

Darwin Initiative Main Project Annual Report

Important note: *To be completed with reference to the Reporting Guidance Notes for Project Leaders:
it is expected that this report will be about 10 pages in length, excluding annexes*

Submission Deadline: 30 April

Darwin Project Information

Project Reference	20009
Project Title	Delivering an MPA network for fisheries and biodiversity for Central Africa (Republic of Congo & Gabon)
Host Country/ies	Republic of Congo & Gabon
Contract Holder Institution	University of Exeter (UoE)
Partner institutions	Conkouati-Douli National Park, Congo (CDNP) Ministry of Forest Economy and Sustainable Development (MEFDD) Wildlife Conservation Society, Congo Programme (WCS-RoC) Agence National des Parcs Nationaux, Gabon (ANPN) Partenariat pour les Tortues Marines du Gabon (PTMG) Wildlife Conservation Society, Gabon Programme (WCS-GAB)
Darwin Grant Value	£294,226
Funder (DFID/Defra)	DFID/DEFRA
Start/end dates of project	April 2013 – October 2015 (30 months)
Reporting period (e.g., Apr 2015 – Mar 2016) and number (e.g., Annual Report 1, 2, 3)	April 2014 – March 2015: Annual Report 2
Project Leader name	Prof. Brendan J. Godley and Dr. Matthew Witt
Project website/blog/Twitter	http://darwininitiativecentralafrica.wordpress.com/ http://www.seaturtle.org/tracking/?project_id=924 http://www.seaturtle.org/tracking/index.shtml?project_id=1047
Report author(s) and date	Prof. Brendan J. Godley, Dr Kristian Metcalfe, and Dr Matthew J. Witt – 27 th April 2015

1. Project Rationale

The Republic of Congo and Gabon have significant natural resources with potential for poverty alleviation. However, whilst substantial efforts have been focused on land, the marine realm has often been neglected. This project thus aims to improve the management of marine resources, promote sustainable livelihoods and the conservation of marine vertebrates (many covered by **CITES** and **CMS**), for which the region is globally important. This project has four key themes designed to help address these priorities: (i) capacity building and training to improve and develop the existing knowledge and

skills base in country; (ii) characterising small-scale artisanal fisheries due to its essential role in food security, employment, and their potential role in poverty alleviation; (iii) marine biodiversity monitoring and surveys to improve knowledge on distribution of species and status; and (iv) marine spatial planning. More specifically, the overall aim of the project is to increase awareness among stakeholders to the importance of marine biodiversity and sustainable fisheries in the region; and support the development of a scientifically evidenced, representative MPA network that meets national and international conservation targets, whilst minimising impacts on competing sectors. In particular, this project has a strong focus on maintaining access to important fishing areas, improving profitability, sustainability and resource management to conserve and augment biodiversity and artisanal fisher livelihoods.

2. Project Partnerships

At the end of the second year, the partnerships are demonstrably strong, with significant progress having been made in collecting relevant data to help meet the overall project goal. The Darwin Research Fellow (**DRF**) Kristian Metcalfe has continued to spend a significant proportion of time in country (*Gabon: September - October 2014; Republic of Congo: April - May 2014, November - December 2014*) and so has maintained an excellent working relationship with project partners through his extensive presence. During periods where the **DRF** have not been present in-country the relationship with project partners has been maintained through conference calls, meetings in the UK and email circulation lists.

In the Republic of Congo the partner organisations are the Ministry of Forest Economy and Sustainable Development (**MEFDD**) who facilitate all aspects of project work inside National Parks, Conkouati-Douli National Park (**CDNP**) and Natural Resource Management Committee (**COGEREN**) a stakeholder group inside **CDNP** where the **DRF** is based, and the Wildlife Conservation Society, Congo Country Program (**WCS-RoC**) who provide logistical and field support for project activities in-country.

Additional Relationships: Several recent meetings during the second year highlighted the need to increase the awareness and protection of marine species in the Republic of Congo. Therefore, in November 2014 the **DRF** and partners from **WCS-RoC**, **CDNP**, **WCS-GAB** and **MEFDD** met with Naftali Honig the in country coordinator of the Project for the Application of Law for Fauna Republic of Congo (**PALF**) an organisation dedicated to improving legal protection, law enforcement and reducing corruption. This meeting primarily focused on establishing the requirements to have a species listed and how to improve awareness regarding marine park boundaries and artisanal fishing zones to reduce pressure from illegal, unreported and unregulated fisheries.

In Gabon the partner organisations are the Agence National des Parcs Nationaux (**ANPN**), Partenariat pour les Tortues Marines du Gabon (**PTMG**) and the Wildlife Conservation Society, Gabon Country Program (**WCS-GAB**) who facilitate all aspects of project work and provide logistical support for project activities in-country. During the reporting year there has been a new Congo Basin Coast (**CBC**) coordinator at **WCS-GAB** who has been drafted in to manage the marine program (Dr Hugo Rainey) initial meetings were held with the **DRF** in July 2014 (London) and with the **DRF** and Project leader Professor Brendan Godley (**UoE**) in October 2014 (Gabon) to discuss the project goals and objectives for the reporting year.

Additional Relationships: Recent in-country field work has built further on relationships established with a number of local organisations that promote biodiversity conservation in-country. These include Aventures sans Frontières (**ASF**), **FONDATION LIAMBISSI**, **IBONGA** and World Wide Fund for Nature, Gabon Programme (**WWF-GAB**) who have provided invaluable field and logistical support for field and boat based surveys.

3. Project Progress

3.1 Progress in carrying out project activities

Output 1. Increasing marine protected area coverage

Activity 1.1 Training of local partners:

To augment field data collection project partners **PTMG** in collaboration with **ASF**, **WCS-GAB** hosted 5 marine turtle training workshops in FY2 (with a total of ~110 trainees attending). This represents an increase in the number of workshops previously held (3 workshops and ~75 trainees in FY1) and reflects the increasing number of organisations and staff now involved in sea turtle monitoring in Gabon. The **DRF** also attended one of the training workshops in Mayumba National Park the location of two of the longest monitored nesting beaches in Gabon. Here the **DRF** reported on recent satellite tracking of leatherback and olive ridleys tagged in Gabon, and summarised the key findings of the recent coastal transect that was conducted in FY1. More information regarding the workshops can be found on the dedicated [website](#). In addition, Dr Angela Formia (**PTMG/WCS-GAB**) visited the Republic of Congo for 1 week in November 2014. The primary aim of which was to: (i) visit the 6 nesting beaches in **CDNP**; (ii) review the level and quality of existing training; (iii) assess the 12 years of monitoring data collected by staff from **CDNP**, **MEFDD** and **WCS-RoC**; and (iv) identify data gaps to ensure consistency of data in the neighbouring host countries.

Activity 1.2 Field data collection and data analysis:

The coastal survey conducted along 585 km of Gabon's coast in FY1 highlighted several important nesting locations for olive ridley sea turtles that were previously unidentified. Thus, to address knowledge gaps of at sea movements and better inform fisheries management and petro-chemical exploration activities 6 satellite tags were attached to female nesting olive ridley sea turtles at four further nesting beaches in Gabon (Port-Gentil, Ozori, Omboué and Shell beach in Gamba). This takes the total number of tags deployed during the project to 16. As with previous deployments these were undertaken by local field staff from **FONDATION LIAMBISSI** (3), **WWF-GAB** (5) and **IBONGA** (3) with assistance provided by the **DRF** the project leader Professor Brendan Godley (**UoE**) and Dr Sara Maxwell (**Stanford University**). These deployments further enhanced the theory based training provided by **ASF** and **PTMG** and complement existing data layers on at sea movements and threats for leatherback sea turtles completed by Dr Matthew J Witt and PhD student Stephen Pikesley (**UoE**). More information regarding the deployment of these tags can be found on the dedicated [website](#) and [seaturtle.org](#).

Analysis of the coastal survey in combination with 7 years of monitoring data collected by **PTMG** has also revealed that Gabon hosts one of the most important olive ridley sea turtle rookeries in the Atlantic with nesting effort spanning almost the entirety of the coast. These findings are important as previous Red List assessments have often excluded these nesting populations from the status assessments due to a lack of available spatial and temporal data (olive ridleys in the eastern Atlantic are currently classified as Data Deficient). These findings were subsequently submitted to *Biological Conservation* in January 2015 and were accepted for publication in March 2015 (pending minor corrections). Please see [Annexe 4](#) for more information regarding the initial submission.

Activity 1.3 Awareness raising:

To help meet our project goals and outcomes, in particular to promote awareness of marine biodiversity in Central Africa there is a dedicated project [website](#) that is designed to inform the wider public of the project and keep project partners up to date (in French and English). This website also contains updates from the field including recent findings and announcements. For more detailed information on the website please see [Section 12](#). The **DRF** has also reported recent findings associated with field based

surveys in the popular science magazine *BioSphere*. Please see [Annexe 4](#) for more information regarding this article.

Activity 1.4 Assembling Darwin Marine Biodiversity Atlases:

Development of the Darwin Marine Biodiversity Atlas for Gabon commenced in FY1 (earlier than expected as detailed in the Annual Report from FY1). The final product was completed in FY2 (> 100 data layers) and was used to help inform marine spatial planning in Gabon (see [Activity 1.5](#)). The Darwin Marine Biodiversity Atlas for the Republic of Congo was completed in FY2 (> 100 data layers, baseline is zero) with dissemination scheduled beyond existing project partners in FY3. Please note these Atlases will be updated until the project closes to ensure the latest data is handed over to the relevant Government organisations. Please see [Annexe 4](#) for more information regarding an example of *Darwin Marine Biodiversity Atlas from the Republic of Congo*.

Activity 1.5 Marine spatial planning:

Marine spatial planning exercises in Gabon involved several partners but were primarily led by **WCS-GAB** and the inter-ministerial commission **Gabon Bleu** (which hosted the **DRF** for 4 weeks in FY1). The data developed as part of this and the previous Darwin Project in Gabon were incorporated into a number of spatial analyses undertaken in FY2, which contributed to the identification of a candidate set of MPAs. These data were then used to inform the delineation of the boundaries of the resulting ten marine National Parks being that were announced in November 2014 at the IUCN World Parks Congress in Sydney, Australia by The President of Gabon. Please see [Section 3.3](#) for more details regarding this announcement.

Activity 1.7 Peer reviewed paper:

Field work and long-term sea turtle monitoring data has resulted in a publication (pending minor corrections) that highlights how Gabon hosts one of the most important olive ridley sea turtle rookeries in the Atlantic. Please see [Activity 1.2](#) for more details regarding the importance of these findings.

Output 2. Improved understanding of small-scale artisanal fisheries

Activity 2.1 Engagement:

Engagement with artisanal fisheries has far exceeded planned project targets (4 focal communities) for the number of fishers and sites engaged in Gabon and the Republic of Congo. For example, the project has engaged in participatory research with 49 fishers at 23 of the 26 (88%) artisanal fishing sites in the Republic of Congo and at 20 of the 62 (32%) of sites in Gabon. Baseline socio-economic data has been gathered from 18 sites in the Republic of Congo and 5 sites in Gabon, with information on perceived and current threats to livelihoods identified through these rapid assessments in each of these communities.

Activity 2.2 & 2.3 Training and Field data collection:

Field/boat and aerial surveys completed in FY2 in Gabon and the Republic of Congo have provided up-to-date estimates on the number of artisanal fishing boats operating from 100% of landing sites (total number of boats in Gabon = 1,831 and Republic of Congo = 364 boats). In addition, the operating behaviour and spatial distribution of small-scale artisanal fisheries in the Republic of Congo has been quantified using GPS trackers deployed from 88% of sites situated along the coast to provide the first national map of small-scale fishing effort (and so complements the data layer developed for Gabon in FY1). This datasets is based on 875 individual fishing trips from 49 fishers, representing a total of 192 days at sea (equivalent to 5505 hours) and covering a total distance of 9,511 kilometres (Figure 1). This dataset has resulted in a far greater understanding of the operating behaviour along the coast than would have been revealed had the project just focused on landing sites situated in **CDNP**. More specifically, this dataset has revealed that that variation in fishing behaviour is influenced by where fishers are located, with fishers operating from sites situated in the coastal city of Pointe Noire tending to go further,

faster, deeper and longer than fishers operating both inside the National Park and outside the National Park or city. Subsequent analyses of fishers associated sphere of influence also revealed that the fishing effort is generally concentrated in shallow waters close to the coast with this pattern generally holding across these groups; with the exception of fishers operating from landing sites situated in the city whom operate over larger distances and greater depths. These findings are invaluable when developing national bycatch reduction strategies as it highlights that interventions should reflect these different modes of operation.

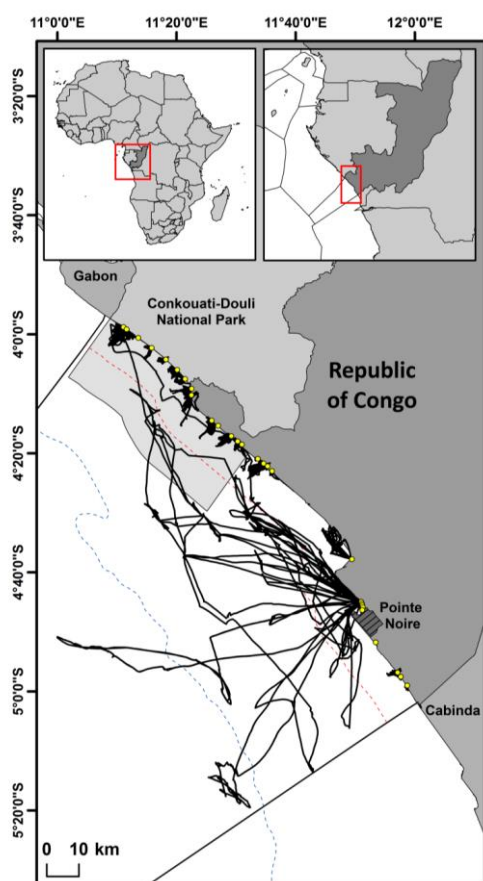


Figure 1. Small-scale artisanal fisheries landing sites and movements at sea derived from GPS units deployed at twenty-three of the twenty-six landing sites situated along the coast of the Republic of Congo from the border frontier with Gabon in the North to Cabinda in the South. Dashed red line indicates the limit of the zone reserved exclusively for artisanal fisheries and blue line indicates the 200m depth contour.

To complement this extensive national dataset project partners in the Republic of Congo also collected 1 year of GPS tracking data from the 12 sites operating inside **CDNP** to provide the first annual/seasonal patterns of fishing effort which will be used to inform the updated park management plan that is being developed by **WCS-RoC** and **MEFDD**. These successes reflect the training provided to staff involved in delivering on this aspect project and the level of engagement with fishing communities since the project commenced.

Output 3. Improved understanding of bycatch

Activity 3.1 Awareness raising:

In FY2 the project has distributed sea turtle (1), marine mammal (1), shark (2) and ray (2) ID guides to in-country partners (**WCS-GAB**, **WCS-RoC**, **CDNP**, **MEFDD**, and **PTMG**) involved in field based surveys and monitoring. The distribution of the ID guides was designed to improve both awareness of species of regional importance and improve the quality of data collected in the field with guides also provided to fishers so that they can identify their catch and thus report any interesting findings to in-country partners at sites subject to monitoring. In the Republic of Congo these guides were provided to each of the 23 sites involved in some form of participatory research (representing 88% of 26 sites). Copies of these guides (raw files) were also provided to fisheries observers for distribution in Gabon.

Activity 3.2 Field data collection:

The rapid socio-economic assessments undertaken at landing sites in Gabon and the Republic of Congo in FY1 identified that sharks constitute an important proportion of catches from boats operating in the small-scale fisheries sector. Therefore, given that little is known about sharks in this region landing site survey protocols were developed by Dr Matthew Witt and PhD student Phil Doherty (**UoE**) and undertaken in partnership with **WCS-GAB** at Cap Lopez in Port-Gentil and two sites in Mayumba, one landing catch in the lagoon, the other directly onto the beach. The aim of these surveys was to develop a better understanding of the composition of this catch (including species, sex, and morphometric data) to inform future management plans and bycatch reduction strategies. This involved training of field staff within the Mayumba **WCS-GAB** programme and a MSc student from Franceville for two weeks, one learning the survey protocols at landing sites with the Mayumba team and the other with Phil Doherty surveying a wider range of landing sites in Libreville and within Corisco Bay. This project was carried out in two phases, one in December, surveying one week in Port Gentil and two weeks in Mayumba, the second phase took place during February with one week in Port Gentil and three weeks surveying other potential areas for shark catch including Libreville and Corisco Bay.

Output 4. Monitoring

Activity 4.1 & 4.2 Darwin reporting & Steering committee:

Please see [Section 7](#).

3.2 Progress towards project outputs

All outputs to date are on target or ahead of schedule, with increased marine protection in Gabon (see [Section 3.3](#) for more details). In addition, the size and distribution of small-scale artisanal fishing fleets have been identified in both countries with a significant number of sites engaged in participatory research. There is also a better understanding of the spatial and temporal dynamics of the operating behaviour of fishers in the host countries through GPS tracking and rapid socio-economic assessments. Furthermore, the GPS data have allowed us to develop a better understanding of the spatial distribution of fishing effort and pressures that can be used to better inform bycatch reduction strategies. The forthcoming year thus effectively requires us to draw together data developed and collected during this project to provide policy recommendations regarding: (i) fisheries management and assessment; (ii) location of priority areas (specifically in the Republic of Congo); (iii) identify bycatch ‘hotspots’ and participatory interventions to reduce bycatch in important fishing areas; and finally (iv) disseminate findings at a closing workshop/seminar(s).

3.3 Progress towards the project Outcome

The overall purpose of this project was to lead to increased and effective management of marine ecosystems in Central Africa (Gabon and the Republic of Congo) as a result of scientific and participatory research that leads to the development of a network of marine protected areas that meet biodiversity objectives whilst contributing to food security and poverty alleviation in coastal communities. There is clear evidence that data gathered and developed as part of this project and the training provided to date has made a significant contribution towards the project outcomes, particularly in Gabon. This is demonstrated by a recent announcement to create a new network of marine protected areas in Gabon. The network will consist of ten marine parks including an extension to Mayumba National Park covering more than 18,000 square miles (over 46,000 square kilometres), equivalent to 23% of Gabon’s territorial waters and EEZ (Exclusive Economic Zone). In addition, the Government also announced that they will create community fishing zones, industrial fishing zones and exclusion zones to protect important petroleum infrastructure. The announcement was made by His Excellency The President of Gabon Ali Bongo Ondimba in Sydney at the 2014 IUCN World Parks Congress (see [speech](#)). These sites were based on spatial planning exercises undertaken using staff trained on this project in FY1 and data collected as part of the Darwin Project in FY1 and FY2 that are presented in the Marine Biodiversity Atlas for Gabon (see [Annexe 4](#) for press releases highlighting the University of

Exeter's contribution). In addition, given one of the main priorities was to ensure that livelihoods of fishers were incorporated into the decision making process the inclusion of community fishing zones highlights that the project has been successful in informing the government of the need to balance biodiversity conservation objectives with food security and poverty reduction in coastal communities. Furthermore, the extent of the EEZ (~23%) to be included in this network far exceeds the initial target of 10% and demonstrates the level of awareness regarding the requirements to adequately protect and manage the regions marine biodiversity and resources.

Significant developments and progress is also being made in the Republic of Congo with increased awareness and available data to inform the design of an ecologically-coherent and representative MPA network that minimises impacts on local fishing communities. Further work is thus planned in the forthcoming year to highlight key findings, and to engage relevant organisations and institutions to allow for more effective and sustainable management of the Republic of Congo's marine biodiversity and resources.

3.4 Monitoring of assumptions

The two main assumptions that are crucial to this projects success are: (i) that Governments remain committed to establishing MPAs and ensuring the sustainable use of marine resources; and (ii) local communities continue to engage in participatory research. Progress to date indicates that there is continued interest in ensuring biodiversity conservation and food security goals are met (see [Section 3.5](#)). Furthermore, there is a high level of continued engagement with fishing communities that has contributed to a better understanding of this sector (see [Section 8](#)).

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

As stated in [Section 3.3](#) the overall purpose of this project was to increase effective management of marine ecosystems in Central Africa (Gabon and the Republic of Congo) through scientific and participatory research that leads to the development of a network of marine protected areas that meet biodiversity objectives, whilst contributing to food security and poverty alleviation in coastal communities. Significant developments have been made towards developing the relevant and required data to deliver these outputs. In particular, the Marine Biodiversity Atlases provide a comprehensive overview of the data available in each region that will allow for more effective marine spatial planning efforts in support of marine protected area network design. These data in combination with data on the modes of operation and spatial distribution and patterns of fishing effort by small-scale artisanal fisheries ensures that these communities are incorporated into future decision making processes. This is demonstrated in Gabon where community fishing zones have been announced in combination with an extensive network of marine national parks. These designations will maintain access to important fishing areas (as highlighted by GPS tracking) and through the designation of new industrial fishing zones will ensure food security and so enhance livelihoods of fishers operating in this sector. Finally, these data will serve as a baseline from which the government can evaluate the impact of management interventions and the evolving nature of these communities in the future. Awareness of the importance of marine biodiversity and the importance of small-scale fisheries has been greatly enhanced across stakeholders at all levels.

4. Project support to the Conventions (CBD, CMS and/or CITES)

The project outputs are designed to contribute broadly to obligations under the MEA, CBD, CITES and CMS. In particular, capacity building and research initiatives such as the development of the Darwin Marine Biodiversity Atlases, participatory research with artisanal fisheries and subsequent awareness raising and training contribute to *CBD Articles 5, 6, 7, 8, 12, 13 and 14*. More specifically, though the data gathered herein can and are being used (as demonstrated in Gabon) to help fulfil obligations to the

Strategic Plan for Biodiversity 2010 – 2020 and support the development of an effectively managed network of MPAs that contributes to biodiversity conservation goals (*Aichi Target 11*) whilst ensuring the livelihoods and well-being of the poorest are safeguarded and incorporated into the decision making process (*Aichi Target 14*). Furthermore, field work to date has contributed significantly to the existing knowledge base on the importance of this region for sea turtles, and so will ensure both countries have the latest information to inform status assessments that are currently lacking in this region ([Please see Activity 1.2](#)).

5. Project support to poverty alleviation

Please see [Section 3.5](#) for more detailed information regarding how data gathered and developed as part of this project is: (i) ensuring that small-scale artisanal fishers are incorporated into future decision making processes; and (ii) helping to contribute to food security and poverty alleviation whilst achieving biodiversity conservation objectives.

6. Project support to Gender equity issues

The scope of the project involves a diverse group of persons from different cultural backgrounds and countries who are engaged in a range of activities from data collection, analysis, and training. Evidence that the project is inclusive and working towards ensuring gender equality is reflected in the nature of the successful working relationships with partners operating in-country and overseas, and the collaborative nature of the reports and publications associated with the project. For example, a recent paper accepted in *Biological Conservation* (pending minor corrections) includes 27 authors, many of which operate across both partner countries (see [Annexe 3](#)).

7. Monitoring and evaluation

As articulated in the main bid the progress of the project against indicators is appraised by a steering committee made up of the partner organisations that are held twice a year. Formal meetings with the project leader (Professor Brendan Godley) and the **DRF** were held in Gabon (October 2013). As with previous years this focused on ensuring all partners have the opportunity to discuss current progress and the work plan for the current reporting year. There has also been regular communication among project partners (via Skype and emails) with extensive presence of key Darwin staff in both host countries during the reporting year (see [Section 2](#) and [Annexe 3](#)). Finally, meeting minutes, reports, publications and Darwin Marine Atlases demonstrate that the project is working towards its stated outcome. In terms of project evaluation there is clear evidence that data gathered and developed as part of this project has made significant contribution towards the projects outcome in Gabon and is making significant progress in the Republic of Congo (see [Section 3.3](#)).

8. Lessons learnt

In the Republic of Congo the level of engagement and participatory research currently undertaken with fishing communities was unexpected by the **DRF** and project partners (**WCS-RoC / MEFDD**) when the project commenced. More specifically, participatory research with local fishing communities in the Republic of Congo has led to an increase in the scope of this project from an initial target of 4 focal sites (15%) to 14 (54%) in the first year and 23 (88%) sites in the second year. This success reflects the importance of training and continued engagement with communities regardless if they choose not to engage at the outset of a project. Here the project has found that participation has snow-balled as communities see others participating with research – an important factor to consider when developing projects that involve isolated and often poor communities.

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

In line with recent guidance provided by Darwin Initiative to all projects we have amended the reporting of progress against our indicators in the logical framework to improve clarity and support project

evaluation. With regard to identifying candidates with suitable experience to be able to undertake a basic GIS course as highlighted in our First Annual Report, we note the following. Accessibility to key governmental and institutional staff is very different in the Republic of Congo compared to Gabon. This in large part reflects the fact that the previous Darwin Initiative Project in Gabon (17005) helped establish long-standing relationships which this project has continued to develop, resulting in significant improvements in biodiversity conservation, awareness and engagement. The **DRF** and project partners in the Republic of Congo (particularly **WCS-RoC**) are thus working hard to identify suitable candidates for GIS training and to build long-standing relationships that will ensure that outputs are directed to the relevant persons. To date the project has identified a number of junior staff members from **MEFDD** (~3) and **WCS-RoC** (~7) that will benefit from basic GIS training which is to be provided in FY3 (please note the project is continually engaging with organisations to identify additional candidates). In addition, the project will host a dissemination event in collaboration with **WCS-RoC** to show how data collated and developed during the project can be used to inform the development of a candidate network of marine protected areas within a marine spatial planning framework.

10. Other comments on progress not covered elsewhere

We don't foresee any additional risks or changes in project assumptions.

11. Sustainability and legacy

Evidence of the sustainability, identify and profile of the project nationally (in the Republic of Congo and Gabon) and internationally are highlighted in [Section 12](#). In Gabon, the long-term partnership with the Wildlife Conservation Society Gabon Program and Gabon Bleu has led to the announcement of a new marine protected area network at the IUCN Worlds Parks Congress in November 2014 that will cover ~23% of Gabon's Exclusive Economic Zone (see [Section 3.3](#)). In the Republic of Congo our extensive work with fishing communities inside Conkouati-Douli National Park has led to a snowball effect leading to increasing engagement with other fishing communities and resulting in 88% of known fishing sites in-country involved in some form of participatory data collection to ensure that their livelihoods will be represented in future policy decisions (see [Section 3.3](#)). Prior to project completion all research on fisheries, biodiversity and other stakeholders will be combined into a marine spatial plan, culminating in recommendations for candidate MPAs (in the Republic of Congo) and all data will be repatriated to relevant institutions in-country to ensure that they have access to the resources developed as part of this project. Beyond Gabon and the Republic of Congo there is also increasing awareness and interest in our work in other countries in Central Africa. For example, the **DRF** Dr Kristian Metcalfe and colleague Dr Ana Nuno (**Darwin Plus DPLUS019: 'Socio-economic aspects of turtle conservation in the Cayman Islands'**) were invited to São Tomé and Príncipe in March 2015 by the Príncipe Trust. The principal aim of which was to provide an overview of the projects, and to provide recommendations on how to improve existing data collection to assist with marine spatial planning initiatives, with a particular emphasis on approaches to engaging fishing communities to collect data to ensure the sustainable use of marine resources.

12. Darwin Identity

The Darwin Initiative identity has been promoted in all actions relating to the project to date, with all monitoring data (hosted on seaturtle.org), reports, training manuals and resources clearly acknowledging the funding provided by the Darwin Initiative through Defra, with links and logos to their respective websites. The work undertaken by all partner organisations is also disseminated (internally and externally) and publicised through a variety of social media including twitter (using hashtag #DarwinInitiative and [@Darwin_Defra](#) to acknowledge funding sources) and on the Marine Turtle Research Group [Facebook Page](#). The Wildlife Conservation Society Gabon Programme also continue to promote all project related activities in-country using twitter ([@WCSGabon](#)) and the University of Exeter (lead organisation) continue to promote project related outputs across its websites. In addition, the

project has highlighted key findings from recent field work in the popular science magazine BioSphere, with Darwin Initiative support duly acknowledged (see [Annexe 4](#)). The project also has a dedicated [website](#) which details the project aims and rationale, in country partners, ongoing research (translated into both English and French) media coverage and outputs. As of April 2015 this site has been visited ~2500 times by visitors from the UK, Belgium, Finland, France, Greece, Germany, Ireland, Jersey, Netherlands, Russia, Slovenia, Spain, Switzerland, Turkey, Brazil, Costa Rica, Peru, Uruguay, Singapore, Barbados, Cayman Islands, Canada, United States, Gabon, Madagascar, Republic of Congo, Sao Tome & Principe, South Africa, South Sudan and Uganda (total countries = 30), thus highlighting that the impact and knowledge of the project (and therefore the Darwin Initiative) has been far reaching. The Darwin Initiative support is also currently recognised as both a distinct project where it comprises the key funding partner in an action (e.g. biodiversity survey / monitoring / engagement efforts), and as a collaborative partner in larger programmes where actions spanned topics of established efforts such as marine mammal and sea turtle monitoring (e.g. training).

13. Project Expenditure

Table 1 Project expenditure during the reporting period (1 April 2014 – 31 March 2015)

Project spend (indicative) since last annual report	2014/15 Grant (£)	2014/15 Total Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)				Within 10%
Consultancy costs			-	-
Overhead Costs				Within 10%
Travel and subsistence				Within 10%
Operating Costs				Within 10%
Capital items (see below)				Within 10%
Others (see below)				Within 10%
TOTAL	124,311	124,351.04		

14. 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 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).

Marine protected area network announcement: Data gathered and developed as part of this project, and the training provided to date has made a significant contribution towards the project outcomes in Gabon. This is demonstrated by the recent announcement to create a new network of marine protected areas that will consist of ten marine parks including an extension to Mayumba National Park covering more than 18,000 square miles (~ 46,000 km²), equivalent to 23% of Gabon’s territorial waters and EEZ.

Images: As part of increasing awareness of the importance of regional biodiversity and of the work being undertaken in the region the dedicated project website hosts copies of press-releases, and a number of photo galleries of field work undertaken with local/project partners in the Republic of Congo and Gabon. Please contact Darwin Research Fellow, Dr Kristian Metcalfe (kristian.metcalfe@exeter.ac.uk) if there is anything you are specifically interested in using, which we would be happy to share.

Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2014-2015

Project summary	Measurable Indicators	Progress and Achievements April 2014 - March 2015	Actions required/planned for next period
<p>Impact:</p> <p>Poverty alleviation, increased food security, and sustainable use of marine biodiversity through an effective marine protected area network in Congo and Gabon.</p>		<ul style="list-style-type: none"> ▪ Significant steps have been made towards project aims in YR 2. 	
<p>Outcome:</p> <p>Increased and effective management of marine ecosystems in Central Africa (Congo and Gabon) as a result of a scientifically informed network of interconnected Marine Protected Areas (MPAs) that enhance ecological integrity while contributing to food security and poverty reduction in coastal communities in the region.</p>	<ul style="list-style-type: none"> ▪ Increased marine protection based on scientific evidence and participatory research. ▪ Increased knowledge and awareness of marine biodiversity and artisanal fisheries. ▪ Marine vertebrate bycatch in fishing communities reduced. 	<p>The project has had a successful year with the announcement of a new MPA network in Gabon far exceeding the 10% target. The project has also increased engagement with artisanal fishing communities which has subsequently resulted in a far greater understanding of the spatial and temporal dynamics of fishers operating in this sector.</p>	<ul style="list-style-type: none"> ▪ Marine Biodiversity Atlas Training Congo ▪ Identify priority areas / candidate MPAs in the Republic of Congo ▪ Produce fisheries action plans and MPA policy papers ▪ Continue training where requested ▪ Host dissemination workshop to present findings in Gabon / Republic of Congo. ▪ Hand-over project outputs (Atlas / GIS data / reports) to national institutions and organisations.
<p>Output 1: Marine Protected Areas</p> <p>Marine Protected Area networks extended to at least 10% of EEZ of Congo and Gabon based on robust research and participatory implementation.</p>	<p>1.1 Enhanced capacity for marine spatial planning via Darwin Marine Atlas for Congo with 10 biodiversity/fisheries professionals trained in its use (baseline is zero).</p> <p>1.2 Enhanced capacity for marine spatial planning via Darwin Marine</p>	<p>Overall progress towards Output 1 is as follows:</p> <p>The Government of Gabon announced the decision to create a new network of marine protected areas. The network will consist of ten marine parks including an extension to Mayumba National Park covering more than 18,000 square miles (over 46,000 square kilometres), equivalent to 23% of Gabon's territorial waters and EEZ (Exclusive Economic Zone). In addition, the Government also announced that they will create community fishing zones, industrial fishing zones</p>	

	<p>Atlas for Gabon with 10 biodiversity/fisheries professionals trained in its use (baseline is zero).</p> <p>1.3 Increased evidence base for Marine Spatial Planning in Congo based on best available information on biodiversity, artisanal fisheries, and industrial fisheries. Facilitated by Marxan analysis leading to candidate MPA network. Minimum 20 data layers (current baseline is zero)</p> <p>1.4 Increased evidence base for Marine Spatial Planning in Gabon based on best available information on biodiversity, artisanal fisheries, and industrial fisheries. Facilitated by Marxan analysis leading to candidate MPA network. Minimum 20 data layers enhanced and/or incorporated into existing Marine Biodiversity Atlas for Gabon.</p> <p>1.5 Increased knowledge of regional biodiversity.</p> <p>1.6 As a result of research, awareness raising and increased capacity MPA network will begin to expand (baseline 3% EEZ Congo; 1% Gabon).</p>	<p>and exclusion zones to protect important petroleum infrastructure. The announcement was made by His Excellency The President of Gabon Ali Bongo Ondimba in Sydney at the 2014 IUCN World Parks Congress and was based on spatial planning exercises undertaken using staff trained on this project in FY1 and data collected as part of the Darwin Project in FY1 and FY2 that are presented in the Marine Biodiversity Atlas for Gabon.</p>
<p>Activity 1.1. Training</p>		<p>PTMG hosted 5 marine turtle training workshops in FY2 (with a total of 110 trainees) to address the increasing number of organisations and staff now involved in sea turtle monitoring in Gabon. In addition, Dr Angela Formia (PTMG/WCS-GAB) visited the Republic of Congo for 1 week in November 2014 to review 12 years of monitoring data that will inform upcoming analyses</p>

	<p>on status of marine turtles in the Republic of Congo.</p> <p>The coastal transect conducted in FY1 highlighted several important nesting locations for olive ridley sea turtles that were previously unidentified. Thus, to address knowledge gap of at sea movements and better inform fisheries management and petro-chemical exploration activities 6 satellite tags were attached to female nesting olive ridley sea turtles at four further nesting beaches in Gabon (Port-Gentil, Ozori, Omboué and Shell beach in Gamba). This included further training from the DRF and Dr Sara Maxwell (Stanford Univeristy) who trained staff from FONDATION LIAMBISSI, WWF-GAB and IBONGA to deploy the tags.</p> <p>Project staff from UoE maintained an active schedule of training and outreach when in-country and information dissemination when based in the UK.</p>
Activity 1.2. Field data collection and data analysis	<p>Analysis of population status of Gabon’s olive ridley sea turtle population including spatial distribution of nesting effort completed (see Activity 1.6). Darwin Marine Biodiversity Atlas for Gabon and the Republic of Congo completed with significant number of data layers incorporated into each Atlas. See output 2 for more detailed information concerning fisheries data collection and analysis.</p>
Activity 1.3. Awareness Raising	<p>Website content updated regularly to highlight ongoing work and findings associated with the project, including reference to National and International press releases associated with Gabon’s recent MPA announcement. Distribution of species ID guides to improve awareness and quality of data collected by field-based monitoring teams. Increased knowledge regarding Gabon’s olive ridley nesting sea turtle population with evidence to date suggesting that Gabon hosts the largest rookery in the Atlantic (see Activity 1.6). In addition, recent satellite tag data from FY2 (see Activity 1.1) were hosted at:</p> <p>http://www.seaturtle.org/tracking/index.shtml?project_id=1047</p>
Activity 1.4. Assembling Darwin Marine Atlases	<p>Dissemination and training of spatial data incorporated in the Darwin Marine Biodiversity Atlas for Gabon commenced in FY1 and FY2 (> 100 data layers) and will continue in FY3. Dissemination of the Darwin Marine Biodiversity Atlas for the Republic of Congo commenced in FY2 (> 100 data layers, baseline is zero) and will continue in FY3.</p>

Activity 1.5. Marine spatial planning	Spatial data incorporated in Marine Biodiversity Atlas for Gabon contributed to the identification of priority areas that informed the Government of Gabon's recent MPA announcement at World Parks Congress in Australia in November 2014. Training and identification of candidate MPAs is due to commence in the Republic of Congo in FY3.
Activity 1.6. Policy paper	Underway.
Activity 1.7. Peer reviewed paper	Paper accepted for publication in Biological Conservation (pending minor edits) that reveals Gabon hosts one of the most important rookeries for olive ridley sea turtles in the Atlantic. Data used to inform this analysis was based on extensive one month coastal survey (covering 585 km) conducted by DRF and in-country partners in FY1, and incorporated 7 years of monitoring data gathered from key nesting beaches.
<p>Output 2: Artisanal Fisheries</p> <p>Artisanal fisheries understood across both nations and are improved as a result of more effective and sustainable fishing practices, based on participatory research and implementation in focal communities.</p>	<p>2.1 Fisher engagement in research facilities multiple aspects with participatory research underway (minimum 10 – 20 fishers in 4 communities – current baseline is zero).</p> <p>2.2 Baseline data assembled and potential interventions identified to improve fisheries profitability (current baseline datasets is zero).</p> <p>2.3 Baseline knowledge of magnitude and spatio-temporal patterns of artisanal fisheries and linkage with industrial fisheries greatly improved. (current baseline is zero).</p> <p>2.4 Research leads to development of publishable case study in rapid assessment of artisanal fisheries and participatory research.</p>
<p>Overall progress towards Output 2 is as follows:</p> <p>Engagement with artisanal fisheries has far exceeded planned project targets for the number of fishers and sites engaged in Gabon and the Republic of Congo. Given the announcement that community fishing zones are to be established in Gabon (informed from GPS tracking data and assessments undertaken in FY1) further emphasis was placed on developing a rigorous nationwide dataset for Congo instead of primarily focusing on CDNP as initially envisaged. This objective was completed in March 2015 with boats tracked from 88% of landing sites along the coast leading to a greater understanding of the spatial and temporal dynamics involved in this sector at a national scale. These successes reflect the training provided to staff involved in delivering on this aspect project and the level of engagement with fishing communities since the project commenced.</p>	

Activity 2.1. Engagement with fishers	Fishers engaged at 23 of the 26 (88%) artisanal fishing sites in the Republic of Congo and at 20 of the 62 (32%) sites in Gabon. Baseline socio-economic data gathered from 14 sites in the Republic of Congo and 5 sites in Gabon. Perceived and current threats to livelihoods identified through rapid assessment at each of these communities.
Activity 2.2. Training in data collection	<p>Continued training in analysing catch data undertaken by PhD student Phil Doherty (UoE) in Port Gentil and Mayumba in partnership with staff from WCS-GAB. This training focused primarily on shark sampling protocols at landing sites and at sea surveys (scientific fishing) as these form a significant proportion of catch in this sector and very little information is presently available on the species, and status of this stock.</p> <p>Continued training has been provided to 2 staff from CDNP and WCS-RoC regarding deployment of GPS trackers on small-scale fishing boats leading to a significant proportion of sites in the Republic of Congo engaged in participatory data collection.</p>
Activity 2.3. Field data collection	<p>Field/boat and aerial surveys in Gabon and the Republic of Congo provided estimates of number of artisanal fishing boats operating from 100% of sites (total number of boats in Gabon = 1,831 and Republic of Congo = 364 boats).</p> <p>Operating behaviour and spatial distribution of small-scale artisanal fisheries in the Republic of Congo quantified using GPS trackers deployed from 88% of sites situated along the coast to provide the first national map of small-scale fishing effort. This dataset is based on 875 individual fishing trips from 49 fishers, representing a total of 192 days at sea and covering a total distance of 9,511 kilometres. Annual/seasonal patterns of fishing effort have also been quantified for the sites operating in CDNP using GPS trackers deployed across 12 sites over 1 year.</p>
Activity 2.4. Fisheries Management Plans	Underway using extensive datasets described above.
Activity 2.5. Identify potential management Interventions	Underway using extensive datasets described above.
Activity 2.6. Peer Reviewed Paper	Publishable case study on rapid assessment of artisanal fisheries using participatory research is currently underway. This will be based on the national dataset collected in Congo to highlight how GPS trackers can be used to rapidly

	<p>characterise the operating behaviour and spatial distribution of fishers. Collaboration with colleagues at the University of St Andrews (Dr Debbie Russell) has also been established to produce fine-scale maps of the distribution of fishing effort and pressures using new analytical techniques.</p>
<p>Output 3: Reducing Bycatch</p> <p>Marine vertebrate bycatch in fishing communities is reduced as a result of participatory research and awareness raising.</p>	<p>3.1 Fisher engagement in research facilities multiple aspects with participatory research underway (minimum 10 – 20 fishers in 4 communities – current baseline is zero).</p> <p>3.2 Baseline levels of bycatch estimated as a result of participatory research with potential interventions identified to reduce bycatch (current baseline datasets is zero).</p> <p>3.3 Research and participatory research leads to publishable case study in bycatch assessment in artisanal fisheries.</p>
<p>Activity 3.1. Awareness Raising</p>	<p>Overall progress towards Output 3 is as follows:</p> <p>Engagement with artisanal fisheries has far exceeded planned project targets for the number of fishers and sites engaged in Gabon and the Republic of Congo. A great understanding of at sea behaviour of sea turtles, important areas for marine mammals and the operating behaviour of fishers has greatly improved our understanding of where the threat of by-catch is likely to be greatest.</p> <p>To improve data collection and understanding of species caught in this sector the DRF in conjunction with project partners distributed training material to each community that can be used to identify by-caught species (including sharks, rays, marine mammals and sea turtles).</p>
<p>Activity 3.2. Field data collection</p>	<p>Fishers engaged at 23 of the 26 (88%) artisanal fishing sites in the Republic of Congo and at 20 of the 62 (32%) sites in Gabon. Baseline data on levels of bycatch gathered from 14 sites in the Republic of Congo and 5 sites in Gabon.</p> <p>Analysis of stomach contents of by-caught dolphins in CDNP indicates that both dolphins and fishers have similar habitat preferences (shallow waters close to the coast) as they are targeting the same species of fish.</p>
<p>Activity 3.3. Identify participatory mitigation</p>	<p>Underway.</p>

Activity 3.4. Peer Reviewed Paper	Publishable case study on rapid assessment of artisanal fisheries using participatory research is currently underway using data annual dataset collected from CDNP in the Republic of Congo.
Output 4: Project Monitoring	<p>4.1 Darwin reporting.</p> <p>4.2 Steering group meetings.</p> <p>Overall progress towards Output 4 is as follows:</p> <p>Progress towards the overall project outcome and indicators are generally very good, with significant input by project partners to ensure that project is on target.</p>
Activity 4.1. Darwin Reporting	All reporting to date was undertaken in a timely manner, effectively drawing together project for appraisal. Interim and summary field reports provided to in-country partners and other funders with dedicated project website updated regularly.
Activity 4.2. Steering Group Meetings	Steering group meetings were undertaken during each field visit by UK staff and followed up with e-mail correspondence and Skype. The DRF has also maintained a significant presence in country exceeding initial plans and so is accessible to in-country partners on a regular basis should partners require a meeting.

Annex 2 Project's full current logframe

Project summary	Measurable Indicators	Means of Verification	Important Assumptions
<p>Goal: Poverty alleviation, increased food security, and sustainable use of marine biodiversity through an effective marine protected area network in Congo and Gabon.</p>			
<p>Outcome: Increased and effective management of marine ecosystems in Central Africa (Congo and Gabon) as a result of a scientifically informed network of interconnected Marine Protected Areas (MPAs) that enhance ecological integrity while contributing to food security and poverty reduction in coastal communities in the region.</p>	<ul style="list-style-type: none"> ▪ Increased marine protection based on scientific evidence and participatory research. ▪ Increased knowledge and awareness of marine biodiversity and artisanal fisheries. ▪ Marine vertebrate bycatch in fishing communities reduced. 	<ul style="list-style-type: none"> ▪ Enhanced capacity for marine spatial planning. ▪ Continued monitoring. ▪ Continued engagement with fishing communities. ▪ Reports and publications by partner organisations. 	<ul style="list-style-type: none"> ▪ Government remains supportive of MPA designation. ▪ Fishing communities and host governments retain commitment to sustainable use of marine resources. ▪ Host countries remain politically stable. ▪ Retention of key staff / ability to appoint replacements. ▪ No major economic changes / anthropogenic disasters that could affect fisheries management.
<p>Output 1: Marine Protected Areas Marine Protected Area networks extended to at least 10% of EEZ of Congo and Gabon based on robust research and participatory implementation.</p>	<p>1.1 Enhanced capacity for marine spatial planning via Darwin Marine Atlas for Congo with 10 biodiversity/fisheries professionals trained in its use (baseline is zero).</p> <p>1.2 Enhanced capacity for marine spatial planning via Darwin Marine Atlas for Gabon with 10 biodiversity/fisheries professionals trained in its use (baseline is zero).</p> <p>1.3 Increased evidence base for Marine Spatial Planning in Congo</p>	<p>1.1 Darwin Marine Atlas Congo.</p> <p>1.2 Darwin Marine Atlas Gabon.</p> <p>1.3 Spatial Planning Report on Candidate MPA sites (Congo).</p> <p>1.4 Spatial Planning Report on Candidate MPA sites (Gabon).</p> <p>1.5 Peer reviewed publication on regional marine biodiversity.</p> <p>1.6 Maps, Media, Government reports / legislation relating to designation.</p>	<p>1. Project partners, fishing communities and host governments and institutions retain commitment to sustainable use of marine resources and both nations remain politically stable.</p>

	<p>based on best available information on biodiversity, artisanal fisheries, and industrial fisheries. Facilitated by Marxan analysis leading to candidate MPA network. Minimum 20 data layers (current baseline is zero)</p> <p>1.4 Increased evidence base for Marine Spatial Planning in Gabon based on best available information on biodiversity, artisanal fisheries, and industrial fisheries. Facilitated by Marxan analysis leading to candidate MPA network. Minimum 20 data layers enhanced and/or incorporated into existing Marine Biodiversity Atlas for Gabon.</p> <p>1.5 Increased knowledge of regional biodiversity.</p> <p>1.6 As a result of research, awareness raising and increased capacity MPA network will begin to expand (baseline 3% EEZ Congo; 1% Gabon).</p>	<p>Darwin Project website updated.</p>	
<p>Output 2: Artisanal Fisheries</p> <p>Artisanal fisheries understood across both nations and are improved as a result of more effective and sustainable fishing practices, based on participatory research and implementation in focal communities.</p>	<p>2.1 Fisher engagement in research facilities multiple aspects with participatory research underway (minimum 10 – 20 fishers in 4 communities – current baseline is zero).</p> <p>2.2 Baseline data assembled and potential interventions identified to improve fisheries profitability (current baseline datasets is zero).</p>	<p>2.1 Focus groups, participatory data collection, workshops, interim field reports. Darwin Project website updated.</p> <p>2.2 Focus groups, workshops, interim field reports. Darwin Project website updated.</p> <p>2.3 Artisanal fisheries action plan (Congo) and artisanal fisheries action plan (Gabon).</p>	<p>2. Trained individuals remain in employment with partner organisations. Partners continue to collect and share data. Good working relationships are maintained with fishing communities.</p>

	<p>2.3 Baseline knowledge of magnitude and spatio-temporal patterns of artisanal fisheries and linkage with industrial fisheries greatly improved. (current baseline is zero).</p> <p>2.4 Research leads to development of publishable case study in rapid assessment of artisanal fisheries and participatory research.</p>	<p>2.4 Peer-reviewed publication on fisheries.</p>	
<p>Output 3: Reducing Bycatch</p> <p>Marine vertebrate bycatch in fishing communities is reduced as a result of participatory research and awareness raising.</p>	<p>3.1 Fisher engagement in research facilities multiple aspects with participatory research underway (minimum 10 – 20 fishers in 4 communities – current baseline is zero).</p> <p>3.2 Baseline levels of bycatch estimated as a result of participatory research with potential interventions identified to reduce bycatch (current baseline datasets is zero).</p> <p>3.3 Research and participatory research leads to publishable case study in bycatch assessment in artisanal fisheries.</p>	<p>3.1 Focus groups, participatory data collection, workshops, interim field reports. Darwin Project website updated.</p> <p>3.2 Focus groups, workshops, interim field reports. Darwin Project website updated.</p> <p>3.3 Peer-reviewed publication on participatory fisheries bycatch assessment and mitigation.</p>	<p>3. Trained individuals remain in employment with partner organisations. Partners continue to collect and share data. Good working relationships are maintained with fishing communities. Effective, appropriate measures can be identified for both the fisheries and bycatch species.</p>
<p>Output 4: Project Monitoring</p>	<p>4.1 Darwin reporting.</p> <p>4.2 Steering group meetings.</p>	<p>4.1 Darwin reports.</p> <p>4.2 Steering committee meeting minutes.</p>	
<p>Activities: (details in work plan)</p> <p>1.1 Training</p> <p>1.2 Field data collection and data analysis</p> <p>1.3 Awareness raising</p>			

1.4 Assembling Darwin Marine Atlases

1.5 Marine spatial planning

1.6 Policy paper

1.7 Peer reviewed paper

2.1 Engagement with fishers

2.2 Training in data collection

2.3 Field data collection

2.4 Fisheries management plans

2.5 Identify potential management interventions

2.6 Peer reviewed papers

3.1 Awareness raising

3.2 Field data collection

3.3 Identify participatory mitigation

3.4 Peer reviewed papers

4.1 Darwin reporting

4.2 Steering group meetings

Annex 3 Standard Measures

Table 1 Project Standard Output Measures

Code No.	Description	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project (% target reached)
6A	Number of people to receive other forms of education/training (which does not fall into categories 1-5 above)	80	115		195	20 (975%)
6B	Number of training weeks to be provided.	9	8		17	6 (283%)
7	Number of (ie. different types - not volume - of material produced) training materials to be produced for use by host country.	2	2		4	2 (200%)
8	Number of weeks to be spent by UK project staff on project work in the host country (Republic of Congo) .	16	16		32	26 (123%)
8	Number of weeks to be spent by UK project staff on project work in the host country (Gabon) .	26	10		36	26 (138%)
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 (Republic of Congo) .	0	1		1	2 (50%)
9	Number of species/habitat management plans (or action plans) to be produced for Governments,	0	1		1	2 (50%)

	public authorities, or other implementing agencies in the host country (Gabon).					
10	Number of individual field guides/manuals to be produced to assist work related to species identification, classification and recording.	0	6		6	0 (0%)
11A	Number of papers to be published in peer reviewed journals.	2	1		3	3 (100%)
11B	Number of papers to be submitted to peer reviewed journals.	2	1		3	3 (100%)
12A	Number of computer based databases to be established and handed over to the host country (Republic of Congo).	0	0		1	0 (0%)
12B	Number of computer based databases to be enhanced and handed over to the host country (Gabon).	1	0		1	1(100%)
14A	Number of conferences/seminars/ workshops to be organised to present/disseminate findings (Republic of Congo).	0	0		0	1(0%)
14A	Number of conferences/seminars/ workshops to be organised to present/disseminate findings (Gabon).	0	0		0	1(0%)
15A	Number of national press releases in host country(ies).	1	2		1	2 (150%)
15C	Number of national press releases in UK.	1	1		1	2 (100%)

17A	Number of dissemination networks to be established (Republic of Congo).	1	0		1	1(100%)
17B	Number of dissemination networks to be enhanced/ extended (Gabon).	1	0		1	1 (100%)
20	Estimated value (£'s) of physical assets to be handed over to host country(ies).	24,100	0		24,100	8692 (300%)
22	Number of permanent field plots to be established during the project and continued after Darwin funding has ceased.	>200			>200	>400%
23	Value (£'s) of resources raised from other sources (i.e. in addition to Darwin funding) for project work.	(from Tullow Oil)	(from Principe Trust)			na
New - Project specific measures	Number of project websites to be produced.	1	-	-	-	na
New - Project specific measures	Estimated circulation of website (hits).	1000	1500		2500	na
New - Project specific measures	Estimated circulation of website (countries).	19	30		30	na

Table 2 Publications

Title	Type (e.g. journals, manual, CDs)	Detail (authors, year)	Gender of Lead Author	Nationality of Lead Author	Publishers (name, city)	Available from (e.g. website link or publisher)
Going the extra mile: Ground-based	Journal Article	Kristian Metcalfe, Pierre Didier	Male	British	Biological Conservation	Elsevier

<p>monitoring of olive ridley turtles reveals Gabon hosts the largest rookery in the Atlantic</p>		<p>Agamboue, Eric Augowet, Francois Boussamba, Floriane Cardie, J. Michael Fay, Angela Formia, Judicael Régis Kema Kema, Carmen Kouerey, Brice Didier Koumba Mabert, Sara M. Maxwell, Gianna Minton, Gil Avery Mounguengui Mounguengui, Carine Moussounda, Narcisse Moukoumou, Jean Churley Manfoumbi, Anicet Megne Nguema, Jacob Nzegoue, Richard J. Parnell, Philippe du Plessis, Guy- Philippe Sounguet, Dominic Tilley, Sebastiaan Verhage, Wynand Viljoen, Lee White, Matthew J. Witt, & Brendan J. Godley (2015)</p>				
<p>Leave only footprints take only data</p>	<p>Popular Science</p>	<p>Kristian Metcalfe, Dominic Tilley (2015)</p>	<p>Male</p>	<p>British</p>	<p>BioSphere</p>	<p>BioSphere (February 2015 Issue)</p>

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

This may include outputs of the project, but need not necessarily include all project documentation. For example, the abstract of a conference would be adequate, as would be a summary of a thesis rather than the full document. If we feel that reviewing the full document would be useful, we will contact you again to ask for it to be submitted.

It is important, however, that you include enough evidence of project achievement to allow reassurance that the project is continuing to work towards its objectives. Evidence can be provided in many formats (photos, copies of presentations/press releases/press cuttings, publications, minutes of meetings, reports, questionnaires, reports etc.) and you should ensure you include some of these materials to support the annual report text.

Reference to the following is included in this Annual Report and are accessible following the links provided below. Should you require a hard copy or are having trouble accessing the links please contact: Dr Kristian Metcalfe. [_____](#)

Annex 4A: Example Darwin Marine Biodiversity Atlas for the Republic of Congo ([click here](#) for link to a copy hosted online).

Annex 4B: BioSphere Magazine Article ([click here](#) for link to article hosted on the project website).

Annex 4C: Initial submission to Biological Conservation, which has been accepted pending minor corrections ([click here](#) for link to a copy hosted online).

Annex 4D: Gabon MPA announcement press coverage ([click here](#) for links to press coverage from the *Mongabay*, *National Geographic*, *Wildlife Conservation Society* and *University of Exeter* hosted on the project website).

Annex 4E: Meeting minutes for the Republic of Congo and Gabon (*Appended below*).

Checklist for submission

	Check
Is the report less than 10MB? If so, please email to Darwin-Projects@ltsi.co.uk putting the project number in the Subject line.	Y
Is your report more than 10MB? If so, please discuss with Darwin-Projects@ltsi.co.uk about the best way to deliver the report, putting the project number in the Subject line.	N
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.	Y
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.	N
Have you involved your partners in preparation of the report and named the main contributors	Y
Have you completed the Project Expenditure table fully?	Y
Do not include claim forms or other communications with this report.	