

Master Gardeners of Ontario

What's Growing On
MAGAZINE GROWING ON



Serving Ontario for 25 Years

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Winter, 2012

www.mgoi.ca



Living Wall at University of Toronto

What Becomes Us

Lynne Marie Sullivan, Lake Simcoe South

We are what we eat. We are also the air we breathe, and being mostly made of water - well, you get the idea. The fact is, we do not simply live in the environment. We are part and product of it, along with all other life forms in a closed ecosystem. We are only as healthy as the stuff we are made of. We too often place responsibility for the environment somewhere else. Permaculture brings it home; by looking at how we live in the spaces we call our own. More than just a method of gardening, permaculture is a microcosm that includes us, our food, water and air.

All food begins in the soil. Yet commercial agriculture devastates soil by mechanical tilling, chemical fertilizers, and mono-cropping. Small-scale and organic gardening is more sustainable, yet still relies on significant inputs of water, soil amendments and labour. Permaculture moves a step beyond by minimizing inputs and maximizing yields, and so reducing environmental impact. The beauty of permaculture is that it aspires to be self-sustaining by design, modeling the processes and

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Therapeutic Gardening for Zoomers

Tom McCavour, Simcoe County

Zoomers are mature baby boomers who have achieved longevity traits essential to successful aging and active retirement. Zoomer magazine editor Vivian Vassos recently outlined twelve easy strategies to live to 100 and thrive while doing so. The first strategy was to “Train Your Brain”, while the second strategy was to “Get Gardening”. Vassos cites the benefits of gardening including bonding with nature, a feeling of well-being, mental therapy for the depressed and physical therapy for the disabled.

It doesn't matter if you are arthritic, neurologically challenged, physically disabled or in a wheelchair, you can continue to garden and enhance your life. There are a wide variety of tools and devices that make this possible. Let's take a look at what is in the handicapped medicine chest.

Reduce the workload. Plant less. Plant plenty of perennials. Consider a sprinkler and drip irrigation system. Use plenty of mulch to control weeds and reduce watering.

Pick up a pair of old fashioned ski poles at a local garage sale to prevent tripping and improve balance. You're not a Nordic walker – you just want to avoid falling down! The poles keep you upright and the hoops prevent digging in.

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What's Growing On is the newsletter of the Master Gardeners of Ontario, Inc. It is published 4 times per year in January, April, July, and October.

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balances found in nature.

One permaculture concept involves plant guilds, or colonies, that associate a variety of plants. Varying heights and root-depths access different nutrients; and each member of the guild contributes one or more special functions. A guild may include a fruit or nut tree, insectary plants, living mulch, biomass crops, nutrient accumulators, nitrogen-fixers, wind-shelters and wildlife habitat. We benefit with food, shade and the advantages of biodiversity with less tilling, irrigation and purchased inputs.

The quantity and quality of natural water supplies are optimized by permaculture management as well. Noting that the best place to store water is in the soil, swales are used to help slow and direct runoff. Shallow catchment ponds create rain garden microzones for wetland plants and animals generally absent in a home landscape, while intensive planting reduces evaporation. These are only a few of the ways permaculture borrows from nature's own processes to produce a healthier environment, one home at a time. For more, read *Gaia's Garden* by Toby Hemenway.

The Fountain of Youth

Edythe Falconer, Ottawa-Carleton

It's just a metaphor isn't it? We're never actually going to find that fountain deep in the Amazon, or anywhere else, in a desert bowl full of some exotic berries. There just isn't going to be a fountain that spews forth elixirs of such power that they can shape shift us back into our more youthful selves.

I look no further than to the "fountain of youth" that is my back yard. This many splendoured thing, my very own Garden of Eden, allows me

many hours of meditation, plenty of exhilarating muscle work and a sense of well-being like none other. I can toil for hours dreaming gardens, savouring new acquisitions and solving yet another garden mystery. No, it is not a show garden. It is my garden, my place, part of my being.

Its influence goes well beyond the fences of my lot, with me wanting to share gardening ideas with others. There are, at least in our area, numerous gardening groups that welcome newcomers, the more the merrier. I belong to two of these great organizations, Friends of the Central Experimental Farm and Master Gardeners of Ottawa-Carleton. Both have enriched my retirement years in numerous ways and both involve continuous learning. Each group reaches beyond its "fences" to go even further into the community. Friends of the Farm works to preserve an agricultural ornamental monument where active research is ongoing, and Master Gardeners dedicates itself to the ongoing provision of advice and instruction for home gardeners.

I wouldn't be writing this article if thirteen years ago I had not read about Master Gardeners in *Canadian Gardening Magazine*. I would not have joined two years later except for an accidental contact with an Ottawa Master Gardener at a garden meeting in North Gower. Nor would I be working in the Rose Gardens at the Farm and contributing to the Friends Newsletter if the North Gower contact had not subsequently persuaded me to work at the Farm. I started there eight years ago and will be happy to continue until I drop.

The moral of this story, if there is one, is that gardens grow not only in soil, but also in our minds, our hearts and our communities. The infinitely rich world of gardening is a community that embraces both body and soul, making and keeping us healthy both physically and spiritually.

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Replace your single wheel wheelbarrow with a double wheel. It will prevent nasty spills. Similarly a two-wheel bicycle cart enables you to easily transport plants, pots or trash.

Have plenty of benches, stools and chairs scattered around – just sit, rest and enjoy. For portable yard work seating, you can invert your kneeling stool, but don't lean back or it will tip. That adjustable stool in your shower can also be used outdoors – and the large end caps do not dig in. A four-wheel garden seat caddy is useful for planting and weeding. A driver's license is not required.

There are a wide variety of gripping aids, including straps and ratchet mechanisms, which allow you to hold a tool even with severe arthritis or other hand injury. Ergonomic radius hand tools provide a wider more comfortable grip, while extenders can be provided for trowels, spades, hoes and rakes.

Hard surfaced level pathways and raised planters and workbenches make life easier for wheelchair gardeners. Most important, find a shady resting place where you can sit and enjoy your beautiful garden.

The Power of Plants

Nancy Abra, London Middlesex Source: American Horticultural Therapy Association, previously published in the Londoner

Just about everyone knows how important plants are. They create oxygen and filter our air. They provide us with a food source, building materials for our homes and even are in the clothes we wear. Plants contribute to our health and well-being and of course, make us happy. Who doesn't like to receive a colourful bouquet of flowers to brighten our day? When you think of it, the power of plants is pretty amazing.

Jennifer Grant, a horticultural therapist at the Mount Hope Long Term Care facility (formerly Marion Villa & St. Marys Hospital) utilizes the positive power of plants in her job. Horticultural therapists are specially educated and trained professionals who involve the client in phases of gardening, from propagation to selling products, as a means of bringing about improvements to their client/resident's life.

As members of treatment or care teams, a horticultural therapist determines individual goals and plans to help residents improve their skills and to maximize their abilities. As the therapist at Mt Hope, Jennifer uses plants to develop a connection

with residents. Through this connection and interaction; she is able to determine the wants and needs of these residents.

“Residents of long term care facilities have very few choices in their lives, as everything is scheduled and set out for them” Jennifer explained. Some residents get very frustrated with aspects of their confined lives but through the horticultural therapy programme, the residents are empowered and they have control over the choice of what they want to grow. Their frustration and anger is gone and that energy is spent on growing plants. Instead of being care receivers, the residents who garden and are involved in this programme become gratified care givers.

Many of the residents were very involved and active in their own communities and now with this horticultural programme, they can once again have a sense of belonging and contributing to this community and the gardens. There are 60 to 80 residents from their mid 40s to late 90s who belong to the ‘Green Thumb Club’ at Mount Hope. They meet on a regular basis to garden and decide on projects for their community, from plant sales, making herbal teas and Christmas gifts to selling their crafts at various in-house events.

Many of the other residents who are not involved in this horticultural programme enjoy the gardens. Jennifer said, “They come to sit in this beautiful garden. It is a peaceful place where they can relax, reflect and restore.”

Jennifer who has a BSc in biology and a certificate in horticulture from the University of Guelph, has worked as a registered nurse, and is working on her horticultural therapist registration. She is an active member of the London Middlesex Master Gardeners and of the Lambeth Horticulture Society and certainly has a distinctive relationship with and love of plants. She has a very special connection with the residents at Mount Hope and through this relationship, she uses the power of plants to enhance the residents' lives at this long term care facility.

*Ontario Horticultural Association and
Master Gardeners of Ontario Inc.*



**Working
Together**



Here is the [latest issue OHA's newsletter the Trillium.](#)



Mystery Plant

Do you know this plant?

The answer will be revealed next issue.

Contact editors@mgoi.ca with your guess.

Janet Trezise. LSSMG correctly named the mystery plant last issue as the Common burdock *Arctium minus*.

MGs in Action

Brantford

MG Grant Clawson received a Civic Recognition Award for his volunteer contribution to the City's annual 'Waterwise Landscape Recognition Programme'.

Mississauga

On December 7, 2011 David Pavanel, Mississauga MG, was awarded the 2011 Riverwood Conservancy Gardening Volunteer Award by Acclamation for his dedication and leadership skills for overseeing the maintenance of the Riverwood front gardens.

Lake Simcoe South

LSS interview on Rogers Cable network promotes Master Gardeners. View the video at: lss.mgoi.ca

Lanark County

Lanark Master Gardeners and the Perth Campus of Algonquin College are presenting a series of Horticultural Seminars on Thursdays during February and March. Register with Algonquin College in January. You can find more details at www.lanarkmastergardeners.mgoi.ca.

Horticultural Factoid

Kim Krieger, an excerpt from ScienceNOW

The graceful taper of a tree trunk into branches, boughs, and twigs is so familiar that few people notice what Leonardo da Vinci observed: A tree almost always grows so that the total thickness of the branches at a particular height is equal to the thickness of the trunk. Until now, no one has been able to explain why trees obey this rule. But a new study may have the answer.

Leonardo's rule holds true for almost all species of trees, and graphic artists routinely use it to create

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Living Wall at U of T

from University of Toronto Student Life Blog UpbeaT, see photo on page 1

Yes, life itself has been written on the wall's list of meritorious accomplishments, and it's happened here, too, at U of T: appropriately dubbed the "Living Wall," this wall is not like most others. Grown hydroponically (using aqueous nutrient solutions, but no soil), the living wall stands 2.5 metres tall and 7 metres wide and hosts a thriving community of mosses, ferns, flowering plants and specialized microbes. The microbes break down air pollutants into such constituent parts as carbon and water molecules, and thus produce significant amounts of clean air that are circulated throughout the adjoining room and building in the Multi-Faith Centre.

Plants as Air Purifiers in the Home and Office

Sue Flinders-Adams, Haliburton

As we say goodbye to summer we find ourselves spending more and more time inside. We strive to keep this indoor environment clean, but our efforts might inadvertently be adding chemicals to our air through the cleansers that we use.

Some of the cleansers along with photocopiers, office furniture, computers, printers, carpets, and glues give off Volatile Organic Compounds.

We are well aware that all plants clean the air. In the process of photosynthesis the plants take in the carbon dioxide we exhale and give off oxygen. These plants in the home or office can also filter out toxins, stale air, pollutants, harmful viruses, and mould spores. A NASA study has revealed that some plants also have the ability to filter out Volatile Organic Compounds.

When considering plants for your home or office, why not include some of these super air purifiers? The more plants you have in your home the better your air quality will be! But wait, you don't have to turn your home into Jurassic Park, Two to three plants in an average room can do the job quite nicely.

The chart on the mgoi.ca website provides information on air-improving plants for three Volatile Organic Compounds; benzene, formaldehyde and trichloroethylene.

Summer Workshop

The 5th Summer Workshop will be held July 14 – 15, at the Niagara Parks Botanical Gardens and School of Horticulture. This year there will be three topics instead of two. Participants will be able to choose the two that will be of the most interest to them. Because there will be three instructors, the number of people attending will not be limited to 40, as in the past, this time 60 attendees can be accommodated. Details of the MGOI Summer Workshop will be available in January, with the Programme Outline going on the website by the end of February. The cost is \$250.00 for the whole weekend, the same as for the last four years. For further information, please contact June Streadwick at streadwick@sympatico.ca

Toronto Balconies Bloom

Elizabeth Stewart, Toronto

As part of our ongoing relationship with Toronto Balconies Bloom, an organization devoted to inspiring and supporting balcony gardeners, the Toronto Master Gardeners donated a free Urban Edibles class at the TBG as a prize in the 2011 Edible Container Garden competition. The winner, Andrea Vaughan, grows strawberries, onions, cherry peppers, basil, celery, radishes and melons on her Scarborough balcony wall ... in shoebags!



Shoe Bags On the Wall

Milestones

New MGITs

Algoma – Maggie Siltala

Halton – Marie Clarke, Janey Marshall

Lake Simcoe South – Cindy Jones-Sherk, Helen Silverstein

Mississauga – Jamila Al-Azzawi, Vinod Bhargava

Muskoka Parry Sound – Carol Alanko, Bryan MacKenzie

Ottawa-Carleton – Janet Carkner, Lysane Maynard, Anita O'Connell

Peterborough – Carol Bulmer, Deb Fraser, Judy McElroy, Beth Williams

New MGs

Lanark – Gerda Franssen

Ottawa-Carleton – Tom Marcantonio, Anna Sipos

Peterborough – Joan Harding

Quinte Tweed – Barbara Fowler, Marlene Phillips

Thunder Bay – Tracy Rowe (Certification Exam)

5 Years

Durham – Jon Van Ekeren, Anita Vincente Pereira

Northumberland – Ina Spence

Thunder Bay District – Deanna Hoffman, Ed Hoffman

10 Years

Brantford – Alex Kucharew, Lizabeth Smith, Ray Taylor

Lake Simcoe South – Jennifer Walton

Thunder Bay – Aino Plumridge

15 Years

Brantford – Helen Smith

20 Years

Brantford – Wilf Pugh, Isabel Pugh, Denzil Sawyer, Kay Suzuki

Thunder Bay – Carole McCollum

25 Years

Brantford – Len Cole, Nancy Lee-Colibaba

Retired

Norfolk County regrets that two of their valuable members have recently retired; Jackie Smith-Winkworth and Dianne Elliott who have been with the group since its formation in March 2002. Dianne served as Coordinator from 2003 to 2009. She put in timeless hours into the evolution of the group and the vast gardening knowledge of both members will be missed. We wish both Jackie and Dianne all the very best!

Welcome Back

Norfolk County is pleased that David Jarvis, a former member of the disbanded Haldimand-Dunnville group has joined us. Welcome back Dave!

In Memoriam

John Simkins died peacefully at the age of 92 on September 18, 2011. John was an original member of the Burlington Master Gardeners that was formed in 1986 (now called Halton Region Master Gardeners.) He was granted Emeritus status in 2006. John was a passionate gardener and became known nationally and internationally for his work as a tree peony hybridizer. He founded the Canadian Peony Society, served on the RBG Board of Directors, was an active member of the Oakville Horticultural Society, and a member of the Garden Writers Association of America. He was recognized as an outstanding community volunteer.

Da Lat Flower Gardens

Patricia Draves – Grey County

Imagine your dream garden. Now imagine your dream garden with every plant and tree in bloom at the same time. But, what if it doesn't have to be a dream?



It's late December and I'm roaming the 50-acre Da Lat Flower Gardens, at an elevation of 5000 feet in Central Vietnam where it seemed everything is in bloom. Rhododendrons, hydrangeas, delphiniums, fuchsia, orchids, bottlebrush trees, and roses in every colour all in bloom, to name just a few! Add a riot of local poinsettia and a menagerie of whimsical topiary. It was overwhelming to this Ontario gardener.

While the plants quietly dazzle visitors with their spectacular colour and scent, thousands of staff in the Gardens and throughout the city have their heads to the ground, spade or plant in hand as they prepare for the 4th Annual Da Lat Flower Festival. Da Lat, City of a Thousand Flowers has over 4,000 hectares of flowers in cultivation, producing approximately 1.4 billion flowers every year. Over 30 percent are exported.

From December 30 to January 3, 2012 Da Lat will dazzle visitors with a flash mob of 120,000 tulips. The Ong Dao Bridge will be decorated with flowers and LED lighting to complete the theme of Europe in the City of a Thousand Flowers. With or without an event Da Lat is always spectacular.

Coordinators' Conference

Our 2011 Coordinators' Conference was another huge success. Once again the Landscape Ontario facility was made available at no charge. In the morning we had the MGOI AGM followed by a Recruitment Workshop. The afternoon session provided practical ideas to take back to our groups. This event is funded through the proceeds of the silent auction and the 50/50 Draw. Thank you to everyone who contributed and participated and to the organizers and their helpers. One of the suggestions that came from the Conference was to develop a way for Coordinators to discuss ideas and issues that are specific to the position without clogging the MG-list. Tena Van Andel agreed to get a forum organized to facilitate this activity. The Coordinators' list was born and is off to a great start. Well done!

The 6th annual Coordinators' Conference will be held on Saturday, October 13, 2012 at the Landscape Ontario facility in Milton.

Events

January to April – every Sunday afternoon from 1:30 p.m. – 3:30 p.m. – at the Centennial Park Greenhouse, Mill Road, Etobicoke. Mississauga MG Advice Clinic

February 24, 10:00 a.m. – 3:00 p.m. – Seedy Saturday, at the Unitarian Church at 84 South Service Road, Mississauga. Workshops, seed and information sharing at the Mississauga Master Gardeners Booth.

March 16 – 25 – Canada Blooms at the Direct Energy Centre, Toronto. For more information visit <http://www.canadablooms.com/>

April 5 – April 7 – Peterborough Garden Show at the Evinrude Centre, 911 Monaghan Road, Peterborough. Details at <http://peterboroughgardens.ca/Showhome.html>

April 12 – 15 – International Home and Garden Show – Successful Gardening Show, at 6900 Airport Road at Derry Road.

April 19 at 7:30 p.m. – Muskoka Parry Sound Master Gardeners present Carson Arthur – "How Green is Your Backyard?" at the Rene M. Caisse Memorial

Theatre in Bracebridge. Tickets \$12.00 in advance, \$15.00 at the door. Door prizes and Silent Auction. For more information call 705-645-0004

May 6, 12:00 to 4:00 p.m. – Hardy Plant Sale at Toronto Botanical Garden, Floral Hall, 777 Lawrence Avenue East. Shrubs, perennials, alpines and Vendors. More Information at www.onrockgarden.com/plantsale

May 19 – 9:00 a.m. – Noon – Prince Edward County MG Annual Plant Sale at the Metro Parking Lot, Main Street, Picton. Contact 613.476.1473

June 23 – 10:00 a.m. – 3:00 p.m. 'A Day Of Wine And Roses' – Sponsored by Prince Edward MG at Macaulay Heritage Park Museum. \$25.00 Lunch included. Contact: 613 476-1473

June 24 – 10:00 a.m. – 4:00 p.m. Our 'Gardens On Parade' features 7 gardens. Tickets \$8.00 in advance \$10.00 on the day of garden tour. Contact Brantford Master Gardeners Vae Hammett vae_gilda@yahoo.ca or 519-759-1939

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realistic computer-generated trees. The rule says that when a tree's trunk splits into two branches, the total cross section of those secondary branches will equal the cross section of the trunk. If those two branches in turn each split into two branches, the area of the cross sections of the four additional branches together will equal the area of the cross section of the trunk. And so on.



Botanists have hypothesized that Leonardo's observation has something to do with how a tree pumps water from its roots to leaves. The idea being that the tree needs the same total vein diameter from top to bottom to properly irrigate the leaves.

But this didn't sound right to Christophe Eloy, a visiting physicist at the University of California (UC), San Diego, who is also affiliated with University of Provence in France. Eloy, a specialist in fluid mechanics, agreed that the equation had something to do with a tree's leaves, not in how they took up water, and the force of the wind caught by the leaves as it blew.

Eloy used some insightful mathematics to find the wind-force connection. He modeled a tree as cantilevered beams assembled to form a fractal network. A cantilevered beam is anchored at only one end; a fractal is a shape that can be split into parts, each of which is a smaller, though sometimes not exact, copy of the larger structure. For Eloy's model, this meant that every time a larger branch split into smaller branches, it split into the same number of branches, at approximately the same angles and orientations. Most natural trees grow in a fairly fractal fashion.

Because the leaves on a tree branch all grow at the same end of the branch, Eloy modeled the force of wind blowing on a tree's leaves as a force pressing on the unanchored end of a cantilevered beam. When he plugged that wind-force equation into his model and assumed that the probability of a branch breaking due to wind stress is constant, he came up with Leonardo's rule. He then tested it with a numerical computer simulation that comes at the problem from a different direction, calculating forces on branches and then using those forces to figure out how thick the branches must be to resist breakage. The numerical simulation accurately predicts the branch diameters and the 1.8-to-2.3 range of Leonardo's exponent, Eloy reveals in a paper soon to be published in *Physical Review Letters*.

MGOI Calendar

Don't forget to post your events on the mgoi.ca calendar. To do this, click the Events button on the main menu. When the calendar opens – scroll to the bottom and click Submit an Event. After filling in all fields on the form, click Send.

Tweet Tweet

MGOI is now on Twitter @MG_Ontario as well as on Facebook. Members are invited to join our Facebook group and 'follow' us on Twitter. We have permission to use the attached graphics.

The Ontario Rock Garden and Hardy Plant Society

The first week of January was dedicated to the packaging of 949 plant species by members of 'The Ontario Rock Garden and Hardy Plant Society' in Toronto. Last year the seed exchange listed a whopping 1284 species. The society focuses on alpine and hardy plants. Members volunteer their time to run a 'seed exchange' through an interactive seed list, one-of-a-kind globally. Their website also has one of the best germination guides which is continuously updated and has been for more than 8 years. You can find all of this tried and true information and more on their website at www.onrockgarden.com

The First Canadian Master Gardener Conference

The rumours are true! With a lot of work, a bit of luck, and lots of pride, MGOI is pleased to announce an April 2013 National Master Gardeners' Conference. This exciting event will be held at Deerhurst Resort in Huntsville, Ontario. Many, many details will follow about this groundbreaking milestone in the history of MGs in Canada. Stay tuned.....

Canada Blooms Looms!

Stay glued to your inbox, as the request for volunteers is soon to come. This year we have our usual admirable advice clinics, spectacular speakers and the successful Sit Down Sunday. We also have some fun new events like 'Reach for the Treetops' and even an 'Honourary MG Trivia event – Ed Lawrence vs Charlie Dobbin vs Denis Flanagan.' Start taking those pick-me up vitamins because we're going to get busy.