



Year at a Glance: Celebrating the first Harvest on the DCC rooftop

2022 was the first official growing season of the Urban Farm at Toronto Metropolitan University's second rooftop farm, situated atop the 8th floor of the Daphne Cockwell Health Sciences Complex (DCC). The roof is dedicated to Indigenous Foodways and Black Food Sovereignty and is the first purpose-built rooftop farm under Toronto's green roof bylaw.

To celebrate the inaugural growing season and thank numerous stakeholders who made this space possible, over 100 guests joined a Harvest Party on October 6, 2022. The menu featured a Three Sisters stew of corn, beans, and squash, a Jamaican pumpkin soup, and a Jamaican pumpkin patti, all made with ingredients grown on the DCC roof and prepared by the talented chefs at TMU Eats.

Thanks to all who came to celebrate and brought this space to life!

















2022 Highlights

Harvested more than **5,000 lbs** of produce from two rooftops.



Provided over **70 engagement opportunities**,
Hosted over **500 visitors**through tours and programs.



Donated **2,000 lbs** / **40%** of total harvest.



Finished construction of the **Urban Farm's first greenhouse** in fall 2022.



Hosted the third annual Living Lab Roundtable, with more than **100 guests** in attendance.



Indigenous Foodways ProgramOverview

Under the leadership of Samantha Williams, Indigenous-led programs coordinator, the Indigenous Foodways Program expanded from 800 square feet on the ENG rooftop to 1,680 square feet on the DCC.

Over 41 food crops, medicinal plants and pollinator plants were grown, including 12 new crops to the Urban Farm, five different types of berries (blueberries, elderberries, black raspberries, red raspberries, and strawberries), and three different trees (sumac, juniper and eastern white cedar).

This year was the first season using the traditional mound method to grow the Three Sisters' (corn, beans and squash) on both ENG and DCC.







Indigenous Foodways Program Highlights



Planted over **41 culturally significant foods crops**, medicinal plants and pollinator plants on the DCC.



Welcomed over **100 guests** to the Indigenous Foodways gardens including:

- the Native Canadian Centre of Toronto,
- Indigenous Nutrition program students,
- Aboriginal Student Services,
- and TMU students, faculty and other stakeholders.



Provided **three part-time summer jobs** for Indigenous Field Assistants.



Collaborated with Miziwe Biik, an Aboriginal Employment and Training Centre in Toronto, to offer training programs to Indigenous youth and community members.



Established a **seed library of Indigenous crops and medicines**grown at the Farm and hosted a
seed exchange at the Harvest
Party.



Participated in the first **Truth and Reconciliation Business Conference** that was Indigenous-led and hosted by the TRSM Indigenous Initiatives.



Black Food Sovereignty Initiative

Overview

Under the leadership of Nicole Austin, Black-led Programs coordinator, the Black Food Sovereignty Initiative launched the pilot of the Harvest Collective program and Learning Circle garden plot on the DCC in 2022. After trialling culturally significant crops in the ENG Market Garden in 2021, the Black Food Sovereignty Initiative expanded to an 874 sq. ft. plot on the DCC rooftop farm. The space is dedicated to growing culturally significant crops for the Black community and to share teachings via monthly experiential learning events.

An Advisory Circle was established with five members (community leaders, students, and TMU faculty) who will play vital roles in shaping the future of the Black Food Sovereignty Initiative's programming, based on the needs and priorities of Toronto's diverse Black communities (African, Caribbean and Black of African descent).



Black Food Sovereignty Initiative Highlights



Participated in **15 external speaking engagements**, all focusing on how Black Food Sovereignty and social justice factor into issues like climate change, food security, and city building.



Expanded selection of **culturally significant crops** including okra, African eggplant (aka "garden eggs"), callaloo, scotch bonnet peppers, Jamaican pumpkin, bitter melon (aka cerasee) and more.



Welcomed representatives of the Government of Canada to the Harvest Collective and Learning on the DCC rooftop to provide consultation on how Black Food Sovereignty can be incorporated into environmental, gender, and agricultural policy.



Hosted experiential workshops through the Harvest Collective and Learning Circle on various topics including:

- Introduction to Black Food Sovereignty (BFS) with Anan Xola Lololi
- Celebrating Black Farmers and BFS through story-telling with Hansel Igbavboa
- Herbalism and Plant Medicine with Kwabena
- Seed Saving for BFS with Peachtree





Market GardenHighlights

Planted the field 1.5 times over by using succession planting, harvesting over 4,600 pounds of food, which equaled to 7,265 units of produce, from 35 crops and 92 cultivars.

Top five most productive crops by quantity: cucumbers (1,437), eggplant (852), garlic (699), summer squash (599), and cherry tomatoes (410).

Sold 129 Garden Grab Bags, with 65% sold to students at an affordable rate.







Living Lab

Overview

In 2022, the Urban Farm Living Lab continued to create research partnerships to address user-driven and community-informed research priorities, and fulfilled 25 requests from undergraduate and graduate students, research groups, and professors from TMU and beyond.

The Living Lab hosted its second annual Research Roundtable, featuring 17 speakers and more than 100 attendees, to bring together participants from across sectors to have discussions about rooftop farming, share relevant research presentations, and to inspire future research.

This year marked the second time the Urban Farm collaborated with the Ecological Farmers Association of Ontario (EFAO) on a farmer-led research project, investigating a fava bean variety trial with other participating farms across Ontario to find out which variety was the most marketable and productive to grow in this region.

Living LabHighlights

Afsana Alam Akhie, MASc Civil
Engineering and Dr. Darko Joksimovic,
Associate Professor and Program
Director of Civil Engineering: investigated
the performance of low-cost sensors
and sensor networks for real-time
monitoring of a productive green roof to
gain a better understanding of rooftop
hydrologic and thermal benefits
analysis, including supervision of plant
growth and temperature.

Joseph Medaglia, Chair and Associate Professor, Fashion, Creative School, and Rachel MacHenry (Fashion, Creative School): established a research-creation partnership with the Natural Dye Network in North East America where we grew several plant species on the rooftop farm used for natural dying for teaching, learning, research and creative purposes.

Tamer Almaaitah, PhD Civil Engineering and **Dr. Darko** Joksimovic, Associate Professor and Program Director of Civil Engineering: completed analyzing the data that he collected in 2021 and published his findings in an open-source journal titled, Hydrologic and Thermal Performance of a Full-Scale Farmed Blue-Green Roof. This study found that 85-88% of stormwater was retained by the Urban Farm's green roof, resulting in a peak delay of 7.7 to 8 hours, greatly reducing strain on municipal sewer infrastructure





Engagement

Overview

The Urban Farm launched new programs that focused on experiential learning, skill sharing, research collaborations, and building community connections.

After the rooftop spaces were closed for a number of years for structural upgrades and the construction of the second rooftop farm, 2022 focused on welcoming as many visitors back to the rooftops as possible. The Farm emphasized themes of experiential learning, knowledge sharing and hands-on approaches to all engagement opportunities for the TMU community and beyond. Existing programs such as chartered tours and volunteering returned and expanded, alongside new programming like Friday Field Walks and workshops.

In total, The Urban Farm hosted over 70 engagement opportunities for the TMU community and welcomed over 500 visitors to the the rooftop spaces!



Engagement Highlights

Provided **5 full-time student positions** for **14 weeks** through the Urban Farm Field Apprenticeship program.

Hosted the Ecological Association of Ontario (EFAO)'s first in-person BIPOC Farmers Network meetup for farmers of all backgrounds to gather, connect, build community and share knowledge at the Urban Farm. Participated in **35 engagement events**including 5 in-class
presentations, 3 tabling
events, 14 interviews, 2
consultations, 8 panel
discussions, and 3
webinars.

Hosted 11 in-field classroom visits on both rooftop spaces and 8 in-person educational workshops on tomato and basil pruning, garlic processing, medicinal plants, lacto-fermentation, microgreens growing, potato harvesting, garlic planting, and composting.

Welcomed **over 100 TMU students** to the Urban Farm over the growing season through the Friday Field Walks program.

Welcomed **25 TMU** students through Workbee Wednesdays to provide hands-on farming experience over **7 weeks**.

Hosted **50 tours**, totalling **500 guests**, from June to October on both farm sites.

Media Features

The Urban Farm's ENG roof was used as a visual backdrop in the National Ballet of Canada's, MADDADDAM, a contemporary ballet based on Margaret Atwood's MaddAddam book series.

In light of the Urban Farm's 2022
Harvest Party, The Eyeopener published an article highlighting the Urban Farm's DCC location, the first purpose-built green roof dedicated to Black and Indigenous Food Sovereignty.

The Urban Farm field apprentices were interviewed by Nordic Bridges, a Nordic-Canadian cultural hub, on how urban agriculture helps them build community, engage with nature, and reconnect with food and culture.

Members of the Urban Farm were highlighted in the EFAO's Fall 2022 newsletter, with Ines Lacarne, field engagement coordinator, and Sharene Shafie, research coordinator, being interviewed alongside other rooftop farmers on the challenges (and rewards) of rooftop farming in relation to soil health, and Michelle Dang, living lab assistant, being featured on the cover for the Fava Bean research trial.







Panels

Participated in Durham College's horticulture program at the Royal Agricultural Winter Fair on current and future opportunities in urban agriculture and how youth can get involved.

Spoke at Toronto Urban Agriculture Week alongside farming experts from Toronto and Nerima, Japan on the benefits of urban agriculture.

BFSI participated in 5 panel discussions including "Black Food Futures: Black Youth-led Labour Market Assessment" and the York Region Youth Food Committee in collaboration with the Black Environmental Initiative's, "Intersection of environmental racism and food insecurity".

In a webinar series hosted by Laboratoire Agriculture Urbaine, we gave a presentation on the principles of soil health and how to nurture healthy soil for productive, rooftop farming.

Nicole Austin, the Urban Farm's Black-led Programs Coordinator, presented her work on running the Urban Farm's Black Food Sovereignty Initiative at a community conversations event hosted by the Black Food Sovereignty Toronto and the City of Toronto's Confronting Anti-Black Racism unit.

Urban Farm Donors

The Urban Farm would like to acknowledge and thank the following donors who provided funds in 2022. We appreciate the support and generosity of these individuals and organizations who helped fund many of the accomplishments the Urban Farm team achieved this year.

- Graywood Developments
- MakeWay/Harbinger
- Dawn Davis
- Rodney Yip





Harbinger foundation



Rodney Yip on the DCC rooftop farm

