



Hayes Farm Travelling Garden Tool Kit for Teachers

Seeds! module

We also have modules that are adapted for K-2 and Grades 3-5 on:

1. Monarchs and Milkweed
2. Bugs (K-2)/ Insects (3-5)
3. Earthworms
4. Three Sisters Indigenous Gardening
5. Maple Syrup

Thanks so much for taking an interest in food, farm and nature education!

Teachers like you help to shape a child's lifelong interest in the natural world.

We look forward to seeing you and your students on the farm!

Goals:

1. To help students understand the basic biology of how plants make seeds and what seeds need to grow.
2. To help students understand important interactions between plants and animals like pollination and spreading seed. This includes seeds in the human diet.
3. To create a sense of respect and engagement with local indigenous cultures and all cultures other than our own and their cultural food ways by learning about indigenous seeds.
4. To encourage children to ask questions and explore outdoors.

Materials:

1. The K-2 presentation is a simplified version of the presentation for grades 3-5.
2. You can find additional information in the Resources section.

Activities

1. Use models provided to look at stages of seed development

Students can put the stages in the correct order and make observations.



2. Take Homes Planting – Seed bags

This can be handy if you are starting this module near the end of the school year and don't have time to start seedlings in the classroom. You may also be lacking good window space in your class.

You can make the bags up together and send them home to parents.

Not every family will have the ability to plant the garden, but the simple act of growing a plant from seed is really empowering and memorable. Even if they grow a bean out in a pot, that would still be a great experience.

Making Seed Pouches

1. Fold wax paper and staple it together to make a bag to hold seeds
2. It would be best to use seeds that start well inside at warmer temperatures and can grow in a pot until harvest time (in case students don't have planting space at home).

Ex: tomatoes, marigolds, sunflowers, zinnias, cucumbers, bush beans will grow with a support stake in the middle of the pot.

NB Community Harvest Garden has a free seed library at the Fredericton Public Library. We know that teachers are often needing to spend their own money on activities, so we highly recommend you check out this free selection of seeds.

3. You may want to send home a small write-up about how to start the seeds that you select as parents may be new to growing from seed too.

4. Put a sticker to label the seed kit and hold the bag shut.

2. In class seedling start

Many teachers do already start seedlings in their classrooms. Again, check out free seeds at the Fredericton Public Library.

It could be interesting to modify the amounts of water, sunlight, nutrition each plant gets to help students understand how important these elements are. You can keep a scientific log of photos and data like plant growth, colour and other characteristics as you go.

3. The Biennial Carrot Experiment

In the late winter/ early spring you can take any carrot from the vegetable crisper that has small white hairs on it and plant it upright in loose, moist soil. Even if there are no small roots yet, they will grow quickly with consistent humidity.

Before long the large end of the carrot will start to push up a green shoot and roots will increase. The plant will likely not reach maturity before the end of the school year, but it could be planted outside and left for observation when students return in the fall. This is a fun, quick and inexpensive lesson to help students understand that plants sometimes need more than one growing cycle to produce seed.

In the resources you will find a few videos about how to start an avocado plant in the classroom as well.

Resources

Seed Library hosted by both of Fredericton Public Libraries in partnership with NB Community Harvest Gardens.

Contents will change each year, but you can view a copy of the seeds you can take home at nbchg.org. There are planting instructions with each. Seeds are available at both Carleton Street and Nashwaaksis locations.

It would be an interesting experience for students to save some seeds and share them back to the library in the future. If you are interested in doing this, you can reach out to Carol Muncer at carol@nbchg.org.

Growing an avocado plant from a pit (seed)

You likely will not get fruit in our climate (although, it could be possible if your school has a year-round, warm, inside growing space). This video shows a pot method and a water bath method. You could run a side-by-side experiment if you like.

Either way, you should get a lovely green plant for free! It is fun for students to think about getting seed from food waste.

From **Nicole's Garden** channel – How to Plant Avocado Pits TWO ways! Garden with kids at home

(5:28) Mom and her kids prepare pits for growing. More suited towards grades 3-5 in terms of following instructions and retaining information.

<https://www.youtube.com/watch?v=BBhqge9yqkA>

Pollination Video

From **SciShow Kids** channel - Flowers and Their Pollinators: A Perfect Match!

<https://www.youtube.com/watch?v=pnBoM4idf1k>

(5:08) Adult educators with puppet helper. Suitable for K-5.

Explains types of pollinators and how their physiology helps them to drink nectar and how they spread pollen. This YouTube channel has a great variety of science videos.

Finding seed suppliers

For quick reference, here are a few Maritime seed companies that carry traditional/ interesting varieties. These seeds tend to be non-GMO, open-pollinated, with lots of Maritime heirlooms.

- [Rainbow Seeds](#), New Brunswick
- [Revival Seeds](#), Nova Scotia
- [The Incredible Seed Company](#), Nova Scotia
- [Annapolis Seeds](#), Nova Scotia