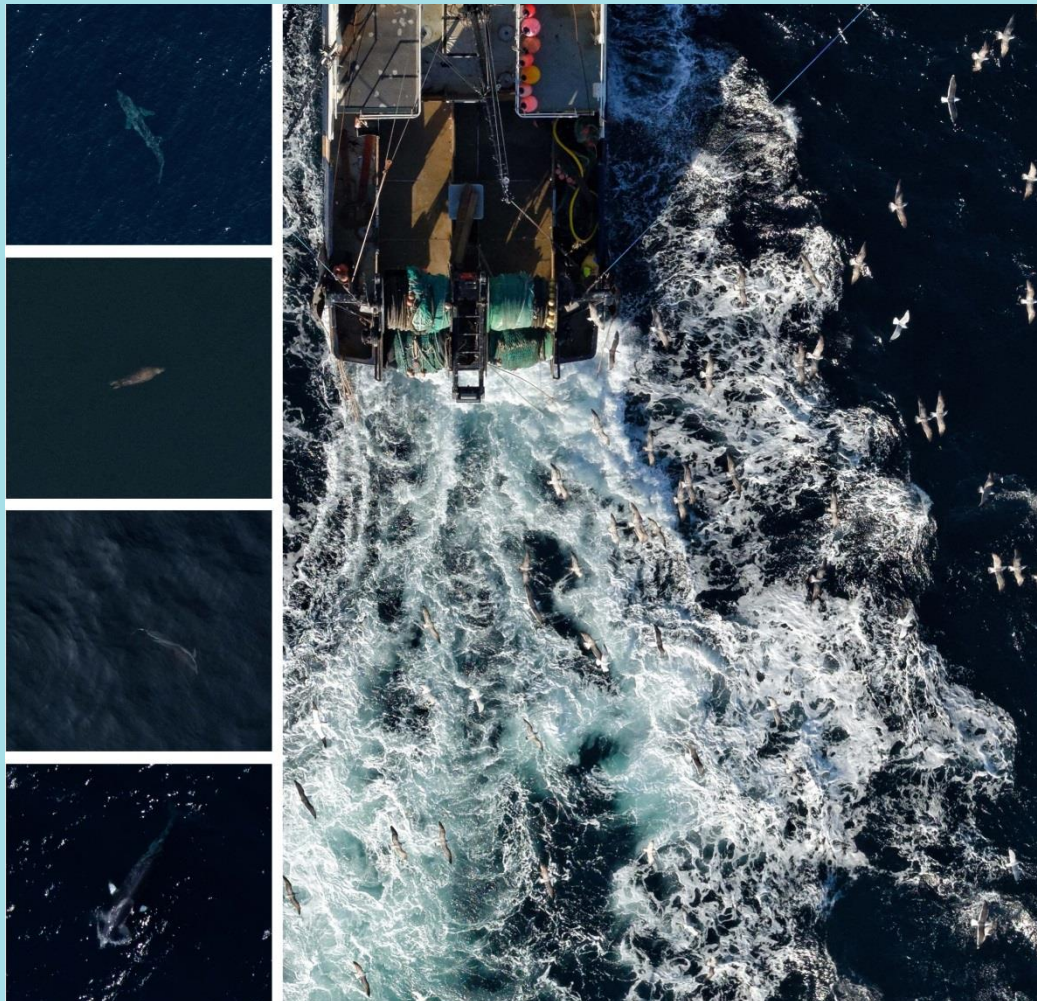


Digital Aerial Baseline Survey of Marine Wildlife in Support of Offshore Wind Energy

Spring 2017 Target Extraction Summary Report



NYSERDA



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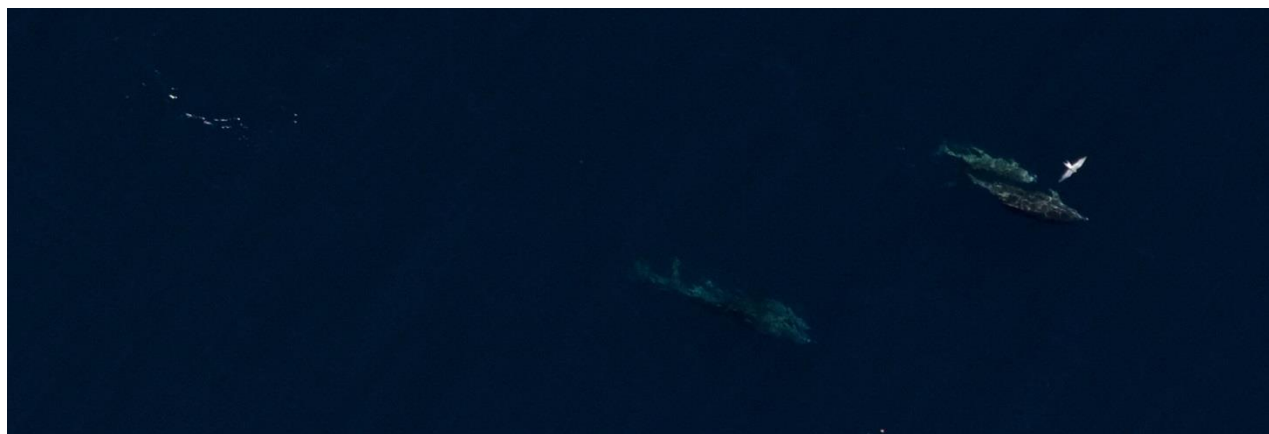


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November 2017



Introduction

Target extraction for the Spring 2017 survey for the NYSERDA Offshore Planning Area (OPA) and Wind Energy Area (WEA) was started in September 2017. All target extraction and quality control of target extraction was completed by November 2017.

Overview

The vast majority of the images collected contained no evidence of living organisms. More than 99% of the images from the WEA were blank as were more than 98% of the images from the OPA. Of the 350,824 images analyzed, 346,632 were blank. Of the 34,685 (10.01%) blank images that were re-examined, 66 were determined to contain targets (living organisms) that had been missed in the initial target extraction. The overall quality rate of the initial extraction was 98.81%, well within the quality control criteria established for the project. Images found to contain organisms were transmitted to taxonomists for identification.

Blank Images Detected

Area	Total Images Analyzed	Blank Images			
		Number Detected	Number Sent for QA	Total Percent QA	Total Percent Blank
WEA	12,683	12,582	1,258	10.00	99.2
OPA	338,141	334,050	33,427	10.01	98.79
Total	350,824	346,632	34,685	10.01	98.81

Total Images and Area Surveyed

Area	Total Number of Images Collected	km ² of Analyzed Images within the Survey Area	Percent Coverage	Survey Area (km ²)
WEA ^a	12,683	133.54	15.69	850.92
OPA ^b	338,141	3,293.25	7.53	43,745.20
Total	350,824	3,426.77	7.68	44,596.12

^a This table only represents the imagery that was processed and analysed per the scope of work. An additional 10% percent coverage was collected for the WEA but is being stored if needed for future processing and analysis.

^b Percent coverage of the entire OPA including the WEA imagery.

Targets Detected

Group	Total (OPA and WEA)	OPA	WEA
Avian	3,807	3,668	139
Fish species	645	642	3
Fixed Structure	3	3	0
Marine Mammal species	1,694	1,687	7
Ray species	0	0	0
Shark species	182	180	2
Turtle species	10	10	0
Vessel	15	15	0

Quality Control Results

Number of Images for QC	Number of Images QCd as Blank	Number of Images QCd Not Blank	% Agreement Reached
34,685	34,619	66	99.81

Animal Order Found in Image	Number of Individuals	Number of QCd Images Containing Species Group
Birds	11	11
Fish	50	50
Marine Mammals	2	2
Turtles	3	3
TOTAL	66	66