les amis de la ferme
friends of the farm

Friends of the Central Experimental Farm

Winter 2017 Newsletter Volume 29 No. 1

In 2017, Master Gardeners Resolve to ...

By Edythe Falconer and Dale Odorizzi, amply assisted by members of Lanark and Ottawa-Carleton Master Gardeners

R. Hinchcliff

Botany Building (Building 74), Arboretum

As each New Year approaches many of us continue to make resolutions about improving our lives generally. We will be slimmer, fitter and smarter—better in some way or another. It's the same for gardeners—"Master" or otherwise—we want to improve our gardens to make them smaller, larger, more maintenance free and always more beautiful, and more and more we want them to express our beliefs about what is best for the environment. Establishing Wild Life and Pollinator gardens are two tantalizing possibilities.

Master Gardeners of Lanark and Ottawa are sharing here our most treasured aspirations. We will work hard to make them come true. We may not earn gold medals but there will have been joy and satisfaction in each of our journeys.

Renovate, rejuvenate, replace, redesign

Helen Halpenny: I resolve to make my grass cutting easier by eliminating corners and narrow spaces, thus enabling my tractor lawn mower to do the job. I do not like trimming. I actually have made a head start this fall by making a large bed encompassing two crab apple trees and the space between. I have eliminated the grass, and amended and tilled the soil. In the spring I will plant shade loving plants, and mulch well. Looking forward to a new bed, complete with bench, bird bath and shade.

Faith Schmidt: This year my husband and I want to eliminate another section of grass on our property to create a wildflower garden that will attract pollinators.

Judith Cox: I resolve to bring back the glory of my own garden. I am going to combine my vegetables, herbs and flowers into a fine fancy stew of colour.

Fran Dennett: My perennial resolution for the last 20 years has been to renovate my garden! Sadly I think it will remain a

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Statement from the Friends' Board of Directors

We were very disappointed to learn that despite the National Capital Commission's recommendation of Tunney's Pasture, the Federal Government will offer land from the Central Experimental Farm to the Ottawa Hospital for a new Civic Campus.

We are thankful for all of the work done by so many people to draw attention to the value of the Farm as a place of national heritage and research. The Friends of the Farm understands there will always be important land needs to be considered but continually encroaching on National Historic Sites should not be the easy answer. The Friends will continue to support the importance of both the ongoing work and public areas of the Farm. Comments and concerns can be sent to president@friendsofthefarm.ca.

President's Message

Even though we are well past the gardening season, the Board of Directors has had a busy few months.

We followed closely and participated to the extent possible in the Civic Hospital site recommendation process led by the National Capital Commission. In the end, the Federal Government has offered part of the Farm to the Ottawa Hospital as a site for a new hospital. We were disappointed with the decision and released a statement expressing our disappointment. We have received a number of responses to that statement and while an overwhelming number were in support of maintaining the Farm as it is, several were in favour of the Government's decision. Even though we were disappointed we will continue with our efforts to preserve and protect the public areas of the Farm, and we will support strengthening the protection afforded to National Historic Sites.

The Board of Directors has decided to move our Annual General Meeting (AGM) from September to April. The change is in response to a suggestion made at our 2016 AGM. For many years, our AGM has been held in September, towards the end of the gardening year. Even though that allowed us to report on the gardens, it meant that we were reviewing our financial position many months after the end of the year. Moving the meeting to April will give us the opportunity to discuss our financial status much closer to the end of our financial year. This change will have an effect on the terms served by members of the Board of Directors. As a Board, we will be recommending and seeking your approval that the terms of those currently serving as members of the Board be extended from September to the following April. We will also be asking you to approve that current Board members be given a one-time extension of six months to the six year maximum outlined in the bylaws. We will provide the wording of the motion and the names of the Directors in our spring newsletter.

We have been delighted with the response to our book *Blooms: An Illustrated History of the Ornamental Gardens at Ottawa's Central Experimental Farm*. We have kept author Richard Hinchcliff busy with book signings. For the next few months we are giving him a bit of a break but are making plans to put him back to work in the spring. We are in the early stages of planning a garden party that would combine book signings with garden tours and other activities in the Ornamental Gardens. Mark June 10 on your calendar and look to Farm Notes and the newsletter for more information.

Ken Young

Judy Dodds at *Blooms* launch, October 2016

Judy Dodds

Message de la présidente

Si la saison de jardinage est bel et bien terminée depuis un bon moment, les membres du conseil d'administration ont, pour leur part, eu fort à faire au cours des mois derniers

Nous avons suivi de près le processus de sélection selon lequel la Commission de la capitale nationale a fait une recommandation relative au site du nouveau campus Civic de l'Hôpital d'Ottawa, et nous y avons participé dans la mesure du possible. Au final, le gouvernement fédéral a offert une partie de la Ferme à l'Hôpital d'Ottawa comme emplacement pour le nouveau campus. Cette décision a été pour nous une grande déception, ce que nous avons exprimé dans un communiqué par la suite. De nombreux commentaires de la part de nos lecteurs et des membres nous sont parvenus un peu plus tard. Bien qu'une très grande majorité ait favorisé le maintien de la Ferme telle qu'elle est aujourd'hui, un grand nombre a cependant appuyé la décision du gouvernement. Malgré notre désappointement, nous continuerons nos efforts en vue de préserver et de protéger les endroits publics de la Ferme. De plus, nous veillerons à raffermir la protection devant être accordée aux lieux historiques nationaux.

Les membres du conseil d'administration (CA) ont convenu de tenir l'Assemblée générale annuelle (AGA) en avril désormais plutôt qu'en septembre, à la suite d'une suggestion faite à l'AGA de septembre 2016. Pendant de nombreuses années, l'AGA avait lieu en septembre, vers la fin de la saison de jardinage. Cela nous permettait de faire rapport sur l'état des jardins, mais nous devions faire l'évaluation de notre position financière plusieurs mois après la fin de l'année. Le fait de tenir l'AGA en avril nous permet de discuter de nos états financiers beaucoup plus tôt avant la fin de l'année financière. Ce changement aura des répercussions sur les mandats des membres du CA. En tant que conseil d'administration, nous ferons une recommandation, laquelle sera soumise à votre approbation, afin que les mandats des membres soient prolongés de septembre au mois d'avril suivant. Nous vous enjoindrons aussi d'approuver une prolongation unique de six mois aux membres actuels en vertu du règlement établissant le mandat d'un membre à six années consécutives au plus. Nous rédigerons la teneur de la motion et dresserons la liste des directeurs que vous pourrez voir dans notre bulletin du printemps.

Nous avons été ravis de la réponse manifestée à notre publication, *Blooms: An Illustrated History of the Ornamental Gardens at Ottawa's Central Experimental Farm.* L'auteur, Richard Hinchcliff, a été fort occupé avec la signature de son livre. Nous lui accorderons une pause au cours des prochains mois, mais planifions déjà de faire appel à lui au printemps. Nous en sommes aux premières étapes de la planification d'une garden party, qui inclurait des séances de signature du livre et des visites guidées des jardins ornementaux. À cet égard, veuillez inscrire le 10 juin 2017 à votre calendrier et de plus consulter les notes de la Ferme et le bulletin pour obtenir d'autre information

Judy Dodds

In 2017, Master Gardeners Resolve to … *(continued from Page 1)*

resolution as I will be 75 next year. The mind is willing but the body is weak!

Amanda Carrigan: I always have garden resolutions and plans. In 2017 I want to get the beds in front of my building looking a little more cohesive and balanced (including finding a substitute for the ornamental grass that never gets a chance because the cat loves chewing it). I also want to be better about monitoring and controlling pests and diseases, like the sawfly larvae that always come to eat my rose leaves, and the mildew that hits phlox and monarda in late summer.

Dale Odorizzi: I will work toward obtaining Canadian Wildlife Backyard Habitat Certification for my garden. I will plant bird or butterfly friendly plants in my garden and will accept that you need caterpillars to get butterflies.

Laurie Chennette: I will replace some of my lawn with flower or vegetable gardens and will continue to use non-chemical methods for maintaining my lawn. I will embrace the weeds in my lawn because they help keep it green in the summer, can be pretty when they bloom, and are butterfly and bird attractors.

Susan Bicket: As a gardener with a new garden as I open up a new bed I WILL wait and weed it at least three times before I start planting. I WILL buy plants when they have a place to go. I WILL mulch, I WILL put good edges on my beds at least twice a year. I WILL exercise to maintain and build muscle over the winter.

Process and practicality

Agnieszka Maleszewka-Keough: Throw out old seed packs before ordering new packs. Order seeds EARLY! Control the urge to plant them all. Sow them at the right time! When seedlings are crowded, thin them out or transplant some. Share extras with neighbours. Transplant mature seedlings before July 1st if not able to do it in late May. Keep them fertilized. I will hang this list on the wall as a reminder!

Ankaret Dean: I will add organic material to my existing compost pile and turn the pile more frequently. I will build a second compost pile, using kitchen waste and organic materials from the garden. At the very least I will buy a bag of compost and put it around my peonies and delphiniums.

Dale Odorizzi: I will review my 2016 Gardening Journal notes on plants that need dividing, and areas or times of the year that need a boost, and will act on this information. I will maintain a cycle of observation and action from year to year. I won't forget to cut back weeds that have grown taller than my plants.

Margaret Ryan: I won't wait until fall when I'm closing down the garden.

Gerda Franssen: When planting seeds in my garden, I will take the time to space them according to package instructions.

Oaks and Rosybloom crabapples in Arboretum, from Prince of Wales Drive

Ankaret Dean: I am going to try to combat the grass weeds in my cut flower garden by using corn gluten in the spring.

Specific plants

Diane McClymont Peace: I planted dwarf blue Scottish kale (I am of Scottish descent) this year and it was wonderful—delicious, tender, great producer, popular with family and friends—and still is. I have some seeds left and will definitely replant again next year and reorder for another year.

Anne Price: I will over-seed portions of my lawn with white clover (Trifolium repens). Clover fixes nitrogen in the soil and stays green longer during droughts.

Paul Pietsch: This year I will grow a good portion of my own vegetables and/or plant a few vegetables in containers. I will also visit and purchase at local farmers markets.

Claudette Russell: I resolve to pay more attention to my apple tree, which is screaming for tender love and care.

Irrigation and pruning

Anne Price: This year I plan on improving rain flow to my water barrels, I know they aren't collecting as much as they could. I will do rejuvenation pruning in the spring to selected established shrubs that are too large and will prune my espaliered apple tree for better production.

Research

Nancy McDonald: This year I plan to carry over a resolution I made in 2016 to take the time to learn about the insects visiting my garden. I want to know more about these visitors and how my garden activities influence which ones come to my garden.

Laurie Chennette: I will enrol in a gardening course and/or join the local Horticultural Society and attend the meetings and go on garden tours. I will buy and read a new gardening book or subscribe to a gardening magazine. What I can't buy I will borrow from friends or the library.

Winsome

Julianne Labreche: I resolve to keep loving squirrels, even when they eat 100 newly planted crocus bulbs. They get hungry too.

Edythe Falconer: My husband and I will continue to try keeping rascally rabbits out of our yard. I will take many more garden photos. They are a perfect antidote for a dark, cold winter day.

Margaret Ryan: This year I plan to bring more cut flowers into the house.

Fran Dennett: Always plan for a bench to sit on to enjoy the fruits of your labour! This was Gaston Tessier's advice every time he made a presentation.

Wonderful

Gerda Franssen: I will take more of my excess fresh vegetables to the Food Bank.

Dale Odorizzi: Regardless of how many resolutions you may wish to embrace, there is one resolution that I hope all gardeners will make and keep: "I will enjoy my garden and feel proud of what I have done and not feel inadequate for what I have not yet done."

Happy New Year!!! Happy 150th Anniversary—Go all out in 2017!

Edythe Falconer and Dale Odorizzi edit The Edible Garden Newsletter.

Kate Harrigan: A Unique Journey, Always Learning

By Barbara Woodward

The Central Experimental Farm came into Kate Harrigan's life when she moved to Canada from Minnesota, USA, in 1993 and settled into the Civic Hospital neighbourhood. She had seven months to explore the nearby Farm before finding employment selling analytical instruments designed to help scientists solve problems in food science.

Kate has walked "every inch of the Farm," which she feels "in its many dimensions has been an intimate part of my life for decades." The Arboretum, with its oaks, willows, rocks that the grandkids climb, has always been Kate's "…'go-to' in all seasons, and in the summer there are special garden places to visit."

After retiring, she began taking daily walks in the Arboretum and wondered why there were so few benches to sit, observe and enjoy the surroundings. Kate took this concern to the Friends of the Farm, who invited her to join the 2017 Projects committee where she served for almost two years. From this initial step, the Farm has become a large part of Kate's life.

R. Hinchcliff

Kate Harrigan

Early interests and influences

Kate has an obvious love of exploring a range of ideas, places and things from an analytical and scientific perspective. Once immersed in an idea, issue or topic, she becomes actively involved in pursuing answers or solutions that make a difference.

This tendency to become actively involved likely stems from the environment she grew up in. Her home state Minnesota has a culture of social activism inherited from early Nordic settlers whose history is replete with social activists who worked cooperatively for the public good.

Kate's mother was always well-informed on political and social issues, as are Kate and her three siblings to this day. The nuns who taught her in high school were highly educated, and socially and politically engaged. Given this, it's not surprising that Kate left her first university studies to join the student political movement against the Vietnam War.

In her childhood neighbourhood, there were lots of undeveloped natural areas to roam in and explore (until dinner time). It was a perfect environment for a child with an open, inquiring mind and an analytical, scientific nature, and likely sparked her strong affinity to plants and trees.

A self-taught gardener for the most part, Kate has devoted a lot of time to indoor and outdoor garden research and experimentation. Wherever she has lived as an adult, she has always nurtured a voluminous collection (50+) of house plants. Her first outdoor garden contained vegetables but later she moved on to perennial gardening.

Kate loves the texture and colours of wood, and says that "each [type of wood] has a unique character." She learned the specific details, complexities and problems of wood, particularly hardwoods, during a two-year trade school certification in cabinetmaking. Following this, Kate founded her own woodworking business where she designed and built custom furniture.

Then Kate became interested in the science of food. Her reading led to an experiment to make bread using sprouted barley, dried and ground, as a replacement for sugar to feed the yeast. Kate says "If you ever want to understand the science of food, make a loaf of bread from scratch … it's all chemistry." (Despite this, Kate asserts she is not a good cook; however, no empirical evidence was provided to support this claim.)

Eventually Kate sold her business and obtained a BSc in Food Science and Technology at the University of Minnesota. Once again she became politically active as president of the student centre board of governors. After graduation she specialized in oats, wheat and barley research. A chance meeting at an oat conference in 1992 introduced Kate to Bill Collins, a Canadian who worked as a senior research scientist at the Neatby Building on the Central Experimental Farm.

At home in Canada

Since moving to Canada, Kate has been very active in community issues in her neighbourhood, including traffic concerns, parks and recreation, and gardening interests such as helping to build a local monarch butterfly public garden ("Neighbours and Nature," Friends of the Farm Newsletter, Spring 2015).

Kate and Bill share a love of plants, which, she says, is their therapy. The garden she and Bill designed and built at home won the Ottawa Horticultural Society's 2013 Trillium Award and George L. Myles Trophy. When travelling, the couple gather seeds to germinate in their indoor greenhouse, to fill their home and solarium (trees included) with exotic plants.

As with many people who volunteer at the Farm, listing Kate's activities does not adequately reflect the hours and energy she has contributed, nor does it do justice to the number of changes, large and small, that she has accomplished over the last few years. Many of these changes benefited from her business expertise and her knowledge of and preference for tools and technology.

For example, introducing a monthly electronic newsletter three years ago led to a complete upgrade of software and hardware, and eventually wireless internet and phone service. As with most non-profits today, Kate has used social media (Facebook and Twitter)

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Ending with a Flurry

By Eric Jones

The last tree tour of 2016, on "Forms and Shapes" of trees and hedges, was held in a flurry of wind and snow on November 20. Roman Popadiouk and Owen Clarkin led a hardy crew of people through the Farm's collection of hedges, pointing out growth characteristics and pruning techniques of different species. The group got to experience the sheltering effects of various hedgerows firsthand as the wind gusts blew by. The tour ended in the Tropical Greenhouse, making it a real "tour" in the traveller sense.

See you later this year for another fascinating round of tours with new things to see and know about trees!

Eric is Past President of the Friends and leader of the Arboretum team.

Eric Jones

Roman Popadiouk (right), one of the leaders of the November tree tour

Travelling with the Friends of the Farm

By Denise Kennedy

In July 2016, fifty-five passengers signed up for a Three Day/Three Gardens tour to Domaine Joly de Lotbinère, Reford Gardens in Metis and the New Brunswick Botanical Gardens near Edmunston.What artistry we found in the gardens! We came home very inspired to try duplicating some of the plantings we saw. And we relished the rekindling of friendships from past trips and the making of new Friends.

Our Next Trip: Destination Ontario 2017 — June 18, 19, & 20

Join Denise and Yvonne for this year's trip on June 18, 19 and 20 to enticing destinations in Ontario!

On June 18th we will go to the Toronto Botanical Garden and the adjacent Edwards Gardens. The latter is a former estate garden featuring annuals, roses, wildflowers and an extensive rockery. We'll unwind and relax on the Grand River for a dinner cruise that evening, after which we will retire to our hotel in Brantford for a good rest.

On June 19th we will spend a leisurely afternoon at the Point Pelee National Park, a lush Carolinian forest oasis at the southern tip of Canada, followed by a group dinner in Hamilton and return to our hotel in Brantford.

On the 20th, a local tourist guide will show us the gardens of Brantford City, a past winner of Communities in Bloom, and then we'll move on to Whistling Gardens for a thorough view of Canada's newest botanical garden, with lunch served in the garden. We will return to Ottawa at about 7:30 pm.

Cost is $555 per person, based on double occupancy. For singles, add $130. This is an all-inclusive trip—transportation, all meals (2 breakfasts, 3 lunches, 2 dinners) and entrance to all venues.

Reserved seating is available. Registration forms can be found on our web site, or call us at 613-230-3276 to have forms mailed to you. As of December 16th, there are only 16 seats to go for a full bus! So, don't delay, call today!

www.netcategory.net

Whistling Gardens

Nancy McDonald

Blue Poppy at Reford Gardens

Denise Kennedy is the Friends of the Farm tour manager and leader of the Macoun Memorial Garden volunteer team.

www.visitwindsoressex.com

Point Pelee National Park

Kate Harrigan: A Unique Journey, Always Learning . . . *continued from page 4*

to connect with the larger community of Farm supporters. A newly rebuilt website and other smart technologies have been added such as Square and Shopify for selling Friends books and cards. She also found funds to support the production of Blooms, the Friends 150th celebration book.

The intrinsic value of the Farm

The community aspect of the Farm appeals to her. Kate speaks admiringly of the people who "inhabit" the Farm daily, walking, exercising, viewing the sights; and the volunteers, who willingly donate their time and energy to accomplish things. The members of the Board are "excellent people to work with and have lots of expertise."

Participating with the Friends has shaped her views on the value of the Farm to Canadians and of the Friends work. "Knowing what I know of the Farm in all its aspects," Kate says, "it truly is a world class research facility, a historical treasure for all Canadians, a local gem of greenspace and heritage landscape, and most importantly for the Friends, a place where the community of Farm-lovers can donate their time and resources."

Barbara Woodward is the newsletter's assistant editor.

The Launching of *Blooms*

By Barbara Woodward

Alison Hall

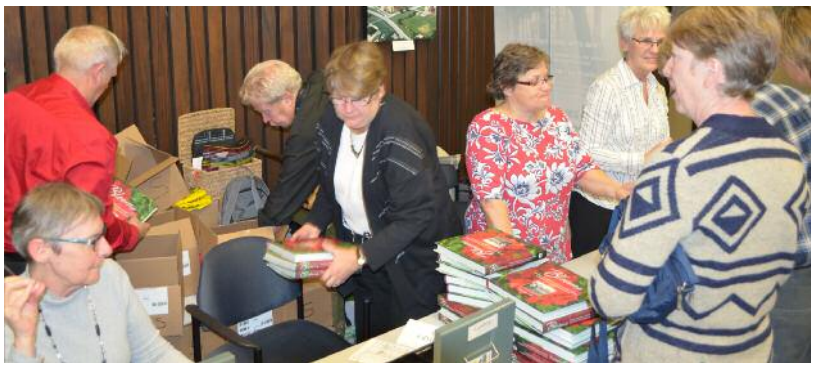
Fenja Brodo, President, Ottawa Field-Naturalists Club, and Judy Dodds

Pierre Corriveau

Riley Brockington

Photos by Ken Young

Richard Hinchcliff, Kitty Langille, and Annie Creighton



Linda Alexander, Rick Haas, Bill Collins, Betty Jean O'Riordan, Donna Pape, Kate Harrigan, Janet Smith

The new book from the Friends of the Farm, *Blooms: An Illustrated History of the Ornamental Gardens at Ottawa's Central Experimental Farm*, was successfully launched on October 18, 2016, at a ceremony attended by many Friends and supporters in the Farm's K. W. Neatby Building.

Judy Dodds, President of the Friends, said the Friends were "… thrilled to be launching this new book, which is all about the Ornamental Gardens, one of the show-pieces of the Central Experimental Farm."

After speeches by Pierre Corriveau, Assistant Deputy Minister of Agriculture and Agri-Food Canada, and Riley Brockington, Ottawa City Councillor for River Ward, Judy recognized the generous donors to the Blooms project—the Community Fund for Canada's 150th, the Community Foundation of Ottawa, the Crabtree Foundation, Doherty & Associates, E. Neville Ward and the Ottawa Field-Naturalists' Club.

In her remarks, Alison Hall, *Blooms* creative designer and co-founder with Valerie Cousins of Sanderling Press, paid tribute to Valerie, a former President of the Friends, who died of cancer earlier in the year. Alison said both she and author Richard Hinchcliff were "… inspired by Valerie's vision for a beautiful, informative, engaging book that would embody the spirit of the Ornamental Gardens, honour the dedicated personalities behind them, and celebrate the gardens' place in the history and landscape of our capital city."

Shari Haas, Donna Pape, Judy Dodds, Kate Harrigan and Richard Hinchcliff were involved in planning the event and were helped on the day by many other Friends volunteers.

Praise for *Blooms*

"This beautifully designed book has something for everyone …
"A tour de force in both words and pictures …
"This year marks the 130th birthday of the Farm and this book is a must-read (and must-enjoy) for everyone who cares about its past and its future. Bravo."

Ailsa Francis, *Ottawa Citizen*, November 12, 2016

"You don't have to be a gardener to appreciate the amazing book *Blooms* …
"This 304-page treasure will not only place the reader in the midst of a collection of very spectacular photos, but likewise provide an in-depth insight into one of Ottawa's most significant heritages …
"*Blooms* is certain to provide you with many marvelous hours of idyllic reading."

Carole Moult, *Riverview Park Review*, December 2016

"This garden book with the beautiful photography and illustrations of the individual flowers and plants is a testimony to the hours of care that went into creating, nourishing and planning the gardens …
"It is a fascinating look at Ottawa's history as well as Canada's history. However, the gardener in all of us will take particular interest in the chapters dealing with the restored gardens: the roses, peonies, lilacs and irises."

Jill Moll, *Ottawa Garden Club Newsletter*, December 2016

To purchase a copy

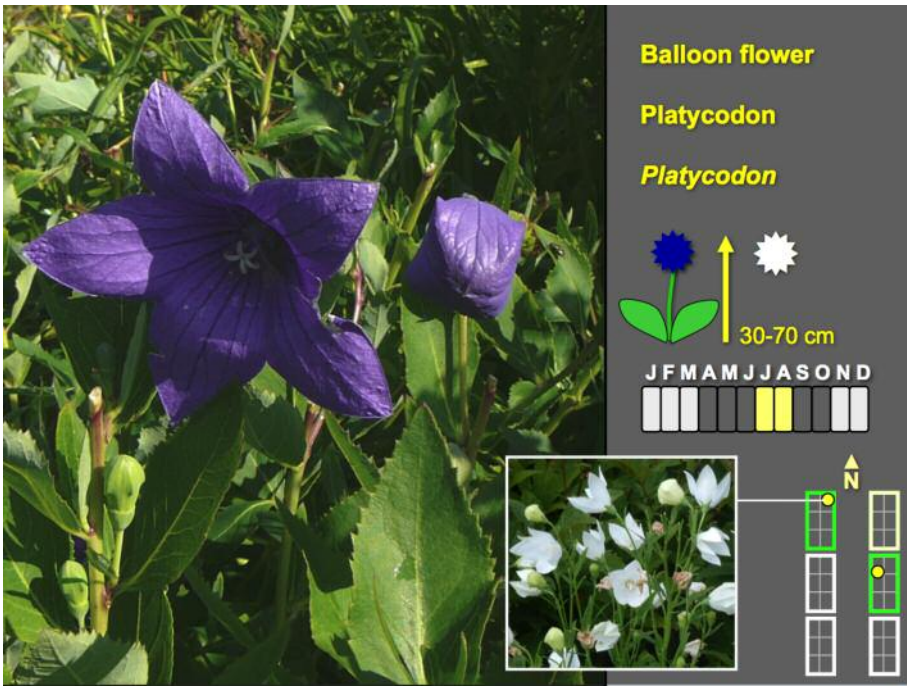
You can get your own copy of *Blooms* or buy it as a gift as follows:

- online at www.friendsofthefarm.ca
- at the Friends office in Building 72 at the Farm, Mon-Wed, 9am to 2pm,
- or visit one of the following local bookstores – Perfect Books, Books on Beechwood, Octopus Books, Singing Pebble Books, Chapters on Rideau, Lee Valley Ottawa, World of Maps, Coles at Carlingwood.

New Guide to the Perennials

Imagine that you're strolling beside the perennial beds in the Ornamental Gardens when you notice an interesting but unfamiliar plant—low to the ground, with medium-blue flowers shaped like five-pointed stars, and what appear to be tiny green or blue hot air balloons attached to the stems. What is it?

Answer: it's a balloon flower. You can confirm that by pulling out your smartphone, going to www.friendsofthefarm.ca, clicking on Collections and then Perennials. There you'll find the brand new perennials gallery, just launched to celebrate Canada's 150th birthday. It is a visual guide to the flowers and grasses in the Perennials section of the Ornamental Gardens. On the balloon flower page, you'll learn that Platycodon is its Latin name, that it blooms in July and August and that there's also a white-flowered version.



Martin McLeod

Page from the new perennial gallery in 'Collections' on the Friends' website

At the outset, this new collection includes about 50 flowers and 10 grasses (there are about 200 species in the six perennial beds). More species will be added as time, blooming and photography allow, eventually growing to about 100 species. Not every species or colour or location in the six perennial beds is covered, but the entries are representative of the plant collection.

Each species is shown on its own page, including plant appearance, flower detail, colour(s), size, location and bloom time. Names are listed in English, French and Latin, and each list is searchable alphabetically.

The Perennials Gallery was created by Martin MacLeod, with help from Sharon Saunders, Kate Harrigan, Richard Hinchcliff, and Christine Banfill. Martin has been a member of the perennials team (Tuesday mornings) for the past seven years.

Shelterbelt Ceremony, 2016

About 70 people were in attendance on a beautiful day in September for the 2016 ceremony to thank donors to the Merivale Shelterbelt.

Polly McColl, leader of the Friends' Shelterbelt volunteer team, introduced speakers Kate Harrigan, Vice President of the Friends, and Lynden Hillier, Director General, Asset Management and Capital Planning, Agriculture and Agri-Food Canada.

Kate and Lynden welcomed everyone and sincerely thanked the donors for their generosity, noting that the continued successful building of the Shelterbelt would not be possible without their support. Kate announced the donors individually and Lynden presented them with a certificate.

The many volunteers involved in the project were also thanked. They include those in the team who toil at the site each week, Deborah Higdon-LeBlond who administers the donation program, and those who had helped that day before and after the ceremony.

Despite the drought during the year, the trees and shrubs at the Shelterbelt looked fine and dandy, thanks to some intensive watering by Agriculture staff. Polly and her team are looking forward to increased planting and better growing conditions this year.

Polly McColl, Kate Harrigan, Lynden Hillier

Ernie's Pot Plot on Hash Lane: Cannabis Experiments at the Farm

By Richard Hinchcliff

Three acres of the Farm's fields were planted with cannabis in 1971. Hundreds of different strains from around the world were gathered and used in experiments by Dr. Ernie Small, research scientist at Agriculture and Agri-Foods Canada.

For Ernie, it was the start of 47 years of research on cannabis, culminating in the publication in November 2016 of his book entitled *Cannabis: A Complete Guide* (see page 11).

Although his work was pivotal in the eventual growth of a hemp industry in Canada, initially it was all about controlling the cannabis drug. Canada's Department of Health and Welfare launched the project in response to concern over the use of marijuana and hashish. Many seeds from other countries were provided by police forces from confiscated cannabis.

Cannabis had been grown at the Farm in the 1920s and '30s in experiments to see if hemp could be economically grown in Canada for fibre. In 1938, the cultivation of cannabis became illegal in Canada under the *Opium and Narcotics Act*, although there was some production during WWII, again for its fibre.

Cultivation for research purposes was allowed in 1961 at the discretion of the Minister of Health, and in 1969 Prime Minister Pierre Trudeau set up a Commission of Inquiry into the Non-medical Use of Drugs (known as the Le Dain Commission). Small was seconded to assist the commission by preparing a report on agricultural and botanical aspects of cannabis.

The focus of his early research at the Farm was on distinguishing between marijuana and hemp or, in other words, between the drug and non-drug subspecies of *Cannabis sativa*. The drug compound of the plant is tetrahydrocannabinol or THC, so Small's goal was to identify when the amount of THC in a particular strain made it a drug.

LAC/Dept. of Agriculture fonds/1B DAP 15 A-30

Ernie Small and cannabis plantation, 1971

Small's cannabis crop

The 1971 three-acre plantation of cannabis was near Ash Lane, which insiders referred to as "Hash Lane." Small had collected 350 different seed stocks from about 50 countries, and set out to test how they varied in the strength of the drug they produced.

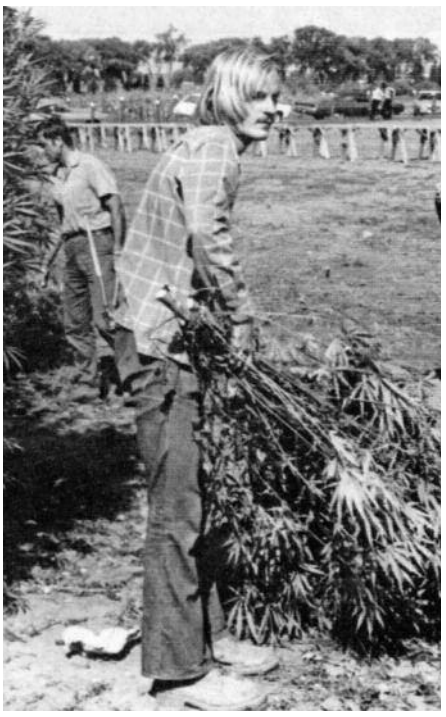
Seeds were sown at the beginning of June and by late August about 70% of the stocks had flowered. Others that had come from warmer climates did not mature during our shorter growing season.

Half an acre was devoted to growing a standard variety of the drug to supply to authorized Canadian researchers. The yield was "exceptionally good"—about 900 pounds of manicured marijuana. A health official at the time claimed the government's crop was three times more potent than what was available on the street.

The plants were in a rather open location and, when word got out, elaborate security measures were necessary, including a fence and guards with dogs. In the book *Ottawa's Farm*, Helen Smith wrote "it is said that one Carleton University student, attempting to escape from the dogs, the police, or both, left his jacket after it got caught on the fence. Unfortunately for him, the jacket contained his name, making it an easy matter for the RCMP to pay him a visit."

LAC/Dept. of Agriculture fonds/1B DAP 15 A-30

On guard, 1971



Canadian Press

Harvesting the cannabis, 1971

Ernie's Pot Plot on Hash Lane... *(continued)*

The experiment in the fields lasted only the one year. After 1971, it was decided to grow cannabis in more secure indoor areas, and this continued until 1979.

Defining hemp versus marijuana

As a result of Small's research, a formal botanical classification system for cannabis was widely adopted. "The way we separated the 'non-drug' subspecies (hemp) from the 'drug' subspecies (marijuana)," he said, "was on the basis of a dividing line of 0.3% THC, dry weight basis, in the leaves and flowering parts of the plant."

This level of 0.3% was well below the 0.9% THC that some authorities considered the least amount required for psychoactive effects. The 0.3% THC level was adopted around the world as the criterion to allow cultivation. Cannabis strains with less than 0.3% may be legally cultivated under license, whereas those with levels of 0.3% or greater may not. (Europe recently dropped the level to 0.2%.)

"It has been extremely gratifying to have so much of the world apply our simple classification in a practical way," said Small. But with seasonal and environmental influences, he noted, it was rarely possible to get exact measures. At different times, the same plant could have more or less THC than 0.3%, which can be an issue since by law hemp crops must be destroyed if their level is higher than 0.3%. In Canada, Small said, "common sense has been exercised by the authorities when levels slightly exceeding 0.3% have been found."

Small's research helped encourage the use of the word "hemp" for the non-drug class of cannabis, and an understanding that it was different from the drug class that produces marijuana. This led to an acceptance that a commercial hemp industry could be fostered in Canada and in 1998, new regulations were provided to allow this to happen.

Dr. Ernie Small

Ernie studied psychology at Carleton University in Ottawa. Living on Fisher Avenue at the time, he walked to the campus through the Arboretum and was fascinated by the trees. This sparked his interest in botany, which led to a Ph.D. in plant evolution at the University of California at Los Angeles in 1969. "I owe thanks to the Arboretum for my career path."

Agriculture & Agri-Food Canada

Ernie Small, 2012

Returning to Canada, Dr. Small immediately began work at Agriculture and Agri-Food Canada (AAFC) and has spent most of the ensuing decades in the same office at the William Saunders Building. "There is dust in here that is 47 years old," he jokes.

Living in California in the late 1960s, witnessing the rapid growth in illicit drug use was "a total culture shock," says Ernie. It was also intriguing and he grabbed the opportunity to lead new botanical research in Ottawa on cannabis. The research has been successful and satisfying, he says, but there were times when he nearly lost not only his projects but also his job. For example, Ernie's boss failed to inform senior management in the department of experiments underway, and when there was an outcry in response to a question in Parliament about why AAFC was growing marijuana at the Farm, Ernie took the heat. He is amazed at the changes that have occurred from those days to the current proposals for legalization.

Ernie continues to work as a Principal Research Scientist at the Farm in Ottawa. He is the author of 15 books and over 350 scientific papers on plants. He has testified as an expert botanical witness in dozens of court cases in North America, and has been a research consultant to national governments.

One of his books for a non-specialist audience is the prize-winning *Top 100 Food Plants: The World's Most Important Culinary Crops*. Others include *Top 100 Exotic Food Plants,* and *North American Cornucopia: Top 100 Indigenous Food Plants*. He co-authored a book entitled *Official Plant Emblems of Canada: A Biodiversity Treasure* and is currently writing a series of articles on "Top Canadian Ornamental Plants" in the Canadian Botanical Association Bulletin.

les amis de la ferme
friends of the farm

The Friends of the Central Experimental Farm is a volunteer organization committed to the maintenance and protection of the Ornamental Gardens and the Arboretum of the Central Experimental Farm in Ottawa, Ontario, Canada. Membership for the Friends of the Farm costs $30 per year for an individual, $50 per year for a family, $25 for seniors/students. Payment by PayPal available on website. Membership fees support the many projects of the Friends of the Farm.

The Friends of the Central Experimental Farm publish the Newsletter (ISSN 1702 2762) four times a year (Winter, Spring, Summer, Fall). All members receive the newsletter and it is sent by regular mail or e-mail. Editor: Richard Hinchcliff. Assistant Editor: Barbara Woodward. Design & Printing: Nancy Poirier Printing. Contributors: Edythe Falconer, Denise Kennedy, Martin MacLeod, Dale Odorizzi, Keith Van Ryswyk, Paul Villeneuve, Barbara Woodward. Translator: Lise Anne James.

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Charitable Number 118913565RR0001

In Memory – Cyril Benson

Cyril Benson, who for 15 years helped take care of the Farm's collection of Explorer roses, died in Ottawa on October 17, aged 90. He was a lover of roses, always willing to share his knowledge and expertise in caring for them. His gentle manner and generous spirit endeared him to fellow volunteers and staff.

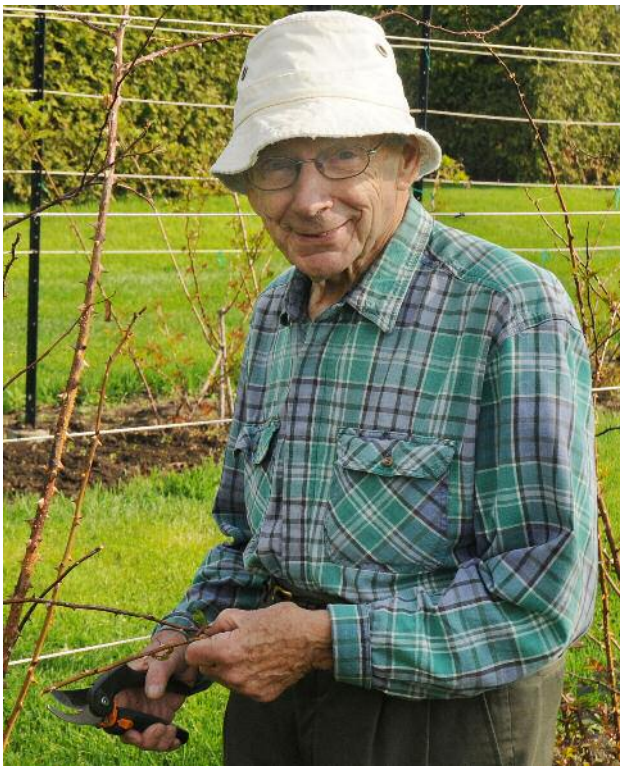
Born and raised in England, Cyril was conscripted into the army after completing elementary school in 1944. World War II was over by the time he finished training at the end of 1945, and the army sent him to Egypt to work on a survey for a civilian project to build a dam.

After completing his army service, Cyril earned a physics degree at Cambridge University. He moved to Toronto in 1952 to work at a new laboratory studying how properties of matter change at very low temperatures while completing his PhD at the University of Toronto. Cyril joined the University of Ottawa science faculty in 1955 and remained there as a Professor of Physics until he retired in 1991.

Cyril was a gardener who loved trees. As a boy in England during the war, Cyril had grown trees in pots on his balcony from acorns, horse chestnuts and seeds he found in his neighbourhood. During his retirement in Ottawa, he grew trees at his home from seeds he collected in the Arboretum, and built a garden of native trees and shrubs at his church.

He had a passion for roses, and accumulated more than 20 rose bushes at home, including several Explorers. After attending a volunteer information session at the Friends of the Farm in 2001, he joined the Explorer rose team, which he later came to lead.

Explorer roses, Ornamental Gardens



R. Hinchcliff

Words commonly used in speaking of Cyril are kindness, grace, wisdom and generosity. He was inspiring in his dedication to the Farm and will be dearly missed.

Kitty Langille, who succeeded Cyril as leader of the Explorer rose team, adds "With a twinkle in his eye and an endearing smile, Cyril not only led by example, but graciously taught, explained and inspired all of us who were so fortunate to be part of the Explorer rose team. When watching Cyril meticulously document, map and nurture each rose under his care, you sensed that he knew each one as if it was a child, its growing habits, strengths and weaknesses, just like any parent."

NEW MEMBER REGISTRATION FORM

NAME: _____

ADDRESS: _____

CITY: _____ POSTAL CODE: _____

PROVINCE: _____

TELEPHONE #: _____

FAX #: _____

E-MAIL: _____

INTEREST IN VOLUNTEER OPPORTUNITIES

YES ❑ NO ❑

TYPE OF MEMBERSHIP

FAMILY	$50/year
ADULT	$30/year
SENIOR/STUDENT	$25/year
BASIC CORPORATE	$250/year
NON PROFIT ORGANIZATION	$25/year
INDIVIDUAL LIFE	$600
SENIOR COUPLE LIFE	$650
DONATION	$_____
TOTAL	$_____

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Please make cheque or money order payable to: "Friends of the Farm." A receipt for income tax purposes will be issued for all donations of $10 or more. Payment by PayPal is available on website.

We are located at Building 72 in the Arboretum. You can visit us or mail this part of the form with your payment to:

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Cannabis: A Complete Guide

By Ernest Small
567 pp. CRC Press, November 2016
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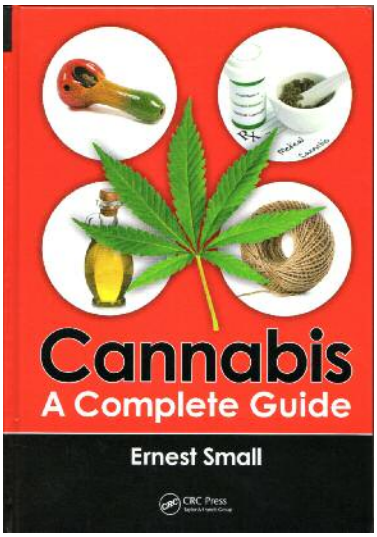
(Online at crcpress.com, 20% discount may be available.)



"*Cannabis sativa*, best known as the source of marijuana, is the world's most recognizable, notorious, and controversial plant." Thus begins a comprehensive new book by Dr. Ernest Small of Agriculture and Agri-Food Canada (see page 8).

Cannabis has been accused of both deadly sins and marvelous virtues, writes Small. He sets out to address just how bad and how good it is, "in sufficient but not overwhelming detail for the consideration of an informed public as well as decision makers."

Based on 47 years of research by Small and much scholarship (there are 1,700 citations), the book considers botanical, business, chemical, ecological, genetic, historical, horticultural, legal and medical aspects of the plant.

This is a book for dipping into, with complex topics made comprehensible, and many fascinating details. At the end of each of the 18 chapters there is a section of "Curiosities of Science, Technology, and Human Behaviour."

Did you know, for example:

- in early America, hemp ropes were used by hangmen, so a "hempen collar" was a noose, and a "hempen widow" was the wife of an executed man;
- "don't Bogart that joint," which is slang for don't keep the marijuana to yourself, refers to Humphrey Bogart always having a cigarette in his mouth;
- and hemp has proven to have ornamental value. Small finds it curious that cultivars of opium poppy are widely grown for their beauty in home gardens, a practice which is tolerated by police and governments, whereas growing hemp as an ornamental is unacceptable.

A key message of the book is that, despite its capacity for harm as a recreational drug, cannabis is extremely useful as a source of stem fiber, edible seed oil and medicinal compounds, and has huge potential for providing new products that would benefit society and create jobs and profits.

Richard Hinchcliff

Planting for Joan Speirs

In November 2016 at the Ornamental Gardens, Agriculture's J-P Gratton and staff planted the three new lilacs that the late Joan Speirs discovered in Franktown, Ontario. The International Lilac Society donated a plaque, which J-P embedded in a boulder and placed beside the lilacs. Joan named the three lilacs 'Franktown', 'Beckwith', and 'Dixie'.

Friends' lilac team leader Maura Giuliani and J-P Gratton, Supervisor of the Arboretum and Ornamental Gardens, alongside the planting for Joan Speirs

Seeking to Understand How the Farm Affects the Health of Ottawa's Residents

By Keith Van Ryswyk and Paul Villeneuve, Department of Health Sciences, Carleton University

Features of the urban built environment have dramatic impacts on environmental exposures that, in turn, are linked to human health. The exposures that affect health include air pollution, noise, heat islands, and access to parks and green spaces.

As diverse as these exposures are, so too are the health outcomes. Long-term air pollution has been linked to premature mortality, cardiovascular and respiratory disease, diabetes and more recently cognitive decline. Noise has been linked to many of these same health outcomes, as well as to mental health. In the last few years, studies have shown that parks and green spaces can help mitigate some of these harmful exposures, and offer health benefits of their own. For these reasons, the Central Experimental Farm plays a vital role in the health of Ottawa residents.

The Farm was created in 1886, and still maintains a large footprint in the city of Ottawa, approximately the same size as New York City's Central Park. Nearly one quarter of Ottawa's population lives within the 5 km buffer that stretches out from the Farm's centre. For these reasons, it is a valuable piece of land, and even more so given that Ottawa is a growing city that needs to deliver services to its residents.

The environmental benefits that the Farm provides have not been well studied. The health impact may be considerable, as green spaces have been shown to absorb air pollution, reduce noise, and mediate heat island effect. Other potential impacts include reducing obesity, increasing physical activity and enhancing social networks in the surrounding area. Canadian studies have also shown that individuals who live in greener areas have reduced rates of mortality and have healthier babies.

At this time, it is not possible to fully understand this as there has been no effort to assess and describe the Farm's impact on environmental exposures to air pollution, noise and temperature in surrounding neighbourhoods, or to describe historically how temperature and air pollution trends have differed between the area of the Farm and more developed downtown areas of the city.

As a team of graduate students enrolled in the Health Sciences and Technology Program at Carleton University, we have begun to try to tackle this controversial topic. There are four of us (Keith Van Ryswyk, Erika Brisson, Mona Ahmad and Natasha Prince). Armed with a fleet of vehicles adapted to include monitoring devices that measure exposures, we've designed an environmental sampling project to measure air pollution, noise and temperature in and around the Farm.

R. Hinchcliff

Site of former Sir John Carling Building

For one hour every morning and another at night, we drove in and around the Farm to map these exposures across the Farm and in the surrounding neighborhoods. In the time between our 1-hour tours, we scampered up and down ladders to maintain a network of 41 air pollution monitors scattered throughout our study area.

On setup day, we strapped the monitors to lamp poles and left them there for two weeks to fend for themselves. For fourteen days they sat there like eggs in inverted tin nests (rain shelters). Natasha and I discovered that some of the noise meters were stolen. We are at least grateful that they spared our samples of NO2 (nitrogen dioxide—a marker of traffic exhaust) and VOC (volatile organic compounds).

Arriving at one site, we learned that an entire sampling setup had been confiscated by the police, tin nest and all. It was eventually returned to us, encased in an evidence bag, but too late to make use of the data it collected. While our 'Farm Squad' has found this work mentally and physically challenging, we completed our fall campaign and are now recharging ourselves for another two week sampling campaign in the dead of winter.

Ultimately, we will consolidate the data and use it to describe how the green space of the Farm impacts nearby air pollution, heat and noise. The data will also provide the opportunity for a future group of students to assess what impact redevelopment of the Farm has on these environmental exposures. Such redevelopment seems unavoidable now with the announcement on December 2 by the federal Heritage Minister Joly recommending the Sir John Carling site on the grounds of the Farm be made available for the new hospital.

With our data, the community will now be well positioned to monitor some of the environmental impacts of such a decision. While our next sampling campaign will be done in frigid winter conditions, we can't think of a better place to conduct fieldwork than in a National Historic Site in the center of our city.

This is a condensed version of an article posted at www.carleton.ca/chaimcentre/2016/more-than-farmland/. The project is being conducted under the supervision of Dr. Paul Villeneuve and Dr David Miller at Carleton University.