

March 2017 Survey Report for New York Bight Whale Monitoring Aerial Surveys

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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, 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 2017 survey.

2.0 EFFORT

The March 2017 survey was conducted from March 20-23, 2017. A total of five flights were conducted, representing a total of 18.9 hours in the air. A total of 4,119 kilometers (km) were flown including 2,516 km of pre-determined systematic transect lines and 323 km of shorter cross-leg (connector) lines connecting adjacent transect line, covering 100 percent of the 15 transect lines. [Figure 1](#) shows the survey lines flown. [Table 1](#) presents the flight time and distance by effort type.

TABLE 1. FLIGHT TIME AND DISTANCE BY EFFORT TYPE DURING THE MARCH 2017 SURVEY

Survey Dates	Hours (hh:mm) and Kilometers 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 20-23	0.75	161	3.87	948	12.02	2516	0.83	171	1.47	323	18.94	4,119

Notes:

hr = Hour (hh:mm)

km = Kilometer

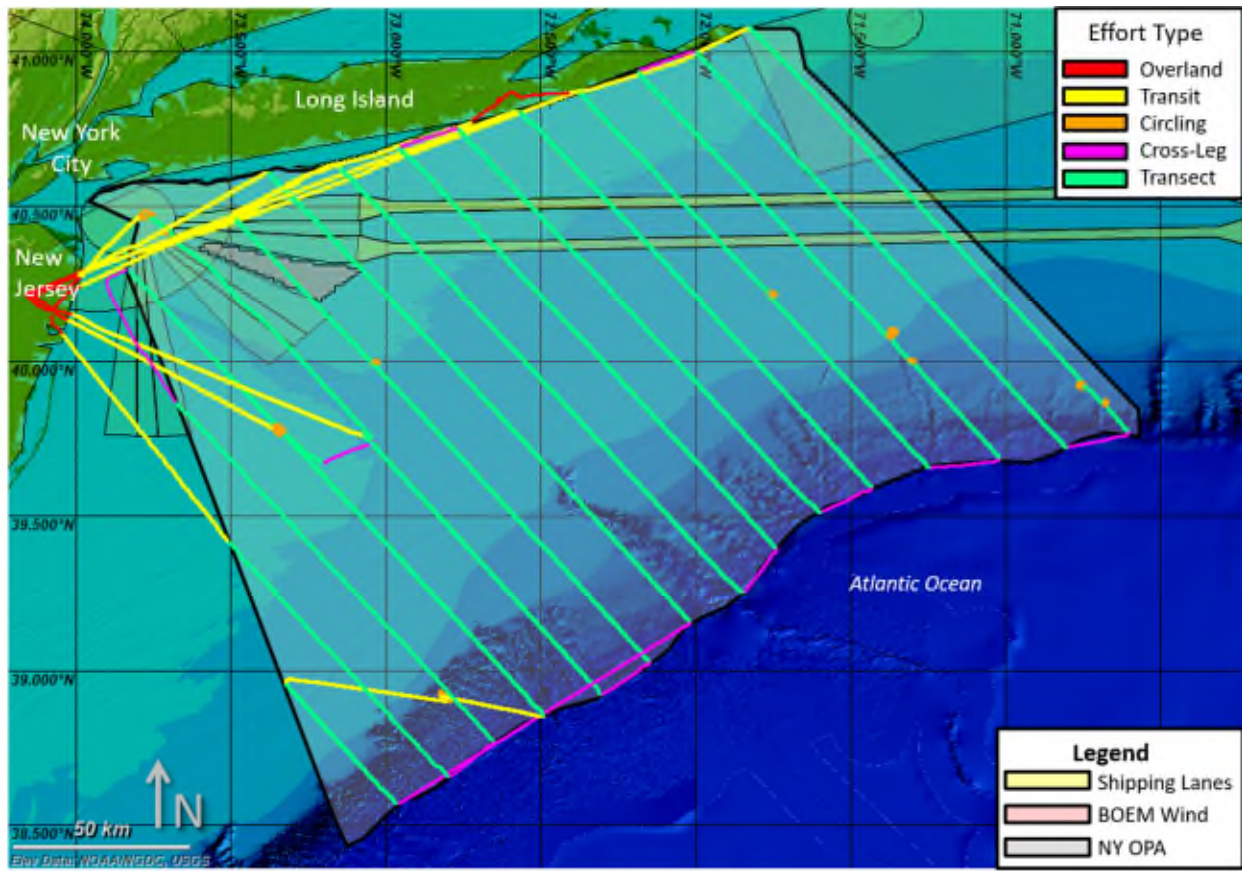


Figure 1. Survey Lines by Effort Type Flown During the March 2017 Survey

3.0 SIGHTINGS

Sightings are presented below based on the following subsections: the six priority whale species and unidentified whales; other marine mammal sightings; sea turtle sightings; unusual or rare sightings; sightings of dead, injured, stranded, or entangled marine mammals or sea turtles; and other species/object sightings. [Figure 2](#) provides a map of all large whale sightings and [Figure 3](#) of all marine mammal sightings. Note that no sea turtles were seen during this survey.

3.1 WHALE SIGHTINGS

A total of 12 sightings of an estimated 15 individual whales were seen ([Table 2](#)). Of these sightings, 10 groups totaling 13 individuals were identified to species. The remaining 2 sightings (3 individuals) were of unidentified large whales.

A total of 2 groups comprising 3 individual North Atlantic right whales were seen. The sightings were reported to the NOAA Northeast Fisheries Science Center Right Whale hotline by telephone after landing and to Tetra Tech by email at the end of the survey day on which the animals were sighted.

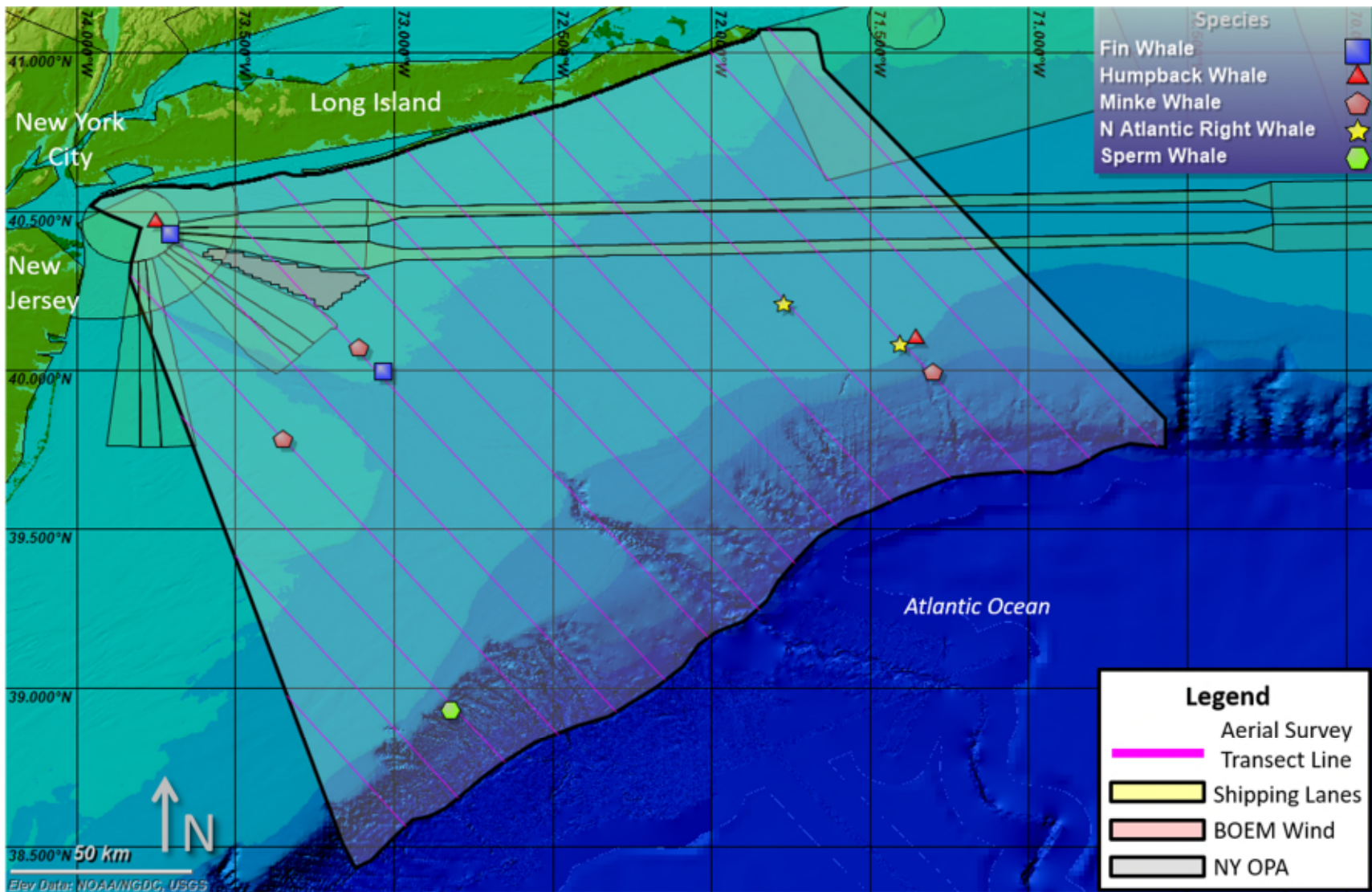


Figure 2. Large Whale Sightings During the March 2017 Survey

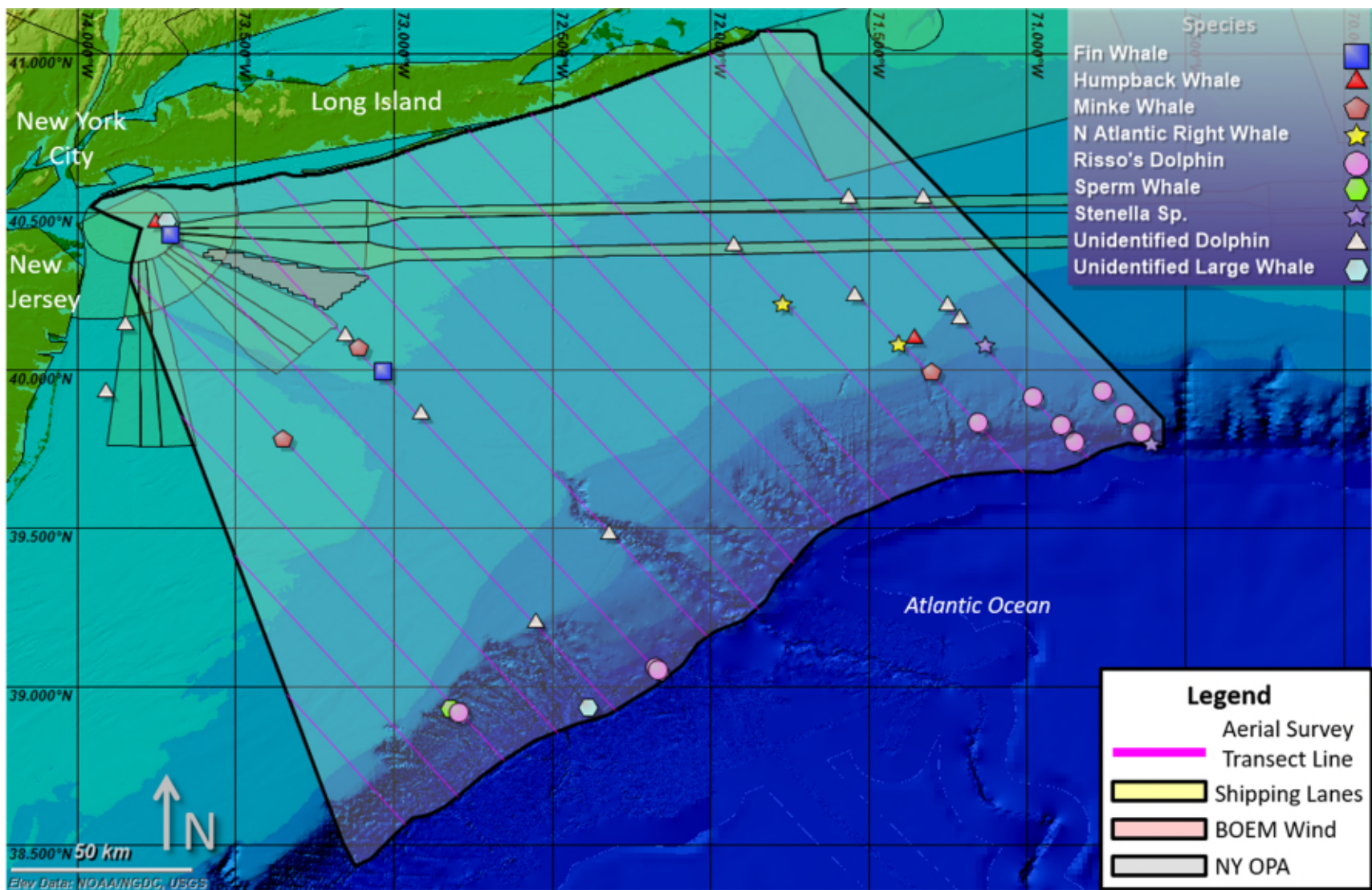


TABLE 2. WHALE SIGHTINGS DURING THE MARCH 2017 SURVEY

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>Balaenoptera physalus</i>	2	2	1 (0.00)
Humpback Whale	<i>Megaptera novaeangliae</i>	2	3	1.5 (0.50)
North Atlantic Right Whale	<i>Eubalaena glacialis</i>	2	3	1.5 (0.50)
Minke Whale	<i>Balaenoptera acutorostrata</i>	3	3	1 (0.00)
Sei Whale	<i>Balaenoptera borealis</i>	0	0	0
Sperm Whale	<i>Physeter macrocephalus</i>	1	1	1 (0.00)
Unidentified Large Whale		2	3	1.5 (0.50)
Total		12	15	

Notes:

*Listed in alphabetic order

SE = Standard error

3.2 OTHER MARINE MAMMAL SIGHTINGS

A total of 24 sightings of an estimated 117 individual other marine mammals (all delphinid cetaceans) were observed (Table 3). Of these sightings, 12 groups totaling 44 individuals were identified to species. The remaining 12 sightings (73 individuals) were of unidentified dolphins (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 2017 SURVEY

Common Name*	Scientific Name	Number of Groups	Total Number of Individuals	Mean Group Size (SE)
Risso's Dolphin	<i>Grampus Griseus</i>	10	41	4.1 (1.62)
Stenella Sp.	<i>Stenella Sp.</i>	2	3	1.5 (0.50)
Unidentified Dolphin		12	73	6.1 (1.24)
Total		24	117	

Notes:

*Listed in alphabetic order

SE = Standard error

3.3 SEA TURTLE SIGHTINGS

No sea turtles were sighted during this survey.

3.4 UNUSUAL OR RARE SIGHTINGS

There were no unusual or rare sightings during this survey.

3.5 STRANDING AND ENTANGLEMENT REPORTS

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

3.6 OTHER SIGHTINGS

In addition to those described above, there were four other non-marine mammal sightings:

- Two individual sharks in two groups
- One fish school
- One sunfish (*Mola mola*)

4.0 PROBLEMS ENCOUNTERED

No problems were encountered during this survey.