

Seabird Data Summary

Cappahayden K-67

April 24, 2020, to July 07, 2020

Facility: Transocean Barents

Position: 47°56.35' North
046°39.56' West

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1.0 INTRODUCTION

Equinor Canada Ltd. (Equinor) contracted PAL Aerospace Ice and Environmental Services to provide environmental and seabird and mammal monitoring services supporting operations on the Cappahayden K-67 well site (Figure 1) from April 24, 2020, at 0130z to July 07, 2020, at 0203z. However, no seabird or mammal observations were recorded on July 07 while on the Cappahayden K-67 wellsite as the facility departed the wellsite at 0203z. Seabird observations are usually recorded throughout the day until approximately 1800z.

During this time, the Transocean Barents (Figure 2) was staffed with PAL Aerospace's Offshore Ice and Environmental Observers/Specialists as the Marine Mammal, Sea Turtle, and Seabird Observers (MMSTSO), by request of the operator. They conducted three seabird surveys daily and visual observations for marine mammals; all following the Offshore Physical Environmental Guidelines (C-NLOPB, 2008).

The MMSTSO was responsible for systematic searches for stranded seabirds while on the Cappahayden K-67 wellsite. Information provided in this report spans from April 24 - April 29, after which time daily searches were not recorded until after the Transocean Barents had moved onto the next wellsite. These daily searches were not recorded onboard the Transocean Barents, due to various factors by PAL personnel. There was a lack of information provided in handovers between the MMSTSOs. Specific tasks regarding seabird searches were not communicated during the offshore deployment of MMSTSOs. When this issue was brought to the attention of onshore personnel, it was rectified immediately. Please note, that although daily searches were not completed during this time frame, any stranded seabirds identified on the deck of the Transocean Barents would have been brought to the attention of the MMSTSO onboard and recorded in the appropriate documentation.

All data collected on the Transocean Barents was stored in a local database at PAL Aerospace and used to compile this report. For environmental data comparison, all times and dates are in Coordinated Universal Time (UTC).

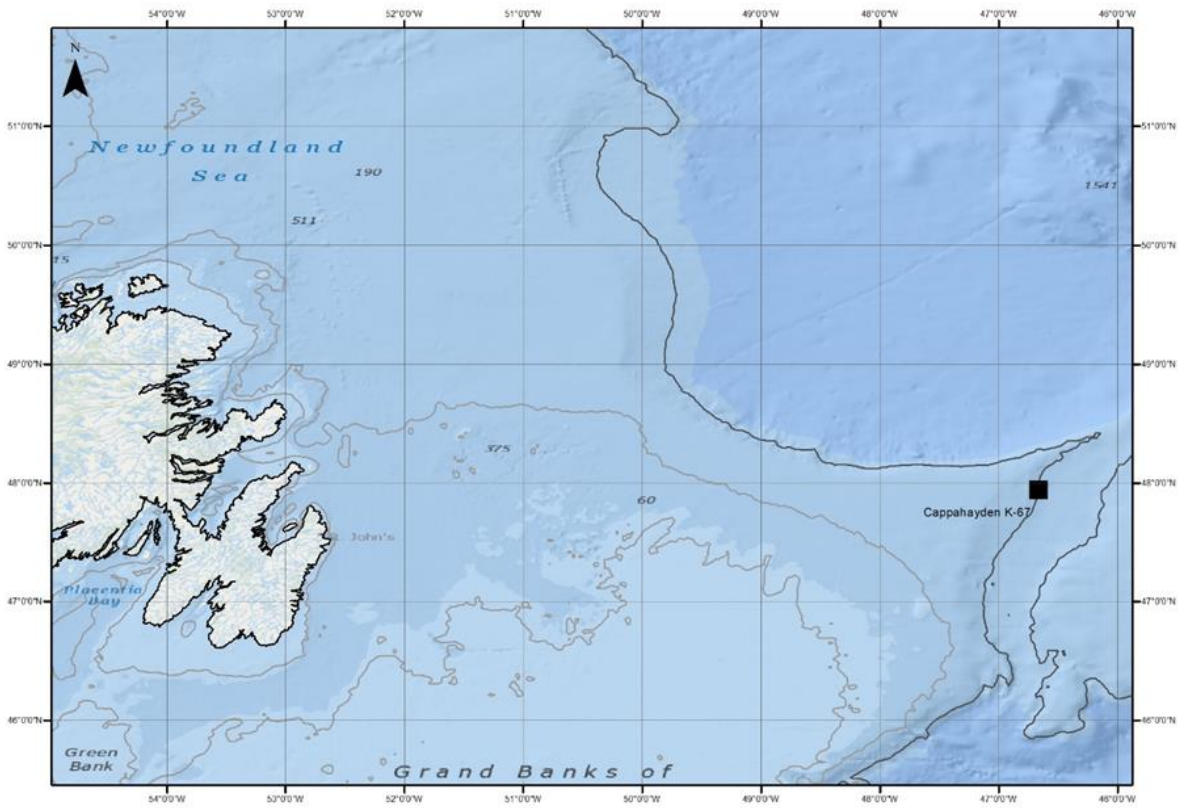


Figure 1: Cappahayden K-67 Well Site Location (47°56.35'N, 046°39.56'W)



Figure 2: Transocean Barents

2.0 SUMMARY OF SEABIRD SURVEY, HANDLING, AND OBSERVATION

Equinor conducted a seabird monitoring program on the Cappahayden K-67 well site from April 24, 2020, when the Transocean Barents arrived on location, to July 07, 2020, when the project completed for that well site. Observations on the Transocean Barents were conducted by the onboard MMSTSO. These observations were completed as per the Eastern Canada Seabirds at Sea (ECSAS) Standardized Protocol for Pelagic Seabird Surveys from Moving and Stationary Platforms (Gjerdrum C., 2012) and the Seabird Survey, Handling, and Observation Protocol (Equinor, 2020).

2.1 OBSERVATION PROCEDURES

- Scan a 180 arc if possible, giving priority to any birds within a 300m semi-circle (Figure 3)
- The semi-circle is broken down into 5 zones
 - A: 0 50m
 - B: 50 100m
 - C: 100 200m
 - D: 200 300m
 - E: >300m

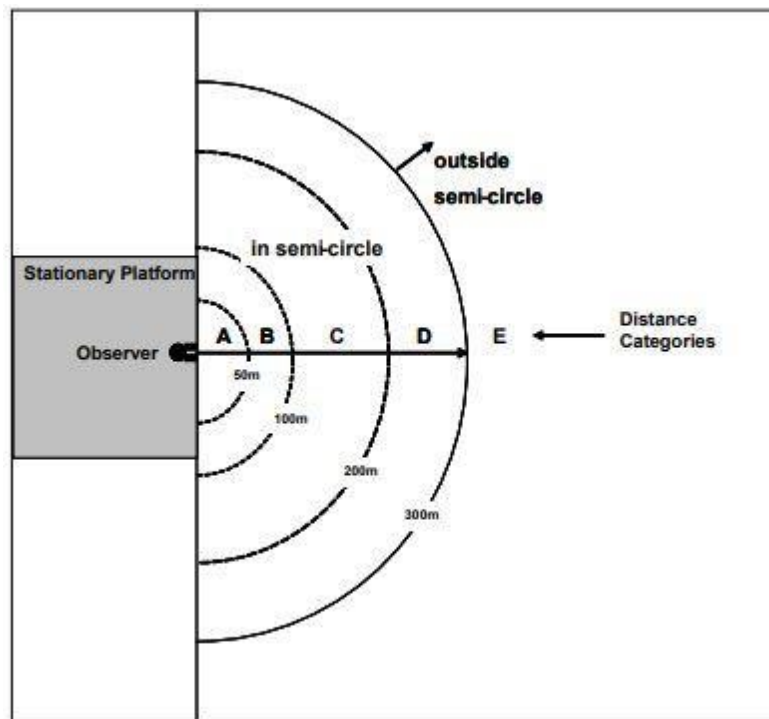


Figure 3: Seabird Observations Zones

- Visually sweep the area, once per scan, scanning from one direction to another
- Systematically record all birds on the water and in flight
- The survey is conducted from a position outdoors whenever possible, as close to the edge of the platform as permitted
- A position near the edge will increase the detection rates of birds, especially for birds that use the waters at the base of the platform
- If surveys are being conducted from a stationary platform, such as an oil drilling rig, the MMSTSO should scan from the same location each time to increase the comparability among scans
- In poor visibility note how far you can see and conduct the scan anyway
- When no birds are detected during a scan, it is important to record "No birds observed"

The MMSTSO utilizes instantaneous counts of seabird occurrences and behaviour from stationary platforms at regular intervals for a total of three observations daily (from 0600 NDT to 1800 NDT). Data is collected regardless if seabirds are present or not. PAL Aerospace's environmental monitoring software, the Ice Data Network System (IDNS), records the number, species, and activities of all seabirds observed.

The MMSTSO was responsible for searching and scanning the decks for stranded and/or deceased seabirds twice daily. All crew members were also requested to alert the MMSTSO if stranded birds were found. The Equinor SSU Coach was available to assist the MMSTSO if needed. When stranded birds are recovered and released, the MMSTSO follows the handling methods devised by Williams and Chardine (1999).

2.2 STRANDED SEABIRD SEARCH PROCEDURES

MMSTSOs conduct daily inspections of the facility to search for potentially stranded birds. This survey quantifies species numbers and status (alive or dead), and timing of migratory bird stranding in the area. This survey consists of outlining the area searched, as well as all findings in the search. Full procedures for stranded seabird searches can be found in the Seabird Survey, Handling, and Observation Protocol (Equinor, 2020).

3.0 SUMMARY OF MARINE MAMMAL AND SEA TURTLE MONITORING

Visual observations on the Transocean Barents were conducted by the onboard MMSTSO during daylight hours. Observations were conducted primarily from the bridge. No sightings were observed throughout the project period on the Cappahayden K-67 well site.

Visual scans were made with the naked eye and with 7x50 binoculars. The detection cues that would have been used were the presence of groups of birds, unexpected splashes, blows, and black objects breaking the surface. Whenever possible, sightings would have been photographed to aid species identification.

Species are identified based upon physical characteristics and behaviours. Identification is facilitated by consulting relevant field guides and by observer experience.

If visual detections occurred, the MMSTSO would have recorded all pertinent information about the sighting within PAL Aerospace's environmental monitoring software, the IDNS.

4.0 RESULTS

4.1 SEABIRD SIGHTINGS

The MMSTSOs provided by PAL Aerospace Ice and Environmental Services conducted seabird monitoring services on the Cappahayden K-67 well site from April 24, 2020, to July 07, 2020. During this period, a total of 255 seabird observation entries recorded 5,767 individual seabirds. 57 observations (22.4% of all observations) resulted in no seabirds identified in viewing distance of the MMSTSO's facility. 28 observations (11.0% of all observations) resulted in no sightings. The most frequent individual seabird sighting was the Northern Fulmar (1,528 individual birds sighted, 26.5% of all birds sighted), followed by Herring Gull (1,432 individual birds sighted, 24.8% of all birds sighted). However, from April 30 until July 07, 2020, the MMSTSO did not record systematic seabird searches onboard the Transocean Barents.

Table 1 and Figure 4 provide summaries of all seabird observations recorded on the Cappahayden K-67 location from April 24, 2020, to July 07, 2020.

Table 1: Seabird Sightings for the Cappahayden K-67 Well Site

Species	Number
Black-Legged Kittiwake	1,099
Glaucous Gull	43
Great Black-Backed Gull	517
Great Shearwater	11
Herring Gull	1,432
Iceland Gull	1
Leach's Storm-Petrel	77
Northern Fulmar	1,528
Northern Gannet	1
Savannah Sparrow	1
Unknown Gull	1,055
Unknown Murre	1
Wilson's Storm-Petrel	1
Total	5,767

Observation	Number
Total Observations	255
No Birds	57
No Sightings	28

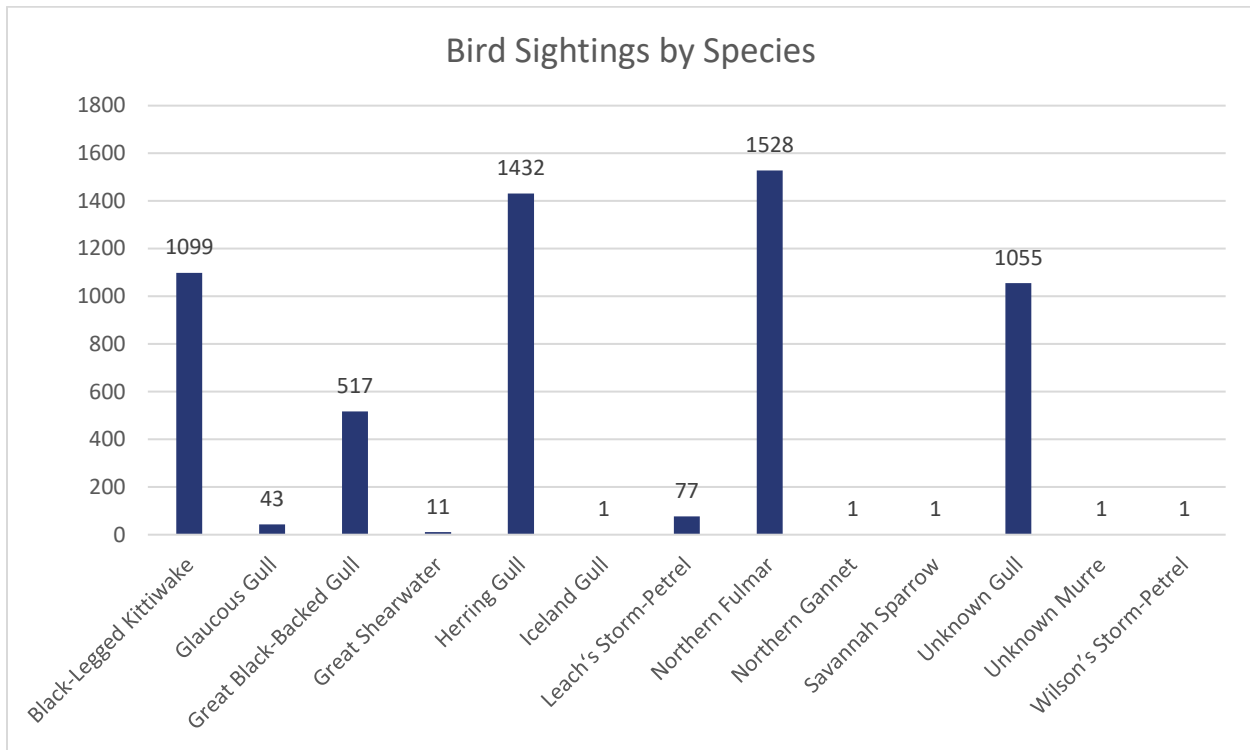


Figure 4: Seabird Sightings for the Cappahayden K-67 Well Site

4.2 SEABIRD RECOVERY

The initial instance that the Transocean Barents was in operation on the Cappahayden K-67 well site, there were two separate instances where stranded seabirds were found onboard the facility. Please see Table 2: Seabird Strandings for the Cappahayden K-67 Well Site for reference. The first instance occurred on April 29, 2020, at 23:30L. The species of seabird was unknown. The carcass was found outside the moonpool after hoses were used in the area and the body was flushed out. The carcass was quite deteriorated. It is assumed the seabird must have died some time ago. Refer to Figure 5: Carcass of Stranded Seabird, April 29, 2020 for an image of the Unknown Bird.

During the second instance, two Sparrows were found. One of the Sparrows was found dead inside an aft box girder by a crew member. Another Sparrow was found alive under a pipe on the main deck by the deck crew, however, it died awaiting release.

Table 2: Seabird Strandings for the Cappahayden K-67 Well Site

Date (yyyy/mm/dd)			2020-04-29	2020-05-24
Location of stranding (Lat/Long, or Name)			Cappahayden K-67, Flemish Pass	Cappahayden K-67, Flemish Pass
Bird Species			Unknown Bird	Sparrow
Total # of Stranded Birds			1	2
Found Dead	# Oiled		0	0
	Fate	# Disposed of at Sea	1	1
		# Sent Ashore	0	0
Captured Alive	Oiled	# Died in Care	0	0
		# Released Alive	0	0
		# Sent Ashore	0	0
	Not Oiled	# Died in Care	0	1
		# Released Alive	0	0
		# Sent Ashore	0	0
Fog (y/n)			N	Y
Rain (y/n)			N	N



Figure 5: Carcass of Stranded Seabird, April 29, 2020

5.0 ENVIRONMENTAL EFFECTS OF THE SURVEY

The marine mammal, sea turtle, seabird observations and stranded seabird checks summarized in this report demonstrate that appropriate monitoring procedures were implemented during the project, including following the requirements in the Canadian Statement of Practice (Government of Canada, 2016).

6.0 SUPPLEMENTARY DIGITAL DATA

The following data has also been provided for this report:

- The Seabird Spreadsheet: Spreadsheet outlining all data and statistical analysis completed (April 24, 2020 – July 07, 2020);
- The Seabird Daily Reports: Forms identifying numbers for seabird searches performed (April 24 - April 29);
- The Seabird Encounter Datasheet Tracker: Spreadsheets identifying numbers for seabirds encountered (April 29 & May 24); and,
- ECSAS Spreadsheet for Import: The spreadsheet to be imported into the active database for all observation information recorded.

7.0 WORKS CITED

Chardine, U. W. (1999). Leach's Storm-petrel (*Oceanodroma leucorhoa*). A Handbook on Release Techniques Prepared for Workers on the Terra Nova Oil Field.

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