EXPERIMENTAL **ACRES**

2023 Project Outlines

OurFoodFuture
Guelph-Wellington

CROP/
PLANTING

Am Braigh Farms

Continued comparison of green manure and compost on market garden plots.

SUMMARY:

Am Braigh Farms will continue the work of the 2022 Experimental Acres pilot. In 2022 cover crops were planted in late summer on some market garden beds, instead of a second crop. Plots also received a compost amendment from composted on-farm waste. In 2023, yields will be compared between the cover cropped and non-cover cropped plots, along with soil tests from spring 2022, spring 2023 and fall 2023.

In addition, an economic case for cover crops will be determined by comparing labour costs associated with creating compost, purchasing compost and cover crops.

Monitoring will include soil sampling, qualitative analysis of soil structure, infiltration, compaction and green cover. Additional foliar nutrient testing between plots will occur during harvest.

SIZE OF TEST AREA

0.16 acres

TESTING

- Comparative soil testing (P,K, OM, EC)
- Aggregate stability, infiltration, compaction and green cover monitoring
- Tracking labour costs

RESEARCH QUESTIONS:

- Can cover crops be used as a tool to reduce labour associated with creating compost on farm?
- Will subsequent crops benefit from cover crops in the same way as compost?

Dufferin county

INNOVATION

Anam Cara Rising

Ecological monitoring of biodiverse hedgerow and comparison of compost tea amendment.

SUMMARY:

Anam Cara Rising (formerly Grand River Gardens) will continue monitoring a biodiverse hedgerow plante d in 2022. A snow fence was installed to help the seedlings throughout the winter. Saskatoon berries will be planted in 2023 to complete the hedgerows. A foliar application of compost tea will happen to half of the hedgerow to improve pest resistance and plant vigor.

Monitoring will be undertaken to inventory beneficial insects surrounding the hedgerow. Qualitative soil measurements such as soil aggregate stability, infiltration, compaction and green cover monitoring will be compared between hedgerows and other garden spaces. Finally, plant vitality will be compared between compost tea treatments.

SIZE OF TEST AREA

~500m

along fence line

TESTING

- Comparative soil testing (P,K, OM, EC)
- Aggregate stability, infiltration, compaction and green cover monitoring
- Insect count (CVC protocol)
- Plant vitality testing (height, leaf count)

RESEARCH QUESTIONS:

- How can ecological monitoring be used to determine perennial planting success?
- How does compost tea affect the growth of hedgerow plants?

Dufferin county

CROP/
PLANTING

Brilliant Meadows Farm

Establishment of new bed to establish 3 year rotation on vegetable garden.

SUMMARY:

Brilliant Meadows has proposed the creation of a new bed to create a three year rotation. The new rotation will be:

1. Vegetable Crop 1
2. Vegetable crop 2
3. Cover crop with chicken grazing

This rotation will integrate animals into the rotation increasing the nutrient input to the soil, and reducing the economic burden of resting a field. Ideal crop seeding timing and management will be determined in 2023.

Funding will be used to cover the cost of cover crop seed for this area. Monitoring and soil testing will include basic laboratory analyses, qualitative monitoring (aggregate stability, infiltration, compaction and green cover monitoring), as well as yield output.

SIZE OF TEST AREA

50 by 100ft

TESTING

- Comparative soil testing (P,K, OM, EC)
- Aggregate stability, infiltration, compaction and green cover monitoring
- Chicken weight
- 2024 yield monitoring

RESEARCH QUESTIONS:

- What is the appropriate planting timing of a grazing crop for chickens for nutritional benefit and ground cover?

Dufferin county

CROP/
PLANTING

Holesome Living Farms

Reducing reliance on agro-chemicals through companion planting in a market garden.

SUMMARY:

Holesome Living Farm has proposed testing companion planting to increase planting space in garden and to reduce reliance on agro-chemicals for pest management. Companion planting (or partner planting) is a method of gardening which pairs plants that can offer benefits to one another in close proximity.

Holesome Living's Experimental Acres will include:

1. One plot of conventionally grown vegetables (planted in evenly spaced rows)
2. Several plots of companion plants

Yield between the conventional and companion plots will be compared. Funding for this project will be used to spread compost across the full garden space and purchase supplies needed for best growing practices (drip tape irrigation, T bars etc).

SIZE OF TEST AREA

~50 ft by 20 ft

TESTING

- Comparative soil testing (P,K, OM, EC)
- Aggregate stability, infiltration, compaction and green cover monitoring
- Pest Monitoring
- Plant vitality testing (height, leaf count)

RESEARCH QUESTIONS:

- How can market garden planting be optimized for biodiversity?
- What companion planting combinations can be used to reduce pest pressure in a market garden?
- How can ecological monitoring be used to determine annual planting success?

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Alternate formats available upon request