Darwin Initiative: Half Year Report

(due 31 October 2014)

Project Ref No	20009
Project Title	**Delivering an MPA network for fisheries and biodiversity for Central Africa (Republic of Congo and Gabon)**
Country(ies)	Republic of Congo and Gabon
Lead Organisation	University of Exeter (**UoE**)
Collaborator(s)	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**) World Wildlife Fund, Gabon Country Programme (**WWF-GAB**)
Project Leader(s)	Prof. Brendan J. Godley and Dr. Matthew J. Witt
Report date and number (eg HYR3)	31 October 2014 HYR2
Project website(s)	http://www.seaturtle.org/mtrg/projects/gabon/ http://www.seaturtle.org/tracking/?project_id=924 http://darwininitiativecentralafrica.wordpress.com/

1. Outline progress over the last 6 months (April – Sept) 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 to end September).

Output 1. Increasing MPA's

1.1 Training

As articulated in the first annual report fieldwork undertaken by the Darwin Research Fellow (**DRF**) Kristian Metcalfe and Darwin Field Officer (**DFO**) Dominic Tilley, between September 2013 and April 2014, identified a number of areas where increased awareness and training was required with species identification in both partner countries. Thus, with the assistance of **NOAA**, **Seaturtle.org** and staff at the University of Exeter (**UoE**) we have printed and/or produced a number of guides on sharks, rays, marine mammals and sea turtles. These were distributed as follows from September 2014:

- Sea turtle ID guides were given to marine turtle monitoring teams in both the Republic of Congo and Gabon (Angela Formia **PTMG,** Philippe du Plessis **FONDATION LIAMBISSI**, Hilde Vanleeuwe of **WCS-RoC**, and Gianna Minton **WWF-GAB** distributed accordingly).
- Sea turtle, marine mammal, shark and ray ID guides were distributed to marine monitoring team in Republic of Congo to improve catch data collection (**DRF,** Hilde Vanleeuwe and Tim Collins

of **WCS-RoC** distributed accordingly).

- Sea turtle, marine mammal, shark and ray ID guides were distributed to artisanal fisheries landing sites in the Republic of Congo (**DRF**, Hilde Vanleeuwe and Tim Collins of **WCS-RoC** distributed accordingly). This is in response to socio-economic questionnaires that highlighted there was a lack of awareness about what species were being caught by these groups.
- Sea turtle, marine mammal, shark and ray ID guides were also distributed to marine mammal monitoring team based in Port-Gentil in Gabon who are conducting large-scale surveys in the waters of both countries (Tim Collins of **WCS-RoC** distributed accordingly).

In addition, the **DRF** has undertaken several meetings with Bob Smith a consultant on the project regarding the delivery and content of GIS workshops for stakeholders with a specific interest in marine spatial planning that are being scheduled for 2015 in both the Republic of Congo and Gabon.

1.2 Field data collection and data analysis

Biodiversity data:
Analysis of data from the coastal transect conducted along ~600 km of Gabon's coastline between October and November 2013 was completed in September 2014, and revealed that Gabon likely hosts the largest known olive ridley (*Lepidochelys olivacea*) rookery in the Atlantic, with almost the continuous presence of nesting activity spanning from Pongara National Park in the north to the Gabon Congo border frontier in the south. In addition to GIS data layers, a draft report has now been completed, with plans to submit these findings for publication between December 2014 and January 2015.

Analysis of the coastal survey also identified a number of data gaps in our knowledge of at sea habitat use for olive ridley sea turtles. Therefore, to address these issues the **DRF** and colleagues from the **UoE** in conjunction with in country partners from **FONDATION LIAMBISSI**, **PTMG**, **WCS-GAB** and **WWF-GAB** deployed 6 satellite-linked tracking devices on the vulnerable olive ridley that nest in Gabon (http://www.seaturtle.org/tracking/index.shtml?project_id=1047) in early October 2014. This involved deploying tags at three new locations that were identified as important nesting grounds that were previously unknown prior to the coastal survey: Ozori, Omboue, Pont-Dick (taking the total number of new sites from which satellite tags have been deployed during this project to five). These tags will thus give us a comprehensive overview of inter-nesting and migratory movements at all known major nesting beaches and so will help develop a more detailed understanding of the relative density of at-sea habitat use and so allow for more effective marine spatial planning efforts in support of marine protected area design, fisheries management and petrochemical exploration activities.

In addition, in May 2014 the **DRF** and **DFO** completed the entry of 12 years of sea turtle monitoring data collected from Conkouati-Douli National Park (**CDNP**) in the Republic of Congo. These data are due to be analysed in the forthcoming year, to identify both spatial patterns of nesting in the park and possible trends over this period, that will be used by park management to inform current and future monitoring efforts as well as improving the knowledge base on marine turtles along the Atlantic coast of Africa.

A preliminary analysis of the cetacean sighting database (> 10 years of monitoring data) collated by Tim Collins (**WCS-RoC**) has highlighted that the Atlantic humpback dolphin has similar habitat preferences to that of artisanal fishers in **CDNP** (i.e. shallow waters close to coast). With bycatch of this species an annual occurrence and so of particular concern these findings are now being used by project partners and park management to work with fishers to explore possible interventions that could reduce bycatch.

Fisheries data:
As of May 2014, the **DRF** and **DFO** and in country partners from **WCS-RoC** have completed the first

comprehensive survey of artisanal fisheries in **CDNP,** which provides important baseline information on both the socio-economics and spatial patterns of fishing effort for this fisheries sector. Between May and October 2014 this program was successfully extended to include 4 artisanal fisheries landing sites outside the park boundaries. These communities differ to those inside the park, as many are typically of west African origin and so it is important that data on these groups were also gathered.

In addition, the deployment of GPS trackers on artisanal fishing boats has continued inside **CDNP** with 600 individual fishing trips logged with GPS trackers since the programmed commenced in February 2014. To date these data have been analysed to identify habitat preferences and important fishing grounds and preliminary reports have been provided to park management. However, it was agreed that data collection should continue to determine if there is any temporal variation in fishers operating behaviour and patterns of fishing effort (thus monitoring will continue up until March 2015 to generate the first annual dataset on artisanal fisheries). The program of GPS tracker deployment also continues in Gabon, with a particular emphasis on key locations (e.g. Cap Esterias, Libreville, Port-Gentil and Mayumba), with this program being managed by **WCS-GAB**.

1.3 Awareness raising

We continue to update the dedicated Darwin Project website to promote all activities and outputs relating to the project, and continue to host biodiversity monitoring data on seaturtle.org. As detailed in *Section 1.1* we have also distributed a number of species identification guides to both improve the quality of monitoring data and increase awareness of biodiversity in the region.

1.4 Assembling Darwin Marine Atlases

The structure of the Biodiversity Atlases have been agreed with partners at **WCS-GAB** and **WCS-RoC**. Data collection and layer development is still ongoing, thus to ensure that progress continues project partners have agreed to contribute to the development of draft atlases by the end of the second year (April 2015). These will then be distributed among project partners and discussed with relevant stakeholders in country for feedback before being finalised. However, it should be noted that data collated and/or developed during the project is accessible to project partners.

1.5 Marine spatial planning

This aspect of the project is planned to take place after the completion of marine atlases (April 2015, *see section 1.4*) to highlight how spatial data can be used to inform design of an ecologically coherent marine protected area network.

Output 2. Improving Artisanal Fisheries

2.1 Engagement with fishers

As of September 2014 project partners are currently working with artisanal fishers from 15 landing sites in the Republic of Congo and 20 in Gabon. It is worth noting that Darwin field staff and project partners are continually engaging with fishers at other landing sites in-country to establish further relationships and thus better quantify and describe this sector. These relationships take time to establish and so we envisage that new sites will continue to be incorporated into the field data collection programme.

2.2 and 2.3 Training in data collection andfField data collection and analysis

Training on the deployment of GPS trackers by staff from **WCS-RoC** has been completed, as successfully demonstrated by both extensive dataset gathered to date and agreed program of work for the next reporting year (*see section 1.2*). We have purchased additional GPS trackers to help with the expansion of monitoring program at landing sites outside of **CDNP** with data on 50 trips successfully

collected from these sites as of September 2014. Additional GPS trackers have also been purchased for partners at **WCS-GAB** due to increasing engagement with fishers at Cap Esterias in Gabon by local NGO **Manga**.

Following preliminary analysis of artisanal fisheries profiling questionnaires and discussions with project partners we have identified a number of areas where we are still lacking data to help identify relative importance of this sector in terms of dependency and well-being. Therefore, as of September 2014 we have discussed available options and are developing a short assessment that can be used to address these knowledge gaps, particularly dependency and well-being of fishers operating in this sector.

Output 3. Reducing Bycatch

3.1 and 3.2 Awareness raising and Field data collection

To help meet our project goals and outcomes, in particular, promote awareness of marine biodiversity in Central Africa and improve capacity to collect data we have printed and/or produced a number of guides to help with species identification (e.g. sharks, rays, marine mammals and sea turtles) that have been distributed to relevant project partners and stakeholders (*see section 1.1*). In addition, the profiling questionnaires have identified that sharks comprise a significant component of artisanal fisheries catch and contribute greatly to their income, however very little is known about species that are caught by this sector thus a program of work has been agreed with **WCS-GAB** to assess this fishery sector, with work due to commence in October 2014.

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 (**UoE**) will be visiting Gabon in October 2014 with the **DRF** to further develop the work plan for the reporting year. The **DRF** will also continue to maintain extensive presence and contact with partners in both countries with field visits scheduled from September – December 2014, and February – May 2015. There have also been regular meetings with project partners and consultants in the UK, which have primarily focused on the development of biodiversity atlases and GIS workshops that are being scheduled for 2015. In addition, there has been regular contact with staff from both **WCS-GAB** and **WCS-RoC** during the period which the **DRF** has not been in the field (June – August 2014).

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 currently expect to have any significant (eg more than £5,000) underspend in your budget for this year?

Yes ☐ **No** ☒ Estimated underspend: £

3b. If yes, then you need to consider your project budget needs carefully as it is unlikely that any requests to carry forward funds will be approved this year. Please remember that any funds agreed for this financial year are only available to the project in this financial year.

If you anticipate a significant underspend because of justifiable changes within the project and would like to talk to someone about the options available this year, please indicate below when you think you might be in a position to do this and what the reasons might be:

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.

Please note: Any planned modifications to your project schedule/workplan can be discussed in this report but should also be raised with LTS International through a Change Request.

Please send your **completed report by email** to Eilidh Young at Darwin-Projects@ltsi.co.uk . The report should be between 2-3 pages maximum. **Please state your project reference number in the header of your email message eg Subject: 20-035 Darwin Half Year Report**