

Passionate about Cannas

For my summer garden, I have adopted the latest fashion for subtropical plantings and my star performers are cannas. I now have more than 800 of them, divided among 40 cultivars, with great ambitions to extend the collection each year. The great attraction is, of course, their bold and colourful foliage and a flowering period that begins in August and lasts until the first frosts.

Cannas belong to the family *Cannaceae*. They originate from tropical and subtropical areas of South America, and 120 species and cultivars are listed in the Royal Horticultural Society *Plantfinder*. That's a target to aim for.

The anxiety of overwintering

In British Columbia, cannas are tender herbaceous perennials and need to be treated similar to dahlias. They grow from rhizomes that are stored frost-free in winter. During the dark days of that season, I worry about my cannas as they lie dormant in the garage, where overnight temperatures sometimes fall to 5 C. I anxiously wonder whether I did enough to protect the rhizomes when I placed them in storage. Certainly, after cleaning them and trimming the roots. I dusted each one with sulphur powder and individually bagged them in a mixture of peat and Perlite. Every day during winter, I



Canna 'Tirol'

check the minimum temperature in the garage and at least once a week I inspect a few, just to ensure they are not suffering winter damage.

Potting up in March

In March, I start them again in a heated greenhouse and have the opportunity to renew my relationship with each one of them. At that time I divide each rhizome into three—last year's stock of 250 cannas became nearly 800 rhizomes this year. With a scalpel, I carefully clean away any dead, rotting, or diseased material, tending injuries with sulphur powder. I lovingly plant each rhizome in a one-gallon pot with a mixture of damp potting compost, bone meal, and slowrelease fertilizer and take great care to ensure the correct planting depth of about 3 inches. I also take care to label each rhizome correctly to identify each for their distinct

characteristics such as foliage and blossom colour and height.

Never too much pampering

During planting, I do not water the cannas until they show signs of growth. I speak to them soft words of encouragement and inspire them to achieve greater things in the coming season. Then I settle them in the greenhouse, cosy at a minimum temperature of 10 C. It may cost more to heat the greenhouse than it does to heat my house, but this is immaterial—the cannas must receive all the TLC they deserve.

By mid April, I proudly see them begin to show off their foliage and respond joyously to additional sunshine, water, and food, putting on 3 to 4 inches of growth each week. Any rhizomes that are reluctant to poke up from the soil are given an extra cuddle and moved to heating mats to receive a little bottom warmth. After a slow start they will quickly catch up with their siblings.

continued on page 2



Cannas provide tropical colour

continued from page 1

By May 10, my cannas are too large and rambunctious for the greenhouse and the outdoor temperature is sufficient to allow transplanting. Bravely my little plants now face the hardships of adverse weather, malicious insects, and pernicious diseases. But they do this well, as cannas are strong, resilient plants.

Transplanting the pot plants into the garden is always a heartening exercise: my babies have moved on to the next stage of growth. Planting several plants of one cultivar in a group results in an excellent display of rich foliage and brightly coloured flowers. A group of 8-foot tall *C*. 'Stuttgart' will try to overshadow a group of richly coloured 5-foot high *C*. 'Roi Humbert' (bronze-purple foliage with mid-red flowers). When transplanting I can't resist adding rich soil, fortified with extra fertilizer, to the planting hole to promote their strong growth. Cannas are hungry feeders, as most grow 6 feet in one season. Bright sunshine, warm temperatures, and plenty of summer rain ensure they grow quickly.

Glorious adulthood

By mid August, my cannas achieve glorious adulthood and commence their wondrous flowering. Flowering continues through to first frosts in November. During this time I reflect on whether I really did all I could for my cannas while they ask for nothing in return.

With luck and attentive parenting, I will have 800 healthy rhizomes to dig up and store affectionately in the fall; then 2,400 plants after the division next spring. That's enough to start a home-based nursery and kindergarten called "Canna-biz," to share my passion with the world.

-Barry Roberts



Summer Garden Party

Master Gardeners, their families, and friends are invited to a tour Barry Roberts's canna garden during a summer garden party in August. Come to 13970– 34th Avenue in Surrey, between noon and 4 pm, on Saturday, August 12:

- Bring a potluck lunch
- Tea, coffee, and cold drinks will be available
- Plants will be for sale
- Come and see a work-in-progress garden
- No admission charge

See you there?

What's AGM?

The Royal Horticultural Society allocates an Award of Garden Merit (AGM) to plants following a field trial. All AGM plants must meet these criteria:

- Must be of outstanding excellence for garden decoration or use
- Must be available from nurseries or specialist growers
- Must be of good constitution
- Must not require highly specialized growing conditions
- Must not be particularly susceptible to any pest or disease
- Must not be subject to an unreasonable degree of reversion in its vegetative or floral characteristics

Further explanation of the AGM program, and a copy of the field trials for cannas, are available on the RHS website at *www.rhs.org.uk*.

Barry's Favourite Cannas

- C. 'Roi Humbert' (syn. 'King Humbert,' 'Roi Soleil')
 - bronze-purple foliage
 - tomato-red flowers
 - 60 inches high
- C. 'Phasion' AGM (syn. 'Tropicana,' 'Durban')
 - pink and purple striped foliage
 - orange flowers
 - 48 inches high
- C. 'Striata' AGM (syn. 'Bengal Tiger,' 'Pretoria')
 - bright yellow and green foliage
 - orange flowers
 - 48 inches high
- C. 'Picasso' AGM
 - green foliage
 - yellow flowers with red spots
 - 36 inches high
- C. 'Wyoming' AGM (syn. 'Professor Lorentz')
 - bronze foliage
 - spectacularly bright orange flowers
 - 60 inches high

C. 'Ingeborg' AGM

- bronze foliage
- apricot-orange flowers
- 48 inches high

C. 'Australia'

- purple foliage
- salmon-pink flowers
- 36 inches high
- C. 'Pink Sunburst' (syn. 'Pringle Bay')
 - pink and purple striped foliage
 - pink flowers
 - 36 inches high
- C. 'Rosemond Coles'
 - bright green foliage
 - red and yellow flowers with particularly large petals
 - 24 inches high



C. 'Roi Soleil'



C. 'Rosemond Coles'



C. 'Ingeborg' AGM All photos by Barry Roberts



June is the middle of clinic season, with sessions happening all over the Lower Mainland, Sunshine Coast, and Vancouver Island. What better place to spend an afternoon than at a garden nursery, with someone to

talk with about your favourite gardening subject? To help make your clinic experience a good one, here are a few reminders.

The area coordinators, who are listed on the first page of the continually changing master list, are the people to contact if you have questions or are wondering about whether a particular clinic still needs another MG.

Also check with the area coordinator if you are the only person listed for a clinic, as you will need to discuss the status of the clinic before you attend. There is no sense driving out to a clinic if you are not able to stay because another MG has not volunteered. If you are a qualified MG, you and the area coordinator may decide that you can do the clinic alone. If you are a student, you will need a qualified MG to do the clinic with you.

If you are listed as the clinic coordinator, remember it is your job to contact the clinic venue and to call and remind the other MGs. Discuss which books to bring, so a good crosssection of reference books is available, and remind everyone to put their names in all their books. When speaking with the venue contact, doublecheck the time and ask if anything special will be happening during the clinic, such as a sale on vines or vegetables, shrubs, or roses, so you can be prepared with reference material. During the clinic, please make sure the pink record of event is completed and sent in with the question-and-answer sheet attached.

While you are at your clinic, enjoy yourself and the companionship of your fellow MGs. Take turns out in the nursery showing people plants, but always make sure someone is available at the table. If the clinic is quiet, be mindful of *continued on page 5*



Island Report

Between March and June, the Vancouver Island Master Gardeners Association (VIMGA) volunteered

at over 100 clinics from Victoria and Sidney to Courtenay. Our clinic pick of the year is Stop and Drop, a Great Gardens Naturally event that happened in May and originated four years ago when the Town of Qualicum Beach entered the worldwide Communities in Bloom Competition. Now sponsored by the VIMGA and the Town of Qualicum Beach, the event has evolved into an event with posters and ads that invite gardeners to bring in their pest and disease problems for Master Gardeners to identify. MGs are on hand to discuss longlasting ways to control pests and diseases using alternatives to chemicals. Composting demonstrations and native plant displays show ways to make a garden colourful, easy to maintain, and waterwise. People are also encouraged to drop off unwanted garden chemicals for safe disposal by the Town of Qualicum Beach.

Mentorship is underway

The VIMGA has made their first baby steps into the realm of mentorship. Following the motto "We'll grow as we know," the Executive has agreed that the committee should facilitate the formation of small teams comprised of a mentor, ideally a second-year student, and two to four new students from a similar geographic area. Their purpose will be to build relationships and spread the Association's goals. We will also be working to gain support for the concept of mentorship from those administering the basic training course at Malaspina University-College.

Continuing education

At present, the Ongoing Education Committee has set the following four goals:

- 1. To look into the practicalities of offering the membership disease and insect workshops similar to those offered regularly at VanDusen Gardens.
- 2. To look into the possibility of MGs auditing MG basic training classes.
- 3. To do more toward publicizing short course and workshop options on Vancouver Island.
- 4. To continue to publicize the MG Advanced Program at VanDusen.

Progress toward these goals to date included a disease workshop on April 26, taught by Andrea Buonassissi. An Advanced IPM workshop is scheduled for September to be taught by Linda Gilkeson. As well, Bob McTaggart has collated information on Vancouver Island short courses and workshops and emailed a list to the membership.

Letter from the Chair

During his years as chair of the Master Gardeners' Association of BC, Doug Courtemanche was asked to outline a plan for the future of the Association. Some of us, including Doug, are now in the process of putting together an action plan that will guide the way this plan can be implemented.

The plan itself is quite ambitious and its essential theme would radically change the face of our Association if implemented. In a nutshell, the plan calls for us to look at a different structure for the MGABC, to create an umbrella organization that will provide educational and administrative support for a number of local chapters. At present, we have two such chapters: one on Vancouver Island and one based in Summerland. We have recently had requests for help in setting up another chapter in Prince George. With our membership growing steadily in the Lower Mainland, yet becoming more geographically scattered elsewhere, pressure is mounting to form local chapters where members can get together to do many of the activities now done at VanDusen. Enhanced participation, affiliation with regional botanical gardens, and drastically reduced travel are some positives cited.

For me, the biggest positive of a chapter system would be that a greater number of passionate gardeners from many different parts of our province could benefit from inclusion in a local group of like-minded people who are interested in learning about and improving on gardening practices. It is possible for our Association to be more inclusive and at the same time maintain standards of education. Reality suggests that if we do nothing, then local groups will form anyway to meet individual and local needs.

Our plan of action must involve all members as much as possible. Soon we will be proposing a membership survey to provide demographic and geographic information that will identify potential members for local chapters. Along with this survey, we will ask our members to list their various skills, in order to assemble a skills inventory database.

Those of us who have begun the process of developing an action plan realize that we have made only the first small step. My hope, as we move forward, is that many more of our members will say: "Let me jump in here and help out!" Our action plan group consists of Lynne Chrismas, Barry Roberts, Doug Courtemanche, and myself. Be encouraged to contact us or other Council members by phone, e-mail, or in person with questions or comments.

—Jack Grant



continued from page 4

how you spend your time. Instead of gabbing about personal things, which might be disruptive to staff, especially in a small space, why not do some research for a show-and-

tell project that can be shared at the monthly meetings? Or read up on a favourite plant for a newsletter or website article.

Other helpful hints for clinics include the following:

- Always wear your name tag and a smile: we represent both the Master Gardeners Association of BC and VanDusen Botanical Gardens.
- Remember to complete the necessary paperwork. On the question-and-answer sheet, first-year students are required to submit both the questions and their answers, while second-year and qualified MGs only have to submit the questions.
- You won't know everything, so don't be afraid to admit it. However, be willing to do research and get back to the person who asked the question. Remember not to pass out phone numbers of other MGs.
- Refer to our website at www.bcmastergardeners.org for Linda Gilkesen's list of least toxic pesticides, a modified clinic list, our Green Pages list of members who operate their own businesses, and the record of event and question-andanswer sheets.

If you have any questions or concerns about a clinic, you are welcome to contact either the area coordinator or myself. If you have not joined the MG Clinics email discussion group to list clinic exchanges or openings, please subscribe at *mgclinics-subscribe* @yahoogroups.ca.

> —Lynne Chrismas Overall Clinic Coordinator

Lay down your mowers How to get greener grass without sprinklers and chemicals

I secretly covet my neighbour's weed-free billiard table of a lawn. At the same time, I worry about the damage done to the environment by the herbicides and pesticides he uses to obtain this deep green homage to the chemical industry.

As we know all too well, garden runoff carries lawn fertilizers and herbicides into storm sewers, which empty into our streams and rivers. Today the most common contaminants in Vancouver-area streams are 2,4-D, MCPP (2-(4-chloro-2-methylphenoxy) propanoic acid), and dicamba, the three weed killers contained in proprietary lawn products such as Weed and Feed, Super Green, and Turf Builder.

Bioassessments of our streams show a continuing decline in the health of both plants and animals, with roughly 34,000 plants, or 12.5 percent of all the plants known to science, threatened with extinction. Further, according to conservationist Terry Glavin's new book, *Waiting for the Macaws and Other Stories from the Age of Extinctions* (Viking Canada, 2006), one in three of all known amphibians and half of all the surveyed fish species in the world's oceans, lakes, and rivers are threatened with extinction.

A chemical-free alternative

One alternative to chemically dependent lawns are the new ecolawns and lawnscapes. Available from Ontario Seed Company and Wildflower Farm, among other suppliers, low-care ecolawns seed mixes are made up of slow-growing, drought-tolerant grasses and flowering plants.

Ecolawns require less fertilizing than conventional lawns and need no watering after the first year. They add colour and scent to a garden, break up compacted soil, and provide pollen and nectar for insects. And those varieties that contain clover or birds' foot trefoil enrich the soil by fixing nitrogen. Further, a Canada Mortgage and Housing Corporation (CMHC) Ecological Outlook study entitled "Residential Landscapes: Comparison of Maintenance Costs, Time, and Resources" showed that levels of soil micro-organisms increase in the absence of pesticides, improving soil quality.

Ecolawns also require less maintenance than a conventional lawn. Although ecolawns need to be edged and some gardeners prefer a mowed appearance, they require significantly less time and energy than conventional lawns. The CMHC study found that residents with low-maintenance lawns spent 50 percent less time and 85 percent less money, and used 85 percent less fertilizer, 100 percent less water, and 100 percent fewer pesticides per year than residents with conventional lawns.

All the advantages

Seed mixtures are available for sun or shade, for lowand high-traffic areas, and for difficult-to-grow areas such as under trees or on steep banks (some varieties are safe eating for pet guinea pigs, rabbits, and horses). Unfortunately, seed catalogues often do not list a separate category for ecolawn seeds. Instead, look for seed mixes with names like "Mow Less," "Fleur de Lawn," "Eviroblend," "Dryland Mix," "Cabin Mix," or "Low-Maintenance."

Ecolawn flower and grass mixtures contain fine-leafed and turf-type tall fescues. Most are mixes of native and hybridized species that are not genetically modified. The hybridized species are new varieties bred for low height, drought tolerance, disease resistance, and yearround greenness. Independent testing has shown varieties such as 'Penn 1901,' 'Justice,' 'Matador GT,' 'Innovator,' and 'Silverstar' to be consistently outstanding and grass seed mixes containing these varieties are superior.

Mixes with flowers typically contain dense, lowgrowing perennial flowers such as yarrow (*Achillea millefolium*), violets (*Viola* spp.), English daisy (*Bellis perennis*), clover (*Trifolium* spp.), birds' foot trefoil (*Lotus corniculatus*), creeping chamomile (*Chamaemelum nobile*), sweet alyssum (*Lobularia maritime*), and baby blue eyes (*Nemophila menziesii*). Mixes with annuals should be avoided.

Super low maintenance

Grass-only seed mixtures generally contain half a dozen

"Ecolawns require 50 percent less time and 85 percent less money, and use 85 percent less fertilizer, 100 percent less water, and 100 percent fewer pesticides than conventional lawns."

varieties of slow-growing fescues with fine-textured, dense, low-height habits. If left unmowed, the grass blades will grow to between 6 to 9 inches, bending over to 4 inches to creating a gentle, flowing look. Mowing an ecolawn every six weeks at a height of 3 to $3\frac{1}{2}$ inches will give you a classic lawn look.

A number of flower-only mixtures also produce a lowgrowing, colourful tapestry. Flower-mixture lawns should be cut once or twice a growing season for the first two years to help establish a strong root system. Although there is no need to continue cutting after the first couple of years, cutting twice a year during the active growing season to deadhead flowers will extend the flowering season and tidy up the lawn. The flowers in ecolawn mixtures have been found to be long lived and wear resistant, with the exception of *Lobularia maritime, Nemophila menziesii,* and *Chamaemelum nobile*, which last only a few years.

On the dry side

You might consider planting a xeriscaping flower mixture of yarrow and 50 to 70 percent clover in hot, dry areas. This mixture will flourish and stay green in poor soil without cutting or watering. The low-growing yarrow produces a dense feathery mat that reportedly looks like grass from a distance. The clover roots loosen and enrich the soil by fixing nitrogen. Any lawn benefits from clover and trefoil's nitrogen-fixing abilities: a regular lawn of 25 percent clover that is cut with a mulching mower will not need any supplemental fertilizing.

Ecolawn seed is best planted in May or September (in the autumn weed seeds will not compete during germination). Although all ecolawns need to be watered regularly during the first growing season, no watering is needed after that. You can seed an ecolawn directly into a prepared seedbed or overseed a thinning lawn. An existing healthy lawn can be converted to an ecolawn over a three- to five-year period. Lists of the steps required to create and maintain a healthy ecolawn, including help with seed selection (depending on soil type, sunlight, wear, and climate), can be found online by searching the phrase "low-maintenance lawns" on the Canadian CMHC website at *www.cmhc-chl.gc.ca*. Ecolawns provide a biologically diverse, multi-textured lawn that is beautiful to look at and ecologically sensitive. The savings in time and cost may help convince my neighbour and other gardeners to give up their outdated lawn care practices.

-Jane Sherrott, with Mike Nassichuk



Un-mowed Ecolawn courtesy of *wildflowerfarm.com*

Ecolawns and European lawn chafer

Ecolawns have been shown to be less susceptible to disease and insect damage than conventional lawns, as lawn pests, particularly grubs at the semi-aquatic larval stage, cannot establish in unwatered ecolawns. Ecolawns even appear to be a possible alternative in neighbourhoods affected by European chafer, Rhizotrogus majalis. However, research into control of chafers is still in early stages and the situation is not yet fully understood. Wildflower Farms, who sell ecolawn seed, report that no problems from chafers have been seen in the nine years their seed has been on the market. Western Canada Turfgrass Association and Bob Costello, an entomologist with the BC Ministry of Agriculture, Food, and Fisheries, author of their chafer fact sheets, are more cautionary. They report that no grass species is chafer resistant. Ecolawn flower-only mixtures could be grown where chafer infestations occur. But more research and monitoring will be necessary before we can definitely conclude that all ecolawns are resistant to chafers.



of the Master Gardeners' Association of **British Columbia** Affiliated with VanDusen **Botanical Gardens Association**

Mission Statement

The Mission of the Master Gardeners' Association of British Columbia is to provide information about gardening to the community and to educate people about environmentally responsible gardening practices.

Please send all contact information changes to Kathy Shynkaryk, membership chair.

All other newsletter correspondence can be sent to the editor, Ann-Marie Metten, at ametten@telus.net.

Newsletter layout by Wendy Jones Carere

Deadline for submissions to the September newsletter is July 15, 2006.

www.bcmastergardeners.org gardener@bcmastergardeners.org ۲



MG Calendar

Tuesday, June 13, 7:30 pm Nori and Sandra Pope The Nature of Perception: Hadspen Garden in Somerset, England Norman Rothstein Theatre The Jewish Community Centre 950 West 41st Avenue, Vancouver Tickets \$15. Proceeds to VanDusen Botanical Garden Capital Campaign.

Tickets available by email at gardener@bcmastergardeners.org, in the Garden Shop at VanDusen Botanical Garden or the Shop in the Garden at UBC Botanical Garden, or mail a cheque payable to MGABC and a self-addressed, stamped envelope to:

MGABC Tickets c/o VanDusen Botanical Garden 5251 Oak Street, Vancouver, BC V6M 4H1

Saturday, August 12, 12 to 4 pm Summer Garden Party 13970–34th Avenue, Surrey Bring your friends and family and a potluck lunch to this free event. Tea, coffee, and cold drinks will be available, and plants will be sold.

Tuesday, September 12, 9:30 am

General meeting Daniel Mosquin The Flora of Garibaldi Provincial Park: A Historical Perspective This is a joint meeting with VanDusen Guides.

May 2 to 5, 2007

International MG Conference Little Rock, Arkansas For more information or to be added to the mailing list for the 2007 Conference, email Janet Carson at *jcarson@uaex.edu.*

Master Gardeners' Association of British Columbia Contact List 2005 / 2006

Please refer to your current MG member list for full contact information, including phone numbers and email addresses.

Chair Jack Grant Chair Elect Lynne Chrismas Ist Vice Chair Barbara Bowers 2nd Vice Chair Jenny Newman Secretary Katie McIntosh Treasurer Karen Shuster Members at Larg Ayuko Inoue Susan Lazar Barry Roberts	Advanced Training June PiersonBasic Training (BT) Doreen GodwinBylaws Sheila WatkinsClinic Coordinator Lynne ChrismasCoffee Convenor Judy ZipurskyCommunity Projects Alice KilianAndrea LebowitzDatabase Manager Pat TaylorEducation Committee Robin Rance	Finance Karen Shuster Fundraising Brian Campbell Membership Kathy Shynkaryk Newsletter Editor Ann-Marie Metten Nominations Mel Felker Plant Information Line —available— Plant Sale Coordinator Joan Bentley Publicity —available—	Selection (BT) Doreen Godwin Speakers Group Linda Shulman Telephone/Email Colleen Martin Linda Wright Transition/New Students —available— Update Seminar —available— Website Committee Karen Shuster Web Masters Deb Dorey David Watkins	Welcome Table —available— VIMGA (Vancouver Island) Chair Rodney Murray Secretary Linda Cooper SMGA (Summerland) Program Coordinator Linda Sears
---	--	---	--	---