

THE RMS – A QUESTION OF CONFIDENCE?

- Manipulations and Falsifications in Whaling



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Glossary

AIDCP	Agreement on the International Dolphin Conservation Program
CCAMLR	Convention for the Conservation of Antarctic Marine living Resources
CDS	Catch Documentation Scheme
CITES	Convention on the International Trade of Endangered Species of Wild Fauna & Flora
CRC	Compliance Review Committee
FFA	Pacific Islands Forum Fisheries Agency
IATTC	Inter-American Tropical Tuna Convention
ICCAT	International Commission for the Conservation of Atlantic Tunas
ICRW	International Convention for the Regulation of Whaling
IOS	International Observer Scheme
IOTC	Indian Ocean Tuna Commission
GPS	Global Positioning System
MCS	Monitoring, Control and Supervision
MHLC	Multilateral High Level Conferences on South Pacific Tuna Fisheries
NAFO	Convention on Future Multilateral Cooperation in the Northwest Atlantic Fisheries
NEAFC	North East Atlantic Fisheries Commission
RFMO	Regional Fisheries Management Organization
RMP	Revised Management Plan
RMS	Revised Management Scheme
VMS	Vessel Monitoring System
WCPFC	Western and Central Pacific Fisheries Convention

1. The RMS Process in 2005 and Remaining Questions

For centuries whales have been slaughtered for commercial gain in unregulated hunts. Even after the establishment of the *International Whaling Commission* (IWC) in 1946, commercial whaling was so poorly regulated that it inexorably drove species after species of whales towards extinction. Finally, in 1982, the IWC adopted a Moratorium of unlimited duration on commercial whaling, which came fully into effect in 1986. Most whaling nations honored the Moratorium and phased out their whaling operations. However, Iceland and Japan have defied the Moratorium by continuing commercial whaling under the exemption for scientific research provided in Article VIII of the *International Convention for the Regulation of Whaling* (ICRW) and Norway hunts whales under an Objection to the Moratorium.

At the end of the 1980s, the IWC initiated a Comprehensive Assessment of the effects of the Moratorium on whale stocks by its Scientific Committee, and instructed the Committee to develop a new system to calculate adequately precautionary quotas for future commercial whaling. In 1993, the Commission accepted (but did not adopt into the Schedule) the *Revised Management Procedure* (RMP) for baleen whales proposed by the Scientific Committee, and began formal negotiations of the *Revised Management Scheme* (RMS), a package containing the RMP and the Management, Control and Supervision (MCS) measures necessary to regulate future commercial whaling.

Since its inception, discussion of the RMS has focused on measures that reflect (albeit poorly) the structure and substance of MCS regimes in other Regional Fisheries Management Organizations (RFMOs) – e.g., observation and inspection and catch verification. While the anti-whaling nations have made numerous concessions on the scope and precise specifications of the package, they have met only intransigence from the three remaining whaling nations and their supporters.

As a result, the RMS has been undermined, both procedurally and substantively, to such an extent that it now contains legal language so inadequate, inconsistent, vague and confusing that the current draft is too weak to be implemented or enforced. Nonetheless, many members of the IWC appear now to believe that a poor RMS is politically preferable to an undermined Moratorium. This reasoning stems in part from recent and repeated increases in whaling effort by Japan, Norway and Iceland and a concerted effort by Japan in particular to encourage pro-whaling countries to join the IWC. Consequently, at its 56th meeting in Sorrento, Italy, in 2004, the Commission adopted Resolution 2004-6, urging the IWC to complete the RMS and establishing a process by which to do so.

This report reviews the RMS in its current form (the text of the Small Drafting Group (SDG) originating from the second RMS Working Group meeting in Copenhagen, in April 2005). Drawing from examples of previous abuses of whaling regulations, and details of how other RFMOs manage marine resources, this report illustrates that the IWC is on a fast track to repeat the mistakes, and disasters, of its long and infamous history. For example:

The draft RMS:

- **leaves some whaling activities outside the control of the RMS:** None of the RMS provisions will ensure the detection of illegal, unreported, unregulated whaling activities, or detection of products coming from whales caught or obtained under the authority of non-Contracting Governments.
- **does not address Scientific Whaling:** The RMS will not be able to prevent Contracting Governments conducting Scientific Whaling based on a self-allocated quota not subject to the RMS;
- **does not prevent Reservations or Objections to all or part of the RMS:** Contracting Governments will be free to lodge an Objection, or leave the Commission and rejoin with a Reservation to RMS provisions, and continue to hunt whales legally;
- **fails to ensure appropriate funding of the RMS or sanctions for non-payment of RMS costs:** The SDG only drafted provisions to ensure funding of the National Inspection Scheme and of the International Observer scheme. All other expenses are omitted. Improper funding of the RMS is likely to result in its collapse;
- **does not ensure the welfare of whales hunted.** The draft merely sets out alternative lists of data to be collected and submitted on a voluntary basis;
- **relies heavily on Annexes to be agreed by simple majority to define technical and other substantive details of the RMS:** As the Schedule does not provide minimum standards for these issues, there is a risk that important policy decisions about future whaling will be made in these side-agreements;
- **contains no Dispute Resolution Procedure;**
- **contains a compensation mechanism for countries disadvantaged by whaling restrictions:** Developing and geographically challenged countries could cripple the IWC by seeking compensation for geographical or temporal restrictions that prevent them whaling under the RMS.

2. RMP

At the core of the RMP is a mathematical model that uses IWC-approved data on historical catches (see section 3) and current population status (from independently verified surveys) to calculate 'safe' catch limits for specific "stocks" of baleen whales. To achieve this, the version of the RMP under discussion until recently uses an algorithm whose parameters are "tuned" to determine a rate of removal that will maintain a stock at 72% of its carrying capacity and not bring it below 54%, assuming no drastic changes in reproductive rates or data reliability and no mass mortality events or significant change in environmental conditions.

2.1. Tuning Level

The IWC chose the tuning level of 0.72 and protection level of 0.54 in the early 1990s, although Norway voted against Resolution 1992:3, in which the preferred tuning level was confirmed. A lower tuning level results in a higher quota, and in 2001, Norway unilaterally started to use a tuning level of 0.66 to calculate its own self-allocated quota (taken under its Objection to the Moratorium). The IWC has repeatedly called on Norway to reconsider its less conservative tuning level (e.g., Resolutions 1996:5; 1997-3; 1998-1; 2001:5), but in 2002, Norway reduced it further to 0.62, increasing its quota to 670 whales. Since 2003, Norway used the same tuning level, but carried forward whales that had not been hunted in the previous year, bringing its quota to 711 in 2003 and 797 in 2005. At IWC 56, Norway announced that, over the coming year, it will develop an entirely different management procedure, which will result in even higher quotas¹.

Norway is apparently now considering tripling its quota to 1,800 in 2006 upon the recommendation of the Norwegian Parliament as a measure to protect fish stocks². Despite its abuse of the tuning level Norway argues that its use of the RMP to calculate quotas is consistent with its position of keeping "its management of the minke whale stock within the framework laid down by the IWC."³

The RMP's tuning and protection levels are not only vulnerable to abuse in Norway's commercial whaling under Objection. Japan recently stated, in the context of the RMS discussions that it "must reconsider its position on ... particularly the tuning level".⁴ Following the RMS Working Group meeting in Copenhagen in April 2005, the draft RMS text now makes the 0.72 tuning level only an option, and

includes a proposal from Norway for a periodic review of the RMP.

2.2. Phasing in the RMP

While pro-whaling Governments believe the full lifting of the Moratorium should be simultaneous with the adoption of the RMS, others Contracting Governments believe that the two events should not be linked at all. The current RMS text therefore offers two options for phasing in the resumption of commercial whaling once the RMS is adopted. It proposes restricting whaling to waters under national jurisdiction either permanently or for a limited period after the lifting of the Moratorium (See Section 7.3). A mechanism has been sought to compensate countries 'damaged' by temporal or geographical restrictions.

2.3. Current RMS Discussion on the RMP

The RMS as currently drafted leaves the RMP unacceptably vulnerable to abuse, both procedurally and substantively. For example:

- The technical specifications of the RMP may not be included in the Schedule, but put in documents annexed to it that can be amended by simple majority before the whole new document is adopted by a three-quarters majority;
- The version of the RMP adopted may not be the agreed 1992 version with the tuning level of 0.72 since the draft text now makes this optional;
- The text does not provide a default catch limit of zero to deter any Contracting Government from lodging an Objection to a catch limit entered into the Schedule;
- Although it has long been agreed that the Commission must deduct all non-natural mortalities (for example as a result of by-catches, ship strikes, struck and lost whales, scientific permit catches and non-RMS whaling) from catch limits, the whole provision on adjustment of catch limits is bracketed and, therefore, optional in the draft RMS text;
- A provision prohibiting the taking of whales in a sanctuary designated by the IWC; by any other competent international body; by a State in respect of any area under its national jurisdiction; or contrary to any marine mammal conservation measure adopted in accordance with international law is bracketed and, therefore, optional in the draft text.

¹ Government of Australia (2004): Response to the questionnaire related to the 'call for comments/positions on key issues in relation to the Chair's proposals for a way forward to the RMS'. IWC/N04/RMSWG4

² Kirby, A. (2004): „Norway seeks tripled whale catch“, BBC News 28th May.

³ Norway, Ministry of Fisheries (undated): „Norwegian minke whaling – background and determination of catch limits“, <http://odin.dep.no/fkd/engelsk/p10001957>, viewed 14th February.

⁴ Government of Japan (2004): Response to the questionnaire related to the 'call for comments/positions on key issues in relation to the Chair's proposals for a way forward to the RMS'. IWC/N04/RMSWG4.

3. Catch Verification through International Observers

According to many fisheries management experts, compliance with regulations and accurate data collection is directly linked to the level of independent observer coverage on a fishing vessel. Many fisheries managed by CCAMLR⁵, IATTC⁶, the AIDCP⁷ and NAFO⁸ now have 100% observer coverage. However, Japan and Norway argue that 100% coverage of whaling vessels is unnecessary and that inspection of vessels by individuals hired by the whaling nations (i.e. National Inspectors) is adequate.

The history of the IWC proves that cheating is inevitable in the absence of independent international observers, and sometimes despite their presence. During the last decade a series of publications have unmasked the extent of manipulation of whaling statistics where national inspection alone - if at all - has been the norm. These abuses include over- and under-reporting of catch data, manipulation of sex ratio, body length and other biological data, particularly by Japan and the former Soviet Union.

3.1. Misreporting and Underreporting in Past Whaling Activities

3.1.1. Soviet Union

In 1995, Zemsky *et al.* compared official Soviet whaling statistics with original records from four factory ships (*Slava 1948-1966*, *Sovietskaya Ukraina 1959-1972*, *Yurii Dolgorukiy 1960-1975*, *Sovietskaya Rossia 1961-1980*)⁹. These data unmasked large-scale falsifications in Soviet whaling data for the period 1947 to 1980.

Over a period of more than 30 years (including after an International Observer Scheme (IOS) was introduced by the IWC in 1972) Soviet whaling data reported to the IWC for all species were seriously manipulated:

Between 1947 and 1980, the four whaling fleets grossly under-reported catches of humpback, sperm, pygmy blue, sei, Bryde's and right whales figures (table 1). In total, more than 90,000 whales killed by the four fleets did not appear in official

statistics, almost half of which were humpback whales. Only 10 protected pygmy blue whales were reported killed to the IWC, although as many as 8,439 specimens were killed. To cover these, and other, illegal activities, other species such as fin whales (then an unprotected species) were over-reported. In 1998, the figures of Zemsky *et al.* were slightly modified¹⁰, but the same extent of manipulation was confirmed.

Table 1: Comparison of Catch Statistics Reported to the IWC and the real Catch Data in Soviet Antarctic Whaling (1947-1980, based on Zemsky *et al.* 1995)

	Reported	True	Difference
blue whale	3,651	3,462	+ 189
pygmy blue whale	10	8,439	- 8,429
sei whale	33,001	50,034	- 17,033
fin whale	52,931	41,184	+ 11,747
Bryde's whale	19	1,418	- 1,399
minke whale	17,079	14,002	+ 3,077
humpback whale	2,710	48,477	- 45,767
southern right whale	4	3,212	-3,208
sperm whale	74,834	89,493	- 14,659
Others	1,539	1,745	-206
Total	185,778	275,795	-90,017

For the period 1959-1972 (before the introduction of the IOS) the fleet *Sovietskaya Ukraina* took 73,778 whales, but only 41,723 were reported to the IWC. Even after the introduction of the IOS, under-reporting of fin (13%), sperm (23%) and minke (17%) and over-reporting of sei whales (small numbers) occurred in 1974/75 by the *Yurii Dolgorukiy*. Between 1979-1989, the *Sovietskaya Rossia* is believed to have caught sperm whales en route to its whaling grounds before the observer boarded¹¹. During the 1974/75 season the *Yurii Dolgorukiy* killed 2,976 sperm whales, but only 2,174 specimens were reported to the IWC¹².

Confronted with the data of Zemsky *et al.* the Russian delegation at the IWC Scientific Committee meeting in 1996 reported that the issue had been thoroughly studied at the national level and, since the new data had not been compared with primary sources of data (e.g., vessel logs) by the Government, it should not be taken into account in discussions of the status of whale stocks¹³.

Later data from the fleets *Vladivostok* and *Dalnly Vostok* (covering 1963-1979)¹⁴ revealed that altogether data had been manipulated by six different Soviet whaling fleets.

5 Created by the Convention for the Conservation of Antarctic Marine Living Resources, May 20, 1980, available at <http://www.ccamlr.org> [CCAMLR]. For an example of 100% observer coverage, see § 9 of Conservation Measure 41-10 (2004), Limits on the exploratory fishery for *Dissostichus* spp. in Statistical Subarea 88.2 in the 2004/05 season.

6 Inter-American Tropical Tuna Convention, May 31, 1949, available at <http://www.iattc.org/> [hereinafter IATTC].

7 Agreement on the International Dolphin Conservation Program, May 21, 1998, 1998, <http://www.iattc.org/idcp.htm> [AIDCP].

8 Convention on Future Multilateral Cooperation in the Northwest Atlantic Fisheries, Oct. 24, 1978, www.nafo.ca/about/convention.htm [NAFO]. See article 23, NAFO/FC Doc. 05/1, Serial No. N5070 [NAFO Conservation and Enforcement Measures].

9 Zemsky, V.A. *et al.* (1995): „Soviet Antarctic pelagic whaling after World War II: Review of actual catch data“, *Rep.Int.Whal.Comm.* 45, 131-135.

10 Brownell, R. L. *et al.* (1998): „True Soviet pelagic whales statistics for the southern hemisphere and North Pacific“, *SC/51/RMP21*.

11 Shigemune, H. *et al.* (1998): „The plausibility of catch records of Bryde's whales reported by the former USSR Government“, *SC/51/RMP2*.

12 Brownell, R.L. (1998): „Possible catches of Bryde's whales by Soviet whaling operations in the North Pacific“, *Rep. Int. Whal. Comm.* 48, 143.

13 SC Report (1996): „Catch History Revisions“ In: Report of the Scientific Committee of the IWC, 49Th meeting, Aberdeen.

14 Brownell, R.L. (1998): „USSR pelagic catches of Bryde's whales in the North Pacific“, *SC/51/RMP29*.

3.1.2. Japan

Starting in the 1950s, three of Japan's five major coastal whaling companies routinely under-reported catches and excluded undersized whales from statistics reported to the IWC^{15,16,17}. A comparison of data from the Japanese scientist Toshio Kasuya and a former director of whaling stations, Isao Kondo, with official *Japan Whaling Association* (JWA) reports, indicate that the JWA's values for company A (1960-1966) represented only 58% of the true catch¹⁸. Whaling companies B (1965-1975) and C (1954-1964) only reported one third of their real catch figures¹⁹. Companies B and C also falsified catches of fin, Bryde's, sei, blue and humpback whales^{20,21}. Other violations include:

- The total true catches of Bryde's whales taken during the final years of commercial whaling (1981-1987) off the Bonin Islands were 1.6 times the number reported to the IWC, with a true total number of 4,162 instead of the reported 2,659 individuals²².
- In Japanese Baird's beaked whale fisheries, other whale species were included in official reports, e.g., several sperm whales were reported as one Baird's beaked whale²³, apparently with the aim of hiding illegal sperm whale catches²⁴.
- Until the mid 1970s, 50 to 100 sperm whales were killed by one single small-type whaling company but not reported²⁵.
- At least four small-type whaling operations illegally hunted sperm whales and processed them at their own land stations or sold them to large-type whalers²⁶. The total number of illegally hunted sperm whales remains unknown.
- Pelagic whaling operations discarded undersized whale carcasses when the number of whales killed exceeded the processing capacity of the whaling vessel, or before towing to the factory ships where inspectors were present²⁷.

Such large-scale falsifications were possible for decades because national inspection covered only a fraction of whaling operations and, even when international observation commenced in the 1980s, it was not complete (for example, it covered less than 10% of sperm whale fisheries). In some cases, national inspectors appeared to be unaware of the under-reporting (e.g., data manipulation appears to increase towards the end of whaling seasons, suggesting that hunting continued beyond the completion of the quota, or the end of the whaling season when inspector coverage was reduced or terminated). In other cases, JWA library records show that some reports were actually annotated by hand to note some sperm whales as "bangai", i.e. unlisted²⁸.

3.1.3. Other countries

From 1965 to 1975 South Korea reported an annual kill of about 20 fin whales, but no catches of Bryde's whales. In 1976, fin whales came under the protection of the IWC, and Korean reports of fin whale catches ceased. Korea reported a yield of 680 tons of whale meat from 34 Bryde's whales in 1978 and 243 tons from 18 Bryde's whales in the following year. These reports assumed a yield per Bryde's whale of 20 tons, while the reality is actually eight tons. In 1981, the Scientific Committee confirmed that Korea had concealed its ongoing hunting of fin whales during the 1970s. Furthermore, of seven large whales caught by Korea in 1982, four were later identified as fin whales²⁹.

In the mid 1970s, when only a small fraction of Norwegian whaling operations was covered by national inspectors, the senior Norwegian scientist at IWC argued that quotas should limit the weight, not the number, of whales hunted. According to his statements, Norwegian whalers often reported two small whales as one big whale³⁰.

According to reports from crew members, protected species such as blue and humpback whales were killed in Spanish whaling operations, but omitted from reports to the IWC even after Spain joined the IWC in 1979³¹.

3.2. Manipulations of Sex Ratio and Body-Length Data

The Schedule of the ICRW prohibits the killing of female whales accompanied by calves (§14). Additionally, paragraphs 15 and 18 prohibit the killing of sei, Bryde's, fin and sperm whales that fall below a defined minimum size. Widespread falsifications of biological data reported to the IWC reveal that whalers often violated these restrictions by manipulating reports of body length and sex.

15 Kasuya, T. (1999): „Examination of the reliability of catch statistics in the Japanese coastal sperm whale fishery“, *J. Cetacean Res. Manage.* 1 (1): 109-122.

16 Kasuya, T. & Brownell, R. (1999): „Additional Information on the Reliability of Japanese Coastal Whaling Statistics“, SC/51/O7.

17 Kondo, I. & Kasuya, T. (2002): „True Catch Statistics for a Japanese Coastal Whaling Company in 1965-1978“, SC/54/O13.

18 Kasuya, T. (1999): „Examination of the reliability of catch statistics in the Japanese coastal sperm whale fishery“, *J. Cetacean Res. Manage.* 1 (1): 109-122.

19 Kondo, I. (2001): cited in: Kasuya, T. & Brownell, R. (2001): „Illegal Japanese Coastal Whaling and Other Manipulations of Catch Records“, SC/53/RMP/24.

20 Kondo, I. & Kasuya, T. (2002): „True Catch Statistics for a Japanese Coastal Whaling Company in 1965-1978“, SC/54/O13.

21 Kasuya, T. & Brownell, R. (1999): „Additional Information on the Reliability of Japanese Coastal Whaling Statistics“, SC/51/O7.

22 Kasuya, T. & Brownell, R. (2001): „Illegal Japanese coastal whaling and other manipulations of catch records“, SC/53/RMP/24

23 Balcomb, K. & Goebel, C. (1977): „Some information of a *Berardius bairdii* fishery in Japan“, *Rep. Int. Whal. Comn.* 27, 485-486.

24 Kasuya, T. (1999): „Examination of the reliability of catch statistics in the Japanese coastal sperm whale fishery“, *J. Cetacean Res. Manage.* 1 (1): 109-122.

25 Kasuya, T. (1999): „Examination of the reliability of catch statistics in the Japanese coastal sperm whale fishery“, *J. Cetacean Res. Manage.* 1 (1): 109-122.

26 Kondo, I. & Kasuya, T. (2002): „True catch statistics for a Japanese coastal whaling company in 1965-1978“, SC/54/O13.

27 Kasuya, T. (1999): „Examination of the reliability of catch statistics in the Japanese coastal sperm whale fishery“, *J. Cetacean Res. Manage.* 1 (1): 109-122.

28 Kasuya, T. (1998): „Evidence of statistical manipulations in Japanese coastal sperm whale fishery“, SC/50/CAWS10.

29 Carter, N. & Thornton, A. (1985): „Pirate whaling 1985“, *Environmental Investigation Agency* (ed.), London.

30 Carter, N. & Thornton, A. (1985): „Pirate whaling 1985“, *Environmental Investigation Agency* (ed.), London.

31 Carter, N. & Thornton, A. (1985): „Pirate whaling 1985“, *Environmental Investigation Agency* (ed.), London.

3.2.1. Sex Ratio

Scientists estimate that at least 80% of data on length, weight, sex ratio, reproduction and maturational state submitted to the IWC by the former Soviet Union in respect of its Antarctic operations were false.³² For example, the fleet *Yurii Dolgorukiy* reported female sperm whales as males to reduce the total number reported (because the weight of one adult male is equivalent to the weight of several females)³³.

During the 1960s, up to 71% of sperm whales taken by Japan were female, but numbers were significantly under-reported, perhaps because they fell below the minimum size limit³⁴. Although Japan imposed a sex ratio quota for sperm whales for the first time in 1973, females continued to be disproportionately targeted, but under-reported, and sometimes misreported as males^{35,36}. Even in the 1980s, reported sex ratios were regularly manipulated. For example, during the 1984 and 1985 seasons, 25% of females caught were recorded as males³⁷. In the 1978/79 season an independent Japanese observer counted a male:female rate of 1:2.0, far higher than the permissible ratio of 1:0.13. Consequently, the Japanese Government recorded a ratio of 1:0.2 in its official reports. Serious discrepancies were also observed for the period 1959-1965 between data collected by independent biologists and official Japanese statistics. The number of females was heavily under-reported, resulting in a total sperm whale catch up to 2.5 times higher than the officially reported figures³⁸.

Portugal reported only the killing of male sperm whales in its operations off Madeira in the North Atlantic during the late 1970s, before it became an IWC member. However, a German observer noticed large-scale manipulations of both sex ratio and number of individuals killed (e.g., three females were counted as one male)³⁹.

3.2.2. Body Length Data

In June 1939, Japan first imposed regulations on its sperm whale fisheries, prohibiting the take of undersized individuals in both pelagic and coastal operations. An analysis of both operations shows that most reported body lengths fell extraordinarily close to the minimum⁴⁰, suggesting that data were manipulated. During the 1980s, catch figures from

Tajiri's whaling station for pelagic operations excluded specimens that fell below the limit, indicating that they were either discarded (see also 3.1.2.) or their length was falsified in the statistics⁴¹. National inspectors were not generally deployed in Japan's coastal sperm whaling operations, making manipulation of data easier⁴². In many cases the reported body length of undersized whales was "stretched" or (particularly between 1950 and 1955) undersized sperm whales were converted into fewer larger whales to match total catch or yield⁴³. Recent reports have revealed that, even under the eyes of inspectors, length measurements were manipulated; for example by hiding the end of the measuring tape up a sleeve⁴⁴. Japan's coastal sperm whaling operations were often conducted in breeding grounds, resulting in a higher proportion of female and undersized (young) whales being killed. The true catch figures for Japanese coastal whaling for the seasons 1959 to 1965 are believed to be 40% higher than officially reported⁴⁵.

In the 1950s, a significant proportion of sperm (96%), blue (56%) and humpback whales caught by the Greek "Olympic Challenger" off South America were undersized specimens. Accordingly, reports for both species were often manipulated, e.g. blue whales shorter than 65 feet were reported as fin whales. Large-scale under-reporting of humpback whales that were undersized or caught in closed seasons/areas was also conducted. During the 1954/55 and 1955/56 seasons the true catches of humpback whales exceeded the reported numbers by a factor of between 6.6 to 13.7⁴⁶.

3.3. Hampering of Inspectors and Observers

For decades, Japanese whaling operations were only monitored by national inspectors. Recent data reveal the extent to which these individuals were prevented from properly conducting their jobs. For example, in Japanese post World War II sperm whale operations^{47,48}:

- Inspectors were only allowed to record landing stations in particular regions, while others were excluded from the programme;
- Inspectors only stayed for a couple of weeks at a landing station, or they visited only after invi-

32 Brownell, R. L. et al. (1998): „True Soviet pelagic whales statistics for the southern hemisphere and North Pacific“, SC/51/RMP/21.

33 Shigemune, H. et al. (1998): „The plausibility of catch records of Bryde's whales reported by the former USSR Government“, SC/51/RMP/2.

34 Kasuya, T. (1999): „Examination of the reliability of catch statistics in the Japanese coastal sperm whale fishery“, J. Cetacean Res. Manage. 1 (1): 109-122.

35 Kasuya, T. & Brownell, R. (2001): „Illegal Japanese Coastal Whaling and Other Manipulations of Catch Records“, SC/53/RMP/24.

36 Kondo, I. (2001): cited in: Kasuya, T. & Brownell, R. (2001): „Illegal Japanese Coastal Whaling and Other Manipulations of Catch Records“, SC/53/RMP/24.

37 Kasuya, T. (1999): „Examination of the reliability of catch statistics in the Japanese coastal sperm whale fishery“, J. Cetacean Res. Manage. 1 (1): 109-122.

38 Kasuya, T. (1998): „Evidence of Statistical manipulations in Japanese Coastal Sperm Whale Fishery“, SC/50/CAWS10.

39 Deimer, P. (2005): in litt. to Pro Wildlife, dated 5th January.

40 Allen, K.R. (1980): „Size Distribution of Male Sperm Whales in the Pelagic Catches“, Rep.Int.Whal.Comn. (special Issue 2) 51-56, SC/SPC/9.

41 Kasuya, T. (1999): „Examination of the reliability of catch statistics in the Japanese coastal sperm whale fishery“, J. Cetacean Res. Manage. 1 (1): 109-122.

42 Kasuya, T. (1998): „Evidence of Statistical manipulations in Japanese Coastal Sperm Whale Fishery“, SC/50/CAWS10.

43 Kasuya, T. & Brownell, R. (2001): „Illegal Japanese coastal whaling and other manipulations of catch records“, SC/53/RMP/24.

44 Kasuya, T. & Brownell, R. (2001): „Illegal Japanese Coastal Whaling and Other Manipulations of Catch Records“, SC/53/RMP/24.

45 Kasuya, T. (1998): „Evidence of Statistical manipulations in Japanese Coastal Sperm Whale Fishery“, SC/50/CAWS10.

46 Barthelmess, & Kock. (1996): „Validation of Catch Data of the „Olympic Challenger“ Whaling Operations from 1950/51-1955/1956“, SC/48/O28.

47 Kasuya, T. (1998): „Evidence of statistical manipulations in Japanese coastal sperm whale fishery“, SC/50/CAWS10.

48 Kondo, I. (2001): cited in Kasuya, T. & Brownell, R. (2001): „Illegal Japanese coastal whaling and other manipulations of catch records“, SC/53/RMP/24.

tation by the station, enabling the whaling industry to manipulate the figures for the rest of the season;

- Whaling companies exchanged information on the inspectors' whereabouts and travel schedule, enabling whales to be landed at stations, which were not inspected;
- Inspectors were invited to excursions, dinners or mahjong games to keep them away from the landing station until all traces of illegal landings were removed;
- Inspectors were accommodated remotely from the landing station where flensers lived;
- Observers, who were accommodated near the landing stations, were booked into rooms from which they could not see the port.

3.4. Current Discussion on IOS

Although the lessons of history strongly support the need for a comprehensive and transparent international observer programme that imposes serious penalties for non-compliance, the RMS text under discussion establishes grossly inadequate provisions for independent observation of whaling operations. These provisions fall far behind best practice in other fisheries agreements. The current RMS:

- gives complete discretion to the Secretariat to select observer candidates, but provides no criteria or guidelines;
- gives Contracting parties discretion to veto any candidate for any reason (which need not be cited) and proposes that if, through no fault of the Contracting Government or whaling operation, no observer is available, the requirement for an observer be waived so that the operation is not delayed or prevented. This means in practice that any Contracting Government could veto all nominated observers (without giving any reasons), invoke this waiver provision, and entirely bypass the observer scheme;
- exempts vessels that operate trips of under 24 hours, carry out no flensing onboard "and have a legal limit of persons onboard, which does not exceed the number of crew". In such cases, only a national inspector would accompany the vessel. It is notable, however, that Norway (the main proponent of this exemption) is currently replacing national inspectors on such vessels with a Vessel Monitoring System (VMS) (see 4.3.);
- provides no sanction for breach of the obligation on Contracting Governments, national inspectors and all those involved in activities subject to the international observer programme, to cooperate with observers;
- imposes no obligation on Flag States to investigate observers' reports of potential violations and impose appropriate sanctions if they are confirmed;
- imposes no obligation to report to the Commission on measures taken as a response to infraction reports.

4. Catch Verification through VMS and Vessel Registry

Registration of vessels by a fishery organization's administrative body is perhaps the most common means of identifying and monitoring vessels fishing legally and illegally. CCAMLR, IATTC, ICCAT, IOTC, NAFO, FFA, and WCPFC all require Contracting Governments to provide vessel information to the Secretariat for recording in a central register. Details required commonly include the vessel's name, registration number, previous names and flags, port of registry, name and address of owner, operators and captain; and length, fish-hold capacity and tonnage. For maximum effect, vessel registries are often coupled with surveillance requirements, in which reporting and other schemes track all activities in order to detect IUU fishing. In addition, *Vessel Monitoring Systems* (VMSs), particularly those with *Global Positioning Systems* (GPS) and satellite technology to track fishing vessels, are rapidly becoming standard practice for ensuring proper enforcement, monitoring, and data collection in international fisheries.

The Straddling Stocks Agreement, WCPFC, CCAMLR, FFA, NEAFC and NAFO all require vessels to use VMS to transmit "real-time" or "near real-time" data for enforcement and monitoring purposes. ICCAT has designed VMS requirements, which will begin to apply at a date to be decided by the Commission. Both CCSBT and the EU⁴⁹ are exploring the use of VMS. The FAO recommends VMS, describing it as playing "an integral role" in "an effective and well planned MCS program"⁵⁰.

VMS programmes are typically required to be tamper proof; fully automatic and operational at all times; able to ensure alternate procedures for the transmission of data in case of malfunction; able to provide real time data; able to provide geographical position of the vessel with a position error of less than 500 meters and with a confidence interval of 99%; and able to provide special messages when the vessel enters or leaves the convention area and when it moves between sub-areas or divisions within the convention area.

Some fisheries agreements, like NEAFC and FFA, require an *Automatic Location Communicator* (ALC) for vessels, to quickly identify potentially illegal fishing activity and distribute surveillance data to enforcement officers. An ALC transmits information (via satellite) regarding the vessel's location, speed, and heading to a headquarters, where the data is automatically correlated with the vessel's position.

In order for the IWC to prevent and detect illegal whaling operations, it would need, at the very least, to combine a robust VMS scheme with a vessel registry.

⁴⁹ Commission Regulation (EC) No 1489/97 of 29 July 1997, as last amended by Regulation (EC) No 2445/1999(5)

⁵⁰ FAO, *Essential Role of Monitoring, Control, and Surveillance in Fisheries Management*, Section 6, UNFAO Committee on Fisheries, 22nd Sess., COFI/97/Inf.6, at para. 6 (Mar. 17_20, 1997), COFI/97/Inf.6 <http://www.fao.org/docrep/meeting/w3861e.htm>

4.1. Whaling in Closed Areas

Whaling nations have systematically defied the IWC's geographic restrictions on whaling and covered their tracks by reporting illegal kills along with those for open areas, or not reporting them at all. In many cases, the fleets may have been on their way to, or returning from, hunting grounds in the Antarctic. Whaling in closed areas has been identified in many parts of the South Atlantic, the Indian Ocean, as well as the South-West Pacific⁵¹. For example:

- In the 1950s the *Olympic Challenger*, poached 580 blue whales in closed waters off Chile⁵².
- During the mid 1960s the Soviet fleets *Soviet-skaya Ukraina* and the *Slava* killed over 2,000 pygmy blue, humpback and Bryde's whales in a closed area of the Northwest Indian Ocean, under the pretence of hunting toothed whales⁵³.
- Seas north of 40°S in the North Indian Ocean were closed to sperm whaling in the 1960s. However, from 1963-1967 sperm whales were hunted there by the former Soviet Union, but reported for the area south of 40°S⁵⁴.

4.2. Whaling out of Season

The Schedule also imposes temporal restrictions on whaling (e.g., §2a of the Schedule restricts hunting of baleen whales, except minke whales, by factory ships from December to April). Violations include:

- Chilean whalers killed at least 15 whales, mostly right whales, between October and December of 1984. Another Chilean whaler illegally operated in the late 1970s and early 1980s over 9-10 months annually⁵⁵.
- Catches of the Greek "*Olympic Challenger*" in the 1950s were over-reported by about 20% in order to cover up oil production from undersized specimens and/or those taken in closed seasons⁵⁶, as noted in chapter 3.2.

4.3. Current RMS Discussions

Despite the obvious need to distinguish legally authorized vessels that are fishing consistently with conservation and management measures from "pirate whalers", the provisions in the current RMS text are inadequate. In particular, the SDG draft makes very poor provision for a Vessel Register. §28 of the Schedule requires the parties to maintain a vessel registry of factory ships, catcher ships, and

land stations. A register was maintained until 1987, when Norway, Iceland and Japan stopped giving information. As a result, the IWC could not maintain a complete and accurate registry and it became officially dormant in 1994.

Although many IWC Members supported the use of VMS to provide real-time enforcement and reporting of infractions and vessel positions in 1993⁵⁷, disagreements arose in 1995 over the need for real-time reporting, a mandatory use of transponders, the type of vessel location, and the need for an IWC control center⁵⁸. The Members agreed, however, that any monitoring system ultimately agreed would have to be based on satellite technology⁵⁹. Today, Norway, Japan and Iceland oppose the inclusion of satellite-based, real time reporting by VMS. They also express concerns about confidentiality of data and security of vessels, although proper encryption measures can ensure confidentiality.

Norway, Japan and VMS

Both Norway and Japan have implemented a VMS system in compliance with CCAMLR and Norway has expressed support for extending its VMS requirements to krill fisheries to avoid krill vessels switching gear for fishing for other species or trans-shipping other target species.

Although CCSBT and ICCAT do not yet require VMS, **Japan** has voluntarily implemented VMS for its "scientific fishing" program under CCSBT and called VMS a "necessary measure to ensure the transparency of the research."^{*} It has also established a VMS pilot program for most of its longline vessels operating under ICCAT.

Currently nearly 500 **Norwegian** fishing vessels distribute information in real time to both the Government and regional fisheries organizations by means of a fully automated VMS system. Norway even requires all foreign fishing vessels operating in its EEZ and the fisheries zone around Jan Mayan to record speed and course using satellite-based VMS.

* Statement made at the CCSBT4(3), Item 3: Consideration of an Experimental Fishing Program (Feb. 19-21, 1998)

4.3.1. Norway's Blue Box

In 2004, the Norwegian Fisheries Department replaced National Inspectors with electronic surveillance on half of its whaling fleet; planning to extend the programme to all boats in 2005. The "Blue Box" includes a system of sensors on the vessel that record, e.g., load/weight on deck, and detect the use of a winch or harpoon. Although the system incorporates a GPS to record the location and time at which a whale is shot and hauled aboard, it does not transmit these data in real time while the vessel is at sea^{60,61}.

51 Yablokov, A. (1997): „On the Soviet whaling falsification, 1947-1972“, *Whales Alive VI (4)*, *Cetacean Society International* (ed.)

52 Ishiwatari, K. (1992): „Selfish western nations sell catch quotas then call for whaling ban“, *ISANA* (7).

53 Brownell, R.L. (1998): „Possible catches of Bryde's whales by Soviet whaling in the North Pacific“, *Rep.Int.Whal.Comn.* 48, 143.

54 Shigemune, H. et al. (1998): „The plausibility of catch records of Bryde's whales reported by the former USSR“, *SC/51/RMP2*.

55 Carter, N. & Thornton, A. (1985): „Pirate whaling 1985“, *Environmental Investigation Agency* (ed.), London.

56 Barthelmess, K. & Kock, K.-H. (1996): „Validation of Catch Data of the „Olympic Challenger“ Whaling Operations from 1950/51 to 1955/1956“, *SC/48/O28*.

57 *Chairman's Report of the 45th Annual Meeting*, Section 9.1.2., *Rep. Int. Whal. Commn* 44, 1994 (May 10-14, 1993).

58 *Chairman's Report of the 47th Annual Meeting*, Section 12.1, *Rep. Intl. Whal. Commn* 46, 1996 (May 29 – June 2, 1995).

59 *Chairman's Report of the 48th Annual Meeting*, Section 12.1, *Rep. Intl. Whal. Commn* 47, 1997 (June 24-28, 1996).

60 *Inspiserer Storfangst*“, *Data Respons News*, 26/9/2003. „ÅBLÅ...BOKSÅ ser nahval avlives“, *Lofotposten*, 25/4/2004.

5. Catch Verification through DNA Sampling and CDS

Discussions of catch verification at the IWC include a proposal for a DNA-based Catch Documentation Scheme (CDS). Although the details have yet to be agreed, such a scheme is based on an understanding that Contracting Governments would register the DNA profile of all whale products, which might appear in the market, in a database. The DNA profile of whale products obtained through market sampling would be tested against the database to verify the legality of their origin. Considering the high value of whale meat, and the previous failure of the IWC to prevent and identify the sale of whales from illegal sources, it is not unreasonable to require that DNA databases (registers) are fully diagnostic (i.e. contain DNA profiles of all animals, however sourced, that might be sold, on the basis that products from animals not included in the register(s) would be considered infractions). Neither is it unreasonable to require that databases, along with archives of sampled tissues, be held independently of Contracting Governments.

To this end, it is vital that the CDS, of which a DNA register is a component, is capable of detecting and tracing illegal or undocumented whale products at all levels of the distribution chain. However, such requirements, as well as a request for random sampling of markets, are strongly opposed by Norway, Japan, Iceland and, to an extent, Korea, where the continued sourcing of whale meat outside the control of the IWC, (including stockpiles, "Scientific Whaling", and by-catch) already makes the current monitoring of trade in whale meat almost impossible. These illicit or undocumented sources of whale meat, and the trend towards nationally held DNA databases and self-monitoring, are likely to significantly compromise catch verification efforts under the RMS.

Despite recent detailed discussions, it is premature to believe that the IWC is close to developing an adequate mechanism for incorporating DNA profiling into an RMS. Many outstanding technical issues need to be resolved by the Scientific Committee and agreed by the Commission before a mechanism is ready for incorporation into the RMS. For example:

- Technical issues remain to be resolved concerning the calibration of the DNA profiling conducted by different laboratories to ensure consistent standards of transparency and reliability;
- Technical difficulties will be compounded if there is expansion of domestic whaling or international trade. In this case, multiple registers in different countries will need to be able to communicate with each other and their data must be comparable in order for samples from different species and populations to be matched.

In addition, the Commission must choose between national and international control and oversight of

DNA registers and market sampling schemes. The two options would be:

- a. Contracting parties maintain diagnostic DNA registers and tissue banks nationally, with external audit conducted under the auspices of the IWC or another international body, and provide information/samples to the Secretariat at the end of each whaling season, or
- b. The IWC holds the register and contracting parties provide tissue samples for entry into it.

5.1. Domestic DNA Registers

Although the Norwegian and Japanese DNA registers are believed to be close to diagnostic, other concerns remain about their adequacy:

5.1.1. Norway

Since 1997 national inspectors have routinely taken DNA samples from each minke whale hauled on board. The following concerns are outstanding:

- **Time delay:** Although it takes several months from time of kill for a sample to be included in the Norwegian DNA register⁶², the meat is sold at auctions directly after landing. Products from illegal operations would therefore be untraceable long before any evidence is available.
- **Incompleteness:** DNA samples of blubber in stockpiles are only available for whales caught since 1997, although older blubber is still in storage and may still be sold or exported.
- **Lack of transparency:** Although in 1997 Norway claimed that its DNA system "will be fully transparent"⁶³, it has refused external requests to match DNA samples⁶⁴.

5.1.2. Japan

Japan's DNA register, which was established in the late 1990s, has been widely criticized by the IWC for its incomplete coverage, and lack of transparency (see Resolutions 1997-2 and 1999-8). There are currently four legal sources of cetacean products on Japanese markets, but only samples from current Scientific Whaling are fully recorded in the DNA database:

- Although in recent years the Government has started to test DNA samples from frozen stockpiles of whale tissues, submission of samples from long-term stocks for testing is still voluntary^{65,66} and a significant portion remains unregistered. Until their registration is compulsory, stock-

⁶² Raymakers, C. (2001): „Monitoring progress in Norway's development of a DNA register as part of its domestic management system for whale meat trade, and investigating reports of illegal trade in blubber“, TRAFFIC Europe.

⁶³ Government of Norway (1997): Downlisting proposal for Northeast Atlantic and North Atlantic Central stocks of minke whale from Appendix I to II, refused at CITES CoP 10 in Zimbabwe.

⁶⁴ WWF (2001): "Norway's whale trade controls are suspect, says WWF", press release Gland, Switzerland, 8.11.2001.

⁶⁵ TRAFFIC (undated): „An update to TRAFFIC East-Asia-Japan's survey of the commercial trade in whale meat products in Japan“, www.traffic.org, sighted Feb. 2005.

⁶⁶ IWC (20004): „Chair's Report of the RMS Working Group Meeting“, IWC/N04/RMSWG 16, November 2004.

⁶¹ Ibid and Ole-Marten Saether (2004), Data Respons, pers. comm. to WDCS, 28 June.

piles will remain a potential source of whale meat to the domestic or international markets.

- The registration of DNA samples from bycaught whales was mandated in July 2001. However, any stored products from specimens by-caught before 2001 remain unregistered.

Products from small-type coastal whaling (e.g. Baird's beaked whale) and drive and harpoon fisheries on small cetaceans do not have to be included in the DNA register. However, mixing and substitution of these species for baleen whales is widespread⁶⁷.

5.2. Sale of Bycatch and Stockpiles

Recognizing that stockpiles and bycatch represent unregulated sources of whale meat, the IWC has repeatedly urged member states to provide information on sources of whale meat on their domestic markets (e.g. Resolutions 1994-7, 1995-6, 1996-3, 1997-2 and 1999-8).

Japan maintains frozen stockpiles from past legal whaling, imports and bycatch, which are only partially covered by its DNA register (see 5.1.2). Detailed composition of the stockpiles is unknown, but they are believed to contain products from sei, fin, sperm and Bryde's whales, which, if they entered the market, could cover any illegal product of the same species and geographic origin⁶⁸.

Products from by-caught whales (e.g. minke, humpback whales and orcas) regularly enter the commercial market in Iceland. The reporting of by-catch in logbooks of fisheries has been mandatory in Iceland for several years⁶⁹. However, neither official statistics on bycatch nor a domestic DNA register are believed to exist⁷⁰. It is, therefore, almost impossible to prove the legal origin of whale products on Iceland's market.

South Korea banned commercial whaling in 1986 but appears to still have a strong market for whale meat, with annual consumption estimated at 150 tons (80% is consumed in Ulsan)⁷¹. Driven by prices of up to \$35,000 for a single whale⁷², the market (for minke, humpback, Baird's beaked whales and small cetaceans) is supplied by both illegal hunting and by-catch (which has reached levels approaching those of Korea's commercial whaling prior to the Moratorium⁷³). Some products from the 69 minke whales killed under Special Permit in 1986 may also

⁶⁷ Cipriano, F., & Palumbi, S. R. (1999): "Rapid genotyping techniques for identification of species and stock identity in fresh, frozen, cooked and canned whale products". Report to the IWC, SC/51/E13. Cambridge, UK.

⁶⁸ Mills, J. et al. (1997): "Whale meat trade in East Asia: A review of the markets in 1997", TRAFFIC International, Cambridge.

⁶⁹ Ólafsdóttir, in NAMMCO (2001): "Annual Report 2001", Norway.

⁷⁰ Altherr, S. (2003): "Iceland's Whaling Comeback", Pro Wildlife, WDCS, The Humane Society of the United States (eds.).

⁷¹ Kim Hak-Chan (2005): "Whale meat still a delicacy in Korea", article dated 4th February, Chosun.

⁷² Mills, J. et al. (1997): "Whale meat trade in East Asia: A review of the markets in 1997", TRAFFIC International, Cambridge.

⁷³ Baker, C.S. et al. (2000): "Predicted decline of protected whales based on molecular genetic monitoring of Japanese and Korean markets", Proc.ER.Soc.Lond. B 267, 1191-1199.

still exist. Although the Government requires a physical description of all by-caught whales, no DNA register is believed to exist⁷⁴ and Korea rejects "any level of outside oversight of registers" and even samples being checked against the national registers⁷⁵. DNA-based analyses of the Korean market in 1994/1995 found products from non-native species, such as southern minke whale and a pygmy form of Bryde's whale, which are unlikely to have originated from incidental catches in local Korean waters⁷⁶.

5.3. Sale of Protected Whale Species

5.3.1. Japan

Over the past decade, independent scientists analyzing Japan's retail market have found tissues from nine species or subspecies of baleen whales (humpback, blue, fin, sei, Bryde's and pygmy Bryde's whales, northern and southern minke whales) as well as sperm whales^{77,78}. In 1994/1995 southern minke whales were the only species legally hunted by Japan, but accounted for only half of the products examined⁷⁹. Although theoretically frozen whale products can be stored for more than 10 years, even meat stored under ideal conditions undergoes irreversible changes when stored for a prolonged period⁸⁰. The current availability of species protected for decades may indicate illegal activities or unreported bycatch. For example:

- In 1998 and 1999, meat from at least five different **sei whales** (three from the southern and two from the northern hemisphere) was found in Japanese markets^{81,82}. At this time, the last catch of a sei whale in the southern hemisphere recorded by the IWC occurred in 1979, and the most recent import of northern sei whales from Iceland was in 1991⁸³.
- Surveys in 1995 and 1999 identified products from **humpback whales**^{84,85}, which have been protected since 1966. No bycatch was recorded

⁷⁴ Kang, S. & Phipps, M. (2000): "A survey of whale meat markets along South Korea's coast", TRAFFIC East Asia.

⁷⁵ Government of Korea (2004): Response to the questionnaire related to the 'call for comments/positions on key issues in relation to the Chair's proposals for a way forward to the RMS'.

IWC/NO4/RMSWG4.

⁷⁶ Kang, S. & Phipps, M. (2000): "A survey of whale meat markets along South Korea's coast", TRAFFIC East Asia.

⁷⁷ Baker, C.S. et al. (2000): "Predicted decline of protected whales based on molecular genetic monitoring of Japanese and Korean markets", Proc.ER.Soc.Lond. B 267, 1191-1199.

⁷⁸ Lento, G.M. et al. (1997): "Molecular genetic identification of whale and dolphin products for sale in Japan and Korea, 1995-97.", SC/49/O21.

⁷⁹ Baker, C.S. et al. (1996): "Whale and Dolphin Products For Sale in Japan and Korea, 1993-95", SC/48/O38.

⁸⁰ Ishihara, A. & Yoshii, J. (2000): "A survey of the commercial trade in whale meat products in Japan", TRAFFIC East Asia.

⁸¹ Lento, G.M. et al. (1998): "Species and individual identification of whale and dolphin products for sale in Japan by mtDNA sequences and nuclear microsatellite profiles", SC/50/O8.

⁸² Baker, C.S. (1999): "Molecular genetic identification of whale and dolphin products for sale in Japan, 1998-99", SC/51/O15.

⁸³ Funahashi, N. (1998): "Whale for sale – Illegal trade in whale meat and products in Japan and South Korea", IFAW, USA.

⁸⁴ Baker, C.S. et al. (1996): "Whale and Dolphin Products For Sale in Japan and Korea, 1993-95", SC/48/O38.

⁸⁵ Cipriano, F. & Palumbi, S. (1999): "Rapid genotyping techniques for identification of species and stock identity in fresh, frozen, cooked and canned whale products", SC/51/O9.

in the area and, if the meat had originated from stockpiles, it would be over 30 years old.

- Products from at least 22 **fin whales** were identified during surveys in 1993, 1995, 1997 and 1998/99. The legal source could not be identified^{86,87,88,89}.
- **Gray whale** products found in Japan in 2000, were believed to originate from the western North Pacific population, one of the rarest whales in the world, with only about 100 individuals remaining⁹⁰.
- The high proportion of products originating from the protected “**J**” **stock of minke whales** (33.7⁹¹-42%⁹²) raises doubts that all specimens originated from reported bycatch. This stock mixes with the Okhotsk Sea stock at certain times of the year and is taken in Japan’s whaling operation in the Pacific.

5.3.2. Other countries

In Korea, DNA analyses of the market place in 1995 identified products from two southern minke whales, which presumably originated from Japanese “Scientific Whaling” and were illegal exported to Korea. Additionally, according to DNA analyses in 1997/1999⁹³ and 2001/2002⁹⁴, over 90% of minke whale meat tested in Korea was classified as originating from “J” stock. This endangered stock was designated as a Protection Stock by the IWC in 1984. However, it is the main victim of bycatch in Korean waters with reported numbers ranging from 50 to 160 annually since 1996. Experts warn that even if current by-catch rates of minke whales in Korea were reduced by 50%, this stock would still continue to decline⁹⁵.

Hong Kong prohibits the sale of whale meat but a 1997 survey found whale meat available in Japanese restaurants in Hong Kong. Although whale meat was never openly offered on the menu, seven out of 27 restaurants surveyed confirmed that they sold it. Japan was noted as the source of these whale products⁹⁶.

86 Phipps, M. et al. (1998): “A preliminary report on DNS sequence analysis of whale meat and whale meat products collected in Japan”, *TRAFFIC Bulletin* 17(2): 91-94

87 Lavery, S. et al. (2002): „Census of North Pacific minke whales on the Japanese and Korean markets by DNA profiling: implications for plausibility of Implementation Simulation Trials“, *SC/54/RMP8*.

88 Baker, C. et al. (1999): „Molecular genetic identification of whale and dolphin products for sale in Japan, 1998-99.“ *SC/51/O15*.

89 Lento, G.M. et al. (1997): „Molecular genetic identification of whale and dolphin products for sale in Japan and Korea, 1995-97.“, *SC/49/O21*.

90 Greenpeace (2001): „What’s wrong with whaling?“, *Briefing*.

91 Dalebout, M. et al. (2002): „How many protected minke whales are sold in Japan and Korea? A census by microsatellite DNA profiling“, *Animal Conservation* 5, 143-152.

92 Lavery, S. et al. (2002): „Market surveys of whales, dolphins and porpoises in Japan and Korea, 2001-2002“, *SC/54/BC*.

93 Dalebout, M. et al. (2002): „How many protected minke whales are sold in Japan and Korea? A census by microsatellite DNA profiling“, *Animal Conservation* 5, 143-152.

94 Lavery, S. et al. (2002): „Market surveys of whales, dolphins and porpoises in Japan and Korea, 2001-2002“, *SC/54/BC*.

95 Baker, C. et al. (2000), *Royal Society of London, Series B*. 267:1191-1199.

96 Mills, J. et al. (1997): “Whale meat trade in East Asia : A review of the markets in 1997”, *TRAFFIC International, Cambridge*.

5.4. Current RMS Discussions

History illustrates the folly of relying on the whaling nations themselves to monitor the movement of whale meat from the ship to the market place, or to ensure the legal origin of whale products in the market.

However, the draft RMS does not guarantee international control of the Catch Documentation Scheme. It provides an option for Parties to create entirely national Catch Documentation Schemes, or to opt for a scheme operated by the IWC, which contains minimal, and non-binding, provisions. For example, it provides no terms of reference for a Catch Documentation Scheme, but gives discretion to the Secretariat to develop the details in the absence of any guidance or instructions. By contrast, the IATTC, ICCAT, CCSBT and CCAMLR agree on minimum provisions for Catch Documentation Schemes (e.g. the information requested from fishing vessels, forms to track catches, details on the control at the point of import or export) and only leave more minor details to the discretion of individual Contracting Governments or the Secretariat.

The RMS draft does not even require Contracting Governments to report to the Commission or to exchange information with the Secretariat on the functioning of the CDS in place.

Most importantly, the draft RMS does not systematically require validation of catch documentation at the time of import/export/re-export and fails to ensure traceability of all catches. As a result, the CDS requirements in the draft RMS will not allow detection of catches from Illegal, Unregulated and Unreported (IUU) whaling or from non-IWC countries.

Japan’s DNA Monitoring for Tuna

Despite its aversion to the use of DNA monitoring in catch verification for whales, Japan has recently begun to use DNA to track the origin of tuna. This is in response to illegal imports of tuna caught in restricted areas and falsely reported to have originated elsewhere.

The Fisheries Agency will collect DNA samples from Indian, Pacific and Atlantic Ocean tuna and use DNA profiles to verify the origin of fish landed at Japanese ports. Importers are required to obtain certificates of compliance with RFMOs that document the location and date of its catch and the ship used. It also plans to assign surveillance officers to about 50 Japanese-registered tuna carriers.

Atuna. February 2, 2005

6. Compliance: The IWC – A Toothless Tiger?

As the previous sections illustrate, in the absence of independent monitoring and supervision of whaling operations, violations (e.g., killing protected species; killing in closed areas; killing in closed seasons; misreporting biological data and numbers taken) are easy to commit and apparently common. The IWC appears to have failed to learn the lessons of its long history of poor regulation of whaling and over-exploitation of whales, and seems likely to continue to delegate responsibility for ensuring compliance to Contracting Governments.

Unlike some other multilateral environmental agreements (such as ICCAT; NAFO; WCPFC), the IWC has no mechanism for the Commission to penalise non-compliance with either its substantive (e.g. quotas) or procedural (e.g. reporting) provisions. When concerned about a potential violation, the IWC through its Infractions Sub-Committee asks the relevant Contracting Government to investigate but, if not satisfied with the response, can at most only adopt a resolution calling for more action. The Infractions Sub-committee has discussed 24 cases of reported illegal whaling, and six of illegal trade since 1990. On average the discussions lasted 1.5 years before being dropped, despite no resolution of the case being reported

Interestingly, like the ICRW, the CITES Convention does not explicitly provide for sanctions against individual countries that fail to implement its provisions fully, and its resolutions are not binding. However, in distinct contrast to the IWC, the Parties to CITES have interpreted the treaty as authorizing the implementation of sanctions, including a total prohibition of trade in CITES listed species. They also treat resolutions, including the administrative, investigative and compliance processes that they establish, as binding.

The following examples⁹⁷ illustrate the impotence of the IWC in the face of overt defiance of its whaling regulations:

- In 1982, evidence was submitted to the IWC that a Chilean whaler had caught up to 200 sei whales annually (violation of Schedule §10); used factory ships in the area (§8c); operated over 9-10 months annually (§2c) and wastefully processed whales (§20b). Chile denied the evidence and refuted the charges. It conducted internal investigations but still exported over 1,100 tons of whale meat to Japan.
- The pirate whaling ship *Sierra*, active from 1968 to 1979, was owned by Norwegian businessmen, managed and crewed by South Africans and sold its catches exclusively to a Japanese company. Despite evidence that *Sierra* hunted thousands of large whales illegally, no steps were taken by any of the three Governments to prosecute the violations.

- In the late 1970s, one third of fin whales killed by Spain were below minimum size, in violation of Schedule §15b, but exported to Japan. Similarly, between 1977 and 1983, a total of 171 (11.7%) fin whales and 71 (11.9%) sei whales hunted by Iceland were undersized. Nevertheless, the products were processed together with legally hunted whales and exported to Japan.

Some Contracting Governments persistently ignore requirements in the Schedule, and requests in resolutions, to provide welfare data from whaling operations, or information on incidental catches. For example, Japan ignores repeated requests to provide data on maximum times to death and numbers struck and lost in its JARPA hunt; data on Time to Death, Instantaneous Death Rate and Struck and Lost Rates for sperm whales; methods used to kill bycaught whales; and the use of the electric lance and cold harpoon. It has requested that welfare issues be deleted from the IWC's agenda in 2005⁹⁸.

Despite being confronted with systematic defiance of its resolutions and infractions review process for decades, the IWC appears likely to replace the Infractions Sub-Committee with an equally toothless Compliance Review Committee (CRC). By continuing to delegate enforcement to Contracting Governments, the RMS will be no more likely to ensure the proper investigation and punishment of infractions than any previous IWC mechanism.

The SDG draft gives the CRC no terms of reference but expects it to:

- (i) review infractions reports submitted by Contracting Governments (there is no binding obligation on them to submit these reports to the CRC);
- (ii) deliver its findings to the Commission as to whether the alleged infractions are violations of the Schedule (without any guidance on what constitutes an infraction);
- (iii) unilaterally develop a list of "serious infractions" (when the composition and the decision-making procedures of the CRC remain unknown)
- (iv) make recommendations on how to ensure compliance (which the Commission has no obligation to follow); and
- (v) review actions taken by Contracting Governments (who are not in the text of the draft RMS obligated to follow up on infractions reports or prosecute violators).

⁹⁷ Carter, N. & Thornton, A. (1985): „Pirate whaling 1985“, *Environmental Investigation Agency* (ed.), London.

⁹⁸ Provisional annotated agenda IWC 57/2

7. Reservations and Objections: an Abuse of Rights?

The ICRW is silent as to whether Reservations can be taken to the Convention (which includes the Schedule) at the time of ratification. Article 2 of the Vienna Convention on the Law of Treaties defines a Reservation as a “*unilateral statement, however phrased or named, made by a State, when signing, ratifying, accepting, approving or acceding to a treaty, whereby it purports to exclude or to modify the legal effect of certain provisions of the treaty in their application to that State*”. Prior to 2002, Reservations had been only taken by new parties when joining the IWC and these Reservations were not directed at conservation measures adopted into the Schedule⁹⁹. However, in October 2002, Iceland rejoined the IWC with a substantive Reservation – to Schedule §10(e), exempting it from the Moratorium (see section 7.2). This created a precedent that allows Governments to circumvent the Objection procedures outlined in the Convention, by leaving and rejoining as a new member with a Reservation.

Unlike with Reservations, the ICRW does outline a procedure for taking Objections to Schedule amendments. The Convention permits the Commission to amend the provisions of the Schedule for the purposes of adopting conservation regulations such as protecting species, closing areas to whaling, setting catch limits, establishing sanctuaries, and determining types of gear. Article V permits parties to opt-out of a Schedule amendment if they object within a certain time frame. If they do not object, then the Schedule amendment becomes binding upon all Governments after 90 days.

Japan, Norway and Iceland have persistently opted out of conservation measures adopted by the IWC. Through a combination of Reservations and Objections, these and other whaling nations have undermined almost every conservation measure established by the IWC.

7.1. Objections

The most important and comprehensive conservation measure taken by the IWC to date is the commercial whaling Moratorium. Several countries - Japan, Norway, Peru, and the former Soviet Union - objected to the Moratorium in 1982. Japan and Peru withdrew their Objections and the former Soviet Union maintains but has never made use of its Objection. However, Norway, acting upon its Objection, resumed commercial whaling in 1993.

Other important conservation measures by the IWC include the creation of the Southern and Indian Ocean Sanctuaries. Not surprisingly, Japan lodged an Objection to the Southern Ocean Sanctuary in 1994 with respect to the Antarctic minke whale and each year kills an average of 440 minke whales in this Sanctuary under the guise of science. The for-

mer Soviet Union also lodged an Objection, but later withdrew it. Japan is currently the only country with an Objection to the Sanctuary; for all other Contracting Governments commercial whaling in sanctuary waters is prohibited. If the Moratorium is lifted, Japan will be able to kill minke whales legally in the Southern Ocean Sanctuary under its Objection.

Chapter III, §6 of the Schedule prohibits the use of the cold (non-exploding) harpoon. Brazil, Iceland, Japan, Norway and the former Soviet Union objected to the ban with respect to minke whales. Brazil and Norway withdrew their Objections and Iceland left the Commission in 1992, but the ban remains non-binding upon Japan and the Russian Federation. Japan still permits the use of the cold harpoon as a secondary killing method in its scientific hunts¹⁰⁰, but does not provide data to the IWC about the extent or effect of its use.

Some species and populations are designated as Protection Stocks and may not be hunted. However, Norway has an Objection to the classification of the Northeastern Atlantic stock of minke whales as a Protection Stock. Iceland objected to the Protection Stock status of blue whales in the North Atlantic and Arctic and caught at least 49 blue whales in the five years following their designation¹⁰¹.

Objections in the Past

In the 1960s, the IWC took several steps to protect blue and humpback whales in Antarctic waters, including a reduction of the open seasons for blue and humpback whales (1960), the temporary closure of humpback whaling in Area IV (1960) and later a ban on killing blue whales in Antarctic waters (1964). However, all Antarctic pelagic whaling nations (Japan, Norway, UK and the former Soviet Union) lodged Objections against these measures. As a result, the long overdue protection of collapsed populations of blue and humpback whales was held up for several years.

7.2. Iceland – a Case Study

In 1982, Iceland opposed the adoption of the Moratorium on commercial whaling but did not take a formal Objection, unlike other countries (see 7.1). Instead, Iceland chose to conduct Scientific Whaling in the years following the Moratorium's entry into force, under Article VIII of the ICRW. Iceland's taking of whales under the scientific exemption drew widespread international criticism, particularly in light of the country's sale of whale meat to Japan. In the face of growing international pressure, Iceland stopped its Scientific Whaling in 1989, and formally withdrew from the Convention in 1992.¹⁰²

¹⁰⁰ For example, Permit No.15-SUIKAN-2348, 29 Oct.2003

¹⁰¹ Carter, N. & Thornton, A. (1985): „Pirate whaling 1985“, Environmental Investigation Agency (ed.), London.

¹⁰² See Status of ICRW (U.S. Department of State, January 24, 2002) (stating that by note of December 27, 1991, the Embassy of Iceland gave notice to Iceland's withdrawal from the Convention effective June 30, 1992).

⁹⁹ Beveridge & Diamond Law Firm (2002): A Legal Analysis of Iceland's Attempted Reservation to the ICRW

In 2001, Iceland decided to rejoin the IWC, but did not want to be bound by the Moratorium. In June 2001, Iceland deposited an instrument of adherence and a Reservation that stated in part, “*Iceland adheres to the aforesaid Convention and Protocol with a reservation to §10(e) of the Schedule attached to the Convention.*” At the 53rd Annual Meeting in London, the IWC by a majority vote:

- i) decided that the Commission has the competence to determine the legal status of Iceland’s Reservation;
- ii) decided not to accept Iceland’s Reservation against §10(e) of the Schedule; and,
- iii) invited Iceland to assist as an observer.

Significantly however, at IWC53 Iceland was treated as an IWC member and allowed to vote up until the vote was taken on inviting Iceland to assist as an observer. The inclusion of a Reservation arguably at odds with the object and purpose of the Whaling Convention appears to have had little impact on the decision by the Secretariat to regard Iceland as a full party with voting rights in the first instance.

On May 10, 2002, Iceland again submitted an instrument of adherence with the same Reservation in advance of the 54th Annual Meeting of the IWC in Shimonoseki, Japan in May 2002. At this meeting, the Chair noted that since the new instrument of adherence contained the same Reservation as the previous year, Iceland’s status would be governed by the decisions taken at the 53rd Meeting. A challenge to his ruling was unsuccessful and Iceland continued to be treated as an observer and was not allowed to vote. Iceland deposited a third instrument of adherence and Reservation on October 10, 2002, in advance of the 5th Special Meeting of the IWC in October 2002. This third instrument of adherence and Reservation was essentially the same as the previous year’s; except for a statement that it would not act upon its Reservation until 2006. At the Special Meeting, the Chair determined that Iceland had submitted a new and different instrument of adherence. In this context, the Chair ruled that Iceland would, in the first instance, be allowed to vote as a Contracting Government. After a series of confusing votes and procedural errors, Iceland finally rejoined the IWC with a Reservation to the Moratorium.

7.3. Current RMS Discussion on Reservations & Objections

One of the most contentious discussions relating to the RMS is the timing of its adoption and the lifting of the Moratorium. While the whaling nations want the two events to occur simultaneously, several Contracting Parties have expressed concerns that in this situation, the whaling nations could object to one or more provisions of the RMS, and thus whale legally, but outside the control of the RMS. Four ways have been suggested to address this risk:

- 1) The Chair of the RMS Working Group suggested adding a “sunset clause” to §10(e) (the Moratorium) such that it becomes invalid on a specific day, provided that no Objections to the RMS

provisions have been received. This suggestion fails on two counts, however:

- If a Contracting Government ignores this and takes an Objection to the RMS, the RMS will still remain in the Schedule along with the Objections lodged against it. If the Commission ever secures the votes to lift the Moratorium in the future, the RMS will not be binding on those objecting Contracting Governments.
- This provision does not prevent a Contracting Government from leaving the IWC and rejoining with a Reservation to the RMS (as Iceland did in 2002). Nor does it prevent a new Government joining with a Reservation to the RMS.

The SDG developed three additional approaches to remove §10(e) while trying to ensure the RMS is binding, but acknowledged that there are inadequacies with each approach because of the enduring right to object and take Reservations:

- 2) Remove §10(e) simultaneously with the adoption of the RMS and add a footnote to the Table of Catches that states, “*Catches may be taken only by operations under the jurisdiction of Contracting Governments that do not have objections or reservations to the provisions collectively known as the RMS.*”
- 3) Lift the Moratorium in two steps. First adopt the RMS, and keep 10(e) in place. Then if the 90 day period passes without Objections to the RMS, vote on replacing 10(e) with the following text: “*Notwithstanding the other provisions of §10, catch limits greater than zero shall only be established in cases where the proposed whaling will be conducted in accordance with all of the provisions collectively known as the RMS.*”
- 4) Phase-out the Moratorium. The proposal appears to be to adopt the RMS and, once the 90 days have passed and no Objections have been lodged against the RMS, vote on a new paragraph, 10(f) that would replace 10(e) one species/stock at a time, or area by area.

However, each of these approaches fails to prevent a Contracting Government from taking an Objection to the footnote (scenario 1) or the second Schedule amendments (scenarios 2 and 3), or withdrawing from and rejoining the IWC with a Reservation to the RMS. In each case, the Moratorium would be lifted, but whaling nations would be able to legally conduct commercial whaling outside the RMS.

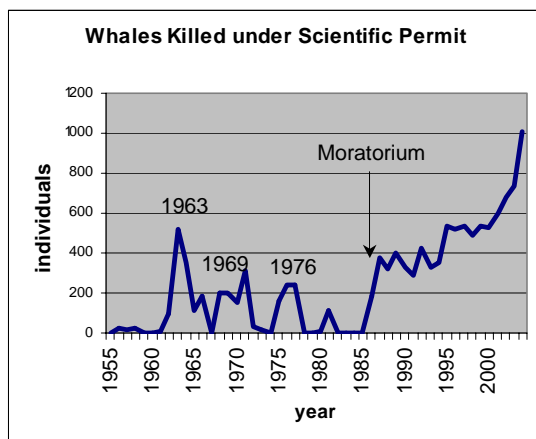
A non-binding RMS, in whole or part, clearly renders the entire RMS process meaningless and makes the lifting of the Moratorium exceedingly dangerous. Based on their previous practice, the likelihood is high that Japan, Norway or Iceland will take Objections to, or leave and rejoin the Commission with Reservations to, the whole or part of the RMS. The only way to truly prevent such abuse of the RMS is to amend the Convention to remove the right of Governments to take Objections or Reservations to any of its parts or provisions. Forbidding reservations is common practice in other fisheries agreements (CCSBT; FFA; MHLIC).

8. Special Permits / Scientific Whaling

Article VIII of the ICRW gives countries an unfettered right to kill, take and process whales for scientific purposes. This right supersedes all conservation measures outlined in the Schedule, including the Moratorium on commercial whaling.¹⁰³ Under this provision, only the Contracting Government issuing a permit can place limitations on where, how many, and which species can be killed.

The IWC has repeatedly expressed its opposition to the abuse of Article VIII for commercial purposes, adopting over 20 resolutions calling on Japan alone to desist. In 2003, the Commission made its most overt statement of concern, adopting Resolution IWC2003-2, which expressed “deep concern that the provision permitting Special Permit whaling enables countries to conduct whaling for commercial purposes despite the Moratorium on commercial whaling”; states that “*current and proposed Special Permit whaling operations represent an act contrary to the spirit of the Moratorium on commercial whaling and to the will of the Commission*”; and states that “*Article VIII of the Convention is not intended to be exploited in order to provide whale meat for commercial purposes and shall not be so used*”. The resolution urges “any country conducting or considering the conduct of Special Permit whaling to terminate or not commence such activities and to limit scientific research to non-lethal methods only”.

Figure 1: Number of whales killed under Special Permit (data based on IWC 2005 and Greenpeace 1985): 1963: Closure of Southern hemisphere humpback whaling; 1969: Closure of Northern hemisphere humpback whaling; 1976: Closure of Southern hemisphere fin whaling; ↓ Moratorium on commercial whaling comes into force.



Regardless of the views of the Commission on the use of Article VIII, and of its Scientific Committee on the merit of specific proposals, whaling under Spe-

¹⁰³ Article VIII reads in part, “Notwithstanding anything contained in the Convention any Contracting Government may grant to any of its nationals a special permit authorizing that national to kill, take and treat whales for purposes of scientific research subject to such restrictions as to number and subject to such other conditions as the contracting Government thinks fit, and the killing, taking and treating of whales in accordance with the provisions of this Article shall be exempt from the operation of this Convention.”

cial Permit has grown exponentially since it was first used, not long after the creation of the IWC.

In the 1950s a total of 27 permits under Article VIII were issued. During the 1960s the number significantly increased, to an average of more than 100 catches per year¹⁰⁴. By the 1970s, when fin and sei whaling were prohibited in the southern hemisphere, up to 300 whales were taken annually under Special Permit (figure 1) with the USA, the former Soviet Union, South Africa, Canada, Denmark and Peru all using Article VIII for their own interests. However, it was in 1985 – one year before the Moratorium came into effect – that the number of whales killed under Special Permits dramatically increased (see figure 1). Since then the debate on Scientific Whaling has been dominated by the activities of Japan and Iceland.

8.1. Japan

The commercial motivation for Japan’s whale “research” programme is clear: When the Moratorium came into effect in 1986, Japan could not meet its market’s annual demand of 3,000 to 4,000 tonnes of whale products from its stockpiles and trade under its Reservation to the trade ban imposed by CITES. The price of whale meat rose significantly¹⁰⁵. In 1987, Japan established the Institute of Cetacean Research, a Non Governmental Organization, heavily subsidized by the Government, that conducts scientific research on whales, and started pelagic Scientific Whaling in the 1987/1988 season.

Kyodo Hogeï, the company that previously conducted commercial whaling in the Antarctic, established a holding company (Kyodo Senpaku), to which it transferred its ships, equipment and crew. Funded by a gift of US\$ 9.6 million from Kyodo Senpaku, about US\$385,000 in tax-deductible private donations, and US\$2.7 million from the Fisheries Agency, the ICR chartered Kyodo Senpaku’s vessels and started Scientific Whaling in the Antarctic, Japan’s usual and lucrative hunting grounds. So, while commercial whaling in the Antarctic ended in May 1987, it resumed only seven months later under the guise of “science” – the so-called JARPA (Japanese Research Programme in Antarctica)¹⁰⁶ was born.

The number of whales killed under JARPA was far smaller than Japan’s hunts before the Moratorium and, in 1994, the Government commenced a five year Scientific Whaling programme for minke whales in the North Pacific, called JARPN (Japanese Research Programme in the North Pacific). When the original JARPN research permit expired, a new programme, JARPN II, was introduced in 2000, targeting sperm and Bryde’s whales as well as minke. Two years later JARPN II was expanded again to include sei whales, which are classified by the World Conservation Union (IUCN) as Endan-

¹⁰⁴ Greenpeace (1985): „Scientific whalers? The history of whaling under special permits“.

¹⁰⁵ Ishihara, A. & Yoshii, J. (2000): “A survey of the commercial trade in whale meat products in Japan”, TRAFFIC East Asia.

¹⁰⁶ Greenpeace (2001): „Scientific whaling – the true story“.

gered. Under JARPN / JARPN II almost 700 minke whales, more than 150 Bryde's whales, at least 40 sei whales and 18 sperm whales have been killed to date. Altogether since the Moratorium came into effect, Japan has killed about 7,000 whales in the name of science. Despite a growing understanding of whale biology and improvements in non-lethal research techniques, the lethal scientific take is currently more than twice that of the 1960s. The JARPA permit expired recently and Japan will apparently bring a new proposal to the Scientific Committee in 2005 that doubles its minke hunt in Antarctica and expands the programme to include fin and humpback whales¹⁰⁷.

Although the Scientific Committee has acknowledged that some results of Scientific Whaling have been useful for the management of whales, serious criticism has repeatedly been voiced that the data could have been obtained by non-lethal methods. The current research programmes have also been widely criticized for their open-ended nature and recent focus on feeding ecology; studies that aim to provide evidence to support Japan's claim that whales are out-competing humans for fish stocks and need to be culled. The premature decision to continue the JARPA programme even before the final results were analyzed by the Committee has also generated significant criticism. Although Japan has graphically illustrated its claims of voracious whales in numerous glossy pamphlets, it has never subjected its arguments to serious academic scrutiny and the normal course of peer review and publication. In contrast, several reputable scientists have published damning critiques of both Japan's methods and findings^{108,109} as well as opposing views about the impact of whales on fish stocks.

8.2. Iceland

Officially, Iceland ceased commercial whaling in 1985, but only a few months after the Moratorium, started drawing up a four-year-programme for Scientific Whaling, which was entirely subsidized by commercial sales and export of the meat¹¹⁰. The original version of the research programme included 40 blue and 40 humpback whales¹¹¹, but these were later omitted and the permit authorized the killing of 320 Fin, 320 Minke and 160 Sei whales (in fact, 292 fin and 70 sei whales were hunted.) The IWC repeatedly criticized the scientific merit and economic motivation of the programme and adopted Resolutions 1987-1/3, 1988-2, and 1989-1 calling on Iceland to desist. Iceland left the IWC in 1992.

After Iceland rejoined the IWC in 2002 with a Reservation against the Moratorium that it plans to activate in 2006, it presented a proposal for a two-year

Scientific Whaling programme of 200 fin, 200 minke and 100 sei whales in 2003 and 2004. The proposal incited widespread criticism, including a demarche from 23 Governments¹¹², the strongly-worded Resolution 2003-2 (see above), and a statement from 39 members of the Scientific Committee declaring that, not only was Iceland's research proposal poorly contrived and unlikely to yield relevant results, but that it was 'deficient in almost every respect'. Iceland hunted 36 minke whales in 2003 and – although two thirds of the whale meat from the previous year was still unsold when the fleet departed¹¹³ – took another 25 in 2004¹¹⁴. It has, however, presented no information to the IWC on these hunts.

8.3. Special Permits under the RMS?

As this and previous sections illustrate, Special Permit whaling has become the loophole that swallowed the Moratorium and all other conservation measures along with it. It is out of control in ways apparently never envisioned, or considered serious, by the drafters of the ICRW, and will remain so, because neither the Treaty, the Schedule or any resolutions can impose any controls or limits on its use.

The draft RMS recognizes that Special Permit whaling is of concern, yet has assumed that any problems can be resolved by a voluntary code of conduct that is part of the RMS package, but outside the Schedule. As this report illustrates, reliance on voluntary measures in the face of such systematic abuse is patently absurd. Even if the whaling nations accepted the most robust MCS measures in the RMS, they could still bypass the entire scheme, including precautionary catch limits, by simply self-allocating a quota under Article VIII for species or stocks on which the RMP does not set catch limits. The 'Total Catches Over Time' provisions, which would otherwise deduct scientific removals from an RMP-generated quota, would simply not apply to these other stocks or species.

The only way to stop the abuses of Scientific Whaling is to amend or remove Article VIII through binding proscriptive language in the Convention. Such an amendment, or Protocol, to the Convention would have to be ratified by all current IWC members and be a condition for all new members joining.

107 Darby, A. (2005): "Japan casts wider net in whale hunt. April 14, 2005 Sydney Morning Herald.

108 Clapham, P. et al. (2003): „Whaling as Science“, *BioScience* 53(3), 210-212.

109 Clapham, P. et al. (2002): „The JARPNII program: a critique“, document SC/54/O26 of the Scientific Committee of the 54th IWC meeting, Japan.

110 Altherr, S. (2003): „Iceland's Whaling Comeback“, *Pro Wildlife, WDCS, The Humane Society of the United States* (eds.).

111 Carter, N. & Thornton, A. (1985): „Pirate Whaling 1985“, EIA.

112 Argentina, Australia, Austria, Belgium, Brazil, Finland, France, Germany, Ireland, Italy, Kenya, Mexico, Monaco, the Netherlands, New Zealand, Peru, Portugal, San Marino, Spain, Sweden, Switzerland, UK and the US.

113 Lindquist, O. (2004), in litt. to Pro Wildlife, dated 16th May.

114 Icelandic Ministry of Fisheries (2004): "Iceland continues a minimal implementation of its research plan for minke whales", Declaration, dated 6/1/04.

9. Animal Welfare

The high degree of cruelty inherent in whaling has long been recognised, but the time that a harpooned whale takes to die in commercial whaling operations can still range from a few minutes to more than an hour. Experts have concluded that “welfare standards achieved in current whaling operations fall well short of those required in other sectors where animals are slaughtered commercially or killed for scientific research purposes, and would not be tolerated in those sectors”¹¹⁵. The following problems were most recently recognised by a resolution adopted by the IWC in 2004¹¹⁶:

- Data presently submitted to the Commission are of insufficient quality or completeness for it to make a fully informed assessment of the welfare implications of all whaling operations;
- The IWC’s current criteria for determining the onset of death and insensibility in cetaceans are inadequate;
- The efficiency of killing methods is influenced by many factors (e.g., the amount of explosive charge in the grenade, the calibre of the rifle used, the type of ammunition, the target area of the whale, the angle of the shot, the proximity of the whale to the vessel, the accuracy of the gunner, prevailing weather conditions and sea state, and the size and species of the whale targeted);
- Complete data sets (including comprehensive data for each whale killed) are not currently provided by any Contracting Government. To address this issue Resolution 2004-3 requested to provide data on each whale killed.

Additionally:

- The most extensively used whale killing methods do not adequately cater for physical size and morphological differences between species hunted. For example, Japan uses the same basic killing technology to kill minke whales and sperm whales, with only a slight increase in explosive charge. However, an adult male sperm whale can weigh up to 50 tonnes, compared to an adult minke whale of five to ten tonnes. In addition, a sperm whale’s brain is buried deep within its body, making a direct hit to the brain, and thus a swift kill, difficult, even at close range;
- Whales that are struck but then lost are a characteristic of all current whale killing activities. The prognosis for these animals will vary according to the extent of wounding, but at least some struck and lost whales are likely to die as a result of their wounds. It is therefore imperative that struck and lost whales are counted against catch limits;

- The only measure currently used by the IWC for the consideration of the welfare of hunted whales is the time taken to kill the whale – the ‘time to death’. This does not take into consideration the suffering caused by the extent of wounding, the stress of pursuit or any impact on con-specifics.

9.1. Welfare Issues and the IWC

Despite the strong objection of the whaling nations, the IWC has well-established legal competence to advance the humane treatment of whales. The ICRW grants the Commission a specific mandate to consider the “time, methods, and intensity of whaling”¹¹⁷ and the “type and specifications of gear and apparatus and appliances, which may be used”¹¹⁸. In addition, the Schedule to the ICRW and a number of resolutions provide a specific list of data from whaling operations to be collected and submitted to the IWC in order for it to review killing methods and make recommendations to improve the welfare of hunted whales.

Despite annual discussions within the Commission and its Whale Killing Methods and Associated Welfare Issues Working Group, progress to improve killing methods has been slow. The two most significant events in the last 20 years are the ban of the cold harpoon¹¹⁹ and the voluntary ban on the use of the electric lance as a secondary killing method.

Reports on Animal Welfare

Norway reported during the 2002 hunt for minke whales in the North Atlantic that 80.7% of the whales died instantaneously. This contrasts with the figures reported by **Japan** for minke whales hunted during the 2002/2003 season in Antarctica, where only 40.2% of whales killed were recorded as dying instantaneously.

Iceland has not reported any welfare data from its hunt of 36 whales in 2003 and 24 whales in 2004 under special permit.

9.2. Welfare issues and the RMS

The draft RMS provides three options for dealing with welfare issues (a fourth option is not to address it at all), all of which are based on voluntary reporting of data, even though the current Schedule requires the submission of some data. In addition, the draft text offers a list of minimum conditions under which whales could be killed, such as minimum weather conditions, minimum calibre for rifles, and limits on the number of whales that may be struck.

115 Kestin, S.C. (1999): *Current Animal Welfare Concerns Relating to Commercial and Special Permit Whaling*, IWC/51/WK2
116 IWC Resolution 2004-3 on Whale Killing Issues

117 Article V.1. e ICRW

118 Article V.1.f ICRW

119 § 6, Schedule to the ICRW.

More work is needed to develop the RMS draft text before the next annual meeting, but it is not anticipated that the IWC will endorse anything more to protect the welfare of hunted whales than a request for voluntary provision of data, which is unlikely to make the data currently provided any more complete or meaningful. The following concerns are not addressed under the proposed RMS:

- The IWC has yet to agree on scientifically robust criteria for determining death in cetaceans (for comparative analysis of data between hunts, and evaluating the accuracy of methods used and any improvements made);
- Collecting data merely provides opportunity for evaluation of welfare issues and is insufficient to directly address them. It is profoundly inconsistent for Contracting Governments who have strict domestic legislation regarding the welfare of animals killed for commercial or scientific purposes to agree to an RMS that does not require similar standards for the killing of whales;
- The current draft of the RMS text contains unacceptably ambiguous terms that are open to wide interpretation. For example, the SDG draft offers the following principle: *'The hunting of whales shall be undertaken so that the hunted whale does not experience unnecessary suffering and so that people and property are not exposed to danger'*¹²⁰;
- The Schedule language to address welfare does not have clearly quantifiable goals (such as 100% instantaneous death rate), which can be measured using scientifically approved methods;
- The draft does not prescribe independent monitoring of whale killing by International Observers or penalties for failure to meet welfare standards;
- The draft text does not require that whales that are struck and lost are counted against catch limits;

10. Conclusion

This report illustrates that, historically and continuing today, wherever there has been opportunity to exploit and evade whaling regulations, Contracting Governments to the International Whaling Commission have not hesitated to take advantage. Unable to prevent or penalise violations - from the smallest reporting irregularities to the grossest abuses of quotas - the IWC has consistently failed the whales. This review of the negotiations and current draft text of the Revised Management Scheme demonstrates that the lessons from the past have been ignored rather than addressed in the RMS, and that the IWC's appalling history is destined to be repeated. The RMS draft package is fundamentally flawed. It is weak, so poorly drafted as to be impossible to

implement, and as unenforceable as the IWC's previous attempts at regulation.

However, even if whaling nations allowed the adoption of a stronger RMS; i.e. one that incorporates the best practice followed by other fisheries agreements, the RMS would still be incapable of controlling whaling because of the loopholes and outdated provisions enshrined in the ICRW itself.

Recently there has been significant movement towards completing an RMS and lifting the 19 year ban on commercial whaling. This is not because world opinion favours a return to whaling, or because these animals are needed for food or other products, and certainly not because their populations are able to sustain hunting again. Rather, it seems that recent efforts to adopt an RMS are motivated by fear of the pro-whaling nations gaining a majority within the Commission, and of Japan, Norway and Iceland continuing to increase their hunts under Objection and Special Permit whaling. Driven by the desire to regain control, the Commission may agree an RMS that only gives the illusion of regulating whaling, but in reality cannot prevent Special Permit whaling, cannot prevent countries from evading its regulation by Objections or Reservations, and cannot be enforced by the Commission. Adopting such an RMS and lifting the Moratorium, only to allow commercial whaling to exist side by side with operations that are exempt from regulations is both irresponsible and makes a mockery of the IWC's mandate to conserve whales.

The IWC must not allow its infamous history to become the blueprint for its future. Its early days were characterized by intense competition for resources, compounded by the Commission's lack of experience, oversight, scientific information, and political will. Today, however, both the motivation and the means exist to protect whales. The IWC and civil society have moved beyond the initial stage of conquest and consumption to a respect for the rich interrelationships with our environment and its animal inhabitants. Most IWC members have evolved from the view that whales are an inexhaustible item for consumption to the realization that protecting whales not only helps the animals and their environment, but also provides people with financial, research, educational, and aesthetic opportunities.

Since 1982 the IWC has chosen to place greater emphasis on whale conservation rather than maintaining an unnecessary industry. It is neither appropriate nor defensible to reverse this trend. Whales face a multitude of threats today; directed takes, bycatch, over-fishing, chemical and noise pollution, climate change, and loss of habitat. It is therefore, incumbent upon the IWC to take even greater conservation measures by closing the loopholes in the ICRW that have allowed the Moratorium to be undermined since its inception, and not to negotiate a management scheme that will allow the IWC's appalling history of over-exploitation and cheating to be sustained. Contracting Governments need to act now in recognition of this fact because the world's whales might not survive the IWC's next attempt at regulating whaling.

¹²⁰ Chair's Report of the RMS Working Group Meeting IWC/N04/RMSWG 16

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