

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 2011

1. Darwin Project Information

| | |
|---|---|
| Project Reference | 17-005 |
| Project Title | Darwin Marine Biodiversity Action Plan for Gabon |
| Host Country/ies | Gabon |
| UK contract holder institution | University of Exeter |
| Host country partner institutions | Ministry of Forestry, Water, Fisheries & Agriculture (MEFEP ; Fisheries Directorate) |
| Other partner institutions | Agence National des Parcs Nationaux (ANPN) Partenariat pour les Tortues Marines du Gabon (PTMG) SEATURTLE.org (ST.org) Wildlife Conservation Society (WCS) |
| Darwin Grant Value | £299,746 |
| Start/end dates of project | October 2009 – March 2012 |
| Reporting period (eg Apr 2010 – Mar 2011) and number (eg Annual Report 1, 2, 3) | 1 st April 2010 to 31 st March 2011 |
| Project Leader name | Dr Brendan J. Godley and Dr. Annette C. Broderick |
| Project website | http://www.seaturtle.org/mtrg/projects/gabon/ |
| Report authors, main contributors and date | Godley, Broderick, Collins, Formia, Rees, Witt 28 th April 2011 |

2. Project Background

Gabon has significant natural resources with potential for poverty alleviation e.g. ecotourism and sustainable fishing. Although substantial efforts have been focussed on terrestrial conservation, the country's marine biodiversity has been largely neglected, despite considerable offshore oil exploitation and increasing fishing pressure.

Key marine biodiversity includes:

Major fishing resources: these are currently exploited through a national industrial trawling fleet and concessions to international fleets. There is marked under-capacity for spatial management and assessment/mitigation of bycatch which has the potential to be significant.

Globally important marine turtle populations: the world's single largest rookery for the leatherback turtle (tens of thousands of nests annually and animals use UK waters in St Helena/ Ascension Island); also regionally important, yet under-researched, nesting of olive ridley turtles and regionally important foraging sites for green and hawksbill turtles subject to harvest.

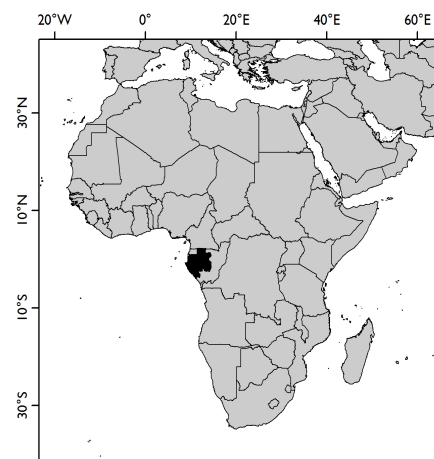


Figure 1. Gabon (filled polygon) and the African continent.

Globally important, yet understudied, marine mammal populations: species include humpback whales; Atlantic humpback dolphins and West African manatees.

There is a clear need for a national **Marine Biodiversity Action Plan** (MBAP) integrating all available information on the spatial distribution of biodiversity and threats. The MBAP will deliver: 1) increased local capacity to undertake research to further inform the development and implementation of the MBAP, and 2) increased awareness among key stakeholders and the general public as to the importance of marine biodiversity. The following document describes the year's activities of the Darwin Gabon MBAP project subsequent to the previous annual report.

3. Project Partnerships

Project partnerships: The lead in-country partner for the Gabon MBAP is The Ministry of Forestry, Water, Fisheries and Aquaculture (MEFEP; Principle Contact has been Mrs Carole Oganagas, but she has recently changed position and we await an update as to a new point of contact). The Ministry has responsibility for fisheries related aspects of the MBAP project, including work related to the fisheries vessel monitoring system (VMS) and the fisheries observer programme. The Ministry also plays a key role in liaising with other Government organisations including Agence National des Parcs Nationaux (ANPN; the CBD focal point with which we have a close working relationship), Centre National de la Recherche Scientifique et Technologique, Centre National des Données et de l'Information Océanographiques (CNDIO) and the Gabonese Navy. Further partner organisations in the Gabon MBAP include the Partnership for Marine Turtles in Gabon (PTMG), who facilitate aspects of project work concerning marine turtles (including work in Congo, Equatorial Guinea, São Tome) in addition to Seaturtle.org and the Wildlife Conservation Society (WCS), who provide logistical support for MBAP project activities in Gabon, Congo and Equatorial Guinea. Our relationship with project partners is maintained through periods of in-country field work and by an email circulation list, e-mails and telephone. During the next year further newsletters and the MBAP project website will become increasingly important for communicating the activities of the MBAP project. Formal meetings with partners are held during periods of in-country fieldwork when project staff are present.

Additional Unforeseen Collaboration: The MBAP project is now collaborating with the National School of Water and Forests (ENEF), which is the Gabonese Government training school for Water and Forestry management. ENEF are responsible for training all National Parks managers and technical advisors. This relationship was facilitated by collaboration on a Gabon MBAP work theme *i.e.* satellite tracking green turtles. Other collaborators include Aventures Sans Frontiers (ASF), a Gabonese NGO concerned with the protection of habitats and species. ASF assist with MBAP activities in Pongara National Park in the north of Gabon, primarily relating to work on sea turtles.

At the end of the second year, the partnerships are demonstrating further strength, with significant progress having been made across the board.

4. Project Progress

4.1 Progress in carrying out project activities

We continue to meet or exceed the scheduled outputs in most cases:

Output 1. Partners trained in monitoring, research and database use

1.1 Workshops

1.1.1 Additional training not in the initial project bid.

As part of marine turtle fieldwork, project staff obtained further training on in-water survey techniques, including transect-based monitoring for marine vertebrates and habitat mapping, use of handheld global positioning satellite receivers and marine turtle handling and research techniques – including collecting morphometric data, sampling genetic material, and flipper and satellite tagging. Training occurred during two periods of in-country fieldwork by UoE in Oct-Nov 2010 and Jan-Feb 2011. New processes of water quality and tide monitoring were taught, which incorporated developing field and computer skills. This training and research has resulted in a large volume of data relevant to mitigation of fisheries bycatch that will directly contribute to the MBAP.

1.1.2 Training in land based fisheries surveillance

A series of training workshops on land-based fishery surveillance was undertaken at the three national parks with marine components (Mayumba, Gamba and Pogara) focused on marine turtle monitoring staff and ANPN ecoguards.

1.1.3 International seminars and capacity building

Darwin Field Officer, Innocent Ikoubou travelled to and around Brazil for knowledge exchange and capacity building. He presented the Cap Esterias turtle project to local conservationists in four different field stations and participated in discussions on ideas/mechanisms for sustainable community based initiatives that facilitate conservation of marine species, especially sea turtles.

Part of the re-profiling of the 2009/10 budget allowed us to carry funds over to support Mr Tim Collins in marine mammal work across the study region. As well as carrying out research across the region (below), he contributed greatly to capacity building in each study location. Much of the training in each national park (including Conkouati-Douli National Park - Congo) focused on raising awareness of the Atlantic Humpback dolphin, emphasising the species rarity, its dependence on near shore, shallow water habitats (most often sighted from the beach) and the threats it faces from a range of human activities, including gillnet fishing and noise. The species appears to be suffering catastrophic declines elsewhere in West Africa and the coasts of Gabon and Congo represent a critical refuge. Training ranged from simple discussions with ANPN and MDDEFE (Ministre du Development Durable et Economie Forestiere et de l'Environnement – Congo) ecoguards in all coastal National Parks (14 in Gabon, 31 in Congo) to more complete classroom and in-field training for researchers (10 people) associated with Mayumba National Park and Conkouati-Douli National Park. These two parks comprise the Parc Transfrontaliere de Mayumba-Conkouati and the cross border effort emphasizes the routine cross-border movements of local humpback dolphin groups. In these two parks we are developing a shore-based methodology that will permit development of effort-based indices of species distribution and abundance, as well as an assessment of threats, including bycatch. During 2011-2012 we intend to extend this methodology to every coastal national park in Gabon and in combination with a focused boat-based research effort will develop a full Gabon-Congo population status assessment. This will be a critical first for the species.

1.1.4 Fisheries observer workshop

Interest in fisheries observer schemes and bycatch reduction through implementation of Turtle Excluder Devices (TEDs) remains high and the Darwin project team are in close communication with the US National Oceanic and Atmospheric Agency (NOAA) Bycatch Observer Programme (Dr Manjula Tiwari, South West Fisheries Science Centre, La Jolla, California, US) on how to maximise the efficacy of this workshop within the context of other fisheries initiatives, partly driven by the EU, which are under development within Gabon. Though the workshop was scheduled initially for winter 2010, it has now been rescheduled for autumn 2011. To support these initiatives, WWF have agreed to bolster funds from the Darwin project by 10000 Euros and the Brazilian Embassy Libreville has offered more advanced training at the national fisheries observer school in Brazil.

1.2 Darwin Graduate Trainees

The host country Darwin graduate trainee (Mr Franck Mbebe) was identified by MEFEP and released from government duties so to undertake academic study. At the request of MEFEP he began his Fisheries GIS course in France and was to be supported by the Darwin Project. This support included an offer of a placement at the University of Exeter, working on Gabon fisheries data under supervision of UK Darwin staff. Government support was subsequently sourced to support Mr Mbebe and at request of project partners, fiscal support was to be directed to Mr. Mesmin Ngabikoumou Wada of DG Peche who is now in receipt of a Darwin scholarship to cover tuition and a significant proportion of his subsistence costs for studies of Masters in Oceanography at Marseilles. This will greatly facilitate his work as an analyst of data from Vessel Monitoring Systems aboard industrial fishing vessels. An additional MSc candidate from Mayumba National Park (Quevain Makaya) has been identified and has been awarded a full fee scholarship by the University of Exeter to undertake MSc Conservation and Biodiversity. Additional support has been secured from oil companies in Gabon. Mr Makaya will undertake his MSc studies in UK beginning Oct 2011. Further, Dr Formia (WCS) and Dr McClellan (UoE) supervised a graduate-level thesis of ENEF student (Lionnel Ndoulouha), whose work focused on the satellite tracking of green turtles in Corisco Bay.

1.3 Darwin Field Officers (Gabon)

In place of the single Darwin Project Officer originally identified by the project, three field officers and a clerical assistant were continuously employed during this reporting period. These field officers received further training from UoE and WCS experts to maximise their potential, strengthen skill sets and build capacity for continuation of their conservation actions, post-project.

1.4 Conference attendance by Darwin staff

As anticipated project staff participated in the International Sea Turtle Symposium in April 2010 that was held in Goa, India. Darwin Research Fellow, Matthew Witt presented data on offshore density estimation of leatherback sea turtles during the leatherback breeding season, contributed to a workshop on satellite telemetry techniques for marine turtles and additionally participated in the African Regional Meeting

A presentation on Gabon-Congo Atlantic Humpback dolphins was made by Mr Tim Collins at the 62nd International Whaling Commission meeting in Agadir, June 2010. The presentation will be edited for publication in a peer reviewed journal. Dr B Godley (Darwin PI) has presented three seminars on Darwin Project work at Universities of Aberdeen, Bristol and Kent in the UK.

Although within the next reporting period, several staff associated with the Darwin project attended the International Sea Turtle Symposium (April 2010) held in San Diego, USA. Darwin field officer (Chacho Villarubia) and project collaborators (Dr Catherine McClellan & Dr Angela Formia) presented data on the green turtle satellite tracking project from Corisco Bay and delivered an overview of the research undertaken by the project to date. These presentations were made in the context of the international Symposium and at the African Regional Meeting.

Output 2. Increased knowledge of the marine biodiversity to inform decision makers

2.1 Geographic Information System (GIS) database

Data are continuously being added to spatial information layers, these include: aerial survey counts of marine turtle nesting events at a 500 m long-shore resolution. Georeferenced positions of marine turtle nesting events gathered over several years of intense night-time monitoring conducted at dedicated monitoring locations, bathymetric data and monthly layers of sea surface temperature and chlorophyll concentration. A significant development has been made in the development of one information layer *i.e.* log counts along the coast, quantified from extensive aerial and ground surveys to 500 m resolution has been made during the reporting period. This is an important data layer as the presence of logs on the coast can adversely affect marine turtle nesting and nest success through blocking access to the beach / sea and creating local instability in beach the platform. Furthermore, log deposition along the Gabon coastline is likely to impact along-shore accretion and deposition of sand, thereby altering beach width dynamics.

2.2 VMS data analysis

Additional training was provided to MEFEP/DG Peche staff in the analysis of data collected by the Gabon VMS system. Staff are well versed and competent in the analysis of these data. To accelerate the use of these data, Darwin staff will provide preliminary analysis of all VMS data collected since 2009 to DG Peche. This analysis is currently underway and will be delivered to DG Peche by May-end 2011.

2.3 Fisheries observer programme

As a result of additional support from the National Oceanographic and Atmospheric Administration (NOAA) of the US Government, a much larger scale marine observer training programme is planned. This collaboration results from the lack of capacity for any kind of fishery observer work, not just marine vertebrate bycatch as the project had initially envisioned. The workshop, originally scheduled for autumn 2010, has been rescheduled for autumn 2011 to allow further resources to be confirmed. DG Peche is seeking to implement the use of TEDs for trawlers in Gabon's Exclusive Economic Zone. Training and implementation for this conservation measure is in close accord with the onboard observer programme envisaged by this project and hence we are seeking to link the two initiatives in collaboration with NOAA.

2.4 Marine vertebrate monitoring

2.4.1 Marine turtles

Further fieldwork was carried out by Darwin Field Officers and UoE staff in Oct-Nov 2010 and Jan-Feb 2011. These expeditions to Corisco Bay and Akanda National Park enabled deployment of further satellite tags on juvenile green turtles, together with tissue sampling for genetic analysis. Satellite tags were deployed in both Gabonese and Equatorial Guinea regions of the Bay as well as deep in the mangrove system of Akanda National Park, where turtles have only recently been shown to exist. Tracking the movements of these turtles through the area, which is under pressure from diverse fisheries activities including directed take, will help identify hotspots for protection measures and highlight marine turtles as a shared resource.

The Darwin field officers have been undertaking dock-side monitoring of marine turtle captures, including the collection of genetic samples as planned and thanks to their training in in-water marine turtle capture and ecological surveying techniques for marine vertebrates they have been able to satellite tag an additional green turtle.

A Gabonese graduate student was able to learn from UoE staff through training in field techniques (Jan-Feb 2010) and through support given on spatial analysis of data derived from the green turtle satellite tracking study.

Additionally, data collected on turtle nesting activity and log abundance along the coast, collected late in the previous reporting period, have been verified and added to the GIS geodatabase during this reporting period.

2.4.2 Marine mammals

Following the initial aerial survey to identify the spatio-temporal distribution of marine mammals in the Gabon coastal zone, further surveying work was initiated in October 2010 and continues to present. To improve detectability in the low clarity near-shore waters boat surveying has undertaken. Large stretches of the Gabonese coastal zone have been surveyed for the presence of marine mammals with stakeholders and local residents in different areas questioned on their knowledge on the presence of these animals.

Surveying has additionally been undertaken along the contiguous coast belonging to Congo, thus generating a more regionally relevant and extensive dataset to be incorporated in the biodiversity theme of the MBAP.

During 2010, all four of the coastal national parks in Gabon were surveyed in addition to Conkouati-Douli National Park in the Republic of the Congo. Surveys indicate that humpback dolphins are routinely found in southern Gabon (Loango and Mayumba National Parks) and Congo but a complete lack of sightings for the northern parks of Akanda and Pongara is troubling. Repeat surveys are planned for 2011 to reinforce findings from the surveys undertaken in this reporting period.

2.5 Scientific papers

A further four peer-reviewed research papers acknowledging Darwin support, which contain project derived or MBAP relevant data, have been published during the reporting period, thus meeting the projects planned outputs a year early. See Table 2 in section 4.3 for details. Work has been initiated on a further 3 papers which therefore exceeds expectations and reflects the quantity and quality of new data generated by the project.

2.6 Darwin conference

This will be a focus of efforts in year 3 as the projects findings mature.

2.7 Marine Biodiversity Action Plan

All current work is focussed on underpinning the drafting of this MBAP.

Output 3. Increased awareness of the marine environment

3.1 Website

The Gabon MBAP website has been expanded to contain all project relevant publications, Darwin newsletters and the planned image library. Additionally, selected press articles relating to the project are linked in the site. Species distribution maps will be made available en masse when the results from the next round of marine mammal surveying are analysed.

3.2 Newsletters

The first Darwin newsletter has been published and distributed in Gabon in French and is available to download in French and English from the project website. A second newsletter has been finalised in English and French and will be published in May 2011. Articles for the third-of-four newsletters are already being sourced. There was some initial delay in newsletter production, but we are now on target for publication dates and are fully confident that the planned number of newsletters will be produced within the agreed project timeframe.

3.3 Press releases in Gabon and UK

One major press release was issued within the reporting period, which featured “Turtle day” activities in Cap Esterias, Gabon. This day involved raising awareness of the plight of sea turtles to local and national residents. The activities were reported in the national press (*Gabon Matin*) and national TV.

Further publicity and awareness raising took place through TV features following the September seminar and the release of a satellite tag equipped green sea turtle in November. The Seminar also led to interviews on national radio and an article in national newspaper.

Significant media activity in the UK and internationally came from a major publication on leatherback tracking from Gabon. Four radio interviews, four TV interviews (BBC World News, Al Jazeera, ITN and BBC South West) at least 4 national press features (The Guardian, The Times, Daily Telegraph, Daily Mail) and an article on the BBC News website appeared in the UK with international publicity promoted through articles in Canadian (The Globe & Mail), French (L'Union) and Italian (la Repubblica) newspapers and the Al Jazeera news website.

3.4 Darwin seminars for key stakeholders

During this mid period of the project we focussed on data generation and collaboration building to great effect. The final year of the project will contain more reporting/disseminating events.

3.5 Host country Seminars

During September 2010 a seminar covering aspects of the DI project took place in Libreville. The event was attended by a wide audience including authorities, stakeholders, partners and the general public.

DI project results were presented at the Environment Day meeting held at the ENEF facility in Cap Esterias in June 2010. Additionally, at two marine turtle training workshops, held in October and November presented and discussed findings from the DI project.

3.6 Additional awareness raising activities

Integral to each in-country visit of UK specialists was the openness and capacity to communicate with local stakeholders to explain the value of Gabon's marine resources and the necessity to properly manage them. Time was taken to speak with coastal inhabitants and fishers to gauge their understanding of the status of marine resources and put the case for sustainable conservation measures.

Local authorities in the Cap Esterias region of Gabon and Corisco/Bata region of Equatorial Guinea were kept fully updated on the results of green turtle tracking in Corisco Bay (shared by both nations) through regular reporting.

Output 4. Project monitoring

4.1 Reporting

Up to date information is included in this report which builds on the successful submission of previous full Y1 and HY1 reports. We believe off-reporting communication between DI and UoE has been beneficial for the project allowing project finances to be effectively utilised where opportunities for improvement over the original work-plan have arisen.

4.2 Steering group meetings

Project leader Dr Godley made a field visit in May 2010 and carried out successful meetings with all project partners and other additional parties that facilitated smooth progress within the agreed work plan.

4.3 Progress towards project outputs

Building on a very productive 18 months of the project we are well on our way towards all target output metrics. We have additionally been able to provide academic training to one undergraduate and one graduate student that were not predicted in the original standard measures assessment.

The only significant deviation from the plan comes from delaying the Bycatch monitoring workshop from late 2010 to late 2011. The delay was decided in order to maximise the scope of the training made available while focussing the actual planned activities to those most needed and requested by host country partners. It will not impact any other aspect of the project timetable. Thus, the programme that was initially envisioned has expanded and enhanced capacity building with legacy support is expected.

4.4 Standard measures

We are making excellent progress towards our outputs. Indeed, with only two years of the project completed, we are already at or exceeding total counts in 20 of the 30 standard output measures, of which 5 are additional to those in the project bid (highlighted in bold).

Table 1. Project standard output measures

| Code No. | Description | Year 1 Total | Year 2 Total | Year 3 Target | Total to date | Number planned for this reporting period | Total planned |
|-----------|---|--------------|--------------|---------------|---------------|--|---------------|
| 2 | Number of people to attain Masters qualification (MSc, MPhil etc) | 0 | 0 | 1 | 0 | 1 | 1 |
| 4A | Number of undergraduate students to receive training | 1 | 0 | 0 | 1 | 0 | 0 |
| 4B | Number of training weeks to be provided | 2 | 0 | 0 | 2 | 0 | 0 |
| 4C | Number of postgraduate students to receive training | 0 | 1 | 0 | 1 | 0 | 0 |
| 4D | Number of training weeks to be provided | 0 | 4 | 0 | 4 | 0 | 0 |
| 6A | Number of people to receive other forms of education/training (which does not fall into categories 1-5 above) | 11 | 29 | 10 | 0 | 8 | 20 |
| 6B | Number of training weeks to be provided | 11 | 23 | 10 | 34 | 15 | 40 |

| Code No. | Description | Year 1 Total | Year 2 Total | Year 3 Target | Total to date | Number planned for this reporting period | Total planned |
|----------|---|--------------|--------------|---------------|---------------|--|---------------|
| 7 | Number of (i.e. different types - not volume - of material produced) training materials to be produced for use by host country (manuals, datasheets, PowerPoint's) | 2 | 1 | 0 | 3 | 1 | 3 |
| 8 | Number of weeks to be spent by UK project staff on project work in the host country | 10 | 21 | 5 | 31 | 12 | 26 |
| 9 | Number of species/habitat management plans (or action plans) to be produced for Governments, public authorities, or other implementing agencies in the host country | 0 | 0 | 1 | 0 | 0 | 1 |
| 11A | Number of papers to be published in peer reviewed journals | 1 | 4 | 2 | 5 | 3 | 4 |
| 11B | Number of papers to be submitted to peer reviewed journals | 2 | 4 | 2 | 6 | 2 | 4 |
| 12A | Number of computer based databases to be established and handed over to host country | 3 | 7 | 0 | 10 | 0 | 3 |
| 12B | Number of computer based databases to be enhanced and handed over to host country | 1 | 3 | 0 | 4 | 2 | 3 |
| 14A | Number of conferences/seminars/workshops to be organised to present/disseminate findings | 0 | 3 | 2 | 3 | 2 | 2 |
| 14B | Number of conferences/seminars/workshops attended at which findings from Darwin project work will be presented/ disseminated. | 1 | 6 | 3 | 7 | 1 | 2 |
| 15A | Number of national press releases in host country(ies) | 3 | 1 | 1 | 4 | 1 | 5 |
| 15C | Number of national press releases in UK | 1 | 1 | 0 | 2 | 1 | 2 |
| 15D | Number of local press releases in UK | 1 | 1 | 0 | 2 | 1 | 2 |
| 16A | Number of newsletters to be produced | 0 | 1 | 2 | 1 | 2 | 4 |
| 16B | Estimated circulation of each newsletter in the host country(ies) | 0 | 1000 | 1000 | 1000 | 1000 | 1000 |
| 16C | Estimated circulation of each newsletter in the UK | 0 | 250 | 250 | 250 | 250 | 250 |
| 17A | Number of dissemination networks to be established | 1 | 0 | 0 | 1 | 0 | 1 |
| 18A | Number of national TV programmes / features in host country(ies) | 1 | 3 | 1 | 4 | 0 | 2 |
| 18B | Number of National TV programmes / features in UK | 0 | 2 | 0 | 2 | 0 | 0 |

| Code No. | Description | Year 1 Total | Year 2 Total | Year 3 Target | Total to date | Number planned for this reporting period | Total planned |
|------------------------------|--|--------------|--------------|---------------|---------------|--|---------------|
| 19A | Number of national radio interviews/features in host county(ies) | 1 | 1 | 0 | 2 | 0 | 2 |
| 19D | Number of local radio interviews / features in UK | 1 | 3 | 0 | 4 | 0 | 1 |
| 20 | Estimated value (£'s) of physical assets to be handed over to host country(ies) | £31,000 | £28,750 | £2000 | £59,750 | £20,000 | £61,519 |
| 22 | Number of permanent field plots to be established during the project and continued after Darwin funding has ceased | >100 | 0 | 0 | >100 | 0 | 100 |
| 23 | Value of resources raised from other sources (i.e. in addition to Darwin funding) for project work | £103,547 | £216,417 | £100,000 | £319,964 | £132,970 | £313,543 |
| New Project specific measure | Press Outputs (Print/Internet) | 16 | 17 | 0 | 33 | 0 | 0 |

Table 2. Publications

| Type (journal, manual, CDs) | Detail (title, author, year) | Publishers (name, city) | Available from (contact address, website) | Cost £ |
|-----------------------------|---|-------------------------|---|--------|
| Journal | Godley BJ, Barbosa C, Bruford M, Broderick AC, Catry P, Coyne MS, Formia, Hays GC, Witt MJ (2010) Unravelling migratory connectivity in marine turtles using multiple methods. <i>Journal of Applied Ecology</i> 47: 769–778 | Wiley | Project Website Publisher's website | N/A |
| Journal | Tomás J, Godley BJ, Castroviejo J, Raga JA (2010) Bioko: critically important nesting habitat for sea turtles of West Africa. <i>Biodiversity and Conservation</i> . 19:2699–2714 | Springer | Project Website Publisher's website | N/A |
| Journal | Witt MJ, Åkesson S, Broderick AC, Coyne MS, Ellick J, Formia A, Hays GC, Luschi P, Stroud S, Godley BJ (2010) Assessing accuracy and utility of satellite tracking data using Argos-linked Fastloc GPS. <i>Animal Behaviour</i> 80: 571-581 | Elsevier | Project Website Publisher's website | N/A |
| Journal | Witt MJ, Eric Augowet Bonguno, Annette C. Broderick, Michael S. Coyne, Angela Formia, Gil Avery Mounquengui Mounquengui, Carine Moussounda, Monique NSafou Solange Nougessono, Richard J. Parnell, Guy-Philippe Sounguet, Sebastian Verhage and Brendan J. Godley (2011) Tracking leatherback turtles from the world's largest rookery: assessing threats across the South Atlantic. <i>Proceedings of the Royal Society B</i> :10 (online) | Royal Society | Project Website Publisher's website | N/A |

4.5 Progress towards the project purpose and outcomes

We feel as we have passed the mid-point of the project that we are making strong progress towards stated purposes and outcomes.

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

It is too early to assess the full impact of the project. Important impacts on biodiversity that will influence the sustainable use of biodiversity benefits are, however, at the core of the project.

5. Monitoring, evaluation and lessons

As articulated in the main bid, the progress of the project against key milestones and indicators is appraised by a Steering Group made up of partner organisation that meets bi-annually.

There is also regular communication among project partners, facilitated by an e-mail listserv and the field presence of the key Darwin Staff in Gabon. The key indicators show the progress of the project as catalysed by the launch of several ongoing initiatives. All of these are clearly articulated and time stamped. To date, all but Fishery Observer Programme are underway, with this initiative well into the planning phase.

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

No response required

7. Other comments on progress not covered elsewhere

We do not foresee any major additional risks.

8. Sustainability

As detailed above, the project has made considerable inroads to creating a profile in-country. There is strong buy-in from partners for the project, demonstrated by the number of initiatives we have been able to get off the ground. The exit strategy will be the formulation of a spatially explicit marine biodiversity action plan which will act as a roadmap for further action in the seas of Gabon and its closest neighbours with which it shares so many biological resources. There is a stable endpoint in that capacity and awareness will have been raised to an all-time high with the launch of the marine BAP. Sustainability will depend on the ongoing commitment of the organisations that currently make up the consortium. This is highly likely given the sustained efforts made by all organisations to date. There will be considerable legacy aspects to this project including a marine biodiversity atlas/GIS database.

9. Dissemination

Dissemination efforts have been targeted at key stakeholders in government and business during the launch period of the project although media activity will have widened the impact. In the forthcoming year we plan to further expand web, media and newsletter activity to increase the profile of the project. We are confident that at least some of the dissemination activities, as needed, will be carried on by in country partners as part of their ongoing work towards the management plan.

10. Project Expenditure

Table 3. Project expenditure during the reporting period (1 April 2010 – 31 March 2011)

| Item | Budget (please indicate which document you refer to if other than your project application or annual grant offer letter) Following carried forward request for 2010/11 Forecasting Exercise | Expenditure | Variance/ Comments |
|--|---|--------------------|---------------------------|
| Staff costs specified by individual | | | |
| Overhead costs | | | |
| Travel and subsistence | | | |
| Operating costs | | | |
| Capital items/equipment (specify) | | | |
| Others: Consultancy | | | |
| Others (please specify) Printing & Genetics | | | |
| TOTAL | | | |

At the time of reporting, University of Exeter Finance Department are still completing the full financial report and the numbers above may be subject to minor changes before the official claim at the end of May.

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

The outstanding achievement of the project this year was the progress towards research objectives. The publication of a paper in Proceedings of the Royal Society B with associated international media coverage was a particular high point.

Photos of the project are available from <http://www.seaturtle.org/imagelib/?cat=695&thumb=1>

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Annex 1. Report of progress and achievements against Logical Framework for Financial Year 2010-2011

| Project summary | Measurable Indicators | Progress and Achievements April 2010 - March 2011 | Actions required/planned for next period |
|---|--|---|---|
| <p>Goal: <i>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</i></p> <ul style="list-style-type: none"> ⇒ 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 | <p>Marine Biodiversity Action Plan (MBAP) effectively enacted.</p> | <p>Significant progress made on all three major fronts of the project:</p> <ol style="list-style-type: none"> 1. Research 2. Capacity Building 3. Awareness raising | |
| <p>Purpose Improved national and local capabilities applied to the sustainable and equitable management of marine biodiversity of Gabon</p> | <p>Training workshops</p> <p>Training of Darwin Conservation Officer and other local partners</p> <p>Training of Darwin Graduate Trainee to MSc</p> <p>Darwin Staff to international conferences</p> | <p>Research and training /capacity building progressing well, leading to strong buy-in from local agencies</p> | <p>Fisheries observer programme</p> <p>Additional research outputs</p> <p>Darwin Conference</p> <p>MBAP creation and handover</p> |
| <p>Output 1. Partners trained in monitoring, research and database use</p> | | <p>General progress has been positive and indicators are appropriate</p> | |
| <p>Activity 1.1 Workshops (1. Visioning; 2. GIS/VMS; 3. Fisheries Observer; 4. Inwater Monitoring; 5. Action Planning; Dates per workplan)</p> | | <p>Further training on GIS/VMS and Inwater monitoring given together with extensive training in nearshore marine mammal surveying. Fisheries observer workshop rescheduled for Autumn 2011 to maximise scope and utility.</p> | |
| <p>Activity 1.2 Darwin Graduate Trainee identified</p> | | <p>Two candidates have been identified and released for MSc level studies.</p> | |
| <p>Activity 1.3 Darwin Project Officer identified</p> | | <p>A number of local people continue to be employed in key roles in the project.</p> | |

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| Activity 1.4 Conference attendance Darwin staff | Project relevant data were presented in two major international fora and at additional UK regional meetings. | |
| Output 2. Increased knowledge of the marine biodiversity of Gabon to inform decision makers | GIS Database Marine Biodiversity Action Plan Species and habitat maps Darwin conference; Scientific Papers | Progress generally meeting expectations and final outputs from this section remain strong indicators of project success and create a framework for legacy. |
| 2.1 GIS database established | | Created and updated with several biological and environmental data layers |
| 2.2 VMS data under analysis | | Analysis and feedback continues at appropriate rate |
| 2.3 Fisheries observer programme underway | | Now planned for Autumn 2011 |
| 2.3 Marine Vertebrate monitoring underway | | Underway. Extending to Congo and Equatorial Guinea to provide regional context of results |
| 2.4 Scientific papers | | Underway. Five papers now published with further papers in preparation. |
| 2.5 Darwin conference | | Planned as per project schedule. |
| Output 3. Increased awareness of the marine environment | Website; newsletters; press releases; Workshops; Darwin conference | Progress generally good and indicators appropriate |
| 3.1 Website established | | Yes and updated with relevant information, documents and links. |
| 3.2 Production of Darwin Newsletters | | Newsletter 2 will be published in May 2011 bringing us on schedule. |
| 3.3 Press releases in Gabon and UK | | 1 in Gabon, 1 in UK, both successful. The UK release received extensive international attention as well as coverage in all major UK newspapers. |
| 3.4 Darwin Seminars for key stakeholders | | Planned for future |
| Output 4. Project monitoring | Darwin reporting Steering group meetings | Progress generally good and indicators appropriate |
| 4.1 Darwin reporting | | Effectively draws strands of project together for appraisal |
| 4.2 Steering Group meetings | | Excellent periodic format for project review |

Annex 2. Project's full current logframe

| Project summary | Measurable Indicators | Means of verification | Important Assumptions |
|---|--|--|---|
| <p>Goal:</p> <p>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.</p> | | | |
| <p>Sub-Goal:</p> <p>The marine biodiversity of Gabon is well conserved for future sustainable use.</p> | <p>Fisheries observer programmes show reduced levels of marine vertebrate bycatch</p> <p>Marine fisheries effectively managed and illegal fisheries excluded from marine protected areas.</p> <p>Increasing populations of key marine taxa</p> | <p>Data from Ministry of Forestry, Water and Fisheries (MFWF)</p> <p>Surveillance by Gabonese Navy and National Parks, VMS data</p> <p>Data from governmental and non-governmental monitoring programmes</p> | |
| <p>Purpose</p> <p>Improved national and local capabilities applied to the sustainable and equitable management of marine biodiversity of Gabon</p> | <p>Marine Biodiversity Action Plan effectively enacted.</p> | <p>Monitoring continued.</p> <p>Reports and publications by partner organisations</p> | <p>Central African Partner organisations incorporate new knowledge into future strategies and workplans.</p> <p>Continued political stability</p> |
| <p>Outputs</p> <p>1. Partners trained in monitoring, research and database use</p> | <p>Training workshops</p> <p>Training of Darwin Conservation Officer and other local partners</p> <p>Training of Darwin Graduate Trainee to MSc</p> <p>Darwin Staff to international conferences</p> | <p>Workshop Reports</p> <p>Functioning fisheries observer programme and bycatch data</p> <p>MSc thesis</p> | <p>Trained individuals remain in employment by partner organisations.</p> |

| | | | |
|--|--|---|----------------------------------|
| 2. Increased knowledge of the marine biodiversity of Gabon to inform decision makers | GIS Database Marine Biodiversity Action Plan Species and habitat maps Darwin conference; Scientific Papers | Outputs provided to Darwin; included on project website and reports | Partners provide and share data. |
| 3. Increased awareness of the marine environment | Website; newsletters; press releases; Workshops; Darwin conference | Web hits Circulation of Darwin Newsletter Media Items Conference outputs | |
| 4. Project monitoring | Darwin reporting Steering group meetings | Reports to Darwin Initiative Minutes of meetings | |

Activities (details in workplan)

1.1 Workshops (1. Visioning; 2. GIS/VMS; 3. Fisheries Observer; 4. Inwater Monitoring; 5. Action Planning; Dates per workplan)

1.2 Darwin Graduate Trainee identified

1.3 Darwin Project Officer identified

1.4 Conference attendance Darwin staff

2.1 GIS database established

2.2 VMS data under analysis

2.3 Fisheries observer programme underway

2.3 Marine Vertebrate monitoring underway

2.4 Scientific papers

2.5 Darwin conference

2.6 Marine Biodiversity Action Plan

3.1 Website established

3.2 Production of Darwin Newsletters

3.3 Press releases in Gabon and UK

3.3 Darwin Seminars for key stakeholders

3.4 Darwin Conference

4.1 Darwin reporting

4.2 Steering Group meetings

Monitoring activities:

Indicator 1 – Minutes from 6-monthly Steering Committee meetings

Indicator 2 – Maps of fishing effort

Indicator 3 – Fisheries observer programme underway

Indicator 4 - New marine vertebrate monitoring underway

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

Please note that a range of project outputs are available to browse on the project website

Page is <http://www.seaturtle.org/mtrg/projects/gabon/outputs.shtml>

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. | No |
| 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. | Online |
| 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. | |