

Sanctuary Ocean Count



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**HAWAIIAN ISLANDS
HUMPBACK WHALE
NATIONAL MARINE SANCTUARY**

**SITE LEADER
PROJECT
GUIDE**

SANCTUARY OCEAN COUNT

CONTACT SHEET

HAWAI'I

For questions, please contact the coordinator at
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<http://hawaiihumpbackwhale.noaa.gov>
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**HAWAIIAN ISLANDS
HUMPBACK WHALE
NATIONAL MARINE
SANCTUARY**



**National
Marine
Sanctuary
Foundation**



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SANCTUARY OCEAN COUNT



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SANCTUARY OCEAN COUNT

PROJECT BACKGROUND & BASICS

Each winter, from approximately December to May, a portion of the North Pacific humpback whale population migrates from their feeding grounds in Alaska to the warm waters of Hawai'i to engage in breeding activities.

Hawai'i is a pristine marine environment is considered to be one of the most important breeding, calving and nursing grounds for humpback whales in the North Pacific. For that reason, Hawaiian Islands Humpback Whale National Marine Sanctuary was designated to protect humpback whales and their habitat in Hawai'i. Humpback whale population numbers are still relatively unknown. In an effort to provide a relative approximation of humpback whale numbers and distribution patterns locally over the years, the Sanctuary sponsors community events such as the Sanctuary Ocean Count.

The Sanctuary Ocean Count was initiated as a means to provide Hawai'i residents and visitors with the opportunity to observe humpback whales in their breeding grounds by conducting a yearly shore-based census during the peak breeding season. Although the census does not claim to provide scientifically accurate results, it serves as a tool to supplement scientific information gathered from other research activities. The count also provides some information on how whales use inshore waters on an average peak season day. The Sanctuary Ocean Count serves to promote public awareness about humpback whales, the Sanctuary, and shore-based whale watching opportunities.

The first count was conducted in February 1996 on O'ahu, with approximately 150 volunteers. In 1999, the Big Island was added to the effort. Kaua'i began participating in 2000 and Kaho'olawe began participating in 2002 - 2010. Moloka'i island has been added to counts in 2024. Currently, the Sanctuary Ocean Count covers ~60 sites on three islands, with an enlistment of over 1,000 volunteers. We also collaborate with Pacific Whale Foundation's Great Whale Count on Maui to have a full statewide whale count effort. In the future, the Sanctuary hopes to expand this project to other islands.

Safety Guidelines:

Safety is a primary concern for all of our volunteers. If weather or environmental conditions become dangerous during the ocean count, stop the effort and vacate the area to ensure the safety of yourself and others. We recommend that you take all necessary precautions while whale watching, as weather and environmental conditions at some of these shore sites can be unpredictable. We advise all volunteers to wear proper clothing and footwear at all times. Never turn your back to the ocean or walk along steep cliffs along the ocean.

In the Field:

Wear appropriate clothing based on the morning's anticipated weather conditions. Essential items include hats, sunglasses, sunscreen, water, watches, something to write on (e.g., clipboard), and pens or pencils. A pair of binoculars or a spotting scope is very helpful but not required. Optional items include beach chairs or mats, rain jackets or umbrellas and cellular telephones for emergencies.

Site Information:

Please review the site descriptions online at <http://hawaiihumpbackwhale.noaa.gov> in order to prepare for the Sanctuary Ocean Count. Facilities and restrictions vary for each location. Please note some sites have specific restrictions (e.g., no pets, no food in area, permit must be obtained). Site descriptions are updated annually based on comments from volunteers. After the count, feel free to provide additional information about your site to the count coordinators so that the information can be kept up-to-date.

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SITE LEADER RESPONSIBILITIES

Mandatory Site Leader Training:

- Site leaders are selected for each Ocean Count Site prior to the training session.
- Site leaders will learn the methods to be used in conducting the count.
- They will also learn more about the roles of a site leader.
- Site leaders will receive important materials for event days at the training.

Following Site Leader Training:

- Obtain volunteer list for site from Sanctuary Ocean Count Coordinator. This will be sent during the week of the event date.
- Select an area and time for everyone to meet on the day of the count. Volunteers should meet at the site at least one half-hour prior to the count (7:30 a.m.) to go over instructions and get settled. Some sites may need to meet earlier depending on the location. Consideration should be given to safety, comfort, and the level of impact to the site.
- Provide meeting time and location to participants.
- Remind participants to bring essential items.
- Find out if any participants require special needs and inform count coordinators of any problems.

On the Day of the Event:

- Provide a brief background on the sanctuary and humpback whales and then provide guidance on how to sight whales and how the data collection will be done.
- Have participants review the Notice of Caution document and complete information on participant sign-in sheet.
- Have all volunteers complete the Behavior Sheets.
- Fill out the Census Sheets (site leaders collaborate to complete one sheet per count date).
- Announce start of each time period to all volunteers.
- Keep a copy of the whale behavior information sheet available for reference.
- Distribute other handouts as appropriate.
- Collect data sheets from volunteers. Be sure that all fields have been completed and information is legible.
- **Place a star on the top right corner of the two most accurate behavior sheets.**
- Submit online via form OR call the appropriate sanctuary office within one hour of the count to report census data, the number of volunteer participants (including site leaders) and number of public outreach for media purposes.

Throughout Whale Season:

- Complete a Site Leader Time Sheet and submit to the appropriate office at the end of whale season. Be sure to record all volunteer hours worked on the Sanctuary Ocean Count project (and other projects if applicable), including your travel time to and from events.

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DATA COLLECTION INSTRUCTIONS

Each site will have 3 types of datasheets:

- Census Sheet to be completed by site leaders.
- Behavior Sheet to be completed by general volunteers in pairs or small groups.

CENSUS SHEET INSTRUCTIONS

Site leaders work together to complete one Census Sheet per count date.

1. Position yourself at the site.
2. Start counting precisely at the times specified on the sheet (0800, 0830, 0900, 0930, 1000, 1030, 1100, 1130, 1200).
3. Slowly scan your site from left to right, spending an equal amount of time in each area of water.
4. Each time you see a whale, tally it on the sheet using a bar (in the space for Adults if it is an adult and in the space for Calves if it is a calf).
5. Do not recount whales within a 15 minute period.
6. Finish counting exactly 15 minutes after you started (0815, 0845, 0915, 0945, 1015, 1045, 1115, 1145, 1215).
7. Only count whales that are at the surface during the 15 minutes of the count.
8. Tally your bars and put the total in a circle next to the bars. This will help the data analysts who might otherwise have to interpret II as either “eleven” or “two”.
9. Complete the visibility chart on the third page of the Census Sheet for each indicated time period.

If you see something other than a humpback whale during the count:

1. Establish what it is (spinner dolphin, or simply some kind of dolphin, or other animal) and record on data sheet.
2. Turtles and seals can also be counted on the census sheet. Please report all monk seal sightings to NOAA Fisheries at 1-888-256-9840.
3. Do not try to establish if there are calves, count all animals as adults.
4. Write the total number of animals in the appropriate space.

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BEHAVIORSHEET INSTRUCTIONS

The Behavior Sheet is to be completed by general volunteers.

It is advisable that volunteers work in pairs or small groups, one monitoring whales and calling behaviors, the other writing them down. Volunteers can exchange tasks. This activity will be conducted in half-hour increments continuously from 0800 - 1200.

1. Start and stop observations precisely at the specified times on the data sheet.
2. Monitor all the whales that can be seen from your position.
3. The data sheet identifies various humpback whale behaviors. Each time a behavior is witnessed, mark the appropriate column on the data sheet with a bar. You may also describe what is happening in the comments section. Use additional sheets if necessary. Record the time before the description. At the end of each 30-minute period, total the bars under each behavior and circle that number. If you take a break please note your absence rather than recording a "0" count.
4. Complete the visibility chart on the back of the Behavior Sheet for each time period. Average the hour as best as possible.

How to fill in columns on the data sheet:

- **NUMBER OF ADULTS** - Write in the total number of animals that appear to be adults. The only way to estimate this is by noting animal size, which is usually apparent by the size of the blow.
- **NUMBER OF CALVES** - This is often difficult to estimate. If you are not able to establish the number of calves, indicate if calves were present (P) or absent (A).
- **BREACH** - Record the number of times this behavior occurs. A breach occurs when the whale breaks clear of the water with its full body and returns to the water with a large splash.
- **SLAP** - Record the number of times this behavior occurs. Here, a whale slaps its tail, head, pectoral fin or peduncle on the water creating small splashes, but the main body of the animal remains underwater.
- **BLOW** - Record the number of times this behavior occurs. A blow occurs when you see a spout (the whale is taking a breath). Sometimes you may not see a blow, but the whale surfaces and then dives again.
- **DIVE** - Record the number of times this behavior occurs. In this behavior, the whale arches its back upward out of the water. The tail may or may not be seen. After the dive, the whale will not be seen for some time.

Some general terms to use in the comment section:

- **TRAVELING** - A continuous directional movement with frequent surface intervals.
- **SURFACE ACTIVE** - Whale is breaching, tail or fluke slapping, spy-hopping.
- **NURSING** - Calf's rostrum is next to the mother's body. Typically the mother is motionless.
- **MILLING/LOGGING** - Whales remain at the surface for an extended period of time - like a log floating on the surface.

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TYPICAL HUMPBACK WHALE BEHAVIORS

Blow



On average, adult humpbacks surface to breathe every 10-15 minutes, but can remain submerged for as long as 45 minutes. Calves must rise to the surface every 3-5 minutes.

Head Rise or Spy Hop



A whale rises vertically toward the surface, with its head out of the water. Some believe this behavior allows the whale to look at activity going on above the surface.

Tail Slap



A humpback raises its tail flukes out of the water and slaps them forcefully on the surface of the water. This behavior is often repetitive and may serve as a warning.

Pec Slap



Humpbacks will slap the water's surface with one or both fins simultaneously. The slapping of fins may serve as a communication signal to other whales.

Head Slap



A competitive display in which the humpback whale lunges forward with its head raised above the water.

Peduncle Slap



An energetic display where the whale throws its tail out of the water and in the process, slaps its peduncle on the surface.

Dive



A humpback arches its back upward out of the water. The tail may or may not be seen. The whale will not be seen for some time.

Breach

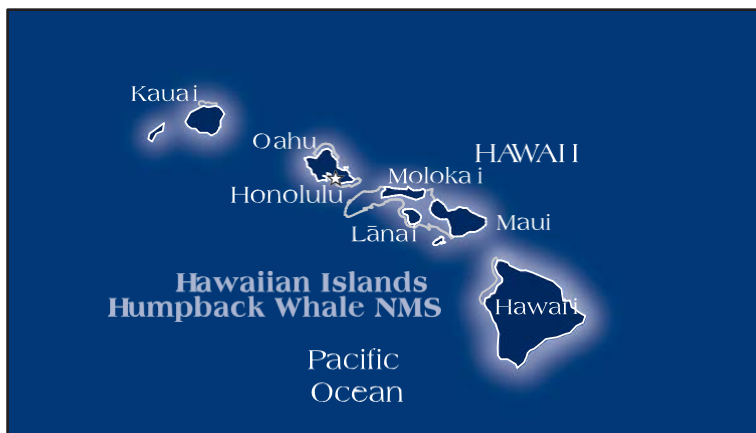


An acrobatic display where the humpback uses its tail to launch itself out of the water then lands back on the surface with a splash.

SANCTUARY OCEAN COUNT

SANCTUARY BACKGROUND & WHALE BASICS

The **Hawaiian Islands Humpback Whale National Marine Sanctuary** lies within the warm, shallow (less than 600 feet), waters surrounding the main Hawaiian Islands and constitutes one of the world's most important humpback whale habitats. Hawai'i is unique because it is the only place in the United States where humpback whales mate, calve, and nurse their young. For this reason, Congress designated the sanctuary to protect humpback whales and their habitat in Hawai'i. Every year, from November to May, more than half of the North Pacific humpback whale population migrates to the warm protected waters of Hawai'i. During whale season it is common to see humpback whales resting near shore or performing acrobatic displays that can be seen from miles away. The sanctuary protects Hawai'i's ocean wilderness through research, education, conservation and stewardship. **Find out more online at <http://hawaiihumpbackwhale.noaa.gov>.**



Hawai'i's Humpback Whales

Population - Humpback whales were once plentiful in oceans worldwide. The global population was depleted by the commercial whaling industry at the start of the 20th century. Now, 10,000 humpback whales, what is believed to be the largest seasonal population in the world, migrate to Hawai'i each year.

Migration - Humpback whales spend summer months feeding on zooplankton and small fish that flourish in the colder, nutrient-rich waters of temperate and sub-polar regions near Alaska and other northern areas. Their annual migration to the tropics during winter is an amazing feat that is not yet fully understood. It's believed that humpbacks follow cues of temperature, ocean currents, and the earth's magnetic field to navigate nearly 3,000 miles of open ocean. Once in warmer waters, the whales engage in mating, calving, and nursing activities.

Facts

Group	Mammalia	Type of whale	Baleen
Order	Cetacea	Hawaiian name	koholā
Sub-order	Mysticeti	Weight	45 - 50 tons
Family	Balaenopteridae	Length	45 feet
Genus	Megaptera	Life span	40 - 60 years
Scientific Name	<i>Megaptera novaeangliae</i>	Gestation	10 to 12 months

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CONTACT INFORMATION

(Updated 2025)

For Reporting Violations, Strandings, or Other Incidents

TO REPORT A VIOLATION, STRANDED OR INJURED MARINE ANIMAL:

Includes stranded/injured sea turtles, monk seals, dolphins, and whales:

- **NOAA Office of Law Enforcement Hotline:**
 - Email written reports, video, and photos to NOAA Fisheries:
 - **Immediately call/report possible illegal or suspicious activity*
 - Phone: 1-800-853-1964
 - * THIS IS THE CONTACT YOU CALL FOR ANY VIOLATIONS!

- **Report an injured or entangled marine mammal via the NOAA Marine Mammal Hotline, 1-888-256-9840.**

