Research in the South Slave

RESEARCH UPDATE

Fall/Winter 2025

rooted futures

Sarah Rosolen, Manager

Youth are always a focus for us in the summer, and even more so this year. We were able to hire three summer students and partnered with **Uncle Gabe's Friendship Centre** to host an additional three (p. 10). From helping with STEM (p. 2-3) and working in the community garden (p. 8) to growing strawberries (p. 9-10) and supporting other researchers' work - our summer student team was kept very busy! We are already starting to make plans for another fun summer.

'Seascape' strawberries from this year's trials

In this issue, we recap the **Boreal Berry Patch Collective** project, now in its last year**.** Read up on how our community worked together to encourage more people to grow, harvest, and eat more local food (p. 4-6). We are grateful to partner with the **Future Harvest Partnership** (p 3, 18-20), who will help continue this work.

We are also thankful for the community contributions in this issue, including the **Northern Whooping Crane Festival** (p. 12-13), Thebacha Leadership Council's **Asset Inventory Project** (p. 11), and the Town of Fort Smith's **Teen Kitchen** (p. 11). And of course, we appreciate the updates from researchers working in the region. There were lots of visiting researchers this summer - more than I can ever remember. And there was that time when a certain politician made a hometown appearance.

IN THIS ISSUE

When your team is all about food, you show up for Halloween like it's harvest time. SSRC/Future Harvest Partnership Farm Family

STEM outreach update

Hilary Turko, SSRC STEM Outreach Coordinator

Youth produce their own stop-motion video project as part of our summer programming in Norman Wells.

With tips from the Boreal Berry Patch team, youth used locally harvested saskatoons, raspberries and rhubarb to make their own fruit leather.

Youth designed and built their own cardboard castle, complete with a working drawbridge and pulley!

The ARI STEM Outreach team had an incredibly busy and rewarding summer! Our summer student, Anais, returned for her second year, bringing fresh energy and creativity to our programming. She designed and led hands-on sessions in Fort Smith, exploring topics from artificial intelligence to building edible greenhouse gas models. She also traveled north alongside other ARI outreach team members to deliver multi-day summer camps in Fort Good Hope and Norman Wells.

We were also thrilled to welcome three summer interns from **Uncle Gabe's Friendship Centre**. These youth helped bring science to life by creating trivia games, hosting activity stations, and learning how to use some of our cutting and printing tools.

Hilary attended the Environmental Educator's Summit in Calgary, hosted by the Wilder Institute/Calgary Zoo. The summit was an opportunity to connect with teachers and environmental educators, exploring topics like nature journaling, invasive species, and even butterfly catching in Waterton Lakes National Park to observe the Curiously Isolated Hairstreak butterfly, an endangered butterfly that only exists in a small area of the Park.

Summer outreach highlights include our robot showcase at Mary Kaeser Library, space activities offered during the TAWBAS Dark Sky Festival, weekly visits to the Fort Smith Day Camp, and of course, building a giant cardboard castle, which took up the entire STEMspace, complete with a working drawbridge! It was a summer full of exploration, learning, and community connection!

Youth practice their compuational thinking skills with a robot showcase at Mary Kaeser Library

work can be fun!

Anais Aubry Smith, Summer Student Outreach Assistant

This summer, I worked as a research assistant for ARI's STEM Outreach team, focusing on delivering hands-on youth and community programming in Fort Smith and the Sahtu. Over four months, I contributed to over 30 workshops in Fort Smith, as well as week-long outreach camps in Norman Wells and Fort Good Hope. Of these, a memorable experience was a community STEM night we organized in Fort Good Hope. Roughly 40 youth participated in this event, which featured activities including drones, virtual reality, robots, coding, LED circuits, rockets launched by chemical reactions, and more!

Reaching so many families, youth, and elders from a remote community to make science and technology accessible in a stress-free environment was a real highlight of mine in our goals of promoting confidence and continued interest in STEM. Overall, it was a summer filled with curiosity, laughter, innovation, and most importantly, fun! I hope to be back next summer to do it all again and more!

a trip to KAKISA with wilfrid laurier university

Trent Stokes, Agriculture Technician (in-training)

In July 2025, I had the opportunity to participate in a community gathering in Kakisa organized by Wilfrid Laurier University and Ka'a'gee Tu First Nationto share knowledge on food security.

With a population of just 39 and the nearest grocery store almost an hour away, Kakisa illustrates the food security challenges that many northern communities face. The gathering provided an opportunity for us to learn about Kakisa's food sovereignty projects, including composting, community gardens, and greenhouse growing. This visit highlighted the benefits of communities coming together to share ideas and knowledge around growing and harvesting our own food.

Greenhouse at Ka'a'gee Tu First Nation

boreal berry patch HIGHLIGHTS

Lisa Smith, Local Food Outreach Coordinator

As we approach the end of the Boreal Berry Patch Collective Project (Phase 1 towards our vision for local food sovereignty), we want to share some highlights from the last two years.

Berry Plants Final Tally – In the summer of 2024, partners planted close to 250 berry plants across 21 sites. After overwintering and monitoring through summer 2025, we are pleased to report a 70% survival rate and that some of the bushes are already producing! Our goal of 'berries' everywhere is coming closer to reality!!

NOTE: survival was mostly impacted by lawnmowers!

Planting with care - Fort Smith Metis Council

Olinto Beaulieu plants a berry bush at the Salt River First Nation Wellness Centre

Local Foods Open House

The project launched in February 2024 with a community open house to celebrate local foods and build excitement for the work ahead. The event featured a series of panel discussions where local experts shared their knowledge and experiences, along with information booths and samples of locally grown, harvested and produced food products for participants to try. This was a fun and informative gathering that left us all inspired.

Local growers panel with Chris Westwell (moderator), Sandy Jaque, Trent Stokes, John Tupper, Veronique Bazinet

BOREAL BERRY PATCH Collective

PWK high school students stage berry bushes before planting at the Northern Lights Special Care Home, with Elders overseeing behind the frame

boreal berry events

Over the course of the project, 15 organizations worked together to deliver **56 local food workshops**. Covering topics such as gardening, food processing, and local food and medicine harvesting, **over 700 participants** learned valuable skills to help them grow, harvest and use more local foods.

Father's Day on the Farm: June 15, 2025 was a fun-filled day at North of 60 Farms, with 53 visitors spending time with local farmer Tim Vanderspek (pictured above). Guests enjoyed seeing chickens and turkeys in the coop, meeting a few cows, half a dozen pigs including mama Daisy, and two female goats, one soon to be kidding. Farmer Tim shared insights into farming and raising livestock in the North.

Dry meat making with Barb & Richard Mercredi

Saskatoon pie workshop at Anna's Home Cooking

Amber Powder (ENRTP alum and ECC officer) supports a berry picking event with Aurora College students and staff

Some of the bounty from weekly workshops with Women's Corrections

We held the inaugural **Boreal Berry Jamboree** – a low-key celebration of our region's incredible local berries – this year. Community members of all ages joined in for hands-on activities and workshops to learn how to make juices, jams and jellies, saskatoon berry pie, and our now almost famous Boreal Berry roll-ups. The fun didn't stop there. Our #BorealBerryMoments photo contest invited residents to share their favourite berry-themed snapshots. Thanks to **Anna's Home Cooking** for the inspiration and support in getting this off the cround!

boreal berry continued

IFor the last two years we teamed up with the **Desnede Farmers Market** to celebrate the end of the growing season with a **Harvest Festival**. In 2024, the event took place at Fort Smith's Mission Park and in 2025 it was combined with **Salt River First Nation**'s Treaty Land Entitlement celebrations at Riverside Park. Both years provided a showcase of local foods, information, entertainment, and of course prizes, bringing hundreds of people together to celebrate the bounty of the season.

WOW table of locally grown foods organized by Sandra Jaque

Mary Anne Schoenhardt wins a cabbage grown at the community garden

Looking Ahead - The Boreal Berry Patch Collective project helped forge a new relationship with the Territorial Agrifood Association, Wilfrid Laurier University, and GNWT- ITI. We are very excited to be part of their **Future Harvest Partnership,** bringing new ideas and capacity to food systems projects across the NWT (see p. 3, 18-20). The project also gave us an avenue to connect with other NWT communities working on food security projects. We look forward to finding new ways to work together to make advances in food sovereignty across the north. And finally, some exciting news for our youth: **JBT and PWK schools** have both purchased greenhouses! These new learning spaces stem from conversations about food security and youth engagement, and will provide hands-on opportunities for food literacy, growing projects, and experiential learning for years to come.

The Boreal Berry Patch Collective Project confirmed that food security is a high priority in Fort Smith. The project allowed space for conversations and relationships to be developed and has been an important stepping stone toward a larger, long-term vision for sustainable, community-driven food sovereignty for the Town. The project's success was built on collaboration—working together showed us that we can achieve more as a team.

Boreal Berry Patch Collective was funded by the Climate Change Health Adaptation Program (Indigenous Services Canada) and supported by all of the following organizations!

fort smith COMMUNITY GARDEN

Trent Stokes, Agriculture Technician (in-training)

Food Bank plot harvest day!

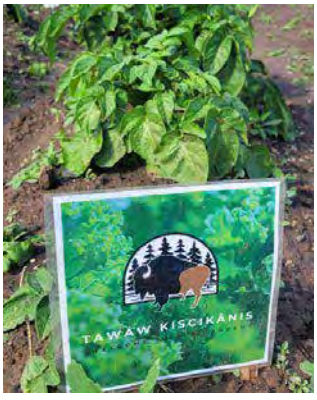
We ramped up the energy at the Community Garden this summer with a mission to boost involvement and get more people to growing. While we still have work to do, we did see an uptick in gardeners from 22 in 2024 to 27 in 2025.

Participants in the garden are expected to 'give back'. They can help in the 'Food Bank plot', deliver a workshop, or share some of their harvest with the Fort Smith Food Bank. The Food Bank plot proved to be an amazing space for building skills and fostering community. We held sessions every two weeks to share techniques and knowledge as we worked together to grow food that would eventually be given to local community organizations. **20 people** helped out with the Food Bank plot this year, producing over **400 lbs of food** that was donated to the Fort Smith Food Bank, Salt River First Nation, Tthebatthie Dene Nation, PWK High School, Sutherland House (Fort Smith Metis Council), Aurora College Food Bank, Uncle Gabe's Friendship Centre, and the Healthy Family Program (GNWT Health and Social Services).

Some of the food that was donated by gardeners.

Helpers in the Food Bank plot.

Finally, we want to give a special mention to Patricia Heaton and the **Fort Smith Metis Council,** who developed and maintained a plot to give their summer day camp kids a chance to get their hands dirty. They had an amazing harvest, too!



We were inspired by the Fort Smith Metis Council's 'Welcome' sign, written in Cree – what a great way to connect youth with skills and language.

The Fort Smith Community Garden is funded by GNWT-Industry, Tourism and Investment and Sustainable Canadian Agriculture Program.

STRAWBERRY research trials

GNWT research license:
Thebacha Strawberry Trials (17813)

Jane Mariotti, SSRC Research Assistant

This summer, we continued research that was started in 2024 in partnership with Sambaa K'e First Nation and Northern Roots Consulting to learn about growing strawberries in the NWT. We approached this year cautiously: We hadn't produced much in our first year, yielding only a few ripe berries. However, we learned a great deal that summer and returned this year as determined as ever, with a plan to test the production of **five different strawberry varieties**. Three of the varieties - Kent, Cavendish, and Honeoye - are "June-bearing" (produce one crop in a season), while Albion and Seascape are "day-neutral" (produce throughout the season). While wild strawberries are perennial, commercial "day-neutral" varieties are typically treated as annuals and "June-bearing" are kept as perennials for three to five years. The goal of this work is to create a guide for strawberry growers in the North and to push the boundaries on what can be successfully grown in people's backyards. Let's celebrate the crops we grow now, and get excited about novel crops we could grow next!

Our plot

How We Set It Up:

This research took place at the Fort Smith Community Garden, where we planted 20 of each variety at one foot spacing. The soil was fortified with chicken pellet compost. We removed flowers until the plants were established and cut their runners throughout the summer to divert the plants' energies into fruit production.

What we learned:

Many lessons were learned this year, but most importantly we discovered that we can grow delicious strawberries in the NWT! (Also that ripe berries are very tempting for community garden visitors)

Give them a strong start

We planted before water was turned on at the community garden, and it turned out to be a hot, dry, windy May. Although we were diligent with hand watering, our little plants were battered and then became infested with flea beetles. One variety in particular - Honeoye - was hit hard. They had arrived in poor condition and quickly succumbed to the infestation. We later learned that Honeoye are also susceptible to root rot.

Various pests we dealt with

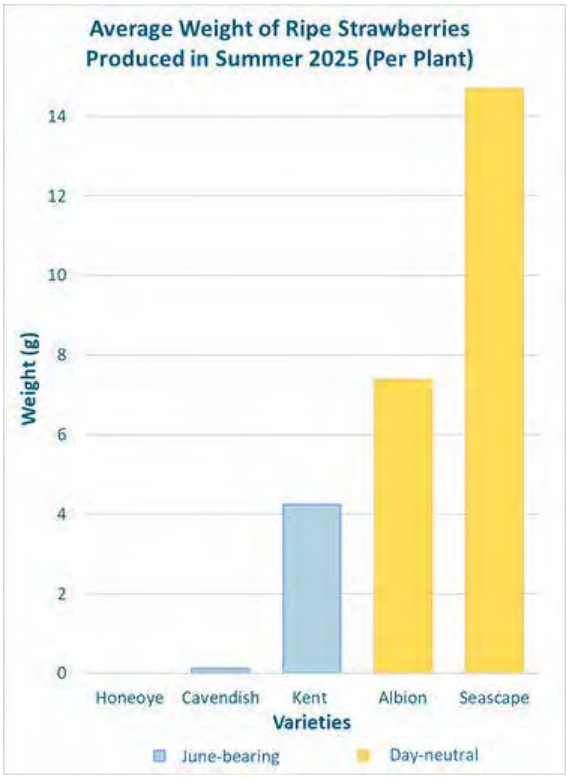
The rest of the varieties responded well to BTI and BTK, natural insecticides. We also dosed them with a heavy application of fish compost (**Net Composting Solutions** to the rescue!), which was a remedy suggested by **Lone Sorensen** (Northern Roots Consulting) and **Kathryn Scott** (Sambaa K'e First Nation), our strawberry sisters from last year's trials. The idea is that stronger plants can withstand being attacked. We were also told that we should have covered them at the beginning of the season to protect and give them a stronger start - we will look at row covers for next year.

(Story continued next page)

strawberries (continued)

Not all varieties are the same!

Fruit production started in early July, with "June-bearing" varieties peaking in mid-August (suggesting northern growers may need to take the name with a grain of salt!) and "day-neutrals" peaking in early-mid September. Overall, the Seascape variety had by far the highest production in their first year.



Final dirt on cold weather berry production

The strawberries were huge (largest weighed in at 56g) and delicious! We shared them at different events, and may have eaten a few in the office as well. Unfortunately they were also tempting for visitors to the garden - we observed discarded stems and plants with no berries on a few occasions, even though we had signs explaining the research. Unfortunately, the commuity garden may not be the best location for this type of research.

The plants were still producing when the first hard frost hit, halting production (though they withstood early light frosts in September). Plants would likely benefit from shelter at the beginning of the season to push production earlier. It would also help protect them from pests as they become established.

These plants were all grown from bare root stock. Unfortunately, due to travel times and distance, stock sometimes arrives in poor condition, requiring longer for plants to get established and producing. As we learned in our first year with Sambaa K'e, this challenge is amplified in more remote communities. We have overwintered our plants from this year and will begin to develop research to figure out the best ways to maintain production year over year.

Finally - a big mahsi cho to everyone who helped with the research this summer!

uncle gabe's high school internship program

Lisa Smith, Local Food Outreach Coordinator

We were thqnkful to have Tony Roberts, Storm Cabell, and Vaughn Fraser join us this summer through a work experience program with **Uncle Gabe's Friendship Centre**. They got a "taste" of everything we do and more, supporting our food projects, helping engage youth in STEM outreach, assisting with the Whooping Crane Festival, contributing to campus facilities work, and gaining exposure to trades and environmental monitoring. This experience reinforced the value of engaging youth in meaningful, hands-on learning that builds confidence and transferable skills. We wish them well in the school year ahead and hope to support a similar program next summer.

Our amazing berry picking team. 'Purple thumbs' Storm, Tony & Vaughn picking berries for our berry roll up workshops for youth

more photos from the summer

MAPPING our community's assets

Mike Couvrette, Coordinator Thebacha Leadership Council

Fort Smith's economy depends heavily on federal, territorial and local government jobs. To help diversify our economy, the Thebacha Leadership Council has launched a **Regional Asset Inventory Mapping Project** to identify resources that could be used to support a conservation economy.

A **conservation economy** prioritizes the well-being of people and the environment when developing employment and business opportunities. Its purpose is to design growth that benefits, rather than exploits, the environment and the community. For example, we can integrate eco-tourism venture with local Guardian programs. Instead of just taking a tour, visitors can contribute to the community's environmental monitoring and protection efforts, leaving with a genuine connection to the place. This approach creates real job prospects for youth in both eco-tourism and Guardian roles. Under this approach, language and on-the-land skills are valued, and learning with Elders and other knowledge holders can be built into education and training. This is one example of many ways that economic development can be designed to be inclusive and sustainable for future generations.

Asset mapping identifies and documents what a community has rather than what is missing. Assets can be natural features such as parks and rivers, infrastructure, local culture and events, people's skills and knowledge, economic resources such as local businesses and sources of funding. Identifying and mapping the community's assets will help local governments identify opportunities for collaboration and make decisions about developing and investing in conservation-economy projects.

We have contracted the South Slave Research Centre to carry out the project and they will be reaching out to community members and organizations over the next several months to gather information about assets and resources. The Asset Inventory and Mapping Project is expected to be completed in summer 2026 and is financially supported by the Centre for Indigenous Environmental Resource's Collaborative Leadership Initiative. Questions about the project can be sent to the Thebacha Leadership Council: info@thebachaleaders.ca

Town of Fort Smith's TEEN KITCHEN

Helena Katz, Communications Coordinator (SSRC)

South Slave Research Centre and the Territorial Agrifood Association (TAA) brought a local food perspective to the Town of Fort Smith's Teen Kitchen this summer. From June to September, the main ingredients were provided by different local farmers. This helped introduce teens to what's grown in the region, and who is growing it (the farmers brought their produce to the sessions as a meet & greet).

Flat World Alpaca Farm provided rhubarb in June for rhubarb chutney and cake. Fort Fitzgerald Gardens supplied haskaps in July for haskap muffins. North of 60 Farms delivered zucchini and carrots in September for zucchini brownies and a yogurt-based dip. Each session brought together 4-10 teens, with SSRC and Town recreation staff co-hosted the events, and TAA compensating farmers for their time and ingredients.

NORTHERN whooping crane festival

Ally Bahry, Northern Life Museum and Cultural Centre

Chances are, everyone in the Thebacha region has heard of the elusive big white bird known as the Whooping Crane. These birds that nest in Wood Buffalo National Park during the summer season are often seen as a sign of hope and resiliency to our community due to their distinctive preservation story. To honor these unique and beloved creatures, it was decided that a festival should be held in Fort Smith, similar to that held in Port Aransas, Texas, the winter home of the Whooping Cranes. In 2023, the first 'Northern Whooping Crane Festival' was designed, but unfortunately never came to fruition due to the horrific wildfires that our community faced and fought during that summer and fall. The following year, in September 2024, the vision came to life and the second annual 'Northern Whooping Crane Festival was held. A pancake breakfast in the name of honored biologist Ernie Kuyt, multiple traditional on-the-land activities, scientific lectures, and an exhibition at the Northern Life Museum and Cultural Centre were included as part of this festival.

Fast forward to spring of 2025, when the Northern Life Museum and Cultural Centre was approached by the Thebacha Leadership Council with the opportunity to have a role in coordination of the 2025 Northern Whooping Crane Festival. All of us at the museum were elated to take on this opportunity to work alongside the Thebacha Leadership Council, Aurora College Thebacha Campus, local businesses, as well as our local knowledge keepers and community members. With all of these organizations and individuals working together, we were able to hold another successful festival in August of 2025, with many events, including all the presentations from our delegates, being held at the Northern Life Museum and Cultural Centre. A drum dance collaborating with the Tthebatthie Denesuline Nation drummers, a guided medicine walk with Louise Beaulieu, a guided hike in the Salt Plains with Nic Comerford from Parks Canada, a Fish Scale Art Workshop with Jennifer Buckley, a Feeding the Water Ceremony, and a Night Market in the museum backyard were among some of the events that took place outside of the many amazing scientific presentations. In addition, the Ernie Kuyt Pancake Breakfast made a return, with many local businesses going above and beyond to provide door prizes for the event. Being such a huge part of this festival has really shown us the true meaning of community, collaboration, and teamwork.

NORTHERN whooping crane festival continued

One of the most amazing parts about the Northern Whooping Crane Festival, though there are many, is the work and collaboration with organizations from across North America. In 2025, we had special guests from the Wildlife Refuge in Port Aransas, the International Crane Foundation, Environment and Climate Change Canada, and the Wilder Institute Calgary Zoo. Every single one of these individuals that travelled to Fort Smith for the festival, whether for the first time or the second, was incredible to get to know and work alongside. They all brought energy, knowledge, positivity, and incredible perspective. Our museum staff, the members of the Thebacha Leadership Council, the crew at Aurora College, as well as our local community members got to form connections and relationships with these delegates that extend even beyond professional relationships into personal friendships. These connections, community togetherness, along with being able to celebrate and learn more about these amazing birds that live in our backyard, is what the Northern Whooping Crane Festival is truly about! Our amazing team is hard at work to bring another amazing Northern Whooping Crane Festival to Fort Smith in the summer of 2026!

YELLOWKNIFE, NT | 15-19 JUNE 2026

www.nacw2026.com

Key Dates

Abstract submissions – Oct 15 to Nov 15, 2025

Registration opens – Jan 15, 2026

Early Bird Rate ends – Apr 1, 2026

Registration closes – May 15, 2026

Share your knowledge on wood bison and muskrat

NWT Species at Risk Committee

NWT status reports on wood bison and muskrat are available for review.

The NWT Species at Risk Committee is preparing to assess the biological status of wood bison (Bison bison athabascae) and common muskrat (Ondatra zibethicus) in April 2026.

To help inform the assessment, the Committee has developed two status reports with the best available Indigenous, community, and scientific knowledge on each of these species in the NWT.

These status reports are currently available for review:
·Wood bison – draft status report
·Common muskrat – draft status report

You will also find fact sheets with maps of where the species occur in the NWT, as well as a list of questions the Committee will consider in its status assessments.

Comments on the draft species status reports must be submitted to the NWT Species at Risk Secretariat (SARA@gov.nt.ca) no later than January 9, 2025.

For more information: www.nwtspeciesatrisk.ca

CURRENT STATUS IN THE NWT:
Wood bison – Threatened
Common muskrat – No status


Photo credit: Vicki St. Germaine


Photo credit: Pierre-Emmanuel Chaillon

DID YOU KNOW?

There are three distinct populations of wood bison in the Northwest Territories: Nahanni, Mackenzie, and the Greater Wood Buffalo metapopulation.

Bison in the Slave River Lowlands are part of this larger metapopulation, which includes several subpopulations in and around Wood Buffalo National Park, in both Alberta and the NWT.

Have your say: Should northern leopard FROG be up-listed to ENDANGERED on the NWT List of Species at Risk?

Conference of Management Authorities on Species at Risk

Northern leopard frog (Lithobates pipiens = Rana pipiens) is a medium-sized green-brown frog with oval-shaped spots on its back bordered by light halos (similar to a leopard). They are uncommon in the NWT, and have only been found near the Slave, Taltson, Tethul and Tazin rivers in the South Slave region.

The population of northern leopard frogs in the NWT is genetically distinct from populations further south and has low genetic diversity. It is also geographically isolated, which means if this population disappears, it would be difficult to replace.

Painting of a northern leopard frog by Lea Randall

Endangered means a species is facing imminent extinction or extirpation from the NWT.

The Conference of Management Authorities on Species at Risk is considering whether to up-list northern leopard frog from Threatened to Endangered under the Species at Risk (NWT) Act. Up-listing northern leopard frog will not change regulations already in place or activities allowed in frog habitat.

Photo credit: Leslie Bol

Let us know what you think!

Contact the NWT Species at Risk Secretariat (SARA@gov.nt.ca) or fill out our survey.

Visit www.surveymonkey.com/r/7B5DLD5 or scan the QR code

CONFERENCE OF MANAGEMENT AUTHORITIES SPECIES AT RISK

For more information: www.nwtspeciesatrisk.ca

Photo credit: Kris Kendell

NWT Species Conservation and Recovery Fund

Joslyn Oosenbrug, Species at Risk Secretariat

Are you doing research on an NWT species at risk, their habitat, or threats to their survival?

The NWT Species Conservation and Recovery Fund (SCARF) provides funding for projects that support the long-term conservation, recovery and protection of species that are at risk in the NWT.

Applications are accepted January 15-March 1.

Visit our website to learn more: www.nwtspeciesatrisk.ca/SCARF.

Help protect our species at risk!

future harvest partnership

Jules Russell, PhD, Wilfrid Laurier University

From Halloween (see photo on the front page!) to November 20th, team members from Future Harvest Partnership (FHP) and the SSRC were busy working with communities and nations in Thebacha to talk about Food Systems Visioning, including work for futures that are both food secure and food sovereign (this can similarly be described as food self-determined).

Food insecurity is a serious concern in the NWT, and many people face food insecurity in Fort Smith and Thebacha. It can be difficult to get foods that are important to people for culture, community, and wellness. Climate change can further impact traditional food systems and growing seasons.
These are challenges that we're working to tackle through FHP. We're working with communities to support their goals for their food futures and supporting collaborative projects of mutual interest.

Through food we can nourish and build connections! Food connects to so many different aspects of our lives and wellness for humans, animals and the Land. There is a lot of excitement and interest in food in Fort Smith and Thebacha. We heard there are strong desires for increased access to traditional and wild foods, especially meat and berries. There's also lots of interest in growing food, whether in one's backyard, a community garden, a food forest, or farming.

The Team at the SSRC already works with local communities on many food related projects. Together, through FHP, we aim to support communities in the NWT through research to: Establish the NWT as a circumpolar leader in sustainable food systems through innovation and policy that prioritizes local production to ensure access to fresh, healthy food, fosters reconciliation, and is responsive to the emerging threats of climate change to the lands, waters, and people of NWT. In other words, good food for healthy people, healthy communities, healthy lands!

We use participatory action research to work towards community goals. Through research we can test new ways of doing things, to see if they are helpful in reaching those goals. We can better understand local food values and priorities, and honor these in food systems work. There are opportunities to build on what works well, to overcome challenges, and to create made in the north approaches to improve food systems. This means learning from Knowledge Holders about food systems and creatively adapting to new situations.

Some of this research may involve numerical measurement, and other approaches may involve listening to people speak about their food experiences, whether growing, harvesting, hunting, fishing, or eating. Some of this research may involve numerical measurement, and other approaches may involve listening to people speak about their food experiences, whether growing, harvesting, hunting, fishing, or eating.

future harvest partnership continued

If you would like to get involved right now and share your experiences of NWT foods, including production, harvesting, and other ways of accessing food, we are currently running a survey for two reasons:

1. To learn about agriculture and harvesting in the NWT.
2. To understand the wants and needs of NWT residents related local food.

The 'baseline' information the survey will collect is important to inform the development of projects and research with FHP moving forward. It's also a tool we can use to measure change over time - one way to see if progress is being made! It can help us to be more responsive to community wants and needs.

Here's more info about the survey: If you currently live in the NWT and are 16+ years of age, FHP invites you to take part in an online NWT Food Survey! Click on the link below to be taken to our survey. The survey can be completed in 10 minutes or less & participants may choose to enter a draw for a prize from a local NWT producer!

FHP is a collaboration between Wilfrid Laurier University, the Territorial Agrifood Association and the Government of the NWT. This study has been reviewed by and received ethics clearance through the Wilfrid Laurier University Research Ethics Board (REB# 9048).

Survey Link: **www.bit.ly/NWT-local-foods-survey**

Questions about this study can be sent to Andrew Spring, PhD at aspring@wlu.ca

We are planning our next in-person activities but in the meantime, we'll continue our engagement online. Of course, the SSRC Team is hard at work at home in Fort Smith on many different food projects and actions!

If you'd like to connect with me, email - Jules at jurussell@wlu.ca (with 2 LLs)

You can also email the Principle Investigator of the Project, Andrew Spring, at aspring@wlu.ca. Andrew is an Assistant Professor at Wilfrid Laurier University.

All the best,
Jules Russell

HAVE YOUR SAY!

2025 NWT LOCAL FOODS SURVEY

QUALIFICATIONS

If you are:

- ☑ **A resident of the NWT**
- ☑ **16+ years of age**

The Future Harvest Partnership invites you to take part in an online NWT Local Foods survey!

TIME REQUIRED

This survey can be completed in under

10 minutes

CHANCE TO WIN!

Participants may choose to enter a draw for a prize from a local NWT producer!

Future Harvest Partnership

This study has been reviewed by and received ethics clearance through the Wilfrid Laurier University Research Ethics Board (REB# 9048). *Questions about this study can be sent to Andrew Spring, PhD* **aspring@wlu.ca**

The Future Harvest Partnership is a collaboration between Wilfrid Laurier University, the Territorial Agrifood Association and the Government of the Northwest Territories.

To participate, please follow link or the QR code for more information & to be taken to our survey

www.bit.ly/NWT-local-foods-survey

Groundwater research in the AB-NWT transboundary region being completed by the Alberta Geological Survey

Allison Rubin, Dan Palombi, and Dan Utting; Alberta Geological Survey.

The Aberta Geological Survey (AGS), in partnership with the Government of Northwest Territories (GNWT) and the Government of Alberta (GOA), is conducting transboundary groundwater research in the South Slave region. Introduced in the June 2024 newsletter, our project aims to enhance the understanding of the hydrogeological setting and distribution of aquifers in the Alberta-Northwest Territories (AB-NWT) transboundary region to support the cooperative management of transboundary water resources.

Our work involves creating geological and hydrogeological maps to better understand groundwater flow and quality across the region. We have completed a water sampling program in collaboration with our GNWT and GOA colleagues, including surface water and groundwater sampling in the lower Hay River sub-basin and sampling of the Slave River. The samples have been analyzed for isotopic and environmental tracers to improve knowledge of groundwater-surface water interaction in the transboundary region. Preliminary results from the lower Hay River sub-basin indicate limited exchange between the river and shallow groundwater systems.

We completed a helicopter survey in October 2025 in the Caribou Mountains, Cameron Hills, and along the Hay River valley to identify and sample groundwater springs and to investigate sediment thickness and rock type above bedrock. The results of this work will refine our sediment above bedrock and bedrock topography modelling to better understand the distribution of potential aquifer-hosting sediments in the region. The results of this project will be documented and shared in 2026/27 using the AGS website and local presentations.

Sediment above bedrock investigations in the Cameron Hills and Caribou Mountains through a helicopter survey completed by Dan Palombi, Dan Utting, and Allison Rubin.

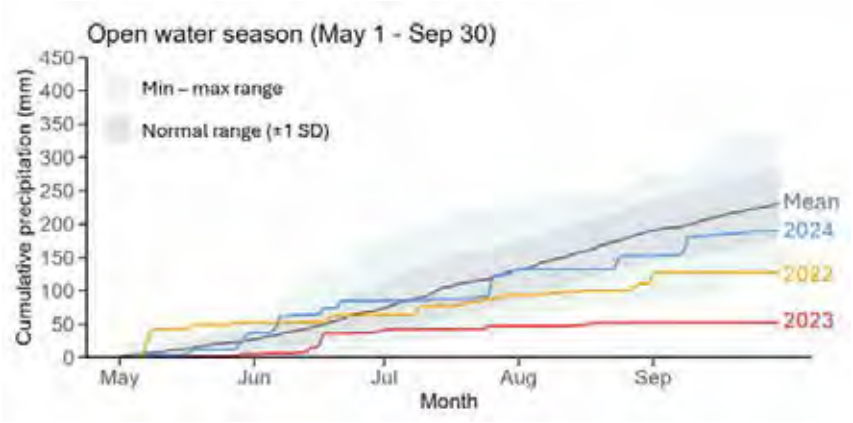
How does CRITICAL WETLAND HABITAT used by Whooping Crane respond to climate?

Arisha Imran, University of Waterloo

Whooping cranes require shallow water in the ponds and wetlands where they build their nests, find their food (e.g., aquatic invertebrates, amphibians) and raise their young. Stable water levels are a key factor for their nesting success, as rise of water levels can inundate nests and drown fledgelings, whereas drawdown and desiccation can increase encounters with predators and reduce food supplies. Our research group has been conducting systematic, seasonal sampling of ponds in the Whooping Crane Summer Range (Wood Buffalo National Park; ~ 80 km northwest of Fort Smith) since 2022 to evaluate how water levels and aquatic habitat respond to shifts in climate.

Photos of the Whooping Crane Summer Range taken in September 2025 showing many desiccated ponds.

Since summer of 2022, we have observed intense drying of ponds and wetlands in the Whooping Crane Summer Range. Arid weather in 2023, when wildfires burned all summer, caused a large water deficit that reduced water levels across broad areas. Despite average precipitation in 2024, water levels continued to draw down. Drying remained intense in 2025 and ~60% of the 67 ponds and wetlands we sample dried up completely by mid-September, before the cranes began their southward migration. During our fieldwork in September of 2025, we collected sediment cores to evaluate if desiccation of water bodies is a frequent phenomenon or a recent unusual outcome of arid weather since 2022. We hope to present results from this study in 2026 – stay tuned!



Cumulative precipitation (mm) during the open water season (May 1 – September 30) for 2022 (yellow line), 2023 (red line), and 2024 (blue line) at Fort Smith. Also shown is the average (black line) and variation (range = light grey ribbon; 1 standard deviation = grey ribbon for the 30-year climate normal (1991-2020).

Researchers Professor Roland Hall (left) and PhD student Arisha Imran (right) with a sediment core collected from a desiccated pond.

Enhancing Northern Community and Ecosystem Resilience to Fire

Madi Landrum, Wilfrid Laurier University

Climate change is altering the landscapes of the north, with warming temperatures and changing precipitation patterns leading to increases in fire frequency and severity. In 2023, record breaking wildfires impacted the Northwest Territories, burning areas that were previously considered to be natural barriers to the spread of wildfire. To explore the effects of changing climate on fire regimes and how we can improve community resilience in the face of climate change, we are looking at vegetation following these wildfires.

As part of this study, a team consisting of a mixture of graduate students from Laurier and community members from Fort Smith are venturing into areas that have burned between 1 and 3 times in the past 60 years around Fort Smith. On site, teams identify what plants are there, if the plant community is changing following the most recent fire (from pine to aspen, for example), and characterize the most recent fire severity. These surveys are helping us determine how the forests are responding to repeated fires of varying severity and how current and changing fuels may influence future fire behaviour around communities.

Photo credit: Madi Landrum

Photo credit: Jenn Baltzer

Our team this year consists of PhD student Andi Nichols, Master student Keagan Ferguson, and GNWT technician and local resident Rhonda Beaulieu. This 3-year long project is being conducted in partnership with the GNWT, Aurora College, Fort Smith Métis, Tthëbátthí Dënesųłłne First Nation, Northern Arizona University, Natural Resources Canada (NRCan), and Michigan Technical University. Funding is provided by NRCan.