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Table of Contents

- 2 **Growing in Place:
30 Years in a West-End Garden**
By Rebecca Last
- 6 **Helping out "The Little Things That Run the
World"**
By Tuula Talvila
- 10 **Propagating Hardy Berry Shrubs**
By Ryan Conrad
- 11 **The Book Nook**
The Ottawa Public Library
- 12 **Garlic: What to Know & How to Grow**
Marilyn H.S. Light
- 17 **Gardening Quiz**
By Edythe Falconer
- 18 **Oasis Floral Foam - Not Such A Good Idea
Anymore**
By Lori Gandy
- 23 **Self-Seeders: Bonanza or Bedlam
In The Garden?**
By Josie Pazdzior
- 27 **HVX & Hostas in Ottawa Gardens**
By Kristin Kendall



AUTUMN HARVEST



GROWING IN PLACE

30 YEARS IN A WEST-END GARDEN

by Rebecca Last

Our house is a utilitarian, semi-detached in a west-end neighbourhood that dead-ends at the Ottawa River. Before the city grew up and swallowed it, this was cottage country. We took possession in mid-September 1992, barely a year after we married.

Backyard (photo by Carol English)

My first assessment of the garden was not favourable. The front yard was surrounded by a grotesquely overgrown cedar hedge that pushed its way through a decrepit chain-link fence. However, on closer inspection, I found a nice selection of shrubs and perennials. The big drawback was the soil – or should I say sand? We live a stone's throw from Britannia beach and its fine, white sand gives my garden great drainage but virtually no soil nutrients.

Evolving Design

Initially I wanted the garden design to compensate for our house's blockish design. I started to enlarge the perimeter plantings with big swooping lines, adding curves and flourishes. To make the most of my small space, I consulted books on Asian garden design, and learned about borrowed views and false perspective. Research introduced me to the concept of stacked functions – making one design element serve several purposes.

Lois Hole's "Perennial Favorites" (1998) was my bible for selecting new plants that would offer three- or four-season interest. Of course, more plants meant I needed more and bigger beds. The cedar hedge was removed along with the chain link fence. Our fifth wedding anniversary gift was a weeping birch with a corkscrew-shaped trunk, which became the focal point for a new island bed in the front yard.



Rebecca Last and Husband at 2011 OHS Garden Tour



After 1st reno circa 2004



Front - from East to West



In Progress - Spring 2003 - Front Yard Rocks

Dry Stone Streambed

Our front yard gets a lovely breeze off the Ottawa River so I designed new flower beds to create a private seating area there. Dividing our front yard from the neighbour's was challenging since their children liked to play across both yards. My solution was to build a dry-stone streambed along the property line with – you guessed it – more flower beds on either side.

If you ever want to get to know your neighbours, have a truckload of rocks delivered. A truckload is a lot of rocks. They remained piled against the curb of our front yard for months as I rose at dawn to haul buckets of them up and down the length of the curving streambed I had designed. With the rocks as a conversation starter, I met many neighbours who remain friends to this day.



Front stream



Tajma-shed (photo by Suzanne Juneau)



Front yard from driveway

Tajma-Shed & Mid-Life Crisis

In the early 2000s, I joined the federal public service and discovered work-life balance. I started spending more time in the garden. The dilapidated aluminum garden shed we had inherited with the house began to collapse. My dear hubby decided he could build one cheaper than buying a kit. However, he injured his back half-way through, which slowed progress. We also chose cedar siding, which added considerably to the cost. Still, 18 months and about \$3,500 later, we had the best garden shed in the neighbourhood – the “Tajma-shed.”

My desire to get **wildlife certification** meant incorporating water and more native plants. Experience had taught us that DIY wasn’t always the best choice. We hired a wonderful small landscaping company. They found me weathered rocks, soil and plants from a site destined for “development,” and created a glorious waterfall, a small fishpond, and a bog garden in the back yard. Despite their attempts to keep the budget low, it was an insane expense, but we have never regretted this mid-life crisis spending.

Gnome Sanctuary & Free-range Kids

For some inexplicable reason, my family has always had a fascination with garden gnomes – perhaps because we all tend to be short, fat and hairy. It became commonplace to find another had been surreptitiously deposited. Our garden became a gnome sanctuary. Our neighbourhood has little traffic and a large City Living project nearby. There is a high proportion of free-range children, many of whom find their way to my garden. We feed the fish in the pond, snack on herbs and flowers, visit the gnomes and sometimes just hang out. A few of these kids graduate to become paid garden helpers. Years later, I occasionally run into one of them, now a young adult. I am



Copper mesh on nuts

always gratified to hear how meaningful those garden visits were for them.

Permaculture

Gardening is always a learning experience, and I began to experiment with permaculture. We selected a serviceberry to replace the curly birch when it succumbed to the bronze birch borer. I also have raspberry canes, two hazelnut bushes, a new red currant, grapevines, a Nanking cherry, and a witch hazel.

Other elements of my DIY front yard design were aging badly, so in 2012 we brought in landscapers again. The result is three crescent-shaped raised beds outlined in massive armour stone, chosen so I can sit on them to garden as I get older. I added new and old wood under the soil in these beds – a modified ***hügelkultur***, which enriches the soil and provides moisture retention.



Front yard after 2nd reno (photo by Jon Last)

Lessons Learned

So what have I learned from growing in place this long? First, things always change, and thinking of my garden as an evolving ecosystem helps me to manage those changes. Second, even a small garden can be a source of immense joy and biodiversity. I learn that enjoyment by paying attention, which has made me a better gardener. Third, never look a gift horse in the mouth. It turns out that many of my favourite flowers are volunteers blown in from the riverbank. However, I do keep a wary eye out for invasive thugs such as creeping bellflower. Finally, and most importantly, I have learned to let the garden be my teacher, and to share its lessons generously with all who care to visit.



Front lawn before

HELPING OUT "THE LITTLE THINGS THAT RUN THE WORLD"

By Tuula Talvila



On May 25, 2021 the OHS and wider audience were treated to a presentation by Doug Tallamy, an entomologist at the University of Delaware, entitled "Nature's Best Hope." The thesis of his talk (which derives from his best-selling book of the same name) is that in order to make the most impact in preserving nature, we shouldn't rely on government and other agencies. Instead, everybody can play a role. (The subtitle of the book is "A new approach to conservation that starts in your yard.")

Tallamy proposed that one of the most effective ways to do this is by providing and protecting habitat that best supports caterpillars. Why caterpillars? Because so many other species – 96% of North America's terrestrial birds, for example – rely on caterpillars (i.e. soft, squishy tubes of nutrition) to feed their young that if we can protect and increase our native caterpillar populations, we are also ensuring survival of many other species.

For me, a gardener with a biology background (and someone who as a child eschewed playing with dolls in favour of caterpillars), the talk was inspiring. So much conservation news is alarming and full of doom and gloom, making me feel like this one person's puny efforts are ineffectual and possibly meaningless beyond the bounds of my own yard. Doug's talk was both calming and exciting at the same time – this is something we can all do!

THE LITTLE THINGS THAT RUN THE WORLD

One of the books that Doug recommended – and which I immediately bought online that very evening – was David L. Wagner’s “Caterpillars of Eastern North America.” While reading the introduction, I ran across a reference to a quote from famed entomologist Edward O. Wilson about “the little things that run the world.” This rang a bell; I remembered Doug Tallamy also referring to the same quote in his presentation. I was able to find online the source of the quote and it led me to some valuable points related to all of this.

“The Little Things That Run the World (The Importance and Conservation of Invertebrates)” was the title of a speech given by E.O. Wilson at the opening of the invertebrate exhibit at the National Zoological Park in Washington, D.C. in May 1987. It was published later that year as a short piece in the journal *Conservation Biology*. In it, Wilson argues that invertebrate conservation is critical: “The truth is that we need invertebrates but they don’t need us. If human beings were to disappear tomorrow, the world would go on with little change....But if invertebrates were to disappear, I doubt that the human species could last more than a few months. Most of the

fishes, amphibians, birds, and mammals would crash to extinction about the same time. Next would go the bulk of the flowering plants and with them the physical structure of the majority of the forests and other terrestrial habitats of the world....Within a few decades the world would return to the state of a billion years ago, composed primarily of bacteria, algae, and a few other very simple multicellular plants.”

That’s a grim scenario indeed. Wilson goes on to outline some suggestions and themes for invertebrate conservation. So much of our conservation attention and energy are drawn to vertebrate species and/or large areas of habitat, but he stresses that: “invertebrates as a whole are even more important in the maintenance of ecosystems than are vertebrates.” Creating habitat reserves for invertebrate conservation would be both practicable and relatively inexpensive. Many invertebrate species can be maintained in large, breeding populations in areas that are too small to sustain viable vertebrate populations. If even just a small remnant of natural habitat is preserved, it is worth protecting because of the invertebrate and plant species it will save.

Wilson’s emphasis on the importance of invertebrate conservation supports the suggestions from Doug Tallamy to focus efforts on providing key habitat for our native caterpillars. While we’re all familiar with the idea of planting native species to support native insects, there are points to consider beyond just ‘plant native.’

For example, to maintain a viable family of birds, there needs to be enough caterpillars – and therefore caterpillar-supporting vegetation – within reach of the parent birds. In other words, trees need to be planted densely enough that there will be food enough to make it possible for birds to nest there. Parents



Black-throated green warbler, a summer breeding resident in the Ottawa area, with a caterpillar. (Photo by Andy Reago & Chrissy McClarren, CC BY 2.0; via Wikimedia Commons [https://commons.wikimedia.org/wiki/File:Black-throated_Green_Warbler_eating_caterpillar_\(43978591235\).jpg](https://commons.wikimedia.org/wiki/File:Black-throated_Green_Warbler_eating_caterpillar_(43978591235).jpg))

feed their chicks an astonishing number of caterpillars from hatching to fledgling and beyond, and they can only do it without working themselves to death if food is abundant and close.

KEYSTONE SPECIES

In his presentation, Doug Tallamy described the idea of “keystone species”: those species that support an entire ecosystem; in this case, plants that provide habitat and/or food for the most caterpillar species. His lab’s research has found repeatedly that in most areas, of all the native tree species present, a small number of them – typically around 5% - support 70-75% of the local caterpillar species. So, to get the most bang for your buck in terms of providing habitat for caterpillars, it is these keystone species that are the best to include in a conservation plan. Without sufficient numbers of keystone species, caterpillar populations will disappear, followed by the insectivores that depend on them – the birds who eat caterpillars and bats who eat moths.

Doug provides a list of keystone species in one of his earlier books, “Bringing Nature Home,” and it can be found online, but because that research was based in his home state of Pennsylvania, I was interested in compiling a list of keystone species for the Ottawa area. Based on research from Tallamy’s lab, the United States National Wildlife Federation’s website has a tool called the Native Plant Finder. By entering a U.S. Zip Code, one can generate lists of herbaceous plants and trees/shrubs (to the genus level), ranked according to the number of butterfly and moth species that use them as host plants for their caterpillars. For each plant genus, the species native to the area are listed and the caterpillar species that use it are listed with photos. By selecting a Zip Code as close as possible across the St. Lawrence River from Ottawa (Zip Code 13694, Waddington, New



Above Photos: Crowned slug moth, *Isa textula*, an Ottawa-area native whose bizarre-looking caterpillar feeds on many native tree species, especially oak. Photo by Andy Reago & Chrissy McClarren, CC BY 2.0, via Wikimedia Commons [https://commons.wikimedia.org/wiki/File:-_4681_%E2%80%93_Isa_textula_%E2%80%93_Crowned_Slug_Moth_\(19311651928\).jpg](https://commons.wikimedia.org/wiki/File:-_4681_%E2%80%93_Isa_textula_%E2%80%93_Crowned_Slug_Moth_(19311651928).jpg) | Photo by Judy Gallagher, CC BY 2.0, via Wikimedia Commons https://commons.wikimedia.org/wiki/File:Crowned_Slug_caterpillar_-_Isa_textula,_Catoclin_Mountains,_Maryland.jpg

SPECIES DIVERSITY

While this article’s focus is on a small number of keystone species, overall plant species diversity is still important, of course, for a healthy ecosystem. If you recall the OHS’s April presentation, “Growing More Butterflies,” Trish Murphy of Beaux Arbres native plant nursery outlined particular plant species that are hosts to specific butterfly species. Some of these are specialists on only one or a small number of plant species on which to lay their eggs and so it’s critical to maintain these in the ecosystem or those butterflies will be absent. Additionally, including a diversity of tree or herbaceous plant species allows for more resilience in the face of severe environmental conditions, whether sudden or prolonged, and also adds visual and horticultural interest to our planted areas.

York), I came up with a list which presumably would be applicable to the Ottawa area as both locations are in the St Lawrence lowland physiographic region.

AND THE WINNERS ARE...

The Native Plant Finder results for the Waddington NY Zip Code comprised 59 genera of woody plants and 175 herbaceous plants. We tend to focus our attention on flowers for pollinators and host plants for specific caterpillars but this tool clearly demonstrated that the number of caterpillar species supported by trees is an order of magnitude larger than for herbaceous plants.

While not everyone will have space to plant more trees on their property, if you do, consider which species are native and will support the greatest number of “the little things that run the world.”



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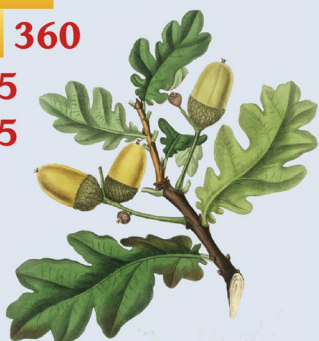
Tallamy, D. (2009). *Bringing Nature Home: How you can sustain wildlife with native plants.* Timber Press.

Wagner, D.L. (2005). *Caterpillars of Eastern North America.* Princeton University Press.

Wilson, E.O. (1987). *The Little Things That Run the World (The Importance and Conservation of Invertebrates).* Conservation Biology, 1(4), 344-346. Retrieved August 6, 2021, from <http://www.jstor.org/stable/2386020>

Highest ranking woody plant species, supporting greater than 200 species of caterpillar (number of species shown in red):

<i>Quercus</i> (oaks)	521
<i>Prunus</i> (cherries)	455
<i>Salix</i> (willows)	431
<i>Betula</i> (birches)	410
<i>Populus</i> (poplars)	360
<i>Acer</i> (maples)	295
<i>Vaccinium</i> (blueberries)	295
<i>Alnus</i> (alders)	261
<i>Pinus</i> (pines)	259
<i>Carya</i> (hickories)	238
<i>Ulmus</i> (elms)	201



Highest ranking herbaceous plant species, supporting greater than 30 species of caterpillar:

Goldenrods (<i>Solidago</i>)	- 138
Strawberries (<i>Fragaria</i>)	- 84
Sunflowers (<i>Helianthus</i>)	- 70
Joe-Pye Weed (<i>Eupatorium</i>)	- 35
Willow herb (<i>Epilobium</i>)	- 32
Violets (<i>Viola</i>)	- 31

PROPAGATING HARDY BERRY SHRUBS

BY RYAN CONRAD



As some readers may remember, last summer I was busy foraging government berries from shrubs in public parks around downtown Ottawa-Gatineau. In particular, I was pretty excited about all the Aronia berries planted along the restored bike path behind Parliament. I picked a couple of litres, making sure to leave plenty for the birds, and canned lots of apple-Aronia jam that I've only recently finished this summer. While I enjoyed harvesting these berries that otherwise would have just rotted on the ground, I wanted more! In the late fall, before the ground froze, but after most hardwood shrubs had lost their leaves and gone dormant, I took hardwood cuttings to propagate my own shrubs at home and on my family's farm up in Shawville.

I took a dozen 6-10" cuttings from a few elderberry bushes behind Parliament, along with another bush along the canal by the War Museum and another massive bush in a neglected park in Vieux Hull. I also took a couple of hardwood Aronia berry cuttings from the bike path behind Parliament, making

sure not to take too much from the recently established bushes. I also took a couple of cuttings from a gooseberry bush at a friend's farm in Kazabazua that produces unbelievably tasty nickel-sized watermelon-flavoured berries—the biggest I've ever seen! Lastly, I took a dozen cuttings from both black (Consort) and red (Red Lake) currant shrubs I had in my back yard garden already. With all my cuttings in hand, I was prepared to pot things up so that they could overwinter outside and experience a natural stratification process.

I placed each cutting into some washed leftover pots from perennials I had purchased in previous years. The bigger the better, but a 6" pot will work fine to get started. I filled each pot with rich topsoil from my garden and pushed the cuttings deep into the soil. I watered all the pots and then placed them all in a shady location so that when they leafed out in the spring, the sun wouldn't zap all the moisture out of the leaves before a proper root system had established itself. Once they were in a shady corner, I mulched around the pots with fallen leaves from a nearby Manitoba maple for a little bit of extra protection from the soon-to-arrive cold winter winds. Lastly, I built a squirrel-proof enclosure with some scrap metal and chicken wire to keep these destructive pests away from my precious propagation operation!

Soon the winter weather arrived, the moistened pots froze under a blanket of snow, and I could just forget about everything until the spring. But when spring arrived, the cuttings slowly came into bud and leafed out like the mother plants they were taken from. The pots needed

Apple-aronia jam from foraging government berries. Previously published in December 2020 OHS Newsletter.

to be kept moist and shaded throughout the spring while the new root systems formed and established themselves. By mid-summer I could tell which cuttings were a success, and which cuttings failed to take, but I had a pretty high success rate, particularly among the elderberry cuttings. The trick is to always take more cuttings than you actually want in your garden because some will inevitably not make it for whatever reason. And, if you end up with more cuttings taking root than you need, they make great gifts for friends—or you could even donate them to the OHS plant sale!

Come early fall, as everything begins to go dormant again, I will transplant my rooted propagations in the garden and at the farm, disturbing the roots as little as possible and watering them in well. While some like to do a mid-summer transplant, I prefer to keep them safe and sound until the fall when they're dormant—too many deer and squirrels to contend with. There's nothing worse than doing the many months of work propagating plants only to see them destroyed in minutes by furry creatures. But I do prefer to have my propagations planted in their forever homes before winter so they can wake up in the place they are going to live, and establish an even better root system before they are fully leafed out and baking in the summer sun. Propagating plants is a year-long process, but it beats going broke at the nursery.

SUGGESTED FURTHER READING:

- **The Elderberry Book** (2019) by John Moody
- **Landscaping with Fruit** (2009) by Lee Reich
- **Farming the Woods (2020)** by Ken Mudge & Steve Gabriel
- **Homegrown Berries** (2014) by Teri Dunn Chace

The Book Nook

31 TITLES SUGGESTED BY THE OTTAWA PUBLIC LIBRARY FOR OHS MEMBERS



The Collection Development staff at the Ottawa Public Library have specially selected a list of materials for OHS members. This list includes new titles added to the OPL collection.


Among the materials for this summer/fall are books, magazines, DVDs and digital resources, in English and French, relating to:

- Trees and orchards
- Edible gardens and vegetables
- Creating a Japanese garden
- Public and private gardens
- Sustainable gardens
- Halifax Public Gardens
- Flower arranging
- House plants
- The philosophy of gardening
- Growing figs in cold climates
- DVDs, such as *Ageless Gardens* episodes on healing plants and wild gardens
- **The Pollinators** (DVD and streaming video)

The list also includes a number of gardening magazines (e.g. *Country Gardens*, *Gardens Illustrated*).

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.

https://ottawa.bibliocommons.com/list/share/354296247_collection_development/1941742453_ottawa_horticultural_society_fall_titles



SUSAN
DELAFIELD

GARLIC

WHAT TO KNOW & HOW TO GROW

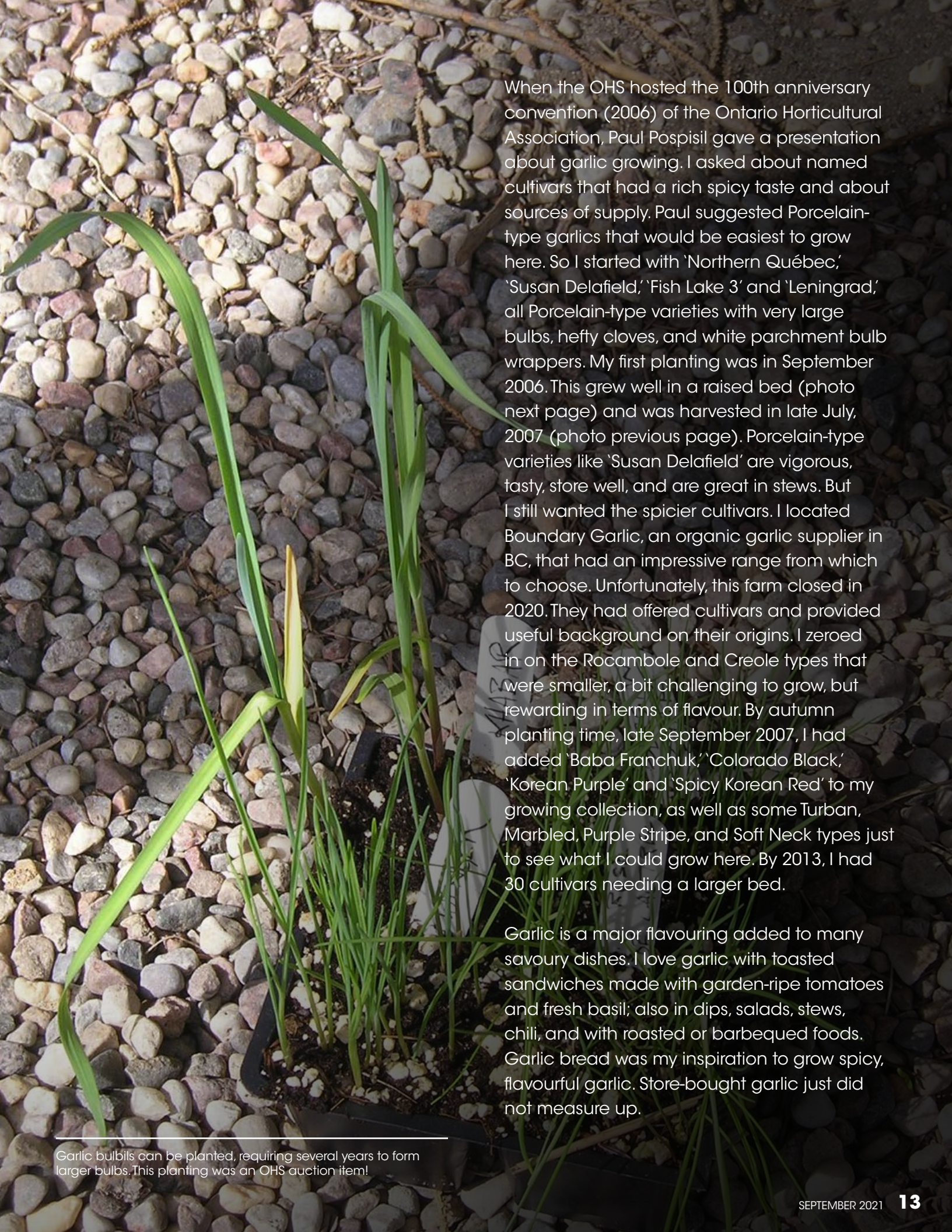
MARILYN H.S. LIGHT

A BIT OF HISTORY

The ancient Greek word for garlic, *scorodon*, seems to be linked to the garlic-like odour of various plants (garlic mustard, garlic chives, germander) as well as to a specific kind of plant we know as garlic, *Allium sativum*. Herodotus, in the 5th century BC, referred to *Allium sativum* as manured garlic. (*Allium sativum* originated in Asia: 'manured' suggests it was being cultivated when he referred to it thus.) Garlic, as we now know it, has been cultivated in many lands for a very long time.

There are now many varieties of *A. sativum*, variably named as Porcelain, Turban, Marbled, Purple Stripe, and Soft Neck, as well as Creole and Rocambole, depending upon their physical characteristics and flavour. Varieties used to be separated according to the presence or absence of a tall, coiling, snake-like scape (*ophioscorodon*). *A. sativum* var. *ophioscorodon* and *A. sativum* var. *sativum* etc. are now taxonomically synonyms. Many hardneck garlic cultivars are of the var. *ophioscorodon* group, whereas the Soft Neck 'artichoke-type' and some other cultivars have no flowering stalk (no snake-like scape). Removal of the scape is essential to ensure maximum bulb yield.

First harvest, July 2007, of Porcelain Garlic, 'Susan Delafield'



When the OHS hosted the 100th anniversary convention (2006) of the Ontario Horticultural Association, Paul Pospisil gave a presentation about garlic growing. I asked about named cultivars that had a rich spicy taste and about sources of supply. Paul suggested Porcelain-type garlics that would be easiest to grow here. So I started with 'Northern Québec,' 'Susan Delafield,' 'Fish Lake 3' and 'Leningrad,' all Porcelain-type varieties with very large bulbs, hefty cloves, and white parchment bulb wrappers. My first planting was in September 2006. This grew well in a raised bed (photo next page) and was harvested in late July, 2007 (photo previous page). Porcelain-type varieties like 'Susan Delafield' are vigorous, tasty, store well, and are great in stews. But I still wanted the spicier cultivars. I located Boundary Garlic, an organic garlic supplier in BC, that had an impressive range from which to choose. Unfortunately, this farm closed in 2020. They had offered cultivars and provided useful background on their origins. I zeroed in on the Rocambole and Creole types that were smaller, a bit challenging to grow, but rewarding in terms of flavour. By autumn planting time, late September 2007, I had added 'Baba Franchuk,' 'Colorado Black,' 'Korean Purple' and 'Spicy Korean Red' to my growing collection, as well as some Turban, Marbled, Purple Stripe, and Soft Neck types just to see what I could grow here. By 2013, I had 30 cultivars needing a larger bed.

Garlic is a major flavouring added to many savoury dishes. I love garlic with toasted sandwiches made with garden-ripe tomatoes and fresh basil; also in dips, salads, stews, chili, and with roasted or barbecued foods. Garlic bread was my inspiration to grow spicy, flavourful garlic. Store-bought garlic just did not measure up.

Garlic bulbils can be planted, requiring several years to form larger bulbs. This planting was an OHS auction item!

We use about 100 bulbs a year so planting is limited to four cloves of each cultivar in a 3.5 x 3.5m raised bed. The soil is well drained, sandy loam with compost dug in annually. I have kept records since 2007 to learn about each cultivar and when it needs to be harvested. The general guideline is 'when the leaves are yellowing' but the time this happens can vary with the weather. I record cultivar performance, planting and harvest dates, with each bulb being weighed, and cloves counted, so as to decide what does best in my garden. The best cloves are kept for re-planting, the rest stored in labelled paper bags at room temperature and used through winter on into

June/July when some are still left to create marinades and dressings. Over the years, a few disappointing cultivars have been discarded (eaten but not re-planted) so I now have 24 including a Rocambole called 'Keeper' (photo page 16). I had presumed that the name referred to storage, but it is more about the flavour that is great. 'Keeper' is a softneck that has never produced scapes. The above-ground leaves die off in early July so this has to be carefully marked and promptly dug to locate the bulbs. Cloves will resprout by October so I use them promptly. 'Keeper' is excellent for garlic bread!

Garlic Growing Tips

START small and purchase healthy bulbs (seed garlic) from reputable growers. Never plant supermarket garlic or take a chance with garlic of unknown source. Market garlic is fine for eating fresh.

PREPARE the garlic patch before planting. Garlic prefers well drained, friable clay loam. Raised beds with full sun exposure provide best drainage during wet growing seasons. Dig deeply, amending annually with compost and sand.

RECOMMENDED

Porcelain type: 'Majestic,' 'Music,' 'Susan Delafield,' 'Great Northern'

Purple Stripe/Marble type: 'Red Russian'

Order in August for late September planting.

More garlic tips on the next page!

PLANT Late September to early October, before frost, is the best time to sow garlic. Garlic is planted like tulips only not as deeply.

Gently remove the papery covering of a bulb, then separate cloves, selecting the largest, undamaged cloves for planting. Do not remove the skin covering a clove. Prepare row labels with variety names. Plant early-maturing Rocambole types at the outer part of the bed for early access.

Porcelain and Purple Stripe/Marble types have few but very large cloves per bulb. Other types have more but smaller cloves per bulb. Use a hoe to create a 3-inch (7-8 cm) deep trench. Press cloves, flat base down, firmly into the soil. Space about 6 inches (15 cm) apart. Cover planted row

with soil, tamping down gently afterward. To stop animals from disturbing the garlic, lay straw or loose mulch over top.

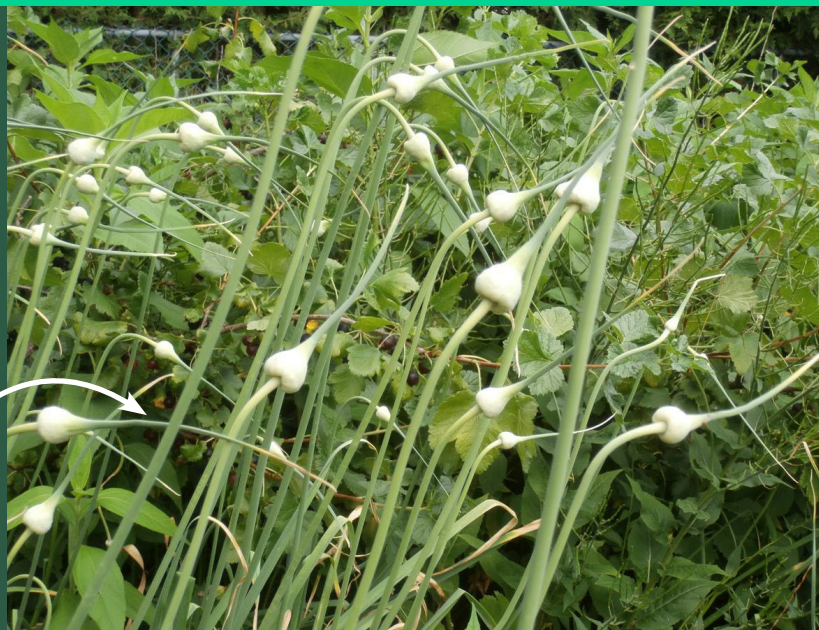
Repeat rows two feet apart. A board can be used to separate rows and to give you space to weed, etc. without trampling the soil. Boughs (I use cedar cuttings) can be laid on top of mulch to further protect the garlic through fall and winter.

Garlic cloves will root quickly and grow roots under the soil until freeze-up. Frost-hardy shoots emerge in early spring. Keep boughs in place until shoots can be seen then remove carefully. Leave mulch, as it will slowly become part of the soil. Additional mulch and compost can be added at this time.

WATER

If rain is lacking, weekly watering is needed while garlic is in active growth (*April through June*).

Garlic scapes must be cut earlier than seen here: while still coiled.



PRE-HARVEST As garlic plants mature, scapes will appear, first straight then curved and snake-like (photo above). Snap off scapes and use them in cooking. They store well in the fridge. Leaving scapes on the plants results in bulbs being 1/3 of the final size than if scapes had been snapped off early. NB. Some scapes can be left to mature, as the top contains

maturing bulbils or offsets (photo next page). Bulbils can be sown in pots (photo page 13), and left covered with mulch outdoors over winter. In spring, bulbils sprout. These can be planted in propagation beds where several years will be needed before good-sized bulbs are formed.

HARVEST

You can begin harvesting in mid-July but this can extend into early August. The plant appearance is the clue. Once foliage begins to yellow with only a couple of leaves still green, do not delay harvest. Dig carefully using a hand fork to loosen soil before lifting a bulb. Bulbs can bruise and sunburn, so place them temporarily in a labelled paper bag. Once all the bulbs are harvested, take them to a garage, shed, barn, or similar airy place where the bulbs can cure.

Use scissors to remove dried foliage, leaving green foliage untouched. Gather the stalks and tie them together with twine. Label each bundle with the cultivar name. Hang bundles

from hooks where they will have ample air circulation while drying. Curing takes about three weeks, when the bulb wrappers and roots have dried. Gently remove adherent soil, using scissors to trim roots. Use secateurs to sever each stem about three inches above a bulb. Do not remove bulb wrappers. At this stage, I plan which cloves will be planted in late September for next year's harvest. I mark the selected cloves using a permanent marker on the dry wrappers. This makes for quicker work come planting time. Cured bulbs, including ones selected for planting, are stored at room temperature until that day.



Freshly harvested Rocambole 'Keeper' lacks scapes. Dry on a tray.



Scapes of Rocambole 'Baba Franchuk' produce large bulbils if left on the plant.

STORAGE TIP

Garlic cloves will sprout if stored in a fridge or cold room. For best results, store bulbs in paper bags at room temperature. Label bags to help you choose which cultivar to use next! Check bags for signs of early sprouting. These bulbs should be used first.

SOME GARLIC INFORMATION AND SUPPLIERS:

<https://www.garlicgrowersofontario.com/>

<https://garlicseed.ca/collections/all-varieties>

<http://www.rasacreekfarm.com/garlic-store>

<https://swallowtailfarm.ca/>

Gardening QUIZ

PLANTS THAT WHISPER

BY EDYTHE FALCONER

Match up the genus with its common name.

GENUS

1. *Miscanthus*
2. *Calamagrostis*
3. *Panicum*
4. *Penisetum*
5. *Carex*
6. *Sorghastrum*
7. *Spartina*
8. *Hakonechloa*
9. *Chasmanthium*
10. *Helictotrichon*
11. *Andropogon*
12. *Cortaderia*
13. *Saccharum*
14. *Festuca*
15. *Imperata*
16. *Cyperus*
17. *Phalaris*
18. *Schizachyrium*
19. *Nassella (Stipa)*
20. *Deschampsia*

COMMON TERMINOLOGY

- A. Maiden or silvergrass
- B. Hair grass
- C. Pampas grass
- D. Indiangrass
- E. Little bluestem
- F. Feather reed grass
- G. Hakone or Japanese forest grass
- H. Sedge
- I. Northern sea oats
- J. Feather grass
- K. Switchgrass
- L. Fescue
- M. Fountain grass
- N. Ribbon grass
- O. Blue oat grass
- P. Big bluestem
- Q. Japanese blood grass
- R. Prairie cordgrass
- S. Plume or ravenna grass
- T. Papyrus

GARDENING QUIZ ANSWERS....DON'T PEEK!

Seriously...stop peeking. 1. Maiden or silvergrass 2. Feather reed grass 3. Switchgrass 4. Fountain grass 5. Sedge 6. Indiangrass 7. Prairie cordgrass 8. Hakone or Japanese forest grass 9. Northern sea oats 10. Blue oat grass 11. Big bluestem 12. Pampas grass 13. Plume or ravenna grass 14. Fescue 15. Japanese blood grass 16. Papyrus 17. Ribbon grass 18. Little bluestem 19. Feather grass 20. Hair grass



OASIS

FLORAL FOAM

— NOT SUCH A GOOD IDEA ANYMORE

BY LORI GANDY

This article is a follow-up to my June 2021 article entitled “Making floral arrangements that pop and please.” The article referenced OASIS as a tool for floral arranging. As was pointed out by an OHS member, floral foam is not an environmentally sound material and should be avoided.

When we think of an oasis, we might envisage a natural environment resplendent with all the necessary components to take us out of our busyness and deep into a calm splendour.

But there’s another kind of oasis that is not so redolent of the natural environment: OASIS floral foam – that spongy, green, water-absorbing product that has been stuffed into flower vessels, strung around arches and candles and what have you, to help flowers stand in place and stay watered.

Invented in the 50’s, it revolutionized flower arranging, making it possible to simply and easily arrange flowers in elaborate, long-lasting displays. It has been used by florists the world over ever since.

But today, floral foam – like many things we have taken for granted over the years – is being reconsidered because of its negative impact on the natural environment. The reason? It is a huge contributor to the crisis of plastic pollution.

WHAT IS FLORAL FOAM AND WHY IS IT BAD FOR THE ENVIRONMENT?

Floral foam is made from synthetic, non-recyclable plastic. It contains a combination of formaldehyde and phenolic foam, both of which are toxic to aquatic animals.

According to Becky Feasby of Prairie Girl Flowers, the Canadian representative of the Sustainable Floristry Network:

"Floral foam is neither compostable nor biodegradable. It must be disposed of in the landfill because it is a non-recyclable plastic. We know that floral foam contains several harmful chemicals (including formaldehyde). We know for certain that it breaks down into micro plastics and that floral foam micro plastics in particular are ingested by aquatic organisms."

This excellent article by Rita Feldman provides detailed information about the negative impacts of floral foam gleaned from various studies: <https://flowersmagazine.com.au/2019/11/27/floral-foam/>



HOW SHOULD USED FLORAL FOAM AND THE USED WATER BE DISPOSED OF?

Unfortunately, floral foam packaging does not provide any instructions on how to dispose of it (or the used water) safely. If you have some used foam and want to get rid of it, be aware that it should never be disposed of in your compost or garden, as it will contaminate both. The foam might crumble a bit, but it doesn't fully dissolve in water, or degrade in landfill or soil. It breaks down into smaller and smaller microplastics that will take thousands of years to completely revert into natural elements. As such, it can contaminate our waters and marine life. Used foam must therefore be disposed of in your landfill-bound garbage. (Note: used foam can also be dried out and re-used several times, thereby delaying its disposal.)

As for the used water, be aware that pouring it down household drains or sewers is problematic: there will be microplastics from the foam in the water that will make their way through sewage processing to seep into our water sources used to fertilize farmland. The plastic particles are then re-released into the environment where they can end up in rivers and streams. Feldman suggests pouring water exposed to floral foam through a tight weave fabric - think old pillowcase, cloth or tea towel - to capture as much of the foam bits as possible. The remnants should be placed in landfill-bound rubbish and the strained water poured into a hole in the garden (where it will remain for a long period of time).

WHAT ABOUT BIODEGRADEABLE FLORAL FOAM?

A new line of floral foam has been released by the company that created OASIS. Bio Floral Foam is a phenol formaldehyde-based foam with an additive to attract microbes. Feldman writes that "A recent study about the impacts of floral foam on aquatic animals demonstrated that the Bio Foam is almost identical in chemical composition to regular foam....and it leaches more toxic compounds into the water than regular foam."

Clearly, floral foam – even if it is labelled biodegradeable – should be avoided. Luckily, there are plenty of other means to help stems stand in place and absorb water to stay fresh.

ALTERNATIVES FOR OASIS FLORAL FOAM

One of the qualities of OASIS floral foam is its capacity to hold up to 50 times its weight in water. But there are other ways to keep your blooms fresh without introducing harmful chemicals; you can re-trim the stems and change the water regularly to help prolong your arrangements.

The other attribute of floral foam - holding stems in place in an arrangement - can be done with a number of easily available products. The following excellent suggestions are from the Good Housekeeping website:

- Use a kenzan or flower frog – metal devices that sit in a vase or bowl and secure stems with metal needles or guide them into holes;
- Chicken wire or metal pins are fantastic for securing stems and act as a supportive grate when arranging straight into vases or planters;
- Use pebbles, sand, gravel, clay, marbles, compact moss or even fruit to support floral arrangements;
- Pliable twigs also make a good supportive lattice for flowers to be propped against.

FLOWER FROGS OR KENZANS

These come in many shapes and sizes but they all have one purpose: to help keep flower stems in place in an arrangement while allowing them access to fresh water.



MAKE-IT-YOURSELF FLORAL FROGS

If you don't want to go to the expense of buying floral frogs, you have a number of make-it-yourself options. You can make your own flower frog lids:



Use metal canning lids as a frame for your mesh!

Another option that will do the trick - chicken wire purchased at the hardware store or garden shop.

Here's a handy Youtube video on how to use chicken wire instead of floral foam:

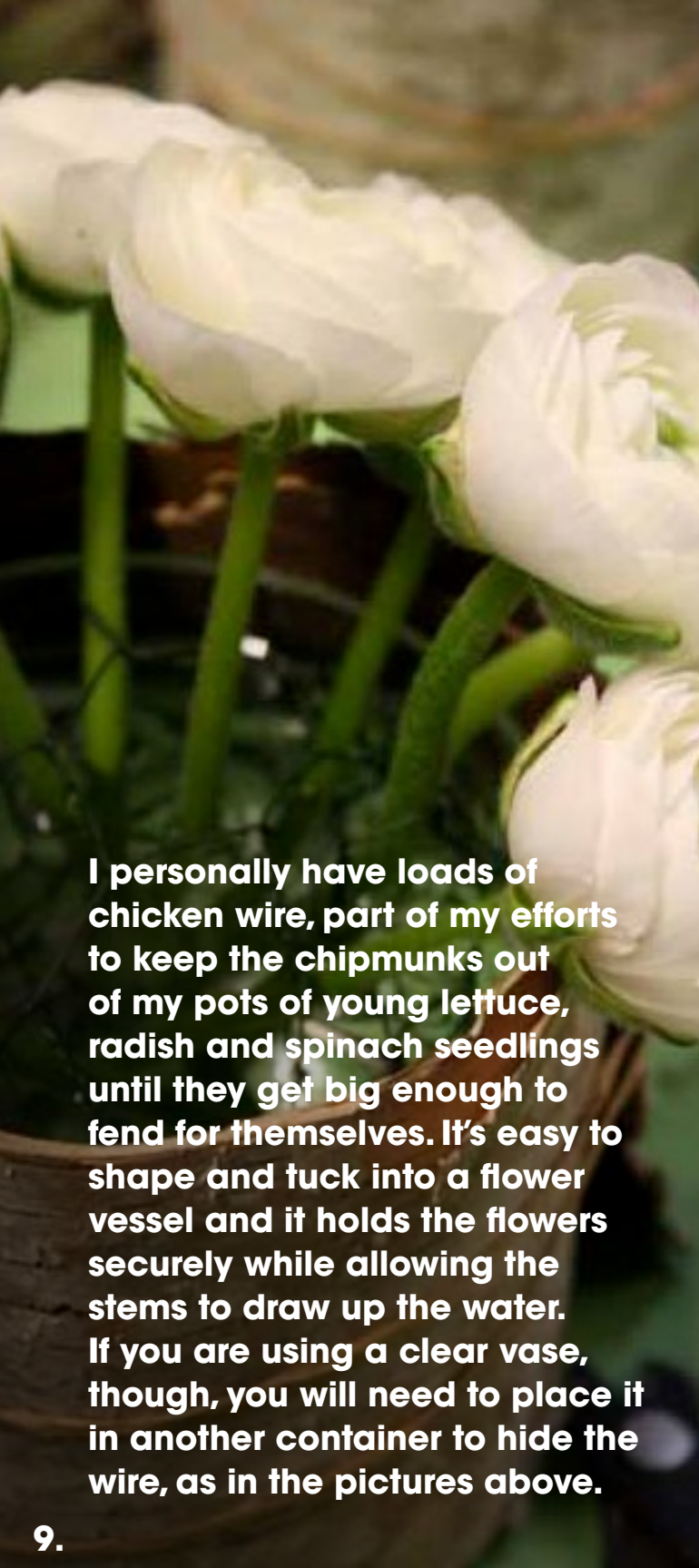
<https://pollenfloraldesign.com/blog/using-chicken-wire/>



This website shows how to make a CLAY FLOWER FROG

<https://ruffledblog.com/diy-clay-flower-frogs/>





Here is a great article entitled “How I gave up floral foam” that showcases a number of methods for making stunning floral arrangements without using floral foam:

<https://pollenfloraldesign.com/blog/how-i-gave-up-floral-foam/>

And lastly, “A Guide to Floral Mechanics” by Sarah Diligent and William Mazuch, is another resource, suggested by an OHS member, which covers a variety of methods, materials and means to create floral arrangements. The book’s promotion states: “This book shows through step-by-step imagery and instructions how to create floral mechanics (the methods and materials used to place and hold stems of flowers and foliage within floral designs).”

I personally have loads of chicken wire, part of my efforts to keep the chipmunks out of my pots of young lettuce, radish and spinach seedlings until they get big enough to fend for themselves. It’s easy to shape and tuck into a flower vessel and it holds the flowers securely while allowing the stems to draw up the water. If you are using a clear vase, though, you will need to place it in another container to hide the wire, as in the pictures above.

As gardeners, we are important stewards of the natural world, even if it’s just our little corner of it. We can and should make the right decisions and practise environmentally sound gardening to ensure we are enhancing, not damaging, the natural environment. Here’s to making stunning floral arrangements, naturally!

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Joe Pye weed makes a great statement all around the rock garden.

SELF-SEEDERS: BONANZA OR BEDLAM IN THE GARDEN?

by Josie Pazdzior
all photos by Josie Pazdzior

Encouraging self-seeding plants is not for the faint of heart. We gardeners like to control our space (or imagine we can). But once we embark upon this path, we must relinquish some degree of control. However, the final word is ours. Which style do you tend to favour: perennials in neatly spaced clumps with mulch between, or a lush profusion of flowers mingling in an “English cottage garden” style?

WHY NOT JUST WEED ‘EM OUT?

If a more informal look pleases you, then these “volunteers” can be a rewarding part of the gardening experience. I find it great fun experimenting with self-seeders and encourage new gardeners to discover the possibilities. I also love surprises in the garden, plants popping up to create serendipitous combinations or pops of colour in unexpected places. Many area gardeners are happy to have such traditional annuals as forget-me-nots, poppies, and morning glories that return each year, ideally filling a space and time perfectly suited to each. For instance,

the forget-me-nots and poppies bloom early and low to the ground, while the morning glory climbs above the later perennials to add another vertical dimension. Perennials and even trees and shrubs may be especially valuable volunteers, because you can often dig them up to move to other places in the garden or give away.



Candytuft (*Iberis umbellata*) – came up after being planted last year; hope they will persist in the garden.

SUCCESSFUL ANNUAL SEEDERS

The annuals that I like to keep from year to year include cosmos, cleome, love-in-a-mist, sweet alyssum, annual candytuft, Jewels-of-Opar, snow-on-the-mountain, and four o'clocks. After introducing them in the garden, when they appear in future years, I leave them to grow for a bit, and then decide whether to thin them out, transplant to a better spot, pot up for friends/plant sales, or throw in the compost. Some species are best pulled out when they start to decline, like forget-me-nots and snow-on-the-mountain, leaving just enough seeds for the plant to carry on.

To encourage the seeds on the ground to germinate, I leave only a thin layer of mulch around the desirable plants, and keep an eagle eye out for seedlings as they germinate in spring. The weeds that inevitably appear can be a problem, at least until you gain enough experience through trial and error to recognize the seedlings you want. I recommend that you pause before pulling. Don't race along as I tend to do, sometimes going so fast that even while pulling I'm thinking "Oops! that was a *Verbena bonariensis*, not a Siberian elm." Obviously, you need to disturb the ground as little as possible (recommended anyway) if the seeds are to stay near the surface.

INVASIVE ALERT

Some few plants become invasive, and we need to heed the warnings of our friends who know whereof they speak. The worst of these, in my experience, is snow-on-the-mountain, *Euphorbia marginata*, which appears everywhere in my garden after only a couple of years in residence. Its white leaf margins and bracts create a fresh, bright effect when grown amidst green foliage or coloured blooms, but it can be way too much of a good thing. I have pulled out hundreds of them this season already. Fortunately, they are single stemmed and easily pulled. They also contain a milky



1. Poppy mallow, *Callirhoe involucrata* 2. Hellebores, *Helleborus orientali*
3. Evening primrose, *Oenothera triloba* 4. *Hypericum* baby growing up in front of its mother plant, past time to move on out!

sap which can be poisonous or irritating to the skin. I wouldn't be without them now, however, even if it means constant pulling. Now I know why Gillian didn't encourage me to collect seeds!

INVASIVE NO-NO'S

If volunteers are becoming invasive, don't allow them to set seed; deadhead first or pull the plant. Sweet or dame's rocket (*Hesperis matronalis*) and Himalayan balsam (*Impatiens glandulifera*) are beyond this treatment and are not recommended, though I know people who grow them. I don't find them worth the risk to the environment or to the rest of the garden, even though they are fragrant and attractive to pollinators. I remember digging up half a yard's worth of sweet rocket plants, 5 feet high, and putting them in the city's yard waste, in preparation for selling a property. Himalayan balsam, which propels its seeds explosively outward, is designated an invasive species which suppresses native ones and leaves riverbanks bare and susceptible to erosion in winter.

DESIGNING WITH ANNUALS IN THE GROUND

The key to gardening with self-seeders is to make it look as if they are there by plan, not by totally random proliferation. Try to arrange them by editing or transplanting, so that they are massed together to form clumps or a pattern of sorts. If they come up thickly, like the *Euphorbia*, pull them out until you have a distinct grouping that sets off the plants around it. The photo at top right shows the remaining *Euphorbia* in a swathe that provides a fresh white accent in a space where many flowers will soon be blooming around it: asters, anemones, ironweed, Ohio goldenrod, and perennial hibiscus. The *Euphorbia* can safely be pulled out while they still look attractive and have not spread more seeds to add to those probably still in/on the ground. In the photo,



1. *Euphorbia* and other annuals provide colour until the later perennials take over. 2. *Echinacea* seeding nicely along the edge of the walkway. 3. Goldenrod, loosestrife and aster in front, maybe here just for this season.

there is also visible a patch of mixed annual transplants that I hope will seed themselves next year: cosmos, zinnias, cleome, tall verbenas.

PERENNIALS AND WOODIES

Perennials may tell us much about their preferences (soil, light, drainage) from where they choose to germinate and thrive, which is not necessarily where we first put them. Joe pye weed (*Eutrochium maculatum*) was beautiful for the first two years, and then gradually died in the bed where I'd planted it. It began seeding in the gravel around the rock garden, however, and now I leave several clumps to feed pollinators. Seeds grow well in the loose stones of the dry riverbed in front, and I am happy with a great new combo of aster, goldenrod, and purple loosestrife (yes, I'm keeping an eye on the invasive loosestrife.)

Other perennial seedlings can be left growing undisturbed until the next season, when they may be big enough to flower. This spring I harvested a number of hellebore seedlings sheltering under the leaf mulch and the large leaves of the mother plants. I moved some to other homes, and donated some to a plant auction. Coneflowers, tickseed, columbines, asters, *Thalictrum* (meadow rue) and many other perennials can also be managed this way. Tap-rooted ones like Russian sage may not be salvageable, though, unless really small. Another favourite seeder is the native shrubby St. John's wort, *Hypericum kalmianum*, which grows fast and can be sold or given away, while being easy to recognize and pull out.

**My final advice is:
if it wants to grow in your garden,
give it a chance!**

Below is a list of some annuals and perennials that I have had luck with. There are doubtless many more.

Photo: Tickseed, *Coreopsis grandiflora*

ANNUALS

Sweet alyssum, *Alyssum maritimum*
syn. *Lobularia maritima*
Candytuft, *Iberis umbellata*
(Perennial is *Iberis sempervirens*)
Snow-on-the-mountain,
Euphorbia marginata
Pot marigold, *Calendula officinalis*
Cosmos, *Cosmos bipinnatus*
Spider flower, *Cleome hassleriana*
Love-in-a-mist, *Nigella damascena*
Poppy, *Papaver* sp.
Four o'clocks, *Mirabilis jalapa*
Spotted hawkweed,
Hieracium maculatum
Zinnia, *Zinnia elegans*
Moss rose, *Portulaca grandiflora*
Tall or purpletop verbenas,
Verbena bonariensis
Sunflower, *Helianthus annuus*
Jewels-of-Opar, *Talinum paniculatum*

PERENNIALS

Columbine, *Aquilegia canadensis*
or *A. vulgaris*
Coneflower, *Echinacea purpurea*
Poppy mallow, *Callirhoe involucrata*
Hairy beardtongue, *Penstemon hirsutus*
Aster, *Symphyotrichum* sp.
Sea lavender, *Limonium latifolium*
Evening primrose, *Oenothera triloba*
(true evening primrose,
not sundrops)
Bloodroot, *Sanguinaria canadensis*
Mallow, *Malva moschata*
Tickseed, *Coreopsis grandiflora*
or other species
Gloriosa daisy, *Rudbeckia fulgida*
or *R. hirta*
Hellebores, *Helleborus orientalis*
or other species
Russian sage, *Perovskia atriplicifolia*
Shrubby St. John's wort,
Hypericum kalmianum
(Woody plant)
**Various ferns, such as Ostrich fern,
Japanese painted fern**



HVX AND HOSTAS IN OTTAWA GARDENS

By Kristin Kendall with contributions
from Ottawa gardeners

This story begins a little over 3 years ago when a gardening friend thought that my 'Frances Williams' hosta might be infected with Hosta Virux X, or HVX.

I sent a photo to Ann Frederking who in turn passed it on to a couple of Facebook groups, and I was hooked. With Ann's expert help I ordered test kits, shared costs, tested my hosta and a couple of others and was happy to get negative results. But I continued to follow the online hosta groups. One group in particular, Hosta Diseases and Pests, includes followers from literally around the world.

(Full disclosure here, the images I've used to illustrate common signs of the virus are from a very public source, The Hosta Library. The photos related to HVX are not copyrighted).

WHAT IS HVX?

This virus, which luckily affects only hostas, was first identified in 1996 by plant pathologists at the University of Minnesota. Since then, it has spread widely and even reputable nurseries and growers can unknowingly pass it along through their stock. (At one point, infected hostas were sold as new varieties.) The virus lives in the sap of an infected plant, that is, in the leaves, the stems, and the roots. There is no treatment; there is no such thing as an immune hosta at this time. Even if a plant shows no symptoms, it can still infect other hostas in a garden. The virus is spread through the sap - every time you cut into the leaf or stem or root of an infected plant, you contaminate your clippers or shovel and thus spread the virus.

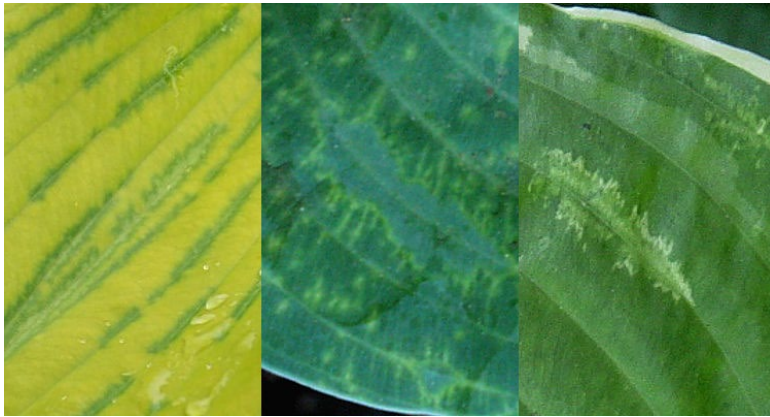
The good news is that there is more awareness of the spread of the disease so good nurseries and garden centres are more careful. But still - buyer beware.

'Frances Williams' hosta

What does HVX look like?

There are 3 common signs that your hosta may be infected

(images from The Hosta Library <https://www.hostalibrary.org/firstlook/HVXsymptoms.htm>):



1- INK BLEED

Characteristic ink bleed of colour along the veins of a leaf.



2- TISSUE COLLAPSE

The tissue of the leaf looks sunken in on itself. It doesn't appear desiccated or dried out.



3- MOTTLING

Mottling often appears along with the other HVX symptoms, but it can also be a sign of another virus or infection (such as Tobacco Virus).

Often gardeners will put photographs of hosta leaves online but, because the image on a screen is two-dimensional, it's hard to see tissue collapse. It can also be hard to diagnose ink bleed because many varieties of hosta display wonderful streaking as part of their attractiveness. And, to complicate matters further, many interesting and desirable hostas have corrugated leaves, and that desirable texture may look like tissue damage.

The only way to be sure whether or not the hosta in your garden is infected is to test it. The only source of tests is Agdia. You can order the Agdia test kits in Canada through A&L Canada Laboratories Inc. (<https://www.alcanada.com/>).

TESTING IN OUR OTTAWA GARDENS

Process and Results

This spring, that same 'Frances Williams' hosta looked suspicious. When it turned out that other gardeners had similar concerns about plants in their gardens, I ordered the test kits and shared costs as in 2019. One participant, OHS member Jane Lund, suggested that we write up our experiences for the OHS fall newsletter.

Each participant was asked to share photo(s) of suspect plants, to explain the reasons for wanting to test, and to share the results. Here's what happened.

FROM TUULA TALVILA

In the spring I noticed that some of my hostas were coming up with distorted and misshapen leaves so I decided to do a couple of the virus X tests.

I tested 'Avocado' and 'Guacamole' and both came up with a negative result. The unusual leaves may have been due to environmental stresses caused by our fluctuating temperatures this spring or some other physical cause (nibbling squirrels or bunnies, perhaps?). It was an interesting exercise.



FROM JANE LUND

Much to my absolute amazement, the hosta plant I've been looking at for years in a pot tested negative for hosta virus. It was a rescued plant from a garden that was getting destroyed. I'm not sure if it looked like that from the beginning when I got it, but eventually I noticed it looked suspiciously like it had hosta virus. So I didn't plant it in the ground.



FROM GLORIA SOLA

The hosta that was tested was Hosta 'Fortunei Hyacinthina', a very old cultivar, but very common as it was extensively used in foundation plantings for commercial buildings. It is a medium-sized hosta with grey-green leaves and slight dimpling. The hosta in question is an offshoot of a hosta from my garden, but planted in a bed of hostas in a church garden. What caught my eye was the intense dimpling of some of the leaves, appearing like tissue collapse, and some yellow streaking in the leaves of what is normally a solid grey-green coloured plant. Although I knew the provenance of the plant, and the bed in which it is planted is an old, well-established bed that has only had one new hosta introduction ('Praying Hands') in the last 5 years, I decided I would test for HVX. This would give me some reassurance about the church's hosta bed and my own original plant.

I did the test and the results were negative. So why the strange leaves? I wonder if the more intense dimpling wasn't due to the early and lingering spring we had which may have given the leaves more time to develop. H. 'Fortunei Hyacinthina' is known for throwing many sports, one of the best known is H. 'Gold Standard.' This might explain the appearance of the yellow streaking in some of the leaves.



FROM DORIS DALLAIRE

I've had this hosta for several years, purchased from a reputable nursery. I planted it in a fairly sunny location and it didn't seem to like it. So, the following year, I put it in a shadier spot. It didn't do well there either. So I moved it again to where it is located now. It gets some shade in the early morning in the summer, then full sun, and later in the afternoon gets more shade. I water it regularly during dry periods and give it fertilizer as required, but it still gets those yellowed leaves, just as it did in the other two locations where I had originally planted it.

In the spring when it starts to grow, it looks so healthy and I keep thinking it has finally gotten over whatever it is that's affecting it. But then, after a few weeks, when the weather gets warmer, the leaves get yellowed. I thought it didn't like water from the hose on its leaves and this year, I only watered around it, being careful not to water the leaves. But still it yellowed. I just don't know what is wrong with it. I tested it twice with the kit and both times it came up negative for the virus. My next step is to just throw it out - not even put it in the compost. It's too bad because I love it when it's healthy looking - it could be a beautiful hosta. I've had some of this type in other homes where I lived and never had this problem.

FROM MY GARDEN (KRISTIN KENDALL)

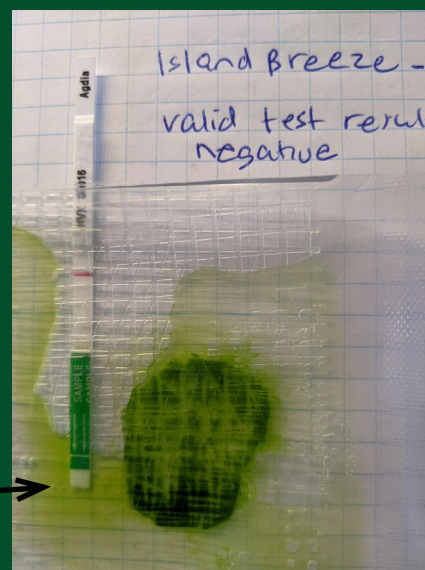
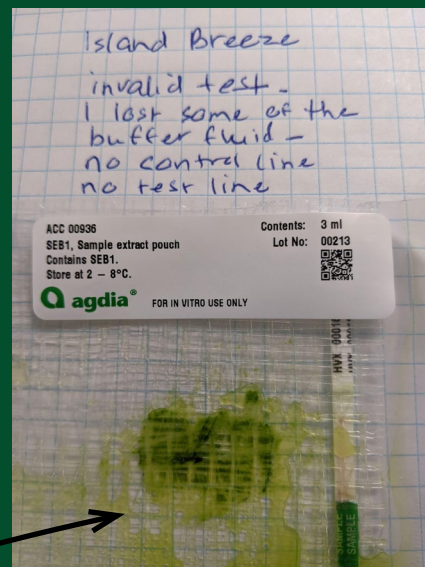
I tested the same 'Frances Williams' hosta as I had in 2019. A close-up of two of the leaves shows why I was worried (see photos below).

This is the only hosta in my garden that predates our moving to this house, so it has heritage value! Just as in 2019, it tested negative.

I decided to test the 'Island Breeze' hosta on the other side of my garden because it's planted in a grouping with others that I particularly like. The amount of corrugation seemed strange because it wasn't on all the leaves. I had not tested this one in 2019.

The first test I did showed invalid results:

When I saw the invalid result, I decided to check directions again. I watched the Agdia directions on YouTube, and the actual pictures of the process were much easier for me to follow. I tried again with better results:

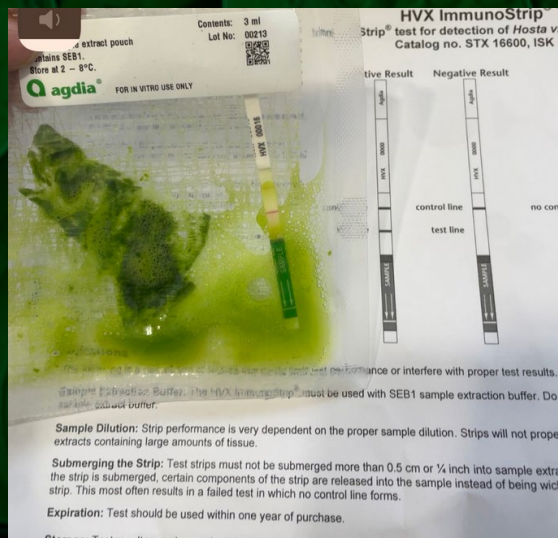


FROM KATHY WALLACE

In June 2021 I found a hosta in my garden with HVX-like pattern on some leaves. I got in touch with my hosta mentor, Ann Frederking, and she did a test. Thankfully it was negative and we assume that the anomaly in the leaves was environmental damage. I clipped the affected leaves and so far the plant is doing fine.



In July 2021 I was visiting a friend at a cottage and she has quite a few hostas. Some were suffering from lack of water, as she lacks an outside tap, but the very last one we reached was definitely sick in my mind. It looked perfectly healthy to my friend though, and she thought that the leaf pattern was part of its character. I brought leaf samples back home with me and the test was positive. I heard from her shortly after and she said that she thought that it was Hosta 'Brother Stephan,' after seeing something similar at a big box store nearby. She commented that her hosta was then in bud and looked healthy to her but she did plan to have it removed.



IN CONCLUSION

Only one of the plants we tested is in fact infected with HVX. The negative test results mean that it's safe to dig up plants around the tested hostas and to transplant and divide them too. It means it's safe to share those hostas with friends or donate them to OHS plant sales.

But, here is the problem - it's impossible to test all the hostas in a garden and, usually, if you have one hosta you have more, even if you are not a hosta addict. If the virus is dormant, the plant can appear perfectly healthy but it is still infectious. Even if you disturb the soil around a "healthy" hosta to deal with other plants nearby, you could still transmit the virus from your tools, or if you move soil around.

Two conclusions: with no symptoms, a plant may still be infected and, even if you test two plants, another one in your garden may still be infected and infectious.

To further complicate matters, one source I looked at, the Delaware Valley Hosta Society, says that in cases where the viral load is extremely low at the beginning of an infection, the Agdia test can give a false negative.

The plants I tested this spring are fine but others in my garden may not be. I don't have the patience or the money to test every hosta.

What do the experts say about dealing with the threat of HVX?

1 - BUYER BEWARE. Buy from garden centres and plant nurseries. Don't buy from the big box stores. The reputable garden centres have a stake in selling you good plants year after year because they want you to come back year after year.

However, wherever you are, report to the person in charge any plant that looks obviously unhealthy. Don't buy where you see staff moving between plants without disinfecting their tools.

2 - KNOW AND KEEP TRACK OF THE VARIETIES YOU BUY. You can use a source like The Hosta Library to see what a healthy plant of a specific variety should look like.

3 - DISINFECT TOOLS AS YOU MOVE FROM PLANT TO PLANT. This applies even to shovels because the virus lives in the sap of the plant so bits of root can be infectious. Clean your tools and shovels as you move around your garden. Scrub off the dirt (it can be infected with tiny fragments of root) and then wipe your tools. Many gardeners use those ubiquitous Lysol wipes. A thorough explanation dealing with how to clean and disinfect tools is found at Delaware Valley Hosta Society Hosta FAQs IIa- HVX (<https://www.delvalhosta.org/faqs-part-ii-a>).

4 - IF YOU DO HAVE TO REMOVE A PLANT, USE GARDEN FORKS BECAUSE THEY ARE LESS LIKELY TO CUT INTO ROOTS. It's also recommended to remove an infected plant later in the season when the sap runs less freely, thus minimizing the chance of spreading the virus while digging up the plant. Dispose of the infected plant in the garbage. Do not compost it yourself. Don't add it to a city-collected yardwaste bag.

5 - IF YOU ARE SUSPICIOUS BUT NOT SURE, SEGREGATE THE PLANT IN A POT.

6 - DON'T PLANT ANOTHER HOSTA IN THE PLACE WHERE THE INFECTED ONE WAS.

There are some excellent and reliable resources on the web; among my favourites:

The Hosta Library: <http://www.hostalibrary.org/> - including an excellent video presentation by Chris Wilson about HVX, available at <http://hostalibrary.org/videos/HVXtalkCW.mp4>

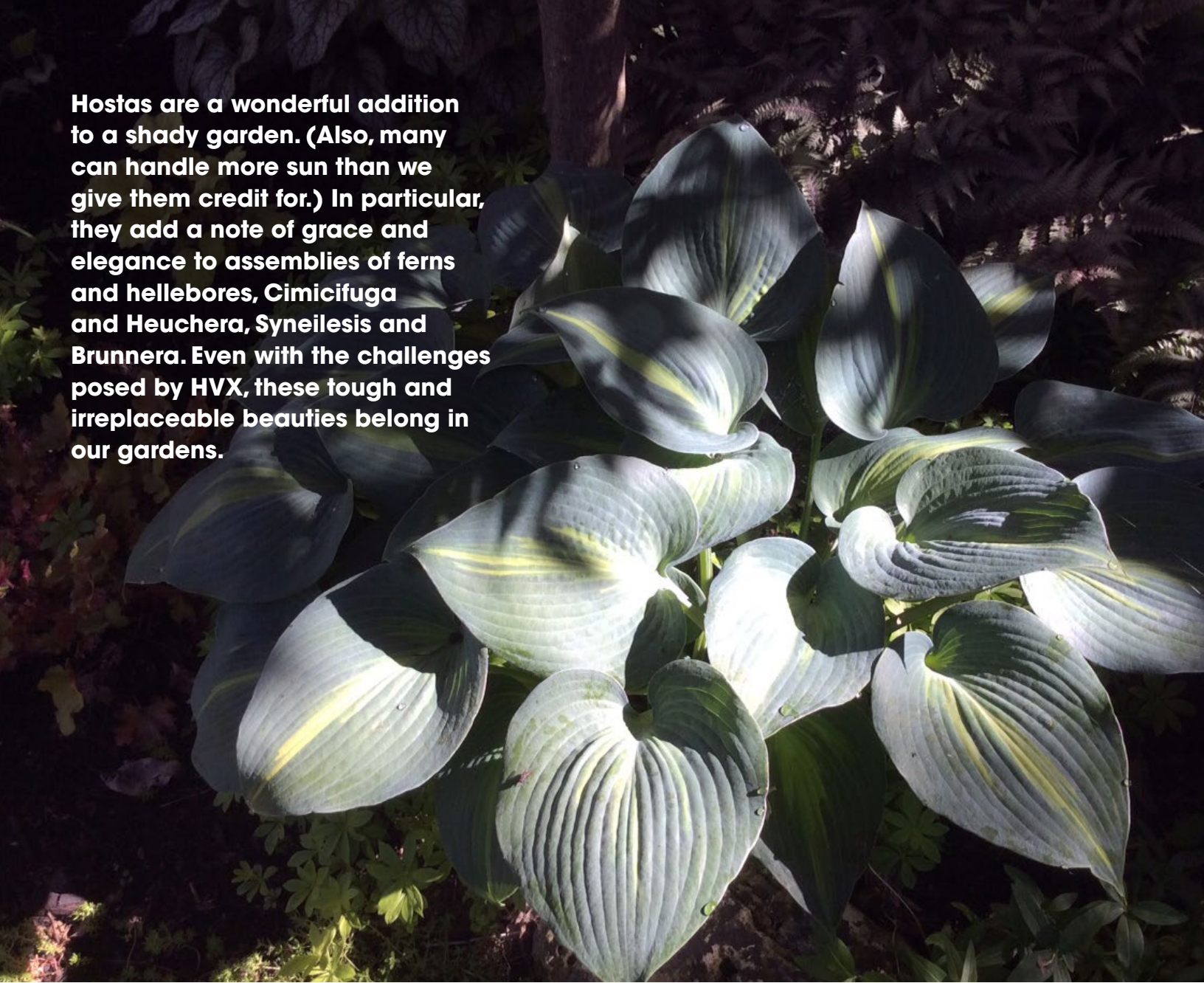
Ontario Hosta Society: on Facebook and at <https://ontariohostasociety.com/>

Eastern Ontario Hosta Society: <https://easternohs.ca/>

Facebook group Hosta Diseases and Pests

Delaware Valley Hosta Society: on Facebook and at <https://www.delvalhosta.org/>

In our own OHS, Ann Frederking is knowledgeable, practical and unfailingly generous in sharing her expertise and experience.



Hostas are a wonderful addition to a shady garden. (Also, many can handle more sun than we give them credit for.) In particular, they add a note of grace and elegance to assemblies of ferns and hellebores, Cimicifuga and Heuchera, Syneilesis and Brunnera. Even with the challenges posed by HVX, these tough and irreplaceable beauties belong in our gardens.

ABOUT US

This Newsletter is published by the Ottawa Horticultural Society (OHS) and is distributed to OHS members free of charge.

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

PLEASE SEND YOUR SUBMISSIONS TO:
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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.

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