



In 1996 five Russian scientists made big waves in the international scientific community. In a courageous act, preceded by a series of clandestine meetings with American counterparts, they publicly revealed one of the most sensational cover-up operations that has ever taken place on the high seas. The post WWII operation makes all other Cold War era tales of daring and intrigue pale by comparison, for the illicit goods in this case were not state secrets or formulas for nuclear bombs, easily slipped in someone's pocket or sent in encoded messages. The agents involved in this cover-up operation managed to hide over 100,000 whales that were illegally hunted around the globe between 1947 and 1974. During this period, factory whaling ships operating in the Antarctic, South Atlantic, South-West Pacific and the Indian Ocean, killed nearly a quarter of a million whales, almost half of which went unreported to the international community. This revelation had a serious impact on population estimates of whale stocks, around the world. But nowhere were the implications of this data as intriguing as they were in the Arabian Region. For the past three years, the Oman Whale and Dolphin Research Group has been studying whales in Oman's waters, and coming to terms with the legacy of this piracy on the high seas.

In 1959, as whale stocks around the world dwindled and most whaling nations considered halting their operations, or adhering to more stringent quotas, the Soviets began to add new factory ships to their Antarctic fleet. The Sovetskaya Ukraina was the largest floating factory ever built, and together with its sister ship, the Slava, it was one of the first ships to attempt a new route to Antarctic whaling grounds by passing from the Mediterranean through the Suez Canal and the Red Sea, rather than making the usual journey around the African Continent. In November 1963, as they passed through the Bab el Mandeb and into the Gulf of Aden for the first time, the factory ship's 25 accompanying catcher vessels, armed with explosive harpoons, fanned out to form a 250 km wide front that travelled along the southern Arabian coast. Eagle-eyed observers perched 22m above sea level in the crow's nest of each catcher vessel allowed them to detect and hunt down every whale in their path, and the fleets were pleasantly surprised to find a relatively large number of whales in this previously unexploited area.

Over the next three seasons, during the two to seven week periods that they spent in the Arabian Sea on their way to the Antarctic, the two factory ships took a total of 1294 Blue Whales, 849 Bryde's Whales, 242 Humpback Whales, and 954 Sperm Whales.

Captured whales were towed back to the factory ship where they were hauled on board. On the processing decks, many whales were examined by on-board scientists before they were dismembered, their meat stored and their blubber rendered to oil in the large vats kept boiling in the hull at all times. In addition to taking measurements to assess each animal's reproductive state and maturity, the scientists would study the whales' stomach contents in an effort to learn about their diet. Throughout the ages, it has always been in the interest of whalers to learn as much as they could about the biology and ecology of their quarry, and ironically much of what we know today, has been learned from these hunters.





It was the Soviet scientists who first proved that Blue and Humpback Whales were both feeding and breeding in the Arabian Sea, something that took the world by surprise, as all other known populations of these whales migrate long distances between polar or sub-polar feeding grounds and tropical breeding grounds.

In May 2002, I was lucky enough to meet one of these men for the first time. Professor Yuri Mikhalev, who had been the chief scientist on the Sovetskaya Ukraina, patiently described his voyages as my colleagues and I eagerly bombarded him with questions. Eyes closed, as if trying to reach back into the far recesses of his memory, he recalled the stench and heat of the processing deck, where the temperatures would reach 60° C. He described the terrible morale of the crews, who were away from home for a year or more at a time and endured great hardship and physical labour, some of them dying from heart attacks and heat exhaustion. And yet, he spoke with a sense of nostalgia, as if somehow he missed those times, and he spoke with admiration for the whales themselves. I understood then that perhaps it was this that he missed, for there is nothing more awe inspiring and invigorating than being out at sea and working with whales. In this, we had found a bond. When we had finally exhausted our list of questions, Professor Mikhalev asked us how we conducted our work, and expressed concern that his crews had not left many whales behind for us to study. Did we have experienced observers? How many vessels did we have at our command? Did we have a 22m high observation tower?

We tried to explain: we have a 6.5 meter long rigid hulled inflatable boat, with a rickety 3m high metal A-frame at the back; we only have two to five observers; and when we find the whales, we approach them with cameras and hydrophones rather than harpoons. The methods at our disposal may seem very limited in comparison to the might of the Soviet Fleet, but our work is beginning to reveal some secrets of its own.

For the past three and a half years the Oman Whale and Dolphin Research Group (OWDRG) has been conducting small boat surveys along the coast of Oman, trying to unravel the mystery of whale abundance, distribution and habitat use. While Bryde's, Sperm and Blue Whales are all of interest to the group, the latter two species are difficult to find, due to their offshore distribution. We focus on humpback whales instead, and have concentrated our surveys in the same areas that were targeted by the Soviets, namely Dhofar and the Gulf of Masirah, where a combined total of 60 humpbacks were taken between the 3rd and 5th of November 1966.

One of our main research techniques is the use of photo-identification to recognise individual humpback whales over time. We have now photographed the underside of the tail flukes and/or dorsal fins of 54 individual humpback whales. These photos are stored in a digital catalogue, along with information related to the whale's location and behaviour during that sighting. Some whales have been observed and photographed as many as four times each (include map with sighting histories), providing the first clues to the population's seasonal movements and habitat use. We are starting to detect a trend, with whales observed feeding in the Gulf of Masirah in the autumn, and engaging in behaviours associated with breeding in Dhofar in the months of February and March.





The rate of re-sights of previously identified or “known” individuals can also be used to calculate population size. The formulas are complicated, but the concept is fairly simple: you would have a lower chance of bumping into your three best friends in the same week in a big densely populated city like New York than you would in a remote country village with a total population of 200. Translating this to whale research: if the percentage of “known” individuals that are photographed on each survey is low, you are probably dealing with a large population. If it is high, you may be dealing with a small population. And in Oman, the percentage of known individuals that we photograph is getting higher on each survey. Our statistical analysis indicates that the population of Humpback Whales in our survey areas may be as low as 100 or fewer. However, we treat this estimate with some caution. Using our New York City analogy, it is possible that by surveying the same areas year after year, we are actually visiting our best friends' favourite cafés, and thereby greatly increasing the probability of bumping into them, even though they belong to a large population.

These tantalizing first steps toward understanding our Humpback Whale population have emphasised the need for continued and expanded research. If this population is as small as it seems to be, there is an even more urgent need to learn more about its distribution and habitat use, and any factors that may threaten its continued survival. We need to be able to survey areas that are not accessible to our small boat, and obtain more accurate population estimates for Humpbacks and other whale species that may have been affected by the Soviet hunt. This would be possible if we could only find a suitable vessel, large enough to withstand some rough seas and with a tall mast suitable for spotting whales from a long distance..... Do you think the Russian government has any ships for sale?

**The Oman Whale and Dolphin Research Group, is a group of volunteer scientists who work in cooperation with, and with approval from the Ministry of Regional Municipalities, Environment and Water Resources, the Ministry of Agriculture and Fisheries, and the Oman Natural History Museum. Its work is made possible by sponsorship from a number of local and regional businesses. Please log onto their website: [www.whalecoastoman.com](http://www.whalecoastoman.com) to learn more about their work and their sponsors.**

