(Provisional Translation)
November, 2014
Fisheries Agency of Japan
Ministry of Foreign Affairs of Japan

Outline of the Proposed Plan for the New Scientific Whale Research Program in the Antarctic Ocean*

1. Research Title

NEWREP-A : **Ne**w Scientific **W**hale **Re**search **P**rogram in the **A**ntarctic Ocean

2. Research Objectives

(1) Improvements in the precision of biological and ecological information for the application of the Revised Management Procedure (RMP) to the Antarctic minke whale.

(2) Investigation of the structure and dynamics of the Antarctic marine ecosystem through building ecosystem models.

3. Research Area

Latitude: South of 60°S, Longitude: 0° to 120°W (the Management Areas III to VI defined by the International Whaling Commission (IWC)) (Refer to the map attached).

4. Research Period

12 years (2015/16-2026/27, midterm review after the first six years).

5. Research Methods

(1) Lethal Survey

a. Whale species: Antarctic minke whales
b. Sample size: 333 animals

(a) As there is no other means than lethal methods, at this stage, the use of lethal method is indispensable to obtain age data which is necessary for estimating the age-at-sexual maturity (ASM), which makes considerable contribution to achieving the application of the RMP.

(b) The sample size is limited to the number required for the estimation of the ASM with sufficient accuracy.

(c) Data obtained through lethal sampling will be utilized to the maximum extent to develop improved ecosystem models (Main Objective II).

(2) Non-lethal Surveys

In addition to the non-lethal methods employed by JARPA and JARPA II

including sighting surveys for abundance estimation, biopsy sampling of skin tissue and oceanographic observations, the feasibility and practicability of the following non-lethal methods will be examined.

(a) Investigating the feasibility of biopsy sampling from Antarctic minke whales, especially in the offshore area in the Antarctic Ocean.

(b) Investigating the feasibility of age-determination methods other than ear-plug reading by analyzing DNA extracted from biopsy skin samples.

(c) Investigating the feasibility of tracking nutritional status indices by the analysis of retinol and saturated fatty acid extracted from biopsy samples instead of the measurement of body condition such as blubber thickness.

(d) Conducting satellite tagging on Antarctic minke whales to elucidate the location of their breeding grounds and using data-loggers for research on feeding behavior.

(3) Krill abundance survey

Simple surveys for estimating krill abundance using an echosounder will be conducted.

6. Research vessels to be used and personnel to be involved

Implementing Organization: Institute of Cetacean Research (ICR)

Research vessels: one research base vessel and a few sighting and sampling vessels

7. Backup plan for contingency

To minimize any negative influences of disruptions including sabotage activities by an anti-whaling NGO and bad weather conditions and to secure the scientific value of data, this research plan establishes a contingency backup plan including (a) adjustments of research protocols at the scene of disruption, (b) adjustment of the research plan and (c) consideration of alternative analytical methods.

8. Participation of foreign scientists and collaboration with other researches/organizations

Participation of foreign scientists will be welcomed and collaboration with other relevant research programs and institutions such as CCAMLR (Commission for the Conservation of Antarctic Marine Living Resources), the National Research Institute of Far Seas Fisheries and the National Institute of Polar Research will be strengthened.

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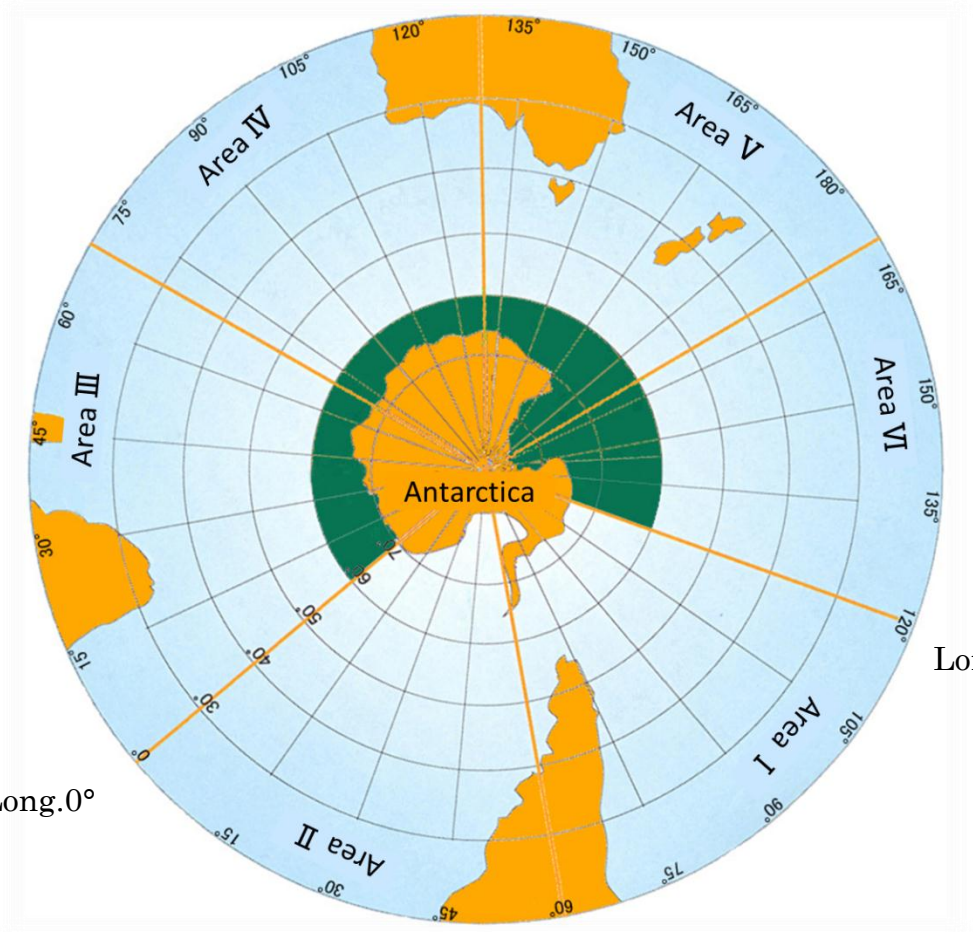
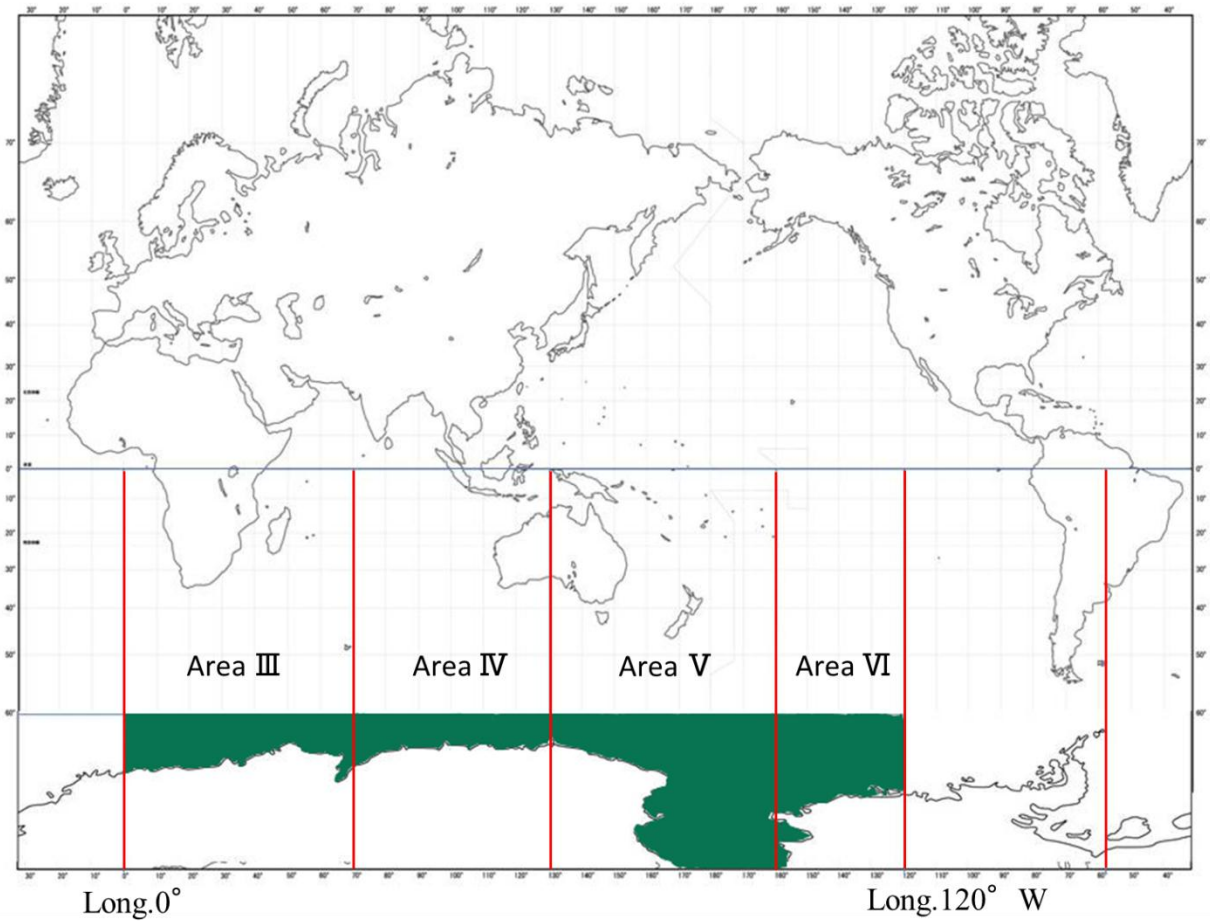
* This proposed plan takes account of the reasoning and conclusions contained in the Judgment by the International Court of Justice (ICJ) in the case concerning "Whaling in the Antarctic" (Australia v. Japan: New Zealand intervening). Japan welcomes outside scientific comments. It will give due regard to such scientific comments and this proposed plan is thus subject to further elaborating and amendment if necessary.

Research Area under NEWREP-A





Research Area

(Attachment 2)

The New Proposed Plan's
- Consideration of the Reasoning and Conclusions of the ICJ Judgment

In light of the reasoning and conclusions of the ICJ Judgment the following measures have been taken through a transparent process including securing the participation of outside experts.

Elements Identified in the ICJ Judgment	Measures Taken in the New Proposed Plan
1. The Decisions regarding the Use of Lethal Methods The JARPA II Research Plan should have included some analysis of the feasibility of non-lethal methods as a means of reducing the planned scale of lethal sampling.	-As a result of examining necessary data for achieving the two main objectives, it was determined that it is not feasible to obtain age data by the currently available non-lethal research methods. However, the feasibility and practicability of the following non-lethal research methods will be examined. --investigating the feasibility of biopsy sampling to collect genetic samples from Antarctic minke whales. --investigating the feasibility and practicability and usefulness of age-determination and methods for tracking nutritional status using biopsy samples. --conducting trials of satellite tagging and data-logger on Antarctic minke whale.
2. The Scale of Lethal Sampling and the Methodology used to Select Sample Sizes The evidence relating to whale sample sizes provides scant analysis and justification for the underlying decisions that generate the overall sample size. This raises further concerns about whether the design of JARPA II is reasonable in relation to achieving its stated objectives.	-The sample size of Antarctic minke whales for the lethal research is determined by statistical testing and is limited to the number of samples with which age-at-sexual maturity data, an important element for implementing RMP and not obtainable by the currently available non-lethal research methods, can be estimated with sufficient accuracy.
3. Discrepancy between the Target Sample Sizes and the Actual Take Japan's statement that JARPA II can obtain meaningful scientific results based on the far more limited actual take suggests that the target sample sizes are larger than are reasonable in relation to achieving its stated objectives.	-As research activities could be disrupted by both natural and human factors including sabotage activities and bad weather conditions, the proposed plan establishes a contingency backup plan which addresses adjustment at the scene of disruption, adjustment of the research plan and consideration of alternative analytical methods.
4. Time Frame Associated with a Program JARPAII's open-ended time frame casts doubt on its characterization as a program for purposes of scientific research.	-This proposed plan has set its research period as 12 years. It has also established "intermediary targets" with a system of mid-term review by the IWC Scientific Committee after 6 years.

5. The Program's Scientific Output In light of the fact JARPA II has been going on since 2005 and has involved the killing of about 3,600 minke whales, the scientific output to date appears limited.	-The scientific output will continue to be presented to the IWC Scientific Committee and there will be increased efforts to publish scientific achievements in peer-reviewed journals. -Scientific data generated from this research will be compiled in a database and be promoted to be widely utilized by outside scientists.
6. Coordination with Related Research Projects Some further evidence of co-operation between JARPA II and other domestic and international research institutions could have been expected in light of the program's focus on the Antarctic ecosystem and environmental changes in the Antarctic region.	-Deepening collaboration and coordination with relevant research institutions such as the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), Japan's National Institute of Polar Research and Japan's National Research Institute of Far Seas Fisheries will be sought and strengthened in the planning, implementation, and data analysis related to surveys for estimating krill abundance. -The participation of foreign scientists in this research will be welcome.