

Sea Green
By Jackie Hilderling

Humpback SPLASH

Humpback whales are back, with a SPLASH, to the waters of British Columbia. These glorious giants weigh up to 40,000 kg and their baleen-hung jaws can filter some 20,000 liters of ocean per mouthful. They are renown for their acrobatic behaviours and complex songs and their return to our waters is a testimony to the resilience of nature.

Humpbacks were intensely whaled. It is estimated that 90% of the world's humpback whales were killed and that the North Pacific population may have been down to 1,400 animals in 1966. The humpbacks received protection from the International Whaling Commission in 1966 and from the US Endangered Species Act in 1973. Canada acknowledged the North Pacific humpbacks as being "threatened" in 2003.

It is now estimated that there may be some 20,000 humpbacks in the North Pacific. This knowledge is the result of the SPLASH Project that was conducted from 2004 to 2006 and involved more than 50 research groups, 400 researchers and 10 countries. All contributed to understanding the Structure of Populations, Levels of Abundance, and Status of Humpbacks (= the acronym SPLASH). Population estimates were achieved through photo-identification. The markings and shape of each humpback's tail is unique allowing the animals to be identified as individuals since they often lift their tails on a terminal dive. Scientists such as Dr. John Ford and his team at Nanaimo's Pacific Biological Station collected these ID photos.

So many scientists and countries were involved in the SPLASH Project because of the humpbacks' huge migrations, known to be up to 7,925 km. Humpback whales feed in cold waters, rich in krill and small schooling fish and then most migrate to overwinter in warm waters where they breed but where there is no food. The leading hypothesis for why the humpbacks would undertake such long migrations to these areas without food is that, in warm waters, there is less threat to their newborns from "transient" (mammal-eating) killer whales.

Among the many interesting findings of the SPLASH study were that there are distinct populations of humpbacks that have strong fidelity to specific feeding and breeding grounds. For example, the 3,000 to 5,000 animals that use the rich waters of Southeast Alaska and

Northern British Columbia as a feeding area appear to travel to Hawaii to have their calves and mate. However, the 200 to 400 animals that feed in Southern British Columbia to Northern Washington are more likely to migrate to Mexico. There appears to be very little genetic exchange between what may be up to 7 of these distinct North Pacific humpback populations.

The SPLASH Project generally highlighted how much we still have to learn about even the ocean's largest animals. While the humpback whales breathe the very air we do, are easy to identify as individuals and have been studied for decades - little is known about some of the most basic aspects of their life history. SPLASH discovered that some of the animals identified in summer feeding grounds could not be found in winter breeding grounds. That's right, we humans have yet to find out where all these giants are going. Also, no one yet has proven how the humpbacks find their food or navigate and why the males sing.

This certainly begs humility in how we treat our oceans and how we manage these animals about which we still have so much to learn.

However, with the increasing numbers of humpbacks reported by the SPLASH Project, the animals may now lose protection under America's Endangered Species Act and Canada's Species at Risk Act. The conclusion may be that there are enough humpbacks and that, therefore, protection can be lifted (that the humpbacks will be "delisted").

This is an issue of great concern. Although there may be 20,000 humpbacks in the North Pacific, we now know that they make up distinct populations that have suffered different rates of depletion from whaling and have different rates of recovery. The populations have different migration rates and different "loyalties" to breeding and feeding grounds.

To manage the humpbacks of the North Pacific as one population would be as flawed as managing the killer whales of the Northeast Pacific as one entity. There are only some 85 southern "resident" (fish-eating) killer whales that do not mate with any other killer whale populations. In order for there to be any hope of their survival, it has been recognized they have to be managed as a distinct population.

So too with the humpbacks of the North Pacific. Not enough is known about these whales to delist them especially while very real threats

exist: entanglement, ship-strike, bioaccumulation of toxins, loss of habitat, noise, reduced food supply due to overfishing and climate change and, yes - the potential of there being "enough" humpbacks to justify whaling.

For further information including vocals, the SPLASH and conservation concerns, see "marine mammals" and then "humpback whale" at www.earthlingenterprises.ca.

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