

Creating a Sustainable Agriculture Program for Worsley Central School



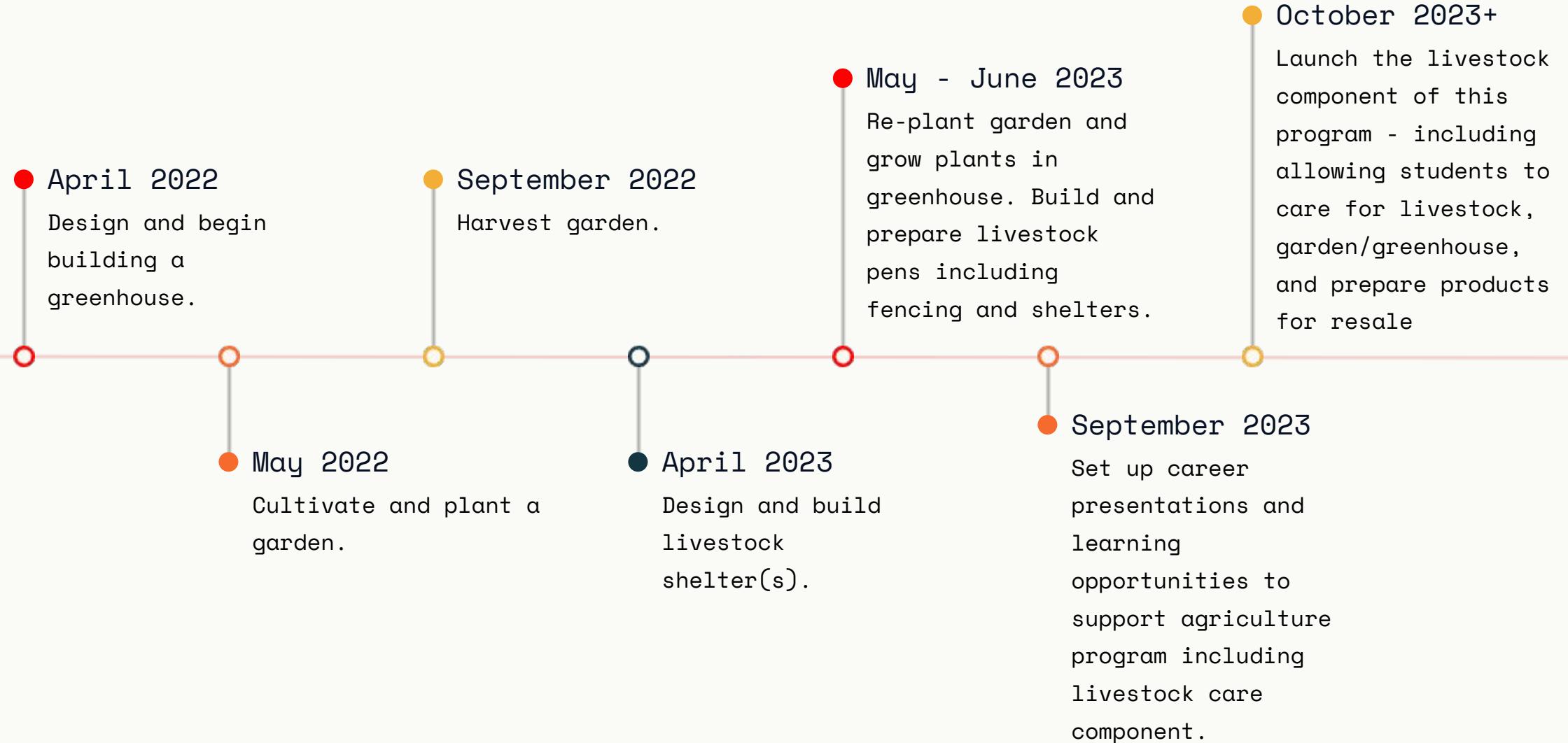


Overview of Program Goals and Objectives

Worsley Central School is committed to creating a sustainable agriculture program that will provide students with the knowledge and skills to become responsible stewards of the environment, independent adults, and potentially choose a career in an agriculture-related field. The concept of “sustainable” is two-fold in this context: students will learn about sustainable farming techniques and the program itself will eventually become self-sustaining.

The program goals and objectives provide a framework for the school to achieve this goal.

Project Timeline





Livestock Component

Livestock plays an important role in the sustainability of Worsley Central School's agriculture program. The school's livestock component includes a variety of animals, such as ducks, sheep, goats, cows, and donkeys. This component will grow and change to meet the needs and interests of the students. Students will start with a smaller animal such as goats and once routines and responsibilities have been established then larger animals such as cattle can be introduced. A donkey (or 2!) may be introduced for the purpose of protecting the livestock from predators. Consideration will be given to other animals depending on availability and student interest. Animals will be "fostered" out during the summer months or extended breaks.

Garden and Greenhouse



At Worsley Central School, students have the opportunity to learn about sustainable agriculture through the school's garden and greenhouse. The garden and greenhouse provide a hands-on learning experience for students to explore the principles of sustainable agriculture. During the "off-season" students will explore indoor gardening techniques using hydroponics and grow-tower technologies. These lessons will be integrated into the science curriculum as appropriate as well as within the CTF and CTS courses for grades 7+.

Preparing and **Packaging** Products for Resale

Packaging products for resale is an important part of creating a sustainable agriculture program for Worsley Central School.

To ensure the products are safe and secure, careful preparation and packaging is essential. Students will learn about regulations from Alberta Health Services for resale of produce or prepared products such as canned goods or cheese made in a "home kitchen."

Students will explore ways to prepare produce grown or products that can be created from the garden, greenhouse or livestock. Examples of this may include making and selling pickles or cheese. The bulk of these learning opportunities will be a part of the CTF and CTS course offerings at Worsley Central School. Worsley Central School will continue to supply the school's hot lunch program with potatoes, potentially expanding those offerings to include onions and other produce.



Team Responsibilities & Career Explorations

STUDENTS WILL LEARN FROM A VARIETY OF TRADES PERSONS, PROFESSIONALS AND EXPERTS IN THEIR FIELD. THEY WILL HELP GUIDE THE PROGRAM AND PROVIDE STUDENTS WITH INFORMATION ABOUT POTENTIAL CAREER OPPORTUNITIES. WORSLEY CENTRAL SCHOOL WILL BE ACTIVELY SEEKING OUT GUIDANCE AND ASSISTANCE FROM COMMUNITY MEMBERS WHO CAN WORK WITH THE STUDENTS.



Teacher



Student



Farmer



Chef



Vet Tech

Program Objectives and **Goals**



- Give K-12 students practical experience in the care, nutrition, and management of animals, while encouraging healthy eating habits and appreciation for locally sourced and sustainable food production.
- Encourage the students to develop responsibility, leadership, and teamwork. Strengthen the sense of community by involving parents, local businesses, and other stakeholders in the planning and upkeep of the garden and greenhouse.
- Continue to investigate career and business opportunities related to agriculture and trades, with a focus on providing opportunities for entrepreneurship and business skills. Examples include selling produce, creating a school-based farmers market, or exploring new methods of sustainable farming and production.
- Teachers will incorporate STEM education into our curriculum by teaching students about plant biology, horticulture, hydroponics, and data analysis. We will also provide students with opportunities to engage in engineering and design processes, as they create shelter blueprints and construction plans for livestock.



The advantages of this program are far-reaching and varied. It includes both academic and extracurricular elements.

Potential Benefits and **Challenges**



Increased Student Engagement

Providing students with active and practical learning experiences can heighten their involvement and enthusiasm.

Educational Opportunities

Students will have the chance to gain knowledge of sustainable farming methods, as well as acquire life skills and explore career prospects.



Financial Challenges

The program may necessitate additional funding to be successful, especially in its early stages. This program is designed to become financially independent over time.

Creating a sustainable agriculture program for Worsley Central School has the potential to bring many benefits, but also presents some financial challenges.

#teamwork #communitysupport #ittakesavillage

How Can You Help?

Donations of Time & Talent will be Appreciated!



Seeds donations - including onions, potatoes, carrot, turnip, beet or cucumber seeds



Gently used greenhouse materials such as seedling kits or egg cartons



Gently used fencing panels by donation or reduced cost



Straw, hay, feed, mulch, topsoil, potting soil etc.



Time & Talent - cultivation of garden, assistance moving materials and shelters, fencing



Time & Talent - experts in livestock, greenhouse, gardening & construction are always helpful



Time & Talent - assistance filling out grant applications for additional funding to get us started.



Assistance with transportation considerations for vet care or securing breeding stock may be needed



Time & Talent - summer garden weeders & helpers appreciated



Time & Talent - summer & extended break families willing to "foster" livestock when school is not in session

The future of our community depends on our ability to create an engaging agriculture program for our children's future.

Engagement is not just a word, it is an action. **Collaboration** is the key to making it happen.

AGRICULTURE

AGRICULTURAL LAW AND POLICY
AGRICULTURAL ROBOTICS AND AUTOMATION
SOIL FERTILITY AND PLANT NUTRITION
FARM BUSINESS PLANNING
PLANT PATHOLOGY
PEST MANAGEMENT
AGRICULTURAL STATISTICS
ANIMAL SCIENCE

SUSTAINABILITY

BIOTECHNOLOGY
GARDENING
LIVESTOCK
SCHOOLS
ORGANIC

FOOD SECURITY

HORTICULTURE
WATER TECHNOLOGY
COMPOSTING
FARM-TO-TABLE
HORTICULTURE
AQUACULTURE TECHNOLOGY

FARMING

AGRONOMY
AGRICULTURAL ENGINEERING
AGRICULTURAL TECHNOLOGY
BIOTECHNOLOGY
AGRICULTURAL METEOROLOGY
ANIMAL BREEDING AND GENETICS
RURAL DEVELOPMENT

EDUCATION

AGRICULTURAL CHEMISTRY
FOOD SCIENCE AND TECHNOLOGY
AGRICULTURAL MACHINERY AND EQUIPMENT
PRECISION AGRICULTURE TECHNOLOGIES
POST-HARVEST TECHNOLOGY
BIOENERGY PRODUCTION TECHNOLOGIES

GREENHOUSE

AGRICULTURAL BIOCHEMISTRY
WEED SCIENCE
AGRICULTURAL ECONOMICS

ENVIRONMENT

PLANT BREEDING AND GENETICS
AGRICULTURAL EXTENSION SERVICES

LIVESTOCK

RURAL SOCIOLOGY
ORGANIC FARMING PRACTICES
FARM MANAGEMENT

GARDENING

FOOD PRESERVATION AND STORAGE TECHNOLOGY
ANIMAL HEALTH AND DISEASE CONTROL
CROP SCIENCE AND PRODUCTION TECHNOLOGY

<https://www.agricultureforlife.ca/grant-stream-1>

Potential Grant for an Employee who could “manage” the “farm”

https://www.agricultureforlife.ca/_files/ugd/31c071_e0065abeeaf54118be5f3190fb75b501.pdf

Curriculum Connections for Junior High

<https://www.journey2050.com/>

Sustainable Agriculture course for Junior High

<https://www.agricultureforlife.ca/mission-to-mars>

Farm Safety Escape Room (Digital)

<https://agriculture.canada.ca/en/department/initiatives/sustainable-canadian-agricultural-partnership>

Canadian Government Sustainable Agriculture Partnership Program

<https://www.ruraldevelopment.ca/initiatives/agri-food>

Farm Ed Toolkit

<https://agriculture.canada.ca/en/programs/agridiversity>

Federal Agriculture Diversity Grant

<https://www.albertagoats.com/youth>

Alberta Goats Association

