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Frozen in Time

HOW MODERN NORWAY CLINGS TO ITS WHALING PAST

A REPORT BY SANDRA ALTHERR, KATE O'CONNELL,
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CONTENTS

GLOSSARY

CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CoP	Conference of the Parties
EFTA	European Free Trade Association
ICRW	International Convention for the Regulation of Whaling
IWC	International Whaling Commission
IWMC	International Wildlife Management Consortium
NAMMCO	North Atlantic Marine Mammal Commission
PCB	Polychlorinated Biphenyls
RMP	Revised Management Procedure
RMS	Revised Management Scheme
UNCLOS	United Nations Convention on the Law of the Sea

EXECUTIVE SUMMARY

ONE

FOR years, headlines have focused on Japan's whaling in the Antarctic whale sanctuary and Iceland's hunt of endangered fin whales. Yet Norway has quietly become the world's leading whaling nation, killing more whales in the past two years than Japan and Iceland combined.

With the attention of media, politicians and the public focused elsewhere since the beginning of the new century, Norwegian whaling has boomed, exploiting loopholes in international whaling and trade bans and using unapproved science to set its own quotas for hundreds – sometimes more than a thousand – whales a year. Now with its domestic market for whale meat saturated due to low demand, Norway is not only exporting meat to established markets in Japan, it is even funding the development of new food-supplement and pharmaceutical products derived from whale oil in an effort to secure new customers, both at home and abroad.

Norwegian whaling ship 'Reinebuen' south of Svalbard, May 30, 2015 (N. Seeliger)

Since resuming commercial whaling in 1993 – under an objection to the International Whaling Commission's (IWC) 1982 moratorium on commercial whaling – Norwegian whalers have killed more than 11,800 minke whales, most in the last decade. During that time, Norway has systematically dispensed with national monitoring and control measures, as well as the IWC's scientific requirements for setting quotas. It has also become much less transparent about the management and welfare implications of its hunt, refusing to provide data to the IWC. Norway has even sought to make whales the scapegoat for global overfishing.

Norwegian whalers have exported more than 230 tonnes of whale products in the past 15 years under a reservation to the international ban on commercial trade in whale products implemented by the *Convention on International Trade in Endangered Species of Wild Fauna and Flora* (CITES). Not satisfied with this, Norway also tried repeatedly to overturn this ban.

Despite all this, the IWC has been almost silent on Norwegian whaling and trade since 2001, even as it continued to adopt resolutions on Japanese whaling. Similarly, the international community has taken only token diplomatic measures against Norwegian whaling during this time.

For as long as Iceland and Japan continue to take all the heat for whaling and trade, Norway will maintain its business-as-usual approach to both. Strong and unambiguous diplomatic action against Norway is urgently needed, including at forthcoming CITES and IWC meetings.

BACKGROUND

TWO

WHALING in Norway dates back to 9th century Vikings, a fact often used by Norwegian whaling lobbyists to characterise the country's modern hunt as a longstanding cultural tradition.[1] A curator of Norway's whaling museum has even attempted to reframe it as a custom dating 'back to the Stone Age'.[2] However, Norway has evolved into one of the world's most developed and sixth richest country (in GDP per capita)[3] making a justification of whaling as a cultural imperative increasingly implausible.

Although the remote Norwegian islands of Svalbard and Jan Mayen have been centres of whaling for centuries, large-scale whaling there in the 15th and 16th centuries was dominated by the Dutch and British. Norway developed key technological advances in the 19th century such as the exploding harpoon cannon and a tethering device to secure harpooned whales, which made whaling ruthlessly efficient, enabling its expansion to an industrial scale.[4] By the 1890s, Norwegian whalers were killing roughly 3,000 large whales annually off their coasts and, in response to dwindling local populations of whales, the Norwegian parliament banned whaling off its northern shores in 1904.[5]

Norway's whaling companies had already turned their attention to pelagic whaling and simply moved their new floating factories and fast-moving catcher boats to more distant waters, including the Antarctic. By the mid-1930s, Norway dominated the global whaling industry, taking more than half of all whales killed and producing a large share of the world's whale oil.[6] With a shortfall of whale oil for its own market, some of Norway's whalers returned to their own waters after the First World War, establishing the foundation of modern Norwegian whaling.

Intense global competition for whale oil decimated stocks of large whales in the early 20th century. In 1946, Norway and 14 other nations[7] agreed to the *International Convention for the Regulation of Whaling* (ICRW), which established the IWC to regulate hunting and conserve whales. However, the over-exploitation continued for decades, much of it undetected and in violation of IWC regulations, and whale populations continued to decline. Finally, in 1982, the majority of IWC member states agreed to a moratorium on whaling for commercial purposes, which came into force in 1986. However, as permitted by Article V of the ICRW, Norway lodged a formal objection to the moratorium exempting itself from the provision's effect (Section 3).

Unlike Japan, which was 'persuaded' to lift its objection by the United States' revocation of access to its fishing grounds,[8] Norway suffered no consequences for its defiance of the moratorium. It maintained its objection, under which it carried out commercial hunts in 1986 and 1987. It then conducted six seasons of special permit or 'scientific' whaling, even though it had called on the IWC to prevent the abuse of this treaty provision in 1956.[9]

Emboldened by the absence of political or economic repercussions, Norway again relied on its objection in 1993, resuming commercial whaling under self-allocated quotas. Having taken an average of 48 whales a year under special permit,[10] its commercial hunt surged within only six years from 157 minke whales in its first season to 625 in 1998 (see Box 1).[11]

In 2014, Norway took the greatest number of minke whales (736) since the previous peak in 2003, yet the IWC has not commented on its whaling since passing a resolution in 2001 calling on Norway to *'reconsider its objection and to halt immediately all whaling activities'*. In contrast, the IWC has adopted several resolutions on Japanese whaling since 2001.[12]

Yet, while Norwegian fishermen and politicians try to keep commercial whaling alive, including by finding new markets for whale products, the global whale-watching industry continues to boom. Although whales abound and whale watching offers a more financially and ecologically sustainable alternative to whaling, Norway's whale-watching industry has grown at a lower rate (4.9% per year) than corresponding whale-watching industries in other European regions (7.1% per year).[13] Studies have shown that the whaling and whale-watching industries are not compatible[14] and experience in Norway bears this out; in both 2006 and 2015, tourists reported being disturbed to witness a whale hunt or its aftermath when their whale-watch vessel encountered a whaling vessel.[15]

NORWAY IGNORES INTERNATIONAL PROVISIONS

THREE

THE *United Nations Convention on the Law of the Sea* (UNCLOS) entered into force in 1994, the year after Norway resumed commercial whaling. Article 65 makes clear that states are obligated to *'cooperate with a view to the conservation of marine mammals and in the case of cetaceans shall in particular work through the appropriate international organizations for their conservation, management and study'*. The IWC was the only relevant international organisation in existence at the time and its competency to both manage and conserve whales has been explicitly acknowledged by the United Nations. Chapter 17 of the Agenda 21 consensus of the first UN Conference on Environment and Development held in Rio di Janeiro in 1992 and the follow-up Rio+20 Conference held in 2012 both recognised that UNCLOS continues to provide the legal framework for the conservation of the oceans.[16]

Yet, Norway, which ratified UNCLOS in 1996[17] and agreed to the consensus on Agenda 21, has repeatedly failed to cooperate with the IWC – not only by continuing to hunt whales in defiance of the moratorium but also by undermining its scientific advice. It has also defied and undermined CITES, whose deference to the IWC led it to list all whales in its Appendix I – banning international commercial trade – in response to the IWC's adoption of the moratorium.

3.1. UNDERMINING THE IWC

Objection against the moratorium

Norway was one of the founding nations of the ICRW, which established the IWC in 1946 to regulate whaling in the hope of preventing the extinction of large cetaceans. Norway proceeded to kill more than 350,000 whales between 1946 and 1986.[18] Norway voted against the commercial whaling moratorium in 1982 and refuses to be bound by it.

In the decade before the moratorium was adopted, Norway caught about 2,000 minke whales per year – far fewer than in the heyday of commercial whaling for oil in the late 1940s and 1950s, when it took approximately 20,000 whales a year.

Even after the moratorium was approved, Norway did not intend to stop whaling and, taking advantage of a provision in Article V of the ICRW that allows contracting governments to exempt themselves from otherwise binding decisions, it filed a formal objection to the moratorium and continued to take almost 2,000 whales annually for the next two years. Provoked by a finding by the US Secretary of Commerce in June 1986 that it had not *'given any indication that it would comply with international standards for whale conservation'* and facing the threat of sanctions, Norway announced that it would suspend commercial whaling on July 3, 1986. As a result, in August 1986, President Reagan opted not to impose sanctions on Norway.[19]

Although it abstained from commercial whaling from 1988 until 1994, an emboldened Norway chose instead to use the 'special permit' provision in Article VIII of the ICRW to keep its whaling industry active, taking 289 minke whales under the guise of scientific research over that six-year period. The IWC responded with a series of resolutions on 'Special Permit Catches by Norway' (see Box 5) that called on it to 'reconsider' its special permit whaling. Simultaneously, conservation groups sought consumer boycotts of Norwegian seafood products in the early 1990s in retaliation for its resumed commercial whaling.[20] But Norway judged that continuing whaling was worth the risk.

The whaling nations' gamble that the moratorium on commercial whaling would be short-lived and never enforced has paid off. Although the ban remains in place today, the IWC has consistently acted as though it is a temporary measure and has worked on its replacement. These efforts included commencing plans for a *'Comprehensive Assessment of Whale Stocks'* in 1985,[21] instructing its Scientific Committee in 1991 to devise components of a *Revised Management Procedure* (RMP) that would set sustainable quotas when the moratorium was lifted, and tasking itself with negotiating a *Revised Management Scheme* (RMS) to oversee future whaling. Each of the whaling nations has influenced the development of these mechanisms, but none more intensely or persistently than Norway.

BOX 1: NORWAY'S COMMERCIAL WHALING UNDER THE MORATORIUM

Quotas, actual catches and numbers of vessels involved in the hunt[24]

YEAR	TUNING LEVEL[25]	QUOTA	CATCH[26]	% OF QUOTA	NO. OF VESSELS[27]
1993	0.72	296	157	53.04	27
1994	0.72	301	206	68.43	29
1995	0.72	232	218	93.97	32
1996	0.72	425	388	91.29	31
1997	0.72	580	503	86.72	32
1998	0.72	671	625	93.14	34
1999	0.72	753	591	78.48	34
2000	0.72	655	487	74.35	33
2001	0.66	549	552	100.55	33
2002	0.62	671	634	94.49	34
2003	0.62	711	647	91.00	34
2004	0.62	670	544	81.19	34
2005	0.62	797	639	80.18	31
2006	0.60	1,052	545	51.81	28
2007	0.60	1,052	597	56.75	28
2008	0.60	1,052	536	50.95	27
2009	0.60	885	484	54.69	21
2010	0.60	1,286	468	36.39	18
2011	0.60	1,286	533	41.45	19
2012	0.60	1,286	464	36.08	18
2013	0.60	1,286	594	46.19	17
2014	0.60	1,286	736	57.23	23
2015	0.60	1,286	660	51.32	22
		TOTAL	11,808		

Abuse of the RMP

A key element of the RMP devised by the Scientific Committee is its 'tuning level' – the fraction of the pre-exploited population that would be left after 100 years of operating the RMP. The higher the tuning level used, the smaller the whaling quota. The IWC adopted the most conservative tuning level (0.72) offered by the Scientific Committee in 1991, rejecting an alternative of 0.66 proposed by Norway and other whaling nations.[22] The Scientific Committee completed the main scientific components of the RMP in 1994, and the IWC accepted all the specifications, including the tuning level, noting that they *'should not be modified, reconfigured or adjusted'*.[23]

From 1996 until 2000, the Norwegian government used the IWC-agreed-upon tuning level of 0.72 to set its own national quotas for minke whales. However, in 2001, when that tuning level would have led to a lower quota due to a higher proportion of female whales having

been killed in past hunts, Norwegian officials dropped to a 0.66 tuning level. In 2003, when a new, lower minke whale population estimate would again have led to a reduced quota, Norway responded with another drop in the tuning level to 0.62.[28]

Although the IWC adopted a resolution in 2001 calling on the government of Norway to reconsider its less conservative tuning level in the setting of its quotas, Norway has faced no real consequences for its abuse of the RMP.

In 2004, the Norwegian government issued a policy statement on marine mammal use, which included a reference to the need to 'cull' whales in order to ensure healthy fish stocks.[29] Many researchers, including Norwegians, have countered that culling whales is not necessary for sound fisheries management and could, in fact, be damaging to fish stocks.[30] Norway's Fisheries Ministry has responded, however, by reducing the tuning level again, to 0.60 – lower than the number explicitly rejected by the Scientific Committee in 1991 – resulting in a quota of 797 whales.[31]

In addition to its failure to use the most conservative tuning level, Norway also led an assault on other elements of the RMP in order to justify higher quotas. In 2004, the Scientific Committee of the IWC began a rigorous review of a proposal by Norway to amend what is known as the *Catch Limit Algorithm*, the mathematical formula at the heart of the RMP that uses information on historic catches and an abundance estimate for the whale population to be targeted. Finally, the Scientific Committee determined in 2015 that the proposal's conservation performance was 'unacceptable'.[32]

Revised Management Scheme

To provide a management context for the RMP, the IWC agreed that it should not be implemented until the IWC had agreed to a *Monitoring, Control and Surveillance* (MCS) regime as part of an overall RMS.[33] The IWC debated the RMS for years, finally acknowledging in 2006 that agreement could not be reached on what criteria should be included in the RMS and how it should be paid for.[34] The failure was due, in large measure, to opposition by Norway, Iceland and Japan to mechanisms that are implemented, and paid for, in other fisheries. For example, while conservation-minded nations were proposing an entirely independent, international observer scheme for all whaling vessels to be administered through the IWC, Norway continued to insist that national inspectors be used, with IWC observers allowed only on some vessels. Norway also insisted that observers should not have access to vessel communication systems, nor be able to report infractions in real time to the IWC.[35]

Objection against the listing of the Northeast Atlantic minke whale as a Protection Stock

In 1976, the IWC's Scientific Committee identified four stock units of minke whales in the North Atlantic: 1) the Canadian East Coast Stock, 2) the West Greenland Stock, 3) the Central North Atlantic Stock (East Greenland-Iceland-Jan Mayen) and 4) the Northeast Atlantic Stock. Concerns about the status of the Northeast Atlantic stock were raised for a number of years, including the fact that catch reports for the stock might not reflect all whales taken.[36] In response to these worries, in 1986, the IWC voted to list the Northeast Atlantic stock of minke whales as a Protection Stock, thereby forbidding whaling. As it had done with the moratorium decision, Norway entered an objection to this decision and continued hunting.[37]

Establishment of NAMMCO

In 1992, Norway, together with Iceland, Greenland and the Faroe Islands, established the *North Atlantic Marine Mammal Commission* (NAMMCO) – a regional management institution that they hoped to use to evade the IWC moratorium and to exert political pressure on the IWC to lift it.[38] However, this effort has failed as 1) other institutions, including CITES, still recognise the IWC, not NAMMCO, as the appropriate international organisation for the management, conservation and study of whales; 2) Iceland, which renounced its IWC membership when NAMMCO was established, re-joined the IWC in 2002; and 3) by 2013 even Norway acknowledged that, 'so far NAMMCO has been more of a supplement to the IWC than an alternative'.[39]

Nevertheless, an analysis of annual Norwegian government budgets for the last 10 years shows that Norway consistently spends far more money on NAMMCO-related activities than on the IWC.[40] In 2016, for example, the Norwegian government budgeted only US$80,058 for participation at the IWC, compared to US$294,251 for NAMMCO meetings.[41] In addition, Norway has stopped submitting welfare data from its hunts to the IWC, instead presenting the information

to, and seeking advice from, NAMMCO on welfare matters (see Section 6). And rather than accepting IWC international observers on board whaling vessels, Norway has turned to NAMMCO to provide occasional observer coverage, suggesting that it continues to resist the role of the IWC in whale conservation and management.

Failure to report required information to the IWC

Paragraph 27 (b) of the binding Schedule, which implements the ICRW, calls on governments to notify the IWC as to the *'aggregate amounts of oil of each grade and quantities of meal, fertilizer (guano), and other products derived from them. ...'* Further, the Commission has adopted numerous resolutions calling on member governments to report to the Commission on the availability, source and extent of trade in whale products.[42] Norway has not complied with Schedule paragraph 27 (b), nor has it provided other information requested in various resolutions.

BOX 2: THE ONGOING ISSUE OF UNWANTED, WASTED WHALE PRODUCTS

In addition to providing between 1,200 and 1,500 kg of meat,[43] minke whales yield another 500 kg of blubber, for which there is no demand for human consumption in Norway. Some blubber is stockpiled and the Norwegian government is encouraging research into uses of oil, including in pharmaceuticals and food supplements (see Section 4).

Other uses of whale products include feed for pet dogs, sled dogs, farmed mink and foxes, and other animals.[44] Internal data from the cooperative of Norwegian fur farmers, Rogaland Pelsdyrfôrlag, (see table) show that in 2014 alone, 113,700 kg of whale meat was used as food for fur animals.

However, much blubber, offal, meat and bones are still dumped at sea and not always in compliance with Norwegian regulation J-33-2013 that requires that *'the dumping of whale remains must be done in such a way that it will not hamper or cause a disturbance of fishing activities or be a public nuisance'.* In August 2015, communities in northern Norway raised a public outcry against the dumping of whale remains, with one local stating, *'I found stinking whale stomachs, blubber and intestines floating in the fjord and stuck on land'.* Whaler Bjørn Andersen, who had been hunting in the area, admitted that this was a common practice.[45]

As Norway's whaling industry continues to battle the problem of low domestic demand, it has increasingly sought to find overseas markets for its products.

Vedlegg 3,1

ROGALAND PELSDYRFORLAG SA (2014)

MELVARER

		Kategori	MENGDE (kg)
	Blodmel	3	350 000,00
	Carbo		3 299 439,00
	Laksemel	3	12 700,00
	Methinonin		19 381,00
	Maisgluten		682 038,00
	Lt- Fiskemel	3	218 651,00
	Arbocel		81 480,00
	Vitaminblanding		16 833,00

FLYTENDE RÅVARER

	Lakse grakse (lettsyrnet)	3	3 417 879,00
	Laksensilasje	2	187 185,00
	Lett syrnet Blod	3	1 197 618,00
	Varmt lster (svine fett)	3	97 999,00
	Soya olje		307 926,00
	Sterilisert Fjordland / rensetrommel	2	493 410,00
	Vann		1 952 736,00

FAST RÅVARE

	Fjørfeskrog	3	7 326 944,00
	Frossen syrnet egghøne	2	1 029 738,00
	Fjørfe kräs og hjerte	3	17 239,00
	Kvitfiskavskjær	3	2 932 112,00
	Frossen laks	2	90 730,00
	Frossen sild/ makrell	3	293 520,00
	Hvalkjøtt	3	113 700,00
	Lever av svin og storfe	3	489 799,00
	Nyre av svin og storfe	3	178 895,00
	Frossen bladmage	3	173 145,00
	Frossen bl.slakt	3	3 440 100,00
	Ost	2	47 080,00
	Smolt		107 720,00
	Frossen lster		37 635,00
	Salt		1 000,00

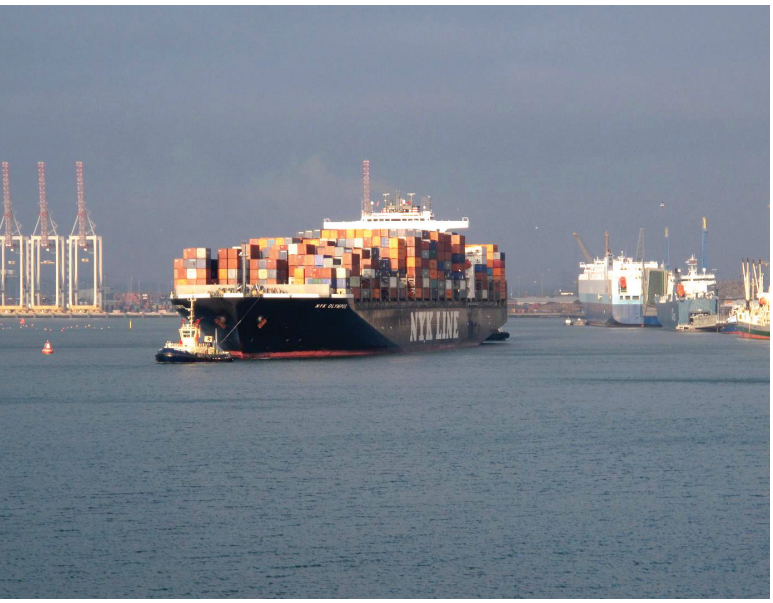
	Total sum råvare		28 614 632,00

The world's No. 1 whale killing nation

Commercial catches in Norway under its objection to the IWC moratorium total 11,808 minke whales through the 2015 season (see Box 1). Over the last decade (from 2006 to 2015), a total of 5,617 whales were killed in Norway, compared to 1,199 whales in Iceland and 5,436 whales in Japan – making Norway the leading whaling nation. In fact, for the years 2014 and 2015, Norwegian whalers killed more whales than Iceland and Japan combined.

3.2. CITES

The *Convention on International Trade in Endangered Species of Wild Fauna and Flora* was agreed to in March 1973 and entered into force in July 1975. Large whales were among the first species protected under CITES: At the first CITES CoP in 1976, blue, humpback, gray and right whales were listed in Appendix I (effectively banning international commercial trade). At CoP2 in 1979, all great whales were included either in Appendix I or II (i.e., international trade restrictions). At CoP3 in 1981, fin, sei and sperm whales were transferred to Appendix I, with the result that all whales then protected by the IWC also received CITES's strongest protection. In 1986, CITES responded to the IWC moratorium by including the last remaining great whales in Appendix I.[46] However, like the ICRW, CITES allows parties to lodge a formal reservation within 90 days of a CITES decision, exempting them from its effect.



In early 2013, Japan's NYK line ship 'Olympus' transported over four tonnes of Norwegian whale products to Japan. (Keith Murray)

Reservations and downlisting proposals

Norway entered reservations against the CITES Appendix I listing of five whale species:[47]

- fin whale (*Balaenoptera physalus*) in 1981
- sei whale (*Balaenoptera borealis*) in 1981
- sperm whale (*Physeter macrocephalus*) in 1981
- northern minke whale (*Balaenoptera acutorostrata*) in 1986
- southern minke whale (*Balaenoptera bonaerensis*) in 1986

Due to the loophole provided by their reservations, Norway, Iceland and Japan are not bound by the CITES Appendix I international commercial trade ban and are able to trade whale products legally with each other and with non-parties to CITES for primarily commercial purposes. Of course, each would benefit from opportunities to trade with new markets and would like to avoid the criticism that they abuse this loophole.[48] Consequently, they have attempted on several occasions to persuade CITES to transfer certain whale species or populations from Appendix I to Appendix II, which allows commercial trade under permit. Each attempt at 'downlisting' – including Norway's in 1994, 1997 and 2000 to downlist minke whales – have failed.[49] Nevertheless, in December 2015, the Norwegian Minke Whalers Association wrote to the government of Norway urging that minke whales be downlisted to enable them to sell whale products in countries other than Japan as well as 'take advantage of' a shortfall in whale meat on the Japanese market'.[50] However, no proposal was submitted to CITES CoP17 in 2016.

Exports of whale products despite commercial trade ban

For years, the Norwegian government complied with the Appendix I listing, refusing to issue export permits for whale products. However, at the IWC annual meeting in 2000, following the third defeat of a Norwegian downlisting proposal at CITES, Norway stated that its government *'had decided that there was no basis for continuing the ban on issuing export permits'*.[51] Since then, the government has supported international trade by issuing export permits – obviously in the hope that external markets will help to ensure the survival of the flagging Norwegian whaling industry.

Actual exports of whale products from Norway are recorded by Statistics Norway, while information on

BOX 3: NORWAY'S EXPORTS OF WHALE PRODUCTS

Sources: UNEP-WCMC CITES Trade Database and Statistics Norway

YEAR	DESTINATION	AMOUNT IN kg (UNEP-WCMC)	AMOUNT IN kg (STATISTICS NORWAY)
2002	Iceland	39,105	24,605
2002	Faroe Islands	-	431
2003	Iceland	-	4,268
2003	Faroe Islands	10,600	8,345
2005	Faroe Islands	-	60
2006	Faroe Islands	-	250
2008	Japan	5,600	5,195
2009	Faroe Islands	1,920	1,920
2010	Faroe Islands	1,000	-
2011	Faroe Islands	468	468
2012	Japan	30	-
2012	Faroe Islands	500	473
2013	Faroe Islands	2,000	994
2013	Japan	41,618[53]	7,337
2014	Japan	96,371	82,394
2014	Iceland	10,000	1,013
2014	Faroe Islands	1,000	526
2015	Japan	not available yet	90,225
2015	Iceland	not available yet	3,589
2015	Faroe Islands	not available yet	2,160
	TOTAL	210,212	234,253

CITES export permits is reported to the CITES trade database, maintained by the United Nations Environment Programme – World Conservation Monitoring Centre (UNEP-WCMC).[52] Comparison of export data from Statistics Norway and UNEP-WCMC shows discrepancies (see Box 3); actual shipments may include lower amounts than what is reported on an export permit, and recording of data may be delayed due to transport times. As UNEP-WCMC data were only available until 2014 at the time of this report, the following section also relies on data provided by Statistics Norway (2015).

In March 2001, the Japanese and Norwegian ministers in charge of fisheries met to discuss plans for the resumption of trade in whale meat. However, Norway's first exports of whale products (by the Myklebust whaling company) were sent to Iceland in 2002.[54] This was a necessary first step for Iceland, which at that time was preparing the foundation for its resumption of whaling to reactivate its domestic market for whale products.

Even after Iceland resumed whaling and produced its own whale products, Norwegian and Icelandic whaling interests continued to collaborate; in 2008, a large shipment of Icelandic fin whale meat exported to Japan was accompanied by five tonnes of Norwegian whale meat.[55] However, the export ended in a disaster for Norway's whalers, as Japanese authorities

discarded the full shipment due to concerns over bacterial contamination.[56]

Norway's export of whale meat to the Faroe Islands (which is a non-party to CITES) began in 2003 and has continued on a regular basis. However, Norway's biggest customer for whale products is Japan. Since exports resumed in 2013 with a shipment of 41,616 kg, they have skyrocketed to 82,394 kg in 2014 and 90,225 kg in 2015. This coincides with Japan's own reduced whaling success in recent years.

Due to phytosanitary concerns, the Kyodo Senpaku company (which operates Japan's whaling programmes) has placed inspectors on board Norwegian whaling vessels since 2013. In 2015, Kyodo Senpaku inspectors conducted 40 on-board whaling inspections, in place of Norwegian health inspectors (who inspect products dockside).[57] A spokesperson for Norway's Food Safety Authority (FSA) acknowledged in April 2016 that the meat from the Kyodo Senpaku trips should not be considered safe for human consumption without FSA inspection. In response to this decision, the Norwegian whale meat company whose vessel carried Kyodo Senpaku inspectors on board appealed. In response, the FSA indicated that efforts were underway to try to change the regulations in order to facilitate trade in whale products.[58]

Overall, from 2002 to 2015, Norway exported a total of 234,253 kg of minke whale meat (see Box 3), equivalent to over 150 minke whales. Japan has been the leading destination for these products (185,151 kg), followed by Iceland (33,475 kg), and the Faroe Islands (15,627 kg). This volume has not gone unnoticed: UNEP-WCMC noted Norway's large exports of minke whale in its 2013 analysis of trade under reservation, where it warned that such trade may 'undermine the effectiveness' of CITES.[59] Furthermore, responding to the ongoing, and growing, international trade in whale products between Norway, Iceland and Japan, CITES has issued several Notifications (e.g., No. 2015/020[60]) reminding parties that CITES Resolution Conf. 11.4 (Rev. CoP12) recommends that no export or import permit should be issued for any whale species protected from commercial whaling by the IWC. However, Norway ignores these and other reminders, continuing to export ever-larger shipments of whale meat and refusing to submit information on domestic stockpiles of whale products.

BOX 4: KEY PLAYERS FOR EXPORT OF WHALE PRODUCTS

The main exporters of whale products in Norway are the companies Myklebust Hvlaprodukter and Lofothval.

Kristján Loftsson, the owner and operator of the Icelandic fin whaling company Hvalur hf holds a 12 percent share in Lofothval. Lofothval's manager is Rune Frovik, former secretary of the *High North Alliance*, a pro-whaling lobbying organisation, which was subsidised by the Norwegian government in the 1990s (see Section 4).

Norway's largest exporter of whale products is **Myklebust Hvlaprodukter**. In 2014, the year it exported 34,282 kg of whale meat in a single shipment to Japan, Myklebust built new freezer storage facilities – a strong indication of ongoing confidence in this export market.

Myklebust was also the source of whale meat sold by the retailer Arktisk Meny at the agricultural fair Green Week, in Berlin, Germany, in January 2014.[61] Both the shipment to and the sale of 34 kg of whale meat in Germany violated CITES and EU Council Regulation 338/97, which prohibits possession and sale of whale products within the European Union.

GOVERNMENT SUPPORT FOR COMMERCIAL HUNTS AND USE OF WHALE PRODUCTS

FOUR

DEMAND for whale products is low in Norway and for whale blubber, in particular, there is little domestic market. On average, Norwegian citizens only eat 0.25 kg of whale meat per year.[62] By 2011, it was reported that less than 5 percent of Norwegian citizens regularly eat whale meat,[63] down from 7 percent in 2009.[64] A market analysis showed that whale meat was considered old-fashioned and just a 'niche product'.[65] Since that time, however, improved packaging and better marketing have led to a variety of supermarket chains, such as SPAR/EuroSPAR, Meny, REMA 1000 and Coop offering whale meat for sale,[66] occasionally offering special price discounts in an effort to increase sales.

Since the 1990s, the Norwegian government has been trying to reanimate the whaling industry both by providing financial support (estimated at a mean annual value of NOK 22 million, equivalent to US$2.5 million[67]) and by easing conditions for whalers.[68]

Financial support

The Norwegian fishing fleet, including whaling vessels, is exempt from the basic tax on petrol and diesel fuel,[69] which has led to tens of millions of US dollars' worth of savings for the fleet.[70] The fishing industry also receives distribution and storage support in the form of grants. Between 1999 and 2004, the Norwegian government allocated US$2.66 million outright, and loaned an additional US$3.2 million, for building new freezer units.[71] Over the period 1993-2006, about US$10.5 million was spent by the government to cover the costs of national inspectors on board whaling vessels.[72] In order to reduce the high costs of inspection, an electronic system ('blue box') was developed, for which the government provided a subsidy of about US$213,000 between 2001 and 2005.[73]

Since 1997, Norway has maintained a register of the DNA of all whales hunted, both for scientific purposes and to facilitate trade. Between 2001 and 2010, all costs related to the development of the scheme, totalling NOK 19.56 million (US$2.24 million) were covered by the government.[74] In some years, government subsidies reached at least half of the economic value of whale meat landings. For the period 1993-2009, the government supported whaling with subsidies of at least US$20 million.[75]

The Norwegian government has also expended significant sums to support lobbying efforts to shore up support for the whaling industry. Between 1992 and 2010, the government spent US$6.9 million *'to inform the outside world of Norwegian resource management, and in particular whaling and sealing'*. This included payments to pro-whaling lobbying groups such as the High North Alliance,[76] the European Bureau for Conservation and Development (which includes Norwegian government whale researcher Dr Lars Walløe on its board of directors[77]), the IWMC World Conservation Trust (IWMC), and the Norwegian Fishermen's Association (Norges Fiskarlag), especially for support of these groups' efforts at conferences focusing on the 'whales versus fish' issue and attendance at IWC and CITES meetings. The IWMC received annual support in the amount of US$34,000 from 2009 to 2014 from Norges Fiskarlag for its work at the UN's Food and Agriculture Organization (FAO), CITES and IWC.[78]

Relaxing whaling regulations to maximise hunting

To prevent depletion of any local populations, the IWC divided the region in which Norway whales into five different small management areas: ES (Svalbard-Bear Island area), EB (Eastern Barents Sea), EW (Norwegian Sea and coastal zones off North Norway, including the Lofoten area), EN (North Sea), and CM (Western Norwegian Sea-Jan Mayen area).

Allocating catches by small areas is an integral part of the RMP. However, in recent years less whaling has been conducted in the Lofoten area, and it appears to have stopped entirely off Jan Mayen. Instead, the bulk of the hunting effort has shifted to Svalbard.[79] In June 2011, midway through the whaling season, the Norwegian government, responding to calls from whalers frustrated by the fact that quotas in the other whaling areas had been used up, removed the quota limit of 65 for Svalbard.[80,81] The following year, it abrogated all the small area and per-vessel quotas, providing an entirely open hunting season.

In 2014, researchers from Norway's Institute for Marine Research (IMR) wrote that the whales in the Norwegian hunt were from 'one and the same stock' and that there was no genetic basis for dividing the hunt into five different hunting areas.[82] The authors acknowledge, however, that information on breeding locations and migration remains scarce. Norway's 2016 whaling regulations have partly returned to small area quotas in that 647 minkes can be hunted in the EW and ESB areas, 63 in the EN area, and 170 in the CM area around Jan Mayen, for an overall quota of 880.[83]

The whaling season in Norway traditionally lasted from the beginning of April to the end of August, although the season was often extended – e.g., once in 2010 and twice in 2012, apparently in response to low catch numbers.[84] However, since 2013, whaling regulations have not included a specific end date for the season, referring instead to a continuation of whaling 'as conditions warrant'.[85]

From 1993 until 2003, all Norwegian whaling vessels were required to carry a national inspector on board in order to record data, including sex, age, length and circumference of the whale, as well as blubber thickness.[86] However, in 2004 the government reduced the inspector scheme's coverage to 50 percent. Then, in 2007, all national inspectors were replaced by an electronic trip recorder, the so-called 'blue box'. Although the blue box records GPS location and the times when the harpoon is fired and the whale is hauled on board, it is not a real-time recording device. Although spot checks by inspectors during whaling trips were initially promised and are in theory still possible, they are rarely conducted.[87] Since 2013, whaling vessels longer than 15m have been required to use Vessel Monitoring Systems (VMS) to allow real-time vessel tracking. However, at least three whaling vessels were given a dispensation from this requirement in 2015.[88]

Stimulation of demand and creation of new uses

In response to the declining domestic consumption of whale meat, the Fisheries Research Institute of Norway commissioned a study in 2000 to examine the reasons for the reduction. The analysis found that whale meat in Norway was considered to have an 'old-fashioned image.'[89] As a consequence, a public relations campaign was launched, including the creation of more modern recipes, such as whale burgers, whale ham and whale pastrami.[90,91]

From 2004 to 2009, the public relations programme cost US$400,000/year.[92] Although it did not immediately result in the desired effect,[93] revenues at several of the leading whale meat companies have increased in recent years. For example, Lofothval's

The Netherlands-based SPAR group continues to defy international condemnation by selling whale meat in its Norwegian outlets. (Paul Thompson)

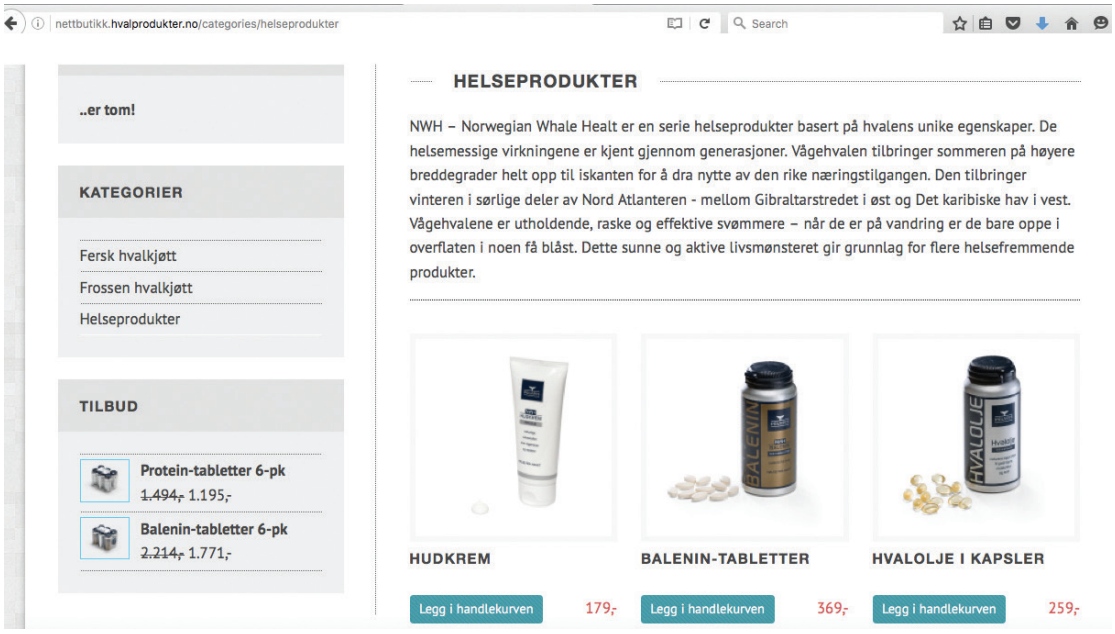
revenue rose from US$1.1 million in 2012 to US$1.6 million in 2014.[94] Myklebust Hvalprodukter's income rose from US$1.3 million to US$1.7 million over the same time period.[95]

In 2011, the Fisheries' Ministry provided US$4.6 million to Innovation Norway, the government's institution for research and development, *'with the aim of establishing committed cooperation between parties in the value chain in order to ensure a stable supply of consumer oriented minke whale products to the market'*.[96] A more recent project aimed at developing new uses for minke whales looked at ways to produce 'balenin', a product claimed to enhance stamina.[97] The project was co-funded by Myklebust Hvalprodukter (US$79,500); Møre and Romsdal County (US$42,810); and FHF, the Norwegian Seafood Research Fund (US$36,694).

Support has also been given to a variety of marketing and public relations campaigns to promote whale meat consumption, including development of the website http://norskhval.no/. For several years, a 'whale mobile', partly funded by the Råfisklaget (the Norwegian Fishermen's Sales Organisation), was sent to more than 40 cities and towns across Norway, offering free samples of whale meat and promoting recipes at a variety of events.[98] In 2014, a new branding association *'Kvalitetshval Fra Norskehavet'* ('Quality Whale from Norwegian Waters') was started, financed by Innovation Norway with grants from the Norwegian government. Its purpose was to improve the reputation of whale meat and to increase domestic demand, including by promoting new recipes for whale dishes.[99] By May 2015, six whale meat processors had signed up and, to date, a total of US$619,421 has been allotted to the promotional effort. Råfisklaget also supports the project.[100]

A series of government-funded studies has examined commercial possibilities for different whale products, including whale oil as a dietary supplement,[101] for medical treatments[102] or as a component in fish feed.[103] In 2015, Myklebust Hvalprodukter announced the launch of a series of new products based on whale oil, including hand cream that it claimed would help chronic psoriasis.[104] The company also markets whale oil health capsules and balenin capsules to 'increase energy levels and endurance'.[105]

In summer 2015, a meeting in Tokyo of government and whaling industry representatives from Japan, Iceland and Norway[106] included a discussion of the trade in products such as whale oil, extracts and whale meal on its agenda. This clearly shows that the whaling nations continue to collaborate to seek ways to maximise their investment in whaling by expanding international trade.[107]



The development and sale of whale-based health products are part of an effort to increase sales for an industry challenged by limited demand for whale meat. (http://nettbutikk.hvalprodukter.no/categories/helseprodukter)

IWC RESPONSES AND RESOLUTIONS ON NORWAY

FIVE

SINCE the IWC enacted the commercial whaling moratorium, it has adopted a series of resolutions focused on or referring to Norway; first targeting its 'scientific whaling' (1998-1994), then addressing its commercial whaling and trade in whale meat and expressing concerns over contaminant levels in northern minke whales (2001). However, since 2001, the IWC has not adopted a single resolution directly addressing Norway's whaling and trade, despite increases in both over that time (see Box 5).

Officials and media in Norway interpret the IWC's recent silence as acceptance of Norwegian whaling by the international community.[108] In 2011, Mr Karsten Klepsvik of the Norwegian Foreign Ministry (and IWC Commissioner from 2005 until 2010) told Norwegian media: *'We have noticed that there's more calm around the whaling issue. This has been a gradual development over several years'*.[109] Indeed, despite all of Norway's assaults on the IWC and CITES and its high take of whales over the last 14 years, fewer diplomatic measures have been taken against Norway than against other whaling nations. The only measures taken have been a demarche in 2006 delivered by 12 countries,[110] an official diplomatic protest by the US made in 2009,[111] and an intervention by the US Commissioner during the 2014 meeting of the IWC.[112]

Norway and the European Union

While not a member of the European Union (EU), Norway is a member of the European Free Trade Association (EFTA), part of the European Economic Area. Although the EU has repeatedly affirmed its strong support for the IWC moratorium on commercial whaling[113] and the CITES trade ban and *'called upon Norway to reconsider its position on these issues'*, it has not taken a strong position against Norway's whaling. This is likely due to the close ties between Norway and its Nordic neighbors that are members of the EU.

BOX 5: IWC RESOLUTIONS ON NORWAY'S WHALING

1988-1

Resolution on Norwegian Proposal for Special Permits: considers that Norway's proposal 'does not satisfy each of the criteria' for scientific research programmes in line with the IWC's Resolutions of 1986 and 1987.

1989-2

Resolution on Norwegian Proposal for Special Permits: repeats its substantial critique against Norway's scientific research programme and invites Norway to reconsider the proposed take of minke whales.

1990-1

Resolution on Norwegian Proposal for Special Permits: repeats the content and appeal of 1988-1 and 1989-2.

1992-6

Resolution on Norwegian Proposal for Special Permits: invites Norway to reconsider the proposed take of minke whales under special permit, as its scientific whaling programme does not satisfy the IWC criteria.

1993-8

Resolution on Norwegian Proposal for Special Permits: 'invites the Government of Norway to reconsider the proposed take of minke whales in 1993 and 1994 under "special permit"'.

1994-11

Resolution on Special Permit Catches by Norway: '... welcomes the decision of the Government of Norway not to issue special permits in 1995'.

1995-5

Resolution on North-eastern Atlantic Minke Whales: '... aware that Norway, having lodged an objection to paragraph 10(e) ... , has unilaterally authorised commercial whaling in 1994 and 1995, and that catches are currently underway ... calls on Norway to reconsider its objection ... and to halt immediately all whaling activities'.

1995-6

Resolution on Improving Mechanisms to Prevent Illegal Trade in Whale Meat: calls for whaling nations to report their stockpiles of whale meat and urges a disposal in the near future.

1996-3

Resolution on Improving Mechanism to Restrict Trade and Prevent Illegal Trade in Whale Meat: commends Norway for its ban on exports of whale meat and blubber and urges its maintenance and full enforcement; calls on Norway to immediately halt all whaling activities and to maintain its policy against the export of whale meat.

1996-5

Resolution on Northeast Atlantic Minke Whales: regrets the unilateral setting of quotas for commercial whaling, especially in the absence of valid abundance estimates.

1997-2

Resolution on Improved Monitoring of Whale Product Stockpiles: encourages whaling nations to provide data on remaining stockpiles, to inventory DNA samples, and to make the DNA database available to the IWC.

1997-3

Resolution on North-Eastern Atlantic Minke Whales: calls upon the Norwegian government to reconsider its objection to the moratorium and to halt immediately all whaling activity under its jurisdiction.

1998-1

Resolution on Norwegian Whaling: calls upon the Norwegian government to reconsider its objection to the moratorium and to halt immediately all whaling activities under its jurisdiction.

2001-5

Resolution on Commercial Whaling: concerned that Norway 'has continued unilaterally to authorise commercial whaling on minke whales' and that 'contrary to the precautionary approach, the Government of Norway has opted to employ a less conservative ''tuning level'' in the setting of its quotas ... requests that Norway refrains from issuing export permits for whale products, calls upon Norway to reconsider the less conservative ''tuning level'', to reconsider its objection and to halt immediately all whaling activities'.

NORWEGIAN WHALING AND WELFARE CONCERNS

SIX

THE IWC defines humane killing of a whale as *'causing its death without pain, stress or distress perceptible to the animal. That is the ideal. Any humane killing technique aims first to render an animal insensitive to pain as swiftly as is technically possible'*.[114] The exploding harpoon – invented by a Norwegian in 1865 and still manufactured in Norway – while far from perfect, is the most effective method of achieving this goal today, given the whalers' objective of preserving as much meat as possible.

A penthrite grenade harpoon fired from a bow-mounted cannon penetrates the whale's body and detonates. The resulting shock waves are intended to cause massive trauma to the brain, rendering the whale irreversibly insensible, if not dead. Spring-loaded claws are released by the harpoon upon impact and embed into the surrounding flesh in order to secure the whale's body so it can be hauled on board or lashed to the vessel for transport to land. If the whalers determine that the harpoon has not killed the whale, a rifle is used as a secondary method. Gunner experience, sea and weather conditions, the size of the whale, the distance fired and the location and angle of the grenade's penetration all impact the accuracy of the kill and the time the whale takes to die (its time-to-death, or TTD).[115]

Norwegian explosive harpoon. 18 percent of harpooned minke whales in Norway do not die instantaneously. (Kai Friis)

Norway has conducted research into whale killing methods, and is responsible for improvements in both the proportion of whales that die instantaneously (the instantaneous death rate, or IDR) and the average TTD. However, whales continue to suffer inhumane deaths due to Norwegian whaling. In one case, a paper discussed at the IWC 2006 Workshop on Whale Killing Methods and Associated Welfare Issues reported on a hunt in which a whale took more than 14 minutes to die.[116] For more than 5,000 minke whales killed by Norwegian whalers in the period 1981 to 2012, 18 percent did not die instantly, and average TTD, while improved, has not fallen below one minute.[117]

Until 2004, Norway provided detailed information, including IDR and TTD data, to the IWC where it was discussed in a standing working group on whale killing methods and associated welfare issues, as well as at technical workshops. Since then, however – the year the first national inspectors were replaced by the 'blue box' – Norway has only reported the numbers of hunted whales to the IWC. Since 2012, it has presented data on TTD from its hunts only to NAMMCO.[118] According to an internal report to Norway's Directorate of Fisheries, 18 percent of whales in the 2012 hunting season were not instantaneously killed and the median TTD was six minutes.[119]

Norwegians are split over whaling and apparently ambivalent about its humaneness; according to polls, 31 percent support whaling, regardless of potential suffering of the animals, but 42 percent oppose whaling if some whales suffer before dying.[120]

CONTAMINANTS IN NORWEGIAN WHALE PRODUCTS

SEVEN

OVER the last two decades, an increasing number of scientific studies have identified alarmingly high levels of contaminants in cetacean (whale and dolphin) products, including minke whales caught by Norway.[121]

A July 2000 study found more than 50 different PCBs in whale blubber, including dioxin-like substances and known hormone-disrupting chemicals.[122] Nevertheless, Norwegian whale hunters contracted with Japanese companies to ship whale products to Japan, receiving explicit support from the Norwegian Parliament.[123] Japanese consumer organisations protested and called on Japan not to import contaminated whale products.[124] An official of the Norwegian government subsequently confirmed the high levels of PCBs and advised against consuming large amounts of blubber.[125] This was followed by new reports of high dioxin levels in blubber.[126]

In 2001, the IWC passed Resolution 2001-5, which expressed concern about contamination levels in whale blubber from Norway. The following year, Japan officially refused to allow imports of Norwegian blubber.[127] In 2003, two studies examined contaminant levels in minke whales hunted in Norway and found mercury levels in excess of Norwegian health standards in muscle tissue.[128] The same year, Norway's FSA advised pregnant and nursing women not to consume whale meat.[129]

Regardless of these concerns, the Norwegian whaling companies Myklebust (see Box 4) and Olavsen exported more than five tonnes of frozen whale meat to Japan in 2008. However, their effort to break into the Japanese market was thwarted when the whale meat was rejected in 2009 by Japan's Ministry of Health due to bacterial contamination exceeding safety limits.[130]

At its 64th Meeting in 2012, the IWC unanimously passed Resolution 2012-1, which recalls that organic contaminants and heavy metals *'... may have a significant negative health effect on consumers of products from these marine mammals'* and urges parties to *'... responsibly inform consumers about positive and negative health effects, related to consumption of some cetacean products'*.

Fresh whale meat steaks on sale in 2014 at a fish market in Bergen, southeast Norway. (ProWildlife)

A 2013 study by the Norwegian Seafood Research Fund looked at contaminant levels in a variety of Norwegian whale products, including whale oil capsules, finding that the oil had elevated levels of organic contaminants, especially PCB, that exceeded human health limits.[131]

Although a 2012 Norwegian study showed a decline in the level of contaminants in whale meat and Norway's FSA lifted its warnings against eating whale products in 2013,[132] the Japanese government rejected imports of Norwegian whale products again in 2014 after tests showed pesticide levels twice as high as Japanese safety limits for aldrin, dieldrin and chlordane. The Japanese Ministry of Health recommended that the whale meat be discarded.[133]

CONCLUSIONS AND RECOMMENDATIONS

EIGHT

8.1. CONCLUSIONS

Whaling in Norway is a relic from the past and in recent decades has become more of a supplement to fishing income than a main source of revenue for most whalers, especially given that the Norwegian fishing industry has diversified beyond its traditional focus on cod. Whaling is actively supported by the government (Section 4); however, it is estimated that less than 1 percent of Norwegian fishermen are engaged in whaling.[134] Most whaling vessels take only a few whales,[135] and rely on a number of fishing concessions for other species such as cod, haddock and saithe for both the domestic and export markets.[136]

In addition, the domestic market for whale meat and especially for blubber is shrinking, even as the government tries to increase domestic demand (including funding research and development of alternative uses of whale oil and other whale products). Furthermore, efforts to get the CITES international trade ban lifted in order to expand international trading opportunities for whale products have thus far failed.

In recent years, expanding whaling by Japan and Iceland has dominated both headlines and diplomacy; Japan lost a legal challenge to its special permit or 'scientific' whaling programme at the International Court of Justice and Iceland remains the target of diplomatic sanctions by the United States. In contrast, Norway has been spared international attention and diplomatic pressure, and has made the most of this vacuum. Since 2010, the Norwegian government has continued to use an unapproved method to set its quotas, and relaxed a number of whaling regulations that it originally introduced in response to criticism by the IWC. It has subsidised research into new uses of whale oil and other products and quietly prepared the ground for increased exports, resulting in nearly 150 tonnes of whale meat and blubber being exported to Japan. It has also become less transparent about the welfare implications of its hunt.

A north Atlantic minke whale off Svalbard, Norway. (Anne-Line Brink)

Although Norway has a reputation for progressive environmental policies, its credibility is undermined by its whaling policy.[137] Norway continues to give the impression that its whaling is sustainable.[138] However, by arbitrarily lowering the precautionary tuning level set by the IWC, by allowing open hunts rather than setting quotas by small area, and by making whales the scapegoat for collapsing fish stocks, Norway has called its scientific integrity into question.

A forceful and unambiguous rejoinder to Norway's strategy is long overdue; the IWC has not formally commented on its whaling since 2001 and the international community has not presented a demarche to Norway since 2006. Demarches were, however, presented in 2015 against Japan and Iceland, even though those countries combined took fewer whales than Norway. For as long as this remains the case, Norway will continue to let Iceland and Japan take the heat for whaling and maintain its business-as-usual approach to whaling.

8.2. RECOMMENDATIONS

To the Norwegian government

- Norway should immediately stop commercial whaling and trade in whale products.
- Norway should withdraw its objections against the IWC moratorium and the listing of the Northeast Atlantic stock of minke whales as a Protection Stock, as well as its reservations against the CITES Appendix I listing of whale species.
- Norway should cease providing subsidies for the whaling industry and instead increase its support for whale watching.

To the IWC member states

- Contracting governments should use their full range of diplomatic and economic measures to convince Norway to permanently end commercial whaling and trade in whale products, including the preparation and issuance of a joint demarche against Norway's whaling.
- Contracting governments should adopt a resolution at the 66th IWC meeting, urging Norway to immediately halt all whaling activities under its jurisdiction, to refrain from issuing export permits for whale products, and to withdraw its objections and reservations.
- Contracting governments should prohibit any transit of protected whale species through their ports and encourage their international port management authorities (at seaports, airports and other ports of arrival) to reject any conveyance (vessel, ship, air carrier, train, etc.) carrying whale products.

To CITES parties

- CITES parties should raise concerns about escalating commercial exports of whale products under reservation by Norway, discrepancies in official trade data, and shipments to CITES member states that violate the trade ban (e.g., Germany in 2014, see Box 4) at the next CITES CoP in 2016 and at the 69th Standing Committee meeting in 2017.

To the European Union

- The EU should take the lead in implementing the above measures. This would be in line with the EU Common Position on commercial whaling adopted by the European Council in 2012[139] and the EC Council Decision in 2014 on EU relations with Non-EU Western European countries, which called upon Norway to reconsider its position on whaling and associated trade.[140]

REFERENCES

NINE

[1] Smith, R. (2013). Viking whalers. http://ngm.nationalgeographic.com/2013/06/viking-whalers/smith-text

[2] Sacks, K. (2014). Whale meat is a tough sell in Norway. Article in Munchies Vice, 18th September.

[3] IMF, International Monetary Fund. (2015). World Economic Outlook (October 2015).

[4] Halverson, S.M. (2004). Small State with a Big Tradition: Norway Continues Whaling at the Expense of Integration and Nordic Cooperation, 31 SYRACUSE J.INT'L L.&COM:121, 128–29 (2004).

[5] Ellis, R. (1999). Men and Whales. The Lyons Press. pp. 255–265. ISBN 978-1-55821-696-9.

[6] Nystrom, J. (2014). United States Policy and Norwegian Commercial Whaling: A Cooperative Approach. Seattle University Law Review [Vol. 37:1].

[7] The fifteen original member countries were Argentina, Australia, Brazil, Canada, Denmark, France, Iceland, Mexico, Netherlands, Norway, Panama, South Africa, Soviet Union, United Kingdom and United States (Iiwc.int/).

[8] http://www.presidency.ucsb.edu/ws/index.php?pid=35644

[9] Report of the Scientific Sub-Committee. (1957). Eighth meeting of the International Whaling Commission. P26.

[10] https://iwc.int/table_permit

[11] https://iwc.int/table_objection

[12] The following resolutions have been passed related to Japan's special permit and community-based whaling: 2001-6; 2001-7; 2001-8; 2003-2; 2003-3; 2004-2; 2005-1 and 2007-1.

[13] Kuo, H. *et al.* (2012). Estimating the impact of whaling on global whale-watching. *Tourism Management*. 33(6): 1321–1328.

[14] Parsons, E.C.M.and Rawles, C. (2003). The resumption of whaling by Iceland and the potential negative impact in the Icelandic whale-watching market. Current Issues in Tourism, Vol. 6, No. 5 and Kuo *et.al*. 2012.

[15] http://www.nordlys.no/nyheter/hvalsafari-endte-blodig/s/1-79-2179087 and Seeliger, N. (2015). Blutige Jagd geht weiter: Hier verstößt Norwegen gegen das Walfangverbot. Article in Bild, 6th June.

[16] Holt, S.J. (1999). Whaling and International Law and Order, Marine Pollution Bulletin Vol. 38, No. 7, pp. 531-534 and "The Future We Want, Rio+20 Outcome Document", A/CONF.216/L.1 Agenda Item 10.

[17] http://www.un.org/depts/los/reference_files/chronological_lists_of_ratifications.htm#Agreement%20relating%20to%20the%20implementation%20of%20Part%20XI%20of%20the%20Convention

[18] Statistisk Sentralbyrå, Norges offisielle statistikk: Norges hvalfangst 1905-1972 and Småhvalfangsten. 1939-2007.

[19] Reagan, R. (1986, August 4). Message to the Congress on Norwegian Noncompliance With the International Whaling Commission Conservation Program.

[20] Betsill, M.M. and Corell, E. (2008). The Influence of Nongovernmental Organizations in International Environmental Negotiations, The MIT Press: Cambridge, Massachusetts.

[21] Chair's Report of the Thirty-Seventh Annual Meeting, Agenda Item 7.

[22] 1991-Appendix 4: Resolution on the Revised Management Procedure. Resolution 2001-5 (Resolution 2001-5 Resolution on Commercial Whaling), and Chair's Report of the Forty-Third Annual Meeting, Agenda Item 10.

[23] IWC Resolution 1994 on RMP.

[24] As can be seen in Box 1, the actual number of animals killed each year is consistently and significantly lower than the quotas issued, reaching only half of the limit or even less, ranging from 36 to 57 percent, likely due to the lack of demand for whale products.

[25] https://www.regjeringen.no/no/dokumenter/Norwegian-minke-whaling-background-and-determination-of-catch-limits-/id419378/ and http://www.imr.no/filarkiv/havets_ressurser_og_miljo_2009/1.4.3_vagehval.pdf/nb-no. The RMP suggests that quotas be fixed within a multi-year block period, and carryover of unused quotas account for differences in quota within those blocks.

[26] https://iwc.int/table_objection

[27] Norges Råfisklaget Årsberetning. (2014). http://www.nrk.no/mr/deltakelsen-i-hvalfangsten-stuper-1.7958814 and http://www.dagligvarehandelen.no/2015/47-v%C3%A5gehval-skutt-s%C3%A5-langt-i-%C3%A5rets-fangst

[28] Papastavrou, V. and Cooke, J. (2006). Sustainable use of ocean wildlife: what lessons can be learned from commercial whaling? In: D. M. Lavigne (Ed.), Gaining Ground: In pursuit of ecological sustainability. Ampersand Printing: Guelph, Canada.

[29] St.meld. nr. 27 (2003-2004). Norsk sjøpattedyrpolitikk.

[30] Lislevland, T. (2009). Nødvendig med norsk hval- og selfangst?. Forskning, University of Oslo. See also Corkeron, P.J. (2009). Marine mammals' influence on ecosystem processes affecting fisheries in the Barents Sea is trivial. Biol. Lett. 5 204-206; DOI: 10.1098/rsbl.2008.0628. Morissette, L. *et al.* (2010). 'Whales eat fish'? Demystifying the myth in the Caribbean marine ecosystem. *Fish and Fisheries* 11(4): 388-404 and http://www.sciencemag.org/news/2014/07/rebounding-whale-populations-are-good-ocean-ecosystems

[31] See *supra*, note 27.

[32] Annex D-Report of the Sub-committee on the Revised Management Procedure IWC/SC 66a. and IWC/66/Rep01, page 14.

[33] IWC Resolution 1994–5. 'Resolution on the Revised Management Procedure.

[34] IWC 2007 Annual Report of the International Whaling Commission 2006, pp. 1–59. Cambridge, UK.

[35] Rose, G. and Paleokrassis, G. (1996). Compliance with International Environmental Obligations: A Case Study of the International Whaling Commission. In: J. Cameron, J. Werksman & J. Roderick (Eds.), Improving Compliance with International Environmental Law. Foundation for International Law and Development: London. https://law.lclark.edu/clinics/international_environmental_law_project/our_work/whaling/

[36] International Whaling Commission. (1986). Report of the sub-committee on North Atlantic minke whales. *Rep. inr. Whal. Commn* 36: 79-88. See also: Øien, N.I. (1990). Absolute and Relative Abundance of minke whales (*Balaenoptera acutorostrata* Lacepede) in the Northeast Atlantic. Thesis. University of Bergen. 140 pp.

[37] Horwood, J.W. (1990). Biology and Expolitation of the Minke Whale. CRC Press: Boca Raton, Florida. 248 pp.

[38] Sanderson, K. (1995). Introducing NAMMCO: A New Regional Approach to Marine Mammal Conservation, The Pilot No. 13 pp10-12.

[39] Norwegian Ministry of Trade, Industry and Fisheries. (2013). Norwegian Whaling Based on a balanced ecosystem. Available at www.fisheries.no/ecosystems-and-stocks/marine_stocks/mammals/whales/whaling/#.Vwv4fz9ssxU

[40] Statsbudsjett 2006/2007 to 2015/2016.

[41] Prop. 1 s. (2015-2016). Proposisjon til Stortinget (forslag til stortingsvedtak) FORBUDSJETTÅRAT 2016.

[42] Resolutions 1994-7, 1995-7, 1996-3, 1997-2, 1998-8 and 2007-4.

[43] Norges Råfisklaget Årsberetning. (2014) and (1998, May 3). Norwegian minke whaling: The hunt is on. News report by High North Alliance.

[44] http://www.canis.no/ekspertpanel/spmsvar.php?spmid=9242&sokres=1. Dahl, a well-known sled dog runner, also recommended whale meat in posts in 2000 and 2003. http://www.ninaskramstad.com/index.php?id=4801; http://www.dagbladet.no/2016/04/01/nyheter/hvalfangst/pelsdyroppdrett/43715738/. The director claimed that the meat used would have been unfit for human consumption, and could have included offal.

[45] http://www.nordlys.no/moter-dette-synet-utenfor-stueveggen/s/5-34-220478

[46] With the exception of the West Greenland stock of minke whales which remains on Appendix II.

[47] CITES. (2015a). Reservation entered by Parties. https://cites.org/eng/app/reserve.php

[48] See CITES Notifications (the most recent as of April 2015: CITES 2015b) and Resolution Conf. 11.4.

[49] The Norwegian proposal to CoP 11, however, did gain a majority of votes in favour.

[50] Lønnsomheten i kvalfangstnæringen med fokus på omsetingen. Letter from the Norwegian Minke Whalers Association to the Industry and Fisheries Department and the Fisheries Directorate, December 6, 2015.

[51] Chair's report of the Fifty-third Annual Meeting of the International Whaling Commission, Agenda Item 9.2.2. Revised Management Scheme (RMS) Commission Discussion and Action Arising.

[52] UNEP-WCMC. (2016). trade.cites.org. Search for *Balaenoptera acutorostrata* from Norway, extracted on 29th February.

[53] This number includes 15,051 kg of whale products imported from Iceland for re-export to Japan.

[54] http://www.mbl.is/greinasafn/grein/678440/ Company director Ole Mindor Myklebust is quoted as saying, 'Restoring exports of whale meat is a major step toward bringing whaling back to normal.'

[55] http://news.bbc.co.uk/2/hi/science/nature/7431568.stm

[56] http://www.mhlw.go.jp/english/topics/importedfoods/05/9-2.html

[57] Letter from Astrid Holtan, Royal Norwegian Ministry of Trade, Industry and Fisheries to Senior Fisheries Negotiator Hideki Moronuki, MAFF, February 4, 2016. Norwegian law requires that all whale meat deliveries be inspected by an NFSA veterinarian, although the Authority can allow for an exemption when it does not conflict with Norway's obligations under international law (Regulation on Control of Marine Mammals (FOR-2003-03-06-288)).

[58] Torsvik, N. (2016). Hvalkjøtt solgt ulovlig til Japan. *FiskeribladetFiskaren*. April 28, 2016. http://fiskeribladetfiskaren.no/nyheter/?artikkel=46660

[59] https://cites.org/eng/cop/16/inf/E-CoP16i-34.pdf

[60] CITES Notification to the Parties Number 20. (2015). Available at www.cites.org

[61] dpa (2015, January 23). Agrarmesse in Berlin: Zoll beschlagnahmt Walfleisch auf Grüner Woche. Article in Spiegel online. http://www.spiegel.de/wirtschaft/gruene-woche-berlin-zoll-beschlagnahmt-illegales-walfleisch-a-945130.html

[62] Tinch, R. & Phang, Z. (2009b). Economics of subsidies to whaling. Eftec report to WWF & WDCS dated June 2009. Unpublished.

[63] Tinch, R. *et al.* (2011). Norwegian use of whales: Past, present and future trends. Eftec report to WSPA, Dyrebeskyttelsen Norge & NOAH. 84 pp. http://old.dyrebeskyttelsen.no/uploads_nye_dyrebeskyttelsen_no/hvalrapport_2011_full.pdf

[64] Boncheva, S. (2011). Whales as natural resources. Masters Thesis, Department of Economics. Aarhus School of Business, University of Aarhus. 100 pp. http://pure.au.dk/portal-asb-student/files/34355886/Whales_as_natural_resources.pdf

[65] Østli, J. (2000). Hvalkjøtt i Norge En fokusgruppeundersøkelse. økonomisk Fiskeriforskning Volume 10:1.

[66] See e.g., http://www.hvalprodukter.no/?id=15&title=Produkter-Dagligvare and https://www.rema.no/oppskrifter/grillspyd-med-hvalbiff-og-gr%C3%B8nnsaker/REC-34628

[67] See *supra*, note 63.

[68] See *supra*, note 62.

[69] See *supra*, note 63.

[70] Palmer, B. (2014, Oct. 9). Norwegians Hate Whale Meat. So Why Does the Country Insist on Whaling? Article in the Huffington Post online.

[71] See *supra*, note 62. Blubber still had to be disposed of at least in 1999, 2002 and 2007 due to limited storage capacities and contamination, which incurred costs of NOK 11 million (US$1.26 million) (NOAH *et al.* 2011).

[72] Tinch, R. & Phang, Z. (2009a). Sink or swim – The economics of whaling today. A report by WWF & WDCS. http://www.wwf.org.au/crawl_publications.cfm?1502/Sink-or-Swim-The-Economics-of-Whaling-Today

[73] See *supra*, note 63.

[74] *Id.*

[75] See *supra*, note 63.

[76] Frovik, R. & Jusnes, L. (2006). Risikoanalyse sel og hval - Fokus på verneorganisasjonenes kampanjer mot fangst - FHF prosjektnr. 221034.

[77] http://www.zoominfo.com/p/Lars-Wall%C3%B8e/6462147. Dr Walløe has been a member of the Norwegian IWC delegation.

[78] Anmødning om økonomisk støtte til IWMS [sic], Letter from Sveinung Flam, director of the Norwegian Fisheries Sales Cooperative Association, to the Norwegian Fisheries Department, November 17, 2014. In 2014, the whaling industry also received a small grant from the government to enable attendance at IWC meetings, in the amount of US$5,500.

[79] https://www.stortinget.no/no/Saker-og-publikasjoner/Sporsmal/Skriftlige-sporsmal-og-svar/Skriftlig- sporsmal/?qid=48788

[80] https://www.regjeringen.no/no/aktuelt/kvote-for-fangst-av-vagekval-i-2011/id629357/

[81] http://fiskeribladetfiskaren.no/nyheter/?artikkel=22458

[82] http://www.imr.no/publikasjoner/andre_publikasjoner/kronikker/2014_1/unodvendig_med_fem_fangstomrader_for_vagehval/nb-no

[83] http://www.fiskeridir.no/Yrkesfiske/Regelverk-og-reguleringer/J-meldinger/Gjeldende-J-meldinger/J-53-2016

[84] Regulation J-154-2012.

[85] Regulations J-86-2013; J-90-2014; J-65-2015 and J-53-2016.

[86] Raymakers, C. (2001). Monitoring progress in Norway's development of a DNA register as part of its domestic management system for whale meat, investigating local whale meat trade, and investigating reports of illegal trade in blubber. TRAFFIC Europe, 26 pp. www.traffic.org/.../traffic_species_mammals5.pdf

[87] See *supra*, note 62.

[88] Anon (2015): Slipper elektronisk dagbok. Article in Kyst og Fjord, dated 13th February. Available at www.kystogfjord.no/nyheter/forsiden/Slipper-elektronisk-dagbok

[89] See *supra*, note 65.

[90] In addition, the plan introduced modernized packaging for whale meat, including 'ready to heat and serve' meals.

[91] http://fiskeribladetfiskaren.no/?side=101&lesmer=32346 ; http://archive-no.com/page/851490/2012-12-05/http://www.lofotprodukt.no/VisProdukt/Produkt/20 and http://www.dagligvarehandelen.no/xp/pub/hoved/avisen/tidligere_utg/13539

[92] See *supra*, note 62.

[93] See *supra*, note 63.

[94] As per annual statement for Lofothval filed at www.proff.no, Lofothval's overall operating profit in 2014, however, was down somewhat year on year.

[95] As per annual statements for Myklebust Hvalprodukter filed at www.proff.no.

[96] See *supra*, note 63.

[97] http://www.fhf.no/prosjektdetaljer/?projectNumber=901025

[98] See http://www.dagbladet.no/magasinet/2007/08/06/508065.html ; http://www.siste.no/innenriks/pa-turn-med-hvalmobil/s/1-79-2122107 and http://www.nsl.no/uploads/filer/norsksjomat/nr2_2010.pdf

[99] http://www.ht.no/incoming/article9815912.ece

[100] http://horecanytt.no/Nyheter/Siste-nytt/Arkiv/2013/September-2013/Hvalkjoett-paa-dagsorden-i-horeca

[101] Oversikt over hvalspekk og hvalolje' (2006) Core Competence AB for FHF, http://www.fiskerifond.no/files/projects/attach/223011_spekk_oljer_sluttrapportrev.pdf

[102] Bjørkkjær, T., Araujo, P., Madland, T., Berstad, A. & Frøyland, L., (2009). A randomized double blind comparison of short-term duodenally administrated whale and seal blubber oils in patients with inflammatory bowel disease and joint pain. In: Prostaglandins, Leukotrienes and Essential Fatty Acids, Volume 81, Issue 5, pp. 425-432 and Bonncheva 2011.

[103] WDC. (2010). Reinventing the whale: The whaling industry's development of new applications for whale oil and other products in pharmaceuticals, health supplements and animal feed. WDC: Chippenham, UK, 12 pp.

[104] http://nettbutikk.hvalprodukter.no/products/hudkrem

[105] http://nettbutikk.hvalprodukter.no/products/hvalolje-i-kapsler and http://nettbutikk.hvalprodukter.no/products/balenin-tabletter

[106] The meeting, held July 1, 2015, included representatives from the Norwegian Ministry of Trade, Industry and Fisheries, the National Institute of Nutrition and Seafood Research, and the Norwegian Embassy in Tokyo, as well as representatives of the whaling industry. The Norwegian delegation was headed by Astrid Holtan of the Fisheries and Industry Ministry (NFD). Other members of the Norwegian delegation included Livar Frøyland (NIFES), Mari Dirdriksen (NFD), Dr. Lars Walløe, and Ole Mindor (Myklebust).

[107] Draft agenda of the Expert Meeting regarding trade in whale products, June 30 to July 1, 2015.

[108] Skagestad, O.G. (2002). Norwegian Trade in Edible Whale products. In: Report of the World Council of Whalers' General Assembly and Conference. Torshaven, Faroe Islands. pp. 16-19.

[109] http://www.newsinenglish.no/2011/07/05/whaling-protests-die-down/

[110] Argentina, Australia, Austria, Belgium, Brazil, Czech Republic, France, Great Britain, Germany, Netherlands, New Zealand, and Spain.

[111] A cable entitled 'Norway uncompromising on whale catch limits' as of 12 December 2009 stated: 'The Ambassador urged the GON [government of Norway] to show flexibility on catch limits to enable a compromise reform of the International Whaling Commission.'

[112] Chair's report of the 65th Meeting, at page 25.

[113] http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52011PC0495

[114] Report of the Workshop on Humane Killing Techniques for Whales. Presented to the 33rd meeting of the IWC as paper IWC/33/15.

[115] Brakes, P., Butterworth, A., Simmonds, M. and Lymbery, P. (2004). Troubled Waters. Chapter 5: The IWC and whale welfare. p.30-36 and Chapter 8: Weather, sea condition and ship motions affecting accuracy in whaling. p. 63-68. WSPA Publication ISBN Number: ISBN 0-9547065-0-1.

[116] Lonsdale, J., Garces, L., Butterworth, A. and Perry, C. A Review of a Norwegian Whale Hunt. IWC/58WKM&AWI 12, Agenda Item 4.2 The paper was the result of an undercover investigation by the Environmental Investigation Agency (EIA) and World Society for the Protection of Animals.

[117] Report of the Expert Group Meeting on Assessing Time to Death Data from the Large Whale Hunts. NAMMCO. November 4-6, 2015, Copenhagen, Denmark. Available at http://nammco.no/publications/hunting-committee/expert-group-meeting-reports/

[118] Report of the Working Group on Whale Killing Methods and Associated Welfare Issues IWC/64/Rep 6 Agenda item 11.

[119] Øen, E. (2015). The Norwegian minke whale hunt 2011 and 2012 - Studies on killing efficiency in the hunt. Report to the Directorate of Fisheries in Norway, October 2015.

[120] NOAH, Dyrebeskyttelsen & WSPA (2011). Seas of change: Why Norwegian whaling belongs in the past. Report, 20 pp.

[121] Altherr, S. & Lüber, S. (2012). Toxic Menu: Contamination of whale meat and impact on consumers' health – A Review. Pro Wildlife & OcenaCare: Munich, Wädenswil, 32 pp.

[122] WWF (2000). Norwegian whale meat contains deadly toxins. wwf.panda.org/?2124/Norwegian-Whalemeat-contains-deadly-toxins

[123] Moy, R. (2001). Enter into agreement legal export of whale blubber. Article in Aftenposten, dated 10th January and https://www.stortinget.no/no/Saker-og-publikasjoner/Publikasjoner/Referater/Stortinget/2000-2001/010516/ordinarsporretime/13/#a2

[124] http://www.ens-newswire.com/ens/mar2002/2002-03-06-03.html

[125] Kirby, A. (2001). Japan warned on 'contaminated' blubber. Article by BBC News as of 24th January 2016. http://news.bbc.co.uk/2/hi/science/nature/1132889.stm.

[126] Fisheries Directorate's Nutrition Institute, (2001). Based on blubber samples from 1999 and 2000.

[127] Japan Times (2002). Blubber may be 'months' away. Article as of 1st August.

[128] Grønvik, S. (2003). Norway. Progress report on cetacean research, January 2002 to December 2002, with statistical data for the calendar year 2002. SC/55/ProgRepNorway, presented at IWC 53.

[129] Doyle, A. (2003). Norway Advises Pregnant Women Against Whale Meat. Available as of 27 April 2016. http://www.smh.com.au/articles/2003/05/13/1052591789427.html

[130] Per www.mhlw.go.jp and EIA. (2015). Recent Cases of Violation of the Food Sanitation Law that were Found on the Occasion of Import Notification. Available at: https://eia-international.org/wp-content/uploads/Recent-Cases-of-Violation-of-the-Food-Sanitation-Laws-Whale-Meat-.pdf

[131] Kjemisk testing av hvalolje og sammenligning med tidligere produkt av spekk. (2013). FHF sluttrapport. http://www.fhf.no/prosjektdetaljer/?projectNumber=900921.

[132] http://www.handelsbladet.no/id/27596.0

[133] www.mhlw.go.jp/english/topics/importedfoods/14/xls/14-05a.xls; www.mhlw.go.jp/english/topics/importedfoods/14/xls/14-06a.xls and Norway whale meat dumped in Japan after pesticide finding. (2015, March 12). Japan Times.

[134] See *supra*, note 63.

[135] A small number of vessels account for a large share of the number of whales killed each year. In 2014, five boats took 320 whales, approximately 43% of the whales kiled that year. In 2015, the same five boats killed 311 of the 660 whales, or 47% of the annual kill. Of these five boats, two boats alone that year accounted for 236 dead whales. http://www.kystogfjord.no/nyheter/forsiden/Maa-finne-ny-omsetningsordning

[136] Per vessel information at www.fiskeridir.no

[137] See *supra*, note 4.

[138] Norway (2013). Norwegian whaling – based on a balanced ecosystem. Article as of 19th March 2013, published on the Norwegian Ministry of Trade, Industry and Fisheries' website: http://www.fisheries.no/ecosystems-and-stocks/marine_stocks/mammals/whales/whaling/#.VcPLP_mOl6w

[139] http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52011PC0495

[140] http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/er/146315.pdf

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