

The Seneca Farm: A hub for sustainable urban agriculture

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Since September 2023, Seneca Polytechnic has been on an innovative journey to enhance food security and sustainability on campus through [The Seneca Farm](#).

The farm uses hydroponic growing technology to produce fresh, package-free greens inside repurposed shipping containers on Newnham Campus. The greens are then used in the Newnham Campus cafeteria. In addition to providing healthy produce for staff and students, the farm supports Seneca's strategic goals of increasing local and sustainable food, reducing carbon emissions and fostering community engagement in sustainability.

It also serves as a research hub for urban agriculture, exploring methods to increase food production capacity and improve crop nutrient content and yield. Its innovative approach offers a case study for high-yield farms that require minimal space and resources, potentially benefiting food-insecure locations globally.

The farm's hydroponic system uses as much as [95 per cent less water](#) than traditional agriculture methods and [reduces electricity usage by 70 per cent](#). It also cuts down on food transportation by [94,910,804 kilometers annually](#), and reduces waste by using recyclable materials and minimal packaging. The Seneca Farm exemplifies a sustainable and community-focused approach to urban agriculture.

By fostering innovation in urban agriculture, Seneca aims to mitigate the risks posed by climate change on the global food supply chain. The farm's monthly harvest includes 23 pounds of basil, with deliveries to the cafeteria and SSF Food Bank.

The Seneca Farm's operations are led by Sustainability Manager Courtney Hayes and Applied Research Manager Dr. Andrew Paton, with support from research assistants and collaborations with Seneca Dining Services and Aramark.

Faculty members can email Courtney Hayes at courtney.hayes@senecapolytechnic.ca to request learning opportunities and site visits.

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