Available online at www.sciencedirect.com
ScienceDirect
Marine Pollution Bulletin 54 (2007) 1565–1568
MARINE POLLUTION BULLETIN
www.elsevier.com/locate/marpolbul

News

Iceland stops commercial whale hunt

No more commercial whale-hunting quotas will be issued in Iceland until the market conditions for whale meat improve and permission to export whale products to Japan is secured, according to a Greenpeace report.

Iceland announced last year a return to commercial whaling and a quota of 30 minke whales and nine fins. However, with virtually no market in Iceland and fears of contamination making Japan unwilling to purchase North Atlantic whale meat, the hunt has not been a commercial success. Icelandic whalers have killed only seven minkes and seven fin whales and have not been able to sell the products.

With similar problems in Japan where they have difficulty selling the thousands of tonnes of whale meat already in storage from its own Southern Pacific scientific hunt it seems unlikely that market conditions for whale meat are going to improve.

Iceland also conducts a separate scientific hunt for minke whales. This was intended to be a 2 year programme to hunt 200 whales, begun in 2003. Yet with only one more month of the 2007 whaling season left, the scientific hunt is still 6 whales short of that quota, despite four years of whaling.

The Scientific Committee of the International Whaling Commission (IWC) reviewed Iceland's scientific programme, and decided not to support it. Whale experts around the world have demonstrated viable alternatives to lethal research which makes killing whales for science unnecessary.

Sparing the six minkes remaining in the scientific quota could earn Icelandic tourism a bonus of $116.9 million from the 112,000 Greenpeace supporters worldwide who have pledged to consider a visit to Iceland if whaling stops.

Source: Greenpeace

UK government scores dismally in efforts to protect whales and dolphins

The Whale and Dolphin Conservation Society (WDCS) has released a new report highlighting the growing dangers to the UK's whales and dolphins. The report, which brings together for the first time all current threats facing UK cetaceans, calls on the UK government to commit to improving the protection of whales and dolphins and highlights threats and possible remedies.

To accompany this report, WDCS has produced a 'UK Government score sheet' which grades the current government action on a number of the most serious threats to the UK's wildlife on a scale of 1–10. Worryingly, many of the conclusions rate the government's action at just 1 out of 10.

According to the WDCS these scores demonstrate how seriously the Government is underachieving and show how little is being done to stop harmful threats to whales and dolphins in UK seas. The report makes a number of urgent recommendations for the improvement of the protection afforded to marine mammals, all of which experts agree are necessary if whales and dolphins are to survive in British waters. The issues evaluated include fisheries by-catch (2/10), chemical pollution (4/10), noise pollution (1/10), boat traffic (1/10) and climate change (3/10).

Source: Whale and Dolphin Conservation Soc.

Pollution causes 40% of deaths world wide

About 40% of deaths worldwide are caused by water, air and soil pollution, according to a recent report to appear in the Journal *Human Ecology*.

A team of scientists led by Cornell Professor of Ecology and Agricultural Sciences, David Pimentel, examined data from more than 120 published papers on the effects of population growth, malnutrition and various kinds of environmental degradation on human diseases. The report concluded that serious environmental resource problems of water, land and energy are now coming to bear on food production, malnutrition and the incidence of diseases.

Of the world population of about 6.5 billion, 57% is malnourished, compared with 20% of a world population of 2.5 billion in 1950. The report also says that malnutrition is not only the direct cause of six million children's deaths each year but also makes millions of people much more susceptible to such killers as acute respiratory infections, malaria and a host of other life-threatening diseases. The report says nearly half the world's people are crowded into urban areas, often without adequate sanitation, and are exposed to epidemics of such diseases as measles and flu. With 1.2 billion people lacking clean water, waterborne infections account for 80% of all infectious diseases. Increased water pollution creates breeding grounds for malaria-carrying mosquitoes, killing 1.2 million to 2.7 million people a year, and air pollution kills about three million people a year. Unsanitary living conditions account for more than five million deaths each year, of which more than half are children.

At the same time, more microbes are becoming increasingly drug-resistant, and global warming, together with changes in biological diversity, influence parasite evolution

doi:10.1016/j.marpolbul.2007.09.001

and the ability of exotic species to invade new areas. As a result, such diseases as tuberculosis and influenza are re-emerging as major threats, while new threats, including West Nile Virus and Lyme Disease, have developed.

The World Health Organization has recently recognized that such environmental degradation, coupled with the growth in world population, are major causes behind the rapid increase in human diseases. Both factors contribute to the malnourishment and disease susceptibility of 3.7 billion people.

Source: Cornell University

More evidence of pollution effects on top marine predators

The first evidence that albatrosses in the North Pacific may be affected by environmental contamination has been reported in a new study carried out by researchers from the University of California. Alterations in the immune function of the black-footed albatross were associated with elevated blood levels of non-point source contaminants.

Non-point source pollution comes from a wide variety of sources such as farms, cars, roads and highways, and lawns. This kind of pollution is ubiquitous and can pose a significant threat to wildlife. At particular risk are higher trophic level species such as albatrosses, which are at the top of the food chain. These long-lived seabirds travel and forage over vast ranges and therefore accumulate chemicals distributed over large oceanographic regions. The black-footed species, however, breeds mainly on the Hawaiian archipelago.

The elevated blood levels found in the albatrosses were due mainly to mercury and various organochlorines. Because the North Pacific is an area of high biological productivity, results from the study are important for other species as well. Of particular concern is the health of other predators in the high-latitude regions of the Arctic, such as seabirds, polar bears, and other marine mammals, that are exposed to contaminants in the marine environment.

Source: Newswise

New tagging system for fish migration studies

Scientists have developed a new chemical tagging system which can track the dispersal of tagged fish larvae across the open ocean.

The new technique known as TRAnsgenerational Isotope Labelling (TRAIL), allows researchers to introduce an artificial tag, a stable isotope of barium, into the tissues of mature female fish just before spawning. The chemical tag is then passed to the female's offspring and becomes a chemical signature within the otoliths (ear bones) of the next generation of fish. Researchers can then track the dispersal of the tagged larvae across reefs and large stretches of open ocean.

The scientists, from the James Cook University, the Australian Research Council, the Australian Nature Conservancy and led by Simon Thorrold, an associate scientist in the Department of Biology at the Woods Hole Oceanographic Institution (WHOI) have been awarded a grant from the David and Lucile Packard Foundation, to study the population dynamics of grouper and snapper in the waters around the Great Barrier Reef and Papua New Guinea for three years.

This chemical tagging approach has been successfully tested in limited studies with clownfish and butterflyfish. Now, Thorrold and colleagues want to attempt one of the first large-scale, empirical tests of the effectiveness of marine protected areas. The scientists will attempt to assess how far and how effectively the larvae spawned within protected areas are contributing to populations outside of their human-described borders.

Most management and conservation strategies assume that fish populations may be connected across broad areas, and that protecting them in one location will allow for sustainable fisheries outside of the reserve boundaries. But such theories are mostly untested and do not necessarily account for how long and how far larvae may or may not drift in the open ocean.

Source: WHOI

Expedition surveying pollution and wildlife on Danube River reaches Hungary

An expedition surveying pollution and wildlife in the Danube River had reached Hungary's capital Budapest by late August. Eighteen scientists aboard three ships were traveling for almost seven weeks down the length of the 2375-km (1470-mile) river, flowing through 10 countries, collecting water and wildlife samples to measure water quality and pollution along the river and its tributaries.

Known as the Joint Danube Survey 2, the trip began on August 14th in Regensburg, Germany, and will end in late September in the Danube's delta in Romania and Ukraine. The aim is to gather information which will lead to improved Danube-related policies in countries along the river's basin, home to more than 80 million people. A similar survey, the Joint Danube Survey 1, was carried out in 2001.

The Danube's water quality improved greatly in the early 1990s, which saw a pause in some of the region's heavy industry and large-scale agricultural ventures, both major pollutants of the river. While many factories and farms have since resumed their activities, stricter environmental standards imposed by the European Union have noticeably dampened their negative effect on the Danube. There has also been a measurable decrease of algae in the Black Sea, where the Danube ends. Pollutants like farming fertilizers and animal manure are washed into the river, contributing to eutrophication in the area. It is hoped that new water treatment plants being built along the river will also contributing to the improvement of water quality and the restoration of wildlife in the Danube.

For the first time, the expedition has also surveyed fish in the river, using electric fishing equipment. The fish within a determined area are temporarily stunned and they float to the surface where they are counted and classified. They are then released again into the river. The scientists found several invading species of fish, such as the bottom dwelling round goby, *Neogobius melanostomus*. Its population in the river has exploded over the past 10–15 years after goby eggs were accidentally transported in the ballast of ships from the