

March 2018 Survey Report for New York Bight Whale Monitoring Aerial Surveys

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March 2018

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TABLE OF CONTENTS

ACRONYMS AND ABBREVIATIONS	i
1.0 INTRODUCTION	1
2.0 EFFORT.....	1
3.0 SIGHTINGS	4
3.1 LARGE WHALE SIGHTINGS	4
3.2 OTHER MARINE MAMMAL SIGHTINGS.....	7
3.3 SEA TURTLE SIGHTINGS.....	7
3.4 UNUSUAL OR RARE SIGHTINGS.....	7
3.5 STRANDING AND ENTANGLEMENT REPORTS.....	7
3.6 OTHER SIGHTINGS	8
4.0 PROBLEMS ENCOUNTERED.....	8
5.0 PHOTOGRAPHS	8

FIGURES

Figure 1. Survey Lines Flown by Effort Type During the March 2018 Survey.....	3
Figure 2. Locations of All Groups of Large Whales Sighted During the March 2018 Survey	5
Figure 3. Locations of All Groups of Marine Mammals Sighted During the March 2018 Survey	6

TABLES

Table 1. Flight Time and Distance by Effort Type During The March 2018 Survey.....	2
Table 2. Number of Large Whale Species Sighted During the March 2018 Survey.....	4
Table 3. Other Marine Mammal Sightings During the March 2018 Survey	7

ACRONYMS AND ABBREVIATIONS

hr	Hour
km	Kilometer
SE	Standard error

1.0 INTRODUCTION

Tetra Tech, Inc., in coordination with Smultea Environmental Sciences, LLC and Aspen Helicopters, Inc. (collectively, the “survey team”), is contracted by the New York State Department of Environmental Conservation (NYDEC), Division of Marine Resources to conduct 36 monthly line-transect aerial surveys focused on the six large whale species most likely to occur in the New York Bight. This survey report documents the survey effort and sightings from the March 2018 survey, representing the 13th of the 36 surveys scheduled to occur under this contract.

2.0 EFFORT

The March 2018 survey occurred from March 12 – 16, 2018. A total of seven flights were conducted, representing a total of 20.02 hours in the air (i.e., from wheels up on the airport tarmac to wheels down on the tarmac for each flight). A total of 4,120.61 kilometers (km) were flown and included completion of nearly 100 percent of the 15 transect lines. A small offshore portion (~3 km) of line 14 was not completed due to inclement weather and snow showers. Flights were not conducted on March 13 due to severe weather conditions. [Table 1](#) presents the flight time durations and distances by effort type. [Figure 1](#) shows the survey lines completed.

TABLE 1. FLIGHT TIME AND DISTANCE BY EFFORT TYPE DURING THE MARCH 2018 SURVEY

Survey Dates	Hours and Kilometers (km) by Type of Flight Effort										Total	
	Overland		Transit		Transect		Circling		Cross-Leg			
	hr	km	hr	km	hr	km	hr	km	hr	km	hr	km
March 12-16, 2018	1.05	227.74	5.11	1,189.89	12.83	2,510.05	0.36	68.42	0.67	124.51	20.02	4,120.61

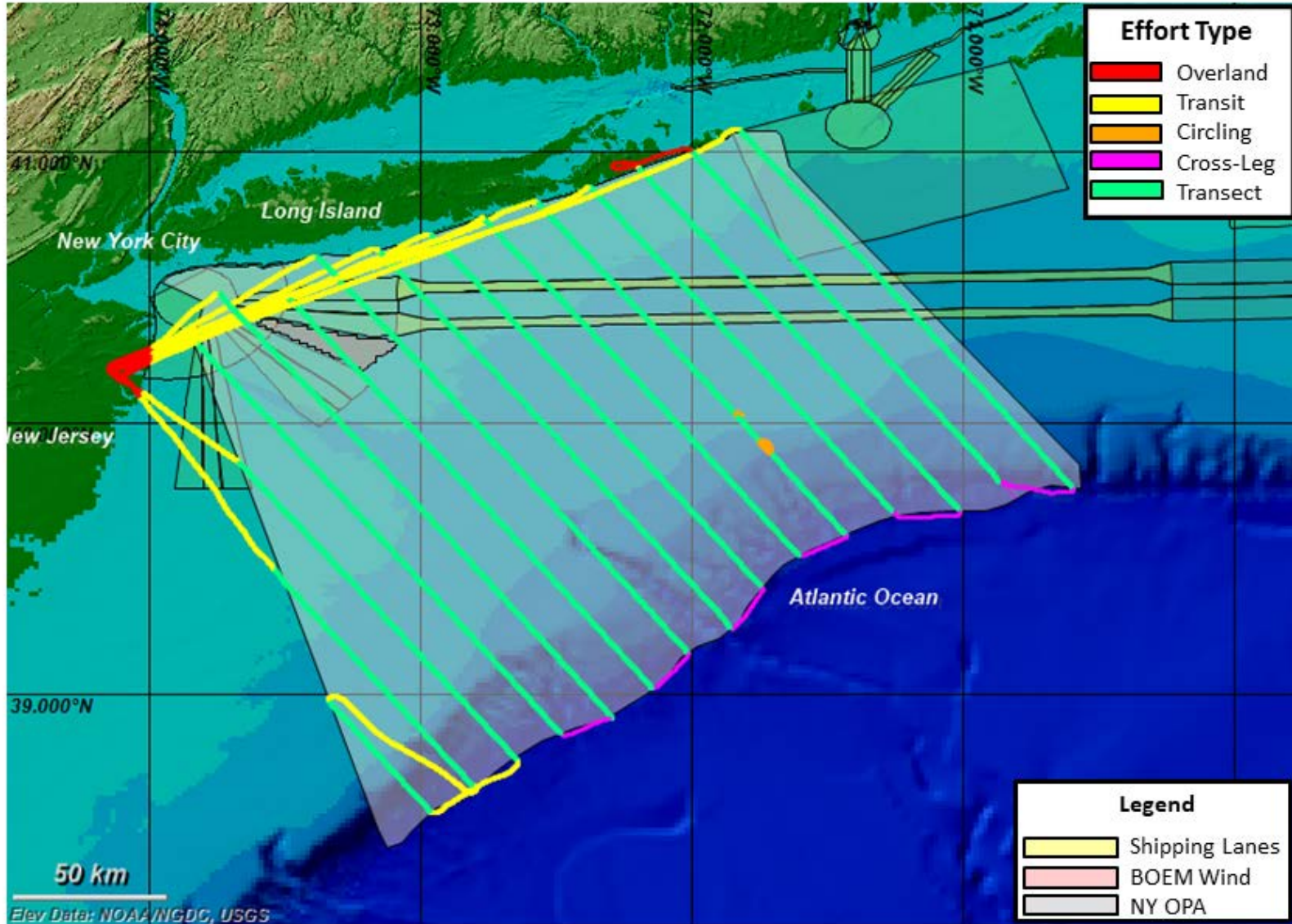


Figure 1. Survey Lines Flown by Effort Type During the March 2018 Survey

3.0 SIGHTINGS

Sightings are presented below based on the following subsections: (1) the six priority large whale species and unidentified whales, (2) other marine mammal sightings, (3) sea turtle sightings, (4) unusual or rare sightings, (5) sightings of dead, injured, stranded, or entangled marine mammals or sea turtles, and (6) other species/object sightings. [Figure 2](#) is a map of all large whale sighting locations, [Figure 3](#) is a map of all marine mammal sighting locations.

3.1 LARGE WHALE SIGHTINGS

A total of three sightings of an estimated four individual large whales were seen ([Table 2](#)). All of these sightings were identified to species. Large whale sightings included one single fin whale, one single humpback whale, and one group (two individuals) of North Atlantic right whales. The North Atlantic right whale sighting was reported to the New England Right Whale Hotline by telephone after completion of the flight (i.e., within 24 hr).

TABLE 2. NUMBER OF LARGE WHALE SPECIES SIGHTED DURING THE MARCH 2018 SURVEY

Common Name*	Scientific Name	Number of Groups	Total Number of Individuals	Mean Group Size (SE)
Blue Whale	<i>Balaenoptera musculus</i>	0	0	0
Fin Whale	<i>B. physalus</i>	1	1	1 (NA)
Humpback Whale	<i>Megaptera novaeangliae</i>	1	1	1 (NA)
Minke Whale	<i>B. acutorostrata</i>	0	0	0
North Atlantic Right Whale	<i>Eubalaena glacialis</i>	1	2	2 (NA)
Sei Whale	<i>B. borealis</i>	0	0	0
Sperm Whale	<i>Physeter macrocephalus</i>	0	0	0
Unidentified Large Whale		0	0	0
Total		3	4	

Notes:

*Listed in alphabetical order

NA = not applicable; SE = standard error

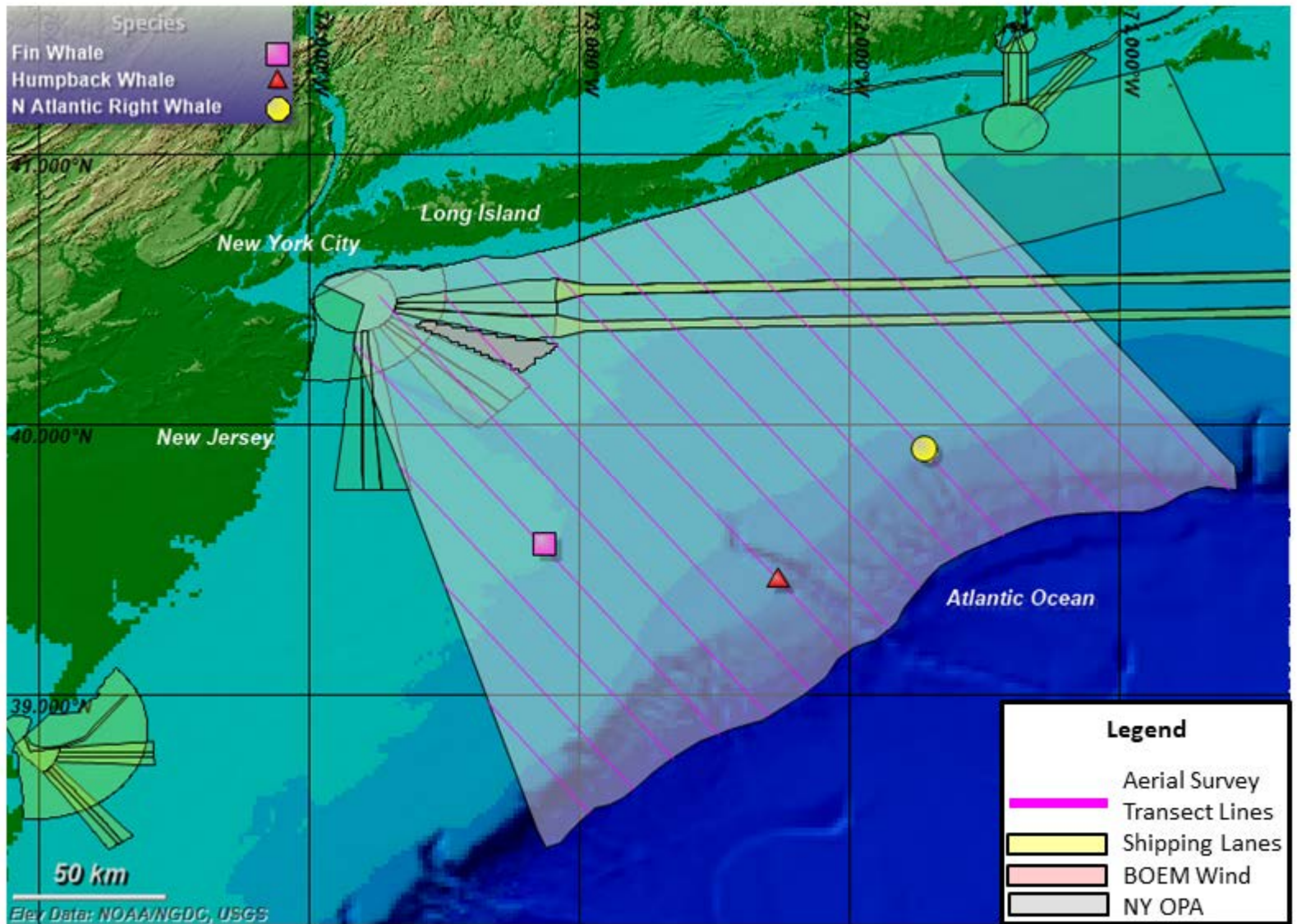


Figure 2. Locations of All Groups of Large Whales Sighted During the March 2018 Survey

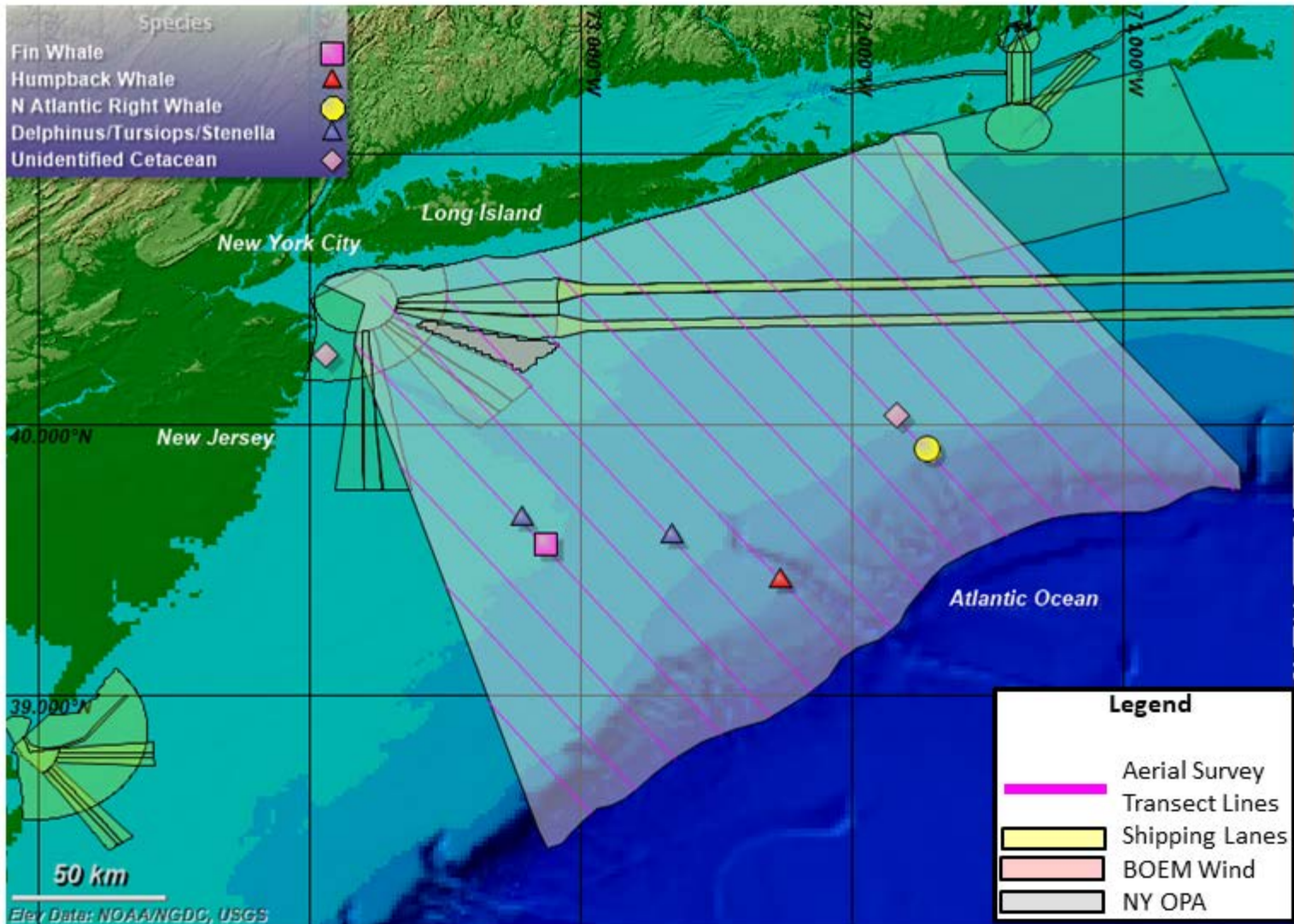


Figure 3. Locations of All Groups of Marine Mammals Sighted During the March 2018 Survey

3.2 OTHER MARINE MAMMAL SIGHTINGS

A minimum total of four sightings of an estimated 39 individual marine mammals other than the six priority whale species were observed (Table 3). This included two groups (estimated total 37 individuals) of *Delphinus/Tursiops/Stenella* spp., and two groups (estimated total two individuals) of unidentified cetaceans (note, in accordance with the project scope of work, dolphins were not circled to confirm species).

TABLE 3. OTHER MARINE MAMMAL SIGHTINGS DURING THE MARCH 2018 SURVEY*

Common Name**	Scientific Name	Number of Groups	Total Number of Individuals	Mean Group Size (SE)
Bottlenose Dolphin	<i>Tursiops truncatus</i>	0	0	0
Common Dolphin	<i>Delphinus sp.</i>	0	0	0
Delphinus/Tursiops/Stenella spp.		2	37	18.5 (3.5)
Risso's Dolphin	<i>Grampus griseus</i>	0	0	0
Unidentified Cetacean		2	2	1 (NA)
Total		4	39	

Notes:

*Some species identifications are preliminary and not certain due to not routinely circling/photographing

**Listed in alphabetical order

NA = not applicable; SE = standard error

3.3 SEA TURTLE SIGHTINGS

There were no sea turtles observed during the March 2018 survey.

3.4 UNUSUAL OR RARE SIGHTINGS

There were no unusual or rare sightings during the March 2018 survey.

3.5 STRANDING AND ENTANGLEMENT REPORTS

There were no sightings of dead, injured, stranded, or entangled marine mammals or sea turtles during the March 2018 survey.

3.6 OTHER SIGHTINGS

There were no other sightings that occurred the March 2018 survey.

4.0 PROBLEMS ENCOUNTERED

There were no problems encountered during the March 2018 survey.

5.0 PHOTOGRAPHS

There were no “best of photographs” during the March 2018 survey.