les amis de la ferme
friends of the farm

Friends of the Central Experimental Farm

Winter 2018 Newsletter Volume 30 No. 1

Buds, Bark and Beyond

By Roman Popadiouk

R. Hinchcliff

Arboretum.

When we walk around and look at trees, what is most noticeable? It depends on the season. In spring, our eyes easily catch yellow, pink or white flowers, either mixed with young leaves or still without them. Later we are looking for massive branches full of heavy green leaves that cast a desired shade on hot summer days.

Harvest time, and we pay attention to fruits and brightly coloured leaves that become focal points in fall. In winter, evergreen trees are easily spotted by any skier in the bush and parks. The size and age of a tree also attracts, but there our interest is more intellectual than seasonally-inspired emotional curiosity.

What else does a tree reveal, if we start to explore it in detail?

Buds: small but mighty

Buds are tiny parts that are visible on thin branches when the leaves fall off. Yes, they are small in size, but in fact they are big in a tree's life. Inside buds, most of our trees hide an almost complete branch that will grow to full size next year.

In summer, some trees—cherries for example—develop buds that will produce either flowers or leaves next year in separate buds. Buds on the tips of branches will grow as twigs that produce only leaves, while buds that grow along the sides will develop either flowers or leaves. How long a new branch will be and how many cherries will ripen is determined in the next growing season, but the potential number of leaves and flowers is determined by the buds before the branch starts to grow.

Another example, walnut trees cannot be mistaken for cherries because they have different leaves, flowers, branches and trunks. Walnuts also have two differently distinctive types of buds. Buds that will produce pollen-bearing flowers next year appear on the sides of thin branches at the end of summer. They resemble catkins and retain their miniature size until spring.

Despite being small compared to the size of the catkins in bloom, the buds contain all the walnut flowers that will open in the spring. Other types of buds with leafy scales occur everywhere on twigs and hide inside them the next year's leaves. Unlike cherries, on walnut trees the number of leaves on next year's twigs may be greater than those inside a bud. New leaves are developing and growing as stems elongate. Female flowers, and new leaves, develop on trees at the same time on spring-born twigs. So the number of next year's nuts—both green and mature—predominantly depend on the environment of the current growing season.

Bark is a highway

Bark is a common attribute that we see every day on trees on residential streets or in parks. However, most of us do not realize bark is not just the outer surface of a tree trunk. It is also an essential connector between the leaves and roots of a tree. Bark's inner side transports all nutrition from leaves to roots, allowing them to grow, and sends back needed water and mineral elements to leaves using vessels of the youngest wood rings.

Continued on page 3

President's Message

This coming year, the Friends of the Central Experimental Farm will celebrate thirty years as an organization. The Friends were officially granted charitable status on June 30, 1988. During these past thirty years, the Friends have become an essential part of the maintenance and enhancement of the public spaces of the Farm. We have also staged numerous events that bring people to the Farm and provide an opportunity to appreciate its beauty while enjoying tea or buying plants, books, or art. We have also provided education regarding the Farm and its history through our Arboretum and Garden tours, as well as the wonderful books we have published.

Over our thirty years we have worked hard to become a good partner to Agriculture and Agri-Food Canada (AAFC). We work well together in the gardens and we support each other's events. Another way we work as a partner of AAFC is to serve as a member of the Central Experimental Farm Advisory Council (CEFAC).

CEFAC was established in 1999, after the Farm was named a National Historic Site. That designation was a symbol of the important role that agriculture has played in Canada's social and economic development, and the remarkable contribution the Farm continues to make in agri-food research. Almost immediately following the designation, the department launched a public consultation process designed to engage both the local and national public on their perceptions of the site, public access, and possible future uses of non-mission lands.

The consultations were also designed to assist in the development of a management framework to guide future decision making. At the time, it was recognized that there was strong public support for the Farm's land to remain in public ownership, for maintaining the federally designated heritage buildings, and for continued support of the Agricultural Museum. Out of that engagement process, CEFAC was created.

CEFAC serves as an important means of obtaining public input, including actively soliciting the views and opinions of their membership groups. One of the main responsibilities of CEFAC members is to monitor the management and operations of the Central Experimental Farm according to the objectives of the Commemorative Integrity Statement contained in the National Historic Site Management Plan and based on that, to provide advice and recommendations that will enhance the satisfaction of the citizens of Canada. For the Friends, our participation is a way that we can share the thoughts and concerns of our members and volunteers with officials of AAFC.

With the severing of the land that will become the site of the new Civic Campus of the Ottawa Hospital, AAFC will be updating the National Historic Site Management Plan that guides decisions about the Farm. Through CEFAC the Friends will play an active role in those activities.

Judy Dodds

Message de la présidente

Au cours de la prochaine année, les Amis de la Ferme expérimentale centrale (les Amis) célébreront le 30e anniversaire de leur organisme. Les Amis se sont vu conférer de façon officielle le statut d'organisme de bienfaisance le 30 juin 1988. Durant ces trente dernières années, les Amis ont assumé une partie essentielle de l'entretien et de l'amélioration des espaces publics de la Ferme. Nous avons également organisé de nombreux événements qui attirent les gens vers la Ferme, désireux d'en découvrir sa beauté, alors qu'ils prennent une tasse de thé ou font l'achat de livres, de plantes ou d'objets d'art. Enfin, nous avons été en mesure d'offrir de l'éducation sur la Ferme et son historique dans le cadre de visites guidées de l'arboretum et des jardins, et de la publication de magnifiques volumes.

Au cours de ces trente années d'activité, nous avons déployé de grands efforts en vue d'établir un partenariat durable avec Agriculture et Agroalimentaire Canada (AAC). Nous accomplissons du bon travail ensemble dans les jardins et nous nous appuyons mutuellement lors de nos événements. Une autre facette de ce partenariat avec AAC consiste à siéger au Conseil consultatif de la Ferme expérimentale centrale (CCFEC).

Le CCFEC a été établi en 1999, alors que la Ferme venait de recevoir sa désignation en tant que lieu historique national. Cette désignation a symbolisé le rôle important que l'agriculture joue face au développement social et économique et de la contribution remarquable que la Ferme continue d'apporter dans le domaine de la recherche agroalimentaire. Par la suite, le Ministère a lancé un processus de consultation afin de mobiliser le public, tant local que national, à faire connaître sa perception face au site, à l'accès par le public et les utilisations possibles à l'avenir de terres non vouées à la recherche thématique.

Les consultations devaient également mener à l'élaboration d'un cadre de gestion qui servirait de guide dans les prises de décision futures. À ce moment, on a pu constater l'appui très fort du public pour que la terre de la Ferme demeure une propriété publique afin d'assurer l'entretien des édifices fédéraux classés comme faisant partie du patrimoine et de continuer le soutien au musée agricole. De ce processus de mobilisation, le CCFEC a été créé.

Le CCFEC est un moyen important lorsque vient le moment d'obtenir l'avis du public, notamment les vues et les opinions des membres des divers groupes. L'une des principales responsabilités du CCFEC est d'assurer la surveillance de la gestion et du fonctionnement de la Ferme expérimentale centrale selon les objectifs de l'Énoncé d'intégrité commémorative contenu dans le Plan directeur du lieu historique national et en fonction de ceci, de fournir des conseils et des recommandations qui seront satisfaisants aux yeux des Canadiens et des Canadiennes. En ce qui concerne les Amis, notre participation nous permet d'exprimer d'une certaine façon, aux dirigeants d'AAC, les idées et les préoccupations de nos membres et de nos bénévoles.

Compte tenu de la séparation d'une partie du terrain appelée à devenir le site du nouveau campus Civic de l'hôpital d'Ottawa, AAC fera une mise à jour du Plan directeur du lieu historique national qui fait office de guide dans les décisions au sujet de la Ferme. Par l'intermédiaire du CCFEC, les Amis exerceront un rôle actif dans ces activités.

Judy Dodds

Buds, Bark and Beyond … *(continued from page 1)*

Cherry buds

R. Hinchcliff

Walnut buds.

Eric Jones

Roman Popadiouk, Arboretum tour, September 2017.

In addition, the bark of young trees or of young twigs on an old tree can absorb carbon dioxide, working in the same way as leaves, but for a limited time. After a few years, cork-like deposits amass in cells on the outside of twigs and stop photosynthetic activities.

A combined force awakens

Bark and buds always live together and often grow outward at the same pace. There are so-called dormant buds that exist on a tree for decades, unnoticeable even to professional botanists and arborists. Unlike normal buds that produce new branches every spring, dormant buds grow yearly at the same rate as the bark's thickness increases.

A bud's slow growth continues until its tree goes under heavy stress and loses many leaves and branches. If this happens, you may notice new young and thin twigs growing on large old branches or right on a main trunk. Dormant buds break dormancy and become normal buds, but rarely for long. Usually it is a sign of the end of the life span of a tree.

What is missing in this story is the function of roots. But they deserve another story. However, most of us will never see how roots grow.

Roman Popadiouk, who has a Ph.D in Forest Ecology from Moscow University, has contributed many articles to this newsletter and written about the Arboretum's trees in the Friends of the Farm's book For the Love of Trees.

Mark Your Calendars – Master Gardener Lectures

Here are the 2018 talks by Master Gardeners, to be held from 7 to 9 pm in Building 72, Arboretum, Central Experimental Farm. See friendsofthefarm.ca for more information. Sign up for individual talks or the entire series. Individual talks: $12 members of the Friends, $15 others. Series of four talks: $40 members, $50 others.

April 10 – Gardening with Wildlife with Rebecca Last.

April 24 – Flowers and Vegetables: Beauty and the Eats with Judith Cox.

May 8 – Unusual Edibles: Growing the Uncommon and Unexpected for Your Plate with Esther Bryan.

May 22 – A Garden for the Bees with Julianne Labreche.

Thank You and Best Wishes

The Board of Directors wishes to express their enormous appreciation to our members, volunteers, donors, AAFC staff and everyone else who contributed to the success of the Friends activities in 2017.

Thank you for a spectacular year. Best wishes for the New Year. We look forward to seeing you again in 2018.

Beauty of the Farm by Ramin

Join us for a presentation of stunning photography by Ramin Izadpanah, to be held from 7 to 9 pm in Building 72, on Tuesday, March 27, 2018. Check friendsofthefarm.ca for further details closer to the date.

Merivale Shelterbelt—Last Chance to Donate

For several years now, the Friends of the Farm have been planting trees and shrubs at the western boundary of this National Historic Site. The Merivale Shelterbelt, as it is known, beautifies the surroundings and provides a recreational path. It protects the fields from salt and soil erosion, and helps clean the air.

Thanks to many generous donors, the Friends' volunteers have been able to plant dozens of new trees and shrubs at the Shelterbelt. And for Canada 150, Agriculture and Agri-Food Canada added 150 new trees, with the last one officially planted by Minister MacAulay, accompanied by student Thomas Davidson. (See the article on page 6 of the Summer 2017 issue of this newsletter.)

To fill a few remaining gaps, the donor program was extended for one more year. Donors have until July 31, 2018, to make a contribution and have the name of someone or something they care about inscribed on a plaque on the commemorative wall.

Help us complete the Shelterbelt and be included in a final celebration in September 2018. For more information please visit the Shelterbelt page on the Friends' website.

Liam Finney, Agriculture & Agri-Food Canada

The Honourable Lawrence MacAulay, Minister of Agriculture and Agri-Food Canada, and Thomas Davidson beside a plaque (top) at the Merivale Shelterbelt in September. After a tree-planting ceremony, the Minister unveiled the plaque that bears the names of all past prime ministers and ministers of agriculture.

Liam Finney, Agriculture & Agri-Food Canada

Minister MacAulay speaking at the ceremony.

R. Hinchcliff

Some of the 150 new trees at the Shelterbelt.

Destination Ontario Bus Tour, 2017

By Denise Kennedy

Thanks to all who participated on our successful Friends of the Farm bus trip last June. We were sold out in January!

Old and new friends visited interesting places along the way. The sundowner dinner cruise on the Grand River was a treat after a long day on the bus and a visit on a very warm day to the Toronto Botanical Garden. Our trek through the Marsh at Point Pelée was particularly rewarding with wild life. Then our host did not disappoint us at the Mandarin, where we enjoyed good food and good conversation—as I could tell by the buzz in our private dining room.

The pièce de résistance was Whistling Gardens in Wilsonville, a 20-acre new botanical garden officially opened in 2012, where once there was only wetland. It has become the largest public, independently owned botanical garden in North America. Darren and Wanda Heimbecker were wonderful hosts, and their garden should be a "must see" destination on every gardener's bucket list!

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

Neville Ward, Champion of Good Causes

By Richard Hinchcliff

E. Neville Ward, a long-time member of the Friends of the Farm, is a passionate supporter of many charities in Ottawa, with a particular interest in those that promote the well-being and education of children.

Neville was born in Toronto and spent his childhood there until the age of 12 when his family moved to Dundas, Ontario, where he completed his primary and secondary schooling. He attended McMaster University in Hamilton, graduating in 1967 with an honours B.A. in geography.

One of his fond memories of McMaster was his summer job driving a lawn mower, cutting the campus grass. He did not envy those of his peers who worked indoors by the blast furnaces of the Dofasco steel mill. His job included some weeding of the flowerbeds at the residence of the University President. "I had learned to identify weeds in my family's garden," he says, "so I was trusted to look after the President's flowers."

Land use planning

After his studies, Neville moved to Ottawa to a job with the federal government first in the Department of Energy, Mines and Resources, and later with Environment Canada. After two years, he took educational leave to study at the University of Alberta in Edmonton, attaining an M.A. in geography (environmental sciences).

He returned to Environment Canada in 1971 to coordinate and write a series of provincial and territorial land use planning reports. Neville also worked on comprehensive *The State of Canada's Environment* reports that were published in 1991 and 1996.

Neville retired in 1996. Following his mother's death in 2006, he established endowment funds with several Ottawa charities devoted to the welfare of children. This was a special interest that he shared with his mother and to which he has continued to devote his time and energy in his retirement.

Early members of the Friends of the Farm

Neville's mother Kathleen Elizabeth Ward was born in Kemptville in 1906, attended teachers college in Ottawa and taught grades one to eight in one-room schoolhouses in the Ottawa area. She later studied household science at the University of Guelph and was then able to teach school combining her love of children and her home economics skills.

Neville remembers his mother tending 60 roses in her garden at their property in Dundas, along with many lilacs and peonies. "She loved flowers and loved spending time at the nearby Royal Botanical Gardens." After she moved to Ottawa in her 80s, the Ornamental Gardens and Arboretum at the Farm became favourite destinations for her. She was 100 years of age when she died.

A year after Kathleen moved to Ottawa, the Friends of the Farm was formed and she and Neville were among the first members, supporting the mission and projects of our volunteer organization. Recently, Neville has been a generous financial sponsor of both the *For the Love of Trees* and *Blooms* books of the Friends.

E. Neville Ward

Helping the needy

Neville financially supports six different charities that primarily provide help for children. He sits on the Community Council of the Salvation Army Bethany Hope Centre and is passionate about the work done at the Centre to help pre-school children in underprivileged young families with their medical, dental, nutrition, schooling and other needs. He is also active with the Fathering Program of the Bethany Hope Centre, "a program that provides a place for young fathers to be encouraged in parenthood and personal growth," he says.

Neville sits on the Board of the Canadian National Institute for the Blind, Ontario East Region. One program he actively supports there offers access to information technology to underprivileged children and youth. This includes DAISY (Digital Accessible Information System) portable machines, tablets, smart phones, Braille readers, and special apps that, for example, provide audio versions of documents to help those at both pre-school and school age levels.

As a champion of these and other charities devoted to the welfare of children, Neville makes a real difference to the lives of many in Ottawa. We salute him for this work and are grateful that he is also a life member of the Friends of the Farm.

Dear Member: We would love to hear your story or that of a fellow member. If you'd like to share it or make a suggestion, please contact the Friends of the Farm office or newsletter@friendsofthefarm.ca .

Heritage at Risk: Dominion Observatory Campus

By Richard Hinchcliff

The boundary of the hospital site is marked on this Google satellite photo of the Dominion Observatory campus and its cluster of heritage buildings. (1) Dominion Observatory, (2) Observatory House, (3) Geophysical Laboratory, (4) Machine Room, (5) Geophysical Data Centre, (6) Seismology Building, (7) Azimuth Mark, (8) Photo Equatorial.

The most familiar building at the Dominion Observatory campus is the Observatory itself. For decades until the telescope was removed in the 1970s, the public was invited on Saturday nights to view the stars. The Observatory became one of the most well known public buildings in Ottawa and is still a landmark, seen here from across the land that is now part of the Civic hospital site. The smaller domed Photo Equatorial structure that protected another telescope is at the left.

A large dignified residence, the Observatory House of the Chief Astronomer allowed for frequent entertaining. Built in 1909, it was converted to laboratory and office space in 1963.

Built in 1913-14, the Seismology Building originally housed the Geodetic Survey of Canada. Since 1961, it has served as Natural Resources Canada's centre for earthquake information.

This Azimuth building, which resembles a small medieval tower, housed astronomical equipment until the 1970s.

There are buildings at the Farm adjacent to the new Civic hospital site whose heritage qualities may be at risk with the loss of their place in a historic 19th century landscape. The former poultry building was discussed in the Fall 2017 newsletter at www.friendsofthefarm.ca/newsletters.

The Dominion Observatory and its surrounding buildings were designed for particular research needs, and to also be a distinctive group in a picturesque campus setting within the larger area of the Central Experimental Farm. All but one were built between 1904 and 1917, and almost all have been given heritage status.

> *"The Dominion Observatory building remains the focus of a group of harmonious buildings … Carling Avenue and the Experimental Farm provide important barriers which protect and maintain the original character of the "observatory campus."*
>
> Federal Heritage Buildings Review Office

The buff and red sandstone exterior of the Observatory, according to the Federal Heritage Buildings Review Office (FHBRO), "contrasts with the green copper of the dome and surrounding natural landscape of the Farm, giving the building a vibrancy not found in other Ottawa federal buildings of this period."

"The (Dominion Observatory's) distinctive shape and colour, as well as its long and important involvement with city life, has made it one of the most well-known and easily recognizable of Ottawa's public buildings."

Heritage at Risk … *(continued)*

Although the astronomers have long since gone, the attractive park-like landscape of that part of the Experimental Farm has helped maintain the original character of the observatory campus, which is a key component of the Farm as a National Historic Site.

From the open space on the Farm grounds to the south, there is a clear view of the Dominion Observatory and the Observatory House. This open space is now part of the hospital site.

Critical research

An observatory needs "a clear view of the heavens." In addition, according to the FHBRO, it needs "distance and isolation from other buildings, whose lights can interfere with the work of the astronomers. It was with this in mind that the raised site on the experimental farm was chosen."

Construction of the Dominion Observatory began in 1902 and it was ready for occupation in April 1905. Designed as a laboratory and research centre, it housed telescopes, chronometers and solar cameras.

Work done at the Observatory and the seven other buildings on the campus was critical to astronomical and geophysical research in Canada, and won international acclaim. Important research continues there in seismology at Earthquake Canada's office of Natural Resources Canada. The observatory buildings also house NRCan's offices of energy efficiency.

Tropical Getaway

"Dreaming of palm trees in paradise? Believe it or not, that tropical getaway is just around the corner in a restored greenhouse in the heart of the Experimental Farm." Thus began a glowing article about the tropical house in the Holiday 2017 edition of *Ottawa Magazine*, issued in November.

During the summer of 2017, Farm staff prepared an overflow display of tropical plants outside at the rear of the greenhouse (photo). Visitors in the summer will again be able to enjoy this added dimension to their tropical getaway at the Farm. In the meantime, as *Ottawa Magazine* says, "There's just a thin sheet of glass between you and the sub-zero temperatures and snowy landscape outside … the conservatory is a temperate world apart."

Display outside the Tropical House, July 2017.

Book Drop-off

Volunteers J. H. Cole Robillard, Jeannine Lewis (coordinator of the book sale), and Donna Pape among some of the 650 boxes of books dropped off by over 180 donors in October. Volunteers are now sorting the books in preparation for the June sale.

Farm Photos

Here's a look back to the winter of 1977, kindly submitted by Sharon Bernard.

Do you have photos taken at the Farm you'd like to share? We'd love to see them. Please contact the Friends' office at 613-230-3276 or send a message to newsletter@friendsofthefarm.ca

James Fletcher: A Person of National Historic Significance

By Daniel F. Brunton

While he was a major force in biological research in Ottawa and across Canada in the late 19th - early 20th Century, James Fletcher's (1852 - 1908) contributions have long been under appreciated. Finally, over a century after his untimely death, that neglect is being corrected.

On 9 November, 2017, Minister of the Environment and Climate Change Catherine McKenna led the unveiling of a historical plaque commemorating Fletcher's contributions to Canada. It is to be situated on the south side of the parking lot for the Fletcher Wildlife Garden off Prince of Wales Drive. Minister McKenna and others recounted how Fletcher virtually 'invented' economic entomology, started up what are now world-class biodiversity specimen collections and inspired many others to get involved in studies of Canadian biodiversity.

At the ceremony, appropriately held at the Central Experimental Farm, Associate Assisstant Deputy Minister of Agriculture and Agri-food Canada Gilles Saindon noted that in the late 1880s Fletcher founded both the Canadian National Collection of Insects and the National Collection of Vascular Plants from his personal collections. Both of these are now globally significant and offer irreplaceable materials for a host of on-going, and as yet unimagined economic and scientific applications.

The core rationale for Fletcher's designation as a Person of National Historic Significance was summed up by Minister McKenna this way:

> "Fletcher was the first official Dominion Entomologist and to this day, the ongoing viability of the Central Experimental Farm and its critical research—like climate change research and studies on plants and insect control—benefits not only all Canadians, but the entire global community.
>
> Fletcher's work is unique in the history of our nation."

Another of James Fletcher's contributions that was especially important to many ceremony attendees and which I focused most of my remarks upon, however, was his record as a team builder. We'd call it 'networking' today but in Fletcher's day they had a more quaint term: letter writing. In his cramped and rather challenging handwriting he communicated with a massive network of contacts he developed from coast to coast that included anyone who had a passion for the natural world or needed his aid.

Parks Canada

Unveiling of Fletcher plaque. Left to right: speakers D. F. Brunton; Gilles Saindon, Agri-Food Canada; the Honourable Catherine McKenna, Minister of the Environment and Climate Change; Master of Ceremonies Dean Oliver, Historic Sites and Monuments Board of Canada.

William J. Topley photo from *Ottawa Naturalist*, 1909

James Fletcher.

His most notable local achievement was a vital role in founding the Ottawa Field-Naturalists' Club. The OFNC is Canada's largest and oldest continuously active regional natural history society, tracing its roots back to 1863. It was floundering as a branch within another organization in the 1870s, however. Soon after arriving in Ottawa, Fletcher assembled a group of talented, young keeners and spearheaded the effort in the spring of 1879 to rekindle regional natural history investigations. He was the engine that powered the venture, holding virtually every significant position within the organization through its formative years. He was also inaugural editor of the Club's scientific publication that became Canada's premier natural history journal *The Canadian Field-Naturalist*, now in its 137th year.

It is probable that he also literally gave his life for his efforts on behalf of Canadian farmers who were struggling with various biological challenges. It is likely that years of working with arsenic and other toxins in his successful development of effective agricultural pesticides at least contributed to his early death at age 56 from stomach cancer. One can only imagine how much more he would have achieved if he (and we) had been blessed with another 15-20 years of his activities.

James Fletcher… *(continued)*

A torrent of dismay and distress erupted within his legion of associates upon notice of his sudden death. Flowery terms like *"our beloved friend"* and *"whom I loved as brother"* were freely expressed, not just amongst his naturalist friends but by prominent public figures such as Minister of Agriculture Sydney Fisher. This was not language typically heard in stiff-upper-lip, WASP-ish Edwardian Canada!

The impressive memorial fountain that is located along the Driveway by the Agricultural Museum is one result of the quickly oversubscribed Fletcher Memorial Fund established by the OFNC. Donations totalling over $1,800 (that's about $45,000 in contemporary terms) were received in less than a year. There were sufficient funds, in fact, to also commission a formal portrait. Appropriately, it now hangs in the Farm's Saunders Building—home to the National Vascular Plant collection that Fletcher founded.

Let's leave the last words to one of James Fletcher's good friends. At the 1910 unveiling of the memorial fountain, Dominion Chemist Frank Shutt said of him:

> "His work was of incalculable benefit to the farmers and fruit-growers of this country … . Probably of even more value, however, was his inspiring enthusiasm, that power to awaken in others an interest in the study of animate nature. And in this connection we of Ottawa were particularly fortunate."

Recognizing that legacy is surely the best tribute of all.

Parks Canada

Fletcher plaque.

Ottawa Naturalist, 1912

Fletcher Memorial Fountain installed at the Farm in 1910.

Other sources of information on James Fletcher and his Ottawa natural history context, which may be of interest, include:

Boswell, R. (2015). New light on the origins of the Ottawa Field-Naturalists' Club. *Canadian Field-Naturalist*, 129: 207-213.

Brunton, D. F. (2004). Origins and history of the Ottawa Field-Naturalists' Club. *The Canadian Field-Naturalist*, 118: 1-38.

Brunton, D. F. (2016). James Fletcher is designated a Person of National Historic Significance. *Trail & Landscape,* 50: 40-43.

Daniel F. Brunton, former president of the Ottawa Field-Naturalists' Club, is a prominent botanist, birder, conservationist and spokesperson for natural history in the National Capital Region.

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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: Daniel Brunton, Julianne Labreche, Denise Kennedy, Roman Popadiouk. Translator: Lise Anne James.

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Early Farm Photographer

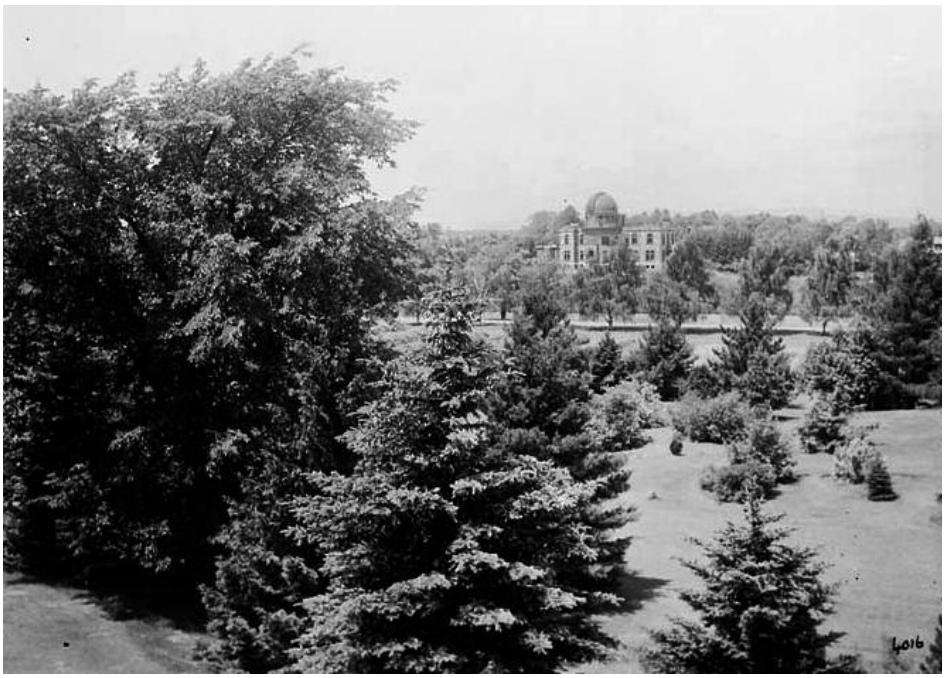
William J. Topley (1845-1930) began photographing Ottawa and its people 150 years ago in January 1868. Thanks to him we have many striking images of the Central Experimental Farm and those in charge during the early days.

Topley was born in Montreal and raised in Aylmer, across the river from Ottawa. He began as an apprentice in 1864 with William Notman, a Montreal photographer. When Notman decided to open a studio in Ottawa on Wellington Street across from the new Parliament Buildings in January 1868, he placed the 22-year-old Topley in charge. Topley made such a success of it that he was able to open his own studio on Sparks Street a few years later.

His reputation and business success were forged inside his studio with his portraits of prominent people in late Victorian Ottawa society, including many politicians. Senior personnel at the Farm, including William Saunders, James Fletcher and William Macoun, took their turn sitting for him.

Topley Studio/LAC/PA-033338

William J. Topley



Topley Studio/LAC/PA-009840

View to Dominion Observatory campus from southeast, c. 1910, across current hospital site. Photo by William Topley.

Although portraits were his bread and butter, Topley produced many images of Ottawa scenery. Those he took at the Farm capture the scenic beauty of the landscape as well as activities from work experiments to garden parties, and are invaluable for their insight into the early days of this National Historic Site.

Researching Historic Gardens and Landscapes

Ottawa landscape historian, Edwinna von Baeyer, has launched a website to support research and writing on historic gardens and landscapes, and the people who made them.

Researching Historic Gardens and Landscapes provides links to the history of gardens and landscapes around the world. On the Horticultural History Links page, the researcher will find a wealth of links to information on the history of fruit, vegetables and ornamentals, as well as market gardening and hybridizing. On the Resources page, von Baeyer has amassed links to books, journals, theses, films, archaeobotany and horticultural organizations.

The visitor is also able to order von Baeyer's books on the website and to read her blog posts, which focus on Canada's garden, landscape and horticultural history. You may visit the site at researchgardensandlandscapes.wordpress.com.

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
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SENIOR COUPLE LIFE	$650
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Going Grassless… *(continued from page 12)*

leave their mark while my dog defends his turf indoors by the window. My hope was to reduce costs with my own design and without hired help.

Fortunately, we did have a large stone entryway built a few years ago by a local professional landscaping firm. The only hardscaping needed was to build a meandering footpath around the front of the house, a day's work requiring a roll of black fabric cloth, bags of river rock and some irregularly shaped grey paving stones. We dug a shallow trench and lined it with fabric cloth. Then we placed the paving stones strategically along the path and filled gaps with river rock. The long-ago planted Champlain roses—part of the Explorer series and crimson-red in color—looked glorious beside the new walkway.

There was more grass to remove. This time, we worked smarter. Another gardener suggested the lasagna method of grass removal, which like lasagna, calls for layering. Just cover the grass with five to six sheets of newspaper to block the sunlight. Then apply 3" to 4" of topsoil. Top with mulch. Water well and let it cook in the hot sun. A few weeks later, my grass was already decomposing. The cedar mulch drastically reduced the need to weed. I read that even while the grass was breaking down, it was possible to plant from pots. I tried. Sweet success and only 55 days to go.

Designing for the front yard

Unlike a backyard, a front yard is shared with neighbours, pedestrians, cyclists and drivers. One challenge was to make a front garden interesting from many angles. Also, because grass still rules in this older '60s suburb, it seemed courteous to share the plan with immediate neighbors who watched the project with interest.

Height was also a factor. With taller plants already planted around the house, the design challenge was to seek out lower-growing ones. Drift® and Flower Carpet® roses, easy-to-grow and pest resistant, proved a good solution. Newer dwarf cultivars also worked, including dwarf calamint (*Calamintha nepeta* ssp.*nepeta* 'Blue Cloud'), dwarf delphinium (*Delphinium grandiflorum* 'Summer Stars') and dwarf obedient plant (*Physostegia virginiana* 'Crystal Peak White').

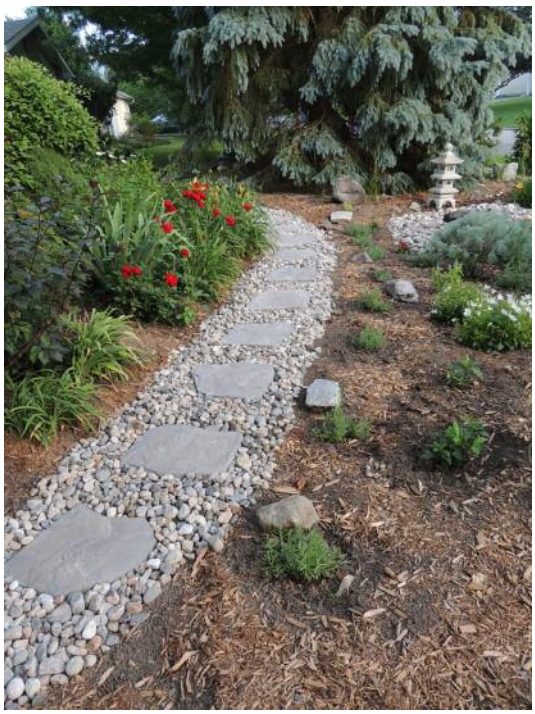
Drought-resistant, sun-loving, Mediterranean herbs were added—lavender (*Lavandula angustifolia* 'Munstead'), oregano, varieties of thyme and sage. To attract pollinators, we planted butterfly weed (*Asclepias tuberosa* 'Hello Yellow') and sneezeweed (*Helenium autumnale*) for butterflies and bees. Despite its unfortunate name, sneezeweed is neither a weed nor does it cause sneezing. It does, however, attract pollinating insects in late summer and fall. Finally, to deal with challenges along the edge of the lawn, we planted tough groundcover evergreens, sedums, creeping phlox and sandwort. Soil was amended with bags of sheep manure and compost.

We transported lighter rocks from the family farm. Heavier rocks, too costly, were excluded. Instead, we placed feather rocks—porous, volcanic rock that is lighter and cheaper—strategically in three corners of the garden with tall, non-invasive grasses planted nearby. Less than 30 days left.

Deadline challenges

The night of the potluck arrived. The front garden, still young, was in bloom. There had been precious little rain since the project began. We avoided using the hose to prevent spraying the leaves, risking disease. Every morning, multiple trips with the watering can were needed to water the base of the plants until they took root. More cedar mulch was spread to preserve moisture in the soil. My back was sore. Still, the project was done.

Guests came and left, later e-mailing thanks and praise. Two days later, it rained, finally.



Hardscaping at the front of the house.

English lavender in full bloom.

Photos by Julianne Labreche

Julianne Labreche is a freelance writer and gardening enthusiast who volunteers with Master Gardeners of Ottawa-Carleton. This article was originally published in Lee Valley's "Gardening Newsletter," October 2016. It is presented here with permission of the author, Lee Valley and the "Gardening Newsletter."

Going Grassless

By Julianne Labreche

The finished front garden.

There's nothing like a deadline to get work done around the garden. That's why, after volunteering in spring last year to host the annual Ottawa-Carleton Master Gardeners' summer potluck, it seemed like a good idea to remove every blade of grass from our front lawn and go grassless. The countdown was on—82 days to go.

Truth be told, this project had been on my wish list for a while. We are like many gardeners who decide to go grass free: changes to our suburban-sized lot had already occurred over the years. Each spring, as front bed flower borders were edged, more sod got chopped and turned into compost. Less grass? Less mowing and more time to smell the roses.

Grass was, well, so much work. Our west-facing front yard is hot and dry. Each year, there was fertilizing, top dressing, aerating, mowing and weeding to be done. Not to mention endless watering. For whatever reasons—including climate change—dry spells seemed to grow longer every summer. Even after so much work and watering, our lawn rarely looked top-notch. Besides, turf grass seemed a tad, well, boring compared to the riotous bloom of perennials, shrubs, ornamental grasses and trees. Then, too, there was the hope of new arrivals—pollinators, including birds, bees, butterflies and other beneficial insects.

Help from my friends

Fortunately, a few neighbors and friends were trailblazers, creating grassless front yards years ago. So often I had admired their gardens when walking past. They were an inspiration and a wake-up call that while grass may be a popular monoculture, there are other options too—no matter the size of the space.

Take my friend Pat Voight's garden, for instance. Her small front yard is full of every sunny perennial imaginable: colorful daylilies, phlox, perennial hibiscus, crocosmia and echinacea. After grubs destroyed her lawn over a decade ago, change was needed. First, she tried annuals but they were pricey. Then she moved to perennials. When one plant didn't work, she'd take it out and try another. "My garden is like the ocean," she says. "It's always moving like the tide."

She read books about gardening, talked to staff in local nurseries, learned to avoid invasive species and decided to limit her choices to those suited to local growing conditions. Today, passersby often stop to see what's in bloom.

Around the corner is Cynthia Lovering's front yard. After moving into their two-storey home in 1995, they also lost their front grass to grubs. Like Pat, she initially worked with a professional garden designer. Over the years, the design evolved to suit her personal style. She did much of the work herself, gradually expanding the garden space. Today, it is a mature garden with Shasta daisies, black-eyed Susans, lupines, ground covers and herbs, including her favorite, lemon thyme. There's a dry streambed, a bark path and a ginkgo tree for shade. She describes it as a "free-flowing garden," not a formal one. In one corner is a bench, welcoming the weary to sit, relax and enjoy the peaceful surroundings.

Nowadays, she believes her garden is less work than grass. It continues to give her endless hours of pleasure. There's no loud noise from a lawnmower and more social time, including time spent with neighborhood children, who like to drop by to smell the herbs or help out in the garden.

Getting started

By last May, the grass in my front yard was already dry. With promises of a mow-free front yard as a reward, I put my hard-working husband to work. Initially, the plan was to dig up the sod, re-use the topsoil and compost the grass. Together, we tackled the lawn edge first, prone to weeds because of damage from winter snowplows and neighborhood dogs that

Photos by Julianne Labreche

View of the front yard.

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