

Protecting Marine Life

2019 RESEARCH HIGHLIGHTS AND IMPACTS

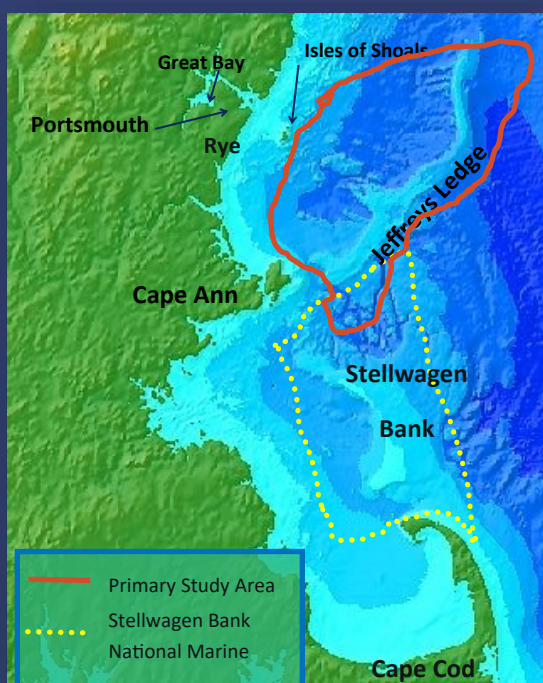


HIGHLIGHTS

- 175 Surveys from May 15 -October 15
- 16 species documented
- 5,462 animals observed during 1,433 sightings
- 95 Individual humpback whales identified, including 3 calves
- 3 Humpback whales documented with injuries
- 421 pieces of litter observed, 51 seen near whales.



STUDY AREA



Key geographic features in our study area.
Base map by Ed Roworth and Rich Signell of USGS.

Our primary study area are the waters on and around Jeffreys Ledge.

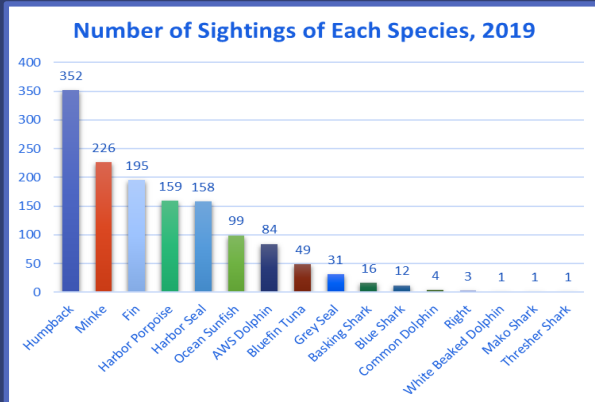
- Jeffreys Ledge is a rocky underwater feature in the western Gulf of Maine.
- It is located approximately 32 km off the coasts of Maine, New Hampshire and Massachusetts.
- The southern end of Jeffreys Ledge is included in the Stellwagen Bank National Marine Sanctuary (SBNMS) boundaries.
- The ledge is approximately 54 km long by 9 km wide. The water depth above the ledge is 45-60 m while the depth surrounding it is 90-150 m.
- Upwelling currents stir nutrients from the sea floor making for a more productive environment.

RESEARCH PROGRAM

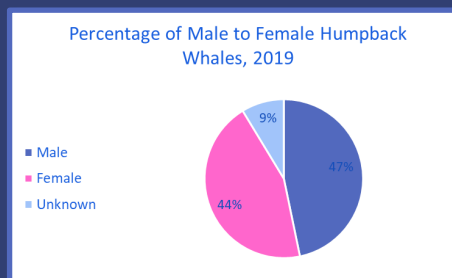
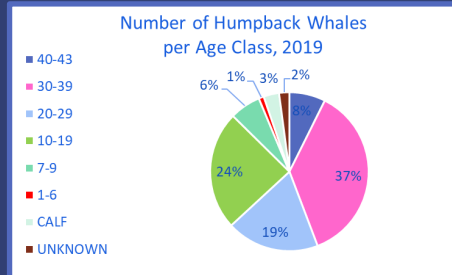
The goal of our research program is to study local protected marine mammal populations by compiling, managing and disseminating data and using the data for continued protection efforts. We have worked toward this goal since 1996, and are the only organization that consistently monitors marine mammals in the Jeffreys Ledge area.

Our research program contributes to the local and global knowledge base of marine mammal science by providing information to resource managers, government agencies and other scientists through publications and presentations.

SIGHTINGS HIGHLIGHTS



Humpback whales were the most commonly-sighted species, followed by minke and fin whales. Over one-third of the humpbacks were aged 30-39. Males and females were almost evenly split.



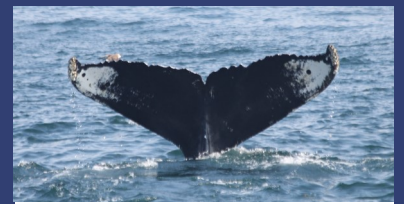
Unusual sightings included a spike in ocean sunfish, 4 sightings of common dolphins, 3 sightings of North Atlantic right whales, and single sightings of a white-beaked dolphin, mako shark and thresher shark.

IMPACTS

- The whales we study are federally-protected. They face human-related threats including collisions with ships of all sizes and entanglements in fishing gear. By monitoring the whale population annually, injuries can be documented and brought to the attention of management.
- Sightings data were used to oppose a dredge dumping site in our research area.
- Litter data were collected, and can help point to solutions. Over 400 pieces of litter were documented, 12% of which were within 100 feet of a whale sighting. Balloons were the #1 item seen.

STEM EDUCATION AND WOMEN IN SCIENCE

- Nine interns joined us from six states, all were women.
- Interns assisted with data collection and education aboard whale watches, at beach cleanups, and our Blue Ocean Discovery Center. They also attended weekly meetings with featured speakers, completed a research project and presented their project at an intern symposium.
- Summer and fall interns volunteered a total of 2,770 hours. The dollar value of this time plus mileage was \$86,713.58.
- Data and whale watch experiences are also used to inspire and teach K-12 students in our educational programs and at our Blue Ocean Discovery Center.



IMPACT STORY

Owl, a female humpback whale, was observed in 2019 looking healthy and behaving normally. A year prior, in August 2018, she was observed thrashing as she was encircled in a purse seine fishing net. Our continuous presence on the water during the summer can document injuries or behavior disturbances and allow us to follow-up for health assessments.

2019 INJURIES

Documented injuries included a humpback whale with a monofilament fishing line entanglement, another humpback with a new injury allegedly from a sailboat strike, and a humpback with a fresh flipper injury of unknown origin. These animals will be monitored in the future.



SUPPORTERS

The Perkin Fund
Granite State Whale Watch
Mysticetus

Donors to our NH Gives
2019 campaign funded new
data collection software and
equipment.