

About the Garden Lessons

Over the course of the Garden Lessons, we will walk educators and young gardeners through the process of starting a garden from planning to harvest to putting the garden to bed for the winter. **Inside, you will find activity guides, curriculum connections, and tips and strategies for successful school gardening.** This hands-on series of Garden Lessons will support educators, youth leaders and students to start and tend to a garden project. These lessons were originally adapted from the Nova Scotia School Garden Resource Guide (2014).

This series is ideal for the integrated learning nature of Nova Scotia elementary curriculum; however, these activities can engage an all ages audience. Throughout the series that spans a full growing season, participants will keep a garden journal for planning, observation, and creative expression. Each student can have their own journal, or a group can keep one together.

Getting youth in the garden offers them opportunities to shape their food system, learn healthy food choices and connect with nature, all while building resiliency in a changing climate and having fun along the way.

Lesson Goals

- Engage in hands-on learning
- Gain food literacy skills
- Learn climate action connections
- Support emotional well-being and connection to the non-human world

Gardening and Climate Action

Look for these climate action icons in Grow Eat Learn resources to make connections between gardening and the climate!



Habitat Creation & Biodiversity



Waste Reduction & Circular Systems



Soil Stewardship



Water Stewardship



Food Security & Sovereignty

Adapting to climate change is critical for our food system. By engaging in the garden, students can learn about food production and its interdependence with plants, animals and weather.

Garden Lesson 8

Putting the Garden to Bed

Introduction

Complete this lesson in late October or November.

When the garden has been harvested, it is time to wrap up for the season. This is known as "putting the garden to bed," and includes removing or covering the plants that are left over and packing away tools and supplies. Putting the garden to bed reduces the amount of work that needs to be done at the beginning of the next growing season. It is also an important step in taking care of the garden soil. The tasks can be completed over multiple days or weeks. It is best to finish putting the garden to bed before the weather is too cold and the ground freezes completely.

Lesson 8 will cover the process of closing your garden and planning for next year, including a brief lesson about crop rotation.

8.1 "Tucking In" the garden

1. Harvest as long as possible before putting the garden to bed! Pay attention to the weather forecast; if there is a frost warning, spread old sheets over plants to protect from frost. Container gardens can also be covered or you can bring the plants in overnight (e.g., garage or shed).
2. When harvest time is over, start cleaning up by removing any plants that are diseased or damaged by insects. Dispose of these in the green bin, not garden compost. Next, tidy up the bed by cutting the remaining annual plants at their base, leaving roots in the soil to decompose. The plant parts can be left on the surface as mulch and bug habitat or disposed of in the garden compost. Tuck the garden in for winter with additional mulch to prevent weeds from sprouting and keep the soil healthy.

Annual plants produce fruit/vegetables and die within one year.

Examples:



tomato



zucchini



pepper



pea



pumpkin

Learning Connections

Science

Observe, Question, Identify, Investigate, Research

Language Arts

Comprehend, Read, Write

Visual Arts

Draw, Colour, Design, Create

Food & Nutrition

Prepare Healthy Food

Climate



Habitat Creation & Biodiversity



Waste Reduction & Circular Systems



Soil Stewardship



Water Stewardship

3. Trim any perennial plants back so that there is only 15-20cm of stem left above the ground. Spreading a layer of compost and mulch would keep them warm and happy. For a container garden, perennials can be stored in a bright place indoors for the winter.

Perennial plants produce fruit/vegetables and appear to die in fall, but they will continue growing back for many years.

Example:



asparagus



many herbs (ex: oregano, sage, thyme)



4. Clean and sanitize gardening tools and put them away. Don't forget to safely store away any bags of soil or other supplies.

Tips and Tools

If the garden is planted directly in the ground, consider planting a "cover crop" to protect the soil and keep it healthy, such as winter rye or winter. Search cover crops or green manure to learn more.

8.1 Materials:

- Garden tools, such as
- gloves and a spade
- Mulch (like straw or raked leaves)

8.2 Planting for next year

There's one last step that you may want to consider before you're finished for the season: planning next year's garden!

There are many plant "families" that react differently with the soil and add or use up different nutrients. Rotating a new "family" into the soil each growing season can make the garden grow stronger and healthier. This is called crop rotation.

Here is an example of a **common rotation** between four plant "families" (leaf, fruit, legume and root) and which nutrients they add or use up:

Leaf

For example, spinach and lettuce use a lot of Nitrogen to make Phosphorous



Fruit

For example, tomatoes and peppers use Phosphorous and a little Nitrogen to make Potassium



Legume

For example, beans, peas adds Nitrogen back into the soil



Root

For example, carrots and garlic use Potassium and any leftover Nitrogen



1. Check the garden map you made in your garden journal during Lesson 1. This can act as a guide to show what was planted and where so you can create a crop rotation plan.

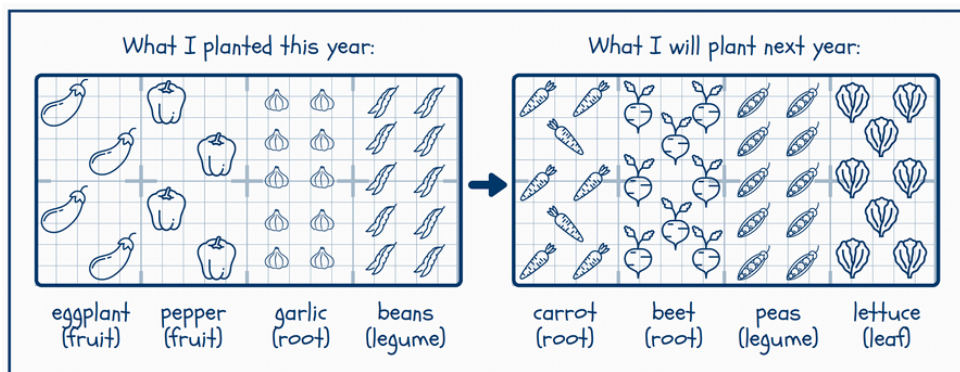
Crop rotation ensures essential nutrients are replenished by plants themselves. Three of the most important nutrients for healthy plants are Nitrogen (N), Phosphorous (P), and Potassium (K). Each nutrient has a different function.

- **Nitrogen (N)** is important for plants because it helps grow strong green leaves.
- **Phosphorous (P)** is important for plants because it helps grow seeds, flowers and fruit.
- **Potassium (K)** is important for plants because it helps grow deep, healthy roots.

2. The next blank page in your garden journal should be named "Plan for Next Year." On this page, draw a map of what you planted this year to match the one you drew in Lesson 1.

3. Using the chart above, follow the arrows to find out what plant "family" you should plant next year. For example, if you planted a "fruit", plant a "root" in that spot next year. Draw another map that shows the new plants you have chosen. Make sure to clearly label both maps with the name and family of each plant.

8.2.1 Example



It's time to celebrate all that you've grown, eaten, and learned!

Congratulations on planning and planting the garden, observing and interacting with the ecosystem, harvesting and enjoying the food, and putting your garden to bed for the season.

As your growing space hibernates for winter, you've already begun planning for fertile soil and abundance next year.

Well done!

Tips and Tools

Keep this year's garden map along with a crop rotation plan for next year so that you can refer back to them over the winter. This becomes a helpful resource when you when you start making next year's garden plans.

Putting the garden to bed properly promotes soil health through carbon sequestration and preventing erosion, and by creating habitat for pollinators to overwinter in.