6 Regenerative Agriculture

B Ecologically Supportive Features and Areas

The Trent University Symons Campus boasts a range of spaces and programs that promote sustainable agriculture and tackle food issues. The University manages approximately 35 acres (14 ha) of farmland that supports the Trent School of Environment and the Sustainable Agriculture and Food Systems program. Additional farm assets include the Trent Vegetable and Market Gardens that are student-run, and other spaces, including the Trent Apiary and a Traditional Medicine Garden. Staff, students and alumni stress the importance of developing the overall campus as a "land-based learning experience" or a "living laboratory" of which Trent's farm assets play a vital role.

History of the Trent Farm Assets

The Field Gardens and Rooftop Gardens were the first of the current Trent Farm assets established in 2005 and 2006, respectively. Nearly two decades later, they have expanded in size and scope to offer growing spaces to faculty, students, and the Peterborough Community Garden Network.

Established in 2014, the Trent Farm aimed to provide interactive learning opportunities for students; provide research opportunities for advancing knowledge and understanding of sustainable agricultural practices; increase on-campus food production; develop partnerships with sustainable food groups; and become a demonstration site for growers. Since its inception, the Trent Farm has become an important component of the Sustainable Agriculture and Food Systems program, and its long term security and prosperity is vital to the success of the program.

Together, the Trent farm assets present the University with expanded roles and academic resources; an interface with related disciplines (e.g., Indigenous studies); and an opportunity for wider sources of funding and research. The farm assets also respond to the **UN Sustainable Development Goal - #2 Food Security,** which underscores the need to advance sustainable agricultural practices and food systems under a holistic perspective with zero loss or waste of food.

Today, the campus is host to a number of faculty and student-run farm assets:

- Trent Farm
- Traditional Medicine Garden
- Rooftop Gardens
- Trent Vegetable Garden
- Trent Market Garden
- Trent Apiary

Rooftop Garden at Trent University

The Existing Trent Farm

The Trent Farm Vision

The future of the Trent farm is regenerative. Regenerative agriculture is designed to restore soil health and biological diversity from beneficial insects to micro-organisms and fungi. It presents an opportunity to integrate Indigenous Traditional Knowledge and engage with local communities.

The key is that it extends beyond the principle of "do no harm", to generously give back to the living systems of which we are a part. It is a way of being that embraces circularity and nutrient recycling, stewardship and recognizes our responsibility to future generations that will inhabit the living world. Such a system combines optimization of food production with nature and biodiversity protection. By doing so, it also provides net benefits to the natural environment.

To foster this opportunity, the TLNAP relocates the Trent Farm from its current location on sloped, seasonally saturated land that is unsuitable for growing and threatened by the provincial highway reserve (Ministry of Transportation Ontario), to underutilized Trent farmland, which offer additional carrying capacities, diversified production, water regulation, rich soil and nutrient cycles, and habitat and wildlife function. In its new location, the Trent Farm is accessible from the Campus Core and has servicing potential. It also provides the Trent School of Environment and the Sustainable Agriculture and Food Systems program with a demonstration site, which could be used to explore and advance practices and technologies that can contribute to the growing body of research related to the potential benefits of regenerative agriculture on the environment, and can therefore have a wider positive impact on agricultural practices in Ontario and beyond.

Trent also encourages the integration of productive spaces in, and within proximity to the Campus Core and University Districts. This may include the integration of new productive spaces such as an allotment garden at the University Integrated Seniors Village, an orchard within proximity to the Campus Core, among others.

The potential for, and location of, a smaller farm within the campus core will be explored, concurrent with the planning for the Trent Farm to relocate. Through further discussions, it is the University's intent to facilitate a seamless transition to new space, where relevant, and to provide a platform for continued growth and prosperity of sustainable agricultural practices on Trent.

Current Conditions at the Proposed Trent Farm Location

Regenerative Agriculture Guidelines

- Provide opportunities for teaching, research, and learning. The Trent Farm and its network of food producing spaces will act as a resource to researchers, students and the community, and foster cross-disciplinary engagements with other departments on campus.

Incorporate ITK approaches and Indigenous engagement through collaboration with the Michi Saagiig and the Indigenous Studies program, as appropriate.

- Thoughtfully establish the Trent Farm to offer a hub that recycles biological nutrients to regenerate and capture the value of organic materials at each stage of decomposition, and similarly restores, repairs, reuses, refurbishes, and recycles nutrients that do not decompose.

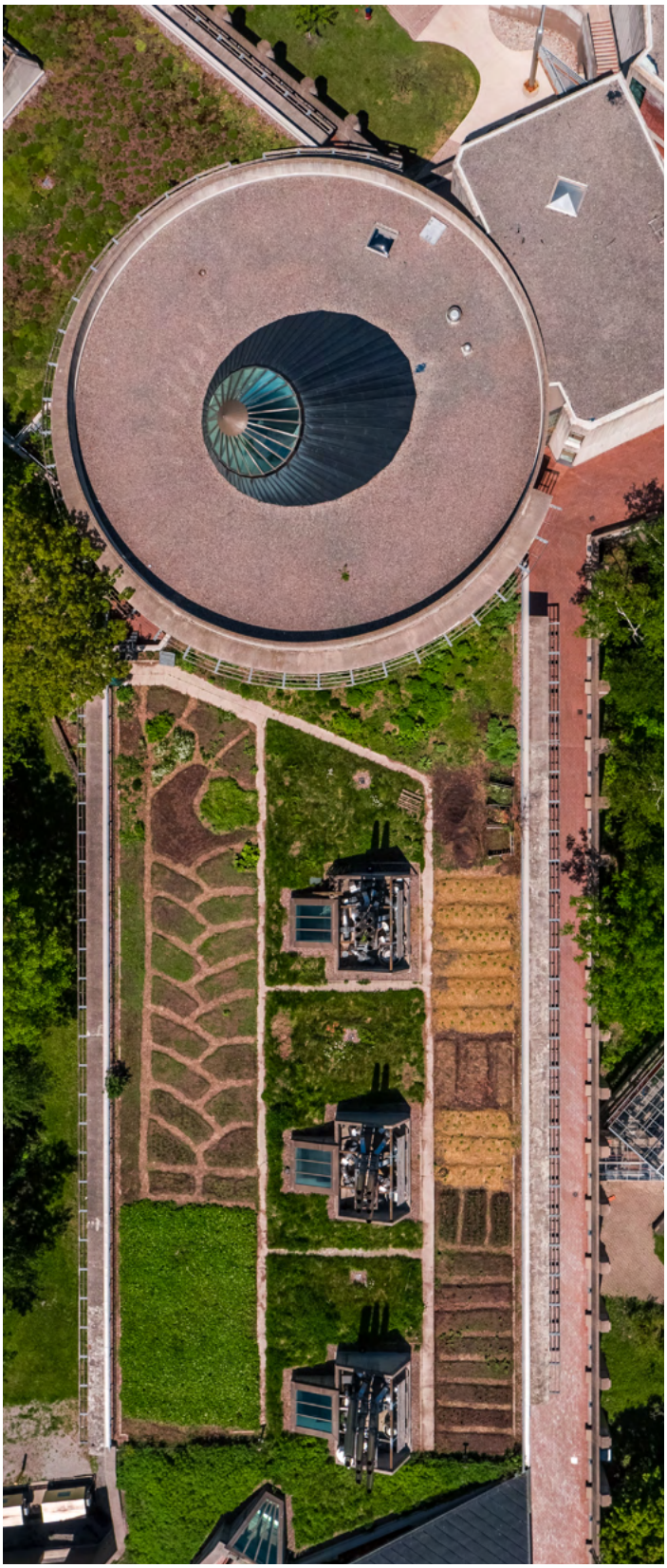
- Incorporate regenerative and organic farming practices, including conservation tillage, cover crops, crop rotation, among other sustainable practices.

- Enhance visibility and accessibility to the Trent Farm from the Campus Core through wayfinding, and accessible and active mobility connections.

- Avoid changes in hydrology that may impact the amount and quality of water reaching the adjacent Provincially Significant Wetlands.

- Identify, restore, protect, and steward natural and cultural heritage features, where feasible and appropriate, by integrating the existing topography, hedgerows, historic stone walls, and other culturally-significant structures as identified by the University.

- Incorporate value-added infrastructure including a green house, outdoor pavilion, kitchen facility, shed, and storage facilities to support farm uses, and expand teaching and community integration opportunities. Infrastructure and buildings must be located outside of the Trent Nature Areas.



Trent University Campus Rooftop Garden

The Three Sisters Garden at Crawford Lake Conservation Area, a Collaborative Project between Ojibiikaan and Conservation Halton. Source: Ojibiikaan

Trent Science Complex Greenhouse