Opening Statement Robin des Bois
IWC 63 - Jersey

ROBIN DES BOIS

Robin des Bois -Robin Hood- thanks the Government of the United Kingdom for hosting the 63rd IWC conference at such a beautiful and historical Island as Jersey. Robin des Bois would like to express to the IWC and the international community it's strong concerns as to the deterioration of the sanitary state of whales following the tsunami and nuclear accident at Fukushima Daiichi which hit Japan and the North Pacific.

1- Radioactive Pollution. Iodine-131, cesium 137, strontium 90, plutonium are among the identified radionuclides which are spreading across Japanese soil by atmospheric emissions. The Northwest Pacific has become primary recipient for not only liquid discharges coming from Fukushima but also for atmospheric fallout. The sources of whale contamination are multiple: permanent contact with artificial radioactivity, ingestion of contaminated plankton, prey and waste, and the transmission of radioactivity to calves during nursing periods. The external and internal effects of this contamination are potentially mutagenic (mutation of the gene pool), teratogenic (abnormal development of the embryo) and carcinogenic, all very serious impacts on whale populations whose future before the disaster of March 2011 was already menaced.

A number of emblematic and vulnerable species are impacted:
- Minke whales (*Balaenoptera acutorostrata*) of the Northwest Pacific and Okhotsk Sea (around 25,000 individuals). Between April and May the young population of this species swim along the East coast of Japan, passing close to Fukushima reactors before reaching their summer feeding grounds in the Okhotsk Sea. During the 2011 Japanese Whaling expedition, two minke whales caught off the Northern island of Hokkaido showed values of caesium–137 at around 31 Bq/kg and 24.3 Bq/kg (Becquerel per Kilogramme). While Japanese scientists believe that the cause may be the accident of Fukushima, data before the accident is not available for comparison. They add that the contamination of whale meat remains at acceptable levels for consumption. However, other radionuclides such as iodine, tritium and plutonium are not taken into account. These figures are concerning as a study conducted on minke whales captured in 1998 in the North Sea, off the coast of Greenland and the North East Atlantic found levels of Caesium-137 ranging from 0.298 to 1.319 Bq/kg[1]. The highest value was observed in the North Sea where whales are directly impacted by discharges from the nuclear reprocessing plants in the United Kingdom and France in operation for several decades.
- The North Pacific right whales (*Eubalaena japonica*). The sub-population of the Okhotsk Sea and adjacent seas is estimated at around several hundred individuals. Their breeding zone is thought to be located north of Hawaii, one of the areas where waste and pollutants dispersed by the tsunami will concentrate.
- The gray whales of the Northwest Pacific (*Eschrichtius robustus*). The Northwest Pacific population is critically endangered with only a few dozen surviving. Their feeding ground is believed to be located north of Japan.
- Humpback whales (*Megaptera novaeangliae*). The population of Humpback whales which frequents Northern Japan during the summer months was estimated to be no more that 400 individuals, when the last statistical analysis was carried out more than 10 years ago.
- The Blue whale (*Balaenoptera musculus*). There are no reliable estimations of blue whale populations in the North Pacific. In winter, Western Pacific populations migrate to Northern Japan.
- The Western population of Fin whales (Balaenoptera physalus) is common during winter in Japanese waters, however its abundance is unknown.
- The Bryde's whale (*Balaenoptera edeni*), relatively spared from whaling, will not be spared from pollutants. The population in the Pacific Northwest is thought to be approximately 20,000 individuals.

[1] Born E.W, Dahlgaard H., Riget F.F, Dietz R., Øien N., Haug T. (2002) Regional variation of caesium-137 in minke whales *Balaenoptera acutorostrata* from West Greenland, the Northeast Atlantic and the North Sea. Polar Biol 25/ 907-913

- The Sperm Whale (*Physeter macrocephalus*), the last sperm whale stock assessments date back to 1976 and are not reliable. Sperm whales range off the Japanese coast, near Fukushima reactors, within the area of radioactive inputs and accumulated solid waste.

2 – Post-tsunami waste. According to the Japanese government and non governmental specialists, the quantities of waste produced on land by the earthquake and tsunami is estimated to range from 25 to 200 million tons. With the recession of the tsunami and the ocean-bound flow of water pathways, undefined yet considerable quantities of this waste along with many toxic chemicals were dragged into the ocean. The largest plume of debris found in the Pacific Ocean in April measured more than 100 km long and covered an area of more than 200km², according to observations by the US Navy. Observations and models of ocean currents indicate that all of the North Pacific will be impacted by tides of waste in the long term[2].

Even prior to the earthquake and subsequent tsunami in March of 2011, two areas of accumulating floating waste have been identified in the East and West of the North Pacific. As a result of tsunami back-flow, whales are confronted with a sudden increase in both floating and submerged waste. Following a 2001 scientific synthesis, the US Marine Mammal Commission estimated that marine litter impacts 43% of marine mammals.[3] Marine mammals are susceptible to the ingestion of waste or entanglement in derelict fishing gear, ropes, and other traps. Certain marine mammals, in addition to birds and fish, are lured to diverse forms of plastic waste in the ocean. Fragments or particles are consumed in place of plankton and bags, tarpaulins and other packaging are mistaken for cephalopods. In 2008 a 51 foot-long sperm whale washed ashore on the Californian coastline and was found to have 450 pounds (205 kilograms) of fishing net and other plastic debris in its stomach.[4] Plastic waste can adsorb chemicals and radioactive pollutants thereby contributing to the internal contamination of whales. Ingestion of this waste can cause intoxication, suffocation, starvation and loss of mobility, and finally death. However, because the majority of dying cetaceans sink to the ocean floor and because following strandings autopsies are not systematically carried out, deaths caused by entanglement or other trauma remain hidden and therefore accurate figures are impossible to collect.

The tide of post-tsunami waste into the marine environment will disperse pharmaceutical waste, pesticides, toxic inputs including phthalates, bisphenol, and Persistent Organic Pollutants such as PCBs and brominated compounds, along with hydrocarbons and heavy metals. Submerged and floating waste act as vectors for the dissemination of toxic waste and lead to the global contamination of marine food chains. When marine litter works its way up in the food chain, it poses particular concern to higher trophic levels such as whales. Before the disaster in March 2011, whale and dolphin meat sold on the Japanese market, already contained high levels of mercury and cadmium. According to scientists, minke whale meat contaminated with brominate compounds exposed consumers to health risks.

The coastal region devastated by the tsunami was one of the most active fishery regions of Japan. More than 20,000 boats, kilometres of docks, and multiple fishing industries were destroyed. The fishing gear that was washed into the North Pacific will continue fishing for as long as the gear remains intact – a calamity that is often largely underestimated. Ghost fishing was a primary cause of the endangered status of the North Atlantic right whale. In certain areas of the North Pacific, scarring on humpback whales show that up to 78% have been entangled in fishing nets.[5] After towing heavy nets and gear over long distances, whales often die of exhaustion.

Robin des Bois is asking the member states of the International Whaling Commission to mandate its scientific committee to conduct research, using non-lethal methods, with the aim of assessing long-term consequences of the tsunami on whale populations throughout the North Pacific.

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2 [2] International Pacific Research Center http://iprc.soest.hawaii.edu/news/press_releases/2011/maximenko_tsunami_debris.pdf NOAA http://marinedebris.noaa.gov/info/japanfaqs.html#1

[3] Marine Mammal Commission, 2001. Annual Report to Congress, 2000. Marine Mammal Commission, Bethesda, Maryland

[4] "A Sea of Debris: The Growing Threat of Pollution to Marine Mammals". The Marine Mammal Center (2008).

[5] Neilson, Janet L. Humpback Whale (Megaptera Novaeangliae) Entanglement in Fishing Gear in Northern Southeastern Alaska. Thesis. University of Alaska Fairbanks, 2006.

Japanese fishermen have denounced the “unforgivable” voluntary release of contaminated water from the Fukushima reactors. At the time, in early April, Robin des Bois expressed their solidarity with Japanese fishermen.

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