



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

## PROJECT PROPOSAL REQUEST

### 1 . PROPOSAL TITLE

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

Assessment modelling for in-depth assessments of North Pacific sei and humpback whales – 2022 to 2024

### 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.

The IA sub-committee is currently conducting in-depth assessments for North Pacific sei and humpback whales. Part of an in-depth assessment is evaluating the status of a population using a population dynamics model that is specific to the biological and behaviour parameters of that particular population and is fitted to monitoring data. The population models are spatially-structured and are fitted to estimates of absolute and relative abundance, genetics data, and mark-recapture data. The population models will be updated following the 2022 SC meeting and the results included in synthesis papers, which will result in an assessment of the status of the population.

The project involves developing and utilizing population dynamics models as required to progress the work on the IA sub-committee.

### 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.

This work is directly related to the work of the In-depth assessment sub-committee in regards to North Pacific sei and humpback whales. In addition, the population dynamic models proposed to be refined can also be applied to other species being studied in any of the sub-groups, with modifications to incorporate species specific details.

### 4 . TYPE OF PROJECT (PLEASE TICK)

|   |   |
|---|---|
| Research project  |   |
| Modelling   | X |
| 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:**

*Provide a clear explanation of the background and rationale for the proposal and its relevance to Scientific Committee identified priorities. Clearly identify the most relevant and recent Scientific Committee recommendations.*

The Committee recommended assessments of the North Pacific sei and humpback whales be conducted. This work is being done in the IA subcommittee. The proposed work is to further develop, implement and document the population dynamic models needed to conduct these two assessments.

**(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 objective is to further develop and implement the assessment models applied to both the North Pacific sei whale data and North Pacific humpback whale data. Then run the models, assemble the results into a paper for each species that describes the methods and results and to present these papers to the Scientific Committee meeting.

The deliverables are the code to the model, results, and summary documentation for each species.

**(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).

The North Pacific sei whale model is a sex-, age- and spatially-structured population dynamics model. The North Pacific humpback whale model is an age-aggregated and spatially-structured population dynamics model. Both models will be further developed to represent the stock hypotheses identified during the 2022 meeting of the Scientific Committee. These models allow for multiple breeding stocks, each of which may be located on multiple feeding and wintering grounds. The values for the parameters of the model can be estimated by fitting it to data on trends in relative and absolute abundance, in addition to tagging and genetics data.

**(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.

**6 . TIMETABLE FOR ACTIVITIES AND OUTPUTS**

Specify the timetable for project activities and expected outputs 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) |
|--|---------------|--------------|----------------|
| Further develop and apply the population dynamic models in cooperation with intersessional steering groups for each species. Then present papers documenting work to the following SC meeting. | Punt          | 6/22         | 4/23           |
| Further develop and apply the population dynamic models in cooperation with intersessional steering groups for each species. Then present papers documenting work to the following SC meeting. | Punt          | 6/23         | 4/24           |
|  |               |              |                |
|  |               |              |                |
|  |               |              |                |
|  |               |              |                |

| Expected outputs  | Completion date (mm/yy) |
|---|-------------------------|
| Report of methods and results included in a synthesis report for each species | 2023 SC meeting (4/23)  |
| Report of methods and results included in a synthesis report for each species | 2024 SC meeting (4/24)  |
|   |                         |
|   |                         |

**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 |
|------------|--|--------------------------|
| Debi Palka | Member: North Pacific sei whale intersessional steering group and North Pacific humpback whale intersessional steering group | Convenor                 |
|            |  |                          |
|            |  |                          |
|            |  |                          |
|            |  |                          |
|            |  |                          |
|            |  |                          |

## 8 TOTAL BUDGET

| PROJECT BUDGET per year  |                    |                 |                 |                 | Co-funding |
|--|--------------------|-----------------|-----------------|-----------------|------------|
|  | Description        | Cost per unit   | Number of units | Total Cost £GBP |            |
| (1) Salaries<br>(by person)                                    | Salary of Dr. Punt | £2,500 per year | 2               | £5,000          | £2,500     |
| (2) Travel/subsistence<br>(by person or est. total<br>for IPs) |                    |                 |                 |                 |            |
| (3) Services (by item)   |                    |                 |                 |                 |            |
| (4) Reusable<br>equipment                                      |                    |                 |                 |                 |            |
| (5) Consumables  |                    |                 |                 |                 |            |
| (6) Shipping & Customs<br>(by Item)                            |                    |                 |                 |                 |            |
| (7) Insurance (by item)  |                    |                 |                 |                 |            |
| (8) Other  |                    |                 |                 |                 |            |
| <b>TOTAL</b>   |                    |                 |                 |                 |            |

### Co-funding Memo:

| Source        | Purpose of Funding                                   | Amount | Secured/Tentative? |
|---------------|--|--------|--------------------|
| IWC SC budget | Previously un-used IWC SC funds for the same project | £2,500 | Secured?           |
|               |  |        |                    |
| <b>TOTAL</b>  |  |        |                    |

| Total value of project:              | £GBP   |
|--------------------------------------|--------|
| Funds requested from IWC for 2023    | £2,500 |
| Funds requested from IWC for 2024    | £2,500 |
| Co-funding (previously unused funds) | £2,500 |
| <b>TOTAL</b>                         | £2,500 |

## 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](mailto:secretariat@iwc.int)).

It is expected the model code and results will be archived at the IWC Secretariat.

## 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: