## **HUMPBACK WHALE FACTS**

Scientific name: Megaptera novaeangliae

Type of whale: Baleen whale

Birth weight & length: ~1.5 tons & 10-16 feet

Sexual maturity weight & length:

Female: ~45 tons & 45 feet
Male: ~43 tons & 42 feet

Sexual maturity age: 5-9 years

**Life span:** ~40-50 years **Gestation:** 10-12 months **Calving interval:** 2-3 years

Diet: Krill, plankton, and other small fish

Did you know...

- Humpback whales are the 5th largest whale!
- Humpback whales feed in cold northern waters of the North Pacific Ocean. Scientists believe that humpbacks fast while on the summer breeding grounds in tropical waters.
- Humpback whales are protected by the Endangered Species Act and the Marine Mammal Protection Act.
- It is illegal to approach a humpback whale less than 100 yards by sea and 1,000 feet by air.



## Humpbacks have been individually identified in the Marianas!

Researchers use coloration patterns on the ventral surface of the tail fluke, along with notches on the fluke's trailing edge, to identify individual humpback whales.

We have identified 44 non-calf individuals using photos and confirmed 14 individuals as females and 10 as males from genetic analyses of skin and blubber biopsy samples. Eight whales were seen in multiple years off Saipan including 4 females that had a calf in at least one year.

This female was photographed in 2007 and seen with a calf in 2016. Photographs of the same whale over time provide insight about the individual's life history, including movement and migration patterns if the individual was seen at different locations.







### Have you seen any whales?

Visit www.happywhale.com to upload your photos!
You may learn where your whale has been and can see where
other humpback whales have traveled.





# HUMPBACK WHALES IN THE MARIANAS

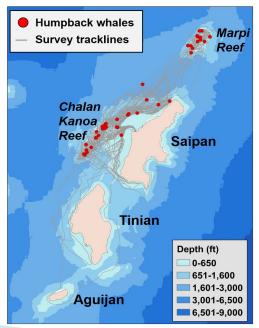
U.S. Department of Commerce
National Oceanic and Atmospheric Administration
National Marine Fisheries Service

## **HUMPBACK WHALES IN THE MARIANAS**

During the fall, humpback whales in the North Pacific Ocean migrate from summer feeding areas off the western coasts of the United States and Canada and the eastern coasts of Russia to winter breeding areas in lower latitudes, where mating and calving occurs. The previously known breeding areas are located in nearshore waters of Hawaii, western Mexico and Central America, the islands of southern Japan, and the Philippines.

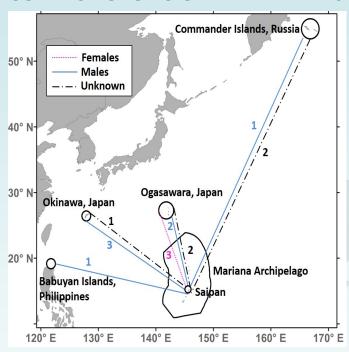
In January-April 2007, a ship-based survey for whales and dolphins was conducted by the Navy within the Marianas. The observers aboard sighted humpback whales on Marpi Reef (~10 nmi north of Saipan).

In January-March for the years 2015-2019, the Pacific Islands Fisheries Science Center, in partnership with the Navy, conducted small-boat surveys off Saipan to look for humpback whales. We had 39 sightings of humpback whales and confirmed with photos that there were at least 58 different individuals (44 non-calves and 14 calves) in the area.



Most of our sightings were on Chalan Kanoa and Marpi Reefs.

## **CONNECTIONS TO OTHER BREEDING & FEEDING AREAS**



The population of humpback whales in the western North Pacific is listed as endangered under the U.S. Endangered Species Act. Understanding the full extent of the range of humpback whales in the western North Pacific and links between their breeding and feeding areas is crucial for the protection and conservation of the population.

We worked with researchers who have humpback whale photo-identification catalogs from the known breeding areas off Japan and the Philippines and the feeding areas off Russia. A total of 11 individuals (4 males, 3 females, and 4 whales of unknown sex) from the Marianas humpback whale photo-identification catalog were matched to individuals in catalogs from Ogasawara and Okinawa, Japan; the Babuyan Islands, Philippines; and the Commander Islands, Russia. Three of the individuals were matched to more than one catalog.

## DO HUMPBACK WHALES BREED IN THE MARIANAS?

#### **Acoustic Research**

Since 2010, we have had a passive acoustic recording device sitting on the seafloor off the west side of Saipan. We have recorded humpback whale song on >60% of days in each month from December to April. Male humpback whales sing to attract mates. The presence of singers within the Marianas suggests that humpback whales may be using the area for mating.

### **Mating Behavior**

Male humpback whales compete for access to reproductive females by jockeying for position near a single female. While competing, males may charge each other, thrash their tail flukes or pectoral flippers, blow long streams of bubbles underwater, or lunge out of the water while expanding their throat and spewing water out of their mouth. We observed multiple competitive groups off Saipan during our surveys.



## **Mother-calf Pairs**

We encountered 14 mother-calf pairs off Saipan. The small sizes of the calves suggest that they were likely born in the Marianas. One calf had light skin color and visible fetal lines, which is indicative of newborns.

These lines of evidence establish the Marianas as a breeding area for endangered humpback whales in the western North Pacific, and should be considered in ongoing research and conservation efforts.

