INTERNATIONAL WHALING COMMISSION

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PROJECT PROPOSAL REQUEST

1. . PROPOSAL TITLE

Please provide the title of the project or the name of the workshop/meeting.

Research and Monitoring of Endangered Western North Pacific Gray Whales Feeding off Sakhalin Island in 2021 and its Relevance to Aboriginal Subsistence Whaling Proposed by the Makah Indian Tribe in U.S. Waters

2 . BRIEF OVERVIEW OF THE PROPOSAL AND ITS EXPECTED OUTCOME

Give a very brief overview (max 150 words) on your proposal and its expected outcomes. Use bullet point to list outcomes. Be succinct and clear as this may be used to summarise your project for the report.

Research by the Russia Gray Whale Programme (RGWP) on endangered western North Pacific (WNP) gray whales summering off Sakhalin Island, Russia, has been conducted annually 1995-2020. The SC has repeatedly highlighted the importance of this research. The data time-series has proven critical to assessment of the population by the IWC, IUCN and in support of the range state Memorandum of Cooperation. In addition to the scientific value of this work for conservation purposes, the annual photo-identification and genetic data are poised to take a new role in the envisioned management of an ASW hunt proposed by Makah Indian Tribe to take eastern North Pacific (ENP) gray whales in U.S. waters. This Makah waiver request is specific to ENP but not WNP gray whales. The funding requested herein is to: (a)continue the critical research by the RGWP on WNP whales and (b) ensure that the ASW hunt managed under IWC is sustainable by minimizing incidental take of WNP whales.

3 . RELEVANT IWC SCIENTIFIC COMMITTEE GROUPS OR SUB-GROUPS

List all the IWC Scientific Committee groups or sub-groups that the outcomes of this work would be relevant to and provide a brief (1-2 lines) explanation of how it would contribute more widely to their ongoing programmes of work. Where possible, do not simply list only the sub-committee within which or for which the project proposal was generated.

ASI – Abundance estimates
CMP – Western gray whale conservation management plan
SDDNA – Stock structure, mixing matrices
IST – Rangewide population modeling
HIM – Salmon fisheries interactions
ASW – Makah whaling

4 . TYPE OF PROJECT (PLEASE TICK)

Research project	XX
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:

Gray whales that summer in the WNP, mainly off northeastern Sakhalin Island and the southeastern coast of Kamchatka (Olga Bay), appear to be a genetically and demographically self-contained group and are therefore assessed as a subpopulation in the IUCN Red List despite the fact that some of these whales migrate to wintering areas in the eastern North Pacific. The number of reproductive females was estimated at between 51 and 72 in 2016, hence the total number of mature individuals is small and well below 250. Historically, gray whales migrated through Japanese and Korean waters to putative wintering grounds in the South China Sea. Recent sightings and bycatches off Japan and China showed that some individuals, including at least two that were also identified in the Piltun feeding areas off Sakhalin Island, migrate through Asian waters in winter and spring. Although one recent record exists of a mother and calf migrating off Japan in spring, it is unclear whether a specific Asian wintering ground still exists. If the western subpopulation were defined to include only those whales that winter in the western North Pacific, it would be classified as Critically Endangered because the number of mature individuals in that group is most probably less than 50 (Cooke et al., in 2018 IUCN Red List).

The WNP to ENP movements of some gray whales potentially exposes them to a ASW hunt proposed by the Makah Indian Tribe in the coastal waters of the U.S. off Washington state. Should this hunt take place, NOAA Fisheries may issue a hunt permit to the Tribe authorizing hunting of ENP gray whales. A waiver has not been proposed for the Tribe to hunt WNP gray whales. Should a struck whale be affirmatively identified as part of the WNP stock, the hunt will cease until measures have been taken to ensure that no other WNP whales will be struck. The proposed regulations governing the hunt include provisions for photographic (or genetic) identification of WNP gray whales. The regulations require that there are adequate photo-identification catalogs and processes available to allow for the identification of WNP whales before they may issue a hunt permit. In the event that a WNP gray whale has been struck in the course of the Makah Tribe's hunt, the Tribe will be notified and required to cease hunting for the remaining duration of the permit period unless measures have been taken to ensure no additional WNP gray whales are struck. In order to make this notification, NOAA Fisheries must be able to utilize a photo-identification catalog and/or genetic data to quickly determine whether or not each whale struck belongs to the WNP population. Full details of the management plan can be found at (Federal Register / Vol. 84, No. 66 / Friday, April 5, 2019 / Proposed Rules).

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

Provide the specific objectives and the expected deliverables. In the case of workshops and meetings, include the Terms of Reference (ToR) and expected outcomes.

The principal outcomes of this work will include: (a) continued population assessment, (b)tracking the recovery trend, (c) monitoring impacts from oil and gas development and the trap-net fishery for salmon, (d) fulfilling actions in the western gray whale CMP, (d) supporting the spirit and intent of the range state Memorandum of Cooperation and (e)making available the 1994-2021 photo-identification catalogue and any related genetic data for the proposed ASW hunt in U.S. waters.

(C) METHODOLOGICAL APPROACH/WORK PLAN/ADMINISTRATIVE DETAILS

Specify the methods to be applied (novel methods require more explanation than standard ones) and the broad workplan – the detailed timetable appears under Item 5 below.

In the case of workshops and meetings, include the broad work plan including any pre-requisites for the workshop/meeting to take place (apart from funding, e.g. completed analyses, papers etc.) and administrative details (e.g. location, dates, number of participants).

Photographic surveys will follow identical methods used by the research team between 1995-2020. These surveys are conducted via 4.5 m inflatable boat, staffed by a boat driver, data recorder, photographer and biopsy sampler. Systematic search from the vessel is maintained until a whale sighting is made. At this point, the research vessel is moved within 6-12 m of a whale pod and individuals are photographed. Location (as determined by GPS) is recorded for all encounters as are environmental. In all cases, attempts are made to photograph the right dorsal flank of each whale, followed then by photos of the left dorsalflank and flukes. Photographs are taken with professional SLR digital cameras equipped with zoom telephoto lenses.

All photo-identification data are stored on hard drives with redundant copies of the data stored at different locations. Photographs collected on film during the early years of the study have been digitized. Image processing has been conducted using ACDSee and Photoshop software. Most recently, the research software Discovery has been used as the primary system to process and manage images and related data collected. Other related data and information are stored in two main formats: Microsoft Access and Microsoft Excel. The RGWP database is managed in Microsoft Access. A digital photo-id catalogue is updated annually. Genetic data are shared with NOAA Fisheries and their scientists that have a long track record of conducting research on gray whale stock delineation.

(D) SUGGESTIONS FOR OUTREACH

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.

Presentations to academic and public audiences within Russia, U.S. and other range states as possible. Outreach via the IUCN Western Gray Whale Advisory Panel. Papers provided to the IWC Scientific Committee and other meetings.

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)
Planning and permits for fieldwork	Burdin	May/2021	June/2021
Deploy to field site	Burdin and team	July/2021	
Small boat sampling surveys	Burdin and team	July/2021	September/2021

Expected outputs	Completion date (mm/yy)
Summary report of field activities to IWC	November/2021
Data analysis and completion of photo-identification catalogue	April/2022
Final report to IWC SC	May/2022

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
Alexander Burdin, Ph.D. email:fewr@me.com	Kamchatka Branch of Pacific Institute of Geography, Far East Branch - None Russian Academy of Sciences, Petropavlovsk, Kamchatka, RUSSIA	None
Matvey Mamaev	A.N. Severtsov Institute of Ecology and Evolution, Russian Academy of None Sciences, Moscow, RUSSIA	None
Anastasiya Kunitsa	Moscow State University	None
Iliya Shevchnko	Kamchatka Branch of Pacific Institute of Geography, Far East Branch - None Russian Academy of Sciences, Petropavlovsk, Kamchatka, RUSSIA	None
Alexander Anofriev	Orlov State University	None
David Weller, Ph.D.	NOAA Fisheries, SWFSC, La Jolla, California USA	None

8 TOTAL BUDGET

PROJECT BUDGET						
	Description	**Cost per unit**	**Number of units**	**Total Cost £GBP**		**Co-funding**
(1) Salaries (by person)	Volunteer/student stipends for: Mamaev, Kunitsa, Shevchnko, Anofriev,	720	4	2,880		
(2) Travel/subsistence (by person or est. total for IPs)	Contribution towards RT travel to and from field site; food and supplies (no housing cost)	5,000		5,000		
(3) Services (by item)	Truck rental Boat rental in Kamchatka (to Olga Bay) Storage in Nogliki (Sakhalin) Car rental in Kamchatka Hotel	1,295 5,033 300 288 215	1 1 1 1 1	1,295 5,033 300 288 215		
(4) Reusable equipment	Camera Nikon D500 DJI Mavic Air2S UAV	965 965	1 1	965 965		
(5) Consumables	Gas and oil for boat outboard motor Plywood for cabin repair	719 360		719 360		
(6) Shipping & Customs (by Item)						
(7) Insurance (by item)						
(8) Other	In kind support, D. Weller, U.S. NOAA Fisheries					
			TOTAL	**18,020 £GBP**		

Co-funding Memo:

Source	**Purpose of Funding**	**Amount**		**Secured/Tentative?**
D. Weller (U.S. NOAA)	In kind support to help facilitate catalogue use for ASW purposes in the U.S.	In kind		Secured
	TOTAL			

Total value of project:	**£GBP**
Funds requested from IWC	**18,020**
Co-funding	
TOTAL	**18,020**

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).

All photo-identification data are stored on hard drives with redundant copies of the data stored at different locations. Data and information are stored in two main formats: Microsoft Access and Microsoft Excel. The RGWP database is managed in Microsoft Access. A digital photo-id catalogue is updated annually. Genetic data are shared with NOAA Fisheries and other scientists that have a long track record of conducting research on gray whale stock delineation. As per IWC terms and conditions, data collected under this grant will be made publically available at or before the two year requirement. Data will be shared with IWC and NOAA Fisheries and are envisioned to contribute to the 'joint catalogue' concept (see IWC 2020).

10. . PERMITS (PLEASE TICK)

Do you have the necessary permits to carry out the field work and have animal welfare considerations been appropriately considered?	In progress: successfully obtained every year 1997 to 2020.
Do you have the appropriate permits (e.g. CITES) for the import/export of any samples?	NA

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

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		