

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

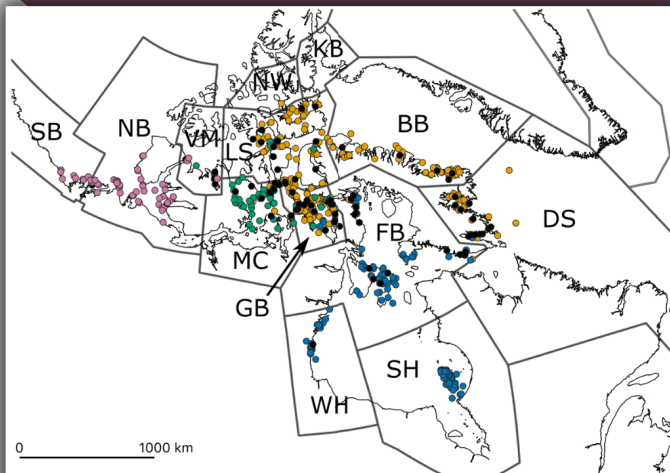
Your Invaluable Help

- 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



Qannaqquhi Illaugaffi Nanuligivaktuni

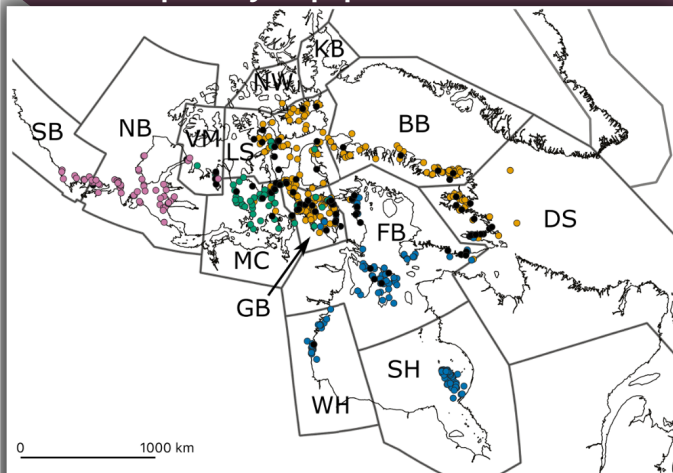
Hulligivaktutliqaa Nanuligiyut?

Nanugnik qauyihaliqpaktun amigaitun katujjivlutik nalvaagnahuaqtun havagutikhainik nanugnik qauyihaguutaginiini palvihaqhaimaitumik qauyihagutauyukhanik uwalu maniliugutaуваклuni Nunavutmiutanun inuqutailu illauvaktutik. (Takulugu <https://bearwatch.ca> uqaqatigiyaqhanik)

Pigiaqtun: January 2017

Ikayuqpakkuffi Annigiyauyuq

- Tunniuqqaivaktuhi illihimayutinnik **inuit qauyimayatukang** atughugin uvuuna piligipqaivaktavun.
- Katiqhuvakkaffi **nanuit illainiq** qauyihagauyukhanik nanuqhiuqtunin: nukiinik, uqhuinik, tingunganik iqhuanitlu analikmik.
- Katiqhuvaktuhi **nanuit anainik aulaaguutagitivluhi**.
- Uqaqaktuhi **qanuq akhuuqngagiananganik katiqhuyiqaami** nunainaqmin (uvaluqaa anainit apputimilu tumainit) **illihimayahi atughugin qangattaqhimayutigtutlu tuhamaqatautiyutiqaqhuhi**.



Uuktuliqtun havagutimik nutaamik nalunaiyautimik aaniqnatunin nanuit timaini anainitlu. Nalunaiyagauhimayut nutaamik havagutinik atughutik nanugnik qauyihagutun illuqaqhapagainik angunahuaqtutlu aangutaint. Huugmi hanagutauyut atugaulluaqtun anguyayuviniit illangaqtainiit (annainitlu). Qanitutkun aputmit tumiviniqun naunaiyayumaaliqtun.

Tugliit Atugakhan

- **Nalaunnahuaqhsugin akitutiginii** katiqhutivlugin qauyihagutauyukhanik.
- Nalunaiyaqlugin **aulatauniitigun 'atugnagtiginii'** palvihangitun qauyihaguhit.
- **Illihagtitilutik katimayuni** nutaat havagutiit illihimayaututik.
- **Appigilugin nunalinbmiut** nakuugiyauyut hanagutiit kittuuyaangit.
 - **Uqamaqatigiikpaklutik nakuuyutigun illihimayauyut atgauniinik** (inuit qauyimayatuqangitlu) qanuqlu hivunmut illiugianga.

Inniqtun: March 2023



Inniqtauhimaliqtun

- Timingita ittichinginit nuttaaik hanayumayut **nanuit attunit kittuuyaangita nalunaiyaqlugin annainit**.
- Qauyihagutitkun **timingita ittichingitnit** appunmit nanuup tumiinit.
- Nutaanik qauyihautiliuqtun **qanugitunik nanuit nigivagianga**.
- Illaitigun **annaini halumaituqagianga** (immaqaa kiniqtug havik) **nalaunnahuaqlugin** halumainiqaqtun nukiinik, ningugantit uqhuinilutlu.
- **Qitutugauyat hiquliqtihimayut** timmiiniiliqniqqata nanuit annainit kuffinauhimayut
 - Nutaanik havagutimik **nalunaiyayuuq aaniqgutunik** nanuit niqainit anainitlu.

Katujiqatigiiktun

