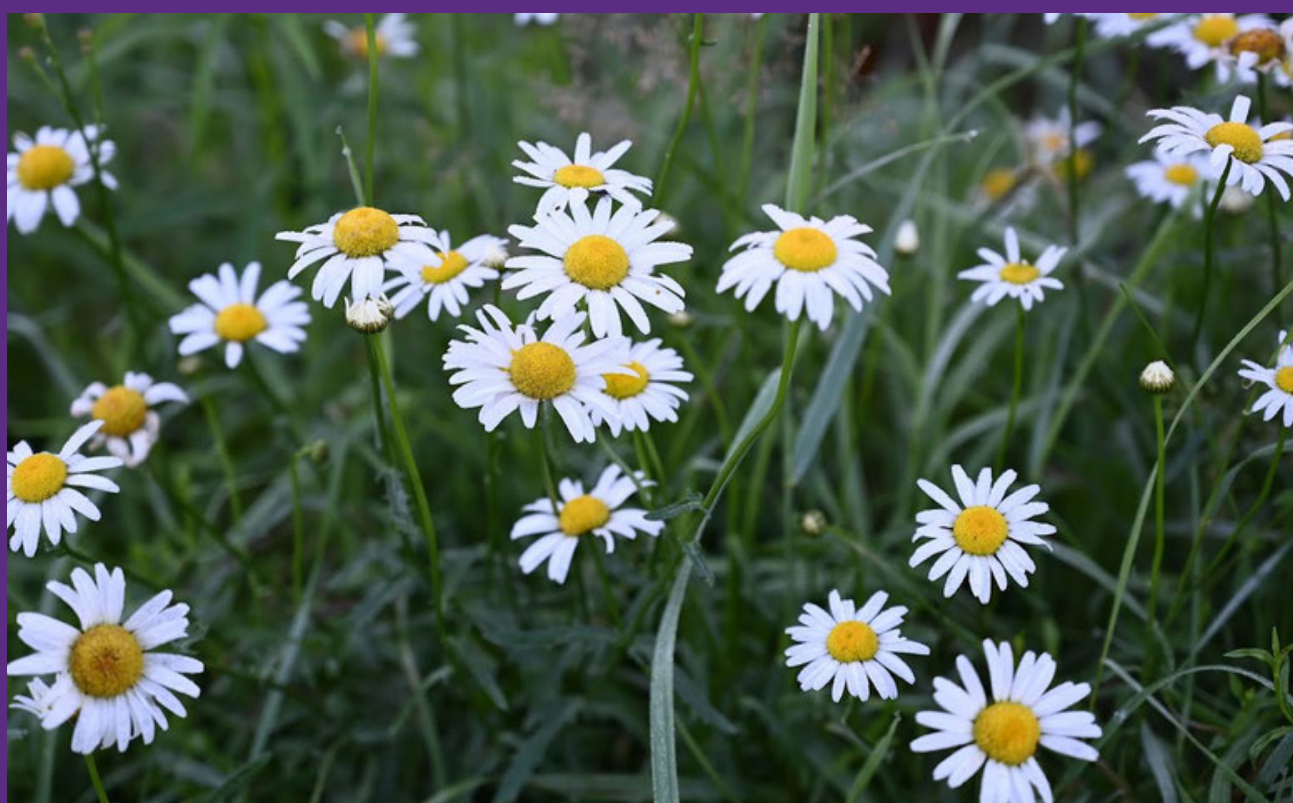
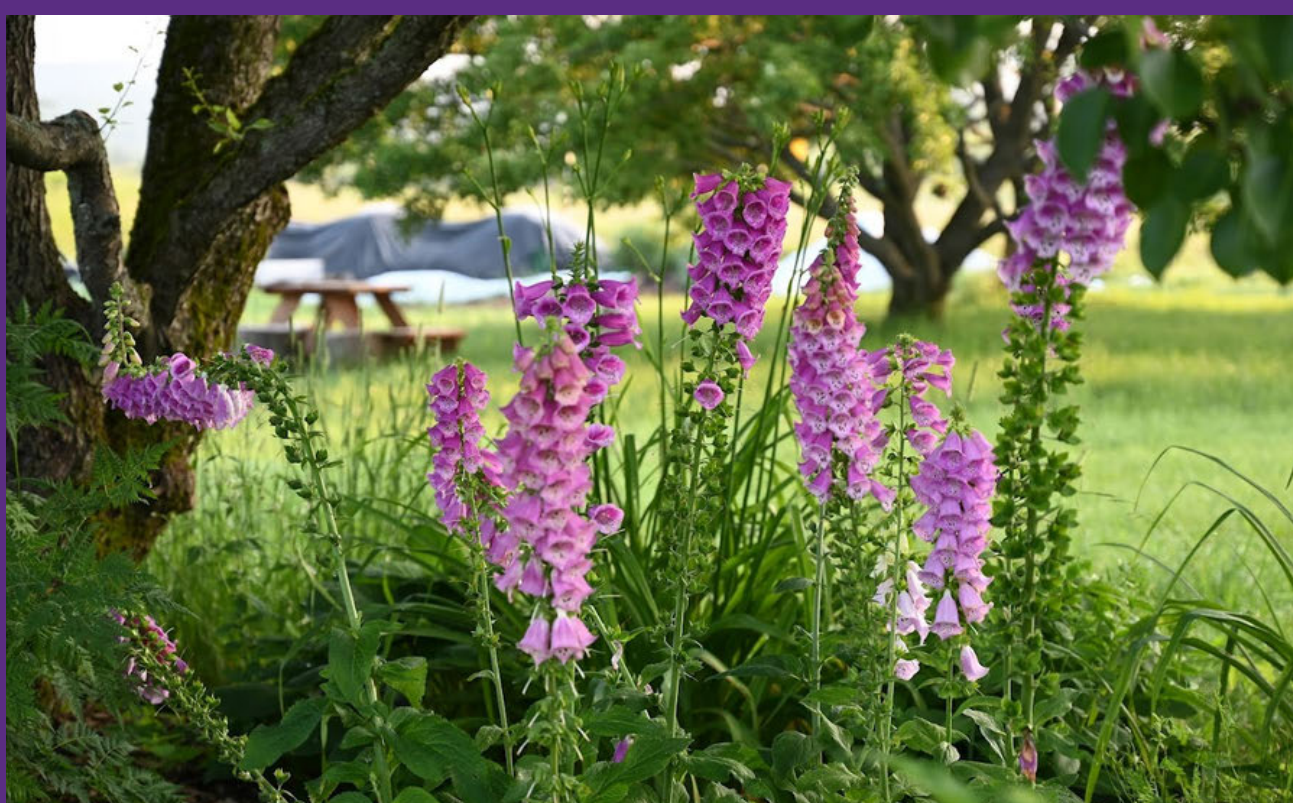


Educational Farm 2023

UNIVERSITÉ
BISHOP'S
UNIVERSITY

Cultivate sustainability for tomorrow's food systems



The Educational Farm is a place to learn creative solutions to sustainability challenges in food systems. Established in 2019, the Educational Farm is a place to practice experiential learning by exploring, experimenting and modelling what future sustainable agroecosystems could look like.



Strawberry Mulch Research

Led by Dr. Mirella Aoun, the goal of this project is to explore alternatives to traditional plastic mulches used in commercial strawberry production. The mulches being tested are red plastic, black plastic, switchgrass straw, and shredded office paper.



Kernza®

Kernza® is a perennial grain that is rich in protein and low in gluten. It has deep roots, and the stems can be used for bedding or mulch after harvesting the grain. Bishop's is the only research plot east of Manitoba growing Kernza® .



Orchard trees

In the 1980's, a dozen apple, pear, and plum trees were planted by the students and staff of Champlain's Farming Technology program. These trees offer a taste of what will soon to come, a larger, more diverse orchard set to be established in 2025.



Permaculture Guild

Led by Prof. Jennifer Downing, the permaculture guild is a collection of primarily perennial and biennial plants that work together to provide services such as attracting beneficial insects and pollinators, creating a diverse habitat, repelling pests, and sequestering nutrients.





Innovation in Raspberry Production

Led by Dr. Mirella Aoun, over 300 raspberry plants were established by the practicum class that took place on the farm in the spring of 2023. The goal of this plot is to examine how tall and narrow beds improve raspberry growth by keeping the roots raised out of stagnant water.



Seed Saving Garden

Led by Prof. Jennifer Downing, the seed saving garden is dedicated to saving seed from heirloom and open pollinated plants, ultimately creating a seed bank of ancestral varieties well-adapted to the local environment.



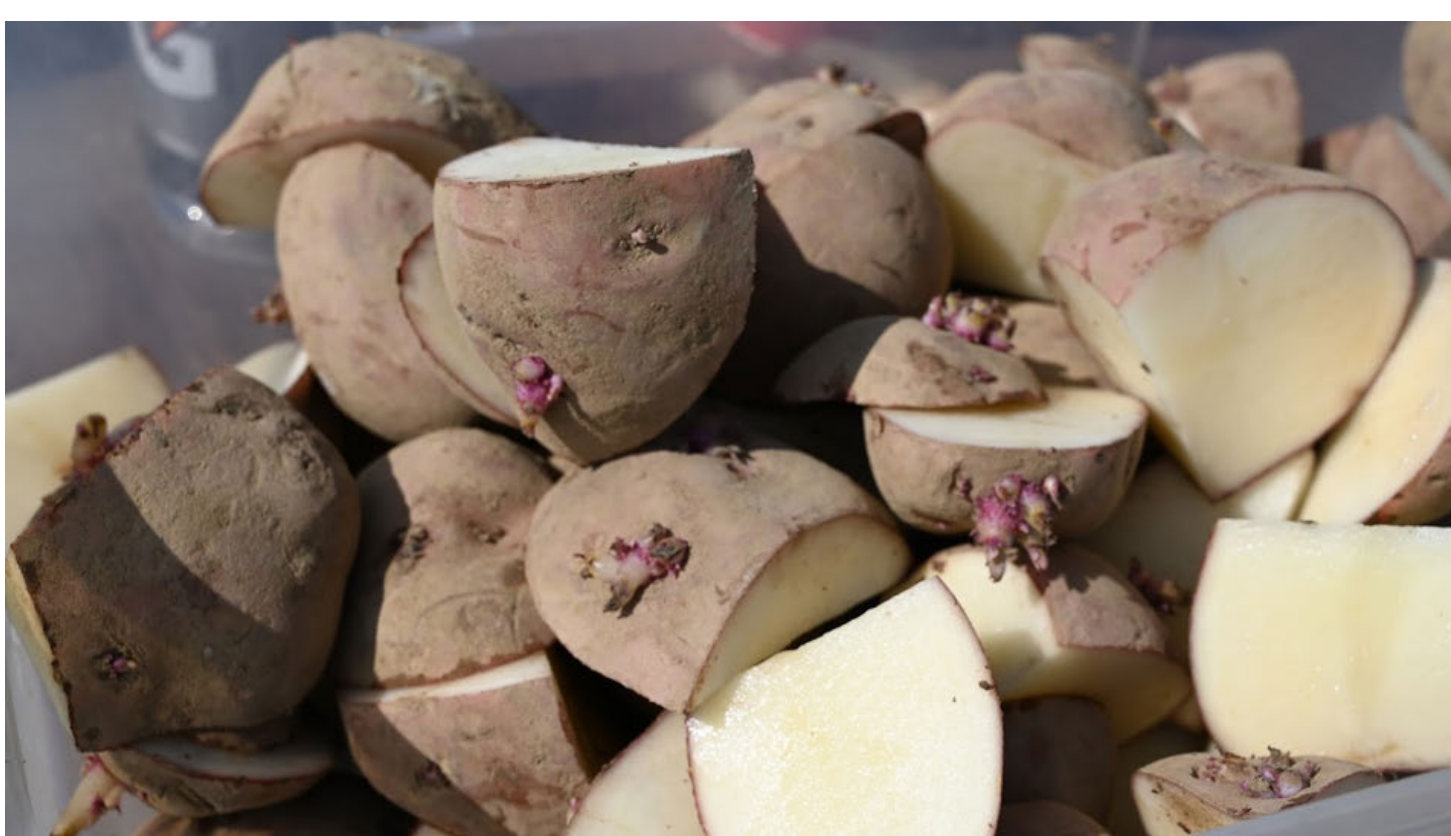
Soil Conservation Research

Led by Dr. Mirella Aoun in partnership with the Université de Laval, a rotation of beans, carrots, zucchini, and corn are being tested. Soil nutrients will be tested over multiple years to determine the impact of the crop rotation and mulches used on the nutrients present in the soil.



Switchgrass

In partnership with Seed Change, the educational farm is growing 8 different varieties of switchgrass. Data is collected on the rate of development and yield of the varieties to compare the differences between each variety. The switchgrass straw is used as mulch in our gardens.



Potato Breeding Research

Led by Dr. Darren Bardati, in partnership with Seed Change and funded in part by the MAPAQ, approximately 4000 potatoes were planted in the spring. The aim of this project is to develop new varieties of organic seed potatoes that are resistant to late blight and well suited to growing in low input organic settings.

Urban Garden

Led by Prof. Jennifer Downing and Dr. Mirella Aoun, the urban garden consists of 4 raised beds, a bean teepee, and 5 5-gallon containers. The garden serves as a demonstration plot for the Urban Agriculture class.



Hedgerows

Led by Dr. Jane Morrison, the hedgerows consist of a variety of hedge plants that are planted on the extremities of the garden plots. Hedgerows provide a variety of benefits such as acting as windbreaks, habitats for pollinators and beneficial predators, and creating a biodiversity hotspot.



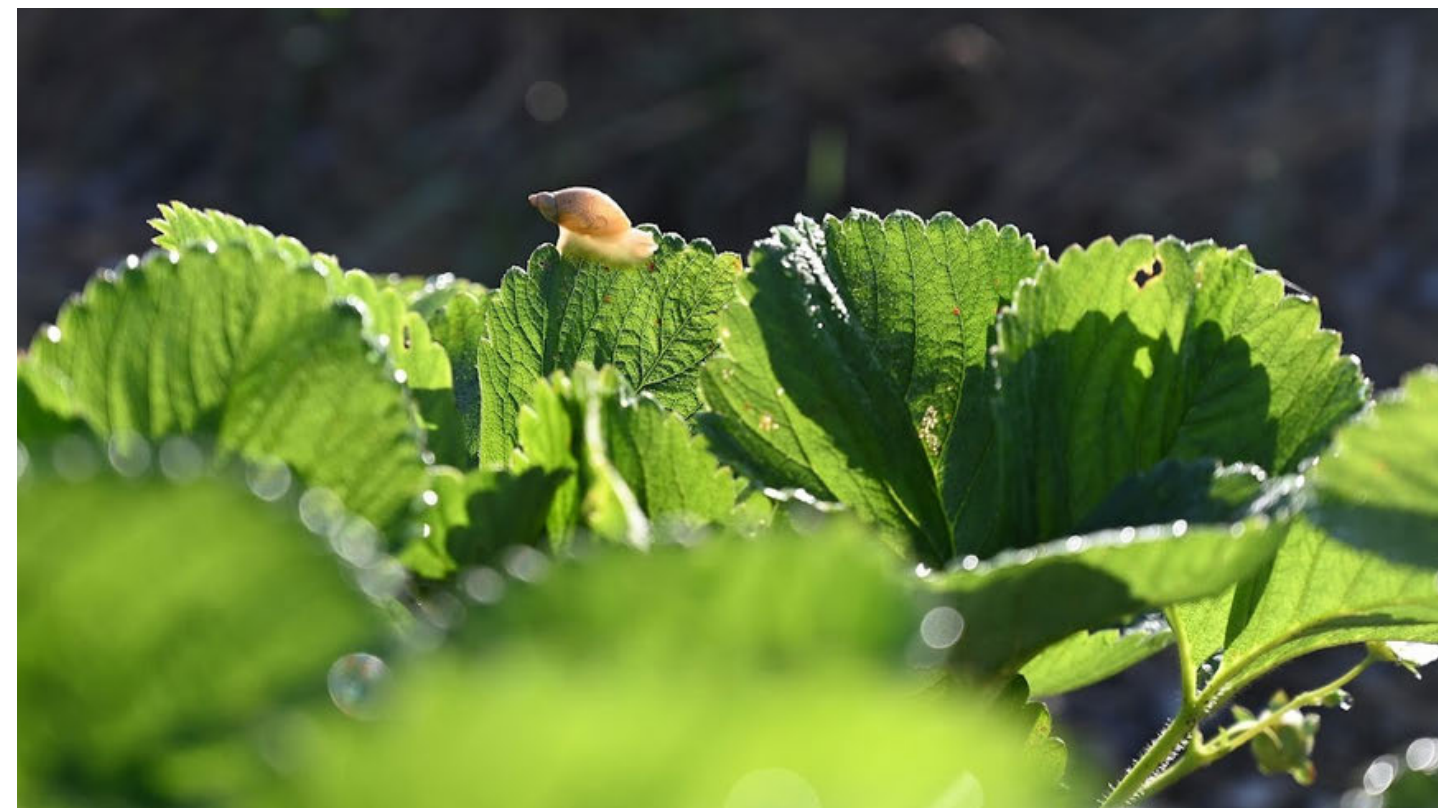
Maple Production

All of the maple production at the educational farm is done by the sustainable agriculture and food systems (SAFS) club. Currently, sap is boiled in a mobile sugar shack built by 4 students under the supervision of Prof. Bruno Courtemanche in 2022. Eventually, a permanent maple production shack will be established near the farm.



Cover Crop

Rather than leaving unused plots bare, a cover crop is planted. This helps reduce the weeds present on the farm, sequester nutrients, prevent runoff, and help improve the soil for future crop production. This summer, a mix of alfalfa, oats, red clover, and field peas is planted.



Future Farm Development

The master plan of the farm includes a biodiversity pond that will also be used for irrigation, a permanent building with a greenhouse, an orchard, small animals, and community outreach. Find out more at www.ubishops.ca/farm

