SC/67b/RP37

NH - Workshop, Comparative biology, health, status and future of NA right whales

.

INTERNATIONAL
WHALING COMMISSION

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PROJECT PROPOSAL REQUEST

1. PROPOSAL TITLE

Workshop: Comparative Biology, Health, Status & Future of NA Right Whales: Insights from Comparisons with other Balaenid Populations

2. BRIEF OVERVIEW OF THE PROPOSAL AND ITS EXPECTED OUTCOME

The North Atlantic right whale's (NARW) population rate of increase is much lower than those of all other well-studied balaenid populations. This workshop would compare reproductive biology, health and status of North Atlantic right whales with those of other balaenid populations with the goal of determining their potential for growth and assessing the role of anthropogenic mortality as a driver of current population decline. Possible causes of the NARW's lower reproductive rate need reassessment including: sub-lethal effects of entanglements, environmental contaminants or marine biotoxins, inadequate prey base, stress from noise, genetic factors and infectious diseases. This review will also help understand population changes for other balenid popuations.

3. RELEVANT IWC SCIENTIFIC COMMITTEE GROUPS OR SUB-GROUPS

SH, NH, HIM, CMP

4. TYPE OF PROJECT (PLEASE TICK)

Research project	
Modelling	
Workshop/meeting	X
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:

North Atlantic right whales were hunted until they were given legal protection in 1935. The size of the population at that time is unknown, but it was very small, probably only in the tens of individuals. By 1992, after several decades of slow growth, the population was estimated as 295 whales. Continued growth averaged 2.8% per year from 1990 to 2010. In 2015, the population was estimated to be 500 whales. However, since 2010, the calving rate has decreased by almost 40%, and between 1970 and 2010 anthropogenic deaths (entanglements and ship strikes) have increased. The recent regulations intended to slow ship speed and move traffic lanes in Canada and the US appear to have reduced ship kills. Between 1970 and 2009, 44% of the diagnosed NARW mortality was due to ship strikes and 35% was due to entanglements in fishing gear, but during the past six-years (2010-2015) the causes of diagnosed NARW deaths were reversed with only 15% due to ship strikes and 85% due to entanglements. Currently it appears that human-caused mortality and injury is exceeding the reproductive capacity of the population. Since 1980, over 50 confirmed NARW deaths were caused by human activities. At the end of 2015, 83% of all known NARW's had scars or carried ropes indicative of past entanglements. Sub-lethal entanglement can cause reproductive failure related to declining health long after an animal was first entangled.

This workshop will compliment efforts of the Subcommittee, specifically in regards to the recommendation to provide a comprehensive update on the status of North Atlantic right whales and identify any remaining data/analyses necessary to review the species status. Additionally, updates from the U.S. Large Whale Take Reduction Team (ALWTRT) on progress of the Whale Safe Rope and Gear Marking Feasibility Subgroups and discussion of the feasibility of gear modifications and marking and how effective bycatch mitigation measures could be applied across species involved in bycatch resulting from common gear types would further support recommendations by both NH and HIM.

(B) SPECIFIC OBJECTIVES OR TOR AND DELIVERABLES/OUTCOMES:

The NARW's population rate of increase is much lower than those of all other well-studied balaenid populations. This workshop would compare reproductive biology, health and status of North Atlantic right whales with those of other balaenid populations with the goal of determining their potential for growth and assessing the role of anthropogenic mortality as a driver of current population trends. Possible causes of the NARW's lower reproductive rate need reassessment including: sub-lethal effects of entanglements environmental contaminants or marine biotoxins, inadequate prey base, stress from noise, genetic factors and infectious diseases.

(C) METHODOLOGICAL APPROACH/WORK PLAN/ADMINISTRATIVE DETAILS

Pre-requisites:

- Updated abundance estimate based on Pace *et al.* 2017
- Updated details on bycatch and ship strikes

Proposed Meeting Details:
Location: New England Aquarium, Boston
Dates: Late 2019
Numbers of Participants: approximately 30

DRAFT AGENDA

1. Welcome
2. Arrangements for workshop
3. Election of Chair
4. Appointment of rapporteurs
5. Adoption of terms of reference and agenda
6. Balaenid populations to be reviewed
    a. BCB bowhead whale
    b. Western North Atlantic right whale
    c. Western North Pacific right whale
    d. Eastern North Pacific right whale
    e. South African southern right whale
    f. Australian southern right whale
    g. NZ-Auckland southern right whale
    h. Chile- Peru southern right whale
    i. Argentina southern right whale
7. Historical and modern catches including anthropogenic
8. Biological parameters, mainly reproductive
9. Health of populations
10. Estimates of abundance and recent trends
11. Factors affecting population increase/recovery
12. Worldwide comparison of population status
13. Population protections 25-years into the future
14. Management implications of actions and no action
15. Future research
16. Publication
17. Any other business
18. Adoption of workshop report

(D) SUGGESTIONS FOR OUTREACH
• Workshop report to be presented at SC69A

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)
Hold Workshop	R. Suydam, S. D. Kraus, G. P. Donovan, [P. J. Corkeron,] R. L. Brownell Jr.	Late 2019	Late 2019

Expected outputs	Completion date (mm/yy)
Produce Report	Spring 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
R. Suydam	North Slope Borough	
S.D. Kraus	New England Aquarium	
G.P. Donovan,	Internatioanl Whaling Commission	
R. L. Brownell Jr.	National Oceanographic and Atmospheric Administration	

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)		
(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		20,000

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).

10. PERMITS (PLEASE TICK)

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

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

Appendix 2 – DRAFT SCORING SHEET

If a project presents multiple primary objectives which are achieved using sub-projects, a sheet should be used to evaluate each single sub-project. Note that not all criteria are equally applicable depending on the nature of the project (e.g. field work versus workshops).

IWC SCIENTIFIC COMMITTEE PROPOSALS FOR FUNDING - REVIEW CRITERIA - TEST				
TITLE OF THE PROJECT/sub-projects:				
PRINCIPAL INVESTIGATOR:				
Key criteria		**Explanation of scoring**	**Score**	**Supporting Remarks**
Relevance to Scientific Committee priorities				
1	How well aligned are the scientific outcomes of the project/activity with the current SC priority areas?	1 - Not aligned/poorly aligned (e.g. too vague or generic reference to general SC priorities) 2 - Reasonably aligned (e.g. some aspects may be vague or links are not clear) 3 - Well aligned (e.g. outcomes clearly deliver in the most part on priority areas, may also address longer term or potential future issues). 4 – Closely aligned (e.g. of interest for multiple sub-groups or delivers on specific SC high priority topics/recommendations in the immediate or short term).		
2	To what extent will the outcomes of the project/activity contribute to improvements in the conservation and management of cetaceans?	1 - Not at all 2 - Poorly 3 - Reasonably or over the longer term 4 - Well or over the medium term 5 - Excellently or to almost immediate effect		
Note: if in each of the two above key criteria under this section the project does not score singularly at least 2 points, do not proceed in further evaluation. Of course, proposals within a sub-group would only be developed if in their estimation scores were of 4 or above.				
Approach and methodology				
3	What degree of scientific merit/value is there in carrying out the work?	1 - Not demonstrated or of low scientific value 2 - Useful/basic scientific value 3 - Very good scientific value 4 - Excellent/innovative scientific value		
4	Is the proposed methodology scientifically sound and feasible in terms of field and analytical methods?	1 - Feasibility unrealistic & poor methodology or not properly addressed 2 - Feasibility & methodology acceptable but would benefit from some substantial amendments		

		3 - Feasibility & methodology good, some small changes beneficial 4 - Feasibility & methodology excellent or a highly promising innovative approach to an important question facing the Committee		
5	What is the likelihood of success based on the proposed overall approach and methodology?	1 – No chance of success 2 - Low chance of success/better approaches available 3 - Medium chance of success/some changes to the approach necessary 4 - High chance of success/little or no changes to the approach necessary		
5a	Are objectives of the research likely to be achieved within the proposed time-frame?	1 – No or unlikely 2 – Partially or potentially ambitious 3 - Yes with some minor suggestions 4 – Yes		
5b	Are any proposed intermediary targets timely and achievable?	1 – No or unlikely 2 – Partially 3 - Probably 4 - Yes		
5c	Is the proposed time-frame/work necessary (e.g. can the project produce results in a shorter time period)?	1 – No or unlikely 2 – Partially 3 - Probably 4 - Yes		
5d	Is the sample size adequate to achieve the stated objectives?	1 – Not demonstrated/not properly addressed 2 – No or unlikely (too low/too high) 3 – Probably (additional analysis needed) 4 - Yes		
6	Is the project likely to affect adversely the population(s) involved?	1 - Not properly addressed/ unknown 2 - Yes severely 3 – Possibly at a low level 4 - No		
6a	**IF YES**, are analyses provided on simulations of the effects using different time-frames for the project if applicable?	1 – No 2 – Partially 3 - Yes		
Note: if in each of the above key criteria under this section the project does not score singularly at least 2 points, do not proceed in further evaluation. Of course, proposals within a sub-group would only be developed if in their estimation scores were of 3 or above.				
Project team and Project management				

7	To what extent does the team have the relevant expertise, experience, and balance?	1 – Poor or not demonstrated 2 – Sufficient 3 - Very good 4 - Excellent		
8	Contingency plan: To what extent have potential problems/risks been considered and appropriate mitigation proposed?	1 – Poor or not demonstrated 2 – Sufficient but could be improved 3 - Fully or requiring only minor suggestions or not applicable		
Value for Money				
10	Does the project represent good value for money?	1 – No or significant amendments would be needed 2 – Yes but with some minor amendments 3 – Yes		
11	Have sufficient links been made to the wider research community/other organisations/capacity building.	1 – No 2 – Some but significant amendments needed 3 – Yes but with some minor additions 4 – Yes or not applicable		