

# Darwin Initiative: Half Year Report

(due 31 October 2013)

<b>Project Ref No</b>	20009
<b>Project Title</b>	<b>Delivering an MPA network for fisheries and biodiversity for Central Africa (Republic of Congo and Gabon)</b>
<b>Country(ies)</b>	Republic of Congo and Gabon
<b>Lead Organisation</b>	University of Exeter (UoE)
<b>Collaborator(s)</b>	Conkouati-Douli National Park, Congo (CDNP) Ministry of Forest Economy and Sustainable Development (MEFDD) Wildlife Conservation Society, Congo Country Programme (WCS-RoC) Agence National des Parcs Nationaux, Gabon (ANPN) Partenariat pour les Tortues Marines du Gabon (PTMG) Wildlife Conservation Society, Gabon Country Programme (WCS-GAB)
<b>Project Leader</b>	Prof. Brendan J. Godley and Dr. Matthew Witt
<b>Report date and number (eg HYR3)</b>	31 October 2013 HYR1
<b>Project website(s)</b>	<a href="http://www.seaturtle.org/mtrg/projects/gabon/">http://www.seaturtle.org/mtrg/projects/gabon/</a> <a href="http://www.seaturtle.org/tracking/?project_id=924">http://www.seaturtle.org/tracking/?project_id=924</a>

**1. Outline progress over the last 6 months (April – September) against the agreed baseline timetable for the project (if your project has started less than 6 months ago, please report on the period since start up).**

### ***Progress in carrying out project activities (1-4)***

We continue to progress well against our schedule on all key aspects.

### **Output 1. Increasing MPA's**

#### ***1.1 Training***

Dr Kristian Metcalfe was appointed as the Darwin Research Fellow (**DRF**) at the start of the project. To assist the **DRF** with field data collection and the training of in country partners in both Gabon and the Republic of Congo Dominic Tilley was appointed as the Darwin Field Officer (**DFO**). This has allowed the project to build momentum and enabled us to train in country partners at multiple sites in the attachment of satellite transmitters, marine turtle monitoring at nesting beaches and the deployment of GPS loggers on artisanal fishing vessels (see **1.2** and **2.3**).

#### ***1.2 Field data collection and data analysis***

As of December 2013 the **DRF**, **DFO** and in country partners have deployed 10 satellite-linked GPS loggers on the vulnerable Olive Ridley (*Lepidochelys olivacea*) sea turtles that nest in Gabon ([http://www.seaturtle.org/tracking/?project\\_id=924](http://www.seaturtle.org/tracking/?project_id=924)). This involved deploying tags at Pongara National Park and two new locations (Port-Gentil and Gamba) to help develop a more detailed understanding of the relative density of at-sea habitat use to allow for more effective marine spatial planning efforts in support of marine protected area design, fisheries management and petrochemical exploration activities.

In addition, with support from in country partners (**WCS, WWF, ANPN, PTMG**) and several local NGOs (**Foundation Liambissi, Ibonga and Aventures San Frontiers**) we have also completed the first coastal transect of Gabon surveying ~600 km of coastline from Pongara National Park to the Gabon Congo border frontier for the presence of nesting Leatherback (*Dermochelys coriacea*) and Olive Ridley (*Lepidochelys olivacea*) sea turtles. This transect filled gaps in current knowledge by surveying areas that are not currently monitored throughout the year, and provided further information on hotspots of human predation and strandings. These data thus add to the expanding database on the nesting density and inter-nesting and migratory movements of sea turtles in Gabon gathered as part of the previous Darwin Project **Darwin Marine Biodiversity Action Plan for Gabon (17-005)**.

Marine turtle nesting beach monitoring work also continued in Gabon and the Republic of Congo with training provided at several sites (Pongara National Park, Port-Gentil, Gamba, and Mayumba National Park) by the **DRF** and **DFO**, with Angela Formia (**WCS**) also visiting Equatorial Guinea to build on previous capacity building and training in surveying techniques. Tim Collins (**WCS-RoC**) has also continued cetacean surveys in the Republic of Congo including the deployment of C-PODS to fill current knowledge gaps on the elusive and Vulnerable Atlantic Humpback Dolphin (*Sousa teuszii*). Tim Collins has also compiled a cetacean sighting database, pulling together >10 years of survey work undertaken in Gabon and the Republic of Congo that will contribute to more effective marine spatial planning efforts in support of marine protected area design.

We are also currently analysing vessel monitoring system (VMS) data from 2004 - 2013 to determine the spatio-temporal patterns and extent of the different commercial fisheries operating in Gabonese waters. This data will then be analysed with the artisanal fisheries data (see **2.3**) to identify (a) overlap between commercial and artisanal fisheries; (b) areas with intense fishing pressure; and (c) overlap with marine vertebrates.

### ***1.3 Awareness raising***

We are planning on expanding the website (<http://www.seaturtle.org/mtrg/projects/gabon/>) developed as part of the previous Darwin Project **Darwin Marine Biodiversity Action Plan for Gabon (17-005)** to include the work being undertaken in the Republic of Congo. We will also be holding workshops and focus groups with artisanal fishermen (see **3.2** for more details).

### ***1.4 Assembling Darwin Marine Atlases***

We have adopted the same format and structure for the Darwin Marine GIS Atlases for Gabon and the Republic of Congo as that developed by the previous Darwin Project **Darwin Marine Biodiversity Action Plan for Gabon (17005)**. We felt that this was the sensible option because several project partners were involved in the development of the original atlas. These databases are continually being populated with the latest research data as it is received so that all project partners have access to the latest data to help inform decision making.

### ***1.5 Marine spatial planning***

This work was initially planned to take place towards the end of the first year of the project, whilst this is still planned for the Republic of Congo, this phase of the project has been brought forward in Gabon. This is largely due to increased knowledge on the importance of marine biodiversity in the region and the development of Gabon Bleu a Government programme initiated to help design a national network of marine protected areas (**MPAs**). As a result the **UoE** and **DRF** have been extensively involved with partners from **WCS** on the provision of GIS and technical advice, and in the use of Marxan to support marine spatial planning in the region. This is currently ongoing with data from the Marine Atlases (see **1.4**) and collected by this project (see **1.2** and **2.3**) being incorporated into the planning process.

## **Output 2. Improving Artisanal Fisheries**

### ***2.1 Engagement with fishers***

We are currently working with fishers at 15 landing sites in Gabon and 9 in the Republic of Congo to undertake a socio-economic assessment and describe artisanal fisheries and their spatio-temporal extent (see 2.3). However, we are continually engaging with fishers at several other landing sites in Gabon and the Republic of Congo to establish further relationships in order to better quantify and describe artisanal fisheries. These relationships take time to establish thus we envisage that new sites will continue to be incorporated into the Darwin teams field data collection programme throughout the duration of the project.

### ***2.2 and 2.3 Training in data collection and Field data collection and analysis***

At present we have trained in staff from **WCS-GAB** in the deployment of GPS loggers to map artisanal fisheries and in the development of a database to collate the data gathered in the field. As a result we have made excellent progress with mapping artisanal fisheries, as of December 2013 the **DRF**, **DFO** and in country partners have collected data from ~200 fishing trips through the deployment of GPS loggers on fishing vessels across 15 landing sites in Gabon (with data collection by in country partners still ongoing). These data are currently being analysed to map current fishing locations for 7 gear types in Gabon. We are due to roll out the same training programme with project partners in the Republic of Congo with the **DRF** and **DFO** due in country in early February 2013 to train and deploy 30 GPS loggers that will be maintained by staff from **WCS-RoC** for the duration of the Darwin project.

In addition, through several partner meetings/workshops we have finalised the socio-economic questionnaire that is to be undertaken by the **DRF**, **DFO** and in country project partners. This questionnaire has been designed to help map current use and understand livelihoods in fishing communities, including the informal processing and trade sector. It also explicitly examines vulnerability to help identify possible community incentives to improve livelihoods and thus will inform future phases of the Darwin project on management interventions. The development of the questionnaire took longer than initially envisaged as we needed to work with partners from both the Republic of Congo and Gabon to ensure that we did not ask questions that would affect any relationships that have been established with the fishing communities. Moreover, we needed to ensure consistency across the project area and thus questions had to be refined to address the dynamics of the fishing communities operating in both countries. As a result we are planning on holding the fisheries questionnaire workshops/focus groups with artisanal fisherman from early February 2013.

## **Output 3. Reducing Bycatch**

### ***3.1 and 3.2 Awareness raising and Field data collection***

As part of the artisanal fisheries profiling questionnaire that has been developed (see 2.3) we have incorporated several questions on bycatch of marine vertebrates to establish baseline levels. Moreover, we will also be asking participants at these workshops to map areas where they currently catch marine vertebrates, which will then be used to inform future phases on the Darwin project on management interventions and participatory mitigation.

In addition, during the fisheries questionnaire workshop/focus groups we will be undertaking short presentations to raise awareness on the importance of the regions marine biodiversity, the problems of bycatch and will also be introducing the potential dividends associated with establishing MPAs.

## Output 4. Project Monitoring

### 4.1 Darwin reporting

This half year report shows our successful progress towards meeting the projects goals.

### 4.2 Steering group meetings

Prof. Brendan Godley visited the Republic of Congo and Gabon in May and October 2013 respectively with the DRF to further develop the work plan for the reporting year. There have also been regular meetings with project partners, which have at present largely focussed on artisanal fisheries data collection and the development of the socio-economic questionnaire (see 2.3).

**2a. Give details of any notable problems or unexpected developments that the project has encountered over the last 6 months. Explain what impact these could have on the project and whether the changes will affect the budget and timetable of project activities.**

None.

**2b. Have any of these issues been discussed with LTS International and if so, have changes been made to the original agreement?**

Discussed with LTS: No

Formal change request submitted: No

Received confirmation of change acceptance No

**3a. Do you expect to have any significant (eg more than £5,000) underspend in your budget for this year?**

Yes  No

**3b. If yes, and you wish to request a carryforward of funds, this should be done as soon as possible through the formal Change Request process.** However, it would help Defra manage Darwin funds more efficiently if you could give an indication now of how much you expect this request might be for.

Estimated carry forward request: £

**4. Are there any other issues you wish to raise relating to the project or to Darwin's management, monitoring, or financial procedures?**

No

**If you were asked to provide a response to this year's annual report review with your next half year report, please attach your response to this document.**