





#### **Darwin Initiative Main Project Annual Report**

**Important note:** To be completed with reference to the Reporting Guidance Notes for Project Leaders: it is expected that this report will be no more than 10 pages in length, excluding annexes

**Submission Deadline: 30 April** 

#### **Darwin Project Information**

Project Reference	20-006
Project Title	A sustainable marine and fisheries management plan for the Pitcairn islands
Host Country/ies	Pitcairn Islands
Contract Holder Institution	University of Dundee
Partner institutions	Natural Resources Division, Government of Pitcairn Island, Zoological Society of London, Secretariat of the Pacific Community, Sea-Scope Marine Environmental Consultants, Conservation Sans Frontiers
Darwin Grant Value	£249,946
Funder (DFID/Defra)	Defra
Start/end dates of project	September 2013 – March 2017 (no-cost extension awarded)
Reporting period (e.g., Apr 2015 – Mar 2016) and number (e.g., Annual Report 1, 2, 3)	April 2015 – March 2016 Annual Report 3
Project Leader name	Professor Terence Dawson
Project website/blog/Twitter	http://www.zsl.org/regions/uk-and-overseas- territories/pitcairn-islands-marine-conservation
Report author(s) and date	Terry Dawson, Robert Irving, Heather Koldewey, 6 May 2015.

#### 1. Project Rationale

Given their extremely isolated location and difficulties of access, the Pitcairn Islands' marine habitats are one of the UKOTs least known ecosystems (Figure 1). Scientific evidence for fisheries management of Pitcairn's Exclusive Economic Zone (EEZ) remains insufficient for decision-making, as highlighted by the PEMP report (Smyth, 2009) and confirmed by our Challenge Fund report (2012). Global fishing pressures on migratory species, especially tuna and billfish, have resulted in commercial fishing fleets increasingly approaching the Pitcairn Government to lease their fishing rights. Further, the Secretariat of the Pacific Community (SPC) proposed that the Pitcairn community develop commercial reef fisheries for export to neighbouring Mangareva (Gambier Islands, French Polynesia). The environmental and economic sustainability of such proposals are unknown. Crucially, the small local community relies on fishing for food, and together with tourism, providing income support.

The local economy of the Pitcairn Islands is reliant on tourism as a source of income due to their geographic isolation, small size, and small population (given that it is one of the primary mainstays alongside fisheries). The community's income is boosted through the sale of souvenirs to cruise ships, landing and accommodation fees charged to visitors and the sale of Pitcairn products such as honey, stamps, postcards, 'signature' clothing/accessories and traditional crafts such as wood carvings. In the recent past, the sale of fish and lobster to cruise ships has also boosted this income from time to time. The number of cruise ships that stop at Pitcairn has increased in recent years and it is expected to continue to rise if the proposed Marine Protected Area has been established. The creation of the world's largest marine reserve in the Pitcairn Islands will enhance the island's image to potential visitors. It provides an opportunity for increased awareness of the islands and their unique tourism experience on offer. This opportunity, and the consequent increased number of visitors, represents a realistic opportunity for building a sustainable economic future for the community.

Considering these challenges with socio-political and economic pressures, our project will facilitate informed decision-making by the Pitcairn Government for sustainable marine resource use by (1) underpinning the scientific evidence-base; (2) developing local capacity for fisheries and environmental assessments; (3) developing a marine management plan with the Pitcairn community and UK Government for fisheries and the proposed marine reserve; (4) enhancing tourism opportunities; and (5) increasing awareness of Pitcairn's importance in meeting the UK's biodiversity targets. A key development within this project is to work closely with the Pew Charitable Trust and the Pitcairn Island Council to support the establishment of a Marine Protected Area, and to provide the underpinning management protocols and scientific evidence-base to ensure a sustainable future for Pitcairn's marine resources.

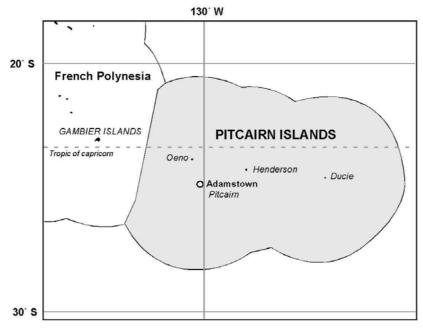


Figure 1. Map of the Pitcairn EEZ and islands.

#### **Project Partnerships** ☐ The UK based partners (Dundee University, Sea-Scope, Zoological Society of London) have liaised frequently since the project's inception on 1st September 2013. Meetings have been held via Skype and in person. A MoU is in place between Dundee University and ZSL, and between Dundee University and Sea-Scope. Visits and contact with the Pitcairn islander community: Skype/Teleconference meetings have been held regularly with Michele Christian, Head of the Natural Resources Division, Government of Pitcairn Island, through the Pitcairn Environment (Stakeholders) Group (PEG) Meetings. Robert Irving (Sea-Scope) and Terry Dawson (Dundee) visited Pitcairn in Aug/Sep 2015 during which time meetings were held with Michele Christian, the Fisheries Officers (Sue O'Keefe and Charlene Warrren-Peu), as well as the Mayor, Shawn Christian. Meetings were also held with the British Government (FCO) Administrator on Pitcairn, Alan Richmond. ☐ Terence Dawson was invited by Jonathan Sinclair, Governor of Pitcairn, to participate in a Pitcairn Islands focus group meeting, Foreign and Commonwealth Office, London, 27 Oct 2015. ☐ Heather Koldewey and Fiona Llewellyn (Marine Reserves Coalition) were invited to join the Foreign and Commonwealth Office 'Blue Belt Working Group' which met in September 2015 and on 19th February 2016 and included discussions on fisheries enforcement in Pitcairn. Other meetings were held in the UK with project collaborators Tom Appleby, Academic lawyer and Trustee, Blue Marine Foundation and Jo Royle, Pew Charitable Trust, (Aug 2015); with Michelle Crick, Research Associate, Conservation Sans Frontieres (Sep 2015, Mar 2016), and with Meriwether Wilson, University of Edinburgh (Feb 2016). There has been on-going correspondence with Michel Blanc and Delphine Leguerrier Sauboua Suraud (Secretariat of the Pacific Community) regarding the Pitcairn fisheries and tourism developments, and integration with the 10th EDF Integre project (cofunding). Legislation regarding the fisheries management have depended upon the active collaboration of Danielle Kelly (Pitcairn Government), who, with Tom Appleby (Blue Marine Foundation), has advised on and reviewed the Pitcairn Fisheries Association documentation developed by Michelle Crick (Conservation Sans Frontieres) and Terence Daw-Tom Letessier and Henry Duffy have progressed regional collaborations to share biological monitoring data of fish populations in French Polynesia and Tonga with Institut de Reserche pour le Developpement (IRD) and Montpellier University to enable comparative assessments with the fish populations surveyed in Pitcairn as part of Henry Duffy's MSc project within the Darwin project. ☐ There has been continuous communication with the Pitcairn Island Tourism (Tourism Assistant/Local Services Manager- Melva Evans, and Tourism Coordinator - Heather Menzies) regarding tourism-related developments as per the tourism development plans (Tourism Visit Report) □ A new collaboration has been initiated with the University of St. Andrews in 2015, with some funding support of the Pitcairn activities through the MASTS (Marine Alliance for Science and Technology for Scotland - Dundee and St. Andrews are members) programme. Jacqui Christian (Pitcairn Islander) was awarded a 6-month fellowship (from Jun to Dec 2015) to visit Dundee/St. Andrews, to prepare a European Commission BEST (voluntary scheme for Biodiversity and Ecosystem Services in Territories of European overseas) proposal. Several meetings were conducted throughout this time be-

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to Dr Ellen Garland (University of St. Andrews) for analysis.

tween Terence Dawson and Jacqui Christian on this and other initiatives. Humpback whale song recordings from the 2015 Henderson expedition (see below) were submitted

#### 3. Project Progress

#### 3.1. Progress in carrying out project activities

The project has made some useful progress in the last 6 months, despite a number of major complications on-island (discussed in more detail later in the report, but including a major infrastructure project to build an alternative harbour and a criminal court case involving the former mayor) and ill health and subsequent unexpected emigration of Pitcairn islanders who had been working with us on the project. Several of the on-island partner members have also had extended leave off-island due to health issues and bereavement leave. These issues have highlighted the challenges of working on an extremely remote island where the total population is less than 50 people. The main activities completed during this period relating to our objectives (highlighted - from the project proposal) are:

#### (1) Underpinning the scientific evidence-base

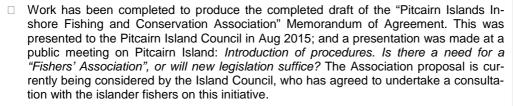
Terence Dawson (TPD) and Robert Irving (RI) visited Pitcairn from 22 Aug to 10 Sept 2015, including a 3-day excursion to Henderson Island (in collaboration with the RSPB as part of their invasive rats assessment). Two SCUBA dive surveys were undertaken as well as Baited Remote Underwater Video (BRUV) stereo camera drops conducted at Henderson over 3 depths at 3 sites (9 deployments in total) over 2 days, building on the dataset collected by Henry Duffy, Tom Letessier and RI. Videos from these deployments have been analysed by Henry Duffy and Tom Letessier for determining fish identifications and abundances. As the trip was undertaken during seasonal visits of a small number of humpback whales, a hydrophone bioacoustic monitoring system was deployed for 48 hours to record any whale songs. These recordings have been passed on to Dr Ellen Garland (University of St. Andrews) for analysis. The whale and Henderson BRUV data are currently being analysed for publication in peer-reviewed journals.

#### (2) Developing local capacity for fisheries and environmental assessments

After consultation with the islanders, it was agreed to supply the fishers with individual portable weigh-scales on request. Two types of fish weigh-scales were delivered to Pitcairn in Aug 2015 for field trials by the island fishers to determine their reliability and robustness. Since September 2014, monthly returns of fish catches have been collated by the Pitcairn Fisheries Officers (Sue O'Keefe and Charlene Warrren-Peu, both recruited and funded under the Darwin Initiative project). It took a while to engage the fishers and explain to the value of submitting records of their catches, but currently 6 of the 12 island fishers have been passing on details of their catches to the Fisheries Officer (50% uptake). We now have more than 12 months' worth of catch returns. Robert Irving has undertaken an initial analysis of the first year's worth of these fish catch records and has prepared graphic interpretations of various analyses. These include the total number of species caught; the total number of individual fishes caught; the most frequently caught species; the number of fishing forays per month; during which months certain species are caught; etc. etc. Robert Irving has also prepared a series of Species Information Sheets (effectively Fisheries Management Plans) for the five main fished-for species (red snapper, fafaaia/coronation cod, wahoo, spiny lobster (two species) and rock lobster). These have been sent to the island and we are awaiting comments back on them.

## (3) Developing a marine management plan with the Pitcairn community and UK Government for fisheries and the proposed marine reserve

Project meeting (TPD, RI, HK) with Tom Appleby, Academic lawyer and Trustee,	Blue
Marine Foundation and Jo Royle, Pew Charitable Trust, on 11 Aug 2015.	



- ☐ In February 2016, the project recruited two MSc students (Kirsty Grey and James Nikitine) to lead on two activities:
  - o Pitcairn Islands Marine Management Plan;
  - o Community ownership of a large-scale MPA: can it work? A Case study of Pitcairn Islands MPA.

The two students will be supervised by Terry Dawson and Meriwether Wilson (University of Edinburgh). The research for these dissertations will commence in May 2016 and will be completed by the end of August 2016.

#### (4) Enhancing tourism opportunities

There has been ongoing work in partnership with the Pitcairn Islands' Tourism Department, the Pitcairn Islands Museum, and other members of the community to enhance tourism opportunities for the Pitcairn Islands.

Visitor information collection/evaluation opportunities are in place - visitor surveys are available to all visitors online (via Survey Monkey) or handed out by the Tourism Assistant.

The content and images for tourism materials is being edited and will be reviewed by all stakeholders in the next few months. Leaflet-style materials are being designed, as per the tourism development plan (Tourism Visit Report) to enhance the self-guided activities available for visitors, and to highlight the natural heritage and unique biodiversity of the Pitcairn Islands. Videos featuring scientific staff (Heather Koldewey, Tom Letessier) and community members are due to be produced - filming dates are being finalised. This will be showcased in the Pitcairn Island Museum and also on cruise ships.

#### (5)

М	edia activities and public outreach:
	Contact Magazine, April 2015: "Clear blue thinking makes an impact on Pitcairn", article presenting the role that the Darwin Initiative Pitcairn project played in the UK Government designation of the Pitcairn Islands, University of Dundee Press Office, Dundee, Front cover (photograph) and pages 16-17.
	Robert Irving wrote an article for Pitcairn's monthly newsletter Dem Tull (March 2016) entitled "The humpbacks are here!".
	Robert Irving wrote an article for Pitcairn's bi-monthly magazine Miscellany (in press) entitled "Darwin Project starts to reveal some fishy business"
	Heather Koldewey included the Darwin project in her presentation as keynote speaker for the Cornwall Wildlife Trust's 'Your Shore' annual conference (27 <sup>th</sup> February 2016) on the theme of 'Ocean Optimism and the power of community marine groups'.
	Terence Dawson was invited by the Natural Resources Division of the Government of Pitcairn to represent the Pitcairn Government at the UKOTCF conference in Gibraltar, 11-16 July, 2015. An oral presentation was given entitled "Pitcairn Islands: Integrating Research, Conservation Monitoring, Management and Sustainable Development". A poster was also presented throughout the duration of the conference highlighting the Darwin project, entitled "A sustainable marine and fisheries management plan for the Pitcairn Islands".
	BBC Radio 4 programme 'Costing the Earth' <i>Britain Rules the Waves</i> , Terence Dawson interviewed on the proposed Pitcairn Islands Marine Reserve, broadcast on 15 and 16 Sept 2015 (podcast available).
	Terence Dawson gave a public lecture at the D'Arcy Thompson Zoology Museum, Dundee, entitled "Protecting the Real Treasure of the Pitcairn Islands - Challenges to creating the world's largest marine reserve", 20 Oct 2015.
	Henry Duffy gave a series of 'Nature Live' presentations talking about Pitcairn at the Natural History Museum, London from May 2015 to January 2016, totalling eight separate public talks at the museum over the last 18 months.
	Terence Dawson gave a seminar on 21 Jan 2016 entitled ""Pirates and the real treasure of the Pitcairn islands - Challenges to creating the World's largest marine reserve" as part of Spring 2016 Earth Science Seminar series at the School of Geosciences, Uni-

versity of Aberdeen.

- Henry Duffy presented our Pitcairn project research for the British Science Association 'Story Collider' live event as part of British Science Week on 17 Mar 2016, see: <a href="http://www.storycollider.org/shows/2016/2/8/london-british-science-week">http://www.storycollider.org/shows/2016/2/8/london-british-science-week</a>.
- Robert Irving assisted with editing the description of the environment of the Pitcairn Islands report on behalf of the EC BEST project (South Pacific Territories), which was led by the BEST regional team (Headed by Jean Kape based in Papeete, French Polynesia). This followed several meetings held in Papeete in August 2015 with Eleonora Avagliano (lead author), Jean Kape and Eric Clua, Scientific advisor of the High Commissioner of the French Republic ('DRRT').



Photo: Robert Irving and Terence Dawson meetings with Elenora Avagliano and Eric Clua (Jean Kape, photographer) in August 2015, Papeete, Tahiti.

#### (6) Policy advocacy and Parliamentary activities:

- Terence Dawson was invited by Jonathan Sinclair, Governor of Pitcairn, to participate in a Pitcairn Islands focus group meeting, Foreign and Commonwealth Office (FCO), London, 27 Oct 2015.
   Heather Koldewey and Fiona Llewellyn (Marine Reserves Coalition) were invited to sit on the FCO's new Blue Belt Technical Working Group; attended the first and second meeting of this group in September 2015 and February 2016 respectively.
   ZSL continue to participate in weekly calls of the Great British Oceans (GBO) campaign.
   Fiona Llewellyn on behalf of the MRC) led GBO strategy meetings in Jan and Apr 2016.
   Robert Irving was invited to attend a meeting updating attendees on the UK Government's MPA proposals for the Pitcairn Islands and Ascension Island, held by the Conservative Environment Group at the Houses of Parliament on 22 Sep 2015.
- □ Published article on MRC and ZSL websites for the one year anniversary since the Pitcairn announcement (18 March 2016).
- ☐ Continued presence on social media with #GBOceans.
- ☐ The Great British Oceans campaign of the MRC was recognised for ocean conservation work through the PEA (People Environment Achievement) Awards in October 2015.
- □ ZSL hosted an FCO UKOT 'Away day' on 7<sup>th</sup> April 2016 at ZSL with presentations on our work in Pitcairn through the Darwin project and activities delivered by ZSL staff Ana Pinto, Fiona Llewellyn, Tom Letessier and Matt Gollock.

#### 3.2. Progress towards project outputs

Activities for the last 12 months (Apr 2015- Mar 2016) highlighted in red

Output 1:	Developing a collection	ports and appraisals. on of GIS maps (atlas) arine habitats and eco-		Comments (if necessary)
	Baseline	Change recorded by 2016	Source of evidence	
Indicator 1.1: Fisheries and regional socio- economic re- views conduct- ed and integrat- ed into an as- sessment report	Report from earlier Darwin Challenge Fund project: 5. Ir- ving, R.A. and Dawson, T.P. 2012. The marine envi- ronment of the Pit- cairn Islands. Dun- dee: Dundee Uni- versity Press: ISBN 9781845861612.	- Robert Irving, Dr Tom B. Letessier; and Henry Duffy (MSc student) - Visit to Pit- cairn for 18 days (May/June 2014) to oversee construction & deployment of Bait- ed Remote Underwa- ter Video Systems (BRUVs). - MSc Student thesis; - 'Pitcairn Islands Economic Report' (2014); - Henderson Island BRUV fish database established 2015.	MSc Thesis and Economic Report published and available on re- quest (submitted with last year's annual report); SUPP1 Hender- son_BRUV_Speci es.xlsx	
Indicator 1.2: Individual fisheries species assesed in a local context	Only variety of fish known (local names). No data on abundance or fishing effort.	Voluntary fish catch recording scheme instigated in Sep 2014 and taken up by half of fishers (6/12). Data from first 12 months (to Aug 2015) has allowed us to make initial assessments of stock and fishing effort. Data from <i>in situ</i> BRUV recordings has provided data on species present, abundance and size ranges.  - Development of fish fact/management sheets for the following species: Red snapper, Pacific chub, Lyretail/Coronation cod, Wahoo, Spiny lobster (two species) and Rock lobster.	SUPP2 Catch returns summary report_Sep14-Aug15.docx SUPP5 Red Snap-per_species_BAP.docx SUPP6 Nan-we_species_BAP.docx SUPP7 Faafaia_species BAP.docx SUPP8 Wa-hoo_species_BAP.docx SUPP9 Spiny lobster Panulirus pascuen-sis_species_BAP.docx SUPP10 Spiny lobster Panulirus pascuen-sis_species_BAP.docx SUPP10 Spiny lobster Panulirus penicilla-tus_BAP.docx SUPP11 Slipper lobster Scyllarides haan-ii_species_BAP.docx	It will be important to ensure logging of catches continues after the end of this project. This aspect will be addressed during 2016/17.

Output 2:	Operational quay-side weighing station and catch logbook.			Comments (if necessary)
	Baseline	Change recorded by 2016	Source of evidence	
Indicator 2.1: Commercial grade weigh scales in- stalled at Bounty Bay	Fish catches not weighed, so no data available. However, individuals of certain species (e.g. sharks, wahoo, yellowfin tuna etc), if thought to be particularly large, have been weighed in the past.	In Sep 2015, three hand-held weigh scales (of two different makes) were presented to the Fisheries Officer. These will be trialed over the next few months to see which (if either) is best. Further weigh scales will then be provided if appropriate. Possible ways of recording catches have been discussed with the Fisheries Officer, who recommended current method (i.e. individuals reporting their own catches to the FO) as best.	Annex 2(2)	Obtaining catch weights is not essential for the success of this aspect of the project but it will add very useful data regarding the landing sizes of species. Persuading uptake of this method may prove tricky (particularly based on 'waste of time/effort' attitude by some fishers).
Indicator 2.2: Methodology established for the collection of data and information	Historically (from 1950s to 1990s), community fish catches used to be reported on a monthly ad hoc basis in the island's journal Miscellany. However, these records are too crude for effective comparisons to be made.	Daily catch logsheets are kept by the Fisheries Officer on days when fishing takes place. This relies on individual fishers reporting their catches (something which half are now doing voluntarily). Summary catch record sheets are emailed to Robert Irving on a quarterly basis, for analysis. An experimental online reporting system (devised specifically for the Pitcairn Islanders to encourage greater take-up of recording catches) has also been created and discussed with key individuals.	Annex 2(2)	Persuading the remaining 50% of fishers to report their catches (without it becoming a statutory requirement) may prove tricky. It is hoped that by sharing interpreted data from the first 12 months of records, others may be encouraged to participate. For the data to be presented and used with confidence, a greater take-up than 50% is required.
Indicator 2.3: Fishery activities are monitored	Prior to this project appointing a Fisheries Officer, no records were kept of when fishing 'forays' took place, by how many people and what quantity & species of fish were caught.	The FO now keeps a record, when she is aware, fishing takes place. However, some 'forays' may go unreported or unnoticed.		

Output 3:	All island fishers train fisheries monitoring a tocols. Household-lev plans	and management pro-		Comments (if necessary)
	Baseline	Change recorded by 2016	Source of evidence	
Indicator 3.1: 12 participants attending workshops and other training events	No previous activity	A public meeting was held on Pitcairn in September 2015 with the majority of active fishers being present. Results of the first year of fish catch data were presented, together with a summary of the work undertaken by the project at Henderson Island, by Robert Irving & Terence Dawson.	Records of at- tendance, photo- graphs of en- gagement (Avail- able on request)	
Indicator 3.2: Local fishers, in collabora- tion with Fisheries Department, enforc- ing community agreed sustainable fishing practices		The FO has continued to explain the proposed new fisheries legislation to islanders/local fishers.	Annex 2(2)	

Output 4:	Establishment of a le ies management plar nal organisations (fisl (permit issue or no-tation).	n as a basis for exter- hing) negotiations		Comments (if necessary)
	Baseline	Change recorded by 2016	Source of evidence	
Indicator 4.1: Status of legal, policy and institutional reforms and collaborative agreements for improved management of fisheries	No management of Pitcairn's inshore fisheries existed before the commencement of the project.	Discussions held with FO, Nat. Resources Dept., PIC & other islanders during visit of Terence Dawson and Robert Irving in September 2015. A recommendation to establish a fishers association: ""Pitcairn Islands Inshore Fishing and Conservation Association" been submitted to Michele Christian for PIC review and island fishers approval.	SUPP3 Draft CONSTITUTION- PIFA v2.docx	

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Indicator 4.2: Local codes, laws and regulations compatible with sustainable fisheries and marine resources conservation and extraction	No laws exist.	A recommendation to update Pitcairn Regulations has been submitted to Michele Christian for PIC approval.	SUPP3 FISHING REG PIT- CAIRN.docx	
Output 5:	Dissemination of information to stakeholders, scientific/conservation community and raising awareness within the general public and international media.			Comments (if necessary)
	Baseline	Change recorded by 2016	Source of evidence	
Indicator 5.1: Stake-holders outreach: slide show presentations, posters, displays, identification guides and other interpretive materials; website set up to provide up-to-date information. Key stakeholders informed at least every three months through email, newsletters and steering group meetings.	No project website	The Pitcairn Environment Group (PEG) members agreed to develop a collaborative website which is now complete and this became live in May 2016. All members (including Pitcairn Islanders) have had input and provided text, images and footage.  - On-island activities going – see separate updated tourism report - Presentations at the UKOTCF symposium in Gibraltar, July 2015.	Now live at: http://www.pitc airnenviron- ment.org.pn/ SUPP12 Touris- is- mOutreach2016.d ocx SUPP16 Sessi- si- on08Marine_03D awsontalk.pdf SUPP17 Sessi- si- on08Marine_12D awsonposter.pdf	
Indicator 5.2: Public outreach: website, social media, Marine Instant Wild.	No activity	Ongoing – see sep- arate updated tour- ism report	SUPP13 UK schools engage- ment stats.docx	
Indicator 5.3: Media outreach: articles, periodicals, journals	No activity	Ongoing - several publica- tions (see Annexe 3, Table 2)	SUPP14 Daw- son_PCB_2015.p df SUPP15 DemTull2016Jan FebMarch.pdf	

#### 3.3. Progress towards the project Outcome

Outcome:	This project will produce a fully- operational fisheries and marine man- agement plan that is ecosystem-based and sustainable, which will enhance tour- ism development, and which is crucial to providing a secure future for the econom- ic benefit of the Island community and protection of the unique marine biodiversi- ty of the Pitcairn Islands.			Comments (if necessary)
	Baseline	Change by 2016	Source of evidence	
Indicator 0.1: Monitoring protocols in place, a quayside weigh-station is established and a central database of marine monitoring data is maintained	None of these methodologies existed prior to the commencement of the project (September 2013).	Protocols to collect fish catch data are now in place. Individual fishers complete individual logsheets (one A4 side per record) and submit these to the FO by the end of each month.  The idea of a quay-side weigh-station was dropped at the end of 2014 in favour of portable hand-held weigh-scales. Three of these (of two makes) were left on the island in September 2015 in order to assess their usefulness.  Excel spreadsheets of all fish catches made since September 2014 are maintained by the FO and passed on to Robert Irving. Records are updated on a monthly basis.	Individual fish catch sheets available on request.  Summary report: SUPP2 Catch returns summary report_Sep14-Aug15.docx	There has been a delay over the past 6 months in updating the monthly fish catch records, due to the absence (offisland) of the FO (accompanying her partner off island for enforced medical reasons).

Indicator 0.2: Fisheries management plans in place for spiny and slipper lobsters, coral trout and other groupers	No fisheries management plans existed prior to commencement of the project.	Management plans (Species Information Sheets) have been prepared for spiny lobsters (2 species), slipper lobster, coral trout, red snapper and wahoo (the main species of conservation concern). Additional sheets have also been prepared for the island's most frequently caught species, nanwe.	SUPP5 Red Snap- per_species_BAP .docx SUPP6 Nan- we_species_BAP. docx SUPP7 Faafaia_species BAP.docx SUPP8 Wa- hoo_species_BA P.docx SUPP9 Spiny lobster Panulirus pascuen- sis_species_BAP. docx SUPP10 Spiny lobster Panulirus pascuen- sis_species_BAP. docx SUPP11 Spiny lobster Panulirus penicilla- tus_BAP.docx SUPP11 Slipper lobster Scyllarides haan- ii_species_BAP.d ocx	
Indicator 0.3: Marine management plan legally ratified that includes a globally significant MPA	No marine man- agement plan	Through the MRC, we are working closely with the Foreign and Commonwealth Office to support the implementation of the designation of the MPA (currently an 'intent to designate') which is planned for autumn 2016.	A parliamentary reception is scheduled for 25 May to update the stakeholder community on Government plans and Activites (Great British Oceans Blue Belt Reception, Palace of Westminster)	
Indicator 0.4: Tourism and outreach package in place on visiting cruise ships and at the Pitcairn heritage museum and through the Internet	No materials	Ongoing - See up- dated Tourism re- port 2016	SUPP12 Touris- is- mOutreach2016.d ocx	
Indicator 0.5: References to Pitcairn in Parliamentary questions, Google ranking for project websites	No activity	Ongoing – see above Indicator 0.3		

#### 3.4. Monitoring of assumptions

Outcome risks and assumptions remain valid. Regarding Assumption 1 (The population of Pitcairn is receptive and are willing to engage with the project), we have already highlighted the problem of the Alternative Harbour project diverting the time and attention of the island fishers (who have been employed to undertake the construction work). However, the Pitcairn community has been continuously receptive and willing to engage with the tourism and outreach elements of this project. There has been more concern from the community about the introduction of fisheries management measures around Pitcairn and reservations about the time it will take to document catches and whether they will result in restrictions. It has therefore taken additional time to achieve the documentation of the fisheries, further hampered by the health issues of the Fisheries Officer. Considering the trips by the project team can only be short (11-18 days), we felt it was better to spend additional time on community engagement to increase the likelihood of the sustainability of the project. The Tourism Department has been more straightforward, providing continuous support for the project with close collaboration throughout the project. Assumption 2 (Cruise ships continue to visit the Pitcairn Islands) still holds true. 16 cruise ships visited Pitcairn Island in 2014 and a total of 913 passengers were landed (from a combination of cruise ships; government charters; private charters; yachts and other vessels. Regarding Assumption 3 (The UK Government continues its support for biodiversity conservation in the UK Overseas Territories, leading to greater interest in the Islands), this also holds true, given the 18th March 2015 Budget announcement, and with continued support to progress the MPA in both the Conservative party and Labour party manifestos. We maintain active engagment with the FCO as part of the Blue Belt working group and current commitments are to move ahead with MPA designation by the Autumn of 2016.

### 3.5. Impact: achievement of positive impact on biodiversity and poverty alleviation

Currently, Pitcairn relies on budgetary aid from the UK government for over 90% of its income. Fishing is an important livelihood strategy for the Pitcairn Island community with most households having one or more fishers; 19 out of 20 households surveyed on the Island reported that they fish for consumption, bartering, or cash sales (Schuttenberg and Dawson, 2012; Pitcairn Economic Report, 2014). Hence, the health of the marine environment is vital to the Pitcairn Island community in terms of food security and economic activity and growth (fisheries and tourism), and biodiversity is an integral and important part of this.

The project is assisting the Pitcairn and the UK Governments in meeting their commitments under the Pitcairn Environment Charter, specifically Charter Objectives No. 2: "To document existing local resource use and ensure its sustainable use and explore other opportunities to utilise local resources sustainably", and No. 7: "Review baseline data on species and habitats; Highlight areas where there are data deficiencies; Establish a protected areas policy".

After consultation with Michele Christian, Terence Dawson and Michelle Crick (CSF) plan to undertake a quality of life and well-being survey on Pitcairn Island from Aug to Sep 2016, which will be used to establish a baseline to evaluate the future impact of any island development and economic activity relating to the current proposals for the MPA designation and tourism opportunities. A comprehensive socioeconomic report had been produced in 2014 and the difficulties in assessing the economic status of households were highlighted, further confirmed by the project team during informal discussions during visits to the island, so it was agreed a well-being approach was more locally appropriate (but including a household 'resources and needs' survey). The evolution of this work will be undertaken with advice from PIC, FCO and ZSL.

#### 4. Contribution to SDGs

Whilst the project was conceived before the establishment of the Sustainable Development Goals, we believe our project addresses a number of these. Specifically:

- Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development.

However, we also think our activities support two other goals:

Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all (8.4 - Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead); Goal 12: Ensure sustainable consumption and production patterns (12.2 - By 2030, achieve the sustainable management and efficient use of natural resources);

#### 5. Project support to the Conventions, Treaties or Agreements)

The overall aim of the project is to ensure long term protection for marine biodiversity in the Pitcairn Islands consistent with the Convention on Biological Diversity (CBD)\* within a context of potential commercial fisheries and local community extraction. With this in mind, a marine and fisheries management plan, underpinned by a scientific evidence base, will form the basis of a long-term adaptive management strategy. Whilst scientific analysis of the fish communities is still ongoing from the BRUV surveys conducted over the May to Aug 2015 period (publication in preparation), Heather Koldewey has engaged with Dr Yvonne Sadovy, Chair of the Grouper and Wrasse Specialist Group and Dr Nick Dulvy, Chair of the Shark Specialist Group, to establish a mechanism to use the data collected by the Darwin project to inform regional species assessments.

The project has also been engaging in activities relating to the Convention on the Conservation of Migratory Species of Wild Animals (CMS). During his visit to Pitcairn in May/June 2014, Robert Irving introduced all of the islanders to a method of recording sightings of Humpback whales made from the island. A small population of these whales visits the island each year between the months of June and October. Further data were collected on whale sightings at Henderson Island (courtesy of the islanders Pawl Warren and Sue O'Keefe, who were stationed on Henderson Island for 6 months from May 2015 until Dec 2015 as part of the RSPB invasive species programme). Data have now been gathered on start/end dates of visits; likely numbers present; composition of groups (adults/young); and observed behaviour. A peer-reviewed publication is being prepared on the results. This aspect of the project will assist obligations linked to the CMS.

\* The CBD does not yet extend to the Pitcairn Islands group.

#### 6. Project support to poverty alleviation

As stated earlier, Pitcairn currently relies on budgetary aid from the UK government for over 90% of its income. Fishing is an important livelihood strategy for the Pitcairn Island community with most households having one or more fishers. We are already developing and/or have initiated activities that will:

- 1. Provide social and ecological information through research that is directly and primarily relevant to the challenges of Pitcairn (specifically relating to fishing and tourism).
- 2. Build capacity in Pitcairn, through training of community members, the promotion of the Island's Museum and strengthening research infrastructure and capability (educational and laboratory material and equipment, outreach training, marine conservation).

#### 7. Project support to Gender equity issues

The University of Dundee, the lead partner of the project, applied for a Bronze Athena SWAN award in November 2013, which was awarded in April 2014. The Equality Challenge Unit (ECU) Athena SWAN Charter was established in 2005, originally to encourage and recognise commitment to advancing the careers of women in science, technology, engineering, maths and medicine (STEMM) employment in higher education and research. In May 2015 the charter was expanded to recognise work undertaken to address gender equality more broadly, and not just barriers to progression that affect women.

The Pitcairn community is very small (~50 people) so the project works with the entire community, including men, women and children. The Fisheries and Conservation Officer post was advertised openly to the whole community and initially filled by Brian Young and, following his resignation due to ill health, by Sue O'Keefe (Appointed April 2015). Charlene Warrren-Peu was appointed temporary Fisheries Officer from May to Nov 2015, in Sue's absence off the island.

#### 8. Monitoring and evaluation

There have been no changes to the monitoring and evaluation plan. All of our indicators were selected on the basis that they were SMART (specific, measurable, achievable, relevant and time-bound). Regarding catch information from fishers, we have only obtained a 50% compliance in providing data. However, some indicators have been quite difficult in obtaining (for example, household income from activities, such as the sale of fish, lobsters and curios and carvings to cruise ship passengers). A baseline 'quality of life' and well-being survey of each household is planned for Aug 2016 which will attempt to measure a proxy for income through an inventory of household items (electronics, kitchen aids, transport ownership, e.g. quad bike(s), fishing boat and gardening tools).

#### 9. Lessons learnt

The project has experienced a number of delays over the last couple of years, which have been primarily due to the small population-base in Pitcairn. This results in a fragile situation where individual illness or specific on-island activities can divert the attention of our island partners to those higher priority events. Terence Dawson attended a meeting with the Governor of Pitcairn, Jonathan Sinclair in Oct 2015, who asked that the NGO community be sensitive to the limited capacity of the small local community at this time, due to some of the issues listed below (specifically items 2 and 3). Last year, we reported that our Fisheries Officer (Brian Young) suffered some medical problems in 2014, which resulted in him being off-island on sick leave until September 2014. Upon returning to his post, he suffered further medical problems (and subsequent sick leave), which resulted in his decision to permanently move (with his wife) to New Zealand in Feb 2015. During his absence, we were able to appoint Sue O'Keefe as a temporary Fisheries Officer. However, from May 2015 until December 2015, Sue volunteered to work on Henderson Island as part of the RSPB invasive species programme. During this time, we recruited a temporary Fisheries Officer, Charlene Warren-Peu, who enabled us to continue to collect fish catch data although the uptake of fish record-keeping has only achieved a 50% level of all fishers. Other issues that have resulted in some delays to our original timetable are as follows:

- (1) Increased international visitors (including other NGO activities) and medical evacuations have resulted in fewer opportunities to visit Pitcairn over the last 12 months due to lack of berths on the transportation ship;
- (2) The alternative harbour project on Tedside has resulted in most of the men spending their time working on this development since April 2015, which has resulted in a lack of engagement on the fisheries management consultations and their useful inputs to the process. Since the start of the project, the island population has also declined by approximately 10%, which increases workload pressures on all existing residents. Fishing effort has been much lower than usual this year due to the labour demands of the Tedside and other island activities. Fish catch records have therefore been more sporadic than anticipated;
- (3) An International criminal trial took place on Pitcairn Island during the Feb/Mar 2016 transport schedule, and all berths were fully-booked. Given the historical connection of this trial with 'Operation Unique' that involved all the islanders, the trial dominated the Islanders focus over this period, so we decided to keep a very low profile in our interactions at that time due to local sensitivities.

In November 2015, we applied to the Darwin Secretariat for, and were awarded a 6-month nocost extension of the project, with a revised end-date from 30th September 2016 to 31st March 2017.

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

There were only minor issues raised in the review of the last report, which was primarily relating to the presentation of our activities and achievements of the outputs and outcomes of the project (improved quantitative data). These issues have been addressed through the revised format of the current Annual reporting requirements, where improved clarity of reporting will facilitate assessment of the project. Another point mentioned was greater exposure of the Darwin Initiative support (use of the logo, for example) on reports and outputs (web-sites). This has now been addressed. For example, a new Pitcairn website has recently been launched, compiling all information and news from across members of the Pitcairn Environment Group. This does recognise Darwin Initiative support for this project. The ZSL website has now been revised and features the support from the Darwin Initiative more clearly on the Pitcairn web page and this has also been included in the MRC website www.marinereservescoalition.org.

#### 11. Other comments on progress not covered elsewhere

Whilst we have experienced delays in the delivery of some outputs, there are no planned changes to our original proposal activities or outputs, and we anticipate that we can achieve all deliverables in due course. However, due to increased (and hopefully temporary) local demands on the islanders' time currently, a more flexible operational timetable was needed to cope with the greater pressure the islanders are experiencing at this time.

#### 12. Sustainability and legacy

With respect to the long-term sustainability of the project, much of the Darwin Initiative activity is working towards constitutional change to the Pitcairn laws (and behavioural changes of fishers) with respect to fisheries and marine management practices, and the enhancement of tourism facilities to increase awareness of the islands' natural environment and infrastructure (permanent sign-boards, museum displays, trail guides, etc).

Terence Dawson and SPC (Darwin project partner) assisted Michele Christian, Head of the Natural Resources Division, Government of Pitcairn Island with the crafting of, and submission of a 10th EDF regional programme initiative (INTEGRE: Pacific Territories Initiative for Regional Management of the Environment, a sustainable development project designed for and implemented by the four European Pacific overseas countries and territories) having a focus on environmental and integrated natural resource management, including co-funding support for tourism developments and fisheries management (see <a href="http://integre.spc.int/en/pitcairn/the-project-in-pitcairn">http://integre.spc.int/en/pitcairn/the-project-in-pitcairn</a>). Funding was awarded in 2014 with the project being led by SPC. Main activities commenced in 2015 starting with a tourism workshop (Feb 2015, reported in the last Annual report) and on-island soil erosion control activities being undertaken in July 2015.

#### 13. Darwin Identity

All project presentations, web sites and publications utilise the Darwin Initiative logo and highlight acknowledgements of the Darwin Initiative financial support. Given the earlier Darwin Challenge fund project in Pitcairn to Terry Dawson (No. EIDCF003) (2010-2012), the Darwin Initiative is well known by all members of the island community, and the wider Pitcairn stakeholder groups.

At present, the project information is hosted on a holding page <a href="http://www.zsl.org/regions/uk-and-overseas-territories/pitcairn-islands-marine-conservation">http://www.zsl.org/regions/uk-and-overseas-territories/pitcairn-islands-marine-conservation</a>.

Ana Pinto's blogs are also online and used as the basis of the outreach engagement with schools in the UK http://www.zsl.org/users/ana-pinto

The MRC and Darwin team helped establish a Great British Oceans website in 2015 which profiles Pitcairn (<a href="https://www.greatbritishoceans.org">www.greatbritishoceans.org</a>).

Heather Koldewey (@heatherkoldewey, 2,156 followers), Ana Pinto (@ana7pinto, 67 followers), @ZSLMarine (4,053 followers), MRC (@MRC\_Marine, 2,391 followers) regularly share information on Pitcairn, as well as periodically by @ZSLConservation and @OfficialZSL accounts.

Project information is shared through the ZSL Marine and Freshwater (2,248 followers), MRC (1,012 followers) and Protect Pitcairn (16,800 followers) pages.

The Darwin Initiative logo has been added to all reports, Species Information Sheets (Target Species Plans) and on articles written for publication in various newsletters.

#### 14. Project Expenditure

Table 1 Project expenditure <u>during the reporting period</u> (1 April 2015 – 31 March 2016)

Project spend (indicative) since last annual report	2015/16 Grant (£)	2015/16 Total Dar- win Costs (£)	Variance %	Comments (please explain significant vari- ances)
Staff costs (see below)				
Consultancy costs			+4.77%	
Overhead Costs				
Travel and subsistence			+3.31%	
Operating Costs				
Capital items (see below)				
Others (see below)			-15.05%	Didn't claim audit fee
TOTAL				

Highlight any agreed changes to the budget and **fully** explain any variation in expenditure where this is +/- 10% of the budget. Have these changes been discussed with and approved by Darwin?

Note consultancy costs are salary costs administered by our partner organisations.

Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2015-2016

Project summary	Measurable Indicators	Progress and Achievements April 2015 - March 2016	Actions required/planned for next period
Impact Currently, Pitcairn small-scale fisheries records are non-existent, making it difficult to capture the economic and social contributions of this activity, leading to their under-valuation and under-appreciation by the UK and Pitcairn Governments. A legally constituted marine and fisheries management plan establishes a basis for economic cooperation and development for the Pitcairn community through sustainable fisheries and tourism opportunities. Improved stewardship of Pitcairn's EEZ will contribute to global targets for marine protection set by the CBD, achieved through an effective management programme of marine biodiversity in the Pitcairn Islands that integrates a sustainable future for the local community.		(Report on any contribution to- wards positive impact on biodi- versity or positive changes in the conditions of human communi- ties associated with biodiversity e.g. steps towards sustainable use or equitable sharing of costs or benefits)	
Outcome The UK and Pitcairn Governments, supported by the Pitcairn Island Council, intend to develop a more sustainable livelihoods and economic growth strategy for the Islands. Tourism and fisheries currently represent the primary mainstays of the local economy, but to date this has not been fully realised. This project will produce a fully-operational fisheries and marine management plan that is ecosystem-based and sustainable, will enhance tourism development, and which is crucial to providing a secure future for the economic benefit of the Island community and protection of the unique marine biodiversity of the Pitcairn Islands.	(Insert agreed outcome level indicators)	(Report on progress towards achieving the project outcome, e.g., the sum of the outputs and assumptions )	(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) Fisheries research reports and appraisals. Developing a collection of GIS maps (atlas) of fisheries zones, marine habitats and ecosystems.	(Insert original output level indicators) Indicator 1.1: Fisheries and regional socio-economic reviews conducted and integrated into an assessment report. Indicator 1.2: Individual fisheries species assessed in a local context.	(Report general progress and appropriateness of indicator) Further diving survey work at Pitcairn was not possible during the visit of Terry Dawson & Robert Irving in September 2015.			
Activity 1.1: In depth review of scienti Pitcairn species of commercial value.		(Report completed or progress on activities that contribute toward achieving this output), and what will be carried out in the next period Completed. Undertaken prior to production of Target Species Plans.			
Activity 1.2: Conduct habitat surveys spatial distribution of commercially va		No seabed habitat surveys conducted at Pitcairn owing to poor weather preventing diving. However, two dives (seabed habitat surveys) and nine BRUV deployments (occurrence of fish species) undertaken at Henderson during two day visit. It is hoped further surveys will be undertaken during 2016/17, but these will be weather-dependent.			
Activity 1.3: Conduct biodiversity sunthat can be compared with other remgos, Papahānaumokuākea.	veys using standardised approaches ote island sites e.g. Galapagos, Cha-	No biodiversity surveys conducted at Pitcairn owing to poor weather preventing diving. However, two dives (incorporating biodiversity surveys) undertaken at Henderson during two day visit. It is hoped further surveys will be undertaken during 2016/17, but these will be weather-dependent.			
Activity 1.4: Establish a database with available to local Council and govern		Completed in 2014/15.			
Output 2. (Insert agreed output) Operational quay-side weighing station and catch logbook.  (Insert agreed output level indicators) Indicator 2.1: Commercial grade weigh scales installed at Bounty Bay Indicator 2.2: Methodology established for the collection of data and information		The island's Fisheries Officer (Sue O'Keefe) was off-island for 6 months (June – November 2015) on Henderson (undertaking RSPB work), followed by a further 3 months off-island on compassionate leave. Whilst high post was filled temporarily (by Charlene Warren-Peu) for the first 6 months			
Activity 2.1: Installation of a fish weig	h station facility at Bounty Bay.	After discussions with the Fisheries Officer, mobile hand-held weight-			

		scales considered more appropriate/useful. Three such devices left for trials on Pitcairn in Sept. 2015. Depending on appropriateness of these devices, more of the same (or alternatives) will be supplied in 2016/17.			
Activity 2.2: Elaborate a fish catch monitoring plan and protocol for Pitcairn fishers.		Implemented in 2014/15 and continued in 2015/16. Overseen by Fisheries Officer. Approximately 50% take-up of reporting by fishers. It is intended that take-up of reporting can be increased to 80% during 2016/17.			
Output 3. (Insert agreed output) All island fishers trained in, and utilising, fisheries monitoring and management protocols. House- hold-level economic action plans	(Insert agreed output level indicators) Indicator 3.1: Participants attending workshops and other training events Indicator 3.2: Local fishers, in collaboration with Fisheries Department, enforcing community agreed sustainable fishing practices				
Activity 3.1: Development of standardised methods.		Completed in 2014/15.			
Activity 3.2: Training workshops.		One training workshop involving local fishers carried out in September 2015. Results of first 12 months of recording presented. End of project workshop planned for 2016/17.			
Activity 3.3: Household-level (fishers)	economic development action plans.	Follow-up survey planned for 2016/17.			
Output 4. (Insert agreed output) Establishment of a legally- binding fisheries management plan as a basis for external or- ganisations (fishing) negotiations (permit issue or no-take zone de- limitation).	(Insert agreed output level indicators) Indicator 4.1: Status of legal, policy and institutional reforms and collaborative agreements for improved management of fisheries Indicator 4.2: Local codes, laws and regulations compatible with sustainable fisheries and marine resources conservation and extraction	(Report general progress and appropriateness of indicator)			
Activity 4.1: Consultation workshops for fisheries management plan		Planned for 2016/17, once Fisheries Management Plan agreed and implemented.			

Activity 4.2: Development of fisheries	management options	Discussions held with Fisheries Officer, Head of Natural Resources Dept. and the Island Council during visit to Pitcairn in September 2015. Included possible establishment of Pitcairn Islands Fishers Association. Decision on way forward to be made in 2016/17.			
Activity 4.3: Preparation of fisheries management plan		On-going. Target Species Plans drawn up during 2015/16 and sent to Head of Natural Resources for approval. For 2016/17, an MSC student will assist with the preparation of a full Fisheries Management Plan with input from Project co-ordinators and appropriate island personnel.			
Activity 4.4: Endorsement of fisheries	management plan	Will take place during 2016/17, once draft Plan has been submitted to the Island Council for approval.			
Output 5. (Insert agreed output) Dissemination of information to stakeholders, scientific/conservation community and raising awareness within the general public and international media.  (Insert agreed output level indicators) Indicator 5.1: Stakeholders outreach: slide show presentations, posters, displays, identification guides and other interpretive materials; website set up to provide upto-date informed at least every three months through email, newsletters and steering group meetings. Indicator 5.2: Public outreach: website, social media, Marine Instant Wild.  Indicator 5.3: Media outreach: articles, periodicals, journals					
Activity 5.1: Consultation workshops on outreach materials and plan		Liaison has continued between Tourism Dept. staff and ZSL staff. Other higher priority matters on island have meant the time given to this has had to be cut back.			
Activity 5.2: Outreach training for 2x Pitcairners		No progress on this in 2015/16 due to pressure on islanders to complete higher priority work. Indeed, it seems likely that off-island training will probably not take place in 2016/17, due to other on-island priorities.			
Activity 5.3: Interpretation and outread	ch plan for the museum	On-going, though this has been given less priority than leaflet & board production.			

Activity 5.4: Consultation and design of simple research facilities	On-going, though low priority this year due to staffing difficulties on island.
Activity 5.5: Installation of interpretive centre in museum	Not achieved during 2015/16 and full installation unlikely to be achieved in 2016/17 owing to other on-island pressures and consequent reappraisal of staff time.
Activity 5.6: Consultation with tourism companies and community on enhanced tourism package	On-going, though little progress during 2015/16.
Activity 5.7: Production of tourist outreach pack, including film	On-going, though little progress during 2015/16.
Activity 5.8: Website and social media established	Project information is currently hosted on a holding page <a href="http://www.zsl.org/regions/uk-and-overseas-territories/pitcairn-islands-marine-conservation">http://www.zsl.org/regions/uk-and-overseas-territories/pitcairn-islands-marine-conservation</a> .  A Pitcairn Environment Group website has been under construction during 2015/16 (to which our Darwin Initiative project has contributed text and photos), with a launch planned for May 2016. In addition, the Pitcairn MPA is featured on the Marine Reserves Coalition website ( <a href="https://www.marine-reservescoalition.org">www.marine-reservescoalition.org</a> ) and the Great British Oceans website ( <a href="https://www.marine-reservescoalition.org">www.marine-reservescoalition.org</a> ).  Ana Pinto's blogs are also online and used as the basis of the outreach engagement with schools in the UK <a href="https://www.zsl.org/users/ana-pinto">https://www.zsl.org/users/ana-pinto</a> Heather Koldewey (@heatherkoldewey, 2,156 followers), Ana Pinto (@ana7pinto, 67 followers), @ZSLMarine (4,053 followers), MRC (@MRC_Marine, 2,391 followers) regularly share information on Pitcairn, as well as periodically by @ZSLConservation and @OfficialZSL accounts. Project information is shared through the ZSL Marine and Freshwater (2,248 followers), MRC (1,012 followers) and Protect Pitcairn (16,800 followers) pages.
Activity 5.9: Pitcairn Instant Wild cameras installed and tested	No cameras installed as yet. The intention had been to install some remote cameras on Henderson, but arranging access to the island has proved harder than we thought. Still a possibility for 2016/17, if visits can be arranged.
Activity 5.10: Pitcairn cameras live on Instant Wild iphone app	Requires cameras to be in place first (see comment above).

Activity 5.11: Webinars with other relevant groups, including Pacific Island nations and Chagossians	None undertaken as yet. A possibility for 2016/17, though will have to assess current appropriateness.
Activity 5.12: Pitcairn conference in UK	Still intended for 2016/17.
Activity 5.13: Parliamentary questions tabled relating to Pitcairn	No questions asked during 2015/16.

# Annex 2 Project's full current logframe as presented in the application form (unless changes have been agreed) LOGICAL FRAMEWORK: A sustainable marine and fisheries management plan for the Pitcairn islands (Round 19 Application Ref No: 2162)

Notes of progress coloured in red to link to the 2015-16 Year 3 Annual reporting narratives, where applicable.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
Imp n a at			

#### Impact

Improved stewardship of Pitcairn's EEZ will contribute to the Millennium Development Goals (MDGs) and global targets for marine protection set by the Convention on Biological Diversity (CBD), the Convention on Trade in Endangered Species (CITES), and the Convention on the Conservation of Migratory Species (CMS), as well as related biodiversity targets, achieved through an effective management programme of marine biodiversity in the Pitcairn Islands that integrates a sustainable future and economic opportunities for the local community.

#### Outcome

Establishment of a fullyoperational fisheries and
marine management plan
that is ecosystem-based
and sustainable, to enhance
experience and income from
tourism development, and
which is crucial to providing
a secure future for the economic benefit of the Island
community and protection of
the unique marine biodiversity of the Pitcairn Islands.

- International fisheries advisory committee established by 2014
- Fisheries Management Plan operational by 2016.

On-going. MSc studentship from May-August 2016 should allow this to be completed.

- Establish baselines and achieve increasing trends in presence and abundance of priority species of fish and invertebrates at selected sites (MDG 7.4. Proportion of commercial fish stocks within safe biological limits) over the lifetime of the project. Baselines to be determined in 2013/14.

On-going. Baselines already established, primarily by means of the BRUV study in 2014/15.

- Reports of meetings of the Fisheries Advisory Committee.
- Pitcairn Island marine management plan published.

On-going. A draft Plan will be submitted to relevant parties at the end of 2016/start of 2017.

- Legally constituted fisheries regulations.

Still waiting to finalise updated fisheries regulations with Pitcairn Government legal representative, though contact regarding this is being maintained.

- Marine biodiversity survey reports (e.g. feeding station assessments, shark records, transect surveys and fish counts), manual of methods, marine biodiversity database.

No diving at Pitcairn during 2015 visits

- The population of Pitcairn is receptive and are willing to engage with the project.
- Cruise ships continue to visit the Pitcairn Islands.
- The UK Government continues its support for biodiversity conservation in the UK Overseas Territories, leading to greater interest in the Islands.

Trends being indicated by continuing collection of monthly fish catch records.

- At least 30% of the Pitcairn EEZ fully protected (Marine Reserves Coalition and CPAWS guidelines. Baseline is 0%) (MDG 7.6. Proportion of marine areas protected)
- Establish baselines and achieve Increasing trends in populations of at least 5 flagship IUCN red list species within Pitcairn EEZ (MDG 7.7 Proportion of species threatened with extinction).
- Establish baseline and achieve 15% increase in income in 80% of households from new markets, trade and sale of fish and/or sustainable nature-based tourism products to island visitors, cruise ships, passing traffic and to French Polynesia by 2016 (baseline US\$760 mean income per annum over 20 households) (MDG 8.9 Building trade capacity).

Household survey planned for 2016/17.

- 50% Tourists visiting Pitcairn have a higher awareness of and

to undertake habitat & invertebrate surveys due to poor weather. However, some BRUV fish data obtained from Henderson during 2-day visit by Terry Dawson & Robert Irving, together with two survey dives at Henderson.

- Conservation status reports of flagship IUCN Red List and endemic species in Pitcairn submitted to IUCN and relevant specialist groups.
- Biodiversity Action Plans.

Target Species Plans (including all 5 red list species) have been prepared and submitted to the Natural Resources Dept. for comment.

- Household social-economic surveys, livelihood diagnostics.

Household survey planned for 2016/17.

- Marine environment interpretive centre, research facilities, tourism outreach pack, Pitcairn Marine Instant Wild facility.

Interpretive Centre now seems unlikely during life of project, due to other more immediate pressures on islanders. Research facilities inspected during visit by Terry Dawson & Robert Irving in September 2015 (including Dive Equipment Store). Update on tourism outreach included.

- Meeting minutes, Parliamentary

engagement with marine biodiversity (prior/post project Initiation).

- Pitcairn tourism is sustainable.

See Tourism report - On-going research in collaboration with Heather Menzies (Pitcairn Island Tourism coordinator)

questions; symposium proceedings; journal publications; website hits; Twitter followers; Facebook likes.

No meetings of the Pitcairn Environment Group (PEG) were held during 2015/16. PEG website due to be completed in May 2016, to which this project has contributed photos and text. Two Skype meetings and one face-to-face meeting were held during the year between the project's three lead parties. Three scientific papers are in prep. but not yet published. Proceedings of the UKOTCF symposium (held in Gibraltar in July 2015, at which Terry Dawson presented on our project) were published in November 2015.

- Economic reports (e.g. Annual DFID Business Case and Intervention Summary reports).
- Data on markets, trade and sale of fish to cruise ships and passing traffic and to French Polynesia (Island Store Accounts).
- Tourist arrival and departure questionnaires and follow up surveys.
- Community perception surveys. -'Best Practice' Environmental and Sustainability' policies established and monitored (tourism provider feedback; Updates/ enhancement of the Pitcairn Environment Charter).

		Not yet started – planned for the 2015/16 period.			
		- Monthly catch monitoring reports /audits.			
		Monthly fish catch reports were collated by the Fisheries Officer during the year. These were emailed back to Robert Irving at quarterly intervals. A summary report of the first 12 months of data (to end of August 2015) was presented to the island community in September 2015 by Robert Irving.			
		- Tourist arrival/departure surveys, Social media and website surveys. Onboard ship surveys.			
		Ongoing - See Tourism report.			
Outputs	<ul> <li>Assessment report incorporating fisheries and socioeconomic reviews.</li> <li>Minimum 5 individual fisheries species assessed using an ecosystems-based approach in a local context.</li> <li>Target Species Plans: assessments of 4 species of eating fish (nanwe, fafaaia, coral trout &amp; red snapper) and 3 species of lobster (slipper/rock lobster &amp; 2 species of spiny lobster) have</li> </ul>	- Project monitoring and evaluation reports	- Fisheries data for local species is accessible and		
1. Fisheries research reports and appraisals. Devel-		Ongoing.	the Pitcairn community will		
oping a collection of GIS maps (atlas) of fisheries zones, marine habitats and		<ul> <li>Scientific reports and journal and book publications</li> </ul>	be supportive in providing non-published but valuable information e.g. from fish-		
ecosystems.		Three scientific papers in prep. (two	ers and divers.		
		resulting from the BRUV studies; one on humpback whales). Contributions on Pitcairn made by Robert Irving to the book "Britain's Treasure Islands" by Stewart McPherson, due to be published in June 2016.			
	been undertaken. Catch data of these species have been incor-	- Habitat data records			
	porated into the Target Species	Two dives undertaken at Henderson in August 2015, when habitat descrip-			

	Plans.	tions were made	
	Plans.	tions were made.	
	- 80% fishing grounds mapped	- GIS maps and datasets	
	for Pitcairn Island and 40 mile reef.	- Marine survey reports	
Operational quay-side weighing station and catch logbook.	- Commercial grade weigh scales installed and used at Bounty Bay by 2014.	- Fisheries Officer position established by the Natural Resources Division of the Pitcairn Government.	Fishers agree to record their fishing activities and catch.
	Hand-held mobile weigh-scales of two makes presented to Fisheries Officer in September 2015, to see which would work best. If acceptable, further scales can be provided.  - Methodology adopted for the collection of data and information by 2014.  - 80% fishers individually reporting to the Fisheries Officer: Catch records (priority species numbers and weights) and fishing effort.  Take-up so far has been 50% (6 out of possible 12 fishers). Pressure needs to be maintained by Fisheries Officer to persuade others to join in. However, difficulty encouraging this due to frequent changes in personnel.	New Fishery Officer (Sue O'Keefe) appointed in April 2015, following resignation of Brian Young in March 2015 on grounds of ill health. Sue was in post for 2 months before being 'seconded' to work with the RSPB on Henderson for 6 months. Job readvertised for temporary Fisheries Officer in her absence. Post filled by Charlene Warren-Peu in July 2015. Sue returned to post in December 2015, but within a month was off the island again, accompanying her partner who required medical treatment off-island in Tahiti. She was still off island at the end of March 2016.  - Individual fish landing record sheets. These continued to be collated by the Fisheries Officer up until November 2015. We have just been informed by the island (05May15) that no fish catch records have been collected during the Fisheries Officer's absence from the island, due to nobody applying for her vacant position.	

		- monitoring data and reports arising from central database of fisheries (Natural Resources Division).  Catch data over first 12 months of recording have been analysed with an interpretive report being presented to the island community in September 2015 by Robert Irving; and an article being written for the island's publication Pitcairn Miscellany.  - Monthly catch summary publications on the status of fisheries utilisation.  See comment above.	
3. All island fishers trained in, and utilising, fisheries monitoring and management protocols.  (leading to improved capacity of island communities and partners to participate in planning and management for fisheries livelihoods)  - Economic and social benefits for the islanders is enhanced	- At least 2 on-island training workshops on management and legislation of natural resource management attended by 90% of island fishers.  Training workshop held in September 2015 during visit by Robert Irving & Terry Dawson.  - Community Fishers organisation established (legally recognised by Pitcairn Government) (adhering to UN FPIC [Free prior and informed consent] principles and 5 <sup>th</sup> COP to the CBD Decision V/16 and Article 8J).  Proposals discussed with Head of Natural Resources Dept. on island in September 2015. Modified proposals then presented	<ul> <li>Training workshop attendance</li> <li>Approx. 2/3 of fishers attended workshop held in September 2015.</li> <li>Minutes of meetings and consultations with community, stakeholders and local government and regional fisheries management agencies (SPC).</li> <li>No visits to Pitcairn by SPC Fisheries personnel took place during 2015/16.</li> <li>Evaluation questionnaires.</li> <li>Social-economic surveys.</li> <li>Tourism Officer (Pitcairn Government) reports.</li> <li>On-going – email communications have continued between Ana Pinto (ZSL outreach staff) and Melva Warren-Evans (Pitcairn Tourism Officer)</li> </ul>	<ul> <li>Local community interest in participating in long-term monitoring program.</li> <li>Pitcairn Government is willing to share decision-making responsibility for marine management</li> <li>Fishing households cooperate in providing information on income</li> </ul>

	to Island Council two days later.	throughout reporting period.	
	Some concern by Councillors as to whether such an organisation was necessary, or whether straightforward legislation (en-	<ul> <li>Memorandum and Articles of Association Pitcairn Island Fishers' Association (PIFA).</li> </ul>	
	acted by the Council) would suffice.	Proposals presented in September 2015 to Island Council by Terry Daw-	
	- Fisheries adaptation and management protocols in place.	son, but their appropriateness was questioned. The establishment of such an Association may not be the best	
	- 10-20% increase of (active	way to proceed and is being reviewed.	
	fishers) household income from boat-based fishing and tourism.	- Membership records, PIFA	
	Ongoing analysis. The prospect	See note above.	
	of export of fish catch to Mangareva now seems unlikely during the time-span of this project, due to a number of problems, the prime one being lack of people/time to make the venture sustainable and profitable. However, tourist fishing trips still a possibility.	<ul> <li>Minutes of the PIFA consultation meetings (with Government repre- sentative).</li> </ul>	
		See note above. Mention is made of the project's proposals in the Island Council minutes.	
		- Household-level economic action plans.	
4. Establishment of a legal-	Management plan submitted to	- Management plan.	- Management plan is ac-
ly-binding fisheries management plan as a basis for	the Pitcairn and UK Governments in 2016.	On-going. Face-to-face discussions held with Head of Natural Resources	cepted by the Pitcairn Island Council and the Pit-
external organisations (fishing) negotiations (permit issue or no-take zone delimitation).	- Collaborative agreements implemented for fisheries man-	Dept., Pitcairn to agree format and content of Plan, in September 2015.	cairn and UK Govern- ments.
	agement.	Target Species Plans drawn up for pri-	
	- Introduction of maps, local codes (bylaws), laws and regulations compatible with sustain-	ority species (Fafaaia/coral trout, red snapper & wahoo; spiny & slipper lobsters).	
	able fisheries and marine re-	Work will continue on the preparation	

	sources conservation.  - At least 5 fisheries management plans adopted for priority species (e.g. spiny and slipper lobsters, coral trout, red snapper & wahoo.	of the Management Plan during 2016, with a draft being submitted to the Island Council and other significant parties for approval in late 2016/early 2017.  Government records recording submission / adoption.	
		On-going consultation with Pitcairn Council regarding PIFA (as recorded in Council minutes).	
		<ul> <li>Record of meetings with community, stakeholders and local government and regional fisheries management agencies (SPC).</li> </ul>	
		As stated above, meetings were held with the community (public presentation/question & answer session); individual stakeholders; the Fisheries Officer and the Head of the Natural Resources Dept.; the Island Administrator (Alan Richmond); and the Island Council. The majority of these meetings have been on an informal basis.	
5. Dissemination of information to stakeholders, scientific/conservation community and raising awareness within the general public and	Scope, frequency and dissemination of information, education and communication (IEC) reports as well as evaluation and monitoring reports:	- No of hits on project web-site  The PEG website (to which this Darwin Project has contributed text and photos) is due to be launched in May 2016.	- All stakeholders have access to email and web-site for registration (can provide a postal contact for correspondence).
international media.	<ul> <li>Stakeholders outreach: # of public presentations, posters, displays, identification guides and other interpretive materials;</li> </ul>	<ul> <li>Minutes of stakeholder meetings- #     articles in international press and     popular magazines.</li> <li>No PEG meetings have taken place</li> </ul>	- There is interest from the international media.

website set up to provide up-todate information. Key stakeholders informed at least every 3 months through email, newsletters and steering group meetings.

- Public outreach: website (# of hits), social media (# of followers), Marine Instant Wild.
- Media outreach: # of articles, periodicals, journals
- Perceptions surveys within key International stakeholder groups at beginning and close of project with 50% of international stakeholder research group have increased knowledge and perception of Pitcairn:
  - a) Pitcairn tourists
  - b) Science community
  - c) Conservation community
  - d) General public (UK)
  - e) School children (UK)
  - f) International media

Due to take place during 2016/17 - see also Tourism report.

- Increase in resolve for marine management, specifically:
- 50% Island households ac-

during the reporting period. Pitcairn Island Council minutes publicly available on-line.

Popular articles published.

- Scientific papers published
- 3 papers in preparation (two on aspects of the BRUV fisheries studies; one on the Pitcairn Islands as a new humpback whale breeding location).
- Presentations at conferences

Oral presentation by Terry Dawson at the UKOTCF Conference in Gibraltar in July 2015, on behalf of the Pitcairn Island Council.

Project poster prepared and displayed at the UKOTCF Conference in Gibraltar.

Henry Duffy (project MSc student in 2014) has continued to give talks on the project to the general public in London as part of the Natural History Museum's regular Open Forum sessions.

- Museum exhibits in place and evaluated.
- References to Pitcairn in Parliamentary questions and correspondence.
- Robert Irving attended the update on the Government's Blue Belt initiative in the UKOTs hosted by the Conservative Environment Group (featuring several

tively engaged in activities that support marine environmental issues

20% Increased level of scientific research in Pitcairn.

See comment above.

MPs) in September 2015 at the Palace of Westminster.

Fiona Llewellyn (ZSL) has continued to promote Pitcairn and its MPA through her work at the Great British Oceans campaign.

- Google ranking for project websites
- local community attendance and active participation at public meetings.

Approx. 25 islanders attended public meeting held in Hall in Adamstown in September 2015, with presentations from Terry Dawson & Robert Irving. These presentations were followed by a question-&-answer session about the project's work.

- Number of participants in talks, workshops and conferences about Pitcairn. # of hits on website, subscribers to enewsletter, likes on Facebook, followers on Twitter.
- # public comments in response to online reports/articles
- # grant applications, scoping visits and research projects implemented (with local collaborations), # scientists visiting/engaged with research in Pitcairn (databases, reports, scientific papers).

#### **Annex 3 Standard Measures**

**Table 1 Project Standard Output Measures** 

Code No.	Description	Gender of people (if relevant)	Nationality of people (if rele- vant)	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the pro- ject	
Estab- lished codes									
2	Number of people to attain Masters degree – Henry Duffy MSc (2014), Kirsty Grey MSc (2016), Jame Ni- kitine MSc (2016)	2 x M 1 x F	UK UK		1	2	3		 Comment [HJK1]: Not attained yet!
5	Marine/Fisheries Officer (Pitcairner)	F	Pitcairn	1	1	1	3		 Comment [HJK2]: Brian, Sue, Charlene – no?
6A	Sustainable fisheries management training			20					
6A	Tourism training (SPC workshop, Feb 2015)	2 x F	Pitcairn		2				
6B	Sustainable fisheries management training			0.1					
8	Pitcairn visit by UK researchers			4	22	4			 Comment [HJK3]: ?
9	Biodiversity Management / Action plans: Spiny lobsters (2), Slipper lobster, Faafaia, Nanwe, Wahoo (Kuta), Red Snapper.				2	5			
11A	Papers published in peer-reviewed journals					1			
11B	Papers submitted to peer-reviewed journals				1	1			

			1		1	1	1
12A	Pitcairn fish catch database				1		
12B	Revised Pitcairn fish database, updated Hender- son Island spe- cies list			1	1		
14B	IMPAC3 Congress (2013); SECC Glasgow (x2) (2014); MASTS, Edinburgh (2014); Sustainable Fisheries, Seattle; RCUK2014, London (2014); Bioinvasions, Galapagos (2015); UKOTCF Conference 2015		1	5	1		
15A	Dem Tull (Pitcairn News) Vol 7, No 12.		1				
15A	Dem Tull, Vol 8, No 6, June 2014 Pitcairn Islands Tourism Quarter- ly, Vol III, Issue 2, Oct 2014			2			
15A	Dem Tull, Vol 10, No. 1, Mar 2014				1		
15C	Press Releases: Marine Reserves Coalition; ZSL.			2			
17A	Pitcairn Environ- ment Group Es- tablished		1				
20	Diving and survey equipment		£262	£2,900	£2,500		
21	Research Facility (laboratory work space, desk space, freezers, equipment stor- age) in the new Division of Natural Resources build- ing			1			

23	Pitcairn Islanders visit to the UK - 2 funded by Pew Trust (2013, 2014), 1 funded by MASTS schol- arship, 2015		£16,00 0	£16,00 0	£10,00 0	
23	SPC Tourism Workshop, Tahiti, Feb 2015 (funded by SPC/ EU IN- TEGRE pro- gramme)			£5,000		
New - Project specific measur es						

#### Table 2 Publications

Title	Type (e.g. journals, manual, CDs)	Detail (authors, year)	Gen- der of Lead Au- thor	Na- tion ali- ty of Lea d Au- thor	Publishers (name, city)	Available from  (e.g.weblink or publisher if not available online)
* The UK Government agrees to cre- ate the world's largest marine reserve around the Pitcairn Is- lands, a UK Overseas Ter- ritory in the South Pacific	Journal	Dawson, T.P., 2015	Male	UK	Pacific Conservation Biology 21 (2), pages 108-109.	http://dx.doi.org/10.1 071/PC14916)
* The Pitcairn Islands – The case for pro- tecting their marine envi- ronment	Journal	Irving, R.A., Dawson, T.P. and Koldewey, H., 2015	Male	UK	Pacific Conservation Biology 21 (2), pages 110-112.	http://dx.doi.org/10.1 071/PC14916)

* Pitcairn Is- lands: Inte- grating Re- search, Con- servation Mon- itoring, Man- agement and Sustainable Development	Conference ence Proceed- ings	Dawson, T.P., Chris- tian, J. and Christian, M., 2015	Male	UK	Sustaining Partnerships: a conference on conservation and sustainability in UK Overseas Territories, Crown Dependencies and other small island communities, (ed. by M. Pienkowski & C. Wensink), pages 189-192.	UKOTCF: http://www.ukotcf.org/confs/gibral-tar2015.htm#proc
* A sustaina- ble marine and fisheries man- agement plan for the Pitcairn Islands	Conference ence Proceedings	Dawson, T.P., Irving, R. and Kol- dewey, H. 2015	Male	UK	Sustaining Partnerships: a conference on conser- vation and sustainability in UK Overseas Territo- ries, Crown Dependen- cies and other small island communities, (ed. by M. Pienkowski & C. Wensink), pages 232- 233.	UKOTCF: http://ww w.ukotcf.org/confs/gi bral- tar2015.htm#proc
* The hump- backs are here!	News- letter	Irving, R., 2016	Male	UK	Dem Tull, Vol 10, No. 1, March 2014, pages 4-5.	http://www.demtullpi tcairn.com/
Darwin project starts to reveal some fishy business	Newslet- ter	Irving, R., 2016	Male	UK	Miscellany, in press.	

## Annex 4 Onwards – supplementary material (optional but encouraged as evidence of project achievement)

#### **Checklist for submission**

	Check
<b>Is the report less than 10MB?</b> If so, please email to <a href="mailto:Darwin-Projects@Itsi.co.uk">Darwin-Projects@Itsi.co.uk</a> putting the project number in the Subject line.	✓
Is your report more than 10MB? If so, please discuss with <a href="Darwin-Projects@Itsi.co.uk">Darwin-Projects@Itsi.co.uk</a> about the best way to deliver the report, putting the project number in the Subject line.	
<b>Have you included means of verification?</b> You need not submit every project document, but the main outputs and a selection of the others would strengthen the report.	<b>√</b>
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.	
Have you involved your partners in preparation of the report and named the main contributors	<u>??</u>
Have you completed the Project Expenditure table fully?	
Do not include claim forms or other communications with this report.	