OTTAWA HORTICULTURAL SOCIETY

NEWSLETTER

SEPTEMBER 2023

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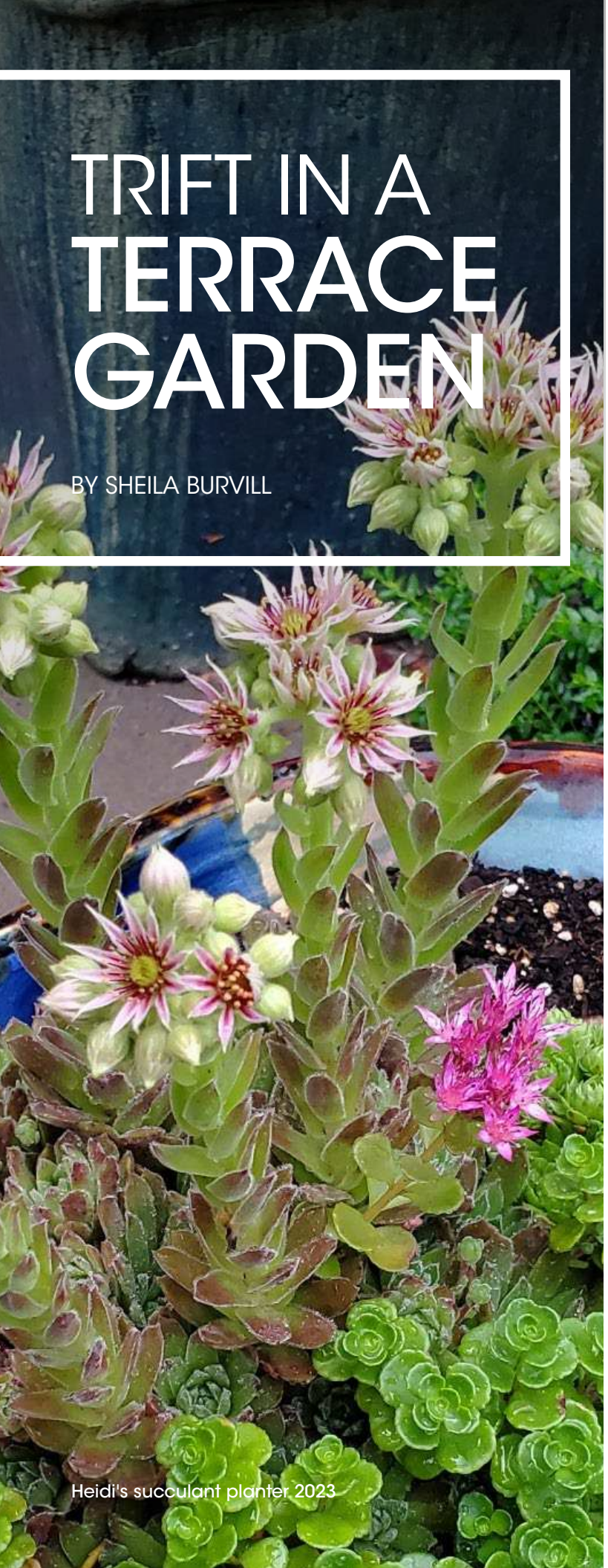
FALL CORNUCOPIA

TRIFT IN A TERRACE GARDEN

BY SHEILA BURVILL



Heidi's succulant planter 2023

Thrift is an admirable characteristic in a gardener, I think. After all, it provides motivation for buying plants at OHS sales, for dividing one plant to make two, and for cadging plants from fellow gardeners. There's a special pride in knowing that your garden hasn't cost you a fortune.

I thought I might have to give up thriftiness when we moved and my new garden was going to have to be in containers on a 2nd floor terrace. I'd not only have to buy annuals from nurseries (since we rarely see these in OHS sales), I'd also have to buy soil to fill my containers plus acquire more containers and the soil to fill them. As for perennials, I would likely have to treat them as annuals, to be replaced every year. Ca-ching, ca-ching!

Happily, that's not how things have turned out.

For one thing, a long time ago, I'd invested (wisely, as it turned out) in a number of large ceramic containers bought mainly from Hortus Urbanus. Others came from Ikea and OHS Fall sales. I wasn't going to leave them behind so they were moved, contents and all, to our new condominium apartment. Certain miniature hostas, planted in wooden and zinc containers also came along.

In year one, mid-summer, we made do with whatever cheap annuals and herbs we could still find at Loblaws. The big nursery splash was buying a canna in bloom and a gorgeous ornamental elephant ear *(Colocasia)* to plant in some of the large pots. Sometime later, we found a raised bed on wheels at Canadian Tire; it became our vegetable garden. Fellow OHS members contributed some large black pots left over from tree and shrub purchases so we planted annuals in them too.

Come the Fall, we composted the annuals, harvested the herbs, let the soil in the raised bed and pots dry out, and moved the vegetable planter next to the outside wall of our main room. Whatever smaller perennial pots that fit were tucked under the raised bed or placed over the dry soil in it. The elephant ear tuber had divided itself so we cleaned off the soil, left them to cure a week or so by placing them in a protected area, and wrapped them loosely in newspaper to store in our basement storage locker over winter.

On the advice of an OHS member, we stopped watering the canna, cut off the dried-out foliage and moved it, pot and all, into the storage locker where the poor thing tried valiantly to put out new growth until we finally put a solid piece of plywood overtop.

Everything else on the terrace got bundled together, as tightly packed as possible, into one large lump, enveloped in covers bought at Lee Valley (the big pots) and with tarps, some old blankets and an outdoor rug piled on. We tied it all up with rope; heaven knows what our neighbours thought of it all but we didn't ask them and they didn't comment.

Over the winter the Botanus catalogue arrived. Taking inspiration from the canna and elephant ears in storage, I looked for similar flowering plants whose bulbs or tubers could be over-wintered indoors. That's how I came to order a *Dahlia* 'Nuit d'Eté.' Now, I had never liked dahlias as I much prefer flowers that are perfumed and don't look like something a graphic designer has dreamed up. But 'Nuit d'Eté' has nice green leaves and a cactus-like deep red blossom that I found attractive. It had been years since I'd grown lilies but, calculating that the European red lily beetle would find it difficult to find lilies so high up, I ordered some patio lilies too, two of one variety and three of another.

Top to Bottom: Canna and patio lilies 'Tiny Rocket'. *Dahlia* 'Nuit d'Ete.' Miniature hosta stand. Large hosta containers.

Come the Spring of year two, we hauled up the canna from the locker, watered it, and gradually placed it in better light over the course of a few weeks. The elephant ear tubers were planted in temporary pots, also watered, and gradually introduced to the light. When temperatures rose to a suitable level, the canna pot was moved outside on the terrace and the elephant ears potted into larger containers. The result? The cannas and one of the elephant ears prospered, thus amortizing the original investment and reducing how much money we'd have to spend on replacement plants that year.

When we unpacked everything we'd over-wintered outside, we could see that the two big hostas, all but one of the miniature ones and some succulents had survived. So they, along with the canna, the elephant ear plus the lilies and dahlia, could form the basis for gardens to come.

We're now in year four. The patio lilies have multiplied, tremendously, and now require large pots of their own. *Dahlia* 'Nuit d'Eté' has been divided and occupies three large pots. This year, they were joined by *D.* 'Bishop of Oxford' and 'Pennies from Heaven.' A trollius, bought as a sacrificial perennial in year three, surprisingly poked its little head up in the early Spring and re-bloomed in late July (although it got a bit sun-scorched).

Another very special bonus – a small succulent garden growing in a planter potted by the late Heidi Geraets and bought at an OHS auction some seven or so years ago now sports some flowers for the very first time.

As we gradually added some new trough planters, small trellises, and largish pots (all bought at Knipple's, some on sale!), we made sure they were all black. The pots we

AN INTERESTING BONUS ON THE TERRACE

This suddenly turned up in one of the big hosta pots on our terrace, in mid-July.

Luckily for me, one of my neighbours has a special interest in mushrooms so I asked her to identify it for me. Slavi reported it was likely a *Leucocoprinus birnbaumii*, a tropical mushroom which is also known as plantpot dapperling or flowerpot parasol. You tend to find it in greenhouses here in Ottawa, and growing from mycelium found in potting medium.

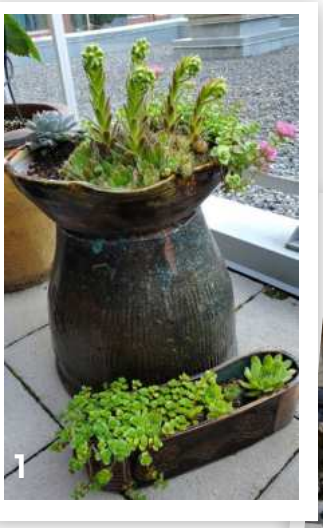
Here are the key identifications for it:

- a bump in the centre (umbo) of the flattened cap
- a fragile cap
- fibrous scales on the cap, concentrated more towards its centre
- striate margins on the cap
- a bulbous base at the bottom of the stem
- also a barely visible ring at the bottom of the stem
- the gills are not attached to the stem (free)

Slavi later confirmed the identification through a spore print.

scrounged from friends, neighbours and even from sidewalk garbages are also black which sets off our original coloured and expensive pots quite nicely. Those older pots cost a bundle back in the day but when you calculate the cost over the number of years we've used them (15 and counting), they were bargains.

So – perennials on a terrace – surprisingly thrifty after all!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1 Heidi's planters 2023
2 North Terrace
3 *Trollius* - second bloom
4 Patio lilies 'Tiny Double You'
5 Patio lily 'Tiny Rocket'
6 *Dahlia* 'Bishop of Oxford'

LESSER-KNOWN GARDEN TOOLS: THE BUSH AXE

BY JEFF BLACKADAR

Known variously as a ditch witch, sling blade or bush knife, this polearm cutting tool is effective for clearing brambles and other types of thick growth. In this article, I will refer to this tool of many names as a bush axe. However, even that simple name is not a satisfactory way to describe this tool, as the bush axe looks more like a halberd than a hatchet. The bush axe's wooden handle is much longer than a typical axe handle and the thin, double-edged blade is longer and has a hook. The bush axe is fierce-looking, which hints at this tool's relationship to its martial cousin the bill, a weapon used by European infantry during Europe's Middle Ages.

Like any dangerous weapon swung at high velocity, the chances of a serious injury are present when using a bush axe. A gardener using this tool needs to concentrate on where the blade will swing from the back to the forward stokes. You need a good grip with two hands and steady footing in protective boots. Instructions with the tool advise not to use it overhead. This, I would guess, is to reduce the risk of head injury if the tool were dropped. It certainly would split your coconut. The bush axe is best used swung close and parallel to the ground. A two-handed swinging motion will produce a pleasing slice through brambles, burdock and even small buckthorn.

The first time I saw the bush axe in use, I was driving in South Carolina. A worker was efficiently clearing heavy vegetation from the roadside with a bush axe. I had seen the movie *Sling Blade* years before, but now saw the tool in use for its intended purpose in real life. It looked effective and I liked that it uses muscle power only. I had not seen it for sale in Canada but was pleasantly surprised to find a new bush axe at the Tractor Supply Company in Ogdensburg, NY.

In a way, the bush axe is like a scythe. Both can be used to cut back vegetation using a long sharp blade. I'm not an expert, but I find a scythe is better for cutting grasses while the bush axe is better for tougher vegetation. For a comparison of the two tools, I used both a scythe and a bush axe to cut thick dog strangling vine *(Vincetoxicum rossicum)*. The scythe worked but often got tangled. The bush axe cut the vines fairly well, although it was tiring work. (Photo on previous page.)

The bush axe also performs well cutting Japanese knotweed *(Reynoutria japonica)*. The handle is long enough to reach the base of the stalks from beyond the arching stems. (Photo on this page.)

Using the bush axe requires a lot of physical energy. Each swing with both hands requires power to make the blade cut well. At the same time, there is some twisting of the spine to make the swing. Just like with my scythe, I'd love to get some coaching from an experienced user to learn how to work with the tool for a longer period, efficiently and safely. For now, I have found it is better to work at cutting with a bush axe for short periods interspersed with other work, like gathering up what's been cut. It is not safe to swing an axe if you are tired, out of breath or not fully concentrating, particularly an axe this long.

So why would you buy, use and store this hard-to-find tool when money, time and indoor space are all precious and limited? If you are working in overgrown areas, this tool is truly useful. It is more effective than an electric whipper snipper and requires less maintenance than gasoline-powered cutting tools. Neighbours won't be disturbed by noise from a bush axe. It is durable as well. The blade can readily be sharpened with a file and a whetstone.

Using a bush axe requires even more attention and energy than a typical garden tool. It is dangerous and far from precise. However, as a hand tool with a long history, it has an admirable utility and appeal compared to noisy, powered alternatives. It is useful for controlling brambles and other patches of overgrowth. It is ready for work immediately, rather than needing an extension cord, battery charge or gasoline can. It also looks great hanging on a wall with other tools, ready for battle against blackberry canes and burdock plants.

MY RETIREMENT ADVENTURE

AT THE GARDEN CENTRE

BY KRISTEN DOUGLAS

When to retire, how to afford it, what to do in retirement, how to prepare for it – after over 30 years at the Library of Parliament, I finally stopped wrestling with those questions and retired in January of 2022.

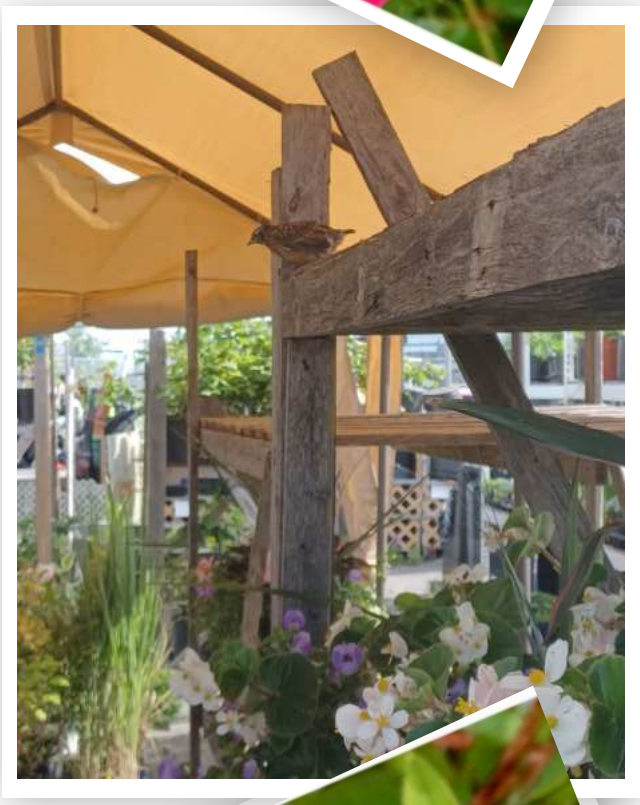
The pandemic's lockdown stage was finally waning, and employers all over Ottawa were talking about moving people back to the workplace. Having started my career as a research officer, and having ended up as one of the organization's Healthy Workplace champions, I had taken seriously the advice I'd received about planning for retirement – and not just the financial side – and felt that I had a reasonably good idea of what my retired life would look like. I was wrong!

To celebrate my retirement, we had planned a trip to Sanibel Island, Florida, which was cancelled due to damage from Hurricane Ian. So, instead of walking the beach, I spent my first non-working winter mopping up a leaky basement and finally getting around to organizing and cleaning my house. There were three other adults in the house, my spouse and two of my three sons, all of whom were either working or studying full-time, so I was the obvious one to take on household chores like cooking, cleaning and groceries. First surprise discovery of retirement: having a clean house did not make me happy. I did not enjoy the full-time housekeeper role the way I had when my kids were little and, in fact, I missed the aspects of my paid role that I had enjoyed – independence and recognition, regular interactions with my talented and interesting professional colleagues, and the authority to make decisions and tell other people what to do.

I did have a couple of significant volunteer commitments that had begun while I was still

working, and had creative hobbies like pottery, as well. I had even turned a bedroom into an art studio, but the son whose bedroom it was came back temporarily, reclaiming my studio. Even if I'd had the studio, though, I wasn't feeling inspired to paint. I had thought I would love having a choice of what to do in retirement, but instead I found myself missing a clear purpose to my days.

Just as I was coming to the conclusion that I was too young, or not ready yet, for full-time retirement, spring arrived, and we were finally able to travel. But even a lovely week in Italy did not shake my sense that my retirement plan needed adjustment. When my spouse and I made our annual trip to Green Thumb Garden Centre to buy vegetables and other spring planting essentials, a new option presented itself. My spouse, Keith, had recently announced that he didn't plan to run for re-election as an Ottawa City Councillor. In conversation with Green Thumb's owner, Mary Shearman Reid, he was asked whether he'd be looking for other work. Keith's not the gardener in our family, though, so I decided to apply to work at Green Thumb part-time. Later that summer, duly vetted and interviewed, I joined the Green Thumbers, as we call ourselves, and I haven't looked back (nor managed to properly clean my fingernails!).



I have now been part of the Thumber team for just over a year. My body has adjusted to the physical demands of the job, but I still come home from work tired, dirty and happy. I have loved being outside all day, learning about the huge variety of plants that we have available and how to care for them. My colleagues in this new job are as big a part of my enjoyment of work as they were in my previous job and, when we have time, we natter away about anything and everything while we work. Garden centre customers are generally happy to be there, and we share their enthusiasm about their gardening plans while we help them make their selections. The environment is much more pleasant than that of Parliament Hill, to say the least.

Having new responsibilities, like watering an entire garden centre stock, potting up new plants or those who've outgrown their pots, staking, pruning and weeding, designing planters for sale, has not only offered the chance to develop new skills, but also reminded me of skills and interests that were not so often expressed in my career at the Library of Parliament. For example, I was an excellent bug catcher as a child, and those skills have come in handy when dealing with Japanese beetles and other pests. Mary knows that I worked at a library for a long time (and that I was not a librarian) so I am often assigned organizational tasks like filing perennial tags in alphabetical order.

We reuse and repair everything we can at Green Thumb, as many of our longstanding customers know, and that commitment to the environment matters to me. Some of my Green Thumb tasks have required resourcefulness and some determination, like equipment repair, and success at work gives me increased confidence to tackle similar challenges at home.

One of the delights of this retirement adventure has been renewing my love of gardening in my own garden. When I am watering the annuals at work, I am always thinking about which ones I have never tried that might look good in one of my own pots (current favourites: *Hypoestes, Dichondra* and *Pennisetum rubrum*). If I am deadheading the perennials, I am constantly revising my garden plan to make room for just one more (*Brunnera, Epimedium* and *Chelone*). I have discovered that I don't need to allow the perennials I have been tending for years to take up so much space, but can let some of the overgrown stuff go to make room for new friends. And in the vegetable garden, same story. My spouse has now retired too and luckily he's enjoying assuming more of the indoor household tasks, like groceries and cooking. So now, although more beautiful outside, my house has gone back to its previous messy state. And I am either in the garden or at the garden centre!

USING YOUR GARDEN TO RAISE FUNDS

BY KIMBERLY ENNIS

GARDEN PARTY
Twilight Secret Garden.jpg Margaret River
https://commons.wikimedia.org/wiki/File:Twilight_Secret_Garden.jpg
CC BY-SA 4.0, via Wikimedia Commons

Money. Not the plant *(Lunaria annua)* but the currency. Depending on their income, many philanthropic organizations and institutions may find a huge discrepancy between what they wish they could provide and what their budget allows. For Not-For-Profits, the never-ending endeavor to raise funds in a society with donor fatigue is challenging at best. So, whether you are a staff member, a volunteer, or even an individual fundraiser who wants to make a large donation, I have a few suggestions for you.

To begin, you will need to answer the focusing question: **What am I looking to accomplish with this current fundraising event?** Having small goals in mind, such as raising money for a specific program or two, will likely reduce your stress levels and will give your potential donors something to be emotionally invested in. We all care about someone with specific needs and we want to know how we can help.

When designing a fundraising event, you need to raise the most money possible, while spending the least. This is the point where you start considering your resources. You will need a space to hold your event, furnishings, and decor. You'll need people to plan it and people to run it. You will need some sort of food to serve, even if it is just some small offering. You will need music that creates the kind of atmosphere you want to convey - don't forget to pay your SOCAN (Society of Composers, Authors and Music Publishers of Canada) fees or find a source for free music you can use. You will also need guests. Every element of an event is important. The devil is in the details but so is the guests' delight. Every person running it is important, but your guests (donors) are your focal point. You need your donors to raise your funds.

LIVING SCULPTURE
Living Sculpture.jpg Lee Jones
https://commons.wikimedia.org/wiki/File:Living_Sculpture_-_geograph.org.uk_-_50462.jpg
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For an event that will garner maximum financial contributions and keep donors coming back in subsequent years, you will need to attend to all five of their senses. **They must feel transported to some magical place, or feel like time froze in a moment of bliss and awe.** If you can achieve this, attendees will be more likely to loosen their purse strings, come back next time, and spread the word for your next event. So, put as much effort into dazzling them as you can.

As avid lovers of gardens, weavers of beauty and magic in the natural world, we all know the profound effects of nature on the well-being of ourselves and others. If you've got a beautiful garden, know someone else who does, want to create a garden for your organization, or can imagine transforming a building into a lush, enchanting space, then you've got yourself a fairly inexpensive venue that will captivate your guests.

I know a good many of you are already there but let us embellish the scene a little further. It's evening, perhaps the sun is setting, painting the sky in rich pinks, oranges, and tints of blue. Soon it will be full dark and the fairy lights you have strung will softly illuminate the tables and/or chairs you have decorated in beautiful, draping fabrics. Torch lights provide further illumination and help keep the bugs at bay. The garden is in bloom and the sensual flowers release their delicate perfume. Soft music is playing, perhaps jazz or classical, and the aroma of fine food cloaks us in the promise of tantalizing tastes to come. How many senses did we evoke here? All of them! Could you create this scene? Absolutely!

The beauty of the enchanting garden atmosphere is that it can be scaled to size for smaller and larger gatherings. Think long rustic tables, seating many, for a farm to table dinner. Perhaps an intimate gathering in your garden with friends and family to raise money for a large group donation is in order. For a more public affair you could create living sculptures and garden art for people to enjoy with donations on entry.

How about seating for guests to enjoy a live string trio or quartet and open buffet or table of hors d'oeuvres? The possibilities are many.

If your event is to be indoors - as would be

GARDEN PARTY TABLE
Various Desserts On A Table Covered With Baby Blue Cover.jpg Fu Zhichao
https://www.pexels.com/photo/various-desserts-on-a-table-covered-with-baby-blue-cover-587741/
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the case with a fundraising gala, or any other event where weather is a worry - you can bring the flora inside. Direct-sow seeds in pots for a dramatic, seasonal entry into the event, using bulbs for spring, or sunflowers and ornamental corn or grasses for autumn. Use books for inspiration.

Never underestimate the power of a dramatic entryway to draw guests into an event. First impressions and last impressions are huge. Plant your own centerpieces. You could do anything from houseplants to bulbs to seeds. You could even do fish in a bowl with a blooming water lily and pad and candles.

Gardens are themed, so don't forget to add a theme to your garden event. Have large plants lining walls, or living walls that create a lush atmosphere. If your organization has space for a vegetable or cut flower garden, you could perhaps offer the ingredients for the salad or make floral arrangements for the tables to cut costs. Look for venues that are willing to donate the use of their building for your cause or at least offer it at a reduced price.

Make sure there is food and it is as memorable as you can afford. Look for chefs or catering companies who may be willing to donate some or all of their time to your cause and offer you a reduced rate on the food, whether you are providing a full meal or nibbles. You must appeal to the sense of taste and smell; both have the power to evoke beautiful emotion and memory. You want to generate goodwill that will hopefully increase generous giving and make people want to come back the next time you host an event.

Don't forget silent auctions. They are a wonderful piece of programming that keeps guests entertained and raises additional funds. Ask businesses for items associated with gardening. The more you ask, the more you get.

Having a garden party event is a wonderful way to promote an organization's horticultural therapy program. Depending on the participants' abilities, they may even enjoy growing or preparing some of the decor or food for an event as part of their therapeutic activities. Otherwise, use your volunteers.

When I was a student in the Event Management program at Algonquin College,

we put on fundraising events for two children's charities on a zero-dollar budget. We asked and asked for donations of everything. You should do the same. It's a numbers game; you keep asking until you find the people who feel passionate about your cause and want to give. We pulled at people's heartstrings by promoting our charities and used a lot of descriptive writing to draw people into our event with the promise of a good time.

Don't forget to advertise. Your target audience should be the people with the money: forties and up. Think about what they want based on where they are in life and offer it through your event. Use the types of social media that your target audience (guests) uses and ask them to share. Research what a proper social media campaign looks like and use it or ask people who are good with social media to help. Put up posters with QR codes in places where your target audience visits. Advertise on radio. Go on CTV Morning Live with a demo. Promote the businesses who are donating their time and goods to you and ask them to cross-promote your event. Have it posted under 'events' on the organization's website.

Use your volunteers - as many as you can get - and take really good care of them. You want them to come back too. Don't forget to make a gesture of thanks to them. If you can give them some small gift like a themed seed collection or throw them a thank-you BBQ or something along those lines, it will go a long way.

Have back-up plans for everything that could possibly fall through or go wrong. It's called risk management. Talk to your partners (the businesses offering their services) about their back-up plans. Have alternative plans ready to go should the need arise.

Finally, enjoy yourselves and your event. You've worked hard for this and you deserve it!

TOP TO BOTTOM:

TABLE DECORATION
Flower Arrangement On A Party.jpg Daka
https://www.pexels.com/photo/flower-arrangement-on-a-party-17668614/
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FLOWERS AT A CELEBRATION
Women Holding Hands Near Hanging Flowers.jpg Cottonbro Studio
https://www.pexels.com/photo/photo-of-women-holding-hands-near-hanging-flowers-7267174/ Pexels Simplified License https://www.pexels.com/license/ , via Pexels

OHS DIRECTORS COLUMN
A series of columns on gardens and gardening by members of the OHS Board of Directors. This is an opportunity to get to know more about the people on the Board who direct the affairs of the Ottawa Horticultural Society.

WHY I GARDEN

BY REBECCA LAST,
OHS BOARD MEMBER

As a returning member of the OHS board, I was asked to write an article about my garden to introduce myself. This newsletter has published several articles I've written about my garden. It's a small garden – there's only so much I can say! Instead, I thought I'd tell you **why** I garden.

TOP: Vinegar and toner
BOTTOM: Fiddleheads

I'm very near-sighted and several of my relatives have experienced vision loss. Beyond the pleasing sight of a pretty garden, I love gardening's other sensual pleasures – the rich smell of soil after rain, the fragrance of flowers, the taste of fresh herbs and the feel of foliage. Visitors to my garden often get my "scratch and sniff" tour, which involves smelling and tasting the range of edible plants I grow.

I suffer from eco-anxiety, defined as "a chronic fear of environmental doom". (Clayton et al (2017), *Mental Health and Our Changing Climate: Impacts, Implications, and Guidance* (PDF), *American Psychological Association*). As we live with the slow-motion disasters of climate change and biodiversity loss, I hope my gardening and sharing that passion with others can make a small but significant difference.

The issue of widespread hunger is one I find especially concerning. The Green Revolution and other technological innovations forestalled Malthus' predictions. Even as the number of humans on planet Earth continued to rise, global rates of hunger fell steadily for decades. We are now seeing limits to the Green Revolution – weeds becoming resistant to herbicides, loss of insects and pollinators from the indiscriminate use of insecticides, and the degradation of soils and water due to widespread use of chemical fertilizers.

The way we produce food is deeply unsustainable and contributes significantly to both climate change and biodiversity loss. It takes 10 calories of energy to produce 1 calorie of food and the average mouthful of food travels about 2,200 km. The 1998 ice storm brought home how fragile those attenuated supply lines are when extreme weather strikes. Even today, most major cities only have about three days' supply of food at any given time. Addressing climate change means decarbonizing our economy, and our food supply. We grow increasingly fewer varieties of increasingly fewer species of food plants. This loss of biodiversity makes our food supply increasingly vulnerable to

pest infestations or widespread plant disease, such as another Irish potato famine.

The global food supply took a hit in 2007-2008. Sharp spikes in food prices those years had multiple and complex causes, but crop losses due to extreme weather events were among them. In developing nations around the world, rising food prices and fear of food insecurity led to riots and civil unrest. Tunisia, for example, saw a precursor to the Arab Spring that began there just three years later. Hungry people are not governable. The food-price inflation we are seeing this year is also due in part to extreme weather events reducing crop yields around the world.

As much as I am tempted to stick my fingers in my ears and chant "la-la-la-la," I still try to make a difference, including by giving gardening talks and through my *Gardening at Last* blog. When contemplating new plants to add to my garden, I prioritize those that produce food, especially perennials, and native plants that will also support wildlife. The environmental impact of growing our food from annual plants troubles me, so I've studied permaculture, including learning about edible weeds. Attending a lecture by the wonderful Stephen Barstow about a decade ago, I learned the term "edimentals" and have since been exploring the food value of the many ornamental plants I grow. Did you know that hosta flowers taste like sweetened green beans?

I'm also learning as much as I can about processing food. My husband and I make several hundred pots of jams, jellies and chutney each year. I make herb and fruit vinegars and dehydrate a lot of produce. I buy from farmers markets to support local farmers, purchase locally produced organic seeds each spring, and I've learned how to save my own seeds.

In the early 2000s, I had my garden certified as wildlife habitat by the Canadian Wildlife

TOP: A late-season bouquet with edimentals, including: amaranth, anise hyssop, garlic chive flowers, seed pods of magenta orach, and hop flowers.
MIDDLE & BOTTOM: These two photos of my CWF Backyard Habitat sign were taken 15 years apart!

Federation. Research by luminaries such as Doug Tallamy, Lorraine Johnson and Heather Holm, all of whom have spoken to the OHS, has inspired me to improve my garden habitat, and improve the ways I garden so I disturb the resident wildlife as little as possible.

I may be just one gardener with one small garden, but I believe gardeners working together can save the world!

Rebecca Last has been a member of the OHS since about 2003. In years past, she helped to organize members' garden tours and has served as program convener on several occasions, including for the past couple of years. She is a member at large on the Board of Directors.

TOP: This photo of some frogs in my backyard pond was taken by my brother Jon Last about a decade ago. There is always at least one frog living in my backyard pond.
MIDDLE: Serviceberries
BOTTOM: From the top, moving clockwise, this plate of edimentals contains: mallow leaves, a day lily shoot, bee balm (*Monarda didyma* – overlapping the day lily), mouse-eared chickweed, anise hyssop, lovage, a violet flower, garlic chives, tulip petals and lemon balm.

The Book Nook

22 TITLES SUGGESTED BY THE OTTAWA PUBLIC LIBRARY FOR OHS MEMBERS

Ottawa Public Library / Bibliothèque publique d'Ottawa

The Collection Development staff at the Ottawa Public Library have specially selected a list of books for OHS members. The list features titles in English and French recently added to the OPL's collections.

Among the titles for this issue are materials relating to:

- ✓ Climate change gardening
- ✓ Guerrilla gardening
- ✓ Carl Linnaeus biography
- ✓ Wreaths
- ✓ Moon gardening
- ✓ Medicinal plants
- ✓ Microbe science for gardeners
- ✓ Les jardins de Métis
- ✓ House plants and indoor gardening
- ✓ Tough plants for tough places
- ✓ Orchards
- ✓ Pollen
- ✓ Floral arranging
- ✓ Seeds

Click on the link below to see the complete list from the Library. This also allows you to view availability and place a hold from the link.

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UNDERSTANDING SOIL

BY BARBARA LONG | DRAWINGS BY GRANDDAUGHTER, SLOANE BROOKES

[This article originally appeared in the January 15, 2022 issue of Trowel Talk (Vol. 13, no.1), the publication of the Ottawa-Carleton and Lanark County Master Gardeners.]

We begin our study of what lies beneath our feet by looking at five soil layers, also called horizons. From top to bottom we have: organic (leaf litter and humus), topsoil (minerals with humus), the leaching layer (sand and silt with very few minerals), subsoil (clay and minerals) and parent/bedrock material. Understanding more about it can help us grow healthy food and beautiful plants.

Think about a kitchen sponge; it is a flexible block of plastic with holes of various sizes that hold water. When our garden soil has a structure like a sponge, it can hold water, air and nutrients that plant roots can absorb over time, as needed, and also allow the roots to move through it readily.

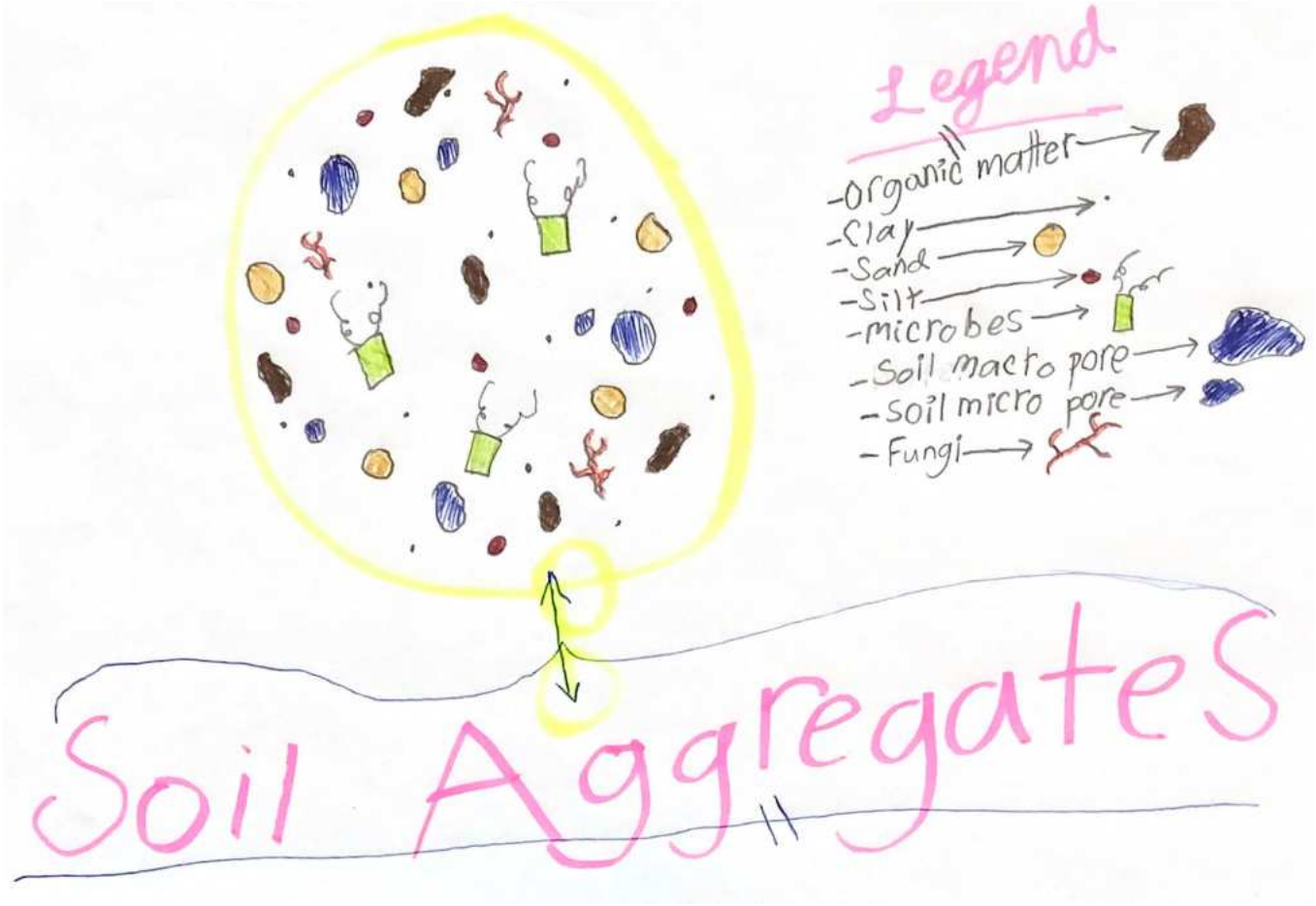
Aggregates and soil pores are terms we use when talking about soil structure and texture. A well-aggregated soil is one that has lots of clumps (aggregates), composed of sand, silt, clay, organic material, fungi, mycorrhizae (more on this later), bacteria, water and air. Organic matter helps to hold soil particles into aggregates. Aggregates have soil pores within them and between them. Large soil pores are called macropores which allow water to drain through the soil and provide air exchange; smaller ones, called micropores, hold water.

From gophers, snakes and mice to ants, beetles and earthworms, right down to tiny mites, springtails and amoeba, soil is teeming with a variety of animal life. Some aerate the soil by moving through it, improving drainage, while some digest and excrete waste that fertilizes the soil.

Microorganisms such as bacteria and fungi in the soil provide important nutrients such as nitrogen and phosphorous to plants by breaking down organic matter through decomposition.

Roots, mosses, algae, and mushrooms are types of soil flora that decompose over time as well, contributing to the nutrient mix.

As mentioned earlier, many types of fungi are present in soil. When plant roots absorb nutrients from the soil some are aided in their work by these fungi. Beneficial fungi attach to the root hairs and create an additional web of threads spreading out into the soil to collect water and nutrients for the plant. In return,



the plant roots provide nourishment in the form of sugars to the fungi which don't have chlorophyll and so cannot make their own food through photosynthesis. This symbiotic relationship between roots and fungi is called **mycorrhizae**.

To sum up, there is a lot going on down there!

NO-DIG GARDENING

Now that we understand more about the value of the intricate web of interconnectedness beneath our feet, we can make good decisions on how to maintain it when we garden. If we leave the soil undisturbed, the roots of the plants we grow will absorb more water and nutrients.

We are accustomed to practices such as tilling the soil and double-digging techniques for our gardens. Rethinking these practices to embrace a technique called **no-dig gardening** is a huge topic I will touch on briefly here.

Basically, no-dig gardening means planting on top of the existing soil, lawn or garden. One technique is to place multiple layers of newspaper over the area and then cover it with several inches of organic matter such as wood chips, leaves and compost. After a period of time, depending on a variety of factors, the newspaper layer will decompose and you can then plant directly into the organic matter. The roots of your plants will grow downwards through the newspaper layer into the undisturbed soil where they can benefit from the well-aggregated soil with its nutrients and mycorrhizal networks.

No-dig gardening takes more time at the front end of the process but is easier in successive years since cultivating the soil each year before planting is not needed. By adding more organic matter to the top level each year, the layers below become richer with nutrients as rain carries them down by gravity.

The wide variety of fauna (worms, etc.) in the soil travel up to the organic matter and bring it down into the undisturbed soil to consume and excrete it, thereby making nutrients available to plants. This process also loosens up soils that may be heavy with clay (which can become waterlogged) and bulks up soils that are sandy (which drain water too quickly).

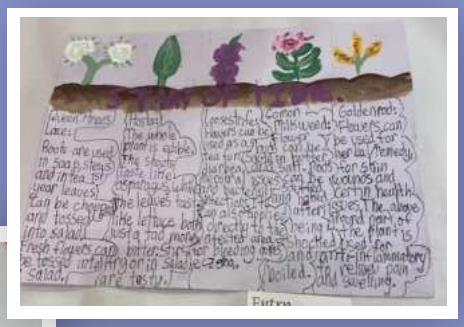
Another benefit of no-dig gardening is that the seed bank remains dormant. Millions of seeds exist in soil, some for decades. When they are exposed, germination is triggered by moisture, air and sunlight. Many of these seeds are weeds which are unwanted in our gardens. Using the no-dig gardening method saves time weeding.

I encourage you to look into how you could garden using the no-dig method to grow healthier plants, reduce your workload and keep the soil beneath our feet the way nature intended it to be.

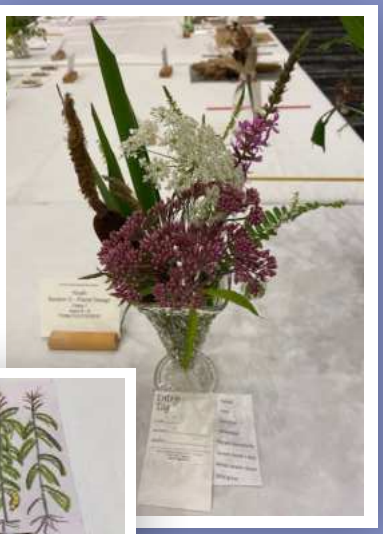
NEXT GENERATION OF SHOW WINNERS

Photos by Iris Waung

Ava and Lia Waung are the granddaughters of long-time OHS member Iris Waung. The girls, aged 11 and 7, entered the youth category show at the recent Ontario Horticultural Association convention in Ottawa and did very well. This is not surprising as they have been exposed to floral design since a young age. Even as toddlers they watched Iris design floral arrangements and helped Iris in her workshops.



At the OHA convention in July, Ava, who is in grade six this fall, entered five classes and earned one first prize, three second prizes and one third prize.



Lia, who is in grade two, entered five categories. She devoted a great deal of time and energy in carefully drawing her plant materials and illustrations. For her efforts, Lia earned one first prize, two second prizes, one third prize and one honorable mention.

Entering the youth category show at the OHA convention was a great learning experience for Ava and Lia. They enjoyed collecting the plant materials and doing research about them. Most of all, they enjoyed designing and putting together their entries. We will surely see more of Ava and Lia at future shows.

HOW TO ACHIEVE HEALTHY & FERTILE SOIL FOR YOUR GARDENS

BY VESNA MADJARIC

To achieve healthy and productive soil in your garden, it is essential that soil has a healthy pH, which is the measure of acidity or alkalinity of the soil. A standard soil fertility test will tell you the level of nutrients that your soil sample contains. This will be measured as levels of N (nitrogen), P (phosphorus) and K (potassium) and the level of acidity and alkalinity of the soil. The best pH for the majority of plants is between 6.5 and 7.5. Some plants, on the other hand, do require either alkaline or acidic soils. In that case, the pH number will tell you how much lime you need to add to the soil to correct acidity, or sulphur to correct alkalinity. Soil temperature before planting should be higher than 5 degrees Celsius. Tests could also be done for the particle size and moisture content of the soil, and imbalances indicated by the soil tests should be improved before planting plants. Proper soil drainage is also important and if not improved, plants will not take root and thrive.

Besides good pH and good soil texture (which gardeners refer to as crumbly), it is very important that soil consist of plenty of organic matter. Humus helps improve soil's texture and increases soil's aeration and also provides nutrients to the plants. Microorganisms in humus break down organic matter which helps plants to absorb and use it. With good and healthy soil, plants will be healthier and less prone to plant diseases and insects.
The main types of soil are loam, sandy soil and clay. Loam is the best type of soil. It is crumbly and has a lot of organic matter. It also drains well and retains moisture. Clay soil is fertile but its texture is not good for plant roots and requires some work to improve the soil. Sandy soil is easy to work with but drains too quickly and doesn't hold nutrients very well.

The fastest way to improve any type of soil is to add compost. Compost should be added in spring or autumn and before any landscaping. Compost should be added to the two inches of topsoil and it could be up to 6 inches high. These few tips might help you see a great improvement in soil and make your gardening much more enjoyable.

Ms. Vesna Madjaric holds a B.Sc. in Agriculture, an M.Sc. in Biotechnology, and an M.A. in Ecological, Environmental and Ethnic Geography of the Arctic. Photos by V. Madjaric

A HORTICULTURAL INTRODUCTION

BLAINE MARCHAND

In the spring 2023 OHS auction, Jamie and I offered an important and rare lilac, 'Asessippi.' Why does this shrub have these attributes? It is rare because it is not easily found in commerce or only infrequently in specialty nurseries, many of which have gone out of business in recent years.

It is important because 'Asessippi' is a Canadian lilac hybrid created by Frank Leith Skinner. To most people, his name is unknown. Yet in the 20th century, he was acclaimed both nationally and internationally for his lilacs and his horticultural creations of new varieties of fruit trees, shrubs and perennial plants. In fact, he was considered Canada's Luther Burbank, who was a famous hybridizer south of the border.

Skinner was born in Scotland in 1882. At age 13, he and his parents sailed for Canada. The family settled in Dropmore, 400 kilometres northwest of Winnipeg, where they took up ranching. Given the isolated location where they lived, Skinner received little formal education and he, in turn, like his parents, became a rancher. But when out on horseback, he became curious about the plants he saw and their ability to survive in the extremes of the harsh prairie climate.

In 1911, Skinner developed pneumonia and lost the use of the lower lobe of his right lung. As a result, he was advised not to engage in strenuous activities. It was then that he decided to begin actively pursuing

Maiden's Blush

Excel

his interest in prairie plants. Over a seven-year period, he collected plant material and taught himself hybridization techniques. With persistence and patience, he developed the skills that established him as an equal to highly educated horticulturists around the world. Many of these became personal friends as a result of his extensive correspondence with them, including W.T. Macoun, Dominion Horticulturist at the Central Experimental Farm in Ottawa.

(As an aside, Skinner's hybridization work was being undertaken at the same time as the other internationally known Canadian hybridizer of that era, Isabella Preston of the Experimental Farm. In fact, it is said a rivalry developed between the two of them.)

In 1925, encouraged by his horticultural friends, Skinner decided to focus his plant propagation and hybridization work on new varieties that would be fully hardy in the prairie environment. He established the Manitoba Hardy Plant

Mount Baker

Nursery to house the wide variety of plants he had collected and worked on - trees, shrubs, fruits and flowers. His goal was to offer varieties that would be drought and disease resistant.

One of Skinner's plant passions was for lilacs. Earlier in 1917, he had visited the Arnold Arboretum at Harvard University in Boston. The director of the arboretum, Professor Charles Sprague Sargent, presented him with seedlings of two lilacs in their collection, *Syringa oblata*

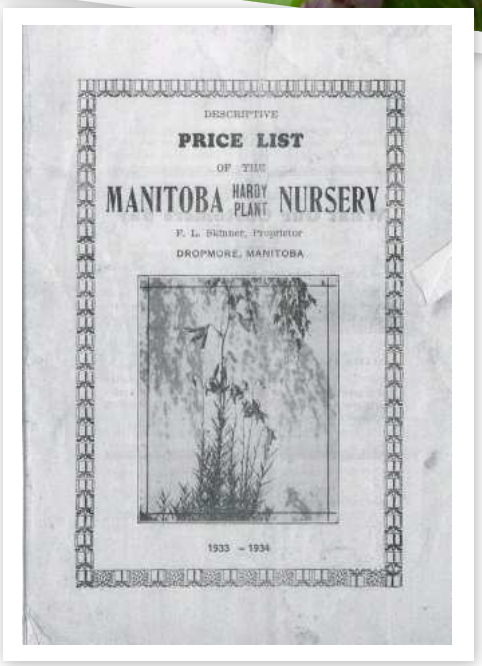
dilatata and *Syringa patula*. These lilacs had come from seed harvested in the Diamond Mountains of Korea and had been brought to the arboretum for germination.

The seedlings of *Syringa oblata dilatata* first bloomed in the spring of 1921. Crossing their pollen with different *Syringa vulgaris* cultivars, which he did not specify in his notes, led to Skinner's introduction of 20 new cultivars. His first were 'Asessippi' and 'Minnehaha' in 1932. These were followed by 'Pocahontas' in 1935, 'Sister Justena' in 1956, 'Mount Baker' and 'The Bride' in 1961 and his last, 'Maiden's Blush,' in 1966. Perhaps due to the use of the original seedlings from the Arnold Arboretum and maybe with an eye on the commercial market, he called this group of new lilacs "American Hybrids." Interestingly though, the Americans refer to them as the "Canadian Hybrids."

Skinner also made successful lilac crosses using pollen of *Syringa reflexa* from the Arnold Arboretum. At first, his crosses did not take. But then pollen he received from the arboretum in 1922 did. By 1935, Skinner selected the ones that he considered the best among them and named them 'Handel,' 'Helen' and 'Hiawatha.' The following year, he named one 'Hecla' and much later, in 1944, introduced 'Donald Wyman' (this lilac can still be found in commerce).

Skinner created an interspecific hybrid (crosses made between two species or species hybrids within a genus) lilac using pollen from *Syringa pubescens* on *Syringa patula.* It was named *Syringa* X *skinneri* in his honour. Another interspecific hybrid, which he created from *Syringa villosa* crossed with *Syringa sweginzowii,* he named 'Heidin.'

Skinner spent over three decades on his hybridization work. In recognition of his important contributions to horticulture, he received an honorary doctorate from the



TOP: Asessippi
BOTTOM: Manitoba Hardy Plants Cover

University of Manitoba and was made a Member of the Order of the British Empire. In 1933, the Royal Horticultural Society in Britain presented him with its prestigious Award of Merit and its Cory Cup, which each year recognizes the best hardy plant, for his lily, 'Dropmore Concolor.' When Skinner was 80, the Canadian government gave him a grant to write about his lifelong work. His book, *Horticultural Horizons,* was published only six months before his death on August 27, 1967.

After Skinner's death, his son Hugh took over the Hardy Plant nursery but, in the early 2000s, decided to close it. Today, the Dropmore property is the *Frank Skinner Arboretum Trail*, managed by Hugh. The property allows people to connect with the beauty of the site and admire the legacy of Frank Skinner.

At one time, Skinner lilacs were among the offerings of Select Plus International Nursery in Mascouche, Quebec. But when the owner, Frank Moro, passed away, the business was closed. However, one can still enjoy the beauty of Skinner lilacs by visiting the Ornamental Gardens at the Central Experimental Farm. His hybrids are there among its extensive lilac collection, which is recognized internationally. *A listing of the lilacs, found on the Friends of the Central Experiment Farm website, will help you locate them.*

Article prepared with the use of *Lilacs, The Genus Syringa,* Father John L. Fiala, Timber Press, 1988 and *Lilacs for the Garden*, Jennifer Bennett, Firefly Books, 2002 as well as a number of internet sites about Frank Leigh Skinner and the Frank Skinner Arboretum and Trail. Image of the Hardy Plant Nursery catalogue and photographs of the Skinner lilacs are from the Robertson/Marchand collection.

Sister Justena

YARROW:

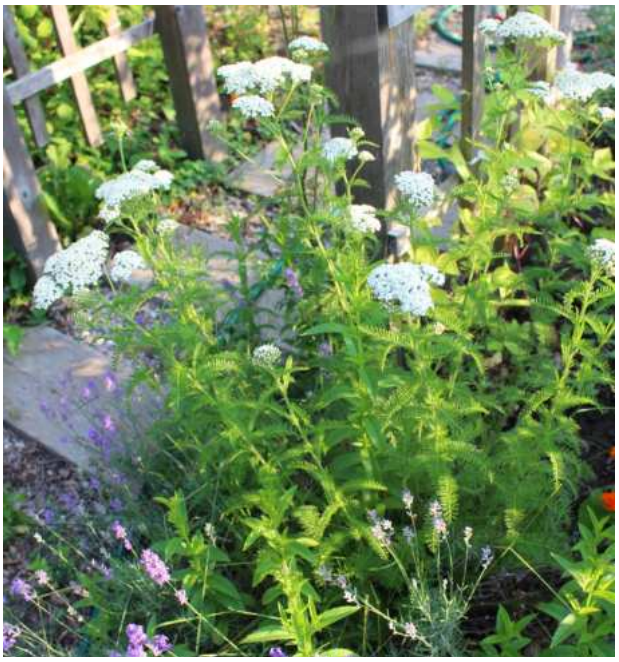
ASK A SIMPLE QUESTION, GET A COMPLEX ANSWER!

BY TUULA TALVILA

Last summer I noticed some white yarrow poking up through one of my lavender plants. It seemed popular with the insects so I left it there. This spring I decided again to just leave it but I looked online to see whether it's a native plant to this area or not. Long ago, I had grown a candy-coloured, named variety, but maybe this white one was native. I thought that was a simple question, but it turned out to have a complex answer.

YARROWS WORLDWIDE

The yarrow genus, *Achillea*, which is a member of the family Asteraceae, is found throughout the northern hemisphere and comprises over a hundred species, mostly in Eurasia. It takes its name from the Greek mythological warrior hero, Achilles; he supposedly treated his soldiers' injuries with the plant (some of its common names include 'allheal' and 'bloodwort'). It is still widely valued today as a medicinal plant and is used to treat skin wounds, aid with digestive inflammation, and is taken as a sedative. Yarrow typically has feathery leaves and large, flat flower heads made up of clusters of small flowers.



TOP: Yarrow flower head
BOTTOM: Yarrow (and mint) infiltrating my lavender
Photos by T. Talvila

COMMON YARROW

The common name, yarrow, typically means the species *Achillea millefolium*, whose "thousand leaves" refers to its many tiny leaflets that give the foliage its ferny appearance. It's a tough perennial, often popping up in disturbed sites or growing despite drought conditions or poor soil (what does that say about my herb garden where it seems to have happily settled in?). It has a long bloom time, from late spring and throughout the summer, attracting many insects to its flower heads.

NATIVE RANGE

Common yarrow probably originated in Asia and, being an adaptable plant, easily spread on its own from there to Europe, eventually crossing to North America long ago, perhaps with the very first inhabitants who came here. Along with two other species (*A. sibirica* and *A. alpina*), *A. millefolium* is now called a North American native plant. Here, it has likewise spread and has differentiated itself from its Old World self. As described by Kathy Keeler on her Wandering Botanist blog:

> **"It is a moderately weedy plant that grows well in disturbed sites. Natural disturbed sites are found where rivers and lakes rise and fall or where big animals congregate, for example at watering holes. Additional disturbed sites are created by human settlements. Hopping from one disturbance to another, yarrow probably spread through meadows and along forest edges. But it was also adaptable, so it climbed mountains, flowering sooner in the shorter growing seasons at high elevations, or descended to the seaside, growing tall and skinny in the dense grass. At some point it crossed into North America and spread out there. Over those vast distances differences developed between yarrows, and the ones of New York are more like the ones of Kansas than they are like the yarrows of France, Ukraine or Yunnan, but the differences are subtle."**

As a herbal medicine, common yarrow has been popular all over the world historically – from ancient Greece to widespread use throughout Europe, to millennia of use in Ayurvedic and Chinese medicine, throughout North America in Indigenous societies, and even found buried with Neanderthal and on Neanderthal teeth – which is why it is now found growing all over the world. People from all different regions and cultures took yarrow with them when they journeyed to other lands, including likely bringing seeds with them to grow their own supply. It's a highly adaptable plant and has easily grown in diverse habitats.

A COMPLEX SITUATION

There is a huge amount of genetic diversity in common yarrow, with its widespread and disparate populations that have, over time, adapted to local conditions. On top of that, yarrow exhibits polyploidy, i.e. having multiple copies of its chromosomes. Yarrows can be diploid, tetraploid, hexaploid or even octoploid, and all can interbreed with each other. Such a degree of genetic variation makes it a challenge for taxonomists and *Achillea millefolium* has been tackled by both lumpers and splitters alike. Currently it is considered a single species. But because of all that variation, it is called a species complex, meaning that it has genetic diversity due to habitat, separate populations, and chromosomal differences. Individuals from different populations can still interbreed, however, so the separate populations are not considered distinct species.

When yarrow was brought to North America by Europeans, it was able to interbreed with the pre-existing native populations of yarrow that had likely come over much earlier with this continent's earliest migrants. Hence, the species complex got even more complex, and common yarrow is now considered both a native *and* an introduced species in North America, as strange as that sounds.

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We depend on our members for ideas, articles and information about what is going on in the gardening community.

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The views and opinions expressed in this newsletter are solely those of the individual authors. They do not purport to reflect the position of the OHS or its members.

The newsletter welcomes articles about all aspects of gardening. **A Submission and Style Guide has been prepared and is available on the OHS website: https://ottawahort.org/previous-ohs-newsletters/**

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