

### **Chapter III Realities in Relation to Whaling**

#### **Frenzied age of the “International Whaling Olympics”**

In 1899, modern whaling, “Norwegian-style whaling,” started in Japan, wherein roped harpoons were fired from cannons installed on steamboats to catch whales.

Reckless hunting by American and European whaling ships dramatically decreased the whale population around Japan. Japanese-style whaling, the *amitori shiki* method, was in decline. However, this new whaling technique revived the whaling industry and, in 1934, whaling in the Antarctic Ocean began.

Whaling bases were established from Hokkaido to the Kurils, the coast of Tohoku, the Ogasawara Islands, Shikoku, Kyushu and even overseas in Taiwan and the Korean Peninsula. In this way, the Japanese familiarized themselves with whaling and became one of the leading whalers alongside Norway and the U.K.

Behind Japanese whaling were Japan’s highly technical skills.

First, harpooners were intensively trained. What was taught was not just killing whales but also the Japanese appreciation for life: taking whales with a single shot without suffering. Harpooners were sent to training facilities, where a good amount of time and money were spent to give them thorough training. This was a Japanese whaling tradition and good training was also given to harpooners for today’s research whaling. Naturally, the dissectors’ techniques were also very advanced compared with other countries—Japanese dissectors processed a whale weighing tens of tons in just less than 30 minutes.

Shortly after Japan’s adoption of western-style whaling, WWII broke out. During the war, deep sea whaling was out of reach for most countries and little whaling took place in the Antarctic Ocean from 1940 to 1945.

Once WWII ended, many countries suffered from food shortages and worldwide whaling resumed.

War-stricken Japan, which faced an especially serious food shortage, was permitted by

the U.S. occupation army general headquarters to resume whaling in the Antarctic Ocean as a measure to deal with food shortages. This would solve the postwar food shortage.

Large amounts of Antarctic Ocean whale meat was utilized in households, workplaces and school lunches and the distribution of whale meat was not limited to densely-inhabited cities such as Tokyo and Osaka but to other parts of the country.

### **Total Numbers of Whales Captured by Factory Ship Whaling in the Southern Hemisphere by Country and Whale Species**

	Norway	U.K.	Japan	Soviet Union	Netherlands	South Africa	Panama	Germany	U.S.	Denmark	Total
Blue	81,772 (41)	70,546 (35)	25,391 (13)	3,987 (2)	3,456 (2)	5,139 (3)	5,452 (3)	3,749 (2)	1,256 (1)	315 (0)	201,013 (100)
Fin	209,057 (38)	107,373 (20)	120,054 (22)	54,527 (10)	18,830 (3)	15,945 (3)	11,810 (2)	6,785 (1)	2,293 (0)	556 (0)	547,230 (100)
Humpback	11,061 (36)	7,791 (25)	6,637 (21)	2,699 (9)	1,303 (4)	243 (1)	1,066 (3)	235 (1)	47 (0)	22 (0)	31,104 (100)
Sei	18,390 (13)	3,898 (3)	73,486 (54)	40,514 (30)	457 (0)	122 (0)	13 (0)	14 (0)			136,894 (100)
Minke			46,558 (47)	52,969 (53)							99,527 (100)
Sperm	37,673 (21)	14,388 (8)	33,022 (18)	86,272 (48)	3,744 (2)	3,756 (2)	864 (0)	439 (0)	49 (0)	2,114 (0)	180,566 (100)
Total	357,903 (30)	203,996 (17)	305,148 (26)	240,968 (20)	27,790 (2)	25,205 (2)	19,205 (2)	11,222 (1)	3,645 (0)	897 (0)	1,195,979 (100)
Operation Period	1932 - 72	1931 - 63	1935 - 87	1946 - 87	1946 - 64	1946 - 57	1935 - 40, 1950 - 56	1936 - 39	1937 - 40	1936 - 37	

Based on International Whaling Statistics. Note: Figures in parentheses show capture ratios by country and whale species (%)/ Source: Fisheries Agency.

In this way, international whaling became popular again after WWII. The period from 1950, five years after the resumption of international whaling, to 1960, was called the “International Whaling Olympics” and maritime whaling countries, including Japan, Norway, the U.K. the Soviet Union, Finland, Iceland, Denmark and Canada hunted whales without concealing a sense of rivalry, of never wanting to fall behind any other country.

The table above shows the total numbers of whales captured by factory whaling ships in the southern hemisphere, listed by country and whale species. The greatest numbers of whales caught were the blue whales and the fin whales. These whales were 27 to 33 m long. Every year, these two species were caught by Japan as well. All in all, Japan had excellent whaling techniques as a fishing empire, Rather than military strength, Japan showed its strength in catching whales.

Naturally, large whales such as blue whales and fin whales, which were targeted highly sought after, sharply decreased in population. Whaling countries changed to smaller whales such as minke whales and sei whales, which were caught with abandon.

**Management of whale resources and the establishment of the IWC**

Whales as a resource are difficult to control in any event as they migrate between oceans around the world and have large habitats.

One organization that currently manages international whaling is, as you may know, the International Whaling Commission (IWC). As of 2010, commercial whaling is absolutely not permitted even for species that are in abundance according to the IWC. The original purpose of the IWC at the time of its establishment was to “provide for the proper conservation of whale stocks” and “make possible the orderly development of the whaling industry,” and not to ban commercial whaling.

**Numbers of Blue Whales Captured by Country (1909/10 - 1972/73)**

Country Name	Number Captured	Percentage (%)
Norway	167,105	50.6
U.K.	110,568	33.5
Japan	23,491	7.1
Soviet Union	3,994	1.2

Netherlands	3,456	1.0
Panama	5,452	1.7
Germany	3,749	1.1
U.S.	1,623	0.5
Denmark	1,221	0.4
Argentina	9,371	2.8
Total	330,030	100.0

**Numbers of Fin Whales Captured by Country (1909/10 - 1975/76)**

Country Name	Number Captured	Percentage (%)
Norway	279,521	40.5
U.K.	150,661	21.9
Japan	121,494	17.6
Soviet Union	54,552	7.9
Netherlands	18,830	2.7
South Africa	15,951	2.3
Panama	11,810	1.7
Germany	6,785	1.0
U.S.	2,458	0.4
Denmark	669	0.1
Argentina	26,706	3.9
Total	689,437	100.0

**Numbers of Humpback Whales Captured by Country (1909/10 - 1972/73)**

Country Name	Number Captured	Percentage (%)
Norway	30,108	47.6
U.K.	14,524	23.0
Japan	6,641	10.5
Soviet Union	2,712	4.3
Netherlands	1,303	2.1
Panama	1,066	1.7
Germany	235	0.4
U.S.	51	0.1

Originally, the movement to manage whales as a resource grew in 1930s due to excessive hunting by various countries was started not from the anti-whaling position but from Norway and the U.K., which are countries with a good record on whaling, in 1930s.

In 1932, the whaling industry of Norway and the U.K., which were whaling in the Antarctic Ocean the most, concluded a civilian pact called the Whale Oil Production Agreement. The purpose was more to adjust production of oil for preventing crashes in whale oil prices than to conserve whale resources.

Subsequently, as Japan and Germany started whaling in the Antarctic Ocean in 1934 and 1936, respectively, as described above, Norway and the U.K., in an effort to manage whaling, led in the signing of the International Agreement for the Regulation of Whaling in 1937. This agreement restrained new whaling countries by implementing a whale management system, including dates of operation in the Antarctic Ocean.

After WWII, as mentioned earlier, countries re-engaged in vigorous whaling.

In response, the IWC was organized under the International Convention for the Regulation of Whaling in 1948 for the purpose of determining whale quotas. The IWC was founded by 15 major whaling countries. Japan joined the IWC in 1951.

The IWC at the time of establishment managed whales, working up agreements such that humans could coexist with whales. That is, the IWC was not premised on “prohibiting commercial whaling” as it is now. The IWC was created to discuss how whales could be effectively utilized, increasing their population without allowing them go extinct.

However, countries such as Japan, the U.K. and Norway continued to catch whales in large numbers even after the foundation of the IWC. The U.S. switched their main source of fuel from whale oil to petroleum and began sharply criticizing the large number of whales being caught .

In this context, global environmental conservation and wild animal protection came into being around 1960. These trends increased anti-whaling feelings worldwide.

In 1963, the general assembly of the IWC banned the catching of blue whales and humpback whales in the Antarctic Ocean. This was followed by the imposition of catch quotas for each country, strengthening resource management. At this point, countries such as the U.S., the U.K., the Netherlands and Australia completely withdrew from whaling as it ceased to be profitable. Animal protection and environmental conservation groups took advantage of this shift, ramping up their activities. Preservation of the global environment came to be closely linked with an anti-whaling attitude.

The U.S. above all raised whales as a symbol of global environmental conservation. Some have said that this was a U.S. ploy. At that time, the U.S. was involved in the Vietnam War and media around the world painted the U.S. as a “hawk”, in which hard line measures are utilized, without compromise, to preserve ideals and principles). Accordingly, the U.S., which wanted to eradicate this image, was said to have devised a scheme of turning its image around--to present itself as a “dove” by promoting the protection of whales.

A major turning point in the whaling issue was the IWC general assembly in 1971. Joan McIntyre, President of an American NGO called Project Jonah, warned that whales were on the verge of extinction and proposed that a temporary ban, or “moratorium,” on commercial whaling was necessary.

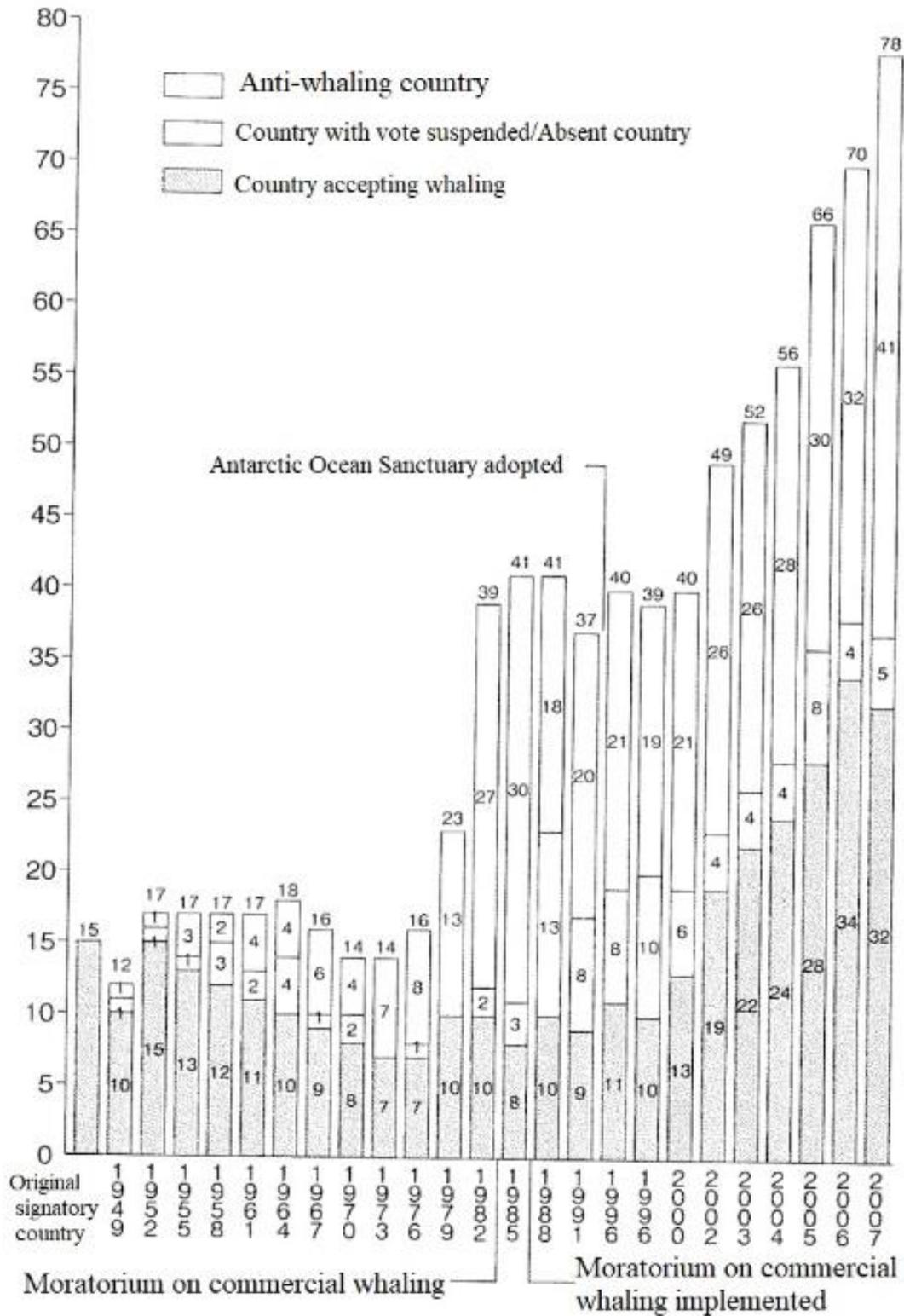
In 1972, the first United Nations Conference on the Human Environment was held in Stockholm, wherein the U.S. delegation proposed:

Whales are living resources that are a common heritage of mankind that should be conserved for a long period. However, the IWC has taken no measures up to now. Whales, which are a symbol of dying wild animals, must be protected.

This proposal gathered the support of an overwhelming majority and the recommendation for a 10-year moratorium on commercial whaling was adopted by the UN Conference on the Human Environment.

However, this moratorium was not binding unless adopted by the IWC.

## Changes in IWC Membership



Accordingly, the U.S. proposed a moratorium on commercial whaling in the IWC general assembly in 1973 as well, which was rejected because it was “not scientifically justifiable.”

The reason was that there was no science-based information at that time on whale population, age, gender composition, pregnancy period and natural mortality. Therefore, the claim that whales were on the verge of extinction had no foundation whatsoever.

Then, anti-whaling countries led by the U.S. gradually implemented a more overt strategy. Adoption by the IWC depended on a majority vote and a decision on a resolution requires a three-quarters majority. Anti-whaling countries encouraged landlocked countries and countries that had nothing to do with whaling including Oman, Kenya, Seychelles, Peru, Monaco and small Caribbean countries, to join the IWC.

By 1982 as result of these maneuvers, 25 anti-whaling countries joined the IWC and the three-quarters majority required for a decision was obtained.

In this way, a 10-year moratorium was enacted in 1982. However, this decision was obviously a violation of international law. As mentioned earlier, the IWC was founded on the International Convention for the Regulation of Whaling and its provisions clearly stated the goals were “conservation and optimum utilization of the whale resources” and “orderly development of the whaling industry.” The original purpose of the IWC agreed upon was not to discontinue commercial whaling but to catch the number of whales necessary based on science. This breach of an international agreement a majority vote is obviously a non-democratic move by those claiming to be democratic.

While this moratorium was scheduled for review based on the latest science on whales by 1992, it has been extended and maintained to this day--the moratorium has no basis in science.

### **What is research whaling?**

Now, let me give you a description of scientific research whaling as set down by the IWC.

Japanese research whaling is scientific research conducted by the Institute of Cetacean

Research with permission of the Japanese government in accordance with the Convention for the Regulation of Whaling. Research ships and crews are managed by Kyodo Senpaku Co., Ltd.

Incidentally, when the moratorium was adopted in 1982, a recommendation by the Scientific Committee of the IWC was required for adoption but such a recommendation was not obtained--therefore adoption of the moratorium was invalid. Accordingly, whaling countries such as Japan and Norway filed an objection and rejected the moratorium. However, under instructions from then Prime Minister Yasuhiro Nakasone, who buckled under U.S., pressure, the Japanese government withdrew its objection and shifted to research whaling. Norway, on the other hand, openly continues commercial whaling and maintains its objection.

Scientific research started in this manner and catching whales for that purpose is recognized as an inherent right of countries according to Article 8 of the Convention for the Regulation of Whaling. With respect to Japanese research whaling, anti-whaling countries object by making two claims: "Whaling is conducted by overriding the opposition of the IWC and illegal" and "It is disguised as commercial whaling because the meat of whales caught in research are sold." However, Japanese research whaling does not violate international law nor is disguised as commercial whaling.

First of all, the reason Japan began research whaling in 1987 was that there was a lack of whale biological data. Data was necessary to make decisions for the start of sustainable utilization of whales, not for a vague conservation of whales, and to obtain biological data, there was a need for full-scale whaling. Japan formed a team which included experts immediately after the adoption of the moratorium and made a detailed research schedule, which passed the review of the Scientific Committee of the IWC. In fact, members of the Committee highly regarded the proposals.

Whale research is conducted in a very strict manner. The IWC is an international organization recognized by various countries and there can be no deviations from established guidelines. Research whaling is conducted according to a research plan made in advance by experts.

Whale research is conducted under these international conditions and based on guidelines. Thus, terrorists, such as the Sea Shepherd Conservation Society, which

attacks Japanese research whaling vessels with fire-bombs and dangerous chemicals and disrupt research activities with lasers, are engaging in criminal activity based on international laws of the sea.

For research whaling, a very large fleet is organized. First, there are two scientific fish finder boats called sighting vessels. These are in charge of sighting survey, in which whales are visually searched for, in addition to oceanographic and marine life surveys.

Next, the sighting vessels are followed by three sighting/sampling vessels. These also conduct sighting survey. Only when a specific species of whale under survey is found, they sail off their predetermined course to follow the whales. These vessels are arranged in line, a harpoon equipped ship to catch a whale and a factory ship in the rear.

In the factory ship, activities such as measurements, dissection and sampling occur. First, the whale is put on a scale. A scale capable of weighing a gigantic whale whole is installed only on the factory ship and nowhere else. Subsequently, 25 measurements are taken, including weight and height. In addition, whale earwax is sampled to estimate its age, samples of sperm in urine, mammary glands, uterus, sperm in the uterus, heart and ovaries are taken and the stomach is split open to find out what has been eaten.

It is a requirement that whales after a survey be utilized as effectively as possible. They are brought back as a by-product of a capture survey and shipped to market by Kyodo Senpaku Co., Ltd., which is the consignee. Proceeds from sale of the by-products go back into research.

In this way, 250 to 300 people going out in six vessels doing whale research can cost a lot of money: One research whaling trip is said to have cost as much as 5 to 6 billion yen.

However, the Japanese government has only allowed 500 million yen annually as a “cetacean capture survey subsidy” in the last ten years or so—the research program runs a significant deficit. If whale research is stopped, then anti-whaling countries will proceed to the next level. Research whaling needs to be continued for training in whaling skills and to cover the shortfalls in expenses necessary for research. The meat of whales used as samples for research whaling is put on the market and the proceeds are used. However, the number of whales caught is strictly limited, which results in high

prices of whale meat on the market. In Japan, apart from research whaling, small whales such as Baird's beaked whale and pilot whales not under the IWC's control are currently caught commercially along the coast of Abashiri and Hakodate in Hokkaido, Ayukawa in Miyagi Prefecture, Wada in Chiba Prefecture and Taiji in Wakayama Prefecture. These are caught within limits specified by the government.

As I mentioned earlier, one excellent point of Japanese whaling is the superb skill of harpooners for catching whales for both research as well as coastal whaling. Currently, harpoon cannons use gunpowder to power the harpoon used to catch the whale. The harpooners' hit rate is approximately 80% and, when the whale does not die instantly, a rifle shot to the head is used. The highest priority is given to catching whales without making them suffer, which is a traditional Japanese whaling technique. Kyodo Senpaku Co., Ltd. and the Japan Whaling Association still continue to train young people, including graduates of National Fisheries University, to develop excellent harpooners in preparation for the resumption of commercial whaling in the future.

### **It is NOT “possible to research without catching and killing”**

At present, Japanese research whaling can be roughly classified into two areas.

One area is research whaling in the Antarctic Ocean and Northwest Atlantic Ocean, mainly for minke whales and other species, including sei whales, humpback whales and fin whales.

The other area is research whaling in coastal zones, mainly around Ishinomaki, Miyagi Prefecture and Kushiro, Hokkaido.

The main purpose of Japanese research whaling is to identify the type and the amount of fish eaten by minke whales based on its stomach contents. Finding out how much and what type of fish are eaten by whales is very significant to Japan's fisheries and the lives of fishermen, as Japan's fisheries mostly depend on coastal fishery. Research like this is intended to gather data such as age, growth, migration, whale childbirth and childrearing, in addition to population and the food consumed by whales.

Anti-whaling countries and environmental organizations take on whaling only to denounce it, as if whaling itself was wrong, and ignore the scientific data obtained from

research whaling. However, research whaling has finally begun to reveal whale ecology, which has been unclear up until now.

For example, whale ages are now clearly identifiable. Earwax in the whale external auditory canal is resinous, unlike that of land mammals, and a cross-section of it is marked with lines for the each year, in the same way annual rings of trees are formed. Counting the number of the lines gives the age of the whale.

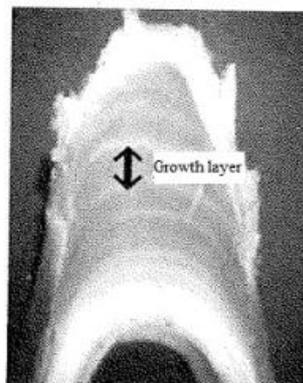
The Institute of Cetacean Research found out that blue whales (up to 33 m), the largest whale species, have an average lifespan of 120 years, sperm whales (up to 18 m) 70 years and minke whales (7 - 10 m), which are a medium-sized species, 50 years.

Other discoveries found that pregnancy is 11 months for baleen whales and 16 months for sperm whales and, similarly to humans, whales give birth to only one calf at a time. The lactational period of calves is about six months, during which they swim with their mother and feed on breast milk.

Some people say that conducting research is possible without killing whales. Cetacean research includes methods that involve merely observation and catching and killing. These methods have their own strengths and limitations and research uses combinations in whatever is most practical.

Visually observation does not involve catching and killing, and one can determine population size, number of gams, ecology and habitat in this manner.

For catching and killing, anti-whaling countries argue that sampling and examining the DNA of whales that have washed up on beaches or have strayed into bays should be sufficient but DNA examination provides only very limited information. For example, the maturation period of a whale yields valuable clues for whale management and, for that purpose, genital glands are sampled, which is located deep inside the body and cannot be obtained without catching and killing the whale.



Cross-section of earwax of minke whale. Growth layers resembling annual rings of a tree indicate the age of a whale  
Courtesy of the Institute of Cetacean Research

Examining the stomach contents naturally requires dissection. The stomach is taken out while close attention is paid not to spill the contents, which are first frozen for ease of transportation and storage. Then, after the contents are completely thawed to prevent damage, investigators start their examination. After the volume and weight of the contents in solid and liquid states are measured, food and larger pieces are taken out and the contents are filtered through a fine mesh. This tedious process is repeated many times and tweezers are used to carefully search for bones and small fragments of the fish that that were eaten, and of crustaceans and parasites. Only through methodical tasks like this can data be obtained for determining what whales eat.

Therefore, the argument of anti-whaling activists that liquid feces from swimming whales should be sufficient for research is based on ignorance.

In addition, measuring the weight and the amount of food in the stomach of a whale allows for analysis of its metabolism and food intake. Thus, for Antarctic minke whales, it has been found that it requires 4% of its body weight in food, or about 220 kg.

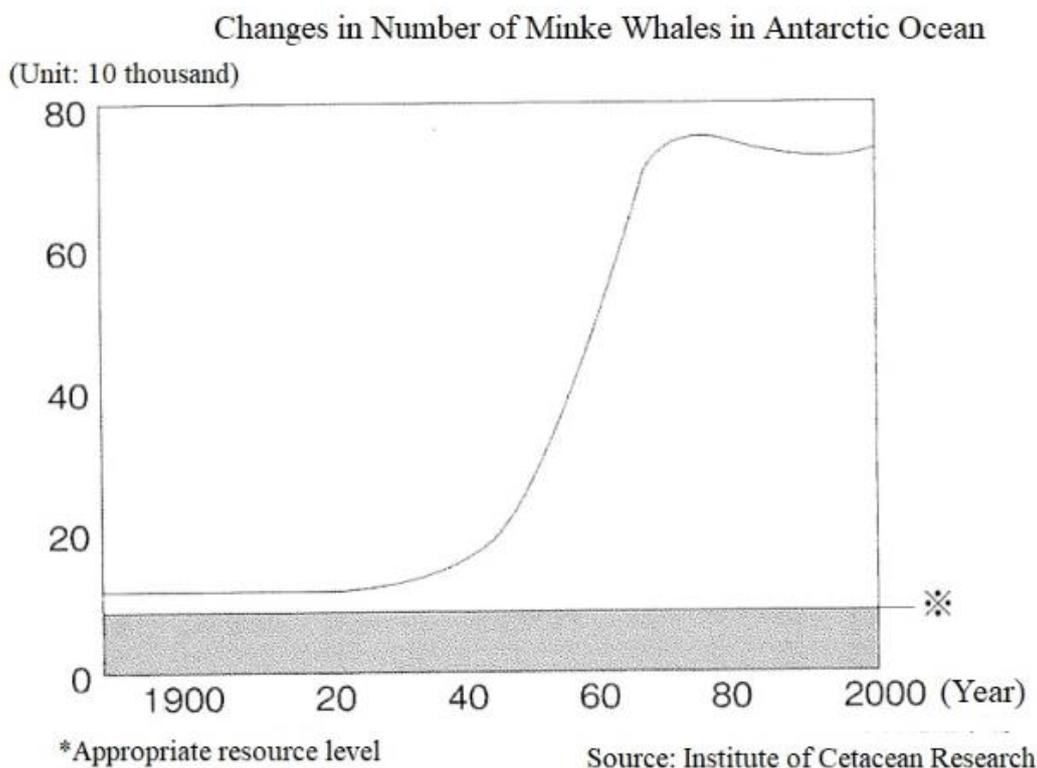
Furthermore, the marine contamination level can also be clearly observed by measuring the amount of polychlorinated biphenyl (PCB) contained in the fat layer of the skin of male Antarctic minke whales.

The results of capture surveys conducted by Japan are now highly valued by many members of the Scientific Committee of the IWC.

### **Whales are increasing rapidly!**

In 1970s, when accurate scientific research had yet to be conducted, an American anti-whaling ecologist called Sidney Holt said that the population of minke whales in the Antarctic Ocean was about 20,000. Subsequently, his projection developed a life of its own and became established.

However, calculations very different from Holt's emerged. Seiji Osumi of the Institute of Cetacean Research, who was engaged in the study of whale ecology in Japan, went to the Antarctic Ocean in person in a whaler to count the population of whales before



research whaling started. He stated that 20,000 claimed by Mr. Holt was far too low and that there were at least 400,000 minke whales in the Antarctic Ocean.

Is it 20,000 or 400,000? In those days, debates were held over these two projections. When official research whaling began and the population of minke whales in the Antarctic Ocean was surveyed in 1982, it turned out that there were at least 760,000 in the Antarctic Ocean alone.

This number was officially reported to the plenary meeting of the IWC and approved. Moreover, the number 760,000 was a result obtained in summer, when whales migrate for food, and the number could be even larger during breeding season. The Scientific Committee of the IWC later conducted more detailed research, which led to the current official view of the IWC that, while the population in the Antarctic Ocean is 760,000, at least about 1.14 million minke whales live in the oceans of the world.

In addition, the population of Bryde's whales has been confirmed to be about 25,000, mainly in the North Pacific Ocean, 30,000 fin whales in the North Atlantic, 26,000 gray whales in the Northeast Pacific alone and an amazing 2 million sperm whales in oceans around the world.

For these whale species, these numbers show that they are thriving. Catching a small number of these whales, calculated from research whaling, makes no significant reduction in numbers. It has been confirmed that in the Arctic Ocean, there are about 8,000 bowhead whales. I will detail something later that is very important with respect to bowhead whales.

Incidentally, the fin whale is designated as a threatened species by the International Union for Conservation of Nature and Natural Resources (IUCN) but research whaling has confirmed that its population is about 30,000 in the North Pacific Ocean. The Washington Convention names a species endangered when the population is at 1,000 to 2,000 and Japan argues that the ICUN's designating of the fin whale as threatened must be revised.

#### **Cetacean Stock Sizes Estimated by IWC**

Whale Species	Relevant Area	Research Year	Estimated Stock Size (Population)
Minke whale	Southern hemisphere	1982/83-88/89	761,000 (under analysis)
	North Atlantic Ocean (central and northeastern parts)	1996-01	174,000
	West Greenland	2005	10,800
	Northwest Pacific Ocean and Sea of Okhotsk	1989-90	25,000
Blue whale	Southern hemisphere (pygmy blue whale excluded)	1997/98	2,300
Fin whale	North Atlantic Ocean (central and northeastern parts)	1996-01	30,000

	West Greenland	2005	3,200
Gray whale	Northeast Pacific Ocean	1997/98	26,300
	Northwest Atlantic Ocean	2007	121
Bowhead whale	Bering/Chukchi/Beaufort Sea	2001	10,500
	Off West Greenland	2006	1,230
Humpback whale	Northwest Atlantic Ocean	1992/93	11,600
	Southern hemisphere (south of 60 degrees south latitude in summer)	1997/98	42,000
	North Pacific Ocean	2007	At least 10,000
Right whale	Northwest Atlantic Ocean	2001	Approx. 300
	Southern hemisphere	1997	Approx. 7,500
Pilot whale	Central and Northeast Atlantic Ocean	1989	780,000

It may have been true that, when the IWC adopted a moratorium on commercial whaling in 1982, some whale species were on the decrease. However, three decades have already passed since the start of the moratorium and whale are certainly and continuously increasing.

The results of research whaling have revealed that whales, which are marine dwellers, have long lives because their environment is less prone to change than that of land. Accordingly, it is clear that protecting only whales, of all marine life, will disrupt the balance of ecosystem, even cause instability of marine resources.

It is said that “whales are endangered” not only by anti-whaling people but also by most people but, of as many as 83 cetacean species, only the blue whale, the bowhead whale and river dolphins have not recovered in terms of numbers. All the other species can be said to be sound. In fact, sperm whales and minke whales are increasing rapidly.

### **Anti-whaling countries continue to deny science**

Some anti-whaling people say that “Japan’s capture survey is a guise and continuing the survey would lead to depletion of whales around the world,” which is an irresponsible remark not based in the realities of research whaling.

In the first place, the number of whales caught in research whaling is very small. For example, the sperm whales caught as samples in past research whaling only account for 0.009% of all living whales, captured sei whales 0.1% of all living whales and minke whales, which are caught the most, only 0.9% of all living whales.

The percentages of whales caught in research whaling are only 0.009% or 0.9% of the total amount and, what is more, whales are ever-increasing. They can never be depleted.

Biologically, to begin with, research results show that whales are increasing at an annual rate of 4 to 7%.

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It has been three decades since the moratorium on commercial whaling. Accordingly, a simple calculation, of multiplying 4%, the lowest rate of increase assumed, by 30 years provides the number of living whales today, which is about three times larger than the number mentioned earlier. For example, the population of minke whales in the Antarctic Ocean was confirmed to be 760,000 in 1982 and it is projected to increase at a rate of at least 4%, or 30,000, every year, which means that there should technically be no problem in catching 30,000 minke whales a year for commercial purposes. Therefore, the Scientific Committee of the IWC drew the conclusion that catching 2,000 minke whales would cause no problem because of the current size of the population.

This conclusion, however was rejected in the IWC general assembly, mainly by anti-whaling countries. They will not allow one single whale to be caught for any reason, defying science and logic, which is in fact highly troubling.

In the Scientific Committee of the IWC, its conclusion was drawn on scientific grounds. The anti-whaling countries do not trust the science. This is truly perverse.

Anti-whalers claim that whales are cute and intelligent, yet there really is no scientific ground for these claims.

To begin with, consider why human beings have devised “science”. Science shows us a direction in human society for protecting the human environment, namely our living environment and natural environment. Accordingly, denying science seems to me to lead to denying the human environment and human beings themselves.

After all, science is continuously ignored due to the restraint of one statement proposed by the U.S. in the Conference on the Human Environment in 1972: “World whale stocks are valuable living resources that must be regarded as the heritage of all mankind.”

This is, in a sense, cultish and religious.

### **Feeding damage by whales disturbing marine ecosystems**

When I visited Kushiro and Hakodate, Hokkaido in autumn 2009, I heard similar stories in the two cities, somewhat coincidentally.

First, off the coast of Kushiro, catches of Pacific sauries had grown much smaller over the past few years. On investigation, it was found out that many minke whales came off the coast and ate large volumes of Pacific sauries. In addition to Pacific sauries, catches of walleye pollacks have long been poor.

Research whaling off the coast of Kushiro in 2009 was scheduled to take place for 40 days, from September 5 to October 14, but extended for three days because bad weather stopped the ship from leaving port many times. The stomachs of the whales caught were examined and large volumes of walleye pollacks were found from in all the minke whales, which surprised everyone. Minke whales were thought to mainly eat krill. However, research whaling showed that whales greatly changed their diet in recent years. In addition, large species of whales are often observed off the coast of Kushiro recently. The change in the minke whale feeding habits and the frequent appearances of large whales are assumed to be because the whale populations have considerably increased, which has led to a shortage of food such as krill. Thus whales have started eating Pacific sauries and walleye pollacks, and large whales have come close to the coast seeking them.

Excess feeding caused by whales as described above has apparently become serious enough to render the coastal fishery near Kushiro unprofitable. Therefore, I have heard,

Kushiro fishermen say that they need to demonstrate against the Fisheries Agency.

Also in Hakodate, what greatly disturbs people concerned with the fishing industry is excess feeding by whales of squid. As you may know, delicious squids are caught in large numbers. In traditional squid fishing, fishing boats sail out at night and large numbers of lamps are lit to lure squids. Recently, however, many whales come along to eat the lured squid.

These things occur frequently not only in Hokkaido but in other Japanese waters.

In 1970s to 1980s, or three to four decades ago, the Japanese catch of fish was the largest in the world at about 12 million tons annually. About 4 million tons of it were walleye pollacks, which were processed into *kamaboko* and other fish-paste products. Japanese sardines, mackerels, Pacific sauries and horse mackerels were also caught in large volumes.

In recent years, however, the Japanese fish catch has been rapidly decreasing.

It was 5.7 million tons in 2005, a surprisingly sharp decrease to less than half in 20 years. In Kushiro, in particular, the catch was 1.2 million tons, or 10% of the entire Japanese fish catch, in 1980s but has decreased to 120,000 tons, 10% of that volume, in 2005.

Several factors may be involved, such as marine environmental change due to global warming, but that alone is quite unlikely to be sufficient to account for the decrease.

One possible reason is excess feeding caused by whales. Research whaling described earlier at last revealed the startling realities of excess feeding attributable to whales. For a long time, whales were believed to eat only krill but various species of fish were found in their stomachs. For example, the stomach of a surveyed whale that was landed in Kushiro was filled with walleye pollacks, Pacific sauries, squids, krill and other species of fish enough to fill two to three drums (200 liters each). Hundreds of minke whales individually eat this much a day, which means what they eat in a year adds up to an astonishing amount of fish.

What is more, this amount of food eaten is by minke whales, which are relatively small

as a whale species. More than anything, whales are big eaters. The largest blue whales may be as long as 27 to 30 m and 100 to 120 tons in weight. How much food do they eat a day? As much as 4 tons of fish and krill.

According to trial calculations by the Institute of Cetacean Research, while the total annual fish caught by all humans on earth is about 90 million tons, the total annual amount of fish eaten by whales on earth is about 300 to 500 million tons, or about three to five times as much as the human beings. This should be considered a serious problem, rather than a surprising one.

The problem is not confined to Japan. Many years have passed since commercial whaling was banned and whales increased year after year during the period, which has put fishermen around the world, as well as in Japan, in a real bind.

For example, recent news reports from overseas say fishermen in Canada and the U.S. have started to take excess feeding by whales seriously and this problem is emerging, above all, in the U.S., the lead anti-whaling country, which is nothing but ironic. After all, excessive protection of whales based on ignorance has caused an increase in the population of whales, which has not only a serious impact on marine ecosystems but also puts the livelihood of fishermen in their own countries.

Under these circumstances, recent research whaling has come to include intensive surveys on excess feeding caused by whales, in addition to basic biological studies as population numbers and increases.

This is why Japan's period of research whaling, which was initially scheduled to be 10 years, has been extended since 2005 mainly for investigating the excess feeding by whales.

### **Anti-whaling countries' undisguised maneuvers to win over a majority of votes**

In this way, steady scientific studies by Japan and other countries have made clear that fish consumed by whales is about 300 to 500 million tons annually, or about three to five times that of the humans. In addition, the living population of whales is much larger than previously estimated and Japan has calculated the effective stock size of whales based on scientific research, which was submitted to the IWC. The data were evaluated

by the Scientific Committee and drew the conclusion that “catching 2,000 minke whales a year does not adversely affect the resource.”

However, anti-whaling countries stubbornly continue to refuse to lift the moratorium (temporary ban) on commercial whaling.

In the IWC, a resolution is adopted by a majority vote of at least three-quarters in the plenary meeting by the representatives of various countries in attendance.

That is why whaling countries seeking conditional commercial whaling and anti-whaling countries that totally disapprove of whaling confront each other in the general meeting of the IWC and contend for votes almost every year. As described previously, anti-whaling countries work vigorously to increase member countries. That is, they approach countries that have nothing to do with whaling and request them to join the IWC, merely to increase the number of members. In the background is even criticism that anti-whaling countries may be dangling economic support to countries which accept anti-whaling policies or hinting at sanctions to countries which are against anti-whaling measures.

The most “successful” case of these maneuvers to win over a majority of votes was the IWC general meeting in 2003. In order to restrain the resumption of commercial whaling, anti-whaling countries such as the U.S. and the U.K. submitted a joint proposal to set up a committee in the IWC for the conservation of whales and establish a new fund for the purpose. It was adopted with 25 affirmative votes and 20 negative votes.

The temporary ban (moratorium) on commercial whaling was in effect since it was proclaimed in 1982 and this proposal created a trend toward a permanent, rather than temporary, ban on commercial whaling. The IWC is no longer in line with its original purpose and philosophy at the time of its establishment—it has made a complete turn.

However, such thinking and aggressive ways of anti-whaling countries were received with doubts by a number of anti-whaling, not to mention whaling, countries. That is, the illogical argument of anti-whaling countries were met with objections from some of the anti-whaling countries that had been against whaling until then.

In the IWC general meeting in 2006, the numbers of votes of whaling and anti-whaling

countries were equal and a resolution that the moratorium was no longer necessary was successfully adopted.

In the following year, however, complications arose in the general meeting again. In an attempt to postpone the implementation of the resolution determined in the previous year's general meeting, anti-whaling countries counterattacked by increasing members who agreed, strengthening unity during the year and laid down a hardline policy with no concessions, which again resulted in discussions going nowhere.

Japan's basic principles were "early resumption of sustainable whaling based on scientific grounds" and "inheritance of the whale meat-eating culture through sustainable use of resources" but the meeting itself was rendered dysfunctional due to hindrance by anti-whaling countries and ceased to provide opportunity for constructive discussion.

Accordingly, exasperated Japan finally presented to the IWC general meeting future options, including "complete withdrawal from the IWC," "establishment of a new managing agency to take the place of the IWC" and "voluntary resumption of coastal small-type whaling."

To begin with, the U.S. brought up whales as a symbol of environmental conservation to propose a 10-year moratorium and successfully had it passed as a resolution in the IWC in 1982. It was originally no more than a moratorium, or temporary suspension, and was scheduled for a review after studies on whales by 1990 but the moratorium continued.

Countries in favor of whaling presented data based on scientific research recognized by the Scientific Committee of the IWC, which showed that minke whales and sperm whales had already more than sufficiently increased and that whales were excessively feeding on fish, which was having a significant impact on ecosystems. Nonetheless, anti-whaling countries rejected these arguments. Even if confronted with scientific facts and reason, anti-whalers wield mere emotional arguments, such as "it is hard on whales" and "conservation of the biggest creature on earth is a barometer for watching over global environment", and discussions grinds to a halt.

These arguments by anti-whaling countries faced fierce objection by the Japanese delegation. Some said that, above all, the arguments of Australia and New Zealand, the

most unyielding of the anti-whaling countries, were not at all scientific and that there was even the opinion that Japan should leave the IWC based on the prevailing circumstances.

In fact, some countries did withdraw from the IWC. Canada withdrew in 1982 and Iceland raised an objection to the IWC in 1992 and even led the establishment of a new regional commission for conservation and management of marine mammals.

Japan can regain its freedom of commercial whaling by withdrawing from the IWC. There was even the hardline opinion raised that the IWC is a voluntary organization and withdrawal would cause no problem. I also think that withdrawing from the IWC would allow Japan to carry through sound arguments and maintain its dignity as a nation but I could not adopt the hardline policy because the Japanese government, which clings to international opinion, should be prudent.

Furthermore, there was consideration, that as a national policy, to avoid upsetting the U.S., an anti-whaling country. But then, what will become of the future of Japan's fisheries industry? I personally wish that the government would think of Japan before thinking of the U.S. But some people worry that Japan may be seen as going back to an arbitrary military state if it sticks out and does something like that. How on earth is whaling linked to Japan's going back to a military state?

### **The U.S. in fact is a whaling country**

Let me mention something important as a person in the position of delivering a sound argument: The U.S., standing at the front of anti-whaling countries, is actually a whaling country. Many Japanese should know that the U.S., which intends to keep Japan from catching any whale, is currently a definite whaling country.

Whaling is taking place in Alaska.

First, Alaska, is land of the indigenous Inuit, where people lived based on marine animal hunting. In Alaska, colonization by the Russians progressed in the 18th century. However the Russians suffered financial difficulty due to the Crimean War and sold Alaska to the U.S. in 1867. The U.S. is said to have been happy to purchase the land because it was aware that Alaska was abundant in underground resources such as

various minerals, oil, agricultural and marine resources including wood and marine products. Alaska also had military significance and was a tourist attraction. These advantages led the U.S. to purchase Alaska, the home of the Inuit.

The U.S. has in the past brought Native Americans, indigenous people, under its complete control, and Anglo-Saxons rushed in droves. Again, in Alaska, they brought the Inuit, who had settled there, under control and introduced American culture, which rapidly Americanized them. One conspicuous example of this is drinking alcohol. In Alaska, which is a cold place to begin with, had no grain or fruit. The Inuit neither distilled alcohol nor had a habit of drinking alcohol. After purchase by the U.S., whiskey and wine freely found their way to the Inuit, which is said to have resulted in an overwhelmingly large number of alcoholics.

For Inuit, the U.S. permits them to catch as many as 54 bowhead whales a year so that they can get back the former way of life. This Aboriginal Subsistence Whaling permits whaling for subsistence and, in addition to the Inuit, the indigenous Makah in the State of Washington have been permitted to catch 140 gray whales since 1990. The Makah live in Washington and their lifestyle is hardly different from that of the present Americans but their whaling is permitted from the perspective of the Aboriginal Subsistence Whaling. Countries outside the U.S. point out Aboriginal Subsistence Whaling and, at present, the IWC allows 19 fin whales and 175 minke whales to residents of Greenland, 20 humpback whales to indigenous people of Saint Vincent (off the coast of Bequia Island) of the Caribbean and 13 bowhead whales to the Chukchi of Russia.

The bowhead whale, which has a body length of almost 20 m and an average weight of about 80 tons, is the third biggest of all whale species. If catching 54 of them annually is permitted, it is equivalent to 864 minke whales (an average weight of a minke whale is about 5 tons).

However, this is quite absurd. If the subsistence whaling is really important to the Inuit and they cannot survive without eating whale meat—I personally do not think it is the case—why don't they go to the Antarctic Ocean and catch minke whales, where there as many as 760,000 of them, rather than endangered bowhead whales?

Let me add that I understand the Inuit, who are permitted to catch bowhead whales in

Alaska, also receive substantial welfare benefits thanks to the profit generated from offshore oil fields. Families with children are entitled to \$300 to \$600 a month and anybody over 65 who has lived in Alaska for 25 years or more receives \$120 a month as an Alaska Longevity Bonus. With this protected living taken into consideration, I have to wonder if whaling really suits the interpretation that it is Aboriginal Subsistence Whaling, that is, whaling permitted for survival.

Bowhead whales, which live in extremely cold ocean waters, multiply very slowly and catching them at such a pace raises fears that bowhead whales may go extinct before long. I wonder why they do catch minke whales, of which more than 1 million exist on earth.

In this way, the U.S. refuses to permit catching of even one whale by commercial whaling and, at the same time, allows their own people to catch bowhead whales, which are endangered. While they protect the right of their indigenous people, they are saying that the Japanese should eat beef rather than whale meat. They insist that not one single minke whale should be caught, where there are more than 1 million minke whales around the world. What is one to make of this self-centered attitude?

Now, there are many fishermen in the U.S. and Europe, who are anxious and enraged about the rapid decrease of fish due to excess feeding by whales, just as fishermen in Hokkaido are as mentioned earlier. A trader who has been to Alaska to purchase salmon recently has told me that the issue of excess feeding by whales is serious to them as well and they are seeking measures for addressing this issue from the government. Fishermen not only in the U.S. but also in many other countries are beginning to feel directly that an excessive increase in the population of whales is gradually becoming a matter of life or death.

### **Warning by the UN Food and Agriculture Organization**

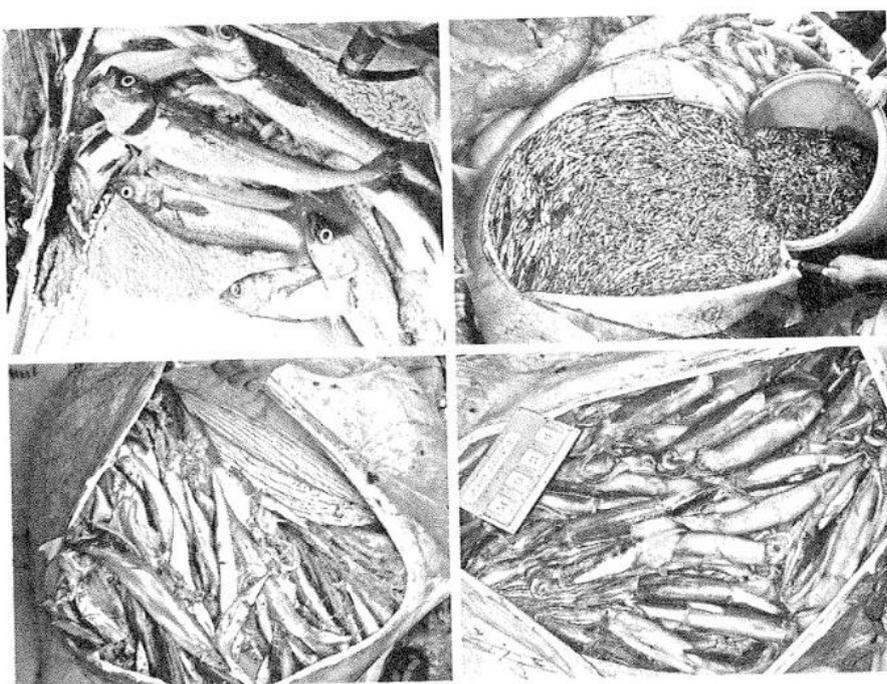
Let me tell you something even more important. In the IWC, the confrontation between anti-whaling countries and countries insisting on whaling has remained unsettled but what is recently attracting attention is the existence and concept (policy) of the Food and Agriculture Organization of the United Nations (FAO). The FAO announced statistical data on whales in the Committee on Fisheries in 2002, estimating the global sea fishery production at approximately 90 million tons and cetacean predation at

approximately 500 tons. That is, the cetaceans eat over five times more fish than humans do. Therefore, the FAO warned that excessive protection of the cetaceans may lead to changes in marine ecosystems and expressed concern about future cetacean research due to the loss of research whaling.

After all, a serious problem is bound to occur in terms of the human food chain, not to mention the one for whales. One key measure to take from now on is to ensure survival of whales and utilize them as resources while implementing control to maintain the population. In particular, animal protein will steadily decrease in the future due to explosive population growth in developing countries. This is another perspective from which the FAO is giving an important suggestion that we should not fail to utilize whales. The FAO is an official specialist agency of the UN in the same way as the WHO and UNESCO and their suggestions are quite authoritative.

In addition, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (a.k.a. Washington Convention) bans imports and exports of specific endangered animals and plants but it exempts those which are stable in number from the ban.

In any case, whales should be utilized from a global point of view. What is important should be to mutually recognize the traditions and food culture of individual countries while catching only the scientifically approved numbers of them and controlling the entire marine ecosystems.



Stomach contents of minke whales. Large volumes of fish are found in the stomach. Clockwise from top right: anchovies, Japanese common squids, Pacific sauries and walleye pollacks (Courtesy of the Institute of Cetacean Research)