.

A key assumption was that there was baseline information regarding levels of drift in past years; this was not the case. Two student MSc projects brought together all the available background information as well as carrying out research into the current situation on TCI, one focusing on the impact of Sargassum on businesses and the environment (Kirsty Lee), the other on the distribution and composition of *Sargassum spp.* washed ashore in the Turks and Caicos Islands (Sylvia Myers); posters included as Figures 2 & 3). A report, based on interviews and focus groups involving 100 local tourism industry providers to determine their perceptions of Sargassum has been produced, distributed to all 100 participants, submitted to DECR and shared on the SargNet forum (front cover included as figure 4; email attachment Annex 3.1).

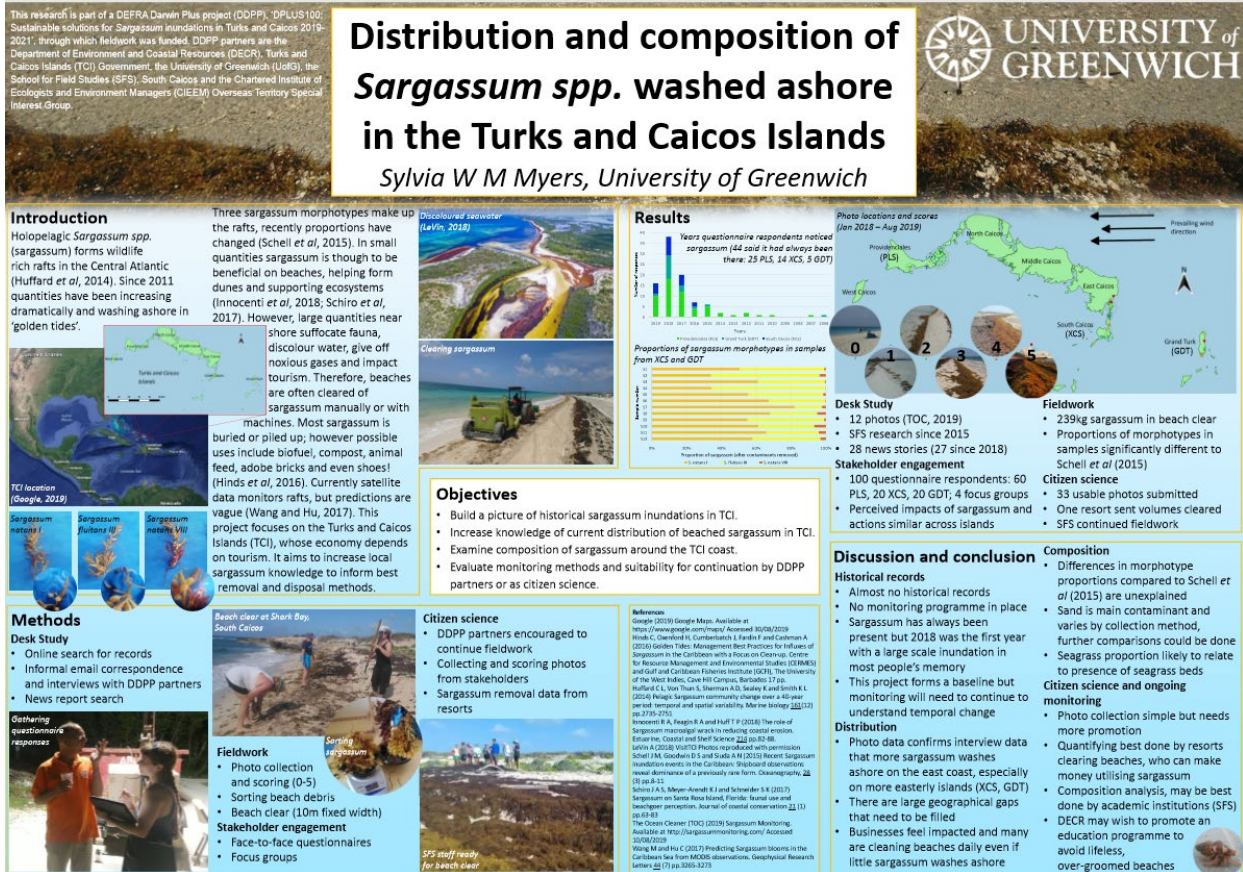


Figure 2 MSc student poster summarising thesis research

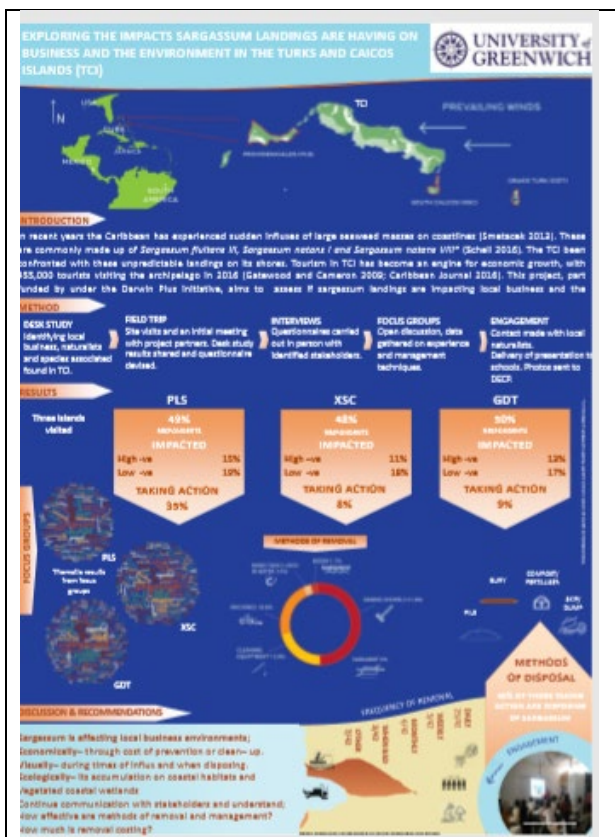


Figure 3 MSc student poster

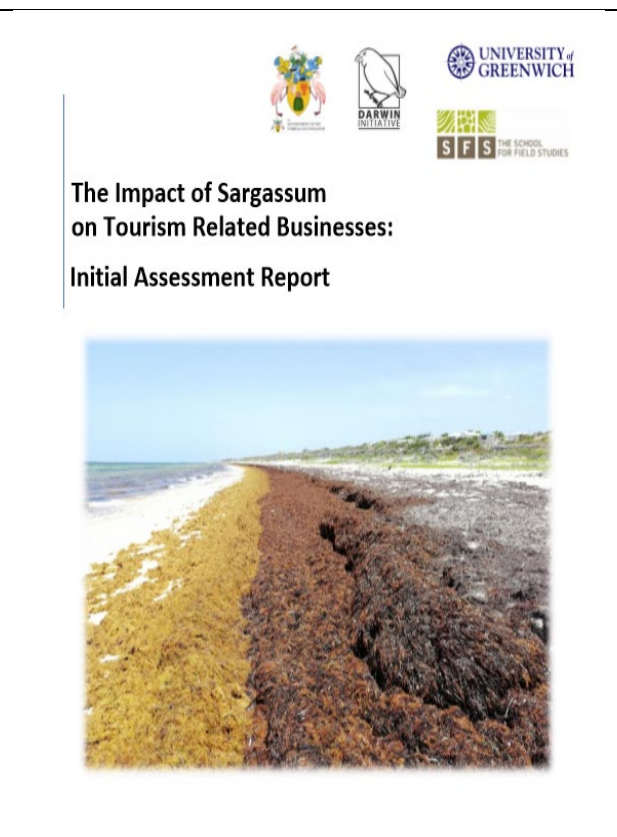


Figure 4 Front cover of the Impact Report

The original indicators included a fieldwork report and socio economic/environmental assessment of the impact of sargassum. These have been substantially achieved with further work, particularly on the ecological impact, planned for year 2.

Output 2: Education and awareness raising of shoreline/coastal environment

The application had DECR officers tasked with “education etc” with Amy Avenant responsible for “*Awareness and Education*”; this has not been realised. However, contact was made with some local schools during the visit in June with the UofG students holding workshops in two schools on South Caicos and gave presentations to SFS students and to the wider partnership on Providenciales. This has been continued by SFS directly involving their student groups and visiting schools on South Caicos. Identification sheets and a protocol have been developed and distributed for schools and local people and shared on the Caribbean wide SargNet (figure 3) An article was published in the local paper, ‘Times of the Island’ (hard copy mailed by SFS but not received – likely to be in UofG postroom), raising awareness of the issue and importance of coastal ecology.

Output 3: Characterisation of macro-algae, such as *Sargassum* spp, deposited as drift to identify potential as biomass for fuel and other products.

The composition of the drift has been determined with analysis of samples to determine level of contamination with organic/non-organic material was carried out during the June visit by the UofG team, working with SFS staff. It became apparent that there were three different types of Sargassum in the samples. The implication of this is that each type needs to be chemically characterised (it cannot be assumed these are the same) as well as mixed samples. This obviously increases the work required in preparing samples and quadrupling the laboratory work. It was anticipated that regular samples from different islands would be sent from TCI to the university labs (a task identified for DECR staff in the application; see Section 2). The only samples analysed to date were physically brought back by the UofG team on their return in June 2019. These have been characterised and the results published (Milledge J J, Maneein S, Arribas López E & Bartlett D (2020) Sargassum Inundations in Turks and Caicos: Methane Potential and Proximate, Ultimate, Lipid, Amino Acid, Metal and Metalloid Analyses *Energies* 2020, 13(6), 1523; <https://doi.org/10.3390/en13061523>).

Output 4: Research outputs developed and shared with other British Overseas Territories experiencing ‘golden tides’

We are in close contact with researchers across the Caribbean via SargNet, a real benefit that was not anticipated when the application was written (it was initiated in May 2019). This two way communication increases the impact of this project and we benefit from other’s findings. An article published in the CIEEM journal, ‘In Practice’, has directly linked into the UK Overseas Territories Special Interest Group and a questionnaire has been sent out through this group and the Overseas Territories Conservation Forum (<https://www.ukotcf.org.uk/>) to try to /generate more information/contacts for year 2.

3.3 Progress towards the project Outcome

OVERALL OUTCOME: *The detrimental impacts currently experienced by the tourism sector will be alleviated, students will have engaged in STEM activities and the potential for macro-algae as a biomass fuel evaluated*

The Indicators in the application are discussed individually below.

- *Removal of drift deposits has increased:* there is no baseline and, although we have some indication of the beaches most impacted and unofficial information of which resorts are actively removing drift it would be difficult to quantify an increase. Due to the ban on removal there is a reluctance to provide detailed information although some is included in the Impact Report.

- *Tourist dissatisfaction has decreased:* there is no baseline data. Some anecdotal information was reported but there is an understandable reluctance to discuss negative comments. If an end use was to be found and removal increased then this indicator might be addressed by turning it round, reframing as tourist satisfaction increasing.
- *Workshops with teachers (2) and students (2) have been held:* it was assumed that workshops with teachers would be held by DECR staff, alongside other events so it is questionable whether these will take place. Workshops took place in two schools, and with a class of ~ 30 SFS students on South Caicos, led by the MSc students, in June 2019. While this part of the indicator could be considered as achieved it would be better if more were held on other islands.
- *50 students have engaged in STEM activities including measuring and taking samples:* with two separate groups of SFS students already have actively engaged in monitoring Shark Bay and in sorting samples into the different types this indicator has been achieved. However, it is anticipated that, as soon as SFS are able to host students again this will continue, and samples freeze dried and dispatched to the UoG labs.
- *A technical report:* the Impact Report (figure 2) could be construed as a technical report but the intention is to produce a more detailed document, with wider scope adding in the material gathered in the MSc theses and with more environmental information, the focus of work to be carried out in Year 2.

3.4 Monitoring of assumptions

The current situation regarding Covid 19 is impacting on this project in several ways.

- SFS and UofG have been in shut down mode since early/mid March and normal working is not likely to resume until late summer 2020. This affects both monitoring/sample collection on TCI, availability of students and access to laboratories.
- The UofG team has been impacted with staff sickness with Dr John Milledge being severely ill with the virus and not likely to return to work until August at the earliest; Dr Debbie Bartlett was relatively mildly affected with the virus returning to work late April and also impacted with additional workload as all University teaching and examining has moved on line.

Assumptions made in the application against specific outputs are discussed below.

Output 1 assumed: *availability of historical records – particularly regarding past levels of drift and availability of data from local partner.* This did not exist, compromising setting a baseline, however anecdotal data has been gathered and is included in the Impact Report. The trend across the Caribbean Sea is being generated by SargNet and so this is no longer critical.

Output 2: *assumed interest from schools and local/national media.* The underlying assumption here was that DECR staff had active contact with schools and would be contacting them. We found there was interest, particularly when the ID sheets were produced. The local media were interested, evidenced by publication of an article in the Times of the Island.

Output 3: *assumed that DECR issue export and phytosanitary certification to enable samples to reach the lab and samples are not degraded in transit.* The certification process proved to be more complicated than originally envisaged with the time lag between different steps meaning that the samples were not as free as would be ideal. This is being addressed with a freeze drier now installed in SFS as this will ensure optimal condition of future samples.

Output 4: *Assumed DECR has links to other BOT education departments and is willing to host outs on a website.* The status of this assumption is unclear but is likely to have been superseded by the advent of SargNet as a dissemination mechanism extending beyond the BOTs to the wider area affected by Sargassum.

4. Project support to environmental and/or climate outcomes in the UKOTs

It is difficult to determine the impact of this project on the basis of work carried out to date. There is significant environmental and socio-economic impacts, both of the sargassum drift and of removing it but both are challenging to quantify and require more investigation. The Impact Report has highlighted the complexity of the Sargassum issue, with both positive and negative aspects to the floating mats and shoreline deposition. The relationship to environmental policies and biodiversity strategies will be addressed in Year 2 when it is hoped to have greater engagement with local naturalists and those with a specific interest in the wildlife of the Islands (e.g. the OTCF).

The Overseas Territories Biodiversity Strategy (UKOTBS), produced in 2014, has the overarching objective being: “to enable the UK and Overseas Territory Governments to meet their international obligations for the conservation and sustainable use of biodiversity in the Overseas Territories” and is the context within which the environmental impact will be considered. In the TCI context the National Tourism Strategy and Policy (2015), acknowledges that natural environment protection must be at the core tourism development and The Environment Charter (2001) policy #7 is “to safeguard and restore native species, habitats and landscape features.

If it proves possible to use the Sargassum to produce biogas then this will have positive climate outcomes as all power generation is currently derived from diesel shipped into TCI. This would be consistent with TCI Energy Policy (draft, 2017) to promote the implementation of economically viable renewable energy that will reduce the TCI’s dependency on imported fossil fuels.

5. OPTIONAL: Consideration of gender equality issues

N/A

6. Monitoring and evaluation

Monitoring and evaluation has fallen to UofG and, as previously explained there have been issues with this project. Despite this significant progress has been made and, assuming that the request for activity to be considered as suspended until normal working can be resumed post Covid 19 and the end date moved back, we expect to deliver the outcomes in the application although some of the originally proposed activities made need to be amended.

7. Lessons learnt

The partnership has not worked in the way that was anticipated. While input from DECR has been less than expected, compromising some aspects, SFS staff have contributed significantly more and, despite not being financial beneficiaries (and on the contrary providing free accommodation, subsistence, transport and laboratory facilities to the UofG team during most of the June visit) stepped up to help achieve project outcomes.

In retrospect when the project was approved all the partners should have been asked if anything had changed, whether they still had the capacity to deliver commitments made in the application and – importantly – if they wanted to continue with the project. While a delay between submission and approval is the norm, in this instance we were told the application had been rejected with this decision later reversed. This checking process will be incorporated in future.

Considerable time has been spent on trying to negotiate a partnership agreement or MOU and it has not proved possible to get DECR to sign, although the other partners have done so. While the UofG standard paperwork maybe considered over complex (it is drafted by lawyers to meet every eventuality) it would have been helpful to set up some kind of agreement before beginning work on this project rather than assuming that commitments made – and signed off - in the application were still valid.

Applications are always written on the basis of best available information and this is always inadequate – obvious as the requirement for more in-depth knowledge is the justification for funding. This almost always means that outputs, outcomes and activities need to be revisited

and adjusted. In this case we did not know there were three different types of Sargassum requiring samples to be sorted to separate them, additional surveys to determine if the proportions of these were constant and four times the amount of lab work originally envisaged (each has to be characterised alone and in a mix).

8. Actions taken in response to previous reviews (if applicable)

N/A

9. Other comments on progress not covered elsewhere

There are two specific risks to successful completion of this project.

The impact of Covid 19 means that the 2020 monitoring and sampling season has been compromised. The sargassum inundations seem to be seasonal with deposition increasing in June/July when travel to the islands is not possible, there are no SFS students and the UofG laboratories are closed so there can be no analysis.

While many of the activities that were to be undertaken by DECR have been picked up by SFS this means that all the monitoring and sampling is from one island, South Caicos, rather than across all of the islands. While this probably has little impact on the overall outcome it is unfortunate, particularly with respect to awareness raising. It seems unlikely that integrated educational activities (teacher workshops; guided walks) will take place and without DECR hosting the Sargassum Task Force this may not be realised.

10. Sustainability and legacy

The sustained legacy of this project may be best realised in conjunction with SargNet activities as there is interest from other research organisations and project across the region affected by Sargassum. When the application was drafted we had no idea that over summer 2019 interest in Sargassum would become so widespread and high profile. There is a lot of interest in the chemical characterisation and if we can get more samples analysed and publish the results these will be welcomed and used across the affected region.

11. Darwin identity

Support from the Darwin Initiative was made explicit in all communications with local people and in presentations made to stakeholders and in schools. There is some awareness on TCI that this is a mechanism for the Government to source funding; there are a number of active Darwin projects on the island. The project has used the Darwin Initiative logo on outputs such as the Impact Report (figure 4), Sargassum Identification sheets, and summary poster displayed at the Guadeloupe conference (Figures 5 & 6). Tweets and Insta posts were shared with Darwin Initiative during fieldwork.



There are two species of floating Sargassum seaweeds. They come in different forms. Here are the three most common.

Sorting Sargassum

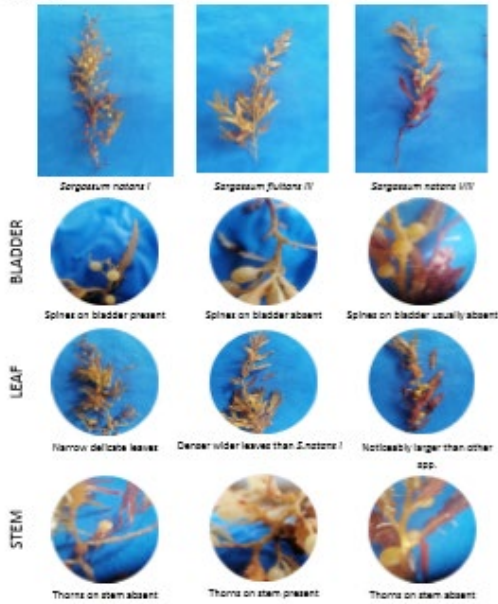


Figure 5 Identification guide

Sustainable solutions for Sargassum inundations in Turks & Caicos

Funded by Darwin Plus Round 7: April 2019 – March 2021

RATIONALE: Sargassum drift on the beaches of Turks & Caicos is detrimental to the tourist-based economy.

This investigation of the issue will involve students/citizen scientists in assessing the extent and composition of macroalgae on the shoreline contributing to finding a solution while promoting biodiversity/environmental awareness. The feasibility for exploiting the macroalgae, specifically the potential for anaerobic digestion for biogas and composting as an alternative to disposal as waste will be explored; this could reduce current dependence on oil as a fuel.

In the first 6 months:

- We have produced a report on the impact of sargassum on tourist-based industries based on interviews with 100 operators
- Two MSc research projects have been completed
- Created easily reproducible ID sheets to enable the different morphotypes of Sargassum affecting the islands to be identified
- Set up monitoring to try to determine the locations, quantity and seasonality of Sargassum deposition
- Collected samples to determine the relative proportions of the different morphotypes deposited and identify contaminants, both biological and of anthropogenic origin
- Collected samples and brought them back to the UK
- Carried out analyses of moisture and ash content, calorific value, protein, lipid and fibre content, amino acid profile, fatty acid profile, XRD analysis of ash, CHN analysis and metal and arsenic contents. Further chemical and methane potential analyses are on-going and we expect full results to be available in the next six months.

We are keen to hear from others with view to collaboration

Dr Debbie Bartlett
d.bartlett@gre.ac.uk



Figure 6 Flier displayed at the Guadeloupe conference provided to schools and downloadable on Sargassum, October 2019

Articles in the 'Times of the Island', 'In Practice' (email attachment Annex 3.2) and the Darwin newsletter. This project has been included as a circular economy case study on the Microbiology Society [website](#). Student posters (figures 2 & 3) and a project summary (Figure 7) were displayed at the Guadeloupe conference on Sargassum and all acknowledge the support of the Darwin initiative.

Sustainable solutions for Sargassum inundations in Turks & Caicos

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12. Safeguarding

The University is committed to supporting and promoting the welfare of staff, students and visitors and is committed to the provision of a safe environment conducive to work, study and the enjoyment of a positive experience for all members of its community. To this end it has a comprehensive safeguarding policy available [here](#). The School for Field Studies similarly has safeguarding policies available [here](#) and both organisation conduct detailed risk assessments prior to any activities taking place.

13. Project expenditure

Table 1: Project expenditure during the reporting period (1 April 2019 – 31 March 2020)

Project spend (indicative) in this financial year	2019/20 D+ Grant (£)	2019/20 Total actual D+ Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs				
Consultancy costs				
Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items				
Others (Please specify)				
TOTAL				

Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2019-2020 – if applicable

Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
Impact Insert agreed project Impact statement		(Report on any contribution towards positive impact on biodiversity or positive changes in the conditions of human communities associated with biodiversity e.g. steps towards sustainable use or equitable sharing of costs or benefits)	
Outcome (Insert agreed project Outcome statement)	(Insert agreed Outcome level indicators)	(Report against the indicators on progress towards achieving the project Outcome)	(Highlight key actions planned for next period)
Output 1. (Insert agreed outputs with activities relevant to that outputs in lines below. Activities relevant to more than one Output should be cross-referenced rather than repeated)	(Insert original Output level indicators)	(Report general progress against indicators, comment on their appropriateness, and reference where evidence is provided e.g. <i>Evidence provided in section 3.2 of report and Annex X</i>)	
Activity 1.1 Insert activities relevant to this Output		(Report completed or progress on activities that contribute toward achieving this Output)	(Outline what will be carried out in the next period)
Activity 1.2, <i>Etc.</i>			
Output 2. (Insert agreed output)	(Insert agreed Output level indicators)	(Report against the indicators on progress towards achieving the Output)	
Activity 2.1.			
Activity 2.2. <i>Etc.</i>			
Output 3. <i>Etc.</i>			

Annex 2: Project’s full current logframe as presented in the application form (unless changes have been agreed) - if applicable

N.B. if your application’s logframe is presented in a different format in your application, please transpose into the below template. Please feel free to contact Darwin-Projects@tsi.co.uk if you have any questions regarding this.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
Impact: .			
Outcome:			
Output 1 <i>Add more outputs as necessary</i>	1.1 1.2 1.3. etc.	1.1 1.2 1.3. etc.	
Output 2	2.1 2.2	2.1 2.2	
Output 3	3.1	3.1	
Activities (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)			

Annex 3 Onwards – supplementary material (optional but encouraged as evidence of project achievement)

Checklist for submission

	Check
Is the report less than 10MB? If so, please email to Darwin-Projects@ltsi.co.uk putting the project number in the Subject line.	
Is your report more than 10MB? If so, please discuss with Darwin-Projects@ltsi.co.uk about the best way to deliver the report, putting the project number in the Subject line.	
Have you included means of verification? You need not submit every project document, but the main outputs and a selection of the others would strengthen the report.	
Do you have hard copies of material you want to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number. However, we would expect that most material will now be electronic.	
Have you involved your partners in preparation of the report and named the main contributors	
Have you completed the Project Expenditure table fully?	
Do not include claim forms or other communications with this report.	