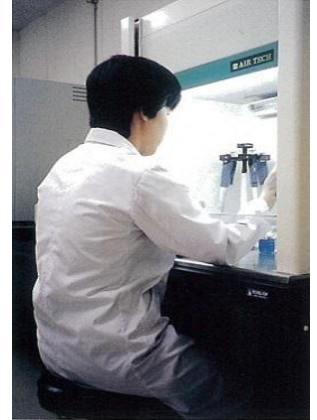


Whale meat distribution and domestic management

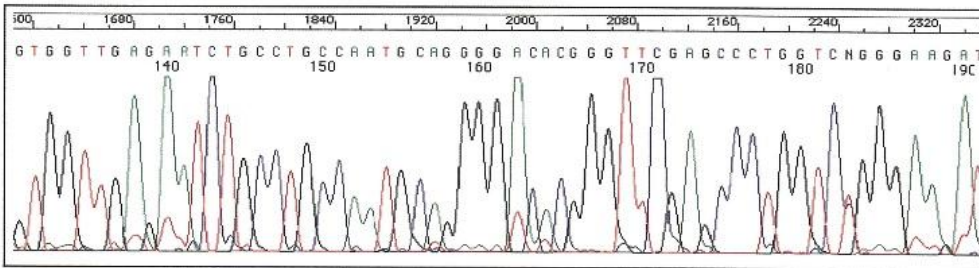
After biological, ecological and genetic measurements, a sampling of whales taken by Japan's whale research programs (minke, Antarctic minke, sei, Bryde's, fin and sperm whale) enter the domestic distribution market as research by-products. Individual genetic information from all whales captured by Japan's whale research programs is collected and stored in a database (DNA registry).

Further, the genetic information of individual whales whose meat may enter the domestic market either from domestic by-catch or imports from commercial whaling countries is similarly collected and stored in the DNA registry database.

By analyzing and registering the DNA of whale meat in the domestic market and cross-checking with the DNA registry database, we are able to prevent illegal whale meat from entering Japan's domestic market.



DNA sample analysis



Base sequence of whale mitochondria DNA (mtDNA). Whales from the same stock show similar mtDNA base sequences.



Stranding Record

The phenomenon when live cetaceans run aground or their carcasses wash up, or when they stray into rivers away from their natural habitat is collectively known as "stranding". Collection and analysis of data on stranded individuals not only greatly contributes to Cetacean Ecology and Biology advancement but is helpful to better understand ongoing changes in the marine environment as cetaceans are at the top of the food chain. The phenomenon where cetaceans strand in mass (mass stranding) has been explained by various theories, such as terrestrial magnetism, topography, parasite infestation, etc. as possible causes, and as it is not yet fully understood, data collection is indispensable.

Since 1986, the Institute of Cetacean Research has been collecting data on stranding events occurring along the coast of Japan. This database called the ICR Stranding Record includes events involving fishing gear. The Stranding Record data is reported annually to the IWC Scientific Committee. In recent years, in cooperation with the National Museum of Nature and Science, more than 300 marine mammal stranding events (including seals and other pinnipeds, dugong and sea otter stranding data) have been collected annually. Collection of this data cannot happen without the participation of persons who happen to be near the sea and find a stranded marine mammal or who pass along information related to any such incident along Japan's coastline. If you have such information, whether the stranded animal is alive or not, please contact the Institute of Cetacean Research.

Stranding reporting form: <http://www.icrwhale.org/zasho.html>



A fin whale that stranded in the Bay of Tokyo



Scientists conduct biological survey on a gray whale stranded in 2007 in Tomakomai

Food culture

The Japanese have lived with whales since ancient times

The long history of whaling in Japan, from prehistoric times to the present, gave rise to the worship of whales and bore fruit in the culture witnessed today in whaling songs, dances and the various traditional handicrafts that have been handed down from generation to generation. They are historical evidence that the Japanese people have lived in close association with whales. Now is the time to acknowledge the importance of our whaling tradition and food culture. Japanese are and should be proud of this

Primitive and Ancient whale hunts

Cetacean remains found at archeological sites

Large quantities of dolphin bones from about five thousand years ago (Early to Middle Jomon period) were found at the Mawaki site in Ishikawa prefecture. In Kyushu, many earthenware pieces made by using whale vertebral plates as rotating tables (called "pottery with whale-vertebra-imprinted bottoms" since the bottoms retain the depressions made from the deep dents of the joints between the corpus vertebrae and the vertebral plates) have been excavated from sites dating back about a thousand years (Middle to Late Jomon period). A whale scene was depicted on the surface of a jar used for burials, dating back some two thousand years (Late Middle Yayoi period) and unearthed at the Haranotsuji site on Iki Island (Nagasaki prefecture). Whales are mentioned in "Kojiki", the oldest existing historical record of Japan compiled in 712. As can be seen, Japanese people have had a close association with cetaceans from ancient times.



Mawaki site (Ishikawa prefecture). Designated national historical site. Photo credit (1983): Prof. Tetsuo Hiraguchi, Kanazawa Medical University



Whale-vertebra-imprinted bottom, unearthed at Kurohashi shell mound (Kumamoto prefecture). Photo credit: Kumamoto Prefecture Board of Education

Whaling in Medieval and Premodern times

Progress and spread of whaling techniques

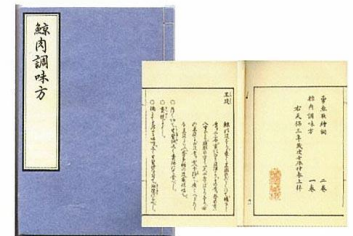
"Hand harpoon whaling" was developed around the twelfth century. Fishermen rowed out to sea and speared whales with harpoons. In 1606 (beginning of Edo Period), Kujira-gumi (a premodern whaling company), the first organization specializing in whaling in Japan was established in Taiji, Wakayama prefecture, marking the beginning of organized whaling. Further, in 1675, "hand harpoon whaling with nets" was developed. This whaling method spread to Tosa (Kochi prefecture), Nagasaki and other areas, and led to a sudden increase in the capture of whales.



From "Ogawajima Hogeji Emaki", a collection of paintings of whaling scenes.

Popularization of whale meat as food

With the introduction of Buddhism into Japan, the eating of animal meat was prohibited, which led to a culture of eating fish. Regarded as a kind of fish, whales had been consumed from old times as a valuable source of protein. It was, however, not until the Edo period that whales became popularized as food, when quantities of whale meat were put on the market and became available to the common people. The book "Geiniku Chomi-gata", a collection of whale recipes for some seventy parts of whales and other special cookbooks were also published. It was also during the Edo period that tombs and monuments for whales were erected in various parts of Japan in gratitude and as memorials for the dead whales' spirits. Performing arts, such as whale songs and dances, also flourished at the time.



"Geiniku Chomi-gata"

Modern and Present day whaling

From the beginning of modern whaling to the present

Modern whaling in Japan began with the introduction of the Norwegian whaling method in 1899, which employed harpoon guns (a line was attached to the harpoon, which was shot from the gun) installed on steamships. The Japanese whaling industry had declined for a time, owing to the Western whaling ships that flocked to and overexploited Japanese waters. Coastal whaling, however, recovered with the introduction of the new method, and in 1934 Japanese fleets set sail to the Antarctic Ocean. At that time, American and European countries were engaged in large-scale pelagic operations, which resulted in the severe depletion of Antarctic whale resources. Management controls were introduced that gradually reduced quotas, and the Western nations withdrew from the industry since whaling was no longer profitable. Japan remained to the last, but was forced to cease when the IWC placed a moratorium on commercial whaling. The only remaining whaling today is the research whaling based on the International Convention for the Regulation of Whaling, small-type coastal whaling and the dolphin fisheries which have been conducted in various parts of Japan since old times.

Whale cultural perception

Whales have been utilized uninterruptedly by the Japanese people since long ago, resulting in the worship of whales and many other cultural expressions such as whaling songs, dances and traditional handicrafts handed down through generations, and it is very much alive today. Whale tombs and memorial monuments for the souls of these animals can be found throughout the land of Japan. From north to south in the country, the meat of whales has been used as food in multifarious ways. In the Hakodate region south of Hokkaido, whale soup (a earthy broth made with salted whale meat, edible wild plants and vegetables) is one of the traditional foods enjoyed during the New Year festivities. In Niigata prefecture, whale soup is consumed typically in full summer to help stand the heat. In the Kansai region centered in Osaka, whale skin or "koro" is an indispensable ingredient for the oden hotch-potch stew and the traditional "hari-hari nabe" whale meat pot is another famous dish from that region. Traditional recipes such as these are still alive while many new forms of original whale cuisine are being created today.



In Muslim culture whale liver is considered the first food in heaven

It is proven in the Hadeeth (the saying of the Prophet Mohammad) that the first food offered to welcome the people to Paradise upon entering will be "the caudate lobe of whale liver".

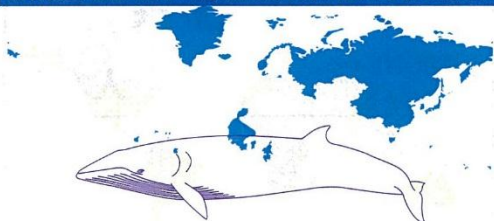
That is mentioned in the Hadeeth of Thawbaan (one of the Companions of the Prophet Mohammad), the freed slave of the Messenger of Allah (blessings and peace of Allah be upon him), according to which one of the Jewish rabbis came to ask the Prophet Mohammad (blessings and peace of Allah be upon him) about some matters to test him. In the Hadeeth it says: The Jewish man said: What will be presented to them first when they enter Paradise? The Prophet Mohammad said: "Caudate lobe of whale liver."



Whaling history outline

- About 7000 B.C. Jomon (ancient Japanese) people start to utilize whales.
- About 3000 B.C. Jomon people start dolphin fishing.
- About 0 B.C. Yayoi (ancient Japanese) people start whaling.
- 9th century Whaling begins in Norway, France and Spain.
- 12th century Hand harpoon whaling using hand thrown spears begins in Japan.
- 1606 Sashite-gumi (spearing team) is set up in Taiji (Wakayama prefecture), marking the start of organized hand harpoon whaling.
- 1612 Hand harpoon whaling of Baird's beaked whales begins in Wadaura (Chiba prefecture).
- 1675 Hand harpoon whaling with nets devised in Taiji. The method spreads to Shikoku and Kyushu regions, inducing dramatic development of coastal whaling.
- 1712 Systematic hunting of sperm whales by the colonist settlers starts in Nantucket, Massachusetts (New England).
- 1838 Kujira-gumi established in Ayukawahama (Miyagi prefecture), marking the start of organized whaling employing the method of hand harpooning with nets.
- 1864 Modern harpoon gun whaling on steamships is developed by Norway.
- 1879 Weather conditions deteriorated during the take of a right whale in the seas off Taiji and 111 lives were lost. The tragedy triggers the decline of premodern whaling.
- 1899 Japan succeeds in introducing the Norwegian whaling method.
- 1904 Norway commences whaling in the Antarctic Ocean.
- 1924 Norway commences pelagic operations in the Antarctic Ocean.
- 1931 Twenty-six countries sign the first Convention for the Regulation of Whaling (Geneva Convention) within the United Nations Organization.
- 1934 Japan commences pelagic operations in the Antarctic Ocean.
- 1946 Fifteen nations, mostly major whaling countries, sign the International Convention for the Regulation of Whaling in Washington, U.S.A., which is in effect today. Japan was under U.S. occupation and could not take part, but was permitted by the GHQ to go whaling in the Antarctic. Whale meat thus obtained helped to alleviate the food shortage after the World War II.
- 1948 The International Whaling Commission (IWC) is established.
- 1951 Japan becomes member of the IWC.
- 1972 A ten-year moratorium on commercial whaling was adopted at the United Nations Conference on the Human Environment held in Stockholm. It was also proposed at that year's IWC Annual Meeting, but was rejected as having insufficient grounds.
- 1982 The IWC decides to place a moratorium on commercial whaling from 1986. Japan lodges an objection against the decision.
- 1985 Following consultations with the U.S., Japan withdraws the objection.
- 1987 Japan and the Soviet Union withdraw from commercial whaling in the Antarctic Ocean. Japan launches the minke whale research in the Antarctic.
- 1988 Japan suspends the take of minke, Bryde's and sperm whales in her coastal waters.
- 1990 The IWC Scientific Committee agrees that there are at least 760,000 minke whales in the Antarctic (1985/86 -1990/91 estimate).
- 1992 The IWC Scientific Committee completes the Revised Management Procedure (RMP) and calculates that a take of at least 2,000 Antarctic minke whales per year for the next hundred years would not affect the stock. Japan launches the western north Pacific whale research program on minke whales. The IWC accepts the RMP but introduces an inspection and observer system and other catch verification measures (RMS) as a condition of RMP implementation and restarting of commercial whaling.
- 1994 Japan launches the Second Phase of the whale research program in the western north Pacific, which includes Bryde's and sperm whales in addition to the minke whale.
- 2000 Japan commences the second phase of the whale research program in the Antarctic (JARPA II).
- 2006 The anti-whaling countries define their absurd position that the completion of the RMS would not mean the restarting of commercial whaling thus making clear that the RMS completion would be impossible. As a result the RMS completion process comes to deadlock and is postponed indefinitely.
- 2008 The "Future of IWC" process is initiated to break the IWC dysfunctional state deadlock.
- 2010 The anti-whaling countries reject to base discussions on the IWC President and Vice-president comprehensive proposal on the "Future of IWC" process, so no agreement is reached at the Annual Meeting.
- 2012 The IWC Scientific Committee agrees on new two abundance estimations of 720,000 (1985/86 -1990/91 estimate) and 515,000 (1992/93 - 2003/04) for the Antarctic minke whale.

The purpose of the International Whaling Commission is to provide for the proper conservation



of whale stocks and thus make possible the orderly development of the whaling industry.

Whales & Whaling Weblinks

Government / International Organizations

Whaling Section, Fisheries Agency, Government of Japan <http://www.jfa.maff.go.jp/whale>
International Whaling Commission (IWC) <http://www.iwcoffice.org>
North Atlantic Marine Mammal Commission (NAMMCO) <http://www.cites.org>
Norway
Iceland
Greenland

National Research Institute of Far Seas Fisheries <http://fsf.fra.affrc.go.jp>
Institute of Cetacean Research <http://www.icrwnaie.org>

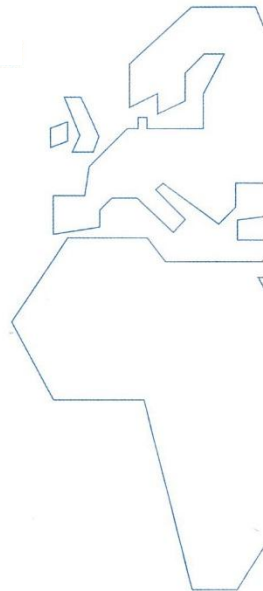
Related Websites

【Japan】

Japan Whaling Association (JWA) <http://www.whaling.jp>
Japan Small-Type Whaling Association (JSTWA) <http://homepage2.nifty.com/jstwa>
Whale Portal Site <http://www.e-kujira.or.jp>
Japan Fisheries Association (JFA) <http://www.suisankai.or.jp>
Global Guardian Trust (GGT) <http://www006.upp.so-net.ne.jp/GGT/>

【Outside Japan】

High North Alliance <http://www.highnorth.no>
IWMC-World Conservation Trust <http://www.iwmc.org>
World Council of Whalers (WCW) <http://www.worldwhalers.com>
International Network for Whaling Research <http://www.ualberta.ca/~inwr/>



Japan Fisheries Agency

with: The Institute of Cetacean Research