

SC/68A/RP/02

SH - Research (Olson) Using photo-ID to Investigate the Identity of Blue Whales at South Georgia



INTERNATIONAL
WHALING COMMISSION

Appendix 1 – PRO FORMA FOR PROJECT PROPOSALS



135 Station Road, Impington, Cambridge, UK, CB24 9NP;
 Tel: +44 1223 233397 - Fax: +44 1223 232876
 E-mail: secretariat@iwc.int

PROJECT PROPOSAL REQUEST

1. PROPOSAL TITLE

Using photo-ID to Investigate the Identity of Blue Whales at South Georgia

2. BRIEF OVERVIEW OF THE PROPOSAL AND ITS EXPECTED OUTCOME

Blue whale catch records from South Georgia are dominated by Antarctic blue whales and generally it has been assumed that all blue whales at South Georgia are of this form (Branch et al. 2007a).

The Antarctic Blue Whale Catalogue contains 11 individually identified blue whales that have been photographed at South Georgia. Three of these whales are consistent in appearance with non-Antarctic blue whales, with a proportionally shorter tailstock and "bad skin" (prevalent lesions and scarring). They appear similar to Chilean blue whales. All three whales were photographed on 28 February 2015.

Comparing the identification photographs of these three whales to the photo-ID's of Chilean whales (approximately 400 whales, held by the Southern Hemisphere Blue Whale Catalogue) may yield a match between the two regions. If a photographic match is found it would confirm the presence of Chilean blue whales at South Georgia.

Branch TA, Stafford KM, Palacios DM, Allison C, Bannister JL, et al. 2007a. Past and present distribution, densities and movements of blue whales *Balaenoptera musculus* in the Southern Hemisphere and northern Indian Ocean. *Mammal Review* 37: 116–175.

3. RELEVANT IWC SCIENTIFIC COMMITTEE GROUPS OR SUB-GROUPS

SH – The sub committee on Southern Hemisphere whale stocks is examining the population structure of Southern Hemisphere blue whales. Results generated from this study will provide relevant information.

PH – Results generated by this project will be archived in the Antarctic Blue Whale Catalogue and the Southern Hemisphere Blue Whale Catalogue.

4. TYPE OF PROJECT (PLEASE TICK)

Research project	X
Modelling	
Workshop/meeting	
Database creation/maintenance	
Compilation work/editing (e.g. on whalewatching regulations, SOCER, etc.)	
Other (please specify below)	

5. BRIEF DESCRIPTION OF THE PROPOSAL AND ITS CONNECTION WITH SCIENTIFIC COMMITTEE RECOMMENDATIONS (DO NOT EXCEED 1500 WORDS)

(A) BACKGROUND, RATIONALE, AND RELEVANCE TO THE PRIORITIES IDENTIFIED BY THE IWC SCIENTIFIC COMMITTEE:
<p>Recently acoustic, genetic, and re-evaluated catch data have given evidence that Chilean blue whales may occasionally, if infrequently, be present at South Georgia (Branch et al. 2007b; Pangerc 2010; Sremba et al. 2014), but this is yet to be confirmed. Confirming the presence of Chilean blue whales at South Georgia will provide information on the identity of blue whales at South Georgia and provide new data on the movement patterns of Chilean blue whales.</p> <p>Branch, T. A., E. M. N. Abubaker, S. Mkango, and D. S. Butterworth. 2007b. Separating southern blue whale subspecies based on length frequencies of sexually mature females. <i>Marine Mammal Science</i> 23:803-833.</p> <p>Pangerc, T. 2010. Baleen whale acoustic presence around South Georgia. University of East Anglia. PhD dissertation.</p> <p>Sremba, A. L., A. R. Martin, and C. S. Baker. 2015. Species identification and likely catch time period of whale bones from South Georgia. <i>Marine Mammal Science</i> 31:122-132.</p>
(B) SPECIFIC OBJECTIVES OR TOR AND DELIVERABLES/OUTCOMES:
<p>Objectives:</p> <p>(1) Compare three individually identified blue whales photographed at South Georgia, (with morphological features consistent with Chilean blue whales) with approximately 400 blue whale ID photos from Chile, held by the Southern Hemisphere Blue Whale Catalogue.</p> <p>Deliverables:</p> <p>(1) A report to IWC SC meeting in 2020 summarizing results.</p>
(C) METHODOLOGICAL APPROACH/WORK PLAN/ADMINISTRATIVE DETAILS
<p>Identification photographs will be compared using methods outlined in Sears <i>et al.</i> (1990) and Gendron and Ugalde de la Cruz (2012). Results will be added to databases of the Antarctic Blue Whale Catalogue and the Southern Hemisphere Whale Catalogue.</p> <p>Gendron, D. and Ugalde de la Cruz, A. 2012. A new classification method to simplify blue whale photo-identification technique. <i>J. Cetacean Res. Manage.</i> 12: 79-84.</p> <p>Sears, R., Williamson, J.M, Wenzel, F.W., Bérubé, M., Gendron, D. and Jones, P. 1990. Photographic identification of the blue whale (<i>Balaenoptera musculus</i>) in the Gulf of St. Lawrence, Canada. <i>Rep. Int. Whal. Commn.</i>, (Special Issue) 12: 335-342.</p>
(D) SUGGESTIONS FOR OUTREACH
<p><i>Please, note that successful proponents will be requested to produce ad hoc material that will be used by the IWC Secretariat for dissemination and outreach.</i></p>

6. TIMETABLE FOR ACTIVITIES AND OUTPUTS

Specify the timetable for project activities and expected out puts separately. For projects with multiple distinct elements please indicate interim goals and timeframes. Add as many rows as you need to the tables below. If publications are an expected output please note whether you will submit the manuscript to the IWC's Journal of Cetacean Research and Management.

Activity to be undertaken	Key person(s)	Start(mm/yy)	Finish (mm/yy)
Comparison of blue whale identification photographs from South Georgia and Chile	Paula Olson	July 2019	December 2019

Expected outputs	Completion date (mm/yy)
Paper with results submitted to IWC Scientific Committee meeting 68B 2020	April 2020

7. RESEARCHERS' (OR STEERING GROUP) NAME(S) AND AFFILIATION

Please, also specify if the project team has any direct connection (e.g. same research group or institute, collaborator on common project) with people involved or likely to be involved in taking the funding decision (e.g. IWC SC heads of delegations, SC convenors, etc.). Add as many rows as you need to the table below.

Name	Affiliation	Connection with decision

8. TOTAL BUDGET

Breakdown into: (1) salaries/wages (include name/position of each individual and breakdown of time and duties i; (2) travel/subsistence expenses (breakdown by person and justification) unless for IPs for workshops where a total estimate based on an average for the total number of IPs is acceptable; (3) services (e.g. aircraft/vessel time, consultancy fees, ARGOS fees, etc.); (4) reusable capital equipment (e.g. reusable equipment such as a hydrophone, cameras, etc. Note that this equipment will have to be registered at the IWC Secretariat and will remain property of the IWC at the end of the project), (5) expendable capital equipment (e.g. consumables, tags, stationery), (6) shipping costs, (7) insurance costs, (8) in kind co-funding (specify whether other funding is available for personnel/name, equipment, venues, etc.). Note that "Overheads" are not admissible. Add as many rows as you need to the table below.

Type	Detailed description	Cost in GB pounds
(1) Salaries (by person)	Comparison of ID photos, production of report, data submitted to Southern Hemisphere Blue Whale Catalogue	390
(2) Travel/subsistence (by person or est. total for IPs)		
(3) Services (by item)		
(4) Reusable equipment		
(5) Consumables		
(6) Shipping (by Item)		
(7) Insurance (by item)		
(8) Co-funding		
(9) Other		
Total		390

9. DATA ARCHIVING/SHARING

Please state your plans for data archiving and sharing. Note that data collected primarily under IWC grants are considered publicly available after an agreed period of time for publication of papers, usually about two years. The work of the IWC depends on the voluntary contribution of data to the various databases and catalogues IWC supports. Please consult the Secretariat (secretariat@iwc.int).

Not applicable

10. PERMITS (PLEASE TICK)

Do you have the necessary permits to carry out the field work and have animal welfare considerations been appropriately considered?	N/A
Do you have the appropriate permits (e.g. CITES) for the import/export of any samples?	N/A

If 'Yes' please provide further details and enclose copies where appropriate: