

Testimony of Andrew J. Read
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Madam Chairwoman and members of the Subcommittee, thank you for inviting me to testify regarding the current status and future of the International Whaling Commission. My name is Andrew Read and I am the Rachel Carson Associate Professor of Marine Conservation Biology at Duke University. I have served on the Scientific Committee of the International Whaling Commission for over a decade, including five years as chair and convenor of its Standing Sub-Committee on Small Cetaceans.

As we approach its 60th Annual Meeting to be held later this month in Santiago, Chile, the International Whaling Commission stands at a critical juncture. The divisions between nations that support and oppose commercial whaling remain deep and unresolved. At their core, these divisions are rooted in different world views regarding the relationship between humans and whales, a point that we will undoubtedly hear more about today. In my testimony, I will address three topics: (1) scientific whaling; (2) the potential for a new category of whaling; and (3) the future of the Commission. In my comments I will emphasize the way in which science is being misused by some participants within the International Whaling Commission (IWC). This abuse of science is particularly troubling to me as a working scientist and in my role as a member of the Scientific Committee.

First, let me make a few comments on the status of the world's whale stocks. Almost all populations of the great whales are depleted today as a result of past over-exploitation. It is difficult for us to grasp the enormous scale of past whaling and its impact on marine ecosystems. For example, in the 20th century alone, more than two million whales were killed in the southern hemisphere. This largely uncontrolled harvest decimated many baleen whale species, leaving small remnant populations in some areas and completely extirpating them from others. The Southern Ocean blue whale, the largest animal on earth, was reduced from a population of more than 200,000 to less than 2,000 animals today. Because this hunt took place before scientists started to study the ecology of the region, we will never know what effects this massive harvest had on the marine ecosystems of the southern hemisphere.

Some populations of whales are now recovering from past harvest, but many others are not. For example, along the U.S. west coast, the eastern Pacific population of gray whales has recovered to the point that it was removed from the federal list of Endangered and Threatened Species in 1994. Unfortunately, the western Pacific population of this species has not recovered and remains critically endangered. We do not understand why one of these populations has recovered while the other has not.

Scientific Whaling

As you might imagine, estimating the number of whales in a stock is not a trivial exercise. Despite two decades of research costing more than \$50 million, the Scientific Committee of the IWC has been unable to agree on an estimate of the number of minke whales in the Antarctic. In the early 1990s, the Scientific Committee agreed that this number was close to 760,000, but the results of more recent surveys suggest an estimate that is one-third of this number. In addition, the scientific evidence is inadequate to determine whether this population of whales is increasing, decreasing or stable.

So, there is a clear need to improve our scientific knowledge of whale populations; this task lies before the Scientific Committee of the IWC and its member scientists. Recognizing the difficulty of obtaining information on whale populations, in 1994, the IWC agreed to a new system, known as the Revised Management Procedure or RMP, that would allow it to generate catch limits, or quotas, based on only three pieces of information: (1) stock structure; (2) abundance; and (3) past catches.

Unfortunately, rather than work within the normal scientific process to address these information needs, some member States have opted to develop programs in which whales are harvested under the guise of science. These research programs, sometimes referred to as 'scientific whaling,' have killed large numbers of whales over the past two decades. Since 1987, for example, the Government of Japan has killed almost 10,000 whales in the North Pacific and Antarctic under their Special Permit program. The Governments of Norway and Iceland have engaged in smaller lethal research programs in the North Atlantic.

These Special Permits are authorized under Article VIII of the International Convention for the Regulation of Whaling (ICRW), which sets forth the provisions that regulate whaling and established the International Whaling Commission. Article VIII allows member States to issue Special Permits to their nationals to "kill, take and treat whales for purposes of scientific research." The products of whales killed under these Special Permits may be sold on the commercial market. The Article does not stipulate how many whales may be killed for such research purposes. It is important to note that this provision of the Convention was agreed to more than sixty years ago, well before any of our modern non-lethal research techniques were developed.

There are many troubling aspects to these programs. First and foremost, they do not contribute to our understanding of whale populations in a way that contributes to their management. As I noted above, we need only three pieces of information to manage whales under the Revised Management Procedure. It is not necessary to kill *any* whales to obtain this information. For example, stock structure is typically studied using analysis of genetic markers, such as mitochondrial or nuclear DNA. Only minute samples of tissue, such as those obtained from a remote skin biopsy, are required for this type of study. One gram of skin is more than enough for this

analysis, so to sample an entire whale for a study of population structure is an overkill of truly leviathan proportion.

One of the stated objectives of scientific whaling programs is to elucidate the role of whales in their ecosystems. These research programs begin with the premise that the recovery of whale populations will reduce the biomass of fish stocks available to humans, thus justifying the future harvest of whales to ensure food security. This premise ignores an overwhelming body of scientific evidence that demonstrates that over-fishing, not hungry whales, are responsible for the depletion of many of the world's fish stocks. To study the ecological role of whales, these programs kill whales and examine the contents of their stomachs. Once again, non-lethal methods are available to address such questions. It is possible to conduct detailed analyses of the chemical signatures of tissue samples obtained from the same tiny biopsy sample used for genetic analysis, providing a rich record of the diet of the animal over various time scales. Instead, Special Permit research programs kill an entire whale to describe its last meal.

The Special Permit programs are typically described as 'feasibility studies' without clear hypotheses to be tested or any rationale for the numbers of whales to be killed. As a result, the programs have developed into long-term, open ended harvests of whales. The numbers of whales taken are large and, in some cases, greater than the catch limits that would be authorized under the RMP. Thus, Article VIII of the Convention provides an open-ended loophole that allows member States to harvest an unlimited number of whales under the guise of science and sell their products, with no effective control by the International Whaling Commission.

Finally, there has been no external review of these Special Permit programs, as would be expected of any other research endeavor of comparable magnitude. The results of these programs are reviewed only by the IWC Scientific Committee. Because the Scientific Committee operates by consensus and includes scientists who work for member governments engaging in this research, it is impossible to reach agreement on almost any aspect of these programs. In December 2006, for example, the Scientific Committee reviewed the largest Special Permit program to date – JARPA I, an eighteen-year Special Permit program conducted by the Government of Japan in the Antarctic. The stated objectives of this program were to: (1) estimate biological parameters (especially the rate of natural mortality); (2) elucidate stock structure; (3) examine the role of whales in the Antarctic ecosystem; and (4) examine the effects of environmental changes on cetaceans. The Scientific Committee was able to find very few areas of agreement in its review, although it did note that none of these four objectives had been achieved. Importantly, the program was not able to provide an estimate of abundance for minke whales, the species on which most work was focused. Thus despite the deaths of several thousand whales, there is still no agreement on how many minke whales exist, without which catch limits cannot be calculated.

On many occasions, member States of the IWC, including the United States, have called for an end to these Special Permit programs. Most recently, at the 2007 meeting of the International Whaling Commission in Anchorage, a Resolution was passed calling on Japan to suspend its lethal research program in the Antarctic. Forty member countries voted for this Resolution, two opposed it and one country abstained. The Resolution referred to the fact that JARPA I had been largely unsuccessful and noted that whales taken in this program were killed within the Southern Ocean Sanctuary, an area where the IWC prohibited commercial harvest in 1994. Despite this and many other similar Resolutions, the Government of Japan continues to prosecute JARPA II, its current Special Permit program in the Antarctic and a similar program, JARPN II, in the North Pacific.

These Special Permit programs have served to further polarize debate within the Commission; differences amongst member States on this issue must be resolved if the Commission is to move forward. In particular, it is critical that this loophole be closed, so that any whales killed under Special Permit are counted towards the catch limit for that stock, much in the same way that we now consider by-catches of whales in commercial fisheries.

In my view, these programs have also greatly undermined the work of the Scientific Committee. The Committee is forced to review proposals for and results of these Scientific Permit programs as if they were *bona fide* science, when they are not. The programs are unnecessary for the management of whale stocks, and almost all of the information gained from them could be obtained using non-lethal means, posing serious ethical issues for the scientists involved. A sound underpinning of science is critical to the function and credibility of the International Whaling Commission. Continued acceptance of these programs undermines the work of the both the Committee and Commission. These Special Permit programs should end now.

Other Categories of Whaling

For many years, the Government of Japan has requested a quota of coastal minke whales from several stocks in the Okhotsk Sea and North Pacific to alleviate what it describes as socio-economic hardships caused by the moratorium on commercial harvests that came into force in 1986. Japan asserts that such small-scale whaling is more similar to aboriginal subsistence whaling than to commercial whaling. Since its inception, the IWC has recognized that the nature of aboriginal subsistence whaling is very different from that of commercial whaling. As a result, a different management system is employed for aboriginal subsistence whaling, one that includes consideration of the cultural and subsistence needs of aboriginal peoples.

The management of aboriginal whaling under the auspices of the IWC has been largely successful, in contrast to the dismal history of regulating commercial whaling. In Alaska, the aboriginal harvest of bowhead whales is co-managed by the National Oceanic and Atmospheric Administration and the Alaskan Eskimo Whaling Commission. This co-management program has managed to meet the cultural and

nutritional needs of the Alaskan Eskimo communities that hunt whales, while assuring that the stock of bowhead whales in the western Arctic recovers from past over-exploitation. The population now numbers more than 10,000 whales and the co-management program has been so successful that many scientists now believe that this stock of whales should be down listed from Endangered to Threatened under the Endangered Species Act.

Should the harvest of whales from Japanese coastal communities be managed under a similar program? I believe that this would be a very dangerous course of action. The IWC defines aboriginal subsistence whaling as the harvest of whales for local consumption, carried out by indigenous peoples who share strong ties related to a continuing traditional dependence on whaling. Critical in this definition is the absence of any commercial trade in whale products. It is possible to define cultural and nutritional needs of aboriginal peoples precisely because the products of this harvest are consumed within these communities. Once it is possible to sell whale products on the open market, it becomes impossible to separate true cultural need from the desire to sell products for profit.

Thus, I believe that the creation of a new category of small-type coastal whaling, or any other small-scale enterprise would be a dangerous course of action. Establishment of such a category could undermine support within the Commission for the current scheme that successfully manages aboriginal subsistence whaling. Member countries wishing to authorize a commercial harvest of whales should continue to work to establish quotas within the existing rules of the Commission.

The Future of the IWC

As I noted at the outset of my testimony, I believe that the International Whaling Commission lies at a critical juncture in its history. The future of this institution will depend on the ability of member States to at least partially reconcile vastly differing world views on the value of whales and whaling. Given the deep gulf between member States who oppose and support the resumption of commercial whaling, it seems unlikely that we will see any resolution to the impasse in Santiago.

The United States has long held a position of leadership within the Commission and its Scientific Committee. It is my hope that Commissioner Hogarth will continue to exercise this leadership role, both as Chair of the Commission and as Commissioner of the American delegation. Our delegation should continue to press for an end to Special Permit programs that allow the uncontrolled harvest of whales under the guise of science. The U.S. delegation should also continue to oppose the establishment of any new category of whaling that allows the commercialization of products. Finally, the United States should continue to oppose any resumption of commercial whaling until a fully transparent, third-party monitoring system is agreed to that will ensure any future harvests do not exceed catch limits set under the Revised Management Procedure.

It is my personal view that it will be extraordinarily difficult, if not impossible, to control whaling, should the IWC agree to resume a commercial harvest. In aboriginal subsistence harvests, indigenous whalers have a fully vested interest in preventing over-exploitation. In contrast, under any system of commercial whaling there is little or no economic incentive to harvest whales in a sustainable manner, particularly if whales are taken in international waters, where they are truly a common property resource. We have to look only at our past failed attempts to control the commercial harvest of whales and other high-value marine resources, such as bluefin tuna, to see the perils in authorizing such ventures.