Darwin Initiative 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 about 10 pages in length, excluding annexes

Submission Deadline: 30 April 2013

1. Darwin Project Information

Project Reference	19026
Project Title	Implementing a Darwin Initiative Biodiversity Action Plan for Ascension Island
Host Country/ies	Ascension Island (UK Overseas Territory)
UK contract holder institution	University of Exeter
Host country partner institutions	Ascension Island Government Conservation Department (**AIGCD)**
Other partner institutions	Centre for Ecology and Hydrology (**CEH**) Queen Mary University of London (**QMU**) Royal Botanical Gardens, (**RBG Kew**) Royal Society for the Protection of Birds (**RSPB**) University of Lund (**UoL**)
Darwin Grant Value	£299,480
Start/end dates of project	01/07/2012 – 31/12/2014
Reporting period	01/07/2012 – 30/04/2013 Annual Report 1
Project Leader name	Dr. Annette C. Broderick & Prof. Brendan J. Godley
Project website	www.ascension-island.gov.ac/government/conservation/projects/biodiversity-action-plan/ www.facebook.com/AscensionIslandConservation https://twitter.com/AIGConservation
Report authors, main contributors and date	Dr Nicola Weber & Dr Sam Weber, Dr Annette C. Broderick & Prof. Brendan J. Godley (April 2013)

2. Project Background

The Problem: The UK Overseas Territory of Ascension Island is an isolated volcanic peak in the South Atlantic Ocean. The island is small (just 34 sq. miles), yet supports exceptional biodiversity, including at least 55 endemic species of plants, fish and invertebrates, as well as globally important seabird and marine turtle populations. However, as with many oceanic islands, Ascension has a significant invasive species problem.

Priority: The primary aim of this new Darwin project, which commenced in July 2012, is to design and implement a **national Biodiversity Action Plan** (BAP) for Ascension Island that will integrate information on the spatial distribution of biodiversity and threats and set out clear mitigation measures and targets for sustained progress in the long term. The BAP will comprise of multiple Species Action Plans (SAPs) with defined targets to promote the recovery of populations of endemic and threatened species including actions to increase their protection through legislative changes and the protection of key habitats. Action plans will also be produced and implemented for key invasive species and major habitat types.

Ascension Island currently has a small government-run Conservation Department with just three core government-funded staff. This project aims to increase local capacity to carry out research to further inform the development and implementation of the BAP. In addition to research and restoration work, campaigns will be initiated to increase awareness among key stakeholders and the general public as to the importance of the biodiversity of Ascension Island.

3. Project Partnerships

Project Partnerships: Two Darwin post-doctoral research fellows (Dr Nicola Weber and Dr Sam Weber) have been appointed to oversee the project on-island with the support of the local conservation team and lead partners in the UK at the University of Exeter (Dr Annette Broderick and Professor Brendan Godley). Also, many other organisations and individuals are involved with taking this project forward and making it a success, and will consult on specific SAPs and carry out training workshops when visiting Ascension Island. They include, the Centre for Ecology and Hydrology (invertebrates, plants and invasive species), Queen Mary University London (lower plants), Royal Botanic Gardens Kew (higher plants and *ex situ* plant conservation techniques), Royal Society for the Protection of Birds (tracking movements and monitoring of bird populations) and the University of Lund (frigatebird tracking). The project also seeks to facilitate knowledge and skills exchanges with Governments and NGOs in the other South Atlantic UK Overseas Territories – St Helena, Tristan da Cunha and Falkland Islands. Developing and implementing the first national Biodiversity Action Plan for Ascension Island is building the Government's capacity to meet their CBD commitments.

Formal meetings with partners are held during periods of in-country fieldwork when project staff are present, and during the rest of the year are carried out via email and/or phone/Skype conference calls. At the end of the first year, the partnerships are demonstrably strong, with significant progress having been made across the board.

Additional Collaboration: Within the first year, a number of new links have been established. Firstly, Dr Richard Hartnoll a Professor Emeritus at the University of Liverpool is providing scientific support and training for the elements of the project relating to the near-endemic land crab *Johngarthia lagostoma*. As we began to compile the SAP for this species, it became clear that the lack of basic biological data currently limits the effective conservation of the land crab on Ascension Island. Additional funding from Flora and Fauna's Flagship Species Fund (£9,662) has been successfully

obtained to help support this area of work. Secondly, the Army Ornithological Society in collaboration with Dr Jim Reynolds at the University of Birmingham have joined the project, primarily to advise on the SAP for the sooty tern, but also bird monitoring and invasives control more generally. With financial support from this project, members of this new collaboration have deployed a number of tracking devices on the sooty terns and the data from this work and previous tracking and monitoring will feed into Output **2.4**. Finally, we have also established close ties with other on-going funded projects, the results of which will feed directly into the BAP. These include the Darwin Initiative Challenge funded project 'Assessing Ascension Island's Shallow Marine Biodiversity' led by the Shallow Marine Survey Group based in the Falklands Islands. Data from this project will allow us to create a more comprehensive habitat action plan for the inshore marine environment and to look at SAPs for the endemic fish species. We also have close ties with the OTEP-funded Protected Areas project in the Falklands and are hosting the workshop (Monitoring Protected Areas in the South Atlantic OTs) for this project in June 2013 that will also be attended by partners of our project from Kew Gardens and the RSPB. Outcomes of this workshop will feed directly into Output **2.6** related to legislative change.

4. Project Progress

4.1 Progress in carrying out project activities

Output 1: AICD organisations able to undertake long-term monitoring and management of the biodiversity of Ascension Island.

1.1 Appointment of Darwin Research Fellow

Dr Nicola Weber and Dr Sam Weber have been appointed as the Darwin Research Fellows (DRF), sharing the salary and responsibilities of the post so that the ambitious targets of the project can be met. Both are working as full-time members of staff in the AIGCD and this increased capacity will allow more novel research to be carried out with partner organisations in addition to identifying areas where research would be needed in the future. With permission from the DI, the project start date was revised to be 1st July 2012 rather than April 2012 due to delays with the recruitment process.

1.2 Appointment of Darwin Trainees

In January 2013, Cameron Stewart, a resident of Ascension Island with household status (i.e. accommodation costs are covered by a parent or spouse) joined the team on a Darwin Traineeship (stipend £250/ month for 6 months) to experience practical conservation work for 6 months while he is on his gap year before going to University. He was a strong candidate on paper and has proven to be an asset to the department, but was also the only person that applied for the position. We have interest from another very promising Island resident (originally from St Helena) for the next traineeship that is anticipated to begin in July 2013 but as he has single person status, approximately double the current amount of money will be required to cover his allowances. This would be matched by AIG who would also need to provide single person accommodation for him. As such highly motivated and high calibre candidates for this position are few, it is felt that this candidate should be invested in and thus, if possible, we will explore with DI and AIG if necessary changes can be made to the budget.

1.3 Training Workshop 1 - Developing *ex-situ* conservation plant collections

(See Supplementary Material for photographs)

Marcella Corcoran, a conservation horticulturist from the Royal Botanical Gardens (RBG) Kew, visited Ascension for 3 weeks (24/01/13 – 15/02/13) to work with the AIGCD. Marcella is the UK Overseas Territories (OTs) Programme Officer at Kew and in addition to advising on the day-to-day horticulture work that the Conservation Department undertakes, Marcella ran a 5-day workshop for the team on 'Developing *ex-situ* conservation plant collections'. The primary aim of this workshop was to initiate the development of an integrated conservation strategy to develop a genetically diverse *ex-situ* plant collection for Ascension (see also **2.2**). The course was run at the Red Lion in Green Mountain National Park and focused on the conservation role of nurseries for growing Ascension's endemic and native plant species and then returning them to the wild. The workshop was also attended by regional partners from the South Atlantic UKOTs; Vanessa Thomas from St Helena ANRD and Cynthia Williams from Stanley Growers in the Falklands. Vanessa is the Nurseries Officer on St Helena where her team have a successful programme for growing endemic and native plants and returning them to the wild, and Cynthia is also part of a successful team on the Falklands that grows endemic plants and encourages residents to plant them in their gardens. As well as participating in the workshop, Vanessa and Cynthia were able to give us valuable advice about their experiences with nursery work in the UK OTs and hopefully we will continue to work closely with them in the future. The whole of the AIGCD team of 11 staff attended the workshop and it was evident that they benefited from the many activities that were organised, from the lectures to the practical sessions on how to carry out germination trials, care for plants in the nursery, and to make our own compost. As a team building exercise during the workshop, participants created a display garden at the Red Lion for visitors to see some of Ascension's most important plants. In the time since her visit a number of improvements have already been made to the nurseries, in particular a new cataloguing and labelling system and Marcella is currently compiling a list of action points, primarily on nursery management that will go directly into the Species Action Plans for the endemic plants so that progress continues to be made.

1.4 Training Workshop 2 - Land crab monitoring techniques

Between 21/02/13 – 12/03/2013 Dr Richard Hartnoll of Liverpool University visited Ascension Island to host a Darwin Project training workshop in land crab biology and research methods, and to help launch several major research projects within AIGCD's "Operation Land Crab" initiative that are key to the delivery of the Species Action Plan for this species. The visit included a week long training event for AIGCD staff and an MSc student from University of Exeter recruited to carry out research on the reproductive ecology of land crabs. Practical training was given in handling, banding, sexing and microchip tagging land crabs, as well as in the gathering of morphological data and the identification of recruiting juvenile land crabs. Dr Hartnoll also delivered a seminar to AIGCD staff on the global diversity and distribution of land crabs, the biology of *Johngarthia lagostoma* on Ascension Island and important knowledge gaps that need addressing to inform the conservation of this species. The success of this workshop is evident in the exciting progress that has already been made within the Operation Land Crab project. AIGCD staff and the University of Exeter MSc student have produced the first distribution maps of land crab spawning around the coast of Ascension Island, and have banded and microchipped hundreds of spawning adults to allow their migrations, growth rates and site fidelity to be studied. In addition, the team have collected and described the first ever specimens of the recruiting megalops stage and first crab stage of *Johngarthia lagostoma* and have mapped their recruitment sites (further details in Supplementary Material). Specimens have been lodged within a host country reference collection and sent to the Natural History Museum in London, and a

description is currently being prepared for submission to a peer-reviewed scientific journal.

1.5 Training Workshop 3 – GIS Review and Support

Alan Mills, a GIS consultant, visited AIGCD between 11/04/2013 – 19/04/2013. His visit aims were to refresh Conservation's GIS, to ensure that data were up to date and quality controlled, to re-sensitise both Conservation and other partners about the scope and capability of the system currently, and to discuss pathways forward for ensuring that GIS was integrated into the science and outputs for the BAP. Some troubleshooting of the system was conducted, including reviewing the hardware and software set up and the connectivity of staff to the shared system. Refresher and introductory training was given to various staff in database design, GIS management and system navigation. The opportunity was also taken to discuss the wider role of GIS on island within AIG and other agencies. Alan is expected to return to Ascension for a follow up visit that is primarily to further build capacity and look specifically at BAP activities involving spatial data and analysis. An earlier visit than originally envisaged may be useful to sustain the momentum of this visit and to ensure skills are enhanced to fit with the timescale of species and habitat BAP development where GIS could be utilized.

1.6 Training Workshop 4 – Documenting Ascension's Bryophytes

Between the 15/04/2013 – 26/04/2013, Dr Jeff Duckett and Dr Silvia Pressel of the Natural History Museum (NHM) and Queen Mary University London visited Ascension Island to lead a Darwin Project training workshop in bryophyte biology, collection and identification for AIGCD staff. The workshop included sessions on field identification, microscopy and the preparation of herbarium specimens, as well as a seminar on bryophyte biology, conservation and diversity on Ascension Island that was attended by both AIGCD staff and members of the public. Botanists within AIGCD accompanied the NHM team on all site visits and received extensive training in bryophyte taxonomy, giving them the skills and confidence to continue survey and monitoring work after the end of the project. During the 10 day workshop the NHM team and AIGCD staff developed the most comprehensive inventory of bryophytes on Ascension Island to date, including 65 native species, 13 new records for the island and 1 species that is believed to be new to science. Specimens of all species were taken for DNA barcoding and for inclusion in a host country herbarium collection that is currently under development. High quality photographs and locations of all species were also taken for inclusion in a Darwin Project field guide that will form one of the major outputs of this work programme. As a direct result of the workshop, at least 2 key areas of high bryophyte diversity have been identified for habitat restoration work and inclusion in Site and Habitat Management Plans. A follow up visit by the NHM team is planned in Year 2 to consolidate training and research projects initiated during Year 1.

1.7 Training Workshop 5

To be undertaken in Year 2.

<u>Output 2: Greatly enhanced knowledge of key biodiversity elements in Ascension Island</u>

2.1 Full Inventory of Animal and Plant Species for Ascension Island

Significant progress has already been made towards the creation of a full inventory of biodiversity on Ascension Island. As all terrestrial vertebrate species and the endemic and native higher plants are already well documented, a focus has been placed on previously understudied taxa such as lower plants and invertebrates. In collaboration with Darwin Project partners from the Natural History Museum and Centre for Ecology

and Hydrology, reference collections of >60 bryophytes (mosses, liverworts and hornworts) and > 100 terrestrial invertebrates have been assembled and catalogued. The collections include a number of new records for the island and at least 2 species that are believed to be new to science. Herbarium cabinets and display units have been ordered and additional space created within the AIGCD building to house the reference collections and a microscopy suite once taxonomists at the NHM have finished verifying identifications. Through the Darwin Project workshops (see **1.3** and **1.6**) the AIGCD team has received extensive training in the preparation and display of herbarium specimens, and in invertebrate sampling techniques, enabling reference collections to be expanded as necessary after the project has ended. Additionally, in collaboration with the Darwin Initiative Challenge-funded project 'Assessing Ascension Island's Shallow Marine Biodiversity' led by the Shallow Marine Survey Group based in the Falklands Islands we are beginning to build up an inventory of Ascension's shallow marine species, with a particular focus on the endemic fish.

2.2 Development of *ex-situ* Plant Conservation Techniques

Significant progress has been made towards achieving this output after the successful workshop led by Marcella Corcoran from the Royal Botanical Gardens, Kew (see **1.3**). The primary aim of the workshop was to initiate the development of an integrated conservation strategy to develop a genetically diverse *ex-situ* plant collection for Ascension. Since then, Assistant Conservation Officer Jolene Sim has taken responsibility for the management of the nurseries that grow the endemic plants and re-introduce them into the wild. A new record keeping and labelling system has been put into place that assigns every plant that passes through the nursery with a unique identification code that will remain with it through to reintroduction into the wild. Documenting where the plants/seeds/spores are collected and ensuring that they are returned to the same area is an important step in ensuring that the different populations remain genetically diverse. AIGCD has strong links with Kew Gardens – the lead partners for this output and it is anticipated that a further training workshop will be held on *ex-situ* techniques and/or reintroducing collections to wild in the next reporting year. Additionally, AIG recognise the importance of the nursery work for protecting Ascension's endemic plant species and are looking to put aside some funds in their budget that will go towards the improvement and maintenance of the shade house facilities.

2.3 Design of a More Sustainable Biodiversity Monitoring Strategy

Due to the considerable biodiversity on Ascension Island and the limited resources available for staff costs on an island of just 800 people, developing a sustainable programme of biodiversity monitoring will always be challenging. With this in mind, a guiding principle of the BAP agreed with stakeholders at the outset was to ensure that monitoring targets are prioritised and achievable within the existing capabilities of AIGCD. Alternatively, SAPs should include targets that can help increase capacity for monitoring in specific areas. For example, one target of the recently completed green turtle SAP is to develop an international internship program that can help to deliver the proposed monitoring targets without putting undue strain on existing work programmes. In addition, training in database design and management and enhancements to AIGCD's database management system though Darwin Project workshops (see **1.5**) will also make it faster and easier to enter, catalogue and map biodiversity monitoring data in future.

2.4 More Detailed Knowledge of the At-Sea Habitat Use of Key Marine Species in Relation to Fishing Effort

We are happy to report that excellent progress has been made in documenting the habitat use of seabirds around Ascension Island, with tracking projects already initiated for 3 priority species: masked boobies, sooty terns and the endemic Ascension frigatebird. In a collaborative effort involving the RSPB, the University of Exeter, the University of Lund and AIGCD, 43 GPS loggers and 3 satellite-linked transmitters were deployed on frigate birds and 30 GPS loggers deployed on masked boobies. To date, 19 GPS loggers have been successfully recovered from frigate birds yielding data on the routes of 44 foraging trips. Meanwhile, the satellite-linked transmitters have been uploading positional data continually for 62 days to an openly accessible online forum (http://www.seaturtle.org/tracking/?project_id=809) which has generated significant local and international interest in the project. These data will inform a larger scale deployment of remote download GPS tags on frigate birds in September 2013. In addition to planned project activities, a further collaboration has been developed with researchers from the University of Birmingham and the Army Ornithological Society tracking the migrations of the sooty terns which breed at Ascension Island. The Darwin Project funded 10 geolocator tags (with a matched contribution from collaborators) which were deployed in December 2012 and will be recovered when the birds return to breed in August 2013. Spatial data from all seabird tracking work will be integrated to highlight important marine bird areas and overlaid with fisheries Vessel Monitoring System (VMS) data to identify potential conflicts. Permission to use VMS data has already been obtained from St Helena Government Fisheries Directorate and data transfer is being arranged.

2.5 Species Action Plans for 20 Key Species

Following consultations with stakeholders at the outset of the project a template Species Action Plan (SAP) has been produced and agreed upon by project partners (provided in the Supplementary Material). The draft SAP is fully integrated with the targets of MEAs that have been ratified by the UK, including the Aichi Biodiversity Targets, and proposed actions have been made SMART wherever possible (Specific, Measurable, Achievable, Realistic, Time-limited). The green turtle SAP is now complete and work on the remaining 19 is underway.

2.6 Interim Report on Legislative Change

Owing to very strong buy-in from Ascension Island's Crown Counsel and Administrator regarding environmental governance and legislative change, progress in this area has far exceeded expectations. By the end of the project's second year we are confident we will be in a strong position to provide a full report detailing these reforms. Progress to date includes:

- The passing of the **Marine Protection Ordinance 2013** which provides enabling legislation for the sustainable management of marine products, including the option to impose gear restrictions, closed seasons and permitting schemes. The first regulation enacted under the Ordinance forbids the harvesting of egg-bearing spiny lobster. The legislation has been drafted and passed by the Island Council and is awaiting public consultation.
- The submission of a draft policy to the Island Council on **Reforming the Wild Life Protection Ordinance**. The Wild Life (Protection) (Ascension) Ordinance 1944 is currently the principle legal instrument for safeguarding the native biodiversity of Ascension Island but is highly out-dated. The draft policy recommends the removal of all non-native species from the schedule and enhanced protections for native seabirds, higher plants, marine turtles and land crabs. The policy has the backing of the Crown Counsel and we anticipate progress in this area soon.

- The preparation of a draft policy entitled **Expanding Ascension's Protected Areas Network** which recommends the designation of 6 new protected areas under the National Protected Areas Ordinance 2003 to include all key biodiversity sites on the island (currently there is only 1). The policy is being prepared following discussions with the Crown Counsel and senior management within AIG and is due to be submitted prior to the Managing Protected Areas workshop to be held on Ascension Island in June (see **Section 3**).

2.7 Design of a BAP with Associated Workplan

See 2.5. The first Species Action Plan has been designed and agreed by stakeholders and will form the template for all subsequent SAPs. A concept note for the completed BAP has also been produced and circulated to project partners, including the criteria for identifying priority species for the BAP (included in Supplementary Material). The completed BAP will consist of a series of Species Action Plans and Habitat Action Plans.

2.8 AIG Adopts BAP

All project activities have been fully supported by senior management in AIG, so we are confident that this target will be met. Discussions have already been held about including BAP targets within the existing annual progress reporting and auditing mechanisms for AIGCD and in research permit applications and project proposals from overseas researchers and institutions.

Output 3: Greatly enhanced public awareness of the importance of, and threats faced by the biodiversity of Ascension Island including enhanced legislation.

3.1 Active Engagement Between Community School and Biodiversity Professionals

AIGCD has strong ties with the school on the Island – Two Boats School, which provides education for children aged 3-16. The school has a Conservation Awareness enrichment group (run by a teacher at the school, but with support from AIGCD) where the children learn more about Ascension's biodiversity and help with practical conservation work such as beach cleans and the weeding of invasive species. Indeed this group of children named our satellite tagged frigatebirds (see **2.4** and Supplementary Material). In the summer holidays AIGCD run 5 days of conservation-themed activities for those children that are interested in attending ('Ascension Explorers'), which makes them more aware of Ascension's unique biodiversity and the what they can do to help protect it. This Darwin project is building on these already established ties and where possible, the Darwin partners always engage with the school when visiting Ascension through school assemblies or public events. For example, Marcella Corcoran from Kew Gardens ran a public session "Afternoon with a Kew Gardener" during her recent visit with activities aimed at children such as learning how to plant vegetable seeds and look after the growing plants. As part of the Darwin project we plan to bring the youth groups (Boy Scouts and Girl Guides) to observe the spawning land crabs over the next couple of weeks – an iconic event that receives surprisingly little attention on the Island.

3.2 Design and Population of a Detailed and Vibrant Biodiversity Website

At the request of Ascension Island Government, the AIGCD website has been integrated into the new government website and can be accessed here: http://www.ascension-island.gov.ac/government/conservation/. The website was developed with a design company in the UK, The Communications Group, and provides up-to-date information on Ascension's flora and fauna and the projects that

are being carried out by AIGCD. There are also a number of pages dedicated to the Darwin Initiative project and ultimately the BAP will be hosted here. As each of the species and habitat action plans are developed and approved they will be uploaded on to this website so that they can be viewed and downloaded by any interested person. By making the BAP a dynamic document that can be continually updated as targets are met and new targets are added we aim to ensure that the BAP is used as the definitive guide and co-ordinating document for conservation work on Ascension Island in future.

A Facebook webpage in the name of Ascension Island Conservation Department was created in February 2013 and is the main venue for announcements, updates and photo sharing relating both to the Darwin Initiative project and other work that the Conservation Department carries out. In the space of just 2 months the page has already established a reach of over 5000 people. We have also established a strong presence on the social networking site Twitter (@AIGConservation).

3.3 Active Media Campaign Throughout the Project

At the outset of the project we began our media campaign as we hope to continue with articles and interviews about the aims and objectives of the project in both the local (Ascension Island) and the international (UK) media. We have had seven articles relating to project activities in the local newspaper, The Islander, which can be viewed online (http://www.the-islander.org.ac/). Additionally, the following articles resulted from a press release (http://www.exeter.ac.uk/news/featurednews/title_194691_en.html) detailing the funding award:

West Briton: *Tremough scientists head off to South Atlantic* (5th April 2012)
BBC Radio Cornwall interview (14th March 2012)

After some interest in the remote tracking aspects of the project, a press release was issued by the University of Exeter detailing the real time tracking of the Island's endemic frigatebird (http://www.exeter.ac.uk/news/featurednews/title_275981_en.html), which was taken up by a number of online media (see Supplementary Material).

Following the awarding of the Fauna and Flora International (FFI) Flagships Species Award, FFI made an announcement on their website where 'Operation Land Crab' was given a prominent mention (http://www.fauna-flora.org/news/flagship-species-fund-supports-eight-conservation-icons-in-2013/ and Supplementary Material).

3.4 Production of Highly Accessible Darwin Newsletter

The Darwin Newsletter has been integrated into the existing AIG Conservation publication, "Conservation Quarterly", where it has been allocated a designated section with appropriate branding (Darwin logos etc.). PDFs of the newsletter can be downloaded from the internet (http://www.ascension-island.gov.ac/government/conservation/library-publications/quarterly-newsletter) and are also emailed to all on the AIG client database (biodiversity professionals and all other interested members of the public who have expressed an interest in receiving the publication). News of the Darwin Project has featured in the last five editions of the Conservation Quarterly:

Broderick, A. & Godley, B. (2012) New Darwin Initiative Project. *Conservation Quarterly*, 37, pp. 10.

Weber, N. & Weber, S. (2012) Implementing a Darwin Initiative Biodiversity Action Plan for Ascension Island. *Conservation Quarterly*, 38, pp. 11.

Weber, N. & Weber, S. (2012) Implementing a Darwin Initiative Biodiversity Action Plan for Ascension Island 2. *Conservation Quarterly*, 39*,* pp. 6-8.

Weber, N. & Weber, S. (2012) Darwin Initiative Project Update - Legislation. *Conservation Quarterly*, 40*,* pp. 5-7.

Weber, N. & Weber, S. (2012) Darwin Initiative Project Update – Workshops, Bird Tracking and Grant Success. *Conservation Quarterly*, 41*,* pp. 4-6.

3.5 Series of Public Meetings

Early on in the project the DRFs held a meeting with democratically-elected public representatives on the Island Council to discuss the need for improved environmental governance on Ascension Island. The meeting included a brief presentation by the DRFs followed by a question and answer session. One positive outcome of the meeting was a proposal to establish a dedicated conservation committee within the Island Council to discuss future planned legislative reforms and other environmental issues. Wherever possible, public participation has also been incorporated within Darwin Project training workshops. The “Afternoon with a Kew Gardner” event held in Green Mountain National Park was well attended by the public, and included tours of the native plant nursery, lectures on home composting, demonstrations of native fern propagation and a ‘grow-your-own’ lesson for children. In addition to public meetings on-island, the DRFs have also delivered 2 seminars on the natural history and conservation work on Ascension Island to visiting cruise ships from Europe and North America reaching an estimated audience of more than 1000 people.

Output 4: Reporting

4.16-Monthly Reports to Darwin

First report submitted on time.

4.2 Annual Reports to Darwin

First report submitted on time.

4.3 Final Report to Darwin

We anticipate that this will also be submitted on time.

4.2 Progress towards project outputs

We feel that at this early stage, we are making strong progress towards our stated purposes and outcomes. We are around 30% of the way through the project now and appear to be on target to attain all project outputs. Of the 27 standard output criteria, 8 (30%) targets have already been reached or exceeded and of the 19 remaining targets, 5 have reached or exceeded 50% completion and 8, 25% or greater completion.

4.3 Standard Measures

We have made excellent progress against standard reporting measures.

Table 1 Project Standard Output Measures

Code No.	Description	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	Total to date	Total planned during the project (% of target reached)
Established codes							
5	Number of people to receive at least one year of training	0.5				0.5	2 (25%)
6A	Number of people to receive other forms of education/ training	16				16	8 (200%)
7	Number of training materials to be produced for use by host country	4				4	2 (200%)
8	Number of weeks to be spent by UK project staff on project work in the host country	33				33	40 (83%)
9	Number of species/habitat management plans to be produced for Governments, public authorities, or other implementing agencies in the host country	1				1	21 (20 SAP, 1 BAP) (5%)
11A	Number of papers to be published in peer reviewed journals	0				0	3 (0%)
11B	Number of papers to be submitted to peer reviewed journals	1				1	3 (33%)
12A	Number of computer based databases to be established and handed over to host country	1				1	4 (25%)
12B	Number of computer based databases to be enhanced and handed over to host country	1				1	2 (25%)
13A	Number of species reference collections to be established and handed over to host country	0				0	3 (0%)
14A	Number of conferences/seminars/ workshops to be organised to present/ disseminate findings	4				4	5 (80%)
14B	Number of conferences/seminars/ workshops attended at which findings from Darwin project work will be presented/ disseminate	1				1	2 (50%)

Code No.	Description	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	Total to date	Total planned during the project (% of target reached)
15A	Number of national press releases in host country	4				4	5 (80%)
15B	Number of local press releases in host country	4				4	5 (80%)
15C	Number of national press releases in UK	2				2	2 (100%)
15D	Number of local press releases in UK	2				2	2 (100%)
16A	Number of newsletters to be produced	4				4	9 (44%)
16B	Estimated circulation of each newsletter in the host country	200				200	200 (100%)
16C	Estimated circulation of each newsletter in the UK	500				500	500 (100%)
17A	Number of dissemination networks to be established	0				0	1 (0%)
19A	Number of national radio interviews/features in host country	1				1	4 (25%)
19C	Number of local interviews/features in host country	1				1	1 (100%)
19D	Number of local radio interviews/ features in the UK	1				1	1 (100%)
20	Estimated value (£'s) of physical assets to be handed over to host countries	£22,450				£22,450	£63,500 (35%)
21	Number of permanent education/ training/ research facilities or organisations to be established and then continued after Darwin funding has ceased	0				0	1 (0%)
22	Number of permanent field plots to be established during the project and continued after Darwin funding has ceased	25				25	100 (25%)
23	Value of resources raised from other sources for project work	£135,000				£135,000	£375,000 (36%)

Table 2 Publications

Type (eg journals, manual, CDs)	Detail (title, author, year)	Publishers (name, city)	Available from (eg contact address, website)	Cost £
Journal	Telemetry as a tool for improving estimates of marine turtle population size. Authors: Weber, Weber, Godley, Ellick, Witt & Broderick.	Conservation Biology	In Review	N/A
Leaflet	Land Crabs of Ascension Island Educational Leaflet.	Printech, Jamestown, St Helena.	Hard copies at the Conservation Office and it will also be on the website	Printing currently being arranged. Costs covered by the FFI grant.

4.4 Progress towards the project purpose and outcomes

We feel that at this early stage we are making strong progress towards stated purposes and outcomes. Through numerous consultations, visits and workshops with project partners over the past 9 months we have established a strong collaborative network on which to build the project and see it through to a successful completion (although the impacts of this project will continue for many years after it is finished). Relationships with all project partners are demonstrably strong and there is a broad consensus on our vision for the format and implementation of the BAP. While it is too early to assess the full impact of the project, the core purpose – to design and implement a Biodiversity Action Plan that will guide future research and practical conservation work on Ascension Island – is on track and is being structured so as to leave a lasting legacy on the Island (see **Section 8**). Several major research projects and legislative reforms that are relevant to the implementation of the BAP have been initiated and there has been considerable investment in capacity building to ensure the targets of the BAP can be carried forward. Indeed, the AIGCD is demonstrably strong at the moment, with staff benefiting from the considerable training and external input that they are receiving through Darwin Project workshops. As well as building capacity, the DRFs are working with project partners and AIGCD staff to ensure that copies of datasets, photographs, papers and final reports are catalogued and lodged within databases to make them available for future projects.

4.5 Progress towards impact on biodiversity, sustainable use or equitable sharing of biodiversity benefits

Due to the lack of any agriculture, forestry or private land ownership on Ascension Island, fisheries represent the only significant extractive use of biodiversity within the territory. Legislative changes enacted through the Darwin Project have already paved the way for sustainable fisheries management by enabling the enforcement of gear restrictions, bag limits and closed seasons where appropriate (see **Section 2.6**). Restrictions on the harvesting of egg-bearing lobster have already been imposed under this legislation in response to local concerns about unsustainable practices. As the focus in Year 1 has been on creating structures for prioritising conservation activities and building local capacity, it is currently too early to assess the direct impacts of the project on biodiversity. However, we anticipate that habitat restoration work targeted within Species Action Plans, as well as additional planned legislative changes (see

Section 2.6), will deliver measurable benefits for biodiversity on Ascension Island within the lifetime of the project.

5. Monitoring, evaluation and lessons

Due to the collaborative nature of this project the progress against key milestones and indicators (as set out in the main bid) is appraised by the project partners that form the Steering Group. Project partners largely consult on the specific parts of the BAP that they are involved in i.e. individual species or habitat action plans, but through conference calls with the other project partners they also have the opportunity to discuss the project as a whole. Indeed, the establishment of a BAP Steering Group has been discussed with project partners to help guide the development of the BAP after the life of the project and ensure it remains relevant and updated (**Section 8**). As covered in **Sections 3 & 4**, successes in meeting the key indicators demonstrate the progress of this project that is still in its earlier stages. The on-Island DRFs are in regular contact with all project partners via email and conference/ Skype calls and all partners will be visiting Ascension between 1 and 3 times during the lifetime of the project to help to ensure that all objectives are met within the timeframe of the project.

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

Not Applicable

7. Other comments on progress not covered elsewhere

No significant difficulties have been encountered during the year and we do not believe that at this stage the project faces any particular risks. As a minor point, and highlighted in **Section 4.1 (1.2)** we would like to discuss with DI the possibility of slight changes to the budget to invest in a promising, local-based Darwin Trainee.

8. Sustainability

In the development of a collaborative Biodiversity Action Plan hosted in an accessible and easily updated online portal, the project has a clearly defined end point and exit strategy. From the outset, the BAP project has benefitted from an exceptionally high level of buy-in from key decision makers within AIG which bodes well for the long term legacy of the project. Practical measures to ensure the sustainable application of the BAP after the project, such as linking BAP targets to annual auditing of AIGCD and to research permit applications from external organisations, have already been proposed and will be developed further over the course of the project. In addition, the establishment of a BAP Steering Group has been discussed with project partners to help guide the development of the BAP after the life of the project and ensure it remains relevant and updated. The Steering Group would consist of AIG decision makers and conservationists along with specialists from various fields of conservation and biology who have a longstanding involvement in the biodiversity of Ascension Island and who could offer locally-relevant technical expertise.

9. Dissemination

To date, dissemination efforts in the host country have primarily focused on the school and youth groups with organised talks and field trips. However, efforts will now be expanded to the community as a whole with an interactive exhibition planned for the Ascension Day Fair (11/05/2013) – one of the largest and most well attended events on the Island. The exhibition that will be run by the Conservation Department will have (Darwin Initiative branded) educational material available about the BAP project as a whole and also individual projects such as the control of invasive species on the Island. It will also have a number of interactive activities relating to these projects, such as the game 'Splat the Rat' to engage more attention from the public. With an apparent increase in eco-tourism on the Island, for example with more cruise liners making a stop at Ascension, this is providing a chance to raise the profile of Ascension's unique flora and fauna and also the conservation efforts that are on-going on the Island. We interact with visitors, providing tours of the Island and dedicated visits to the seabird colonies and turtle nesting beaches at night. In addition to educating the public, the revenue generated by these tours is helping to raise the Department's reputation in the Government as more of a self-sustaining Department that is worth investing in. The Department has an active web presence, with a reach of over 5,000 followers receiving multiple posts each week on the Ascension Island Conservation Facebook and Twitter webpages. Outreach with the general public has been enhanced through increased press coverage of project activities, such as satellite tracking of the endemic frigatebird for the first time and the launch of our new project 'Operation Land Crab' (examples of coverage in the Supplementary Material). The recent launch of the new AIG website with vibrant pages from the Conservation Department documenting Ascension's biodiversity and current projects will also further expand our dissemination network. Ultimately, the BAP will go onto this website with separate pages for each SAP, so that this information is widely accessible to all interested parties. When targets are met, or information needs to be added then these pages can be easily updated. Finally, as all project partners, including the on-Island Research Fellows have a strong background of publishing in the scientific literature, this project will see AIGCD making a move towards routinely disseminating research findings in this manner. All of these efforts will continue throughout the project and we are confident that over the coming of years, guided by the targets set out in the BAP and agreed by project partners, the Conservation Department on Ascension will be in left in a stronger position to take control of both the research and the practical conservation carried out on the Island.

10. Project Expenditure

Table 3 project expenditure during the reporting period (1 April 2012 – 31 March 2013)

Item	**Budget** (please indicate which document you refer to if other than your project application or annual grant offer letter)	**Expenditure**	**Variance/ Comments**
Staff costs specified by individual			Cr £412.13
Overhead costs			Cr £412.13
Travel and subsistence			Db £389.59
Operating costs			Db £84.01
Capital items/equipment (specify)			Db £161.33
Others: Consultancy			£0.00
Others (please specify)			
TOTAL			Cr £189.33 (overheads underspend to be surrendered)

Budgets are as per Forecasting Exercise 2013 and an email from Eilidh Young to Dr Annette Broderick dated 01/03/13.

11. OPTIONAL: Outstanding achievements of your project during the reporting period (300-400 words maximum). This section may be used for publicity purposes

I agree for LTS and the Darwin Secretariat to publish the content of this section (please leave this line in to indicate your agreement to use any material you provide here)

Strong Start. After only 9 months of life, the project has already made a strong start within many of its stated goals. Major achievements to date include the passing of the first major piece of marine conservation legislation on Ascension Island and the drafting of two further legislative reforms; the organisation of 4 training workshops, including one South Atlantic UKOTs regional event, which have been credited by AIGCD staff and international collaborators with a significant increase in the capacity and

enthusiasm of the AIGCD team; the discovery of 2 species of invertebrate and lower plant that are believed to be new to science, as well as 13 new records for the island; and the first collections and descriptions of the elusive juvenile stage of Ascension Island's native land crab. The project has also developed 3 additional collaborations with international partners and attracted almost £10,000 of additional funding for the initiation of a major land crab research and public awareness project. We intend to build on this strong start during the remainder of the project to deliver a highly collaborative and comprehensive Biodiversity Action Plan that will guide future conservation efforts on Ascension Island.

Images: We have many excellent images available that we would happily share (including higher resolution copies of those in the Supplementary Material). These include photos of Ascension's impressive flora and fauna, dramatic landscapes and also of staff conducting fieldwork (e.g. the attachment of tracking devices to seabirds) and participating in Darwin Initiative workshops. Please contact either Darwin Research Fellow, Nicola Weber or Sam Weber with any requests for specific images.

Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2012-2013

Project summary	Measurable Indicators	Progress and Achievements July 2012 - April 2013	Actions required/planned for next period
Goal: *To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but constrained in resources to achieve* ⇒ The conservation of biological diversity, ⇒ The sustainable use of its components, and ⇒ The fair and equitable sharing of the benefits arising out of the utilisation of genetic resources Ascension Island's biodiversity is adequately conserved and is providing sustained and equitable benefits to local communities and beyond.			
Purpose: Improved capabilities applied to the sustainable and equitable management of biodiversity of Ascension Island (and St Helena, Falkland Islands and Tristan da Cunha).	Biodiversity Action Plan is formally accepted by Ascension Island Government. BAP is being implemented by Ascension Island Government and other Island stakeholders.	A template for the BAP has been formulated and loosely agreed upon by all project partners. A greater than anticipated amount of training has been carried out to improve capacity within the Department. The project has the full support of AIG and other Island Stakeholders.	Development of the species and habitat action plans in collaboration with the relevant project partners. Continue with training and on-going monitoring and research programmes.
Output 1. AICD organisations able to undertake long-term monitoring & management of the biodiversity of Ascension Island.	Appointment of Darwin Fellow Appointment of Darwin Trainees Minimum of 10 staff from UK OT partner organisations trained in key biodiversity assessment techniques.	Progress good (all targets met for this year) and indicators appropriate.	
Activity 1.1. Appointment of Darwin Research Fellow (DRF)		Completed	
Activity 1.2. Appointment of Darwin Trainees		First trainee appointed and the second has been identified.	
Activity 1.3. Training Workshop 1		Completed	
Activity 1.4. Training Workshop 2		Completed	
Activity 1.5. Training Workshop 3		Completed	
Activity 1.6. Training Workshop 4		Completed	

Project summary	Measurable Indicators	Progress and Achievements July 2012 - April 2013	Actions required/planned for next period
Activity 1.7. Training Workshop 5		Planned	
Output 2. Greatly enhanced knowledge of key biodiversity elements in Ascension Island	Habitat map Population assessments of key species aka Species Action Plans (min 20; 5 for each 6 mo.) Computer databases (min 4) Peer reviewed papers (min 3) Reference collections (min 3) Habitat map Biological databases Scientific papers Conference presentations (min 2) Biodiversity Action Plan (July 2014)	Progress generally good and indicators appropriate.	
Activity 2.1. A full inventory of plant and species for Ascension Island		All terrestrial vertebrates, native and endemic higher plants are documented. Invertebrate, bryophyte, marine and invasive species databases on-going.	
Activity 2.2. Development of *ex situ* plant conservation techniques		Significant progress	
Activity 2.3. Design of a more sustainable biodiversity monitoring strategy		On-going	
Activity 2.4. A more detailed knowledge of the at-sea habitat use of key marine species in relation to fishing effort		Significant progress	
Activity 2.5. Species Action Plans for 20 key species		Template created and agreed on by project partners.	
Activity 2.6. Interim report on legislative change		Significant progress	
Activity 2.7. Design of a BAP with associated workplan		On-going	
Activity 2.8. AIG adopts BAP		On-going	
Output 3. Greatly enhanced public awareness of the importance of, and threats faced by the biodiversity of Ascension Island including enhanced legislation.	Website Newsletters (min 9) Press releases (min 5) Public meetings (min 5) Interim report on legislative Change	Progress generally good and indicators appropriate.	
Activity 3.1. Active engagement between community school and biodiversity professionals.		On-going	
Activity 3.2. Design and population of a detailed and vibrant biodiversity website.		Website completed and it will be regularly updated.	

Project summary	Measurable Indicators	Progress and Achievements July 2012 - April 2013	Actions required/planned for next period
Activity 3.3. Active media campaign throughout the project (5 Press releases)		Good progress	
Activity 3.4. Production of highly accessible Darwin Newsletter (9 issues)		Target met for this reporting period	
Activity 3.5. Series of public meetings (at least 5)		Good progress	
Output 4. Reporting			
4.1 6 monthly reports to Darwin		First report submitted on time.	
4.2 Annual reports to Darwin		First report submitted on time.	
4.3 Final report to Darwin		Anticipated that this report will also be submitted on time.	

Annex 2 Project's full current logframe

Project summary	Measurable Indicators	Means of verification	Important Assumptions
Goal: Effective contribution in support of the implementation of the objectives of 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 targets set by countries rich in biodiversity but constrained in resources.			
Sub-Goal: Ascension Island's biodiversity is adequately conserved and is providing sustained and equitable benefits to local communities and beyond.	Ongoing monitoring of key biodiversity elements demonstrates positive trends within 5 years of project completion.	Data from AI Conservation Dept.	[redacted]
Purpose: Improved capabilities applied to the sustainable and equitable management of biodiversity of Ascension Island (and St Helena, Falkland Islands and Tristan da Cunha).	Biodiversity Action Plan is formally accepted by Ascension Island Government. BAP is being implemented by Ascension Island Government and other island stakeholders	Biodiversity Action Plan completed Biodiversity Action plan endorsed. Quarterly reports from AI Conservation Department	Ascension Island government retains commitment to biodiversity conservation.
Outputs: 1. AICD organisations able to undertake long-term monitoring & management of the biodiversity of Ascension Island.	Appointment of Darwin Fellow Appointment of Darwin Trainees Minimum of 10 staff from UK OT partner organisations trained in key biodiversity assessment techniques	Field reports Participation in field activities Workshop reports Correspondence Biological databases	A high proportion of participants continue current employment.
2. Greatly enhanced knowledge of key biodiversity elements in Ascension Island	Habitat map Population assessments of key species aka Species Action Plans (min 20; 5 for each 6 mo.) Computer databases (min 4) Peer reviewed papers (min 3) Reference collections (min 3)	Habitat map Biological databases Scientific papers	

	Conference presentations(min 2) Biodiversity Action Plan **(July 14)**		
3. Greatly enhanced public awareness of the importance of, and threats faced by the biodiversity of Ascension Island including enhanced legislation.	Website Newsletters (min 9) Press releases (min 5) Public meetings (min 5) Interim report on legislative change	Web hits Circulation of Darwin Newsletter Media outputs	

Activities (details in workplan)

Capacity building

1.1 Appointment of Darwin Research Fellow
1.2 Appointment of Darwin Trainees
1.3 Training of staff and trainees in taxonomy including workshop
1.4 Training of staff and trainees in population monitoring including workshop
1.5 Training of staff and trainees in endangered plant culture techniques including workshop
1.6 Training of staff and trainees in GIS including workshop
1.7 Training of staff and trainees in Vertebrate tracking

Field research

2.1 A full inventory of animal and plant species for Ascension Island
2.2 Development of *ex-situ* plant conservation techniques
2.3 Design of a more sustainable biodiversity monitoring strategy
2.4 A more detailed knowledge of the at-sea habitat use of key marine species in relation to fishing effort.
2.5 Species Action Plans for 20 key species
2.6 Interim report on legislative change
2.7 Design of a BAP with associated workplan
2.8 Ascension Island Government adopts plan

Awareness raising

3.1 Active engagement between school, other community groups and biodiversity professionals (20 class and field activities)
3.2 Design and population of a detailed and vibrant biodiversity website
3.3 Active media campaign throughout the project (5 press releases)
3.4 Production of highly accessible Darwin Newsletter (9 issues)
3.5 Series of public meetings (at least 5)

Reporting

4.1 6 monthly reports to Darwin
4.2 Annual reports to Darwin
4.3 Final report to Darwin

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

1. Cover sheet of green turtle species action plan (SAP) which will act as a template for future SAPs.
2. Concept document circulated to project partners detailing the vision for the BAP and the approach to the preparation of SAPs.
3. Endemic frigatebird tracking work.
4. “Operation land crab”
5. Photographs of Darwin Project training workshops

1. Cover sheet of green turtle species action plan (SAP) which will act as a template for future SAPs.

Ascension Island Biodiversity Action Plan

GREEN TURTLE

Photo: S. Weber

GREEN TURTLE (*Chelonia mydas*)

1. **Taxonomy**: Kingdom: Animalia; Phylum: Chordata; Class: Reptilia; Order: Testudines; Family: Cheloniidae; Genus: Chelonia; Species: Chelonia mydas.

2. **Range**: Occurs circum-globally in tropical and subtropical seas. Nests in over 80 countries worldwide, with globally important breeding populations located in Ascension Island, Australia, Brazil, Comoros Islands, Costa Rica, Ecuador, Gulf of Guinea, Hawaii, Indonesia, Malaysia, Myanmar, Oman, Philippines, Saudi Arabia, Seychelles and Suriname.

3. **Status**:

   ***IUCN Red List* status**: Globally Endangered

   Local trend: Increasing

4. **BAP Criteria**: Qualifies for BAP under criteria 2 (globally threatened species) and 3 (globally important population).

Citation: Weber, S.*, Weber, N.*, Brodnick, A.C., Godley, B.J., Elliott, J., Sim, J.C., Williams, N., Stroud, S. (2012) *Ascension Island Biodiversity Action Plan: Green Turtle*. [illegible]. Online at: www.ascension.gov.ac/conservation/BAP

2. Concept document circulated to all project partners detailing how we will approach creating the first Biodiversity Action Plan for Ascension Island. The contents of the document have now largely been approved by all project partners and so in the coming year efforts will be put into developing and finalising the species and habitat action plans that will form the basis for the BAP.

Ascension Island Biodiversity Action Plan
INTRODUCTION

General

At the outset of Darwin Project we met with many of the individuals and organisations with a stake in the conservation of Ascension Island's biodiversity to discuss the development of a biodiversity action plan (BAP) for the island. The development of the BAP provides a good opportunity for all stakeholders to agree upon a vision for conservation on Ascension Island over the coming years, as well as a set of specific actions for individual species and habitats. Ultimately, it is hoped that the BAP will guide future conservation work on Ascension, such that all activities undertaken by AIG Conservation Department, external organisations and visiting researchers can be linked to one or more BAP objectives (e.g. through annual AIG reporting and research permit applications of visiting scientists). The BAP will be a live document that can be continually reviewed and updated as targets are met, new research becomes available, and new actions are added. To facilitate this, the BAP will be hosted in an accessible web-based format within the Conservation Department pages of the new AIG website (currently under development). Each Species Action Plan (SAP) and Habitat Action Plan (HAP) will be allocated its own web page that can be easily updated and navigated by interactive section headings, as well as being available for pdf download. It was also generally agreed that all SAPs should have a universal format that can be consistently applied across taxa. The draft green turtle SAP attached is our first attempt at such a template. Below we include a brief summary of how each section of the SAP was approached and how we envisage it working for other species – we would greatly value your feedback on this with advice on areas could be changed, improved, included/ excluded etc. We are very open to suggestions if you feel that any of the sections would need to be changed for the species that you work on.

Structure of Species Action Plans (SAPs)

Cover page:

We anticipate that SAPs will be grouped into three main sections: **marine species, terrestrial species and invasive alien species**. For the purposes of the BAP, species will be classified according to the biome in which the majority of their trophic interactions occur; e.g. seabirds and marine turtles are regarded as marine species despite nesting on land, land crabs are regarded as terrestrial despite an oceanic larval stage. Cover pages will summarise the following key information:

Sections 1-2: Taxonomy and global range

Section 3: IUCN Red List Status will be reported (Not Evaluated, Data Deficient, Endangered etc.) along with the local trend (unknown, decreasing, stable, increasing).

Section 4: As the underlying purpose of a BAP is to prioritise species for conservation action, it would be good to establish a universal set of criteria for identifying eligible species on Ascension for this BAP, which we all agree on. We have proposed the following criteria, but again would value your input/ feedback on these.

1. The species is **endemic to Ascension Island**.

2. The species is **threatened globally** according to the *IUCN Red List of Threatened Species*, and/or appears in the Appendices of multilateral environmental agreements (MEAs) ratified by the United Kingdom, including CITES and the Bonn Convention.

3. Ascension Island supports a **significant proportion of the global population** of the species for at least some stage in its life cycle (native species only). [This criterion would exclude, for example, species for which a negligible proportion of the global population are resident at or visit Ascension Island e.g. humpback whale.]

4. A fourth criterion is also in place for **invasive species with known detrimental effects on native and endemic species**, based on evidence from Ascension Island or elsewhere in the world.

Note: individual species which do not qualify under these criteria could still be included in the BAP through habitat management plans which encompass species assemblages (e.g. a HAP for cliffs and offshore stacks would include most nesting seabirds, HAPs for semi-desert and native grassland would include many native plants and invertebrates, a HAP for coastal marine would include many native fishes). Separate criteria will need to be developed for selecting habitats for inclusion in the BAP.

Citation: Each SAP and HAP will have an individual citation that acknowledges everyone who contributed to drafting the action plan, either in terms of data or intellectual input.

Sections 5-11:

These sections are intended to provide enough relevant background on the ecology, distribution, conservation and current legal status of each species to put the SAP in context.

Section 5: A brief overview of the species' natural history (diet, reproduction, habitat requirements etc.), using information specific to Ascension Island wherever possible. This won't be a literature review, but just contain enough information to give context to the SAP (word limit of around 250 words), referencing only key pieces of information relevant to Ascension Island.

Section 6: A brief description of the species' distribution at Ascension Island (if known), including areas of occupancy, extents of occurrence, and distinguishing between breeding and non-breeding distributions if appropriate. Where spatial data exist, and with the consent of the owner, a distribution map in a standard format will also be included. We will improve the current map as soon as we can, to include more relief and bathymetry.

Section 7: A summary of what is known about current and historical population sizes and long-term trends in abundance. Where quantitative data exist, and with the consent of the owner, a figure illustrating population trends will also be included to provide a visual representation of conservation status for readers who may not have access to primary literature.

Section 8: A list of relevant legal instruments that apply to the conservation of the species, including domestic legislation and multilateral environmental agreements. General pieces of environmental legislation (e.g. the Environment Charter) which are not specific to the species have not been included in this section as they can be summarised in a "General Legal" section in the front material of the BAP. However, attention should be drawn to important shortfalls in existing legislation. Live links to web pages have been included to allow readers to quickly access the text of each named treaty or Ordinance (Ascension environmental Ordinance's will be hosted on the new Conservation Department web page).

Section 9: A table containing live links to other related SAPs and HAPs, including closely related species, potentially problematic invasive alien species and major habitat types in which they occur.
Section 10: A list of all of the known and potential threats to the species at Ascension Island, incorporating information from other populations if necessary. The list will be as comprehensive as possible, but will attempt to distinguish between what are considered to be the primary, secondary and tertiary threats e.g. using exclamation mark icons ( ).

Section 11: A brief list of the main conservation measures that are already in place for the species, including practical management, research, policy, and public information.

Section 12: Species Action Plan

The SAP itself is divided into two sections, one setting out the overriding objectives for the SAP, and the other containing specific actions with an indication of which of the objectives they help to meet.

Objectives: During discussions with JNCC at the outset of the project it was suggested that it would be beneficial to align the Ascension BAP with the Aichi Biodiversity Targets. Linking BAP targets with commitments under other international treaties and agreements (e.g. The Global Strategy for Plant Conservation, CITES, Convention on Migratory Species), as well as the Ascension Environment Charter, was also raised during meetings with Darwin partners. However, when drafting the green turtle SAP we found it was often difficult and slightly contrived to relate the very specific actions proposed in the SAP to the very broad targets of international treaties. Instead, we have opted for aligning the overall objectives of the SAP with multilateral agreements, and then developing specific actions to work towards these objectives – please let us know if your opinions on this. Live links to the text of all multilateral agreements mentioned are included in the objectives table to allow readers to easily access these documents.

Proposed Actions: The actions proposed in the SAP have been divided into 4 categories: policy and legislation, safeguards and management (e.g. *ex situ* conservation, habitat restoration and invasive species control), research and monitoring, and communication and awareness-raising. JNCC suggested that wherever possible **proposed actions should be SMART** (Specific, Measurable, Achievable, Relevant and Time-limited), although this framework should not exclude ongoing conservation action which needs to be continued indefinitely. For the purposes of the SAP, proposed actions for research and monitoring should aim to be of clear applied benefit, and not focus purely on knowledge generation.

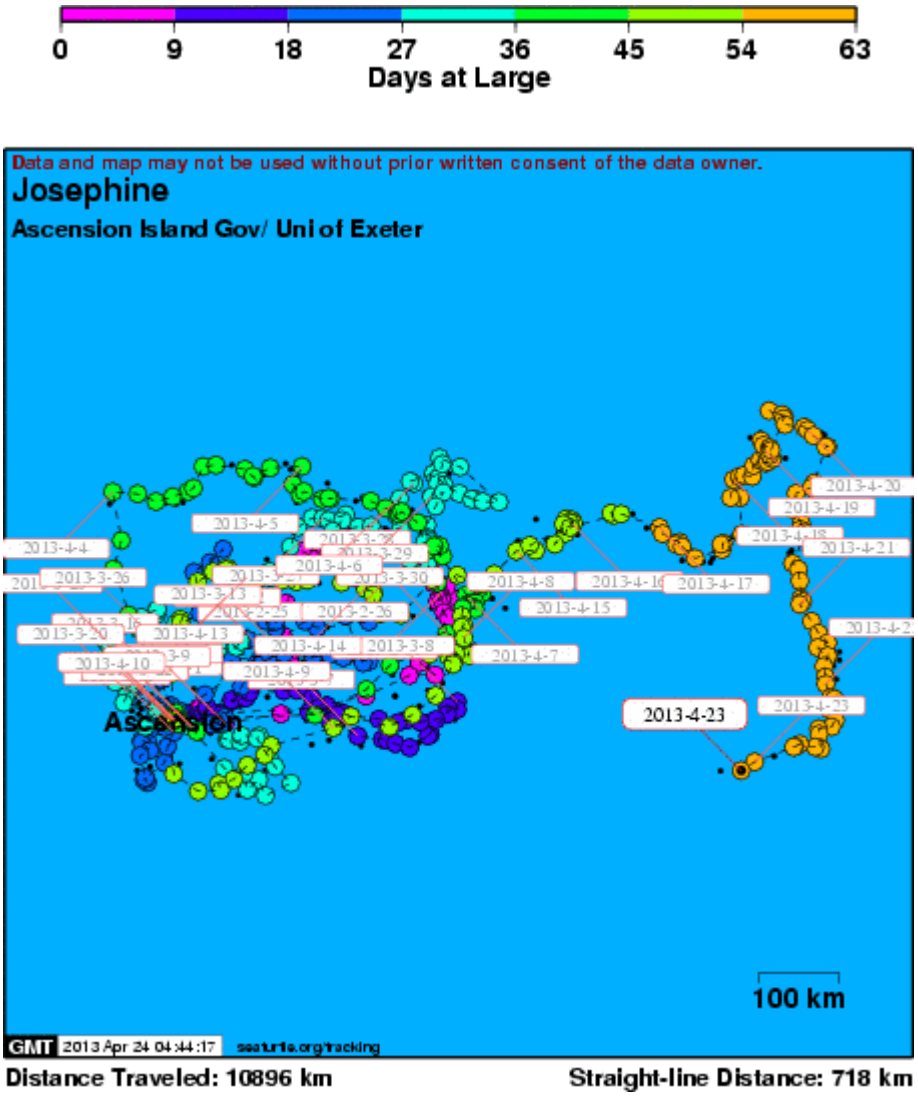
Lead and Partners: The SAP should make clear who will take responsibility for leading on proposed actions and who will support those actions. For clarity, we have distinguished between the AIG Conservation Department (CD), AIG Crown Counsel (CC) and AIG as a whole (including the Administrator, Directors and Facilities Management).

Updates and Progress Reporting: We have yet to fully decide how progress against proposed actions will be reported within the BAP, and would appreciate any suggestions. We envisage that important milestones in the achievement of each proposed action will be reported in rows appended beneath the relevant action (e.g. **CM1 Update 12/12/2012**: A draft proposal on the creation of protected areas for marine turtles has been submitted to the Island Council). When actions have been accomplished in their entirety they can be removed from the SAP and added to Section 11 (conservation measures) or Section 8 (legal). Each SAP will have an indication of when it was last updated in the banner on the cover page.

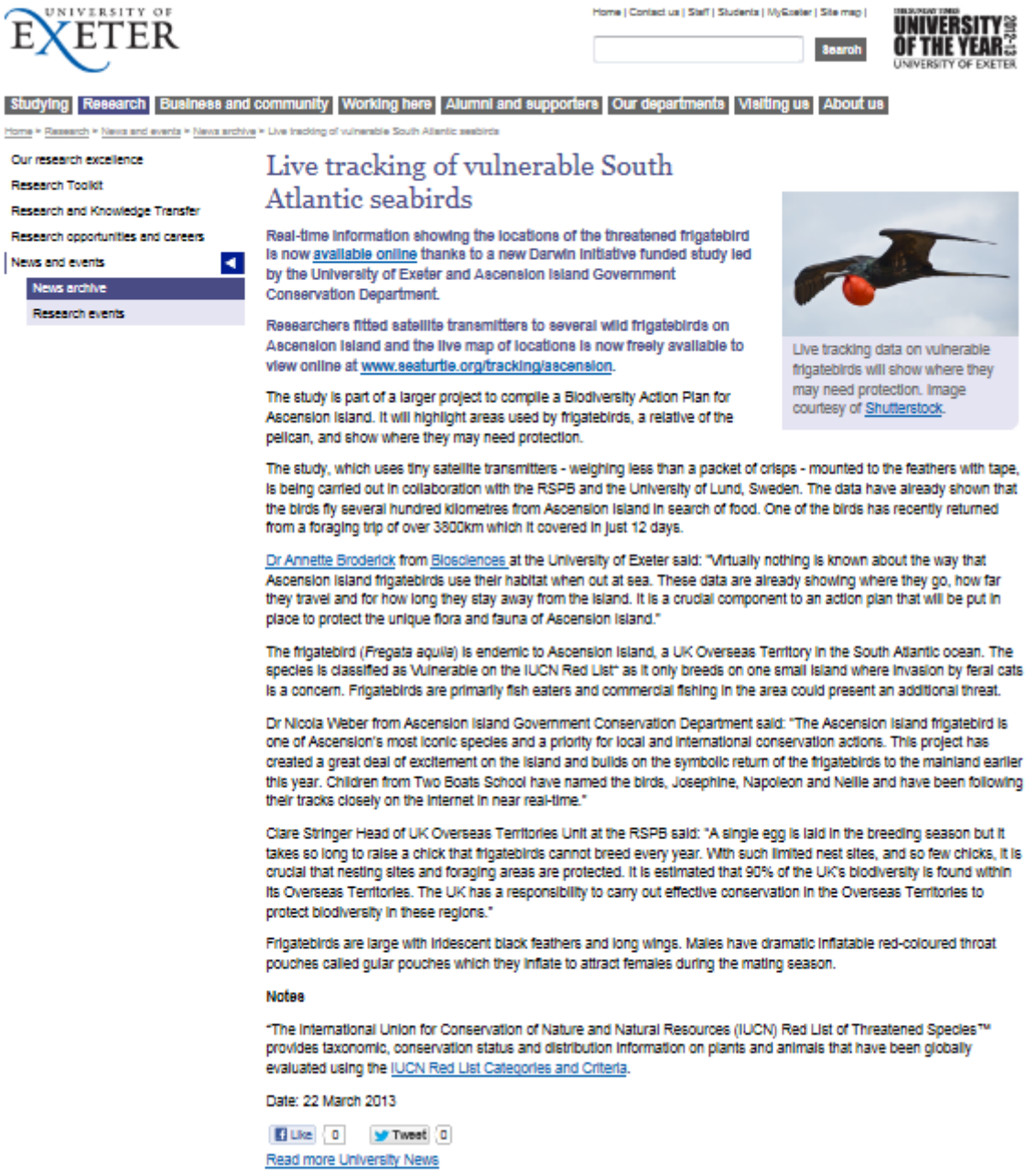
Section 13: This section will contain full references for all literature cited in the SAP and a bibliography with some selected further reading. The AIG Conservation Department is currently working with the Ascension Heritage Society to establish a reference library which will hold a

mixture of hard and electronic copies of all scientific literature, books and reports published on the biodiversity of Ascension Island. The full bibliography and pdf copies (where possible) will be made available via the AIG website, and should be a useful resource for AIG staff and visiting students and researchers. A lot of work on this project has already been completed by Drew Avery from the Heritage Society and we hope that Darwin partners and other collaborators can help to fill in any gaps.

3. Endemic frigatebird tracking project. The Ascension Island frigatebird (*Fregata aquila*) is endemic to Ascension Island and only nests on a single offshore islet - Boatswainbird Island (although a single pair recently bred successfully on the mainland). As part of this Darwin Initiative funded project, Ascension Island Conservation Department, the University of Exeter and the RSPB recently deployed three satellite telemetry devices (manufactured by Sirtrack Ltd.) and 30 GPS logging devices on nesting frigatebirds as a pilot study to investigate the foraging behaviour of this species. It is hoped that a better understanding of their movements at sea will help us to identify areas where they may need extra protection e.g. from conflicts with fisheries. At the time of writing, the transmitters are still collecting data 61 days after deployment and are covering vast distances into international waters on their foraging trips.



The tracks can be viewed in near real time: http://www.seaturtle.org/tracking/?project_id=809



UNIVERSITY OF EXETER

Home | Contact us | Staff | Students | MyExeter | Site map |

Search

UNIVERSITY OF THE YEAR 2012-13 UNIVERSITY OF EXETER

Studying | Research | Business and community | Working here | Alumni and supporters | Our departments | Visiting us | About us

Home » Research » News and events » News archive » Live tracking of vulnerable South Atlantic seabirds

- Our research excellence
- Research Toolkit
- Research and Knowledge Transfer
- Research opportunities and careers
- News and events
  - News archive
  - Research events

Live tracking of vulnerable South Atlantic seabirds

Real-time information showing the locations of the threatened frigatebird is now available online thanks to a new Darwin Initiative funded study led by the University of Exeter and Ascension Island Government Conservation Department.

Researchers fitted satellite transmitters to several wild frigatebirds on Ascension Island and the live map of locations is now freely available to view online at www.seaturtle.org/tracking/ascension.

Live tracking data on vulnerable frigatebirds will show where they may need protection. Image courtesy of Shutterstock.

The study is part of a larger project to compile a Biodiversity Action Plan for Ascension Island. It will highlight areas used by frigatebirds, a relative of the pelican, and show where they may need protection.

The study, which uses tiny satellite transmitters - weighing less than a packet of crisps - mounted to the feathers with tape, is being carried out in collaboration with the RSPB and the University of Lund, Sweden. The data have already shown that the birds fly several hundred kilometres from Ascension Island in search of food. One of the birds has recently returned from a foraging trip of over 3800km which it covered in just 12 days.

Dr Annette Broderick from Biosciences at the University of Exeter said: "Virtually nothing is known about the way that Ascension Island frigatebirds use their habitat when out at sea. These data are already showing where they go, how far they travel and for how long they stay away from the island. It is a crucial component to an action plan that will be put in place to protect the unique flora and fauna of Ascension Island."

The frigatebird (*Fregata aquila*) is endemic to Ascension Island, a UK Overseas Territory in the South Atlantic ocean. The species is classified as Vulnerable on the IUCN Red List* as it only breeds on one small island where invasion by feral cats is a concern. Frigatebirds are primarily fish eaters and commercial fishing in the area could present an additional threat.

Dr Nicola Weber from Ascension Island Government Conservation Department said: "The Ascension Island frigatebird is one of Ascension's most iconic species and a priority for local and international conservation actions. This project has created a great deal of excitement on the island and builds on the symbolic return of the frigatebirds to the mainland earlier this year. Children from Two Boats School have named the birds, Josephine, Napoleon and Nellie and have been following their tracks closely on the internet in near real-time."

Clare Stringer Head of UK Overseas Territories Unit at the RSPB said: "A single egg is laid in the breeding season but it takes so long to raise a chick that frigatebirds cannot breed every year. With such limited nest sites, and so few chicks, it is crucial that nesting sites and foraging areas are protected. It is estimated that 90% of the UK's biodiversity is found within its Overseas Territories. The UK has a responsibility to carry out effective conservation in the Overseas Territories to protect biodiversity in these regions."

Frigatebirds are large with iridescent black feathers and long wings. Males have dramatic inflatable red-coloured throat pouches called gular pouches which they inflate to attract females during the mating season.

Notes

*The International Union for Conservation of Nature and Natural Resources (IUCN) Red List of Threatened Species™ provides taxonomic, conservation status and distribution information on plants and animals that have been globally evaluated using the IUCN Red List Categories and Criteria.

Date: 22 March 2013

Like 0 Tweet 0

Read more University News

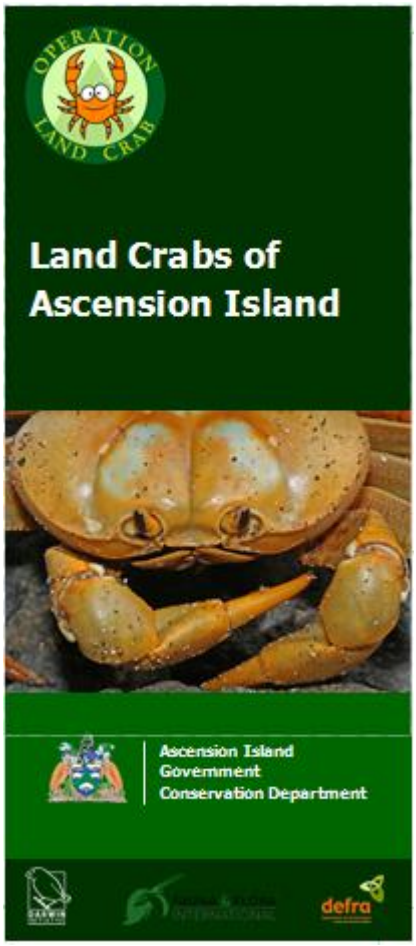
Webpage: http://www.exeter.ac.uk/news/featurednews/title_275981_en.html

Webpage: http://www.birdwatch.co.uk/channel/newsitem.asp?c=11&cate= 13853

4. **Operation Land Crab.** As part of the Darwin project we have also been awarded a £9,662 grant from Flora and Fauna International's Flagship Species fund with DEFRA to launch "Operation Land Crab". The land crab species (*Johngarthia lagostoma*) found on Ascension is endemic to a small number of South Atlantic islands, with the majority of the world population thought to occur on Ascension. As part of this project the team will 1) Map all of the land crab spawning sites 2) Estimate land crab spawning site fidelity, growth and age 3) Provide an estimate of abundance and 4) Carry out land crab related public outreach.

We have been investigating different methods for individually marking the land crabs – the number on the shell and the cable tie work in the short-term but will be lost when the crab moults, so we are also injecting them with a PIT tag, into the muscle of the left claw, which will stay with them throughout their lifetime.

Webpage link: http://www.fauna-flora.org/news/flagship-species-fund-supports-eight-conservation-icons-in-2013/



Front page of the new Land Crabs of Ascension educational leaflet.

Workshop Photographs:

Training Workshop 1 by Marcella Corcoran from the Royal Botanical Gardens, Kew (Photos: RBG Kew)
Top: Composting presentation and seed sorting
Second: Seed sowing and fern spore sowing on compost
Bottom: All workshop participants: Standing from left: Derren Fox, Vanessa Thomas, Nicola Weber, Cameron Stewart, Sam Weber, Liza White, and Jolene Sim. Sitting from left: Catherine Supple, Jess Weber (dog) Cynthia Williams, Charlie Dooley, Marcella Corcoran, Nathan Fowler, Natasha Williams, Kenickie Andrews and Tyler Benjamin

Engaging island residents in some of the plant work that is carried out on Ascension as part of the visit by Marcella from Kew Gardens.

Checklist for submission

	Check
Is the report less than 5MB? If so, please email to Darwin-Projects@ltsi.co.uk putting the project number in the Subject line.	Yes
Is your report more than 5MB? 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.	N/A
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.	Yes
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.	No
Have you involved your partners in preparation of the report and named the main contributors	Yes
Have you completed the Project Expenditure table fully?	Yes
Do not include claim forms or other communications with this report.	