



**Grow Eat
Learn**
Nourish Nova Scotia

Fall Planting Guide

For School and Community Gardens



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Introduction

This planting guide was created for schools and community gardens that want to grow food in the fall. In this guide, you will find tips on preparing your garden for fall planting, a list of suggested cool weather crops and seeds to plant whether you're growing in garden beds, cold frames, or in a greenhouse.

By tending to garden beds you can build healthy soil with practices like cover cropping. This boosts the fertility of the soil and therefore, the amount of food produced to help our youth and communities learn food skills.

Our changing climate brings with it a lot of uncertainty and big challenges for our local food system, for example, a drought affecting crop growth. Amidst the unpredictability, in some cases global warming does mean longer growing seasons and the ability for certain plants to overwinter in our region that never used to. The following guide will help you navigate fall planting and learn about tools and cold hardy plants that can produce food into December and early in the spring.

Climate Connections



Soil Stewardship: Composting and no-till gardening support soil health and reduce erosion while creating biodiverse ecosystems.



Food Security & Sovereignty: Growing food supports community resilience and health while lowering carbon footprint.

Season Extending Infrastructure

By adding infrastructure like floating row cover, cold frames, and greenhouses, the seasonal life of your garden can be expanded. These tools can protect plants from light frosts, pests and create warmer environments for plants to thrive. Cold frames are called 'season extenders' and provide a few extra weeks of growing time, even into December! If your school has a greenhouse, it does the same! Learn more about row cover on page 7.

Planting Trees, Shrubs & Perennials in the Fall

Late summer and early fall is a great time for planting trees! Cooler temperatures and more moisture means that your trees and shrubs will not suffer from transplant shock. However, you must plant your trees no later than the middle of September to early October (before the risk of hard/killing frost). Given how dry summer can be, fall planting may also be a friendlier environment for school perennial planting.



Preparation & Frost Date

Check the Frost Date

Before planting seeds, determine the earliest expected fall frost date for your area of Nova Scotia and count back from that date to see if there is enough time for the plant to mature.

For example:

Days to harvest	50 days
Expected frost date	– September 20th
Plant seeds	= Early August

To find out more about early frost dates for your region of Nova Scotia, you can ask people who have lived in your community for a long time. You can also consult the Farmer's Almanac online at this link:

www.almanac.com/gardening/frostdates/NS

Remember

As our climate continues to change many of the expected dates for an early fall frost will likely change from historical records. Preparing to adapt to such variability and instability will be critical for future gardening projects and food security. Try experimenting with planting/sowing at later dates and take note of the results.



A Helpful Tip

Whether you are planning your garden for spring, summer or fall planting, most gardens tend to do best when they are near to the people who care for them. That's why the traditional kitchen garden (a garden that was planted right outside the kitchen door) was often so abundant and beautiful. If your garden is situated along a pathway that you often walk, you will be more attuned to how your garden is doing, and you will find yourself growing increasingly connected to your garden as the growing season unfolds.



Cool Weather Crops to Plant for Fall

These are 4 kinds of suggested plants to plant in your school garden to get an Autumn harvest.

Transplants

Suggested crops: Red Russian kale, curly kale, kohlrabi, lettuce (red oak leaf), Bokchoy, beets, herbs (garden sage, curly parsley), cauliflower, cabbage, Swiss chard (red), and spinach



Select cold hardy vegetables. If you plan to transplant your seedlings in September, most of your crops must be started in seed trays by the middle of July to early August. Check seed packages for the number of days required for 1) germination and 2) maturity (harvestable).

Direct Seeding/Sowing

Suggested crops: Radishes, pea shoots, kale, lettuce (red oak leaf), beets, spinach, carrots (dwarf variety), snow peas, cilantro, tatsoi, spring turnips, kohlrabi, arugula, mizuna (less hardy than tatsoi), Swiss chard (red is more cold hardy than white varieties)



Select cold hardy vegetables whose seeds have a short germination period and number of days to maturity.



Bulbs

Suggested crops: Onion sets, hard-necked garlic varieties such as rocambole & continental, flowers such as tulips, daffodils, and crocus



Many bulbs prefer to be planted in the fall for harvesting or enjoying the following spring or summer.

Cover Crops

Suggested crops: Oats & field peas, buckwheat, oilseed radish (daikon radish is one kind)

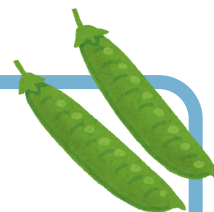


By planting cover crops, you can build organic matter and increase the nutrients of the soil in your garden. Cover crops also suppress weeds, eliminate some pests, protect the soil from wind and rain erosion, and from drying out due to solarization.

Cover crops should be planted no later than the middle of August, so they are established before the first hard (or killing) frost. For small gardens, it is best to select cover crops that will die back over the winter and form a nice mulch cover, which will be reabsorbed into the soil, or can be dug into your garden soil the following spring.

For more detailed information on each of the suggested plants for Cover Crops, see page 6!





Cover Crops (continued)

These cover crop suggestions are usually easy to find at farm and feed stores, and some seed companies. Each suggested cover crop provides different ecological services and has different management considerations.

Suggested cover crops:

1) Oats and field peas: This old-time combination is relatively inexpensive and dies back over the winter providing a substantial mulch layer. Peas are a legume and build nitrogen in the soil.

2) Buckwheat: Thrives in cool moist conditions but is not frost tolerant, so buckwheat must be planted at least 50-60 days prior to the early frost date. Because of its rapid growth, buckwheat is an important crop for suppressing weeds and building soil tilth. Buckwheat attracts pollinators such as honeybees and the dark buckwheat honey is highly desired by beekeepers.

3) Oilseed radish: As the name suggests, some oilseed radish varieties are grown to produce vegetable oil. Oilseed radish grows quickly during cool weather. Oilseed radish has a thick, deep root that can help break up compacted soil layers and acts as a bioaccumulator - helping soil nutrients stay in the garden and not leach away due to rain or winter snow melt. Daikon radish is a type of oilseed radish.





Floating Row Covers

"Floating row covers are lightweight, non-woven fabrics made from materials like polypropylene or polyester. They are **used in gardening to protect plants from pests and harsh weather**, while also helping to maintain consistent temperatures and increase humidity around the plants. Additionally, floating row covers can extend the growing season and enhance crop yields by providing a shield against frost and other environmental challenges."

-Matt Gibson from the Garden Channel

The use of floating row cover will assist in extending growing season in garden beds, but plants that cannot handle below freezing at all may still be impacted by hard frost. Row covers can also be used earlier in the season to grow hot weather crops and as a pest management tool.



Sources

If you want to learn more, review our references linked below to further your learning on Autumn planting.

- [Vegetable Gardening in the fall](#)
([Dalhousie University of Agriculture](#))
- [Your Fall School Garden](#)
([Massachusetts School Gardens](#))
- [Nova Scotia School Garden Resource Guide](#)
- [Fall Garden Templates](#)
([K-State Research and Extension](#))
- [Cheap and Easy DIY Row Covers for Your Garden](#) ([Garden Channel](#))

