

MEDIA RELEASE

Designated Corporation for Scientific Whale Research
THE INSTITUTE OF CETACEAN RESEARCH
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Completion of the 2022 IWC/Japan Joint Cetacean Sighting Survey Cruise in the North Pacific – IWC-POWER

1. Background

This survey is conducted jointly by the International Whaling Commission (IWC) and Japan, and is commonly referred to as IWC-POWER (International Whaling Commission/Pacific Ocean Whale and Ecosystem Research). IWC-POWER is the successor of IWC/SOWER (International Whaling Commission Southern Ocean Whale and Ecosystem Research), a successful whale research program acclaimed globally, which was conducted in the Antarctic Ocean from 1996/1997 to 2009/2010. Taking advantage of the know-how, experience and achievements of IWC/SOWER, IWC-POWER has been carried out every summer since 2010 based on the main research plan of the IWC Scientific Committee.

For the past twelve years, the IWC-POWER research cruises have been covering a wide area of the North Pacific that had not been surveyed for several decades, finding large numbers of fin and sei whales in the Gulf of Alaska area north of 40 degrees north latitude and a large number of Bryde's and sperm whales in waters south of 40 degrees N, and valuable data have been collected to contribute to objective stock assessment. In addition, information on rare species such as blue whales and right whales has also been collected.

As the 13th cruise, this time the research was conducted in the waters south of the Aleutian Islands (within the U.S. exclusive economic zone: waters from north of 40 degrees north latitude to south of 54 degrees north latitude and between 167 degrees east longitude and 170 west longitude). This area was also surveyed in 2010, but this time new biopsy and sound recording experiments were conducted, and valuable data were collected.

2. Outline of the 2022 Research Cruise and Summary of Results

The IWC-POWER program is conducted collaboratively by the IWC and the Government of Japan. The IWC Scientific Committee has developed the research program and established the IWC-POWER Steering Group (Convenor: Koji Matsuoka, Research Executive Director, ICR), which has a role of designing the research plan and analyzing the results of the cruises. The survey was commissioned by the Fisheries Agency of Japan, and conducted by the Institute in cooperation with the Tokyo University of Marine Science and Technology, the National Oceanic and Atmospheric Administration/Alaska Fisheries Science Center (NOAA/AFSC), and other related organizations.

The following is a summary of this year's survey plan and results. In the research area, many

fin, sei, humpback, and sperm whales were found, again suggesting the robustness of their stocks. In addition, many rare blue whales were found in the western part of the research area, suggesting that the resource is recovering well. The whales were photographed for identification. Biopsy (skin and blubber) samples were collected for DNA analysis, and satellite tags were attached to the whales to record their migration and diving behavior. Detailed results of the research will be presented at the IWC/SC annual meeting and other international organizations.

2.1 Main objectives

- (1) Collection of information for the in-depth stock assessment of sei whales, humpback whales and gray whales.
- (2) Collection of information on the rare North Pacific right and blue whales.
- (3) Collection of data on abundance and stock structure of other whale resources with insufficient resource information.
- (4) Collection of information necessary for the development of the medium- to long-term plan of this research program

2.2 Research Cruise Period

From August 2 to September 30, 2022 (60 days)

2.3 Research Area

Waters north of 47 degrees north latitude to south of 54 degrees north latitude, within the U.S. exclusive economic zone between 167 degrees east longitude and 170 west longitude (Figure 1). The research vessel called at the port of Dutch Harbor, Alaska, to embark and disembark U.S. researchers and to load and unload survey materials.

2.4 International Researchers

The survey was conducted by the following international researchers appointed by the IWC Scientific Committee.

Laura Morse (Cruise leader, IWC-nominated international researcher, USA)

Jessica Crance (Alaska Fisheries Science Center, NOAA/AFSC, USA)

Taiki Katsumata (Institute of Cetacean Research, Japan)

Isamu Yoshimura (IWC-nominated international researcher, Japan)

2.5 Research Vessel

Yushin-Maru No. 2 (747 tons, Captain Hidenori Kasai, 16 crewmen).

2.6 Total Distance Covered

1,064.7 nautical miles (approximately 1,972km).

2.7 Main whale sightings

Blue whale (22 groups, 24 animals), fin whale (56 groups, 78 animals), sei whale (25 groups, 27 animals), minke whale (3 groups, 3 animals), humpback whale (19 groups, 54 animals), sperm whale (41 groups, 41 animals), killer whale (17 groups, 86 animals).

2.8 Results of sample collection and other experiments

(1) Photo identification data (number of individuals)

Blue whale: 16 animals, fin whale: 7 animals, sei whale: 8 animals, humpback whale: 6 animals, killer whale: 8 animals (total 45 animals).

(2) Collection of biopsy samples (number of individuals)

Blue whale: 4 animals, fin whale: 4 animals, sei whale: 6 animals, humpback whale: 2 animals, (total 16 animals).

(3) Whale vocalization recording

We conducted 212 hours of acoustic monitoring at 33 stations and recorded the vocalization sounds of blue, fin, humpback, sperm, and killer whales.

(4) Satellite tagging (number of individuals)

A sei whale was fitted with a satellite tag (to record its movement and diving behavior) in the high seas.

(5) Marine debris

Eight cases of marine debris were recorded in the research area.

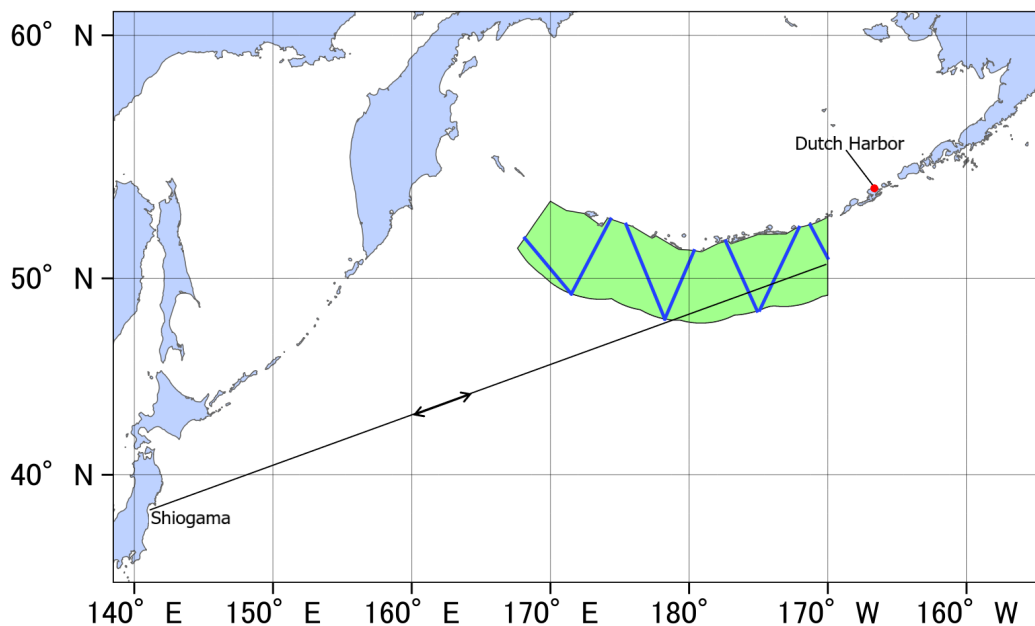


Figure 1. 2022 IWC-POWER survey area (green), and survey course (blue bold lines).

Photographs from the 2022 IWC-POWER cruise



Surfacing blue whales.



Fluke-up humpback whale.



A fin whale, the most frequently sighted whale species.



Surveyor dropping acoustic observation equipment.



International researchers and crew (photo taken at Dutch Harbor).

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