

The Garden Master News



Newsletter of the Atlantic Master Gardeners Association

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SUMMER 2022



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AMGA SUMMER EVENTS 2022

DATE	EVENT	
May 6-July 10	PLANT KINGDOM EXHIBITION- Dalhousie Art Gallery – 6101 University Ave, Halifax,NS, Curated by Frances Dorsey (Atlantic Master Gardener). Features work of 8 artists as "a means to reflect on ways that life on our planet is dependent upon, enriched by and indebted to plants". (www.artgallery.dal.ca)	
June 11-June 24	YEAR OF THE GARDEN: GARDEN WEEK	
June 18	NATIONAL GARDEN DAY	
July 1	CANADA DAY	
July 7-8	MASTER GARDENER SUMMER SCHOOL 8:30AM - 4:30 PM	
July 5-8	AMGA CONFERENCE	
September 1	Deadline for submission of Newsletter articles for Fall Newsletter	
September 26 ?	AMGA AGM	



PRESIDENT'S MESSAGE

By Sandra Matchett

"Learning from Nature" AMGA Conference Schedule July 7-8,2022

Warmer weather has arrived and by now you are all planting. Containers are being created and gardens planted. What a thrill to see things sprouting through the ground and our pots being filled with plants. Nurseries are full with our regular standby items but there is always the thrill of finding something new to try. Since I live in the woods, I am always looking for something new to try and push the limits on light requirements. A challenge it is! Of course, my regular standby of Solenia begonias always give me pleasure as they are such a great shade plant and provide me with beautiful blooms all summer.

Our Summer Conference is getting the finishing touches completed and I am so anxious to see everyone in person. We have a great line up of speakers and our Friday workshop with Julie Moir Messervy is a wonderful way to finish the conference. Julie is a very inspiring and talented presenter and we are very fortunate to have her with us.

To our Master Gardeners in Training, Welcome. Those of you who are attending Summer School or just attending the conference, I look forward to meeting you and hope you will join us at our banquet. To those of you who are graduating: CONGRADULATIONS! We as an Association are there to help and support you.

Wishing you all a great summer and happy planting and growing success.

Sandra

2022 AMGA Conference Program Thursday, 7th July 2022

Speaker	Location		
08:45 Welcome	MacRae Library classroom 3rd Floor		
09:00 Gerald Gloade	The Mi'kmawey Debert Cultural Centre		
10:30 Tour	Mi'Maqi Lunar Garden		
11:15 Keith Williams	Back to the Future: Indigenous Knowledge and Three Sisters gardening		
Lunch 12:30			
13:30 Paul Manning	Insect Identification		
15:00 Frances Dorsey	Plant Kingdom, Exhibition & Pollinator Garden for Dalhousie University, Halifax NS.		
18:00 AMGA Reception	Riverview Room ,		
19:00 Banquet/Ceremor	Jenkins Hall ny		
Friday, 8 th July 2022			

08:45 Welcome		Location
	Welcome	Design Lab, Thermal Plant Building
	Julie Moir	Home Outside
	Messervy	Garden Design Workshop

Conference Information located on AMGA Website

https://www.atlanticmastergardeners.ca/events



Innisfree Garden: A Study in Slow Gardening

Report by Jim Sharpe,
 ARHS President and Program Chair

This winter, Katherine (Kate) Kerin, Garden Curator at Innisfree Garden in Millbrook New York, presented by Zoom, lectures to both the Atlantic Rhododendron Society and the Atlantic Association of Landscape Designers on the garden philosophy of "Slow Gardening." Innisfree is a garden named after the Yeat's poem "The Lake Isle of Innisfree" which starts "I will arise and go now..." It is located about 80 miles north of New York City occupying over 180 acres surronding the a glacially formed Tyrell Lake.

Started in the 1930s by painter Walter Beck and his wife Marion, it was inspired by a 8th century Chinese poet, painter and gardener Wang Wei's scroll painting of Wangchuan Villa. The Becks developed the idea of "cup gardens" to define the garden space and the stroll through them. They were greatly influenced by Lester Collins who started working with the Becks in the 1940s and continued throughout his career, including while he was Dean of Landscape Architecture at Harvard and throughout his career.

Innisfree is like no other garden- as with origami, it unfolds,

Innisfree is like no other garden- as with origami, it unfolds, surprises, and delights.

Charles Birnbaum, Founder & CEO, The Cultural Landscape Foundation (2017)

On Walter Beck's death in 1954, Marion asked Lester Collins to help set up a non-profit foundation for the "study of garden art." This foundation was developed by Lester Collin's wife and family after Lester's death in 1993 to maintain the current gardens today.

Built around Tyrell Lake, it is a natural stroll garden, with a succession of views, experiences and surprises. Starting with an overlook to the lake, the path goes along the lake until a step hill requires a climb up a stairway to see the oxbow in the stream. The stream is fed by a meadow with many stepping stones and natural bridges. Coming down the road approaches the terraces, where surprising mist fountains complement the stone work, plantings and rock walls.



The landscape reflects Lester Collins design philosophy of minimalism, modernism and romanticism. Kate advised that Lester completed his undergraduate thesis at Harvard on emotion in the Picturesque and Romantic Landscapes. In the tradition of the Hudson School of Painting, he wanted us to feel through our

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Innisfree Garden: A Study in Slow Gardening

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bodies by immersion in the landscape. Landscapes are social places. Innisfree generates emotions in us all, from five year olds to jaded older landscape architects. bodies by immersion in the landscape. Landscapes are social places. Innisfree generates emotions in us all, from five year olds to jaded older landscape architects.

Tim Richardson, author of the 2009 book "Great Gardens of American" writes about Innisfree's contribution to landscape design:

"The genius of this place lies not so much in the ideas which the designers formulated for the cup gardens, many of which are disarmingly simple, but in the way they have been maintained over the years. Essentially, everything is allowed to settle into the prevailing spirit of the place; if it does not, it is removed. It is this sensitivity, care and attention to the qualities of landscape, natural and made, that make Innisfree such a memorable success.

- Tim Richardson, Great Gardens of America (2009)

Lester Collins used what was present, which included a large number of glacial erratics which he collected throughout the property. A focal point of the garden is The Point, where three of them are sited like modernist sculpture: the tortoise, the dragon and the owl.



The point: tortoise, dragon and owl rocks

Kate described the elements of "Slow Gardening" based on Collins' design principles. She quoted Thomas Rainier, who is his 2015 book "Planting in a Post Wild World" stated that "Plant communities are the future of horticulture." These communities of perennials and self-sowing annuals are more healthy, resilient, and less maintenance. By following natural succession, carefully editing plantings to maintain balance and interest and careful selection of cultivars and hybridization, it is possible to establish sustainable landscapes.

One area which she described was the bog garden, full of ferns, skunk cabbage and Japanese primulas, many of the hybridized and naturalized for the site. It is mowed once a year by weed whackers and then the cuttings gathered by raking.



Innisfree Garden: A Study in Slow Gardening

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Kate described another cup garden created by a mist fountain on the side of a hill.



The herbaceous perennial in the middle of this garden is *Petasities japonicus*, or Giant Butterbur, a common weed which can be quite a thug and an nvasive plant. However in this setting, a dry hillside, the plant will only expand as far as the water from the fountain reaches, limiting its invasive character. The cup garden is completed by stones and a lip waterfall. Very little maintenance is required. The walk around the lake is like a walk in the woods, but with wonderful views of the natural garden.



In order to maintain the water quality in the lake, Collins devised a circulation system where the nutrient rich water is pumped up to a reservoir, then returns to the lake filtered through a stream and meadow. This both provides nutrients to the plants and helps keep the lake free from algae blooms. The lake has a great variety of wildlife, including bass and snapping turtles.

At the end of the stroll, the path goes through a planting of columnar maples, *Acer saccharum* subsp. *Nigrum* 'Monunentale', in a meadow opening by the lake.



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Innisfree Garden: A Study in Slow Gardening

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Sensory Garden

by Christine Letcher

At the end of the presentation, Kate answered questions about the horticultural practices of slow gardening, including careful design, editing, controlling invasive plants and rotational pruning. She announced a Zoom lecture series that the Innisfree Garden is offering from February to April on Wednesday afternoons including the following:

February 2: Between Wild and Cultivated: The
Marginal Garden and its Care | Noel Kingsbury
February 23: Effective Solutions for Dealing with Deer
| Brad Roeller
March 2: A New Way of Thinking about Gardens,

Nature, and Ourselves | James Golden March 23: Painting the Romantic Landscape: Claude Lorrain to the Hudson River School | John McGiff April 6: Landscape, Poetry & Ecology: Romanticism at

Innisfree Garden | Paul Kane

April 20: Romanticism at Innisfree | Kate Kerin

Further information and registration available through the Innisfree Gardens website at www.innisfreegarden.org.

In conclusion it was wonderful to view the striking photos of Innisfree Garden and learn about the design philosophy of 'Slow Gardening,' from our homes by Zoom in the depths of a Maritime winter. The lecture is available to members on our private You Tube channel at https://youtu.be/iuVkJzsm8Mo.

If interested, it may be worthwhile to organize a visit to Innisfree and other gardens in the US North East when travel is possible again.

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A sensory garden appeals to one or more of the five Senses: sight, smell, sound, taste and touch.

Create **Sight** sensory: by plant color, shape, size, texture and patterns. You may like bright and bold colours like tulips, alliums and coneflowers. You can add wildflowers that attract pollinating butterflies and bees. They also add movement to your garden. Bees gravitate towards blue, lavender, purple, white, and yellow. Butterflies prefer white, pink, purple, red, yellow and orange.

Smell: can be experienced by adding floral fragrance by incorporating various aromatic plants such as roses, honeysuckle, lavender, mint and sage to name just a few. Herbs also stimulate your taste sense.

Sound: You can add trickling water by adding a fountain or a water feature. Hanging wind chimes add a lovely accent! Walking on gravel in your garden will add a crunch as you walk. Plants that respond to the wind such as grasses, if placed in an area that will get a breeze will rustle back and forth.

Taste: can be added by incorporating herbs, edible fruits, vegetables, spices and edible flowers. Some examples are non toxic violets, bee balm, nasturtiums to name just a few. Herbs like Sage, Rosemary, Dill and Lavender are ideal for taste.

Touch: Adding plants like Lambs Ear which is a fuzzy plant is great to touch. In addition to plants, adding smooth stones, and other natural materials will add to this experience.

Enjoy and have fun! # HEALTH NETWORK

The Good, the Bad and the Somewhat Obnoxious



- by Diane Giffin-Boudreau

This past winter, I had opportunity for a review of those visitors to our gardens that round out a healthy ecosystem. SCANS, Senior College of Nova Scotia, sponsored a six-week session with Dr. Paul Manning from the Agricultural Campus in Truro entitled "How Insects Conquered the Earth". It was delivered via Zoom, nonetheless, colourful graphics and popup quizzes kept Interest high throughout.

While the subject was part of our Master Gardeners' training, this was a super review of material covered and even more! I remember not referring to soil as dirt after a lecture by Dr. Phil Wartman. I will now ---not refer to insects as pests. Some maybe, but it is in the eye of the beholder....in my view, it is ok to refer to blackflies as pests.

The program's concentration was on Class Insecta consisting of 6-10 million species which generally include the following characteristics (always a few exceptions...):

- terrestrial
- six legged (three paired sets)
- three segments termed tagmata (head, thorax, abdomen)
- exoskeleton or integument
- male and female individuals
- wings (sometimes present)
- external mouthparts (exception Luna moth cannot eat so lifespan is short)
- holometabolism or complete metamorphosis

- Egg
- Larva
- Pupa or chrysalis
- Imago or adult

Class Insecta breaks into many orders. Ten more common below:

- Lepidoptera (butterfly-day, moth-night) are holometabolous with long straw-like tongues.
- Hymenoptera (ants, bees, wasps, sawflies have a waist and two pair wings. A point of interest if you find a dead bee: the female have long scopa on back legs to gather pollen while males have a little yellow mustache. Be certain it is dead and not just sunning itself because it will sting!
- Coleoptera (beetle) have two sets of wings with one solid pair to protect the flying wings. Easily seen on lady bugs as they lift the top set before flying off using the lower more delicate set. Another of interest is Curculio glandium, the acorn weevil. It has a long snout and the eggs are laid in acorns where the larvae feed. You can check for larvae in acorns that have fallen after a storm. They escape into the soil through a small bore hole in the spent acorn.
- Hemiptera considered true bugs.
 Hemimetabolous developed from egg to nymph to imago. Some are bought in volume to control specific pests on farms.
- Orthoptera (grasshopper, kadydids, crickets) straight winged with chewing mouth parts. (Continued on Page 8)

The Good, the Bad and the Somewhat Obnoxious

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- Odonata (dragonfly-lay wings flat to warm and re-energize, damselflies-leave wings more vertical). Have incomplete metamorphosis with larvae developing in water until the adult flies off. Big mouth parts with serration and large eyes.
- Zygentoma (silverfish, firebrats)
 Ametabolous insects which moult through their life never developing wings. Thought to have been with us in caves and followed us to homes. Urban rather than wild, living for many years.
- Dermaptera (earwigs) Leather-like wings.
 Females have straighter pinchers while males are curved Inward at tip. There are 2,000 species, are hemimetabolous or incomplete metamorphosis=nymph and adult, and parental in that the females look after their young.
- Neuroptida (fishflies, lacewings, antlions)
 Combines different groups and are still being discussed where they belong in taxonomy.
 Lacewings are bought to control pests in green houses.
- Siphonaptera (fleas) A wingless insect with a siphon-like mouth that can jump a long way.
 Larvae feed on waste of the adult and the adult feeds on blood of the host.

While we have heard of insect "Armageddon" in the media, evidence in fossil records demonstrates that insects have gone through the previous extinctions along with other plants and animals and yet have found their way back into our terrestrial environments. Their numbers and species may differ but their success can be attributed to:

- Metamorphosis providing specialized stages to facilitate movement (crawling/ flying) or aid in reproduction through eyes and antennae to effectively locate mates.
- Small size keeps food intake requirement low and fortunately for us keeps them from growing to larger than life versions.
- Fast and effective reproduction. For example, Musca domestica (housefly) lays up to 500 eggs during its week-long lifecycle. Aphids which mate in the Autumn reproduce asexually during our growing season giving birth to live off spring which may already be pregnant. This cycle can occur a dozen times per day. Liken to Russian nesting dolls.
- Tough, lightweight exoskeleton. The
 Phloeodes diabolicus or ironclad beetle
 may have no wings but uses its titan
 polymer in such a way to protect it against
 crushing. Bioinspiration is where we learn
 from nature and apply it to solve real
 world problems. The ironclads polymer
 and methodology of overlapping would-be
 wings has been studied for military
 application.

Like all "critters" that live in the wild, survival is critical. In addition to the attributes mentioned above, insects also need to overcome climatic changes and to avoid becoming a meal if they are to survive.

Since insects are not capable of regulating body temperature, they can simply die, migrate or hunker down for cold weather season. Others use

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The Good, the Bad and the Somewhat Obnoxious

their glycerol levels within the hemolymph to depress their freezing point. Scientists are researching the proteins insects use to deal with cold weather to transfer such knowledge in the development of cold weather crops.

To protect against predators, some (bloody-nose beetle) excrete toxic compounds or alkaloids through their own hemolymph to make animals sick if eaten, whereas monarch larvae toxins vary based on the host plant. Some use colour to blend into their environment (aphids) and some to indicate their level of toxicity. Many are well equipped to jump or fly to avoid becoming lunch.

So when do insects become pests? When they eat or pass pathogens to our plants whether for food or aesthetics; when they become a nuisance (mosquitoes) and don't allow us to enjoy nature; and when they cause illness such as the west nile virus, lime disease or cause anaphylactic shock due to allergic reactions. Pests can be characterized as:

- Parasites (lice) live inside or on the host often for long periods without killing them.
 The health of the host can be compromised by greedy parasites or by passing along pathogens.
- Parasitoids (Hymenoptera-ants/bees/ wasps/ flies) infest the host during larval development, killing them as they mature.
- Predators (beetles) attack, kill and feed on its prey, which can be quite varied as op posed to having a specialized diet. Some of these pests have natural enemies which can be purchased and released but we must be cognizant of unintended ramifications.

As humans, we have developed all manner of eradicating or at least attempting to control pests. But what do plants do to fight back?

- Constitutive: chemical or physical attributes which are always present (thorns or bad tasting fruit through piperine alkaloid)
- Induced: chemical injection response brought on by the sound or vibration of a pest feeding

The inherent defences of plants (whether native or modified cultivars) impact pests in a variety of ways. For example, toxins can enter the gut interfering with digestive enzymes thus starving the pest; trees can produce copious amounts of bad tasting sticky sap virtually kicking the insect out of the wound; or plants can integrate tiny "silica" stones called phytoliths in root or leaf tissue to slow herbivores such as June bug larvae.

So, how can we help?

- Measuring the pluses and minuses of Insect biodiversity is important scientifically and politically
- Developing cultivars resistant to Infestation
- Studying symbiotic associations to enable nature (aphids-ants..., marigolds-slugs)
 - Some of these insects can be bought in large numbers but can have unintended consequences if their numbers cannot be kept in check
- Creating habitat to encourage natural enemies/crop rotation/be messy
- Understanding and making good choices

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for managing "pests" in our own gardens

- Plant an early "yummy" crop with the intension of ploughing under the pest larvae and then plant a later crop
- Sticky traps in green houses
- Mulching to prevent overwintering of larvae which dry out in the cover
- Essential oils (short-lived benefits)

In conclusion, ecosystem services provided by insects include pollination, decomposition, and nutrient flow. These enable:

- food and natural medicine production,
- cultural heritage and recreation,
- soil formation and nutrient cycling, and
- pest regulation

The take away message is that insects may be pests but they are first and foremost necessary to a healthy ecosystem and, if history prevails, will survive whatever we can throw at them. So let's recognize their value and do our part to aid them in their metamorphic journey through the sixth extinction and beyond.





The Birth of a Garden and Hope for a Better Future (part 2)

- by Michel Parent

The gardening season at the Oromocto Food Bank Garden has arrived and with it, great excitement, and anticipation of the good things to come. But before we can plunge our hands into the rich, moist spring soil and plant our 'babies' many large projects need to be undertaken. A pollinator garden, a maze for the kids, a large patio, and the cement foundation to hold three large wooden stands for our rainwater reservoirs. Can't forget the jungle growing in my basement.... so many seedlings to be planted.

Deep breath in ... one step at a time and we will get there! Of course, so much work cannot be accomplished by only one person. Thankfully, with a team of dedicated volunteers, our many projects were soon under way.

Scouts and Girl Guides made beautiful little decorative bird houses that we then installed on top on the garden's wooden fence. They painted stir sticks, the kind you use the stir a can of paint, with the names of every plant to be planted in the garden boxes (approx. 46 different varieties). Two scare crows were also made by the kids and have now found a home in the garden.



The pollinator garden is taking shape!

The Oromocto High School Art program students created very original and artistic paintings. These masterpieces are now adding so much color and interest for our visitors. They are now attached to the more prominent garden boxes that you see as you enter the premises.



Unique and colorful pieces of art.



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The Birth of a Garden

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We also had some help from a few big box stores, who sent their personnel to volunteer for a few hours. A dozen people armed with garden tools quickly performed many tasks. They filled boxes with soil, dug up soil as part of the patio preparation work and weeded to name a few things.

Much needed donations came from many different sources. Grocery stores, nurseries, hardware stores have donated soil, compost, wood, gravel, and sand. Many gifts came from individual citizens. Homemade wooden chairs, tables, planters, decorations, pots, and plants.





Handmade Furniture and Decorations.

A lot of time has been spent 'selling' and convincing people about the positive impacts the project would have on the Oromocto Food Bank (OFB). Sadly, some local people do not even know the location of the OFB and don't realize it's positive impact on the community as well as the many clients it serves. Travelling the local region was also a time-consuming activity as all donated items needed to be picked up, but in the end, it was all worth it. The transformation of a small empty lot into a green oasis is currently Taking place. Each day that passes offers new opportunities to add to the plan, embellishing every square foot of our piece of land.

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The Birth of a Garden

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While we are busy with all these projects, clients and visitors coming to the food bank are offered free seeds, gardening advice and a tour of the place. The goal, to entice everyone who would listen, to grow a plant and discover the many positive aspects of this simple activity that is planting a tiny seed.

What a joy to see it coming to life. To witness its evolution and rapid transformation into a delicious nutritious snack like a freshly picked cherry tomato or to become a thing of true beauty like the Morning Glory 'Heavenly Blue' flower.



Aerial view of the food bank and it's gardens under transformation

I invite everyone to share their gardening experiences with as many people as they can. Together, we can make a big difference in our respective community!



Oramocto Food Bank and Gardens

AMGA 2022 EXECUTIVE

Contact Executive members by e-mail at:

atlanticmastergardeners3@gmail.com

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