



# Darwin Initiative Overseas Territories Challenge Fund Interim Report

This report should be completed and submitted within a month of agreed end date of project

Darwin Ref Number	EIDCF019
Darwin Project Title	Inshore Cetaceans of the Falkland Islands
Country (ies)	Falkland Islands
Award holding Organisation	Falklands Conservation
Partner Organisations	Austral Biodiversity
Grant Value	£24,950
End date	April 2014
Author(s), date	Grant Munro, 18 <sup>th</sup> October 2013

## 1. Challenge Fund Background

Current knowledge on the inshore occurrence and distribution of cetaceans in the Falkland Islands is extremely limited and no dedicated survey has been undertaken in inshore waters. Sei whale, Commerson's dolphin and Peale's dolphin are known to occur. Both national and international species action plans for these IUCN, CITES & CMS listed species recognise that the lack of information on which to base assessments and management decisions is a major threat to conservation.

Highlighted in species action plans is the need to identify distribution, abundance and trends in dolphin populations along with the stock identity of sub-populations. To target these data gaps an inshore survey of cetacean occurrence is required paired with focal studies incorporating photo-identification. However even basic data on potential survey occurrence rates, variability between distinct inshore geographical areas and habitat types, and the feasibility of focal studies are lacking and hence a first step in the process is to conduct a basic pilot survey to define occurrence rates and variability so that a more extensive and statistically robust island-wide survey may be designed and planned. The current Darwin Challenge award seeks to establish basic parameters and feasibility so as to allow accurate design and planning of a wider survey.

The aims of the project are to:

- Design a 10-day transect survey to evaluate encounter rates, variability, & reactive movement of animals, in order to feed data into the design of a full island-wide survey.
- Undertake the 10-day inshore transect survey for cetaceans from a suitable vessel
- Test feasibility of photo-identification and focal studies during the pilot survey
- Design and cost a full island-wide survey utilising data obtained from the pilot survey
- Undertake acoustic monitoring at 2 sites to suggest seasonality in occurrence
- Submit full funding application based upon results

## 2. Challenge Fund Activities

Activities are broadly based on two themes:

- Tasks related to and resulting from pilot cetacean transect survey
  - Design of 10 day survey [completed]
  - Execution of 10-day survey [confirmed 26<sup>th</sup> Feb 2014 – 10<sup>th</sup> March 2014]
  - Analysis of 10-day pilot survey results [March 2014]
  - Design of island-wide survey [April 2014]
  - Initial assessment of focal study feasibility during survey
- Tasks related to acoustic monitoring
  - Seasonality of occurrence at 2 sites (to inform time of year for survey) [Ongoing data collection; data analysis & seasonal trends in March]

Acoustic monitoring of Commerson's & Peale's dolphins, through the use of C-POD click detectors, is on-going at two sites; Port William, Stanley (East Falkland) and Port Howard (West Falkland). Seasonal trends in occurrence will be conducted with full data in March 2014.

Design of the 10-day pilot survey has been completed by Iris Thomsen, with guidance from Sonja Heinrich and Phil Hammond at the Sea Mammal Research Unit (SMRU), University of Saint Andrews, and local input from Grant Munro. The survey design will sample a range of strata representing different habitat types in four broad geographical areas; north coast of West Falkland and islands, north of Falkland Sound, south of Falkland Sound, and embayments of south-east East Falkland (Bay of Harbours and Adventure Sound). A full report on the survey design is available and will be fine-tuned prior to the survey with inclusion of the north of West Falkland, and include feedback that has been supplied from the survey vessel operator.

Following a UK visit and meeting with SMRU and local liaison with charter vessels, the survey dates have been confirmed for late-February 2014. Due to tourism commitments the charter vessel was unavailable for a 2-week block during the mid-summer season. The survey dates were constrained to either early season (October) or late season (February/March). Both periods provide similar day-length and weather conditions. The late summer period was chosen for both biological and practical reasons;

- Occurrence of Sei Whales: Sei whales will be present inshore in late summer and can be included within survey effort (not present in October).
- Availability of Personnel: Iris Thomsen and Sonja Heinrich will be available to assist on the survey (not available in October). Sonja Heinrich will be able to provide training and instruction to local volunteers, whilst Iris Thomsen having conducted the design is best placed to make any modifications whilst on-survey should conditions necessitate.
- Flexibility in Completion Dates: No follow-on vessel commitments immediately post-survey means there is flexibility to extend the survey if completion is delayed by poor weather for observing. Post-survey vessel commitments in October would have meant that the survey would have required to be terminated after 10 days regardless of whether effort had been completed.
- Availability of Survey Equipment: Survey equipment could be made available on loan by University of St. Andrews in February but was being utilised in October.
- Modifications to Vessel: The construction of an observer platform by the vessel operator above the wheelhouse will be possible.

Whilst the survey dates of 26<sup>th</sup> February - 10<sup>th</sup> March are closer to the end of the programme all expenditure will occur within the financial year and outputs will be completed prior to Darwin + funding rounds.

Iris Thomsen is available and has been contracted to undertake the analysis of the pilot survey data and prepare an island-wide survey design. Iris will be employed from the lead-up to the pilot survey until completion of the project. Guidance will be provided by Dr Sonja Heinrich and Dr Phillip Hammond. C-POD analysis will be undertaken by Grant Munro, whilst final reports and Darwin proposals will be jointly progressed by all parties and local stakeholders.

### 3. Outcome & Impact of Challenge Fund

The project is still on-going and survey periods have now been confirmed. The encounter rates and variance recorded on the pilot survey will allow a robust island-wide survey to be designed, whilst patterns of seasonality through acoustic monitoring will determine if repeat surveys are required, at least in focal areas to determine movements and residency. Training during the pilot survey will field-test techniques in the Falklands conditions and provide training to local volunteers.

### 4. Lessons

The project was extended for a year due to a delay in the commencement of the project. This resulted from an initial intention as a pilot project to use existing personnel between extant work commitments to undertake the project work. Due to increases in work-load due to environmental assessment of hydrocarbon exploration this proved not to be realistic. The employment of a dedicated officer to undertake survey design and analysis in the current summer season shall ensure that project commitments are met and survey periods are now confirmed.

### 5. Project Expenditure

Item	Budget for whole project*	Actual Expenditure 2012/13	Forecast Expenditure 2013/14	Comments
Travel Costs				
Subsistence costs				
Overhead costs				
Operating Costs				
Capital Costs				
Other				
Salaries (specify by individual)				
TOTAL	24,950	8,363.38	16,586.62	

\* please indicate which document you refer to if other than your project application or annual grant offer letter

\*\* please explain any variance of +/- >10%

### 6. Other comments not covered elsewhere