



## ᓄᓇᑭᑦ ᐃᓚᑎᑦᑎᐱᐅᑦ ᑲᑎᒐᐱᓪᑦᑎᑭᑦ ᐅᐱᓪᑦᑲᑦ ᑭᑭᑦᑲᑦᑲᑦ #126176

## Western Hudson Bay beluga population abundance estimate

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New

ᐱᑦᑎᐃᑎᑦᑲᑦᑲᑦ  
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Scientific Research

ᐅᑦᑲᑦᑲᑦ ᐅᐱᓪᑦᑲᑦᑲᑦᑎᑦᑲᑦᑲᑦ: Tuesday, April 22, 2025

**Period of operation:** from 2025-07-18 to 2025-08-03

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כחלק מפרויקט

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**ᑭᓪᓂᕐᓴᓄᓐ:** The WHB beluga population has been studied through aerial survey and satellite tracking in the 1980's, early 2000's and most recently in 2015. Data collected suggest that the population has been relatively stable. However, recent changes such as increased shipping traffic and potentially increased hunt pressure warrant an update to the abundance estimate for this population as the last survey was conducted ten years ago. The survey will be designed to cover the summer range of belugas in western and southern Hudson Bay following past survey efforts (2004 and 2015), and beluga satellite tracking data. Surveys will include a crew of four visual observers as well as one camera operator, and will be flown in two Twin Otter planes fitted with four bubble windows and a camera port. We will hire observers to assist with the survey from the adjacent communities and have requesting recommendations for staff of people who are interested. All equipment and training needed for the survey will be provided by Fisheries and Oceans Canada. The survey will use a combination of aerial photography in estuaries, where the highest densities of animals are expected, and visual surveys, in areas where lower densities of beluga are expected. Surveys will be flown at an altitude of 305 m for visual portions and 610 m for photographic portions. Both planes will be based out of Churchill for the duration of the survey.

►Δ&ND<sup>c</sup>: La population de bélugas de l'ouest de la baie d'Hudson a été étudiée grâce à des survols aériens et des suivis satellitaires dans les années 1980, 2000 et plus récemment en 2015. Les données récoltées suggèrent que la population est relativement stable. Cependant, des changements récents comme l'augmentation du trafic maritime et une pression de chasse potentiellement plus élevée rendent nécessaire une mise à jour de l'estimé d'abondance de cette population (le dernier survol ayant eu lieu il y a déjà 10 ans). Le survol couvrira l aire d'estivage des bélugas dans l'ouest et le sud de la baie d'Hudson, déterminée par les survols ayant eu lieu en 2004 et 2015 ainsi que par les données de suivis satellitaires. Les survols comprendront une équipe de 4 observateurs visuels ainsi qu'un opérateur de caméra, et se feront à bord d'avions Twin Otter équipés de 4 hublots convexes ainsi qu'une station de caméras. Nous allons engager des observateurs dans les communautés adjacentes au survol. Tout l'équipement et la formation nécessaire pour le survol seront fournis par Pêches et Océans Canada. Le survol utilisera une combinaison de photographies aériennes dans les estuaires, où une plus forte densité de bélugas est prévue, et d'observations visuelles dans les zones où une plus faible densité de bélugas est prévue. Les avions voleront à une altitude de 305m pour les portions visuelles et 610m pour les portions photographiques. Les deux avions seront basés à Churchill pour toute la durée du survol.

[illegible]

## Personnel

Personnel on site: 8

Days on site: 15

Total Person days: 120

Operations Phase: from 2025-07-18 to 2025-08-03

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Area surveyed to estimate the abundance of the WHB beluga population	Scientific/International Polar Year Research	Marine	N/A	N/A	Nunavut communities: Arviat, Whale Cove, Rankin Inlet, Chesterfield Inlet. Nunavut protected area: Kuugaarjuk Migratory Bird Sanctuary

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ᐳᖅᐸᐳᑦ	Alex Ishalook	Arviat Hunters and Trappers Organization	2025-01-15

$\subset \Delta^{\text{e}j^c} \wedge J^{\text{e}}_{\text{e}\triangleright \dot{n}} \triangleleft^{\text{e}} r^{\text{eb}} C \triangleright / L \text{r}^c$

### Project transportation types

Transportation Type	How to Use	Length of Use
Air	Twin Otters will be used to fly systematic survey lines	

### Project accomodation types

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$\Delta^b C d^c$ 
$$\Delta^b C d \Gamma n \sigma \Delta^c \sigma^c$$

ለርቢሳንፕላንፕላን ለርቢሳንፕላንፕላን	ፍጥረት ፍጥረት	ፍጥረት ፍጥረት ከፍተኛ ፍጥረት	ፍጥረት ፍጥረት	ከፍተኛ ፍጥረት ፍጥረት
Aerial surveys	ፍጥረት	2L	Left on the land	Staff and observers may need to go to the washroom while landing to refuel.

◀◀⋈▶C♯C◀<sup>b</sup>C<sup>♯</sup>C▶L<sup>♯</sup>

There will be no environmental impacts on the land as we will use airports to refuel, and already demarcated landing strips where fuel is regularly cached as needed. There will be minimal noise disturbance to wildlife as we fly at an altitude of 1000-2000ft.

# **Additional Information**

**SECTION A1: Project Info**

**SECTION A2: Allweather Road**

**SECTION A3: Winter Road**

**SECTION B1: Project Info**

**SECTION B2: Exploration Activity**

**SECTION B3: Geosciences**

**SECTION B4: Drilling**

**SECTION B5: Stripping**

**SECTION B6: Underground Activity**

**SECTION B7: Waste Rock**

**SECTION B8: Stockpiles**

**SECTION B9: Mine Development**

**SECTION B10: Geology**

**SECTION B11: Mine**

**SECTION B12: Mill**

**SECTION C1: Pits**

**SECTION D1: Facility**

**SECTION D2: Facility Construction**

**SECTION D3: Facility Operation**

**SECTION D4: Vessel Use**

**SECTION E1: Offshore Survey**

**SECTION E2: Nearshore Survey**

**SECTION E3: Vessel Use**

**SECTION F1: Site Cleanup**

## SECTION G1: Well Authorization

## SECTION G2: Onland Exploration

## SECTION G3: Offshore Exploration

## SECTION G4: Rig

## SECTION H1: Vessel Use

## SECTION H2: Disposal At Sea

## SECTION I1: Municipal Development

**İşin Ayrıntılarına Göre: İşin İçeriği**

[illegible][illegible]

### Miscellaneous Project Information

[illegible]

## Cumulative Effects

## Impacts

$\mathbb{A}^b \mathbb{C} \triangleright \sigma^a \tau^c \triangleleft \mathbb{B} \Gamma \triangleright \mathbb{C} \dot{\sigma}^c \mathbb{D}^c \triangleleft \mathbb{D}^b \mathbb{C} \triangleright \tau^c \mathbb{L} \tau^c$

[illegible]

( $P = \langle b \rangle_{\dot{a} \cdot p \cap \dot{a} \cdot b \cdot c}$ ,  $N = \langle b \rangle_{\dot{a} \cdot r \cdot c \cdot \dot{a} \cdot b \cdot c} \subset \langle \dot{a} \cdot \Gamma \cdot \dot{r} \cdot b \cdot c \cdot \dot{a} \cdot \Gamma \cdot \dot{a} \cdot c \rangle$ ,  $M = \langle b \rangle_{\dot{a} \cdot r \cdot c \cdot \dot{a} \cdot b \cdot c} \subset \langle \dot{a} \cdot \Gamma \cdot \dot{r} \cdot b \cdot c \cdot \dot{a} \cdot \Gamma \cdot \dot{a} \cdot b \cdot c \rangle$ ,  $U = \langle b \rangle_{\dot{a} \cdot \Gamma \cdot \dot{a} \cdot c \cdot \dot{a} \cdot \Gamma \cdot \dot{a} \cdot c}$ )

1 polygon	Area surveyed to estimate the abundance of the WHB beluga population
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