The Japanese Whale Research Program under Special Permit in the Antarctic (JARPA) was conducted between the austral summer seasons of 1987/88 and 2004/05. The JARPA had four main objectives: a) estimation of biological parameters to improve the stock management of the Southern Hemisphere minke whale; b) elucidate the role of whales in the Antarctic marine ecosystem; c) elucidation of the effect of environmental change on cetaceans; and d) elucidation of the stock structure of Southern Hemisphere minke whales to improve stock management.

The International Whaling Commission Scientific Committee carried two review workshops on JARPA, the first in 1997 and the final on December 2006.

JARPA II started with two feasibility surveys in the seasons 2005/06 and 2006/07. The first full survey started in 2007/08. The objectives of the JARPA II are the following: a) monitoring the Antarctic ecosystem (whale abundance trends and biological parameters; krill abundance and the feeding ecology of whales; effects of contaminants on cetaceans; cetacean habitat); b) modeling competition among whale species and future management objectives (constructing a model of competition among whale species; new management objectives including the restoration of the cetacean ecosystem); c) elucidation of temporal and spatial changes in stock structure; and d) improving the management procedure for Antarctic minke whale stocks.

Scientific contribution of JARPA/JARPA II

Scientific contribution of JARPA/JARPA II has been made available in different forms, as scientific documents for the IWC/SC meetings, as publications in peer reviewed journals, and as oral presentations at scientific symposiums.

Table 1 shows the number of IWC/SC documents, peer-reviewed publications and oral presentations at scientific symposium based on JARPA/JARPA II sample/data, by year.

IWC/SC documents
In the period 1988-2008 a total of 186 documents were presented to annual and intersessional meetings of the IWC/SC, with an annual average of 8.9 documents. Several of these documents were prepared by or in collaboration with foreign scientists. Documents were presented mainly at the RMP, IA and SP sub-committees, which deal mainly with management of whales.

Peer reviewed publications
The number of peer-reviewed papers made in same period is 101, with an annual average of 4.8 documents. These contributions have been made not only in the field of whale management but also in the field of whale natural sciences. Again several of these papers were prepared by or in collaboration with foreign scientists.

Oral presentations at symposium
The number of oral presentations made at scientific symposium in the period 1988-2008 is 183, with an annual average of 8.7 documents. These contributions have been made not only in the field of whale management but also in the field of whale natural sciences. Titles and contents of such presentations can be found in the annual progress report of the Institute of Cetacean Research (ICR).

The list of IWC/SC documents and peer-reviewed papers derived from JARPA/JARPA II is shown in the Appendix 1, by year. An asterisk indicates those papers published in peer-reviewed journals.

Other scientific contribution
JARPA/JARPAII material has been used in:

a) Pre-graduated, master and doctoral thesis: 16
b) Chapters of books: 52
c) Local bulletin of ICR (Geiken Tsushin) and Suisan Shigen Kanri Danwakaihou: 31
d) Other reports: 0
JARPA/JARPA II biological material such as whale skeletons has been provided to municipal museums.

Data access and availability
All the data and samples obtained by JARPA have been available to the national and international scientific community through established data access protocols. Appendix 2 shows the data access protocol of ICR, which can also be found at the IWC/SC web page. As a result ICR scientists carried research collaboration with a number of national and international scientists and research institutions, as indicated above.

Table 1: Scientific contribution of JARPA/JARPA II

<table>
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<tr>
<th>Year</th>
<th>IWC/SC documents</th>
<th>Peer reviewed publications</th>
<th>Oral presentations at symposium</th>
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</tr>
<tr>
<td>Total</td>
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<td>101</td>
<td>183</td>
</tr>
</tbody>
</table>
Appendix 1

List of scientific papers based on data and samples collected by JARPA and JARPA II (peer-reviewed papers and unpublished documents submitted to the IWC/Scientific Committee). Asterisks indicate those papers published in peer reviewed journals.

[1989] (5)


[1990] (14)


**[1991] (13)**


[1992] (6)


[1993] (11)


5

[1994] (12)


[1995] (12)


[1996] (13)


[1997] (30)


[1998] (12)


[1999] (15)


[2000] (18)


[2001] (9)


[2002] (13)


[2003] (12)


[2004] (10)


[2007] (16)


Appendix 2

Protocol for access to samples/data from the Institute of Cetacean Research (ICR), Tokyo, Japan under Procedure B (JCRM 6 (suppl.): in press)

INTRODUCTION
This protocol has been developed in the context of Procedure B of the IWC Scientific Committee's rules for data availability adopted at the 55th Annual Meeting (Journal of Cetacean Research and Management 6 (suppl.): in press). Procedure B applies to data required for analyses deemed important in providing advice to the Committee other than catch limits. Conditions for data recipients (repeated below) as specified in the rules for data availability are applicable.

It was agreed that the Committee shall specify the nature of the work and the data required during the meeting at which the recommendation is made, to the fullest extent possible in the time available at the meeting and in accord with the published protocol. Requests to the ICR for data under Procedure B of the Scientific Committee's rules for data availability shall be submitted by the Data Availability Group assisted by a nominated member of ICR.

It was also agreed that if the correct process is followed, the data owners will normally approve the applications within a 'specified time period'; in this case ICR agrees that it will respond within XXX weeks of receiving an application.

FORMAT OF THE APPLICATION
The format for the application is based on the revised application for catch-at-age analyses agreed by all members of the Scientific Committee at the end of the Scientific Committee meeting in 2003 (Annex G, Appendix 11).

(a) Title of the proposal, giving the broad subject of the proposed analyses.

(b) Investigators: the full name and affiliation of the principal investigator(s) and co-investigator(s) should be provided. This should include at least one scientist from ICR.

(c) Objectives and rationale of the study as specified by the Scientific Committee along with the appropriate reference to the report(s) of the Scientific Committee. This will include the reasons why the proposed analyses are important and how they fit into previous work.

(d) Data to be used will include a general description of all data to be used as well as data held by ICR. For the ICR-held data, the precise requirements will be given, including the level of disaggregation.

(e) Description of the methods likely to be used. The level of detail must be in accordance with the level of novelty of the proposed methods and the particular research questions they will address. References to similar analyses should be included where available.

(f) Schedule of the work: this should include estimated times for the various analyses to be carried out and an indication of which investigators will collaborate on individual components. If the project is a long-term project, annual progress reports will be required by ICR and the Scientific Committee.

(g) Output of the research: this will follow the rules for publication agreed at the Scientific Committee meeting and given below. ICR may consider requests for less stringent conditions (e.g. presentations at non-IWC scientific meetings, publications, etc.). Such requests should be detailed here.

CONSIDERATION OF THE PROPOSAL
If an application has been approved by the whole Scientific Committee at an annual meeting, it will normally be approved by ICR. However, the final decision will always remain the prerogative of ICR. ICR may request reviews by an internal review group and/or external experts. The following factors will be taken in to account by ICR when considering applications.

(a) Priority: highest priority for analysis/research of samples/data produced by Japan's Whale Research Programs under Special Permit, will be for the scientists that collected and obtained the data in any particular field.

(b) Suitability of the requested data in the context of the proposed methods and the objectives of the research.
(c) Level of co-operation with ICR scientists.

The response to an application for data will be communicated by the ICR's Director General to the Data Availability Group and may include requests for further information. If the research proposal is accepted, ICR will nominate a scientist, (normally one of the co-investigators) who shall be responsible for making the necessary arrangements to provide the required samples/data.

**Agreed Scientific Committee conditions for data recipients**

Applications deemed suitable under Procedure A or Procedure B below are granted under the following conditions:

1. Data shall not be transmitted to third parties.
2. Papers may only be submitted to a Committee meeting in accordance with the time restrictions given below. Such papers must not include the raw data or the data in a form in more detail than is necessary to understand the analysis.
3. Papers must carry a restriction on citation except in the context of IWC meetings.
4. Data owners are offered co-authorship.
5. Publication rights remain strictly with the data owner.
6. Data shall be returned, to the Secretariat or the data owner as appropriate, immediately after the meeting at which the paper is submitted and any copies destroyed, unless an extension is granted.
7. Data requesters sign a form agreeing to the above conditions. Such forms will be held by the data owner and the Secretariat. In the case of Procedure B, the Data Availability Group will sign the agreement on the Committee’s behalf and ensure that the conditions of any agreement are met by any individual scientists involved in the analysis.
8. In the event of a breach of the conditions in (6), serious sanctions [to be determined] will apply.