

**Implementation of the New Scientific Whale Research Program  
in the Antarctic Ocean (NEWREP-A)**

1 Japan developed the New Scientific Whale Research Program in the Antarctic Ocean (NEWREP-A) taking account of the Judgment of the International Court of Justice in March 2014<sup>\*1</sup>.

\*1

The evidence does not establish that design and implementation of the Second Phase of Japan's Whale Research Program under Special Permit in the Antarctic (JARPAII) are reasonable in relation to achieving its research objectives and are not "for purposes of scientific research" as prescribed by the provisions of Article VIII, paragraph 1, of the International Convention for Regulation of Whaling. (See paragraphs 227 and 247(2) of the ICJ Judgment)

It is to be expected that Japan will take account of the reasoning and conclusions contained in this Judgment as it evaluates the possibility of granting any future permits under Article VIII, paragraph 1, of the Convention. (See paragraph 246 of the ICJ Judgment)

2 In accordance with the International Convention for Regulation of Whaling (ICRW)<sup>\*2</sup>, Japan submitted the proposed plan of NEWREP-A to the Scientific Committee of the International Whaling Commission (IWC) in November 2014. The proposed plan was discussed at the Scientific Committee in May-June 2015. As a result of the discussions, the Scientific Committee indicated that it would be necessary for Japan to undertake additional works and analyses (Attachment 1).

\*2 Paragraph 30 of the Schedule to the ICRW provides that a Contracting Government shall provide the Secretary to the International Whaling Commission with proposed scientific permits before they are issued and in sufficient time to allow the Scientific Committee to review and comment on them.

3 As a result of additional work and analyses by Japanese scientists, the Government of Japan assessed that all of the items pointed out by the Scientific Committee that needed to be conducted prior to the start of NEWREP-A had been completed. Therefore, Japan finalized the plan (Attachment 2) and decided to implement the plan from this austral summer.

4 All of the results of additional work and analyses including those in Attachment 1 will be reported to the Scientific Committee Meeting scheduled in June 2016.

Main items pointed out by the IWC's Scientific Committee (SC) in relation to Resolution 2014-5 and Japan's planned responses

Main items pointed out by the SC	Japan's planned responses
<p><b>1 Reasonableness of research methods and the level of contribution to conservation and management of whales</b>  <b>【Resolution 2014-5 (a) (b)】</b>  <u>Additional work needs to be done to evaluate the level of improvement in conservation and management of cetaceans by improved precision in biological parameters through lethal sampling.</u></p>	<p><u>○Implement quantitative simulations of expected research outcomes in order to explain necessity of lethal sampling.</u></p> <ul style="list-style-type: none"> <li>▪ Evaluation of the level of improvement of performances in RMP/IST* etc.</li> </ul>
<p><b>2 Whether the objectives of the research could be achieved by non-lethal means</b>  <b>【Resolution 2014-5 (c)】</b>            The SC agrees with the Panel that <u>it will not be able to determine whether non-lethal means can be used to achieve certain objectives</u> until the field experiments, laboratory work and analyses recommended by the Panel are conducted.</p>	<p>○Verify feasibility of non-lethal methods including biopsy sampling from the first field season.</p> <ul style="list-style-type: none"> <li>▪ <u>Japan considers that implementation of lethal sampling is reasonable until feasibility of non-lethal methods is confirmed. However, Japan will begin to examine the feasibility of non-lethal methods from the first field season.</u></li> </ul>
<p><b>3 Whether the scale of lethal sampling is reasonable</b>  <b>【Resolution 2014-5 (d)】</b>            The estimated sample sizes are likely to be too small to obtain scientifically meaningful research result.</p>	<p>○<u>Implement further statistical simulations to verify the reasonableness of sample sizes.</u></p>
<p><b>4 Other matters as the SC considers relevant to the programme, having regard to the decision of the International Court of Justice.</b>  <b>【Resolution 2014-5 (e)】</b>            The SC recommends further collaboration related to the development of ecosystem models, prey studies and evaluation of non-lethal techniques.</p>	<p>○Collaborate with Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR) and related scientists regarding development of ecosystem models and prey studies as well as establish collaboration and cooperative relations with researchers within and outside Japan who have knowledge and experience on non-lethal methods including biopsy sampling and satellite tagging.</p> <p>For instance, attend meetings of this year's Scientific Committee of CCAMLR and explain outline of program regarding prey research.</p>

\* Revised Management Procedure (RMP) is the IWC's agreed mechanism to calculate safe catch limits for commercial whaling. Implementation Simulation Trial (IST) is an application test of RMP using simulations (experiment under various conditions).

(Note) Demonstrate objective basis for reasonableness of lethal sampling and sample sizes especially through 1 and 3.

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

### **1. Research Title**

NEWREP-A : New Scientific Whale Research Program in the Antarctic 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 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.

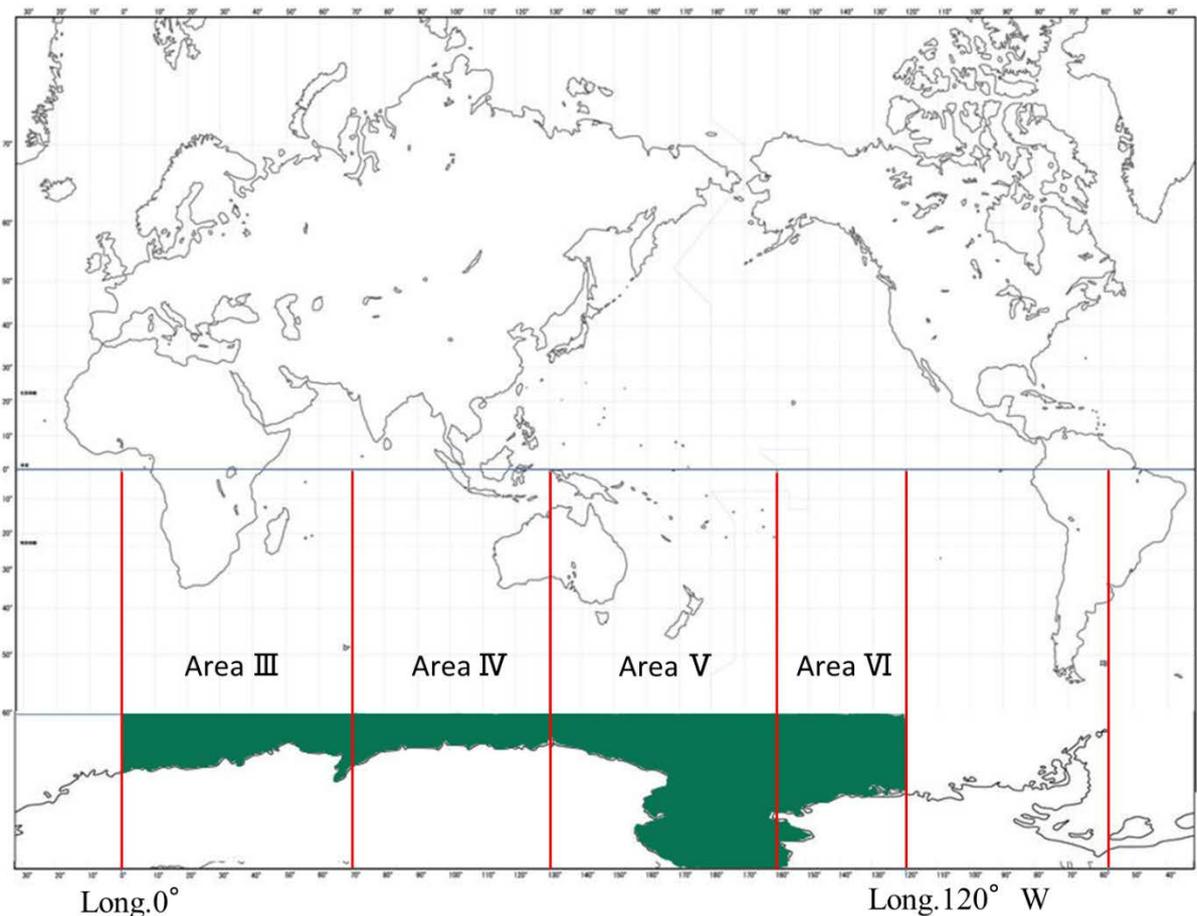
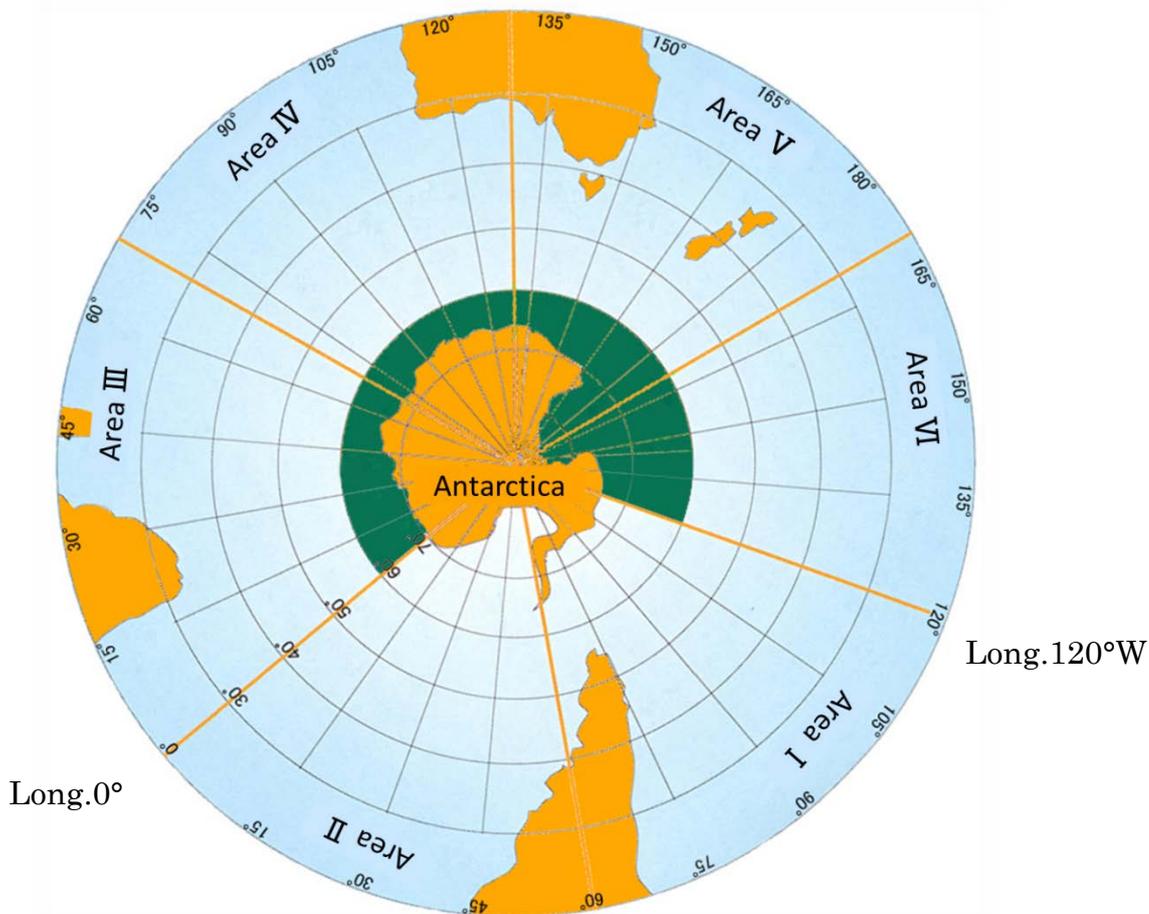
## **8. Participation of foreign scientists and collaboration with other researches/organizations**

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**