

# **Highfield Farm**

"The end result that we aim for is to produce a system that is ecologically sound and economically profitable."

**Bill Mollison** 

"...the quantifiable value of food waste in Canada is actually \$31 billion... the cumulative cost of associated wastes (energy, water, land, labour, capital investment, infrastructure, machinery, transport, etc.)...

### exceeds \$100 billion."

\$27 Billion Revisited - Value Chain Management International Ltd., 2014

### "Upon this handful of soil our survival depends."

Sanskrit Text 1500 B.C.

## Holistic Management

From the Greek holos, meaning: all, whole, total.

Holistic management is a whole farm plannings system that helps to reap sustainable environmental, economic, and social benefits. Current management practices do not take into account the whole system.

Context is everything.

## Soil health is the foundation

Current agriculture models are massively subsidized, dependant on chemical inputs, kill microbiology, and degrade topsoil.

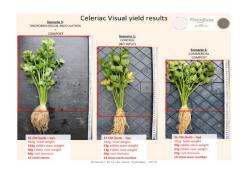
Regenerative systems can be built which increase water retention, microbial life, organic matter, and nutrient density.

Soil health directly drives farm profits.

### The Soil Food Web Works

40 years of research and applied solutions by Dr. Elaine Ingham







"Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has."

**Margaret Mead** 

#### "78% of Calgarians said they were willing to buy food grown locally to reduce their ecological footprint."

#### "In 2009, 21% of Calgarians reported

that they were concerned about not having enough money for food, with 9% reporting that they were 'very concerned'."

# **City of Calgary**

The goal of The City's Urban Agriculture Pilot Project is to:

**1.** Establish new entrepreneurial urban agriculture ventures on vacant or suitable City-owned land that use sustainable farming practices

2. Return City-owned vacant land to productive use

**3.** Develop guidelines for urban agriculture operations, permits, approvals and applicable regulations

**4.** Provide benefits to the Calgary community by supporting local food production

Roads Department (land holder) and Sustainability Strategy (Project Contact) are working very closely to provide support for this project. Criteria for Selecting Applicants:

- 1. Proof of non-profit or charitable organization status.
- 2. \$5 million in liability insurance
- 3. Urban Farmer Capacity
- 4. Farm Plan
- 5. Community Benefit Plan
- 6. Economic Feasibility



# **Compost Council of Canada**

**The Compost Council of Canada** is a national non-profit, member-driven organization with a charter to advocate and advance organics residuals recycling and compost use. It serves as the central resource and network for the compost industry in Canada and, through its members, contributes to the environmental sustainability of the communities in which they operate.

**The Compost Quality Alliance (CQA)** is a voluntary program established by the Compost Council of Canada and the compost producers utilizing standardized testing methodologies and uniform operating protocols to improve customer confidence in compost selection and utilization.

**Moss Park Community Garden** is located in downtown Toronto. The City of Toronto wanted to bring back the neighbourhood to Moss Park. The Compost Council of Canada approached Starbucks Canada and together, the three organizations established a community garden that helps feed families while also supporting neighbouring food-sharing organizations. The Moss Park Community Garden was first started in the mid-1990s and continues to be a community gardening hub today.



# **Highfield Farm Core Team**



Mike Dorion Soil Biology Education



**Jack Goodwin** Operations Lead Charitable Food Production



Jeremy Zoller Landscape Design Commercial Food Production



**Jay Fish** Logistics Greenhouse Design

### Highfield Farm Statement of Purpose

Highfield Farm is founded on three pillars of land revitalization, regenerative food production, and community building.

Applying practical soil science, we are revitalizing an underused site, through compost and vegetable production.

We engage Calgarians by providing educational opportunities, and practical volunteer work growing charitable food while restoring ecosystems.

We provide a model that can quickly capitalize on neglected land in Calgary through holistic site designs.



### Land Revitalization

Establish strategies, techniques and practices to convert brownfield sites into a healthy ecosystems.

Establish measurable standards and protocols around soil health and biology, water quality, carbon and nutrient cycling, ecosystem diversity, contamination, and remediation.



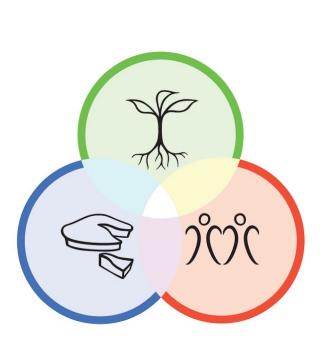
### Regenerative Food Production

Create a profitable and ecologically regenerative farm.

Produce food that is nutrient dense and accessible.

Research, develop, design, build, and trial passive solar greenhouses

Utilize multiple different food production systems.



### **Community Building**

Engagement of general public through workshops, tours, education, events, practical volunteer opportunities.

Provide internships and apprenticeships, especially to youth.

Partner with charitable organizations to build food security through education, experience, donations, and awareness of opportunities.

Regenerate green spaces for public use.

Activate local community and business through innovative programming, such as Plant  $\bullet$  Grow  $\bullet$  Share a Row.







#### What the site looks like now











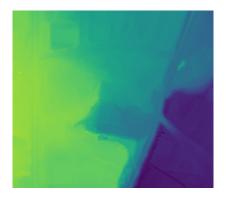


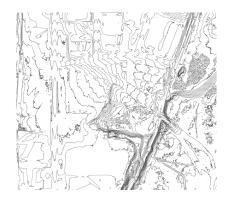
#### **But also flowers!**

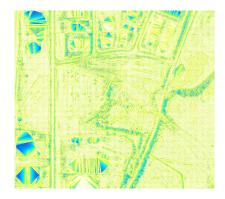




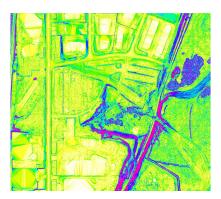




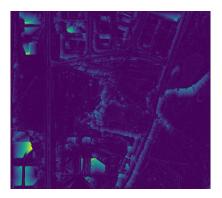




#### 100 hours of observation for 1 hour of work







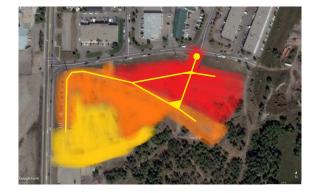






### 100 hours of observation for 1 hour of work









Master Plan Concept















### **Class II Compost Facility**

- vegetative matter + manure
- mid scale < 20,000 tonnes per year
- simple application with detailed plan
- minimal equipment for startup

- member of and adhere to standards of CQA
- test model for decentralized composting
- helping to inspire new ideas for compost facilities

### **Compost for Site Health**

- OM + fungi + microbes + humus +
  pH balance + ...
- making it on site allows for constant monitoring for optimal product and site specificity
- most needed input for vegetable grow beds

- enhance perennial landscaping and ecosystem services
- best material for water capture and runoff mitigation
- mitigate some urban contaminants immediately (ex. salt, dust)

### **Compost for Business Health**

- startup revenue through arborist tippage
- material brought to site (no trucking costs)
- potential for multiple revenue streams
  - landscapers, farmers, City
  - custom mixes
  - teas, socks, and other value added products

- enhanced landscape adds value to City property
- ZERO conventional maintenance saves City money

# **Current Collaborators**

















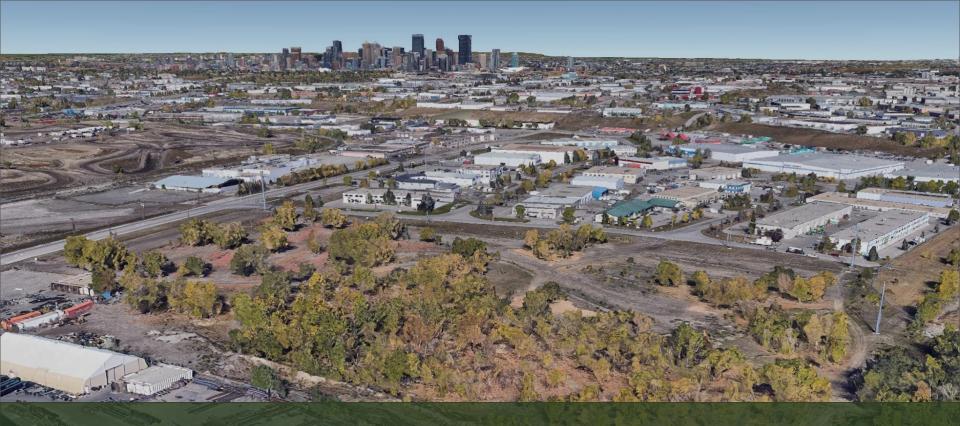


# How to Get Involved

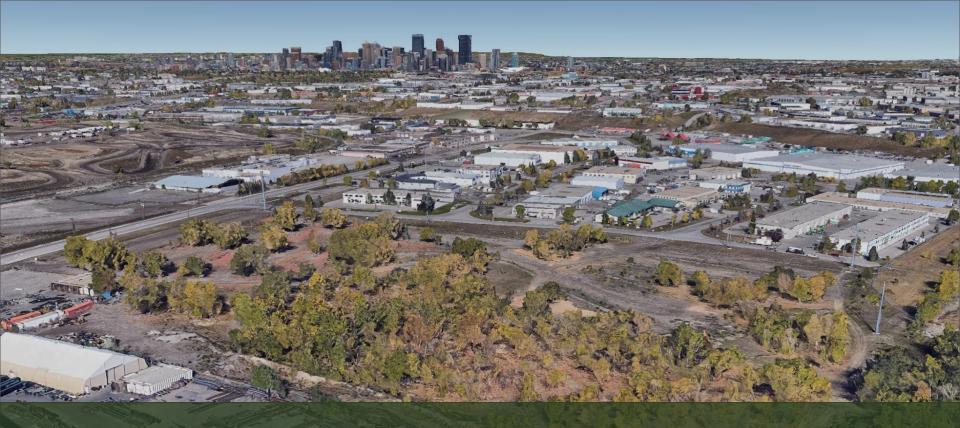
### highfieldfarm.ca

More info, instagram, volunteer

Parks Foundation Calgary: parksfdn.com Donate



# HighfieldFarm.ca



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