SuliaKaKatigulluta
How we work together

The team: Liz Pijogge, previously the Northern Contaminants Projects Coordinator for the Nunatsiavut Government, has transitioned into a new position within the Nunatsiavut Government, where she continues to support research and knowledge stewardship. As part of her previous role, she sat on the federally funded Northern Contaminants Program (NCP) Management Committee through Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC). Within that Committee, plastics have been a rising concern. Liz had heard about Dr. Max Liboiron's plastic work at Memorial University, but the two didn’t connect until Max came to Nain in 2017 on a fishing trip and Liz happened to be at the airstrip and recognized Max getting off the plane. A partnership on plastic pollution monitoring began.

Liz and Max during the On-the-land workshop at Uivak, 2024. Photo: Liz Pijogge.

While Liz and Max specialize in different parts of the project, we are full collaborators and share decision-making in how the project progressed. Our goal is always to do research that nourishes and takes care of the people who live, hunt, and gather in Nunatsiavut.

As the Northern Contaminants Researcher at the Nunatsiavut Research Centre, Liz designed the sampling locations and species and conducted all sampling and other on-the-land research activities. She also specializes in analysis that requires local knowledge (such as seasonality). Liz states she is not a scientist; instead, her knowledge and approach to research is based on what she has learned on the job and what has been taught to her by others, as well as from living on and with the land.

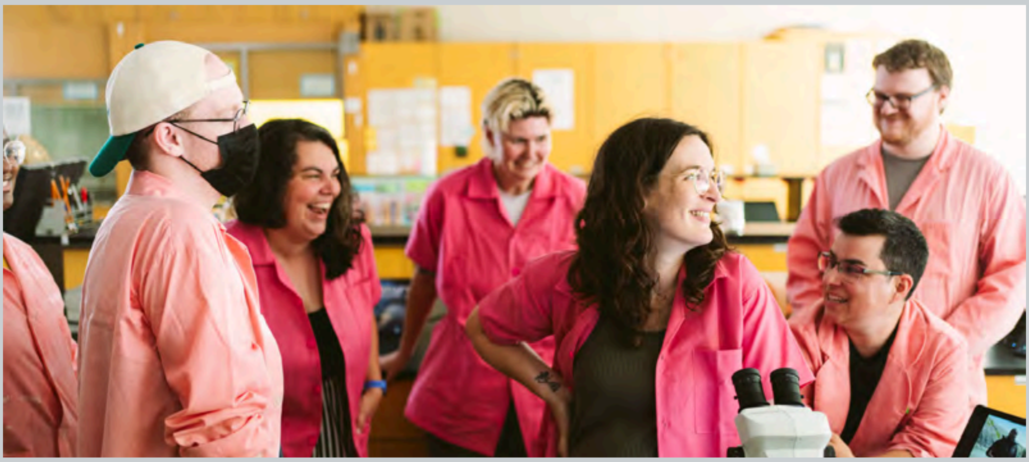
Left: Liz taking ice cores around Nain, 2023. Photo: Paul McCarney. Right: Max Liboiron in the lab, 2024. Photo: Alex Stead.

Max processes samples in their lab at Memorial University, which mostly means getting guts and organic samples and looking in them for tiny plastics using specialized methods. They oversee many students' training for lab analysis. Max specializes in analysis based on the Western science of plastics, as well as some of the relationships that plastics have with water and land. Max draws on their Michif community and Elder relations to bring land-based knowledge and ethics into the scientific lab, but since these are not Inuit ways of knowing or doing, Max defers to Liz on place-based and community-based analysis.

As this partnership phase concludes (March 2026), the Nunatsiavut Government is taking leadership of the project going forward. This moment marks both an ending and a continuation: the conclusion of a successful co-led research partnership, and the strengthening of Nunatsiavut-led plastics monitoring rooted in Inuit governance, priorities, and futures.

Ungatâni 250 inuit
sakKititsigunnasimajut
tâpsuminga suliatsamik

Of course, we don't do it alone. Over 250 people have helped make this project a reality!



Piniannigisimajavut tapvani allaKutimmi
Our approach in this report

When we began this study in 2017, we found some plastics in twenty-nine iKaluit (Arctic char/Salvelinus alpinus) from Nain Bay and TikKoatokak Bay. Max had only studied Atlantic cod on the island of Newfoundland before, and there was a big difference between how cod ate plastics and how these few iKaluit ate plastics. We shared our data with the staff at the Nunatsiavut Research Centre, and Max couldn't explain the reason for the difference. We agreed that we needed a bigger sample size to be sure of what we were finding. This was good because it turned out that our understanding changed significantly with a better sample size. Those iKaluit (Arctic char) from 2017 were a bit odd and did not represent how iKaluit ate plastics. We also began looking at plastics in other animals, waters, and areas in Nunatsiavut to get a better sense of the plastic landscape.

This report covers samples collected between 2017 and 2025. Our research includes 849 animal samples spanning 20 different species, 70 surface water samples, 675 shoreline quadrats, and over 7,500 plastics from shoreline surveys (Fig. 1). The data represents all the samples that have been fully processed and validated. It takes us a year or more to process samples completely, and then another year to discuss and analyze the results with community.

Nunalinni kamatsianik palastikkinik igitauKattatunik Nunatsiavummi is one of the most comprehensive, long-term monitoring projects in the Arctic and sub-Arctic to date (AMAP, 2021). We look at all aspects of the environment, and particularly how they relate to Inuit life and foodways.

From a scientific perspective, the project is unique because it does not start from a "blank slate." It is based on Liz's and co-worker's lived experience of being Inuit in Nunatsiavut and flows from existing research relationships and activities with the Nunatsiavut Government including work at the community freezer in Nain and over 28 other monitoring projects Liz is part of as the Northern Contaminants Researcher. This is why, for example, we have many iKaluit (Arctic char) samples from around Nain (this is where Liz lives, works, and fishes) and why many of the natset (Ringed seals) cluster around Upper Lake Melville (we work with other researchers who do their research there).

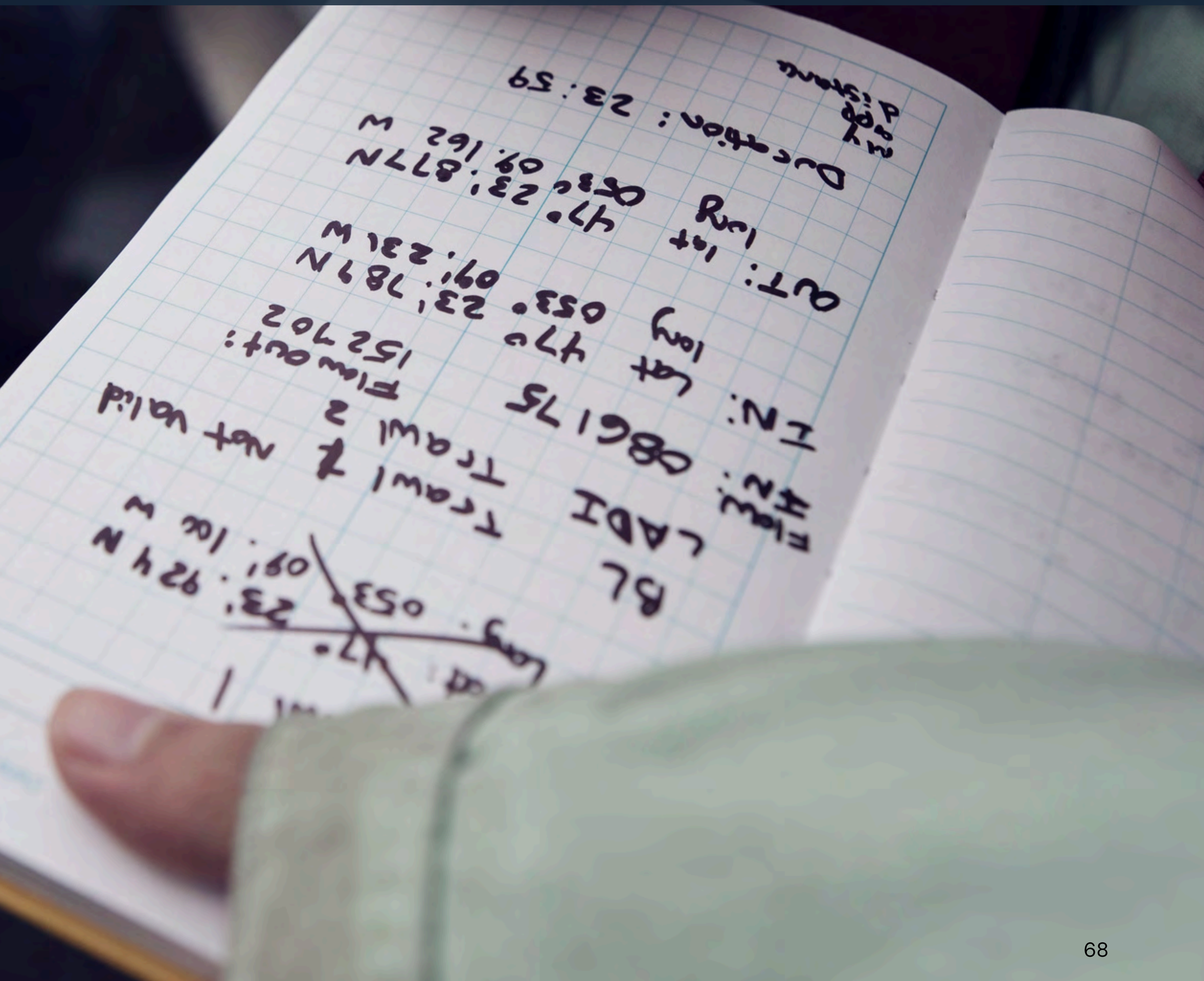
> When I told Nick that Katie Winters translated plastic as ‘kinik’ he said that means ‘material’ or ‘made from,’ so the translation implies plastic is never its own thing, but always something made for something else.
>
> - Max Liboiron, recalling a conversation with Nick Flowers (June 2024)

This research comes from and through Nunatsiavut and Nunatsiavummiut. We use Labrador Inuttitut words for animals as their default names, and add lay/local, English common, and Latin/scientific names in italic afterwards. Because reading that long list of names can take a while, after we introduce each animal in a section, we switch to Inuttitut with the English name in brackets after the first time we mention them. Nick Flowers also recommended we have place names in Inuttitut. Finally, after many conversations, meetings, and sessions about how to attribute the collective efforts, inputs, and knowledges that went into this report, we have included all the people who provided input into this report as co-authors.

Lab reference guide photo from McLeod et al. *A field guide to prey of ringed seal (Pusa hispida) of the Canadian Arctic. Nunavut Research Institute,* 2024. Photo: Alex Stead.

Kaujisannik piusigijausimajuk

Research Methods



Melissa Novachefski records data for trawling during a training session. Photo: David Howell.

Piusigijausimajut Nunami ammalu Imâni

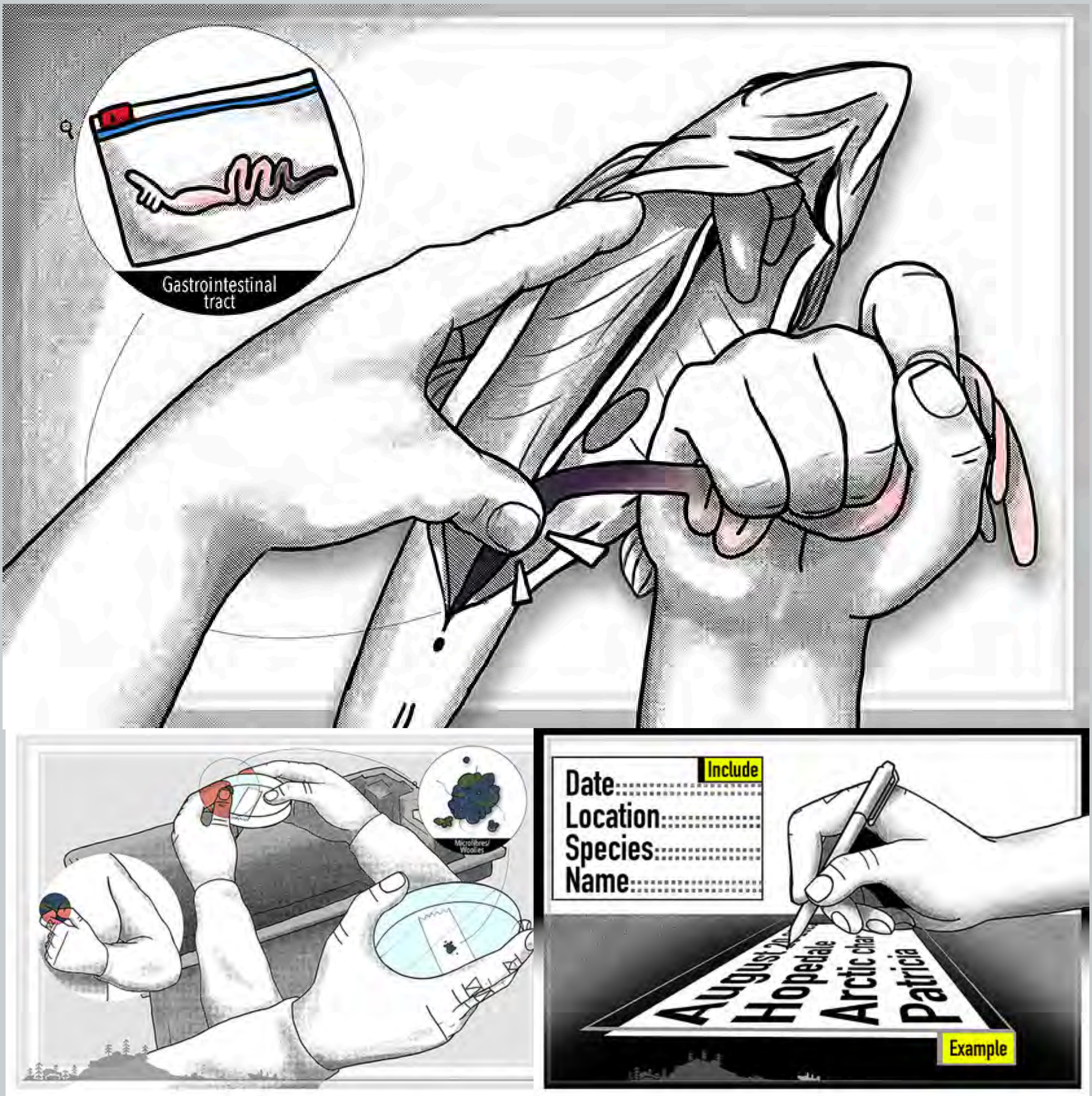
Methods on the Land and Water

Omajut ottugattausimajut / Animal samples

We focus on iKaluit (Arctic char/Salvelinus alpinus) and natset (Jar/Ringed seals/Pusahispida) because the moratorium on caribou hunting in 2013 shifted our diet to these animals. We gather samples from Inuit hunters and fishers, from the Nain community freezer, from personal contacts, and through sample-sharing with scientists working in the region. Our sample design is community-based. Most samples from animals in this study have been eaten (except for those from sample sharing with southern-based scientists). The samples are also community-based because they are based on relationships we have with other people, whether they are hunters and/or researchers.

In her prior role as the Northern Contaminants Projects Coordinator for the Nunatsiavut Government, Liz was involved in many monitoring projects in Nunatsiavut as well as the Nain community freezer. She looked for opportunities to gather samples for multiple projects that have similarities; she calls this sample-sharing. The Nain community freezer in the Nunatsiavut Research Centre is the perfect place to gather samples because when hunters donate animals, Liz or co-workers get a sample before putting them into the freezer for community members. Liz also collaborates with other researchers who sample animals such as appak (Turr/Thick-billed murre/Uria lomvia) but don't use the guts. Liz takes the opportunity to take the stomach and intestines of the bird for plastics research before giving the meat to the community freezer and other parts of the animals to other researchers.

Left to right: Katrina Anthony, Max Liboiron, Beverly Hunter (out of frame), and Reuben Flowers collect iKaluit guts during the Uivak On-the-land Workshop, 2024. Photo: Alex Bond.



These are instruction cards for hunters and fishers who want to contribute animal guts to the study. The back has text in English and Inuttitut.
Illustration/Allanguasimajuk: James Jacque. Hand model/Aggamut atuttausimajuk: Patricia Johnson-Castle.

When hunters or Liz have the animal guts (and feathers for birds), they recorded information about where the sample came from, label the sample, freeze it, and then the frozen samples were shipped to St. John's for processing.

Because some of the samples come from community freezers and other places that we don't anticipate, sometimes we don't have data about the exact date something was caught, the exact place, or the size or sex of the animal. We still included these samples in our analysis, but you may see, for example, we have 348 iKaluit (Arctic char), but only 310 of these have place names recorded for the locations they were caught. This isn't a mistake, but the nature of community-based sample collection.

Phillip Abel and Valarie Flowers gather waste during the Uivak On-the-land Workshop, 2024. Photo: Max Liboiron

Sitjami palâstikket: Marine Debris Tracker & Alakkasâjatigut /
Shoreline plastics: Marine Debris Tracker & Paper forms

Several Nunatsiavut Government Environment Department staff are trained in using the Marine Debris Tracker App, which allows you to log items you clean off the shoreline. The app records each item and geotags it, resulting in a dataset in the cloud. Anyone can access this data at: https://debristracker.org/data.

Starting in Makkovik in the summer of 2023, we did several shoreline cleanups and recorded our findings on paper. We also weighed each type of item (such as fishing net, food containers, and glass). This doesn't geotag each item like the Marine Debris Tracker App, but it did allow us to record extra information about each item, and its weight, and do some community-based analysis to figure out where items may have come from.

(Left to right) Geraldine Andersen, Joby Razzelliot, and Martin Onalik search a grassy shoreline quadrat for plastics on Uivak near Hopedale, 2024. Photo: Max Liboiron.

Sitjami palâstikket: Quadrats / Shoreline plastics: Quadrats

A quadrat is a fancy name for a one-meter square marked on the ground. We used rope to mark out a space and look for small microplastics within the boundaries. This approach allows a concentration measure (how many places per meter squared) that the other two shoreline methods do not. We also recover much smaller plastics than in shoreline studies because our eyes are so close to the ground. All the concentration figures for shoreline plastics in this report come from this method. Most shoreline samples don't go to the lab but were analyzed on site. We recorded their material, size class, and what type of item they were, as well as information about where we found them. These details were then transferred into a dataset.

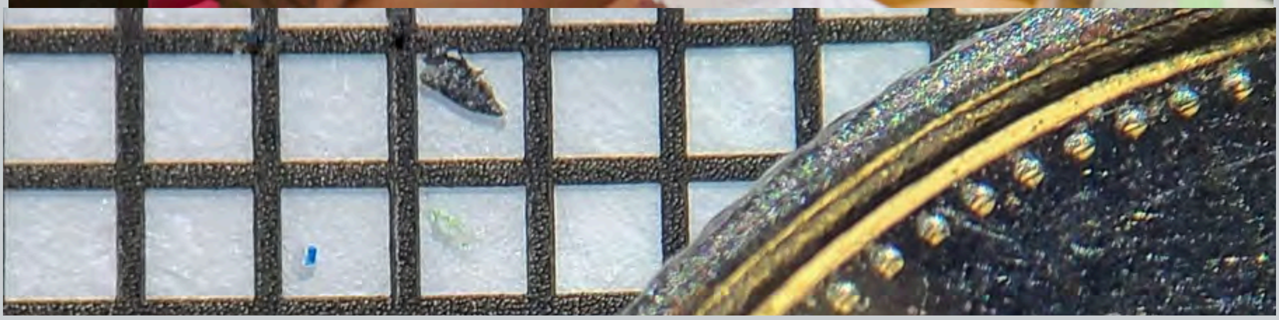
Piusigijausimajut iluan Kimigguvimmi

Methods in the Laboratory

> "When I first started in the wet lab, I was expecting to actually see brightly coloured plastics wash out of the guts under the sink tap. Eventually, I realized that many ingested plastics in the animals we processed were tiny little microfibres only visible under the microscopes. This prompted me to be really careful working under the sink, because it's very easy to unknowingly wash microplastics of interest down the drain - and end up misrepresenting the number of ingested plastics in wild foods."
> -Melissa Morgan, lab technician who has processed over 200 sieves (2024)

Looking for plastics in gut contents

Animal guts and trawl samples were shipped frozen to the CLEAR lab at Memorial University based in St. John's. We defrosted the samples and rinsed the contents of guts or trawl samples into sieves with very fine mesh (between half and a third of a millimeter, or 250-333um), and then looked at the samples under a microscope for plastics.



Top: CJ Hoegg-Phelps looks under a microscope for plastics in the lab, 2024. Photo: Alex Stead.
Bottom: Three plastics found in an iKaluk from Nain in 2019. The grid is 1mm, and the coin on the right is a nickel for scale. Photo: Riley Cotter

Isolating and logging plastics

When we think we've found a plastic, we put it in a paper filter to dry. If we've pulled out something organic instead of plastic, the sample will shrink as it dries, making it easier to identify as organic. After the drying period, we re-examined suspected plastics under the microscope. Forensic tools also included a burn test, cutting the plastics to compare internal and external patterns, listening to the sound they made against glass or metal, and using a compound microscope to look closely at the structure (see figures 4 & 5). We recorded the size, weight, type, colour, erosion patterns, and other characteristics of the plastic. A second person double-checked one in three samples to make sure we didn't miss anything.

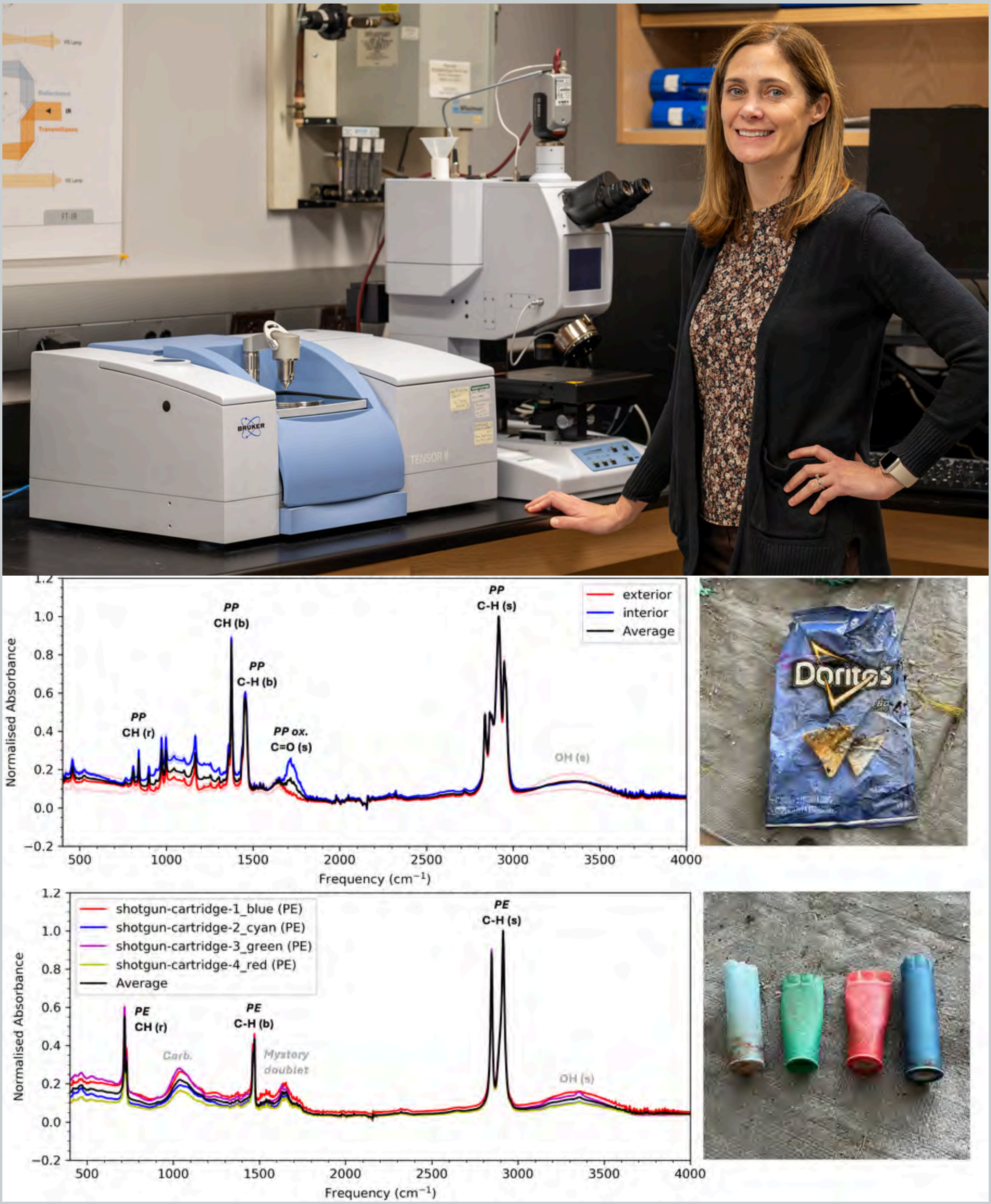
The smallest plastic we've identified was in the stomach of a Ringed seal caught in Kattagi by an unrecorded hunter. It was a blue fragment that was 0.06mm long by 0.03mm around. That's about as thick as sheet of paper (or slightly smaller than a paper cut!).

Top: Detail of LADI's mouth, deployed in a stream by Ranger Bight in Arvertok (Hopedale), 2023. Photo: Max Liboiron.
Bottom: The LADI trawl in the (Tongait) Torngat Mountains, 2020. Photo: Liz Pijogge.

Imaup Kângani ottugattausimajut / Surface water samples

We skimmed the surface of the ocean with plastic trawls that gather floating elements in a 333 micron (um) mesh pouch (a "cod end"). Microns are very small, one-millionth of a meter– 333 microns is smaller than the tip of a sewing needle. Liz always used the LADI trawl, a large trawl with a wide mouth. LADI stands for the Low-Tech Aquatic Debris Instrument (Coyle et al. 2016).

One time, Max was on weather hold in Makkovik for a long time and couldn't get up to Nain where Liz and LADI waited. So, Max put together BabyLegs, a small, simple, build-it-yourself trawl made with baby tights for a net and a container for the mouth (in this case, a kitty litter container). Samples captured in the cod ends and tights were shipped to CLEAR in St. John's for processing.



Top: Rebecca Sarazen at Surface Science Western with the Fourier transform infrared (FTIR) spectrometer. Photo: Jeff Henderson.
Middle: An FTIR spectrum that shows a plastic's polymer type. This Doritos bag is polypropylene (PP).
Bottom: An FTIR spectrum for four colours of shotgun shells, all of which are all polyethylene (PE). Spectrum images: Joby Razzell-Hollis.

Spectrometry

Finally, we sent an example of every type of plastic we found for spectrometry analysis, where a laser is shot at the plastic and the results are analyzed, telling us what polymer it is (polystyrene or nylon, for example). This also tells us if the sample is not plastic.

Summat jaikat Kimigguvimmi kutsojân?
Why are CLEAR lab coats pink?

Photo of lab member alum Alex Flynn, 2024. Photo: Alex Stead.

Ilangit mikinitsait palâstikket napvâKattajuavut angitigijut pujannut...upvalu annugânnesimajunut! Palâstikket pisimasongujut atujattinik, Kimigguvimmit piKutingit, ammalu pujunnilu imminik. kutsojait jaikait piusiKaluaKattavut unuluanik palâstikkinik KimigguviggijauKattajunut. KaujimattisiKattatuk uvattinik mikijojunut ottugattaujunit, upvalu jaikattinik ikittunik napvâKattagatta kutsojaujunut avatittini. Tungajuttait upvalu Kinnitait tauttungit avatinneluaKattavut mikijutuinnautlutik palâstikket.

Some of the smallest plastics we find are the size of dust.... or lint! Plastics can come from what we wear, lab materials, and from dust itself. Pink lab coats are standard in most plastic laboratories. It lets us know if a tiny particle is from a sample, or from our lab coat since we find very few pink plastics in the environment. Blue and black are the most common colour of environmental microplastics.

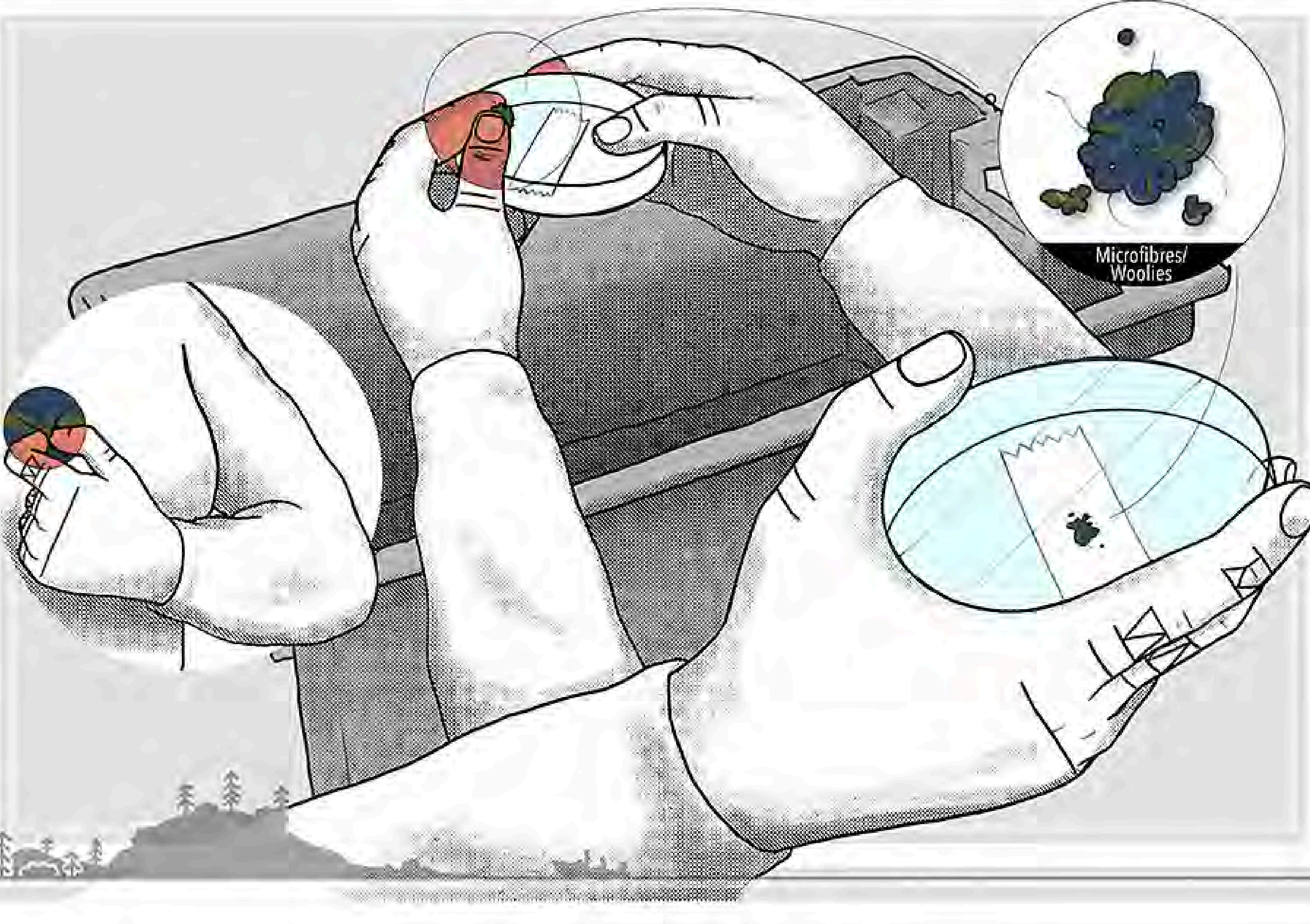


Illustration of how to make a contamination control from a hunter's clothing. This allowed lab techs to eliminate any similar particles in the sample. Illustration: James Jacque.

Contamination

Plastics are present in researchers' clothing and tools and are a main component of indoor house (and lab) dust. Plastics from these sources can get into samples and we need to be able to tell which plastics are from our sample and which came from other sources. We do things to make it easier to identify plastics from these sources, such as dyeing our lab coats pink to identify pink microfibres, and we collected samples of air, sample bags, clothing, ropes, tap water, paint from any boats, and other materials used in research so we could eliminate any that look like them from the sample. Finally, if we are unsure whether a plastic came from a sample or from processing, we eliminated it from the study (we don't want false positives!).

When we put all these methods together, it allows us to be confident in what we're reporting. Plastic contamination of scientific samples from clothing, equipment, and air is important enough that some scientists choose to eliminate all microfibres from their studies (the smallest plastics that come from dust) (e.g. Jardine et al., 2023). However, researchers have found that microfibres are the most plentiful type of plastics in the ocean (Suaria et al. 2020; Gago 2018), and in our study here, nearly half (42%) of plastics found in wild food are microfibres. So we took extra care and time to do lots of quality control so we could include microfibres in our results and be sure they did not come from our clothing or other research materials. We are confident that what we have reported here are plastics that come from the samples themselves.

Kaujigasuannik Nunalimmit upvalu Kaningitummit pisimajut imaup Kângani palâstikkisajait iluani Nunatsiavummi

Determining Local or come from away sources of surface water plastics in Nunatsiavut

Identifying sources of surface water plastics involves determining whether the plastic originated from a local or far away source and what the plastic was likely used for. Determining sources of these plastics is tricky because they are so small.

To estimate whether plastics are local or come-from-away, we consider four things:

1. **Duplication**: If the same plastic is duplicated within a sample but is not in other samples, it is likely local since we wouldn't expect two of the same plastic to end up in the same place if they traveled thousands of kilometers.
2. **Erosion**: If a plastic is heavily eroded, it is more likely to be a non-local plastic, since it was probably in the water awhile to get so eroded. However, because the ocean is so strong and because plastics can stay in eddies or get scraped along ocean floors, high erosion alone is not enough to determine a non-local source. However, a *lack* of erosion likely indicates a local plastic. It is unlikely that plastic would not show signs of wear from water, sun, or friction if it has been in the water for any length of time. There are also types of erosion, such as burning, that are common in Newfoundland and especially Labrador but uncommon elsewhere (Avery-Gomm et al. 2018).
3. **Buoyancy**: We expect some kinds of plastic to float and some kinds to sink (even if they sink slowly) based on their density compared to seawater. When we find very dense plastics in surface water, we assume they came from a nearby source and have not sunk yet. Some plastics we found (like plastics from fishing gear) are neutrally buoyant, meaning they have about the same density as water. Neutrally buoyant plastics were usually grouped with floating plastics, since we expect that they should be able to more freely move around with currents than plastics that are denser than water.
4. **Morphology**: Certain particles like films and foams are less likely to stay intact for long periods of time because they are so fragile and are easily shredded in the open ocean, meaning we suspect they are local plastics (Schwarz et al. 2019). We also know that microfibres can move very long distances and can even travel through the air before landing in the water. Moreover, they don't erode in the same way as other plastics so we remove microfibers from the local/CFA analysis.

We combined questions about these characteristics into a flowchart (see Appendix figure 1) to determine whether each plastic we recovered was likely local or come-from-away through long-range transport. We also recognized that conflicting or insufficient information often means we can't estimate the origin of a plastic.

"Recently, Bridget opened a seal stomach for wet processing. It was absolutely full, overflowing, with small digested fish. This sample was the biggest I had ever seen. Bridget had to split chunks of it into new sieves over and over to make it somewhat manageable. It took her four days to process. We decided her sieve sets should be checked by a second person. Altogether, this stomach (¼ of the full seal sample) took 20 hours of lab technician time. It was time-consuming, expensive, and required a lot of mental fortitude!

After processing was complete, no plastics were found. None. My knee-jerk reaction was 'wow, we just spent a week on this seal stomach and we didn't even find a plastic to make all that time and effort worth it.' But that's not true. We put in all that effort into getting a zero. And aren't the zeros better than finding plastics?

In this case, I think it's an extra special zero, because that seal ate so much food, and yet nothing in that seal's stomach did not belong there."

- Jess Melvin, lab manager (2024)

The "land bucket" where we place animal guts after we've processed them. Every month or so, we brought the empty guts to the ocean and returned them, 2024. Photo: Alex Stead.

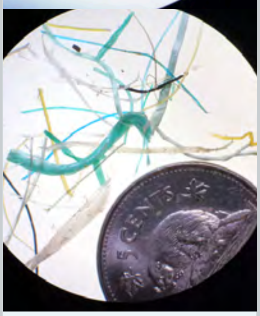
Cleaning up

Science makes waste. We aim to stay in good relationship with the land in how we deal with our scientific waste:

- When we were done with animal guts, we returned them back to the water. We ensured there was no toxicity before we do this.
- One way to process samples is to dissolve the entire gut in potassium hydroxide (KOH), which produces hazardous waste when you are done with it. We did not use this technique, and instead used visual identification and spectrometry which takes longer, but is better for the environment.
- When we do shoreline clean-ups, after we categorized, counted, and weighed the trash, we took it all to the landfill. Some methods leave the trash on the shoreline since you can count and categorize it without handling it at all.

Malittaugialet mikijojunut palâstikkisajait (ilusigijangit)
Guide to microplastic morphologies (shapes)

Table 13: Summary of morphologies of microplastics, the forms that often align with sources of the microplastics

Morphology	Photo	Key sources	Significance in Nunatsiavut
Microfibres		Microfibres are tiny fibres that are kinked, extremely thin, and small, often the size of dust. They come from laundry wastewater and can travel long distances, so when we find one, it is not clear whether it is local or from away.	The great majority of plastics that animals ingest and that we find in surface water are microfibres. In iKaluit (Arctic char), we see a lot of microfibres ingested in the spring.
Fragments		Fragments are pieces of larger plastic items. They are usually hard with jagged edges. They include paint chips and tire crumbs, but for most fragments it is hard to tell their original item. Fragments can travel long distances in the water and may be local or from away, though we can look at their erosion to try to age them.	Fragments account for more than half (59%) of the plastics ingested by iKaluit (Arctic char) in the summer. Fragments are also very common on shorelines.
Thread		Threads are woven rope or monolines from fishing gear. They may also come from things like coarsely woven bags, but threads in marine environments almost always mean fishing gear.	About 6% of all plastics that iKaluit (Arctic char) eat are threads. And, 9% of shoreline clean up plastics are from fishing gear.

Morphology	Photo	Key sources	Significance in Nunatsiavut
Film		Film plastic, also called sheet plastic, are from thin, flexible plastics like plastic bags, food wrappers, Tyvek covering, and similar fabric-like plastics. They break down quickly in the marine environment, so most film plastics are likely local in origin.	We find few film plastics in animals or water because they shred in water so quickly. But they are the top item on shoreline cleanups, accounting for 23% of all plastics. Though Nunatsiavut has a plastic bag ban, it only covers carrier bags (which we did not find).
Foam		Foam plastics are squishy because they have air pockets. Styrofoam items (coolers, cups), upholstery filling, and housing insulation are common sources. Like film plastics, they tend to fragment very quickly in the marine environment so when we find them they are likely to be from local sources.	2% of plastics eaten by iKaluit (Arctic char) are foam. We often find foam fragments on shorelines.
Pellets		Industrial pellets look like beads with no hole. They are the raw feed stock used by industry for making plastic items. If we find them, we know they are from away and they came either from a factory or a shipping container/ wharf. Sometimes they are called nurdles.	We have only found three pellets in the entire study, all on a shoreline in Nain in 2020. They likely travelled on a current together.
Microbeads		Microbeads are tiny spheres used as exfoliants in face care products and some toothpastes (ever wonder what the sparkles in kid's toothpaste is made of?). Plastic microbeads have been banned in Canada since 2019.	We have not found any microbeads across all samples in the study.

Figure 11: Spotter's Guide to Plastic Pollution

Figure 4 & 5: The "Spotter's Guide" used in training lab members to tell plastics from non-plastics. CLEAR lab, 2018.

Figure 11: Spotter's Guide to Plastic Pollution (continued)

Piusigijausimajut Kimiggutauniammata Kaujigatsait

Methods for analyzing data

Different types of plastics have different kinds of analysis, but all our analyses included roles for Inuit from Nunatsiavut as well as Western-trained scientists.

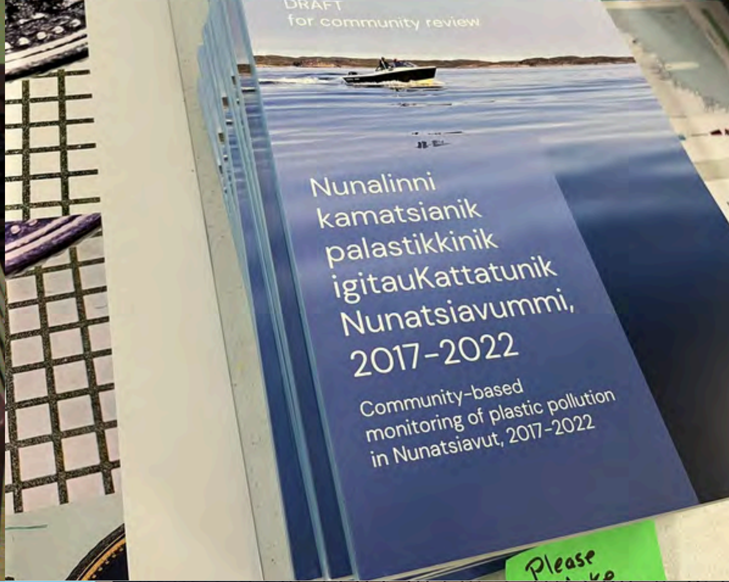
Whenever possible, we hired or contracted Nunatsiavummiut to work in the lab and/or consult on the project. Some of our hires included Joseph Onalik, Edward Allen, Jefta Merkuratsuk, Sid Ford, Katrina Anthony, Caroline Nochasak, Geraldine Andersen, and Kayla Wyatt. You will see their names as co-authors on this report.

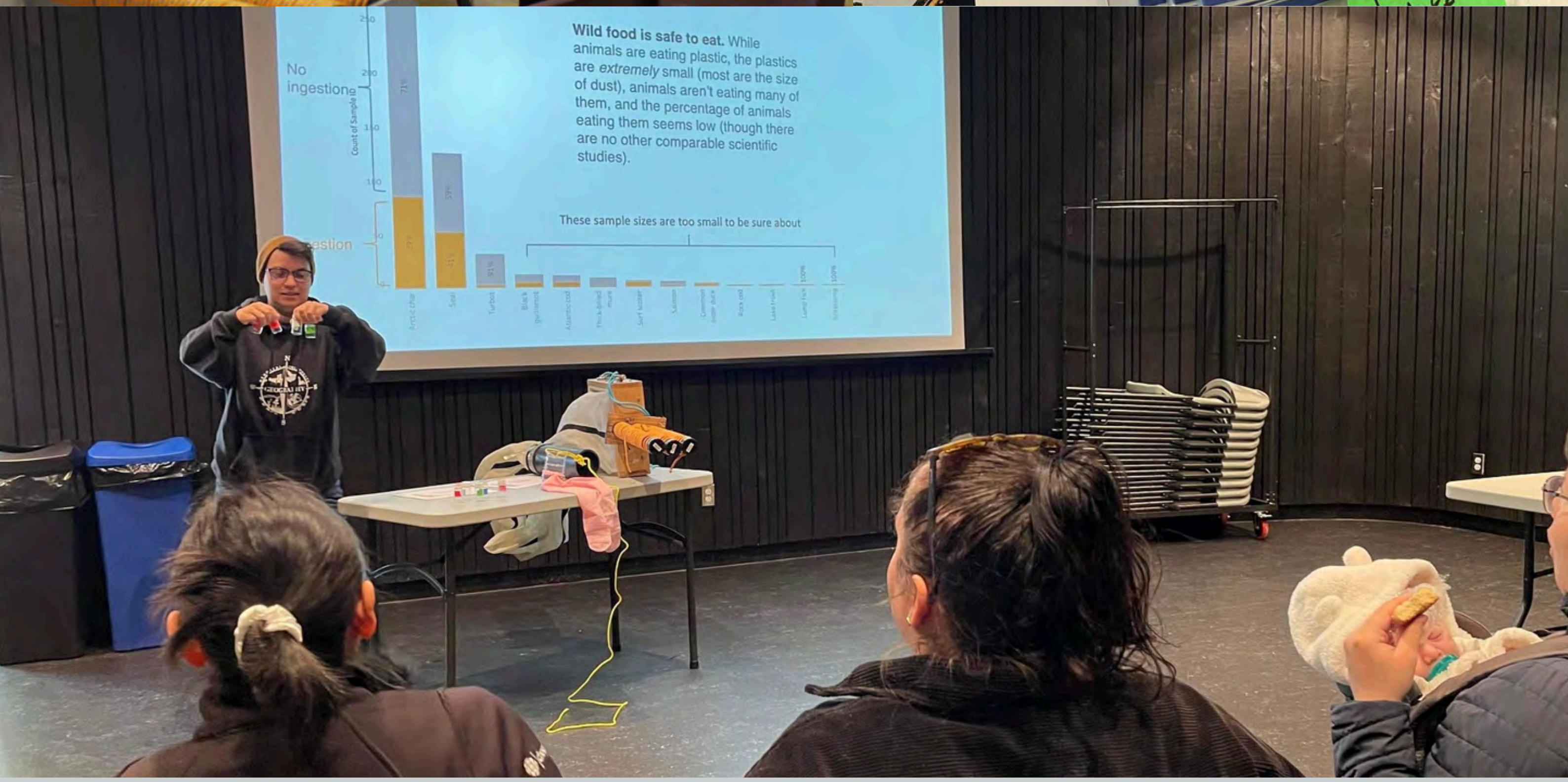
Much of the data in this report is quantitative, based in numbers. That work began in CLEAR, where Max would do some basic descriptive statistics (total sums, averages, percentages), turns these into data visualizations (mainly graphs), and then goes to Nain to share them with Liz and the Nunatsiavut Government Department of Environment team for discussion. Some of the data are also qualitative, based in descriptions. Max would also bring examples or photos of the plastics for identification and analysis and recounted stories from lab members about processing the samples (for example, if some particular smells or sights stood out, or things we were surprised to find, like when there was a high number of blue plastics in one location). The data are kept fluid and workable so that discussions allow for analysis and statistics in real-time (this is also called participatory statistics, Holland 2023). At this stage, local information and Traditional Knowledge about seasons, places, animal habits, water conditions, and more were used to question, test, and shape the data to create findings, as well as create the next set of research questions and priorities.

Nunatsiavut Government Department of Environment team and Max share a meal after a co-analysis meeting. Film still from niKet (CBC Gem, 2022).

Top left: Liz Pijogge, Betty Sampson, and Russell Sampson identify plastics (Rayah Sampson in background). Photo: Lauren Pilgrim.
Top Middle: Max Liboiron, Irene Heard, Rayah Sampson, Billie Andersen identifying plastics melted in Maggovik (Makkovik), 2023. Photo: Lauren Pilgrim.
Top right: Rachel Saunders and Hilda Hunter investogate a melted plastic in Avertok (Hopedale), 2024. Photo: Max Liboiron. Bottom: Tony Andersen and Max Liboiron try to identiy some yellow, waxy tubes found on Long Tickle (they were floats from industrial fishing lines that are not used in Nunatsiavut). Maggovik (Makkovik), 2023. Photo: Lauren Pilgrim

Palâstikket nalunaittausimjut katimajunut / Plastic identification workshops.
We gathered shoreline plastics around Makkovik in 2023 and sorted them in the community center. Makkovimmiut dropped in to help identify items, show us other shoreline objects they picked up, and share knowledge about winds, the landfill, plastics, fishing gear, and sources of waste. The resulting analyses are richer than what science can provide alone. This process was so successful that we did it again in Nunainguk (Nain) and Arvertok (Hopedale) in 2024, and kikiak (Rigolet) in 2025.





Top left: Liz Pijogge, Amelia, and Julia Dicker talking about plastics in Makkovik, 2023. Photo: Lauren Pilgrim. Top right: Draft report shared in Hopedale, 2024.
Bottom: Report on surface water at the Illusuak Centre, Nain, 2022. Photo: Liz Pijogge.

Inulimânut allaKutet utittitaujut / Public report backs.
We held both open-house workshops and more formal presentations on our methods and findings. When we had strong enough data that the Nunatsiavut Government agreed we could share with community, we held a public report at the at the Illusuak Centre in Nain (2023) where community members helped determine some of the potential sources of plastics by looking at images of plastics, as well as providing input about future sampling locations and priorities. We held final report backs to share the summary report in Arvertok (Hopedale), kikiak (Rigolet), KipukKak (Postville), and Nunainguk (Nain) in 2026. We also post this study online on the CLEAR website (civiclaboratory.nl)

Hunter Reports.
We compiled hunter reports and hand-delivered these reports to hunters' homes. These reports contained data from the animals they had harvested and eaten or contributed to the community freezer. For each animal the report identified the number, morphology (shape) size, polymer, and colour of any plastics present. In 2026, we returned 26 hunter reports.

Top: Kayla Wyatt, Max Liboiron, and Paul McCarney during a week-long consultation Kayla did with CLEAR in St. John's, 2023. Photo: Zoom.
Bottom: Reuben Flowers, Nick Flowers, and Bridget Kazooka discuss natset (Ringed seal) feeding ecology. Uivak, 2024. Photo: Alex Bond.

Tugâgutigijaujut ikajuttigetlutik Kaujijausimajut / Targeted collaborative analysis. We held many one-on-one or small group discussions with Inuit researchers, knowledge holders, knowledgeable community members, and current and former Nunatsiavut Government Environment Division staff. Sometimes we had specific questions to discuss before we were ready to release results. Sometimes we went over the entire set of data together. We always had Inuit researchers (not just Liz), go over drafts of reports like this for their input.

Carla Pamak talks about bird sampling at Woody Point during the Nain On-the-Land workshop, 2022, Clockwise: Carla Pamak (standing), Alex Bond, Liz Pijogge, Sarah Semigak Lidd, Emma Haye, Wilson Jararuse, Annie Lidd, Joseph Onalik, Ethan Angnatok (center bottom), Magali Houde, Tyriekah Semigak, Josephine Jararuse. Photo: Laura M. Martinez-Lavasseur.

Nunami katimatitsinik / On-the-Land workshops. Finally, we held On-the-Land Workshops where the team members from Memorial and the Nunatsiavut Government gather with local people (Nain 2022, Makkovik 2023, Uivak 2024, and Hopedale 2024) on the land and in community to discuss research, emphasizing things that the plastics research team is unsure of, doesn't know, or hasn't started so that community input could shape analysis and inform the direction of future research.

Top: Discussions at the launch of this report in Nunainguk (Nain), January 2025. Left to right: Paul McCarney, Kayla Wyatt, Mary Maggo, Liz Pijogge, Max Liboiron, Reggie Maggo, Eric Webb, Christine Nochasak. Photo: Lauren Pilgrim.

Bottom: Liz Pijogge, Jacqueline Winters, Max Liboiron, Alex Bond, and Paul McCarney in Rigolet during a community report back, 2025. Photo: Liz Pijogge.