

A member of Veg in YEG was kind enough to share some of her gardening knowledge with us. Here are the notes that I took during the 2 hour crash-course in urban agriculture.

Weeds -

The biggest takeaway about weeds was not to worry too much about weeding your paths! The important thing is to keep the weeds out of the vegetable beds themselves. In June, gardens look very overwhelming! Your plants are just getting going but the weeds are out in full force. Do not panic. Keep weeding around your plants so that they have the space they need to grow, but do not become too concerned otherwise.

One weed common in Edmonton urban gardens is quack grass:

Quack Grass

- Identifiable by its long, broad leaves (as opposed to the grass which the city of Edmonton uses for boulevards). Another difference is that the city grass, when it is weeded, will behave like turf and come out of the ground in a flat, slab-like form. Quack grass, on the other hand, has very stubborn roots. They reproduce via rhizomes, which are modified stems running underground horizontally. They strike new roots out of their nodes, down into the soil. They also shoot new stems up to the surface out of their nodes. The takeaway here is that even a tiny part of the root of quack grass, if left in soil, can regenerate into a full plant. Therefore when weeding the garden bed, it is necessary to dig up the entire root and remove every part of it. Another plant for which this is the case is dandelions. The rest of the weeds, if you uproot them, will just try out and die, and so you don't have to be so careful with them.
- Fun fact: The roots can be dried and turned into flour.

Creeping Bellflower

- Another weed common to Edmonton. It has edible leaves and an extensive root system that makes it quite difficult to eradicate. Another plant which you have to dig up all the roots for.
- Fun fact: This is the flower that Rapunzel's father stole from the witch's garden in the Old World story.

More info:

<https://www.gardeningknowhow.com/ornamental/flowers/campanula/removing-creeping-bellflower.htm>

Garden Structure

- One of the things I admired about the Veg in YEG garden was the thoughtfulness of the layout. In the first row of her garden - facing the sidewalk - she had planted native flowers. This made the space more welcoming to the community, and gave the garden a pleasant appearance from the sidewalk.

Good Flowers:

- Flea Vane (which has an aster-like appearance)

- Marjoram - this is a perennial, which means less work to upkeep in the coming years.

Leafy Greens:

- Chard and Kale were started indoors
- Kale - covered to prevent flea-beetles. The covering allowed air-flow and water (it's often used by industrial agriculture). Kale is something that bugs really like. Flea beetles like dry environments, not wet ones, and will jump around like fleas. So make sure when you're covering kale you're not trapping the bugs in with the kale! To do this is fairly simple, if you disturb the kale by rustling it a bit, all the bugs will jump around and jump off, and at that point you can cover the kale. If using the cover that Veg in YEG is, you can just leave the cover on 24/7, only removing to check on your plants to make sure they are getting enough water and nutrients and to weed as necessary.
- The cover is called "row cover" and you can get it at most garden centers. Looks like a white, sheer sheet.

Carrots

- Can be hard to germinate. Cover the bed tightly so no air gets under.

BTK

- This is the name of an organic pesticide. It's a type of bacterium that naturally occurs in soil, is nontoxic to humans, birds, mammals, etc. but is toxic to insect larvae.
- It breaks down in the environment in 3-7 days.

More info:

<https://www2.gov.bc.ca/gov/content/industry/forestry/managing-our-forest-resources/forest-health/invasive-forest-pests/gypsy-moth/what-is-btk>

Diatomaceous Earth

- This is a product of fossilized water plants
- When purchasing for the garden, purchase "food grade" and not the stuff produced for swimming pool filters!
- Can be used as an insecticide as it is lethal to ants, bedbugs, snails, slugs, etc as the microscopic sharp edges cut through their protective layering.
- It will not harm worms or other beneficial microorganisms in the soil.
- It will not bioaccumulate
- Insects have no way to build up resistance to it.

More info:

<https://www.gardeningknowhow.com/plant-problems/pests/pesticides/diatomaceous-earth-insect-control.htm>

Intercropping

- Kale and Cilantro grow well together. Cilantro is an umbellifer, which means it attracts pest-killing insects.

- Thyme and strawberries are good companions
- Beets and (onions/leeks/chives/green onions) make good companions

Good Edmonton Crops:

- Lettuce
- Sorel: very tasty, had a nice lemony flavour; self-seeding
- Parsley, celery, oregano, sage
- Marigold, chives, tarragon, strawberries
- Leeks
 - Note that you need to mound leeks to get the best effect - mounding increases the “white bit” of it which is the most desirable part of the plant)

Green Compost (Grass Clippings)

- Green compost - like cut grass - is good to mix in with the top layer of your garden soil, in among, for e.g. the chard. This helps the soil.
- Annual vegetables like bacteria-rich soils
- Woody perennials (berries etc) like fungi-rich soils
- Green manure (like grass clippings) will give you a higher bacteria count - this is why it's good for annual vegetables, like chard.
- To add to soil, lay them in a thin layer, then mix it in with the soil and give it a water.

Squash

- Squash prefer well-drained soil
 - If soil isn't draining well enough, you can mix sand in with your compost, or use clay sand
 - Squash are fussy and do not like being transplanted, so be extra careful with them when you do!
 - Squash flower during the morning only - so if you're watering every morning while its flower is open, you're not allowing the insects to pollinate it. For this reason, squash may benefit from hand-pollination.
 - To pollinate by hand:
 - Distinguish the male from female by the bulbous growth on the females. It is this bulbous growth that needs to be pollinated.
 - You can take your finger and rub it against the stem of the male, and then rub the female to pollinate it.
- More info: <https://www.almanac.com/video/how-hand-pollinate-squash>
- Check under the leaves for pests - look for eggs and remove any that you find
 - Nasturtium (a type of flower) is good to plant between squash. You can just plant them from seed. They will attract pollinators to your garden, and they have edible leaves and seeds (look up recipes if you want ideas). A member suggested using the leaves for taco shells.

Soil Blocks

- For growing seedlings, a soil-block maker is a fantastic investment! You can then make your own soil blocks out of potting mix, leave them on a mesh tray on top of a metal

shelf, and your plants will not become rootbound, they'll be quite happy where they are until your garden (and schedule!) is ready for them.

Thinning Carrots

- Carrots will not be able to grow fully until we thin them. Personally I find thinning vegetables to be hard to do, but keep in mind that you can keep the greens and use them for salads or sauces, or even as compost to give back to your soil, so they are not going to waste.
- To thin them, imagine a carrot at its largest size, and then try to leave about that much room around each plant that you leave.
- Try to leave the largest ones. This can be hard when you're trying to leave space for the ones you're leaving in, so don't sweat it too much, that's just what you're aiming for.
- For the ones you're leaving in the ground, tuck them back in, as you've just disturbed their roots and you don't want to leave them uncomfortable.
- Be quick as you're thinning. Try not to overthink it.
- *Companion plant:* Alyssum (a type of flower) makes a good companion plant for carrots. It's a good ground cover for moisture retention.
- *Soil:* Carrots want reasonably loose soil.
- *Harvesting:* to know when to harvest carrots, you can pull one up and taste or smell it. Carrots that are ready for harvesting will be sweet.

Thinning Beets

- While you can leave the thinning a bit late for carrots, beets are very fussy and need to be thinned right away.
- Leave 3-4 inches between seedlings as we do the thinning
- Can also use greens in salads, pesto sauce, or compost.
- *Companion plant:* Alyssum makes a great ally for beets, too! They provide ground cover and keep the moisture in the soil. The downside is that they provide shelter for slugs. On another positive side, they also provide shelter for ground beetles, which hunt slugs.

Radishes

- You very much need to thin radishes
- To thin them, leave about 1 inch of space between plants
- The leaves are edible, can be used as salad greens, pesto sauce, etc
- Radishes are very picky about harvesting, need to be harvested immediately when they're ready.

Broccoli

- Fertilizer is good for broccoli and other flowering plants
- Can be picky about when to harvest

More info about harvesting:

<https://www.miraclegro.com/en-ca/library/edible-gardening-tips-and-ideas/when-how-harvest-broccoli>

Lemon Bomb

- Good perennial. You can make tea with it :) And it grows very well here.

Tomatoes

- If lower leaves of tomatoes are yellow, perhaps you're overwatering, or they have too little nitrogen in the soil
- There are determinate and indeterminate tomatoes. Determinate means they have a predetermined number of fruits they will yield in a season.

Potatoes

- Just like tomatoes, there are determinate and indeterminate potatoes. With determinate potatoes, mounding will do nothing to increase the yield, so save yourself a lot of work by knowing which kind of potato you're planting!

Companion Plants

- Arugula goes very well between celery and brussel sprouts
- Tomatoes go very well with marigold and parsley
 - Marigolds repel nematodes, but slugs like them.

Compost

- Personal experience shows that even compostable plastic does not compost quickly, it is quite difficult to compost unless ripped into quite small pieces beforehand. Instead, you can line your scraps bucked with newspaper!

Work

- Taking care of a garden is a lot of work! Our workshop leader stated they spend about 20 hrs a week in this garden, on top of the hours their volunteers provide. They tend to spend 6 hours at a time each time they visit, and visit about 3x a week! It's very impressive!!!