

Hon Chris Carter  
Minister of Conservation



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## Briefing to Minister

### Scientific critique of Japan's whaling released

#### **Brief scientific critique of the Government of Japan's Proposal for a second phase of Special Permit Whaling in Antarctica (JARPA II)**

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#### **Executive Summary**

There are numerous scientific flaws in the Special Permit Whaling Programme (JARPA II) proposed by the Government of Japan for the austral summer 2005/06. Some of the more significant scientific issues include:

- (i) most of the data proposed to be collected are not required for the management and conservation of whale stocks;
- (ii) (ii) many of the objectives are based on unsubstantiated or incorrect assumptions;
- (iii) (iii) many of the identified objectives can be addressed through the analysis of data from the previous 18 year Special Permit Whaling programme (JARPA I);
- (iv) (iv) the few objectives that do have some relevance to the management and conservation of whale stocks can be addressed better using non lethal methods;
- (v) (v) there are serious concerns about the impact of the proposed kills on protected stocks for which there are no agreed abundance estimates; and
- (vi) (vi) the proposed kills are being undertaken in the IWC approved Southern Ocean Whale Sanctuary which was set up to allow scientific study of the recovery of whale stocks without whaling.

It is important to note that most of the issues raised here have been endorsed by 63 scientists from 16 national delegations and invited participants to the Scientific Committee during the most recent meeting in Korea. This was an unprecedented demonstration of opposition to the principle of 'scientific whaling', and the JARPA II proposal in particular (although, of course, scientists of the Government of Japan and their supporters at IWC Scientific Committee did not accept the validity of scientific issues identified in this critique).

## Introduction

JARPA II is the second phase of a special permit whaling operation and follows on from the original 18 year JARPA special permit programme. The stated aims of JARPA II as described in the proposal (Government of Japan 2005) are:

1. Monitoring of the Antarctic Ecosystem;
  - a. Monitoring of whale abundance trends and biological parameters
  - b. Monitoring of krill abundance and the feeding ecology of whales
  - c. Monitoring of the effects of contaminants on cetaceans
  - d. Monitoring of cetacean habitat;
2. Modelling competition among whale species and future management objectives
  - a. Constructing a model of competition among whales
  - b. New management objectives including the restoration of the cetacean ecosystem
3. Elucidation of temporal and spatial changes in stock structure; and,
4. Improving the management procedure for Antarctic minke whale stocks.

In essence **the JARPA II programme proposes to more than double the annual catch of Antarctic minke whales (from about 440 to 935) from JARPA I, and to expand lethal sampling to include an additional yearly take of 50 humpback and 50 fin whales.** In addition to the lethal sampling programme, it also includes sighting surveys, non lethal biopsy sampling, acoustic surveys for prey species, and the collection of oceanographic data. 2005/06 and 2006/07 seasons are proposed as “feasibility studies” and the full programme will be started in the 2007/08 season.

The JARPA II proposal is a large document (99 pages) and it not the purpose of this critique to identify and raise all the scientific issues contained in the report but rather to highlight and summarise some of the significant issues relating to the proposal and its application. **To put JARPA II into perspective, it is important to note that Japan has used the right to take whales for scientific purposes far more than any other nation. Since 1987 some 7,900 minke whales, 243 Bryde’s whales, 140 sei whales and 38 sperm whales have been taken for scientific purposes, the great majority taken by Japan. 8840 whales were killed globally by Japan for scientific research between 1954 and the moratorium. By contrast, all other nations have killed about 2,100 whales for scientific research since 1952 (IWC 2002; Gales et al. 2005).**

## Brief scientific critique of JARPA II

This critique summarises material that has been already presented and discussed at IWC Scientific Committee (SC0 in 2005 (e.g. Childerhouse et al. 2005). and also includes some new material from publications in the international literature, (e.g. Clapham et al. 2003; Gales et al. 2005).

1. Review of JARPA I:
  - a. The value of the JARPA I programme to management has not been demonstrated from its publication record in international, peer reviewed journals, which is remarkably poor for a scientific effort on this scale. The failure of JARPA I to publish substantive papers in international refereed journals says much about the quality of its science.
2. Objectives of JARPA II:
  - a. **Under the Revised Management Procedure, the management procedure currently accepted by the IWC, most of the data to be provided through the JARPA II proposal are not required for management purposes.**

- b. **The objectives in the proposal are based on several unsubstantiated or incorrect assumptions:**
- i. *That whales are directly competing with each other.* Whilst overlap of prey (Antarctic krill) is well established for most of the Antarctic baleen whales, there are no accepted models to indicate any level of competition between whales, nor, indeed, that krill production is controlled by top-down influences.
  - ii. *That the reduction of one species (minke whales) will result in an increase of another species (blue whales).* Current evidence refutes this.
  - iii. *That the low abundance and insignificant recovery of blue whales is due to burgeoning minke and humpback whale populations.* Even if there were reliable abundance estimates to demonstrate rapidly-increasing populations of minke and humpback whales, this hypothesis fails to include the other major biomass krill predator species such as seals and sea birds.

### 3. Methodology

- a. **The proposed research is supposed to address questions that cannot be answered by analysis of existing data.** However, without a review of the data already collected in the previous 18 years it is not possible to evaluate this critical issue, especially as the new proposal provides an undefended rationale to more than double the take of minke whales.
- b. **The research claims to address a question or questions that cannot be practically or scientifically achieved by non-lethal means.** In this case, the use of non-lethal means (biopsy) has been clearly demonstrated to address temporal and spatial changes in stock structuring, which is an important component of the RMP.
- c. **The research is supposed to yield results leading to reliable answers to the questions being addressed.** However, the research methodologies specified in the proposal are very poorly developed and presented, thus negating the possibility of a reasonable review.

### 4. Effects of catches on stocks

- a. This analysis is impossible to undertake without recent in-depth assessments of minkes, humpbacks and fin whales. **There are no current agreed abundance estimates of these species in the area where JARPA II takes will occur.**
- b. Particular concerns on this issue are:
  - i. The determination of the extent and possible reasons for an apparent substantial decline in abundance of Antarctic minke whales.
  - ii. The targeting of species that were subject to massive over-exploitation during earlier whaling, whose populations were taken to dangerously low levels and which remain well below their pre-exploitation abundance.
  - iii. A lack of any agreed estimates of fin whale abundance, population trend or stock structure.
  - iv. The potential of take of humpback whales from small, poorly-understood and highly threatened populations in the South Pacific (e.g. Fiji, Samoa, Cook Islands etc)
  - v. The potential impact of takes of humpback whales on existing, non-lethal research programs in Australia, New Zealand and elsewhere in the Pacific.

Given the dramatic increase in the ‘research take’ of minke whales **to levels that may exceed any RMP-derived catch limits**, and notwithstanding our lack of agreed abundance data, the SC cannot determine the potential sustainability of proposed takes.

5. Animal Ethics Review of Experimental Protocol:
  - a. There has been no independent ethical review of the animal experimental protocol of JARPA II, which would be expected in any research programme that involves the manipulation or lethal sampling of animals.
6. Lack of modification to proposal despite extensive comments made during SC:
  - a. Despite extensive debate and discussion at SC meetings, the proponents of Special Permit Whaling Programmes have consistently refused to make any significant amendments or alterations to their original proposal.

## CONCLUSION

When Article 8 of the International Convention for the Regulation of Whaling was originally drafted 60 years ago, there was a strong argument that many elements of scientific research into whales, such as stock identity and genetic relatedness, required the animal to be killed in order to carry out detailed studies. Modern techniques of genetics and DNA analysis, however, can be carried out non-lethally. There is no credible rationale for the lethal take of whales to collect the data required to implement the IWC's management procedures.

Additionally, the JARPA II programme purports to be a study into matters such as competition between krill predators and whale species that are entirely speculative (and outside the sole jurisdiction of the IWC). It could be argued that besides being unsound science, the JARPA II programme represents an abuse of right of Article 8 of the ICRW.

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