

SCIENCE'S COMPASS

1995. The species or family names of more than 800 samples have been identified, and the results have been presented to the IWC's Technical Committee or its Scientific Committee. Japan is also developing a system to detect illegal trafficking in whale products based on registration of DNA profiles, similar to the Norwegian DNA register system. In regard to western North Pacific and Antarctic minke whales sampled during scientific surveys by JARPN and JARPA, Japan has begun genetic labeling for these samples. In addition, Japan has been collecting DNA profile data from by-catches, strandings, and stockpiles of cetacean species. We believe that continuous molecular monitoring and an inclusive registration of DNA profiles will contribute to avoiding or greatly reducing illegal whale hunting and trading in whale products in Japan.

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Further Scrutiny of Scientific Whaling

Normile reports on Japan's expanded scientific whaling program and notes that "Canada, the United States, the Soviet Union, South Africa, and Japan were among several countries that [conducted scientific whaling] before 1982 [the year the IWC passed the worldwide commercial moratorium on whaling], but in recent years Japan has stood alone." Although true, this statement omits three equally important points.

First, Iceland and Norway exploited the scientific whaling provision allowed by the IWC. Between 1986 and 1994 both countries killed 651 whales in the name of science (1), and between 1987 and 1991 Japan imported 4146 metric tons of whale meat, including 4036 tons of research whale meat from Iceland (2). More meat might have been exported, but in 1986 the IWC passed a resolution on scientific whaling that recommended that "the meat as well as the other products should be utilised primarily for local consumption." Iceland withdrew from the IWC in 1992, and Norway reinitiated commercial whaling for minke whales in 1993 under its objection to the IWC commercial moratorium.

Second, the number of whales killed in scientific whaling programs before the commercial moratorium was at most in the low hundreds, and these programs were of limited duration. The Japanese started research whaling for Antarctic minke whales in the austral summer of 1987/88, which is when the commercial moratorium began. They

have killed 4595 minke whales so far (1) and are about to start whaling for the 14th year (the first 2 years were called a "feasibility study"). The Antarctic minke whale research program is scheduled to continue until the 2003/04 season. In the North Pacific, the Japanese started research whaling on minkes in 1994 and have killed more than 500 whales (1). Since the 1987/88 season, Japan's research whaling program has taken 5181 whales, about 2.4 times as many as were taken between 1949 and 1987 by all other countries combined.

Third, the IWC established a Southern Ocean Sanctuary in 1994 (Japan was the only member nation that voted against it), but since then Japan has continued to take all of its annual catch of Antarctic minke whales within the sanctuary boundary, despite repeated requests by IWC that it not hunt there.

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References and Notes

- Data available from the Secretariat of the International Whaling Commission, Station Road, Histon, Cambridge CB4 4NP, UK.
- Japanese import statistics, Statistics and Information Department, Ministry of Agriculture, Forestry and Fisheries, Tokyo, Government of Japan, and Statistical Bureau of Iceland, Foreign Trade, Reykjavik, Iceland.

Publication Rights for Sequence Data Producers

Lee Rowen and colleagues highlight in their Policy Forum (15 Sept., p. 1881) their concerns with the publication of articles containing information derived from publicly available sequence data that have not yet been published in peer-reviewed primary papers. They refer to two review articles (1, 2) on the murine major histocompatibility complex (MHC) that were published before any primary papers from the data producers. In both cases, great care was taken to ensure that the source of primary sequence data was acknowledged in accordance with the guidelines set out by the hosting databases, the labs that produced the primary sequence were credited, and the European Molecular Biology Laboratory/GenBank accession numbers were quoted. It should be noted that Rowen's lab was one of those involved in the