

# Thank you for participating in Bearwatch

## What is BearWatch?

BearWatch is a broad collaboration with a main goal of developing tools to non-invasively monitor Nanuq and develop compensated, community-level monitoring methods based in IQ and on Nunavut & Inuvialuit Settlement Region community inputs. (See <https://bearwatch.ca> for contacts)

Start date: Jan 2017

End date: March 2023

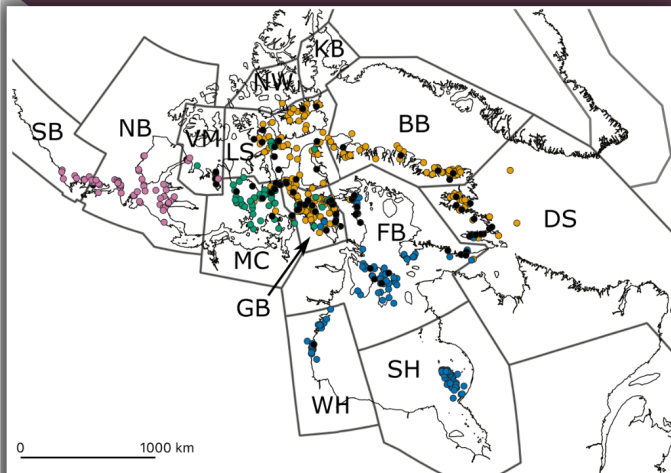
### Your Invaluable Help

- You shared polar bear **TEK** for this project.
- You **collected tissues** from your harvests: muscle, fat, liver and some colon with anak.
- You collected **nanuq anak while on the land**.
- You told us **how much effort** it takes to collect on the land samples (like anak and snow from polar bear footprints) **using your knowledge and satellite communicators**.



### Achievements

- New genetic method to **identify** individuals from their anak.
- Testing method to identify individuals from the **DNA** in the snow from their **footprints**.
- New methods to identify **bear diet from anak**.
- Some **anak contaminant** levels (e.g methyl mercury) **predict** contaminant levels in muscle, liver and fat.
- **microplastics** in polar bear anak - so far found very little.
- new tool to **identify disease-causing** things in polar bear tissues and anak.



Four major genetic groupings of polar bears revealed with new genetic tools developed by BearWatch and using hunter collected harvest samples. At a minimum, these tools work on harvest samples, biopsy samples and scat (anak). We are close to optimizing their use on snow from polar bear footprints and dens.

### Recent and Next Steps

- **Calculate costs** of collection of samples.
- Determine **management 'value' of non-invasive methods**.
- **Workshops in Nunavut and NWT** to introduce new tools.
- **Ask residents** best ways to monitor and **use new tools**.
- Discuss **ethical ways of knowledge relating** (including IQ) and best ways to move forward with community monitoring.

### Collaborators



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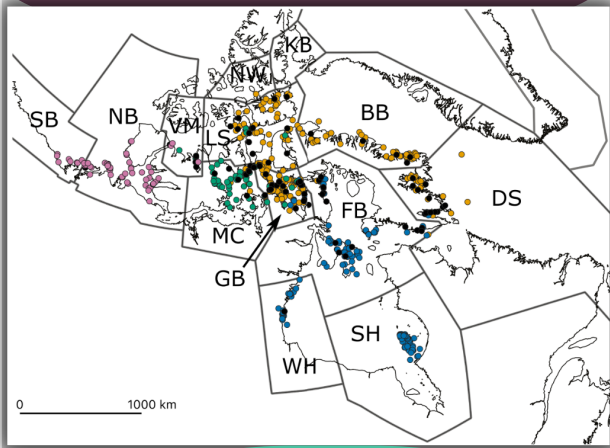
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ΔΙΕΥΘΥΝΤΗΣ: Λ. 2023

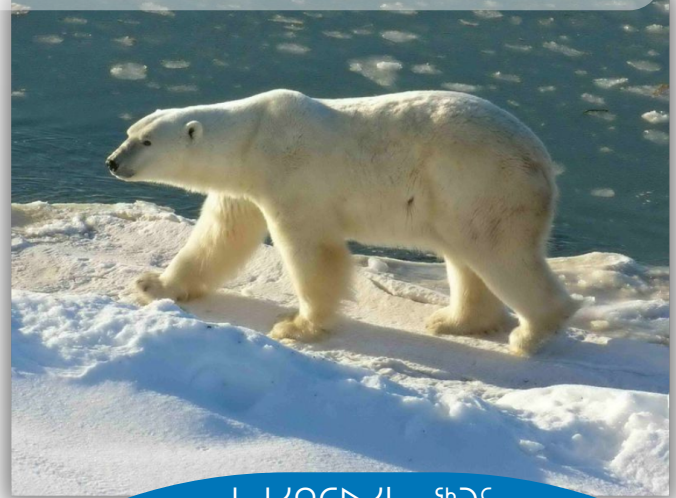
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Gjoa Haven  
Hunters &  
Trappers

Aiviit Hunters &amp; Trappers



# Qannaqquhi Illaugaffi Nanuligivaktuni

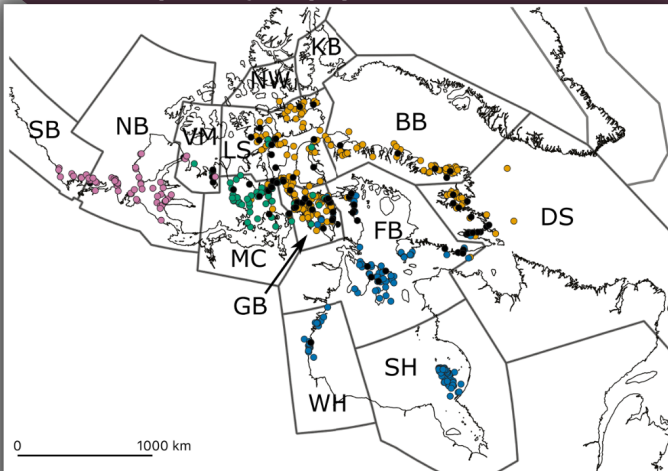
## Hulligivaktutliqaa Nanuligiyut?

Nanugnik qauyihaliqpaktun amigaitun katujjivlutik nalvaagnahuaqtun havagutikhainik nanugnik qauyihaguutaginiini palvihaqhimaitumik qauyihagutauyukhanik uvalu maniliugutauvaktuni Nunavutmiutanun inuqutailu illauvaktutik. (Takulugu <https://bearwatch.ca> uqaqatigiyyakhanik)

Pigiaqtun: January 2017

### Ikayupakkuffi Annigiyauyuq

- Tunnuqqaivaktuhi illihimayutinnik **inuit qauyimayatukang** atughugin uvuuna piligipqaivaktavun.
- Katiqhuvakkaffi **nanuit illainiq** qauyihagauyukhanik nanuqhiuqtunin: nukiinik, uqhuinik, tingunganik iqhuanitlu analikmik.
- Katiqhuivaktuhi **nanuit anainik aulaaguutagitivluhi**.
- Uqaqaktuhi **qanuq akhuuqnagiananganik katiqhuiyaami** nunainaqmin (uvaluqaa anainit apputimilu tumainit) **illihimayahi atughugin qangattaqhimayutigitlu tuhaumaqatautiyutiqaqhuhi**.



Uuktuliqtun havagutimik nutaamik nalunaiyautimik aaniqatigutunuk nanuit timaini anainitlu. Nalunaiyagauhimayut nutaamik havagutinik atughutik nanugnik qauyihagutun illuaqhakpagainik angunahuaqtutlu aangutaint. Huugmi hanagutauyut atugaulluaqtun anguyaayuviniit illangaqtainiit (annainitlu). Qanitukun aputmit tumivinignit naunaiyaiyumaaliqtun.

### Tugliit Atugakhan

- **Nalaunnahuaqhsugin akitutiginii** katiqhutivlugin qauyihagutauyukhanik.
- Nalunaiyaqlugin **aulatauniitigun 'atugnagtiginii'** palvihangitun qauyihaguiit.
- **Illihagtutitlutik katimayuni** nutaat havagutiit illihimayaulutik.
- **Appigilugin nunalinbgmiut** nakuugiyaayut hanagutiit kittuuyaangit.
  - **Uqamaqatigiipaklutik nakuuyutigun illihimayayut atgauniinik** (inuit qauyimayatuqangitlu) qanuqlu hivunmut illiugianga.

Inniqtun: March 2023



### Inniqtauhimaliqtun

- Timingita ittchinginit nuttaaik hanayumayut nanuit **attunit kittuuyaangita nalunaiyaqlugin annainit**.
- Qauyihagutitkun **timingita ittchingitnit** appunmit nanuup tumiinit.
- Nutaanik qauyihautiliuqtun **qanugitunik nanuit nigivagiangita**.
- Illaitigun **annaini halumaituqagianga** (immaqaa kiniqtug havik) **nalaunnahuaqlugin** halumainiqaqtun nukiinit, ningugantit uqhuinilut.
- **Qitutugauyat hiquliqtihiyayut** timmiiniiliqniqqata nanuit annainit kuffinauhimayut
  - Nutaanik havagutimik **nalunaiyaiyuq aaniagutinik** nanuit niqanait anainitlu.

### Katujigatigiiktun

