EDITORIAL

In this issue of INWR Digest we report on some recent attempts by researchers and anti-whaling organizations to support calls for ending whaling. These include the conclusion reached by Roman and Palumbi (see Publications section below) that the pre-commercial whaling-era whale populations in the North Atlantic were considerably greater than currently accepted. Currently accepted estimates of pre-whaling populations are derived from historic whaling logbook and market analysis. Scientists familiar with whaling logbook analyses remain sceptical that the huge population increases estimated from the recent study (based on theorizing about the current genetic variability of contemporary whale populations) are feasible or that the discrepancies in estimates obtained from these two approaches can be easily reconciled.

Another challenging conclusion this year appeared in an article by A.M. Springer et al. suggesting that commercial whaling was the cause of recent large-scale changes in the North Pacific marine ecosystem, including the collapse of various marine mammal populations. Springer et al. hypothesized that when killer whales lost their primary food source (posited as large baleen whales and sperm whales) to commercial whalers, killer whale in the 1960s began to progressively destroy the seal, sea lion and then otter populations. Support for this questionable contribution to understanding ecosystem dynamics and variability is scarcely enhanced among credible marine scientists when the lead author suggests all whale species must be allowed to return to their former abundance, so they can properly play their role in ecosystems.

Which brings us to efforts this summer to impede Iceland’s research whaling program by a number of anti-whaling governments and some like-minded non-government organizations (NGOs). The letter of protest sent by these governments, together with a response from the Icelandic government, is posted on the INWR website.

ICELAND RESEARCH WHALING FEASIBILITY STUDY

On August 6 2003, the Government of Iceland announced that it was about to begin a limited whale research program. No whaling has been conducted in Iceland since 1989. For a number of years Iceland has recognized the necessity of further scientific research on whales in order to increase knowledge of the interactions between the different North Atlantic whale stocks and the role of whales in the marine ecosystem. Iceland opposes the taking of threatened or endangered whales for scientific or commercial purposes.

Iceland tabled its research proposals at the IWC Scientific Committee meeting in June 2003. This proposal involved taking 50 sei whales, 100 fin whales and 100 minke whales annually for two years. While some members of the Scientific Committee disagreed with various aspects of the research, the Committee agreed that the proposed catch of 100 minke whales is sustainable. However, due to the lateness of the plan’s start in 2003, only 38 minke whales were to be sampled this year from the estimated 43,000 minkes that the IWC’s Scientific Committee recently agreed occur in Icelandic coastal waters. Due to bad weather, the number of minke whales taken during the sampling period was 36.

The decision to take only 38 minke whales for scientific purposes in 2003, and omitting fin and sei whales from this protection organizations that tourism will suffer if whaling is resumed, the numbers of visitors to Iceland significantly increased during the months when whaling occurred. What is noteworthy was the increased numbers of tourists during the whaling season from the UK and Germany, two countries expected to be among the most susceptible to appeals for a tourism boycott.

In this issue of INWR Digest we also report the best-year ever for tourism in north Norway -- where a decade of whaling and calls for tourism boycotts certainly has not negatively impacted tourism in general or whale-watching tourism in particular. In past editorials, we have suggested areas where whaling-related research might merit attention. Perhaps researchers might consider critically testing a new hypothesis, namely that whaling may have a positive impact on tourism -- for any number of counterintuitive reasons.
year's research program is, according to an Iceland government announcement, in accord with Iceland's constructive approach to the whaling issue. However, the Icelandic government stresses that its right to conduct research whaling is an undisputed legal right enjoyed by all members of the IWC in accordance with Article VII of the International Convention for the Regulation of Whaling (ICRW). This right comes with the obligation to utilize the products of the animals taken for research purposes; consequently the products remaining after scientific samples are taken will be sold to Icelandic consumers. Revenues derived from whale product sales will be considerably less than the cost of the research, requiring the government of Iceland to provide research funds in order to maintain Iceland's policy of sustainably utilizing living marine resources based on the best scientific information.

The research objectives are, inter alia, to:

*Increase the knowledge of the feeding ecology of minke whales in Icelandic waters by studies on diet composition, energetics, consumption levels of different prey species, and multispecies modelling.*

*Compare the genetic structure of minke whales off Iceland, Norway (including the Jan Mayen area), the Faroes and Greenland.*

*Monitor and evaluate the morbidity of potential pathogens.*

*Determine temporal changes in biological parameters.*

*Determine pollutant burden and evaluate the health status of individual whales and whale populations.*

*Evaluate the applicability of non-lethal research methods.*

The INWR website contains the full text of the Icelandic Ministry of Fisheries announcement, together with Questions & Answers provided by the Ministry, at [www.ualberta.ca/~inwr/issues/iceland_announces_research_whaling_program.html](http://www.ualberta.ca/~inwr/issues/iceland_announces_research_whaling_program.html).

**WHALING AND INCREASED WHALE TOURISM IN THE NORTH ATLANTIC**

Norwegian small-type whalers took 647 minke whales this year, the highest catch since Norway resumed commercial whaling in 1993. The 2002 catch was 634; the quota for 2004 has been set at 670, less than the quota of 711 in 2003.

The quota is calculated using the Revised Management Procedure (RMP), a method adopted by the IWC in 1994 to set sustainable catch limits. Under the RMP, the Norwegian government could have chosen a higher figure than the quota selected, but as in previous years the government chose a conservative national quota.

Northern Norway, where the whaling vessels and coastal whaling occur, is experiencing increased tourism, including whale-watching. Nordland province is home to 27 of the 33 boats that whaled this year, and is also where most of the whale meat is processed. Tourism in this region reached an all-time high this year, with 21,000 more overnight stays in July than in the same month last year. More than 300,000 tourists annually visit the Lofoten Islands, the region with the highest concentration of whaling boats. Nordland's major whale-watching enterprise, located in Andenes, is also operating at record levels, numbering more than 15,000 passengers this summer.

The Iceland Tourist Board reports a 25 percent increase in visitors from Britain and a 77 percent increase in visitors from Germany during August and September 2003, the months when the Icelandic research whaling feasibility study was taking minke whales. Media campaigns calling for tourism boycotts of Iceland by animal protection organizations were also at their peak levels during the same months.

**NORTH ATLANTIC PRE-WHALING WHALE NUMBERS**

A recent report (see Roman and Palumbi 2003, in Publications, below) proposes that pre-industrial whaling whale populations in the North Atlantic were many times larger than current pre-whaling population estimates. The new estimates inferred historic whale population size by measuring the diversity of mutations in whales DNA today, and compared these findings to the rate at which such mutations are thought to occur in whales. Using this method, Roman and Palumbi believe the North Atlantic humpback whale population once numbered 240,000, compared to the currently accepted pre-whaling population estimates of 40,000 (based on analysis of historic whaling documents). The North Atlantic fin whale population, according to Roman and Palumbi, was 360,000, compared to a currently accepted estimate of between 30,000 and 50,000.

Geneticists and whale biologists have been quick to criticize these new estimates, based as they are on an untested methodology and a number of questionable assumptions. For example, genetic diversity is a product of mutations continuously occurring in the aggregate population of all whales of that species having existed over millions of years (e.g., 6 - 10 million years for the humpback) and at rates that might have varied at different periods of time. Per Palsbøll, a whale population geneticist at the University of California Berkeley observed "the proposed reduction in abundance could have happened at any point in evolutionary time". This calls into question the study's claimed relevance to present management efforts "since the abundance estimate may relate to a rather different time period with different climate and ecological conditions (Science 301:451). In addition, estimates of genetic diversity are complicated and error-prone, such that subtle and small changes in the assumed mutation rates can lead to massive yet spurious changes in the calculated results.

Estimates of historic populations are based on examination of catch levels recorded in the log-books of whaling ships, cross-checked against sales records from the markets where the products were sold. In the century (or more) before whaling was regulated or subject to concerns about sustainability, little
or no motivation for whaling companies and market records to be falsified are likely to have existed. Dr. Tim Smith, head of the U.S. scientific delegation to the IWC, has characterized Roman and Palumbi’s criticism of historic whaling records as facile and disturbing, noting that the population of humpbacks could not have been greater than 40,000 based on historical data and was probably substantially less than 40,000. [This] estimate of 240,000 cannot be true (The Washington Post, July 23 2003). Phillip Clapham, whale biologist at the Northeast Fisheries Science Center, Woods Hole, Massachusetts observes "from what we know of the recent history of the populations, we simply cannot reconcile [Roman and Palumbi’s] figures with anything that’s even remotely realistic" (Science 301:451). The IWC Secretary, Dr. Nicola Grandy, is reported to have said that until the IWC Scientific Committee has critically evaluated this proposed new approach to estimating historic populations, the IWC will retain its current estimates based on the analysis of historic whaling records (see Clarke 2003, in Publications, below).

LATEST MAKAH WHALING COURT DECISION

On November 26, 2003 the US 9th Circuit Court of Appeals denied petitions of the U.S. government and the Makah Indians for a full court rehearing of its three-judge panel decision dated December 19, 2002 in the case entitled Anderson vs. Evans. That three-judge panel suspended implementation of the Agreement between the U.S. government and the Makah Tribe and disallowed the whaling quota issued to the Tribe. The panel ruling was based on its opinion that the U.S. government had failed to comply with the National Environmental Policy Act and the Marine Mammal Protection Act.

The 9th Circuit did not give a reason for denying the petitions for rehearing. However, the Court, along with its ruling denying the petitions, republished the December 19, 2002 decision with several amendments and stated that subsequent petitions for rehearing by the full 9th Circuit Court of Appeals may be filed. We speculate that the Court provided a further opportunity for a rehearing because of the amendments. At this time, the Makah are likely to file a petition for rehearing by the full court. Any such petition must be filed within 90 days. The U.S. government has not indicated at this time whether to file a petition.

In the meantime, while the legal issues regarding the National Environmental Policy Act and the Marine Mammal Protection Act are being fought in the federal courts, the U.S. government is proceeding with preparing a full environmental impact statement in accordance with the December 19, 2002 decision. The process is slow and will take some time to complete. The more challenging issue is how application of the Marine Mammal Protection Act may affect the hunt if the December 19, 2002 decision is upheld and not overruled.

On December 5, 2003 the Seattle Times published an editorial supporting the Makah treaty right to whale:

A Whale Hunt is also a Treaty Right

(Seattle Times, Opinion, p. B6)

THE Makah Indians have a treaty right to hunt gray whales that ply the waters off their land in the far northwestern corner of the state.

No amount of legal maneuvering or interference by animal-rights groups should be allowed to trump that entitlement.

The Makah Tribe is the only U.S. tribe with a whaling right clearly specified in their treaty, which was signed nearly 150 years ago.

Largely for that reason, the 9th Circuit of Appeals erred when it said the Makahs must obtain a waiver from the federal government before they can hunt whales. Until now, tribes argue, they have been allowed to manage their own fisheries, including whaling, unless the government can show the action creates a conservation problem.

There is no evidence the Makahs have created such a problem. A panel of appellate judges recently refused to reconsider an earlier ruling. But they should.

Gray whales are no longer endangered. The government's own experts, who support the treaty right to hunt whales, say the biological impact of taking up to five whales a year from a population of 17,000 to 26,000 gray whales that swim these waters would be insignificant.

It is unfair to allow delays and politicking to continue. Past performance is a good indicator of future performance, and the Makahs have been restrained and judicious.

The Makahs waited until gray whales were no longer endangered, then went to the government to seek an opportunity to take whales under agreements with the International Whaling Commission. This process took roughly three years. The tribe remained patient and reasonable.

The Makahs were authorized to take up to five whales in 1999, but killed only one. More recently, the tribe slashed its whaling budget and abandoned its own whaling commission.

Whaling will never be popular nor acceptable to some people. But just because something is unpopular does not mean the Makahs ought to renounce permission to do it. The Makahs have a treaty right to hunt whales and should be allowed to exercise it.

NEW BOOK

A recent book, Marine Mammals: Fisheries, Tourism and Management Issues (N. Gales, M. Hindell and R. Kirkwood (eds), 2003) includes several chapters dealing with whaling-related topics. These include chapters titled Strategies for conserving marine mammals (H. Marsh, P. Arnold, M. Freeman, D. Haynes, D. Laist, A. Read, J. Reynolds and T. Kasuya) which includes sections on aboriginal and commercial whaling; Marine mammals and fisheries: the role of science in the culling debate (D. Lavigne); Ecological consequences of Southern Ocean harvesting (S. Nicol and G. Robertson); Trophic interactions between marine mammals and Australian fisheries: an ecosystem approach (S. Goldsworthy, G.
Bulman, X. He, J. Larcombe and C. Littman; Pinnipeds, cetaceans and fisheries in Australia: a review of operational interactions (P. Shaughnessy, R. Kirkwood, M. Cawthorn, C. Kemper and D. Pemberton); Evaluating the effects of nature-based tourism on cetaceans (L. Bejder and A. Samuels); Ethics and marine mammal research (N. Gales, A. Brennan and R. Baker); DNA surveys and surveillance of marine mammals: species identification, discovery and management (C.S. Baker, G. Lento, M. Dalebout and F. Pichler). See Publications, below, for further in formation.

PUBLICATIONS


