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Fisheries Agency of Japan
Ministry of Foreign Affairs of Japan

Outline of the 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.