MESSAGE FROM THE EDITORS:

We are all Seedy Zines! By checking out, learning from and contributing to this grassroots publication, you are creating awareness and sowing the seeds of freedom. Thank you! Our gardening communities grow stronger when we grow together. Sharing seeds, food, stories and knowledge brings hope to a planet in peril. Caring brings life to a society keen on destruction. It’s thyme – lettuce learn, laugh and live together in Peas and Lovage in SOILdarity!

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Toronto Seed Library Locations
back cover
BE A GOOD SEEDYZINE

SOW WHAT YOU BORROW FROM YOUR LOCAL SEED LIBRARY BRANCH

REMEMBER TO HARVEST SOME SEEDS TO RETURN!
THE HISTORY OF SEEDS IN NORTH AMERICA

By Brendan Behrmann

To understand where we are and where we can possibly go, we must first understand where we’ve been. Studying the past and the ways of our ancestors gives us a vital sense of identity, meaning and purpose — seed history is no different.

When discussing seed history, David Kuyek’s notion of “seed regimes” is a useful lens. A seed regime is made up of the laws and cultural factors that regulate how seeds are produced, distributed, saved, and adapted. These regimes are of limited duration, they last only as long as the legal and cultural factors that establish and maintain them are in place. Changing seed regimes are bordered by crises, from which new regimes and possibilities emerge. We are currently living through one of these “bordering crises,” and a crisis can be a perfect opportunity to affect systemic changes.

Unfortunately, the current trajectory of the seed regime being constructed is towards one further outsourced to the same corporate interests that seek to turn seeds into “intellectual property.” These interests are not interested in family farms, small-scale production, food security, sustainable methods or the future; they crave but one thing — money. This is a fundamental shift away from the two previous Canadian seed regimes.

The first post-colonial seed regime in Canada was that of the Native peoples and the European settlers. During this regime events occurred as they had historically and farmers had near exclusive control over the seeds. In this initial regime, the role played by government was minimal, mainly supportive, and corporate entities were virtually non-existent. The second seed regime began in the late nineteenth century when the government began to play a far more active role, creating a seed regulatory system and centralizing plant-breeding efforts in the hands of scientists using modern breeding and hybridization techniques. This second seed regime was driven by national policy goals and was generally well accepted by farmers.

The second seed regime began to collapse under the weight of increased control over policy by business interests. The big agricultural corporations began to directly manipulate the DNA of plants, inserting sections of DNA code from other organisms into food crops. This was contrasted to previous natural breeding techniques used to create new varieties
allowed them to claim total ownership over the new variety that was created. If you own something, only you can sell it — these new varieties (GMOs) were created solely to make money. The biggest lie propagated by these corporations is that they are creating this new regime for our benefit. New York Times writer Mark Bittman recently cited research indicating that the industrial/corporate/GMO food chain uses 70% of agricultural resources to provide 30% or the world’s food, while peasants using traditional methods are producing 70% of the food with 30% of the resources.

There is hope! Both peasant movements and seed libraries across the world are working to establish a grassroots alternative seed regime — a new reality based upon seed/food sovereignty and a restoration of the concept of the commons. On the cultural level we seek to revive seed saving and interest in agriculture, both as a hobby and a lifestyle. Politically and economically, we seek a new seed regime based in the commons that revives the basics of the first seed regime, based upon seed sovereignty in the hands of the growers, but with all the best aspects of the second regime’s higher organizational capabilities. The difference from the second seed regime is the lack of government control, we believe in decentralization, local food sovereignty, and a return to a more sustainable path.

Brendan Behrmann brendan.behrmann@gmail.com
THE OPEN POLLINATED REVIEW: GETTING TO KNOW YOUR CARROTS

By Bryan G.

“Nothing beats the thrill of pulling up a carrot whose colour doesn’t rhyme with orange!”

Carrots, Sweet, Crunchy and Delicious! As you can see they come in many colours and creative shapes. I think most of us with the internet have seen a dirty carrot picture or two. What is the difference between types of carrot, and what is more exciting and appropriate for you to grow?

I’ve grown a few different types of carrots and carrots of different sizes and shapes. One of the most noticeable things that can happen to a carrot’s appearance is forking. Forking is created when the tap root of the carrot hits an obstacle and decides to grow around it as it chases food. At vegetable competitions carrots are intentionally passively sculpted or forked into a design.

Forking may also occur if carrots are planted in manure that is too fresh or in a growing medium that is too rich. The objective is to get carrots to dig deep for their food and water. Unlike the delicious and massive Solar Yellow carrot above, that was grown in my home garden, carrots could become woody or split if watered too lightly and/or inconsistently. They require full sun and can be grown in a bucket or pot 😊

Carrots fall into 5 major groups: Imperator (Big 9-10”, loose, light, loamy and/or deep soil), Chantenay (shallow or heavy soil, cone shaped 5-6”. Frost improves taste and is excellent for canning), Nantes (7” good for winter, cylindrical, crunchy, less fibrous, doesn’t crack and is tender and juicy), Danvers (Similar shape to Imperator, 6-8”, resists splitting), & Specialties like White Lunar carrot. Heavier soils are best planted with the more fibrous Danvers, Chantenay, Berlicum and Flakee.
So try spicing things up with a garden surprise! Nothing is quite like the thrill of pulling up a carrot whose colour doesn’t rhyme with orange! This July tap into your inner child, or root your child’s interest by growing different coloured carrots! Like Solar Yellow, Atomic Red and Purple Dragon or Haze.

And if you absolutely don’t have space for carrots this year, the Holland Marsh north of Newmarket produces some of Ontario’s best carrots! Ask for them in your grocery store!

Bryan is a Guelph Graduate, Entrepreneur and Community Activist. You can contact Bryan directly Bryan@BackyardGroceries.com
SAVING CARROT SEEDS

By Maria Kasstan

Carrots are often thought to be one of the most challenging seeds to save in the garden. Not only are they biennial, but a gardener must practice safe isolation practices to prevent or encourage cross pollination with its close cousin, the “wild” carrot (Queen Anne’s Lace – Daucus Carota) and other carrot varieties. – Jacob Kearey-Moreland

In fact, it is not difficult if you get them to bloom in isolation in the off season. Harvesting the carrot in the fall, you have to let them go dormant for a few months, (two to three), keeping them cold but not frozen. Then you wake them up early, before the stuff outside has started to grow. A glassed in porch, greenhouse or sunroom would be best. It is suggested that you cut them down about half their length, let the cut dry for a day or so, and then plant them.

At this point, you can decide if you want to save the existing variety or try to create a cross. When plants are ready to burst into bloom, make them tents out of reemay garden fabric, screening or paper, and put some flies or their larva/pupa into the pots. When the flies emerge as adults, they will pollinate the carrot flowers (or cross pollinate them, if you have two kinds,) as they get some refreshing nectar from those carrot flowers. Be good to the plants while the seeds are developing as this is the “pregnancy” of the plant and the seeds will be feeble if the mother plant is malnourished. Be good to the flies too. Anyway, you may need them or their children again for future pollination, so no swatting okay? The pollination will occur over a week or two as not all flowers open at once, and some plants will produce additional blossoms on side shoots, so this can take time, if you let it. Let the seeds dry on the plants, leaving the netting on the clusters. Some folks think cutting the carrot is counterintuitive, but carrots can produce side roots (unlike beets, which require a similar technique but require vertical cuts.) Cutting gives you a chance to taste the carrots and save seeds from the ones you prefer. Here is an informative link with a lot more options: https://www.youtube.com/watch?v=K6sIfyqjeww

Maria Kasstan is a local gardener and volunteer with Seeds of Diversity Canada. If you have been to a Seedy Saturday in Toronto in the last decade, thank Maria. She can be contacted at mariakasstan@gmail.com.
WORKSHOP: TEST YOUR SOIL!

By Jaime Wilson

What you will need
2 recycled jam jars
Shovel
Garden gloves
Water
Stir stick
Measuring tape/stick

Step One
Take 1 clean recycled straight-sided jam jar and fill it about a third of the way up with the soil you choose to experimenting with. Take the other clean recycled straight-side jam jar and fill it up with water.

Step Two
Pour the water from one jar into the other jar that has the soil until the jar is almost full.

Step Three
Use a stirring stick to stir up the mixture really thoroughly.

Step Four
Wait for the water to settle for 1 min, you will be able to see the sand settle first. Sand particles are the biggest and weigh more than silt. The first layer at the bottom will be the sand part of the soil. If there are pebbles in the sand they will also appear at the bottom. After 1 hour the silt layer will appear on top of the sand. Silt particles are smaller than sand and weigh less. After 1 day the clay layer will have finally settled on top of the silt.

Step Five
Look at your levels to make up your ratio. Use the ruler to measure from the bottom of the jar to the top. Measure the levels and write it down on a piece of paper. Now you can determine if your soil has more clay, more silt or more sand. If your ratio is 40% Sand, 40% Silt and 20% Clay then you have the perfect soil called loam. If you do not have this then you will need to add sand, silt or clay to get these percentages for the best soil.

Jaime Wilson jivenwilson@gmail.com
Square Foot Gardening was invented in the 1950s by a U.S. resident, Mel Bartholomew. Back then, it was a new, radical, and sensible alternative to row gardening which was practised in North America by our greatgrandparents. Row gardening was designed when most lived on farms with large acreages and/or gardening plots ...not in cities. Since then, what I call “Foot² Gardening” has spread around the world and contributes to alleviating the world’s food crisis.

Instead of seeding a whole package of vegetable seeds in long rows, you space a couple of seeds in a dipple hole strategically spaced inside one square foot of well composted garden soil framed off by a simple grid. You see an example in the picture of Karen’s and my raised bed, community garden plot in Scarborough, last spring. One’s spacing varies to grow from one to sixteen plants depending on the vegetable’s harvestable size. Square Foot/Metre Gardening, also is ideally suited to containers for patio or balcony gardening.

**Your Benefits**

1. Less effort! Avoid the tiresome job of thinning and most weeding using only 2% of the work it takes to row garden!

2. Easier exercise! Planting and minimal weeding enhances your flexibility and done by hand without straining with large tools.

3. Less expense! Use only the seeds you need and have more grow bounteously.

4. More fun! Enjoy picking what you need when you need it reseeding on a staggered planting basis as you use your harvest.

5. Less space! One square foot or even a medium pot will grow you four heads of delicious lettuce, or 16 shallots, as healthy, tasty examples.
family of two needs only 8 square feet to grow their own food from Mid April to late December in TO. I was harvesting lettuce at Xmas.

6. Lower knowledge needs! Learn all you need to know quickly. Your kids can too!

7. Less time consuming! I spent only about 1 hr a week and I had to travel to my plot.

8. Greater food safety! Achieve a 100% organic, natural harvest plus better taste.

9. More stress-reducing! Disstress melts away because of all the other benefits.

10. Guaranteed success! If I can do it, never having gardened before, you can to. Just do it!

Novice gardeners can learn all they need to know about Square Foot/Metre Gardening in a couple of hours. Some expert gardeners will probably take two weeks because they’re “stuck in the rut” of row gardening! (pun intended :))

For more information, you could check out a 3 min., explanatory video by the inventor of Square Foot Gardening at http://goo.gl/iGacU6, his Website at http://goo.gl/1aF1OM, and/or his easy to follow Guidebook at http://goo.gl/dUt7IH

Have fun Foot² Gardening. Any time is a great time to start!

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SIGN OF SPRING – EASY DELICIOUS RADISHES

By Tracy MacMaster

Happy Spring Equinox! There is nothing finer to dream of on the first day of Spring than radishes. Often planted beside slow to germinate carrots as row markers, radishes are the ultimate easy to grow, easy to love spring vegetable, a quick and cheerful harbinger of harvests to come. Radishes come in a surprising variety of colours and shapes, and are happiest planted straight into cool soil. Their short time to maturity makes them an ideal plant for new gardeners, children and anyone who spent a long winter impatiently waiting to garden. Here are a few of my favourites.

Easter Egg Blend radishes yields round, pretty bulbs in mixed pastel hues – pink, yellow, white and mauve radishes grow in approximately 25 days. They produce mild crunchy radishes, and each bunch is a surprise. If you pick this variety young and tender, the leaves make delicious pesto pounded with the garlic scapes that appear at the same time in the garden.

French Breakfast radishes develop long, slender bulbs with white tips, and also take less than 4 weeks to maturity. French Breakfasts are delicious served dipped in sweet butter and salt, with a slightly spicy bite, or with a dollop of garlic aioli.

Cherrybelle radishes look exactly like the traditional radish we all recognize from childhood. Round, plump and shiny red, Cherrybelle matures in 23 days, and is wonderful in salads, sliced thin on cream cheese sandwiches or just eaten out of hand.

Spring is brief here in Ontario – enjoy your radishes!

Tracy MacMaster is a community gardener at Thorncliffe Community Garden in East York.
"WHERE DOES FOOD COME FROM?"
A WILD GREEN SALAD

By Diana MacAuley

The following plants are found growing within my yard, around (or in) my garden, or by taking a short stroll around the land where I live in the Wilno/Killaloe area. Often I take a basket with me when I work in the garden, gathering what I wish to save for eating, while weeding. Also I keep an eye out while walking just about anywhere with foraging potential.

Wild plant leaves sometimes become tough and stringy with age, and if consumed raw are best in spring and early summer. However, some plant leaves, though larger and stronger tasting, add flavour and nutrition to cultivated green salads all growing season. Often steaming or boiling for a short while will soften and somewhat de-bitter the wild plants, and having fresh or dried wild greens to put into soups, stews and casseroles enhances our cuisine immeasurably.

Bitterness is a taste that many of us have not learned to appreciate in these times of commercially bland and domesticated food, where this blandness is made palatable dressed with sugar and salt. Yet our digestion is healthier and enlivened by bitters, and we know that the life-supporting nutrients of local wild plants vastly surpass that of any store bought produce. Even in our gardens we cannot duplicate that which the Earth provides. Eventually our taste buds will not find the flavours foreign any longer, and our enjoyment of bitter will increase.

My own preference when preparing a wild salad is to rinse them in water, pat dry, and coarsely chop them with a big knife (i.e. cleaver). I recommend adding lemon juice or cider/balsamic vinegar and olive oil, a bit of tamari, other herbs/spices, garlic, etc., and allow the salad to marinade a while (a few minutes to an hour), before eating to allow it to soften and perhaps “tone down” the stronger unaccustomed flavours. You may also wish to use your domesticated salads as a greater portion, adding the wild greens mostly as extra flavour and nutrition.

Do not over-eat wild greens!!! They are more potent and are often extremely cleansing of the digestive system. Begin with small portions of one or two plants. Check out your body’s reaction a few times before you increase your quantities and varieties. Cooking increases digestibility, as does thorough chewing.
Finally and most importantly are the Rules of Wild Crafting:

* be ABSOLUTELY SURE of the IDENTITY of the plant
* gather in areas that are not contaminated by traffic (away from road edges), pesticides, or other chemicals, human/animal waste, etc.
* HARVEST RESPONSIBLY (do not over harvest)! One of seven is a good rule of thumb.
* be RESPECTFUL of nature and tread lightly, tidying up any disturbance, and offering GRATITUDE for the nourishment given to us.

**SOME TASTY LOCAL PLANTS TO EAT.... (with some herbal/nutritional tidbits included):**

**Dandelion --- TARAXACUM OFFICINALE**
Leaves and flowers may be added regularly to savory dishes and salads; roots are delicious sliced thin, fried, and added to salads, rice, etc., or added raw to salads, soups, or roasted, ground and made into a coffee-like drink; Medicinally used to support liver, gallbladder, kidney and liver function; a digestive tonic; rich in Vitamins A and C

**Lamb’s Quarters --- CHENOPODIUM ALBUM**
Highly nutritious leaves in late spring and summer can be used in salads or as a pot herb; Nutritious seeds in the fall are dried for grinding into flour; in the Quinoa family. Used as a tea for digestive upsets, poultice used on burns, high in Vitamin C; Contains Oxalic Acid (like Spinach, Asparagus, Swiss Chard, etc.) so is best to steam or boil before consuming if eating in large quantities

**Plantain --- PLANTAGO MAJOR**
Leaves for salad in early spring, seeds in fall dried to grind as flour; A superior “drawing” plant used as poultice to draw out insect or snake venom, splinters, bacterial infections from wounds; Internally useful to help heal mucous membranes (i.e. gastric ulcers, lung diseases, mouth sores, etc.); Valued highly around the world as a plant that accelerates healing; possible cancer remedy
Stinging Nettle --- URTICA DIOICA
Many welcome the new shoots in mid-spring, which may then be continuously picked, steamed and added to any savory dish or salad, or eaten alone with a little salt & cider vinegar. Iron and mineral rich, nettle is an important medicinal, nutritive plant that is commonly harvested throughout Spring and Summer, dried or prepared medicinally as a blood purifier/builder, diuretic and astringent; For anemia, gout, glandular disease, rheumatism, circulation, spleen, lungs, bleeding, peridontal disease, dysentery, kidney and urinary system support... and on and on!

Balsam Poplar Trees --- POPULUS BALSAMIFERA
Young tender leaves are added to salads, young shoots may be chewed on as snacks; The leaves alkalanize and settle digestive upsets and may be used as poultices on wounds, etc. Early spring buds contain aromatic resin which is extracted by boiling in water, or infused in alcohol or oil. This is then used externally for sores, burns, toothaches, hemorrhoids, inflammation, frostbite, sprains, sore muscles and internally as expectorant for lungs; Anti-bacterial and wound healing.

Enjoy!
SO YOU WANT TO BUILD YOURSELF AN ECO-CITY

By Doubtless Richer Zen

Well, first, you’re going to need some land. No use in trying to change the existing cities unless you have your own private military, and a large one at that. But with a friendly attitude coupled with intricate knowledge of the undercurrents of everyday reality, or lots of money and a bit of know-how, or lots of people with no money but lots of ability and creativity, there are countless ways to source the land that you will need. Also, remember that lots of farmers lead a lonely life and would be happy to have responsible, hip youngsters around to make the country life more fun.

So assuming you’ve seduced and/or kickstarted your way into some land, here’s a few ground rules: be aware and respectful of your neighbors— if your city ever needs to expand, they may be willing to make a deal. Ideally, your land needs to have decent readily available water (obvs!) The next thing you’re going to need is buildings— here’s where you contact people who are involved in making earthships. You can host earthship (earthen houses) workshops on your land. Every finished project is a needed dwelling for your village phase. Encourage whoever’s building the houses to be as creative as they want!

Once you have enough buildings, you can move onto the healing center phase (this can be done while building workshops are still going on! The theme here is Being Inclusive!). By this phase, you should already be on top of the gardens, berry bushes, fruit and nut trees (start out with many, thin them out later - more food in the meantime) medical marijuana/hemp fields, bamboo (if the climate allows) inside and outside all buildings. Animals optional! Assuming some/many of your peers are already in the healing arts, you can use your budding village as a retreat away from the city where people can come to receive an array of natural healing practices (training workshops available, too) as well as healthy delicious food, clean water and air, yoga, massage, meditation, karma auditing- the list goes on.

If the land you have has a decent amount of sand, this is helpful for earthship materials, but also for glass-blowers- (metalsmiths and potters should be able to share the same kiln if needed.) Power your village with what’s available- water turbines, wind turbines, bicycle generators, solar/passive solar, magnetic generators, tesla coils, Orgon receivers, biodiesel, methane capture composting toilets, and most importantly, people power. We all
love free exercise (paste fake smile here) and damn well need it. Especially because one of the precepts of a successful eco-city is to not rely on western (“extreme”) medicine whenever possible. Healthy diets, active humble living, and safe and healthy social lives can all be pillars of a healthy community.

Now, about the money: let’s assume you can get wi-fi at your land. Used properly, this will be a great asset for people who can make a living online. Also to sell any crafts, music, art, offer services, etc from creative creatures living in the ecocity. Cool themes to make a profitable eco-tourist economy could be medieval, elvish, steampunk, or a combination of themes, attracting a wide “audience” to the city to bring in money and potential buy-in participants. As the village grows in success, then the big kahuna is thus: actually paying for the construction of vertical structures (like an office building, but maybe with more artistic appeal). This allows for vertical farming – hydroponic farming on every floor, allowing for more crops of a tropical variety and for more resident dwellings. The thing about vertical structures is that they’re incredibly efficient on land use, allowing for more edible forests and even herds and wildland on the ground.

As it gains momentum, the Eco-city’s main advantage over a current model city is that because the roads haven’t been built yet in the Eco-city, when they are needed, they can be designed by what the people want—more paths favoring bicycles, pedestrians and only one or two main service roads for vehicles coming to and leaving the city. Waste management can be designed so that everything is either re-used, re-cycled or composted (this includes humanure, which can be used for textile crops or other non-edible ones—cotton, bamboo, hemp, etc.) The overall economy can be simply governed by one main precept— if people work together in stead of competing for resources (ie. capitalism), this frees up oodles of time for everyone,— plus, being on shared land, the need to pay rent greatly diminishes, which frees up a lot of money earned.

Another friend of a budding eco-village is the semi-permanent structure—this could be as basic as a tent, or elaborate as a comfortable Yurt, Geodesic dome or a house on wheels— anything to get out of having to submit to industry-corrupted building codes!! Well, these are just some ideas to get you started on building your own eco-city. Have fun! And always remember, “if you know that you don’t know, look it up on google” “Better to make my own system, rather than be a slave to another man’s” “there is no bhudda nature without nature” “trees are sexy- so is freedom”
RADISH (RAPHANUS SATIVUS)

Plant for seed: Many varieties of radish are annual, flowering and going to seed in one season. The large Asian radishes, often called Daikon or winter radishes are biennial. Separate different varieties being grown for seed at the same time by at least 1500m to ensure purity, or otherwise stagger their flowering period. Home gardeners require no more that 200m of separation, and should aim to grow at least 12 different plants to grow healthy seeds. As radishes cannot self-pollinate, pollen must be carried by insects, primarily bees, from plant to plant. Radish seeds can last generally 4-5 years in average storage conditions.

Seed to seed (for biennial radishes): Sow seeds late, so roots barely reach fall maturity, then mulch generously to insure winter survival. The following spring, thin to 30 cm, leaving roots that showed no sign of bolting. Root to seed: Harvest roots in fall. Select desirable roots and trim tops to within an inch of the roots leaving small, new leaves. Ideal storage conditions 5° C in humid location. Replant in early spring at 30cm intervals and cover with 1” of soil. Note: Garden varieties of radish will cross with all wild varieties.

HARVEST 1m (or more) tall stalks containing seeds pods when pods have dried brown. Pull entire plant and hang in cool, dry place if all pods are not dried at the end of the growing season.

PROCESS open pods by hand for small amounts of seed. Pods that do not open when rubbed between hands can be pounded with hammer or mallet. Winnow to remove remaining chaff.

Care: Radishes require well-drained soil with even moisture. 4-6 weeks before average last day of frost, direct sow seeds ½ inch to an inch deep, one inch apart in rows 12 inches apart. Plant consecutively every two weeks or so while weather is cool for continuous harvest. For best results, thin week-old radishes to an inch apart, need full sun.

Harvest/Storage for Food: Radishes are one of the fastest garden vegetables from seeding to eating, like three weeks for some varieties. Do not leave in the ground long after mature stage, their condition will deteriorate quickly. Cut the tops off short, wash the radishes and dry them thoroughly. Store in plastic bags in the refrigerator. Radish greens are edible and can be stored separately for up to three days.
RADISH SANDWICH RECIPE

By Eugene Marcello

This simple dish may not seem like much, but it will linger with you. Sprinkling salt on the radishes will draw out their moisture, so wait until the very end before seasoning. If your radishes didn’t come with their leaves, you can substitute watercress, arugula, dandelion or your favourite spicy leafy green.

 Prep/cooking time: approx. 20min

1 bunch of radishes with leaves and all
1 loaf of nice bread, sliced
some butter OR oil
some fancy salt (or regular salt)

1. Gently wash all of your radishes, rubbing your hands all over them to get any dirt off. Trim the roots, and place the whole radishes in an ice bath.
2. Roughly chop the leaves.
3. Now, the only tricky bit. Slice those radishes as thin as possible into rounds. They should be translucent, letting through faint glimpses of what is beyond.
4. Butter the bread, sprinkle with some leaves, and completely cover with a delicate, thin layer of radishes.
5. Sprinkle with salt. You can even put a bit of freshly ground pepper on there if you want.

Eugene Marcello, eugenemarcello@gmail.com
RHUBARB SOUP RECIPE
By Alison Urquhart

Many of us are familiar with Rhubarb Pie, though unaware that rhubarb was first cultivated for it’s medicinal properties of aiding digestion, and use in savoury dishes. I feel that this vegetable deserves greater appreciation.

I acquired the basic recipe below from a farmers market and would like to pass it on; I enjoy this soup each spring when Rhubarb and spinach are at their peak.

1. Wash approx. 3-4 stalks of rhubarb, and slice into thumb size pieces (like celery).
2. Cut 1 onion into medium size chunks, and sauté in pan with olive oil until translucent.
3. While onion is cooking, wash a good handful of spinach, and pat dry.
4. In a small soup pan, add several cups of soup stalk and bring to a rolling boil, and then turn heat down to medium-low.
5. Add onion, and rhubarb. Cook for several minutes until rhubarb softens (but still firm).
6. Add spinach and cook another minute (until it wilts and turns bright green). Add salt and pepper to taste.
7. Crack one egg directly over the soup, give one swirl of the spoon, and serve warm.

Enjoy!

Alison Urquhart, rqhl0003@humbermail.ca
Before the advent of corporate control and the widespread practice of purchasing seeds, seed saving was a vital and necessary part of the agricultural process as saving seed ensured the farmer continued success. Seed saving is the process of reserving and/or collecting plant seeds from the current year’s crop to plant as next season’s crop. There are many reasons why seed saving remains an important agricultural practice. Seed saving reduces dependency on large corporations and creates agricultural systems which are low input.

This is important for cultural independence and to create sustainable agricultural practices. The concept of saving seeds is firmly entrenched in ideas surrounding food sovereignty, which is the right of people to define their own food systems. Seed saving promotes agricultural biodiversity because it eventually creates strains of plants that are well-suited to your land’s individual climate. Seed saving practices can help farmers find varieties of crops that grow better in different regions, and are especially important when combating the effects of climate change.

Seed saving is also an easy, fun, educational and experimental way of being personally connected to larger seasonal growing cycles. Saving seeds is an easy and interesting change you can make to your gardening plan this year. For information on saving seeds from all types of plants check out the Seed Savers Exchange website - www.seedsavers.org, or visit your local seed library. Tomato seeds are a wonderful plant to start with. Tomato seeds can be saved from organic or heirloom tomatoes that you have grown or have purchased from a farmer’s market or CSA (community supported agriculture) basket. Videos describing the process are abundant on the Internet.

Do you save seeds? What is your motivation to save seeds?

Sarah E. Hoffman is a pamphleteer, blogger, academic and gastronomist. She is married to a very understanding non-foodie, whom she is in the process of converting. Find her @Sarah999 or sarahhoffman99.blogspot.com
5 FOREST FORAGING FAVOURITES
By Kate Raycraft

When we were tykes and Mom wanted us to finish our broccoli, she’d say “Eat your trees!”

The idea was to remind us that secretly, we were massive dinosaurs, who needed to demolish as many broccoli “trees” as possible to fuel our stomps across the countryside.

Lately I’ve been thinking about native Ontario trees that are edible to humans as well as ginormous dinos. Outside of the obvious apples, pears, and cherries, here are a few of my lesser-known favourites:

**Black Walnut (Juglans nigra)**
Some consider the Black Walnut a “weed tree” because it can be aggressive, and releases chemicals that suppress many plants. I respect them as a valuable part of the succession process following fire or human disturbance. They’re often planted as ornamental trees in the city, and are more common in the wild in southern Ontario than anywhere else in Canada. The wood of the black walnut tree is easy to work with, doesn’t shrink or warp, and has a beautiful grain.

A mature Black Walnut tree can produce over 160 lbs (73 kg) of nuts, which are rich in copper, magnesium, and amino acids. They can be harvested in September to October. Harvest the nuts with green hulls, as black ones are often overmature. You will need to stomp on them with a twisting motion to open them, and clean them with a wire brush to remove the bits of hull attached to the nut meat. They then need to be spread out, dried and cured for 5–6 weeks, which lets them firm up and preserves them. Wear gloves when processing walnuts if you don’t want your hands stained brown. They are a traditional source of brown dye, which might be a good use for some of the leftover hulls.

**Mulberry (Morus rubra, Morus alba)**
The native Red Mulberry is on the endangered species list, unfortunately. It is more common to find the Asian White Mulberry (originally brought to North America as food for silk worms) or a hybrid of the two, although provincial recovery efforts for the native Red are underway. Interestingly, some
say the Red-White Mulberry hybrid has the best tasting berries, with an excellent combination of sweetness and tartness. Mulberries are a delightful understory forest tree, also common in urban front yards, lining driveways.

To me, mulberries look like an extra-long blackberry. The fruit starts off white, and gradually turns red and then dark purple, at which point they’re ready to harvest. You can pick them straight off the tree, or spread out a sheet underneath and shake them down. This is another traditional dye plant with a tendency to stain. Some say you can use them for cooking or wines, if you can prevent them from entering your mouth first.

**Hickory (Carya laciniosa, Carya ovata)**
This is another contentious tree among human evaluators. Many people who plant trees are discouraged by its large size at maturity, its slow growth, and the “messy” nuts it generates. These nuts are a favourite of squirrels, rabbits, mice, bears, foxes, and wild birds. First Nations likely planted them for their food value, as well.

Like all nuts, hickories are high in good fats. They’ve also got tons of thiamin, magnesium, and manganese. Hickory trees bear nuts every few years. Like black walnuts, they need to have their outer hull removed, and you can use the same stomping and twisting technique. The inner shells are notoriously tough to crack, but with practice, hitting them with a hammer 1/3 of the way down from the stem is apparently successful. Roast them at 200°F until golden. You can then eat them plain, make hickory butter, or use them in desserts the way you would walnuts or pecans.

**Serviceberry (Amelanchier spp.)**
More and more urban foragers seem to discover serviceberries every year. You might be lucky to happen upon any unharvested unless you plant your own, but they’re a treat. Part of the Rose family, there is a serviceberry species native to every state and province in North America except Hawaii.

The fruits usually darken and mature in June, which has lead to the alternate name “Juneberry”. They are also called “shadberries”, since their ripening coincides with the shad fish’s migration. Serviceberries taste similar to blueberries, to me, although they are seedier. The seeds are quite small and chewable, and add an extra dimension to the overall flavour – similar to an almond, as Wikipedia describes it. They’re high in riboflavin, iron, manganese, and fibre.
Pine, Balsam Fir, and Northern White Cedar (Pinus spp, Abies balsamea, Thuja occidentalis)

Tea made from the foliage of these trees is a source of Vitamin C used by First Nations over winter when few other green foods are available. Just remove the needle husks and any debris, chop them up, and use your favourite diffusion method. Apparently a cup of this brew has many times the amount of Vitamin C of a glass of OJ, not to mention the fact that it’s local and virtually carbon-neutral (less the energy to boil the water). You can experiment with which types of needles you like best while getting to know the different conifers in your neighbourhood – or even make your own blends.

If you’re dedicated, you may also wish to try harvesting pine nuts from closed cones. This involves heating the cones until they “pop” open, removing the “wings”, and then shelling them. It can be quite labour intensive, from what I’ve read, and a good lesson in why pine nuts are so expensive in the store. One source suggests approaching their shelling like eating sunflower seeds – a foraging food ritual for ball games?

*Obligatory Disclaimer:* While I’ve never heard of anyone getting sick while foraging, please use caution identifying and consuming plants. Do not remove all of the nuts, berries, etc from a tree or a stand. The tree grew them for a reason, and it wasn’t just for you
SEEDS AND THREADS
By Kiyoye Marangos

During the colonial period in India, the British took effective control over the country’s agricultural and textile industries. The introduction of chemicals into the clothing and farming sectors divorced these two industries, which were once interdependent. Traditionally, scraps of food had been used to make natural dyes for clothing. Thus, waste was minimal and the process of production was cyclical. Today, we have moved to a linear mode of production that is not only harmful to the environment and our health, but also detrimental to the balance of global economic structures.

Following the food shortages Europe experienced during the Second World War, the global agricultural system became increasingly industrialized. Post-WWII was the United States’ time to shine, and they did so by focusing all their energy on maximizing profit and commercializing crops. Unfortunately, the level of power gained by American agribusiness giants by the 1980s led to extremely questionable international trade laws, affecting the food sovereignty of countries in the global South.

Both farmers and artisans have been left vulnerable by the changes in trade laws. Not only have their livelihoods been threatened, but they have faced the undermining of their culture—a culture cultivated for generations. Cotton farmers are among the most deeply affected groups in India. Since Monsanto introduced genetically modified BT cotton, farmers have been stuck in a cycle of debt, and more than 270,000 of them have committed suicide. Moreover, this dire situation has resulted in a domino effect, as the control of cotton has also led to insecurities for artisans, making weavers the second highest group, after farmers, to resort to suicide.
To shed light on the negative impact of the globalized food and fashion industries, Seeds and Threads has travelled through Nepal, India, Thailand, the Philippines, and to New York City and Toronto to visit organic farmers and textile artisans for a series of three short documentary films. These individuals share their stories of struggle and hope, bridging the connection between organic farming and ethical fashion while providing firsthand insights into the negative socioeconomic, environmental and health impacts of the globalized food and fashion industries.

The first film provides an explanation of the problem and how we arrived at where we are today. In the second section we address the ‘slow’ movement and focus on the preservation of cultural traditions and creativity. Finally, we examine the dangers of unconscious consumption patterns and attempt to provide the viewer with methods for a more sustainable lifestyle. Overall, the film encourages individuals to question the supply and manufacturing chains of their food and clothing. Hopefully, this heightened consciousness will lead to more ethical and sustainable purchasing habits. Ultimately, we aim to educate consumers about the power they have to challenge these industries by making more informed choices.
IMAGINE THE SEED LIBRARY AS THE "SECOND HARVEST" OF SEED

By Jacob Kearey-Moreland

Last winter and spring we sowed the Orillia Seed Library inside the Orillia Public Library. As a growing farmer and community gardener in both Orillia & Toronto, I have been splitting peas and my thyme between the two places, cultivating and circulating seeds of SOILidarity. Our Orillia Seed Library, networked with other seed libraries on Earth, made big news in local papers and the CBC radio last spring with our launch at the Orillia Public Library.

Shortly after the opening I received a phone call from the librarians, who were called by the manager of a local floral department in our nearest Metro grocery store. I called the manager and learned that a large quantity of Burpee seeds were destined for the dumps, as was the case in prior years. Instead of trashing the seeds, the manager, who had recently heard of our new seed library, thought to provide the seeds to those in need, hearing about the communities growing need for seed.

The next day my friend Tara drove us to Metro to pick up the seeds. At one moment a women was perusing the rack, which had over 150 varieties, many organic, heirloom, all viable, yet nearing their ‘best before’ date. I whispered to her “just wait a second”. A minute later we were literally wheeling the entire rack of seeds (close to 1000 packs of seeds) out the front door and sharing free seeds in the parking lot!

Afterwards I thought immediately that if this was happening in one Metro store, what about others? I quickly learned that there hundreds of Metro stores across Canada, many with Burpee contracts, or other seedy arrangements. It turned out most of these stores, at the same time, received the same order to “take them off the shelves”. Sow I interwebbed an urgent SOS (Save our Seeds) to my seedy network of radish gardeners. That week we saved close to ten more seed racks and were literally hours away from saving many more seeds. Now both the companies and many gardening communities have caught on to this untapped waste and are
changing policies, building community and diverting tons of seeds.

Seeds are a living being, and like all living things, seeds do not live forever. Seeds have a shelf life, and the longer they sit for sale on them, the lower their chances of viability. Companies of all sizes who sell seeds, to maintain reputation and quality seeds, give their seeds a ‘best before date’. This ‘commercially viability standard’ varies between companies and different varieties of seeds. To be sure, the longer the seeds have been on the shelf, or in our drawers and closets, the lower their chances of germination.

The Toronto Seed Library has been successful in repurposing extra, or left over seeds from many diverse seed farmers and companies who can no longer sell their seeds at market. Many home growers often have purchased more seeds than they can grow, and those who save their own, have enough to share and exchange with the community. In this way, the Toronto Seed Library has become the “Second Harvest” of seeds. Second Harvest is a large food reclamation and distribution organizing in the GTA, that partners with grocery chains and food providers to make sure food feeds people and not landfills.

We need all hands on deck, to call your local grocery or hardware store, or anyplace that sells seed, and ask what they are going to do with the seeds once they are past their ‘best before date’. If they don’t already have a place in mind, to return the seeds, recommend the Toronto Seed Library. We are in the process of circulating nearly 80 000 rescued seed packs to community gardeners and new community seed libraries across southern Ontario.

Celebrate Seed Freedom and this season save our seeds for good from ‘the dumps’ of Capitalism! Email us your seed saving stories and other seedy commentary at torontoseedlibrary@gmail.com.

Jacob Kearey-Moreland, Seed Librarian, torontoseedlibrary@gmail.com
Permaculture is for the People

By Jeff Woo

Permaculture has roots to the 1970s with Bill Mollison and David Holmgren in Australia. It was conceived of as a fusion of the two words/concepts, “Permanent” and “Agriculture”, as a solution to the alarming rate that the “modern world” was consuming and depleting planetary resources. The goal was to create systems that were “Energy-neutral”, at a minimum, so that human civilization could sustain itself into perpetuity, and actually even be a positive influence on our environment (imagine that!), through assisting “people to become more self-reliant through the design and development of productive and sustainable gardens and farms”.

As a result, Bill and David embarked on an amazing journey that lead to the creations of the books, “Permaculture One”, and “Permaculture: A Designers Manual”, “the Global Gardener” television documentary, and the “Permaculture Design Course”.

Around the same time, in the 1960s, the effervescent character by the name of “Sepp” Holzer was also coming up with a new way of “farming with nature”, actually managing to grow lemons & other tropical plants in the alpine regions of Switzerland. As a young boy, Sepp keenly observed the workings of Nature throughout his childhood on his family’s farm in Switzerland. As he grew older, Sepp began innovating methods of “farming with nature” in the mountains that proves to be highly abundant and sustainable, inspiring many of his neighbours, and now, reader’s and students of his work across the world, in his Permaculture videos on the Interwebs, and in his books: “Sepp Holzer’s Permaculture”, and “Desert or Paradise”.

A modern-day proponent of permaculture as a cure for society’s ills is Geoff Lawton. This effervescent Aussie is bringing innovative thinking and new solutions to problems being faced in Deserts and other regions of the world, with videos such as “Greening the Desert” and “Permaculture Soils”. Geoff brings the ability to grow food where once it could not be grown, and shares his knowledge and the ability to grow one’s own food to the hands & minds of the people.
WHY IS PERMACULTURE FOR THE PEOPLE???

Be-Cause:
*Permaculture can be applied to any place, city, town or village, landscape, region, climate, growing, and/or living situation; It’s a collection of philosophies for “How to Design?”!

*Permaculture does NOT cost you anything (if you don’t want it to); Because this knowledge is freely available in books, videos, and on the Internet, anyone can access this information and apply their newfound knowledge to his/her own life. You may become the Designer in your Life.

*Permaculture can be as simple as connecting drain pipes to garden beds, growing more diverse plants, finding another use for paper cups, or choosing to buy veggies from your local gardeners or farmer’s market, and it can also be applied to entire forests, eco-regions, and the world at large. There are no limits to the Micro or Macro scale of Permaculture.

WHAT ARE THE CORE PRINCIPLES OF PERMACULTURE?

***Care for the earth: Provision for all life systems to continue and multiply. This is the first principle, because without a healthy earth, humans cannot flourish.
***Care for the people: Provision for people to access those resources necessary for their existence.
***Return of surplus: Reinvesting surpluses back into the system to provide for the first two ethics. This includes returning waste back into the system to recycle into usefulness.

If you’d like to learn more about Permaculture, simply type the word into your computer, visit a library, look for a Permaculture Design Course being held near you, or get in touch with one of the many students, teachers, and lovers of how we can design and create a more beautiful, abundant, and harmonious world.

Jeff Woo is an aspiring documentary filmmaker on the subject of Intentional Communities in North America, and co-creator of sustainable systems. He can be reached via cleangreencommunities@hushmail.com
springtime is upon us
air is heavy with anticipation
like dark clouds filled with rain

a hologram sits in my hand
tinier than a teardrop
potential waiting to be unleashed
physical, chemical, biological, emotional, spiritual

planting this seed in my heart
i make a promise
to unleash my full potential
the way the universe promises the seed
it will be a tree

do you see the tree inside this seed?
do you see yourself in the trees?

the clouds break
the rains fall
my tears fall to earth with them

being broken open to be born again

possibilities emerging
merging into materiality
we make the road by walking

how are we placing our footsteps?
are we treading lightly,
so as not to squash this seed,
poison the rain,
steal the air?

how are we raising our voices?
are we speaking truth to power?
are we keeping the promises we made when
our whole world was a hologram tinier than a teardrop,
being broken open to be born again?
ARTIJOKE OF THE DAY

What is a boat’s least favourite vegetable?

A leek.

SEED-SAVING TIP

Save seeds from your fruit (apples, pears) by immersing them in water in the fridge for a few weeks until they sprout. They will then be ready to plant!
MAY 10 - TOMATO PLANTING EVENT

Tomato planting event: Sat May 10, 11-3. Allan Gardens Children’s Conservatory. It’s part of the Allan Gardens greenhouse complex, behind the church nearest Carlton and Jarvis. North doors.

Tomatoes love companions – and Green Thumbs Growing Kids would like to offer our members a gift of tomato and companion plants. We’ll have a number of heritage varieties available. If you aren’t already a member, you can purchase a membership at the door for $10. Children’s activities, tour of Allan Gardens Greenhouses, general information & socializing, plus tomato-inspired treats and solar oven pizza, weather permitting. Meet the folks behind this children’s and youth-focused org, and join a group of like-minded individuals. Green Thumbs Growing Kids is a registered charity and as a member you’re entitled to vote for the Board of Directors, and possibly much more as we develop the membership program with your input.

Green Thumbs Growing Kids is a downtown group animating school gardens, supporting youth in urban ag employment, and developing community resilience. More info online at: kidsgrowing.ca
**11AM - MARCH AGAINST MONSANTO**  
Gathering at Queen’s Park, ending at Christie Pits Park

The MARCH AGAINST MONSANTO (MAM) is a global call to action aimed at informing the public and calling into question the long-term health and environmental effects of genetically modified foods.

**Requiem for Bees**

Beekeepers will open the march by dumping a coffin filled with hundreds of thousands of bees that have died this past winter to illustrate the increasing numbers of Ontario bee deaths linked to the use of agricultural neonicotinoid pesticides.

For more info: [https://www.facebook.com/events/422692497830818/](https://www.facebook.com/events/422692497830818/)

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**12-6PM - TORONTO GMO-FREE FESTIVAL & FARMERS’ MARKET**  
Location: Christie Pits Park (The MAM will lead to festival site.)

Hosted by the newly formed Toronto Non-GMO Coalition, the festival will include amazing, high-profile speakers (including Dr. Shiv Chopra), local performers, environmentally conscious vendors, and an organic/non-GMO farmers’ market.

The Festival’s goal is to increase awareness about the health and environmental impacts of GMOs while celebrating the wonderful organic and non-GMO farmers and businesses that serve our Greater Toronto Area. Marchers and non-marchers alike are encouraged to attend this groundbreaking Festival.

For more info: [www.torontonongmocoalition.org](http://www.torontonongmocoalition.org)
The Toronto Tool Library is the city’s 1st Tool Sharing Project! Access to drills, 3D printers, Laser cutter & Wood shop. Two Locations: 1803 Danforth/ 1499 Queen St W

The Toronto Tool Library is Toronto’s first community space for sharing tools as wide ranging as generators and drills, to 3D printers and an open-sourced Laser cutter. Anyone can access the library! From community groups to small businesses, and anyone who needs a tool. This is about access over ownership.

Why share tools? An average power drill is used for just 15 minutes in its lifetime!

Sharing tools rather than buying them helps provide access to those who cannot afford or would rather not buy expensive tools. It is empowering to fix, repair and beautify your home and neighbourhood.

A Tool Library also:
- reduces our impact on the environment (less consumption)
- increases skills in your community (a workshop to learn in)
- and helps to reduces clutter in the home!

Come check out seeds and gardening tools!

More info: www.torontooollibrary.com
TORONTO SEED LIBRARY LOCATIONS

As of April 2014, listed here are 10 branches:

**Toronto Tool Library “West Side” Branch**
1499 Queen St. W | 647-498-1258
www.torontotoollibrary.com

**High Park Nature Centre**
440 Parkside Dr. | 416-392-1748 ext. 2
www.highparknaturecentre.com

**Church of Saint Stephen—in-the-Fields (Kensington Market)**
103 Bellevue Ave. | 416-921-6350
www.saintstephens.ca/toronto-seed-library

**Regenesis at York University**
347 York Lanes, 4700 Keele St. | 416-736-2100 ext. 31520
www.regenesisyork.wordpress.com

**Toronto Tool Library “East Side” Branch & Maker Space**
1803 Danforth Ave. | 647-559-6734
www.torontotoollibrary.com

**New College at the University of Toronto**
DG Ivey Library, 20 Willcocks St. | 416-978-2493
www.newcollege.utoronto.ca/academics/new-college-academic-programs/d-g-ivey-library/

**iSchool Inforum at the University of Toronto**
Inforum Library in the Bissell Building, 140 St. George St, 4th Floor
416-978-7060 | http://current.ischool.utoronto.ca/services/inforum-is

**TRAVELING BRANCHES**

**Toronto Seed Library Traveling Branch**
Located at events listed on our website and all Seedy Saturday events.
torontoseedlibrary@gmail.com | 647-890-0758 or 647-379-2324

**Native Seed Specialist Traveling Branch**
Located at events attended by Friends of the Rouge Watershed
416-208-0252

**PermacultureGTA Traveling Branch**
647-703-6190 | www.permaculturegta.org

For more information please visit: www.torontoseedlibrary.org
SEE ANYTHING MISSING IN THE ZINE?
Perhaps your article, poetry, artwork or promo material! Please fill out tinyurl.com/seedyform or email theseedyzine@gmail.com with any questions, ideas, or material. The deadline for the summer issue is July 1st.