

Are you Board material? Here's your opportunity. See page 2.



Climate change and urban agriculture



Around the world, food growers are on the front lines of climate change. In British Columbia, intensive flooding and heat waves killed 1.3 million farm animals in 2021. Madagascar, Jordan and New Mexico are currently navigating severe droughts, affecting food production and raising the costs of farming.

While the challenges of climate change can feel distant, they have already hit home in Durham Region. In January 2020, regional council declared a climate emergency, noting that the area has experienced flooding, higher temperatures and the spread of vector-borne diseases. The 2019 Durham Region Agriculture Sector Climate Adaptation Strategy anticipates that a "warmer, wetter and wilder climate" will pose risks to the local agricultural sector. It cautions that livestock and grower health, crop yields, and farming infrastructure such as equipment and facilities could all be negatively affected by extreme weather. However, the strategy also points to opportunities - warmer weather could bring a longer growing season

and the opportunity to produce different kinds of food.

Given that food systems are responsible for a more than a third of global greenhouse gas emissions, agriculture has the potential to be a significant contributor to the problem – or a major part of the solution. Fortunately, even on a small scale, food growing can have many positive environmental impacts.

Take, for example, a community garden. When an individual chooses to grow and eat their own food (and perhaps even preserve it to eat during the winter) they may be replacing food in their diet that would have been imported from far away. This reduction in food miles, or the distance food travels before it reaches the eater, helps cut down on greenhouse gas emissions.

As a part of green infrastructure, community gardens – along with other green spaces such as food forests and rooftop gardens – also generate many other environmental benefits. Extreme weather linked to climate change can mean greater amounts of rain that urbanized areas may not be prepared to absorb. Gardens can help soak up stormwater runoff, reducing the risk of flooding. Durham's Community Climate Adaptation Plan includes rain gardens among its suggestions for green infrastructure to improve the "health and resiliency of the natural environment" and to help reduce heat in urbanized areas.

Community gardens also can make productive use of organic waste through composting -amore planet-friendly approach than sending food to landfills, where it produces emissions as it decomposes. They encourage biodiversity and help reduce air pollution.

While it may not be quantifiable, community food growing also serves the vital purpose of connecting people to nature, and to one another. Durham Integrated Growers for a Sustainable Community (DIG) works with around 30 independently operated local gardens that are bringing people together to create positive environmental impacts. The Field Community Garden, for instance, aims to create opportunities for people to learn about sustainable and traditional gardening practices and to help sustain the natural environment surrounding the garden site. The Hope Community Garden has a mission to strengthen community bonds and foster environmental stewardship.

Our actions can seem small individually, but working together, we have the chance to create a more environmentally friendly future. The next time you plant a seed in your garden or

snack on a locally grown carrot, know that you're playing a part in creating a low-carbon and climate-resilient Durham Region.



Tyrone Mills



If you find yourself out in the east end of the region, you're sure to enjoy a visit to Tyrone Mills. Built in the village of Tyrone in 1846, Tyrone Mills continues to operate as a working water-powered lumber and flour mill. This makes it one of the oldest remaining grist mills in Canada. It is open year-round and provides a wide range of flours, baked goods, preserves, and local crafts - and was one of the only places around to find yeast during the huge breadmaking trend of the pandemic's first wave. In summer, you can take a stroll around the mill pond or relax in the pergola with some delicious pizza from their outdoor bake oven. However, Tyrone Mills is perhaps best known for their apple cider and apple cider doughnuts which are a huge attraction at Bowmanville's annual downtown Applefest. If you take Liberty St. straight north from Bowmanville, you'll encounter Tyrone Mills at 2656 Concession Rd. 7.

Agri-hero

Sargent Family Dairy & Creamery

The first Durham farm to process its own milk on site, Sargent Family Dairy has a brand new processing facility, complete with a viewing room where visitors can watch the process. The Sargents have been farming Jersey cows for 4 generations. While most milk in Ontario comes from Holstein cows, Jersey milk provides more nutritional value, including more protein & calcium. The



DIGging for Board applicants!



Are you passionate about urban agriculture, community gardens, and food security?

Are you looking for a volunteer position with a modest time commitment that will positively impact Durham Region? If you answered yes, then please consider submitting your name and short resume stating your experience as well as what you feel you could contribute to the DIG Board.

Currently, we meet virtually once per month and are in need of an energetic individual who can help with grant writing, or to serve as our liaison with the two local school boards (the DDSB and the DCDSB). Board members are also tasked with helping run our annual Community Garden Tour/Poker Run, planning excursions, leading workshops, writing articles for our *DIG This* newsletter and more!

If interested, please contact Mary Drummond at info@durhamdigs.ca or gangwarily@ sympatico.ca The current DIG board will review all applications, and put forward nominations from suitable candidates at our next Annual General Meeting in March 2022.

"You don't get harmony when everybody sings the same note."

So,... discover participating in the Board and contribute to DIG's harmony. Your ideas are welcome.

Let Me Plant Corn / Braiding Sweetgrass Revisited!

This past November, we had the privilege of listening to Erin Hayward, a Kanien'kéha (Mohawk language) speaking third-generation urban Indigenous person. This virtual **Table Talk**, entitled "Kayénthonenhste", focused on the role of a seed carrier or seed keeper, a role that Erin herself has taken on after she was gifted her first Indigenous variety of corn seed in 2015. Erin maintains seeds by growing them out and by keeping them viable for future generations. No easy feat.

During Erin's presentation, we learned about ways that First Nations people grow and process corn, as well as the history of oppression by the U.S./Canadian governments against Indigenous peoples, policies deliberately enacted to cause food insecurity/ starvation, and cultural genocide.

Zea mays (ZEE-uh MAZE) is humanity's third most important cereal grain after wheat and rice. While there is but one species of corn, there are countless varieties (or types) due to corn's long history as an Indiginous food crop. In fact, the corn plant is thought to have originated between 55–70 million years ago in Central or South America. Indigenous peoples conducted controlled experiments over time to create different colours of kernels, flour corn (think tortillas), popcorn types, dent (cattle) corn which stores well, sweet corn, grandfather or pod corn, which grows well in our Northern climate, and many, many others.

A great winter food source, corn is jam packed full of starch, yet lacks many essential nutrients. To bring balance, Indigenous peoples from all over Turtle Island (North America) grew beans and squash alongside (and often in and amongst) the towering corn plants.

While corn provides the structure for beans to flourish and climb along for support, like a good sister, beans do something amazing underground. Because of microscopic mycorrhizae, a type of fungus that associates with the roots of beans to fix nitrogen, this protein-rich plant helps the hungry corn plant to grow tall.

Where does squash factor in? This slow to start sister spreads along the ground right when the other sisters need a helping hand,

during the hottest days of summer. Squash shields the soil from the scorching sun, and crowds out competition. It's the perfect weed barrier. Not only this, squash is rich in betacarotene and other vitamins not found in beans or corn. Together, the three sisters provide humans with a complete diet.

For more information and to see our **Table Talk**, Google "Let me plant corn" or visit https://tinyurl.com/3ez68su2

For more information about the synergistic relationship between corn, beans and squash, check out *Braiding Sweetgrass* by Robin Wall Kimmerer: https://tinyurl.com/muvbt7r9



Coming up

Mark your calendars! Our next virtual **Table Talk** is planned for February 2022, and is all about how to prune apple trees, brought to you



by DIG, The Nourish and Development Hub, and Nature's Bounty Farm.

Nature's Bounty (http://naturesbountyfarm. com/), located South of Uxbridge, has been growing apples since 1980, and opened to the public in 1993. They have over 25 acres of the usual favourites, plus certain heritage varieties.

Rob Alexander will share his expertise on the art and science of pruning apple trees to help them grow a long and productive life. Including fruit trees in your garden, homestead, or community garden goes a long way towards food security, and will even delight your senses with fragrant white blooms around Victoria Day weekend.

In Fall 2022, you can visit the Nature's Bounty orchard (by appointment) and pick your own. While there, enjoy a self-guided nature walk around the property, obstacle course, corn maze, picnic area, pumpkin patch and a visit with the sheep.

Make sure you follow us on Twitter (@ durhamdigs) or Facebook page (https://www. facebook.com/DurhamDIGs/) to keep current on our events!

ForagingTip

Ontario native plant species spotlight ~ Highbush Cranberry!

Have you ever been hiking or paddling along in Autumn, when suddenly you spot a beautiful, red berry-filled shrub, and think to yourself, "What is that?". Chances are it is the Highbush Cranberry (Viburnum trilobum).

This sun-loving, five to ten foot tall plant can be found on forests' edge, in swamps, shorelines, thickets, and even in your garden. Easily identified by its leaf when not in fruit, the highbush has maple leaf-like leaves, cut into 3-pointed lobes and a deep green colour. To properly identify the plant, look for glands (where the petiole meets the leaf blade) that are club-shaped and have stalks.

Known too for its beautiful white flat-topped clustering June blossoms which attract beneficial pollinating insects, and an edible fruit by the end of summer (ripening from late August to September). The brilliant red buds are a feast for the eyes during the winter blahs.

The best part about the highbush is that it attracts many bird species, who are provided with a snack late into winter, as well as deer, moose, beaver, and squirrels, all of which feed on the berries. The fruit has one large



seed and is high in vitamin C making it a great substitute for store-bought cranberries when making sauce or jelly for your Christmas dinner.

For more information, visit -

https://practicalselfreliance.com/highbushcranberry/ (which explains how to avoid mildly toxic invasive Viburnum opulus) &

https://naturewithus.com/plants/shrubswoody-plants/highbush-cranberry

Is there an Ontario Native plant you'd like us to showcase in our Spring newsletter? If so, email adrian_778@hotmail.com with your idea.

GardenART



Looking for a holiday craft that you can do with the family? Look no further!

We have put together a DIY Wreath Making video on our DIG YouTube channel (https:// www.youtube.com/user/DurhamDigs/featured)

Start by taking an excursion outdoors, and seeking out native red stemmed dogwood or grapevines. Then, find some evergreen boughs for decoration. Make sure you practice sustainable harvesting techniques to ensure there is enough to go around. When you mindfully harvest your supplies, you can actually help to increase plant growing rates by thinning out the habitat, which promotes optimal growing conditions.

For instructions on how to make your holiday wreath, and to follow along with Brandon, visit our YouTube channel mentioned avove.

Recipe

Roasted frozen green



Ingredients

- frozen green beans enough to fit on a baking sheet without too much overlap
- olive oil enough to coat
- salt, pepper, optional other spices/herbs or parmesan cheese - to taste

Steps

Preheat the oven to 450 degrees. High heat is important for getting good texture when roasting any frozen veggie. Do not thaw the beans.

Toss the beans with olive oil. Add salt, optional garlic powder, onion powder, paprika, etc. Toss again to combine. Simple spices work well with just about any vegetables.

Place the prepped beans on a baking sheet and roast for 15 minutes.

Stir the beans. Sprinkle with parmesan If using.

Continue roasting until they are the desired texture, anywhere from 5-15 more minutes depending on your oven and type of sheet pan. Some cook faster than others.



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