



**Fredericton Botanic Garden
Association Newsletter**

**Bulletin du Jardin botanique
de Fredericton**

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Winter 2017

GARDENING IN WINTER

Message from the Acting President
James Goltz

Most gardeners have mixed feelings about winter. It's a welcome time for a break from weeding, dead-heading, trimming and other labour-intensive and time-consuming garden maintenance, but it's also a time when most gardens are least colourful and enticing. Some gardeners, though, have thoughtfully designed their gardens to have showy appeal in all four seasons and can enjoy their garden from a warm indoor vantage point regardless of the weather.

Winter provides a wonderful opportunity for gardeners to plan and prepare. It's a perfect time to check out the latest garden catalogues for new plants that capture your imagination and interest, to research gardening options on the internet and in publications, to contemplate the design of your garden and how you might enhance and revitalize it, to plan your travel itinerary for visiting gardens that you have always wanted to see, to pay attention to houseplants that share your living space, and to start planting plants like peppers, herbs and tomatoes that benefit from a head start

Two of our upcoming Talks in the Garden events will enable you to enjoy and celebrate gardening in the winter. On Saturday February 11, Matt Methven will conduct a tour of the indoor green spaces managed by the Department of Biology at the University of New Brunswick. Matt is a former board member of the Fredericton Botanic Garden Association and helps us with our annual Spring Fair and Plant Sale. On the evening of Thursday, February 16, Wayne Burley will give a talk on how his garden in the City of Fredericton has evolved over the past three decades and how he has designed it to become an urban oasis in all seasons.

This winter, the Fredericton Botanic Garden Association is hoping to devise and implement a new vision for our own renewal and revitalization. We can't do this alone. We greatly appreciate and rely on our many stal-

Annual General Meeting and Silent Auction

Speaker: David Coburn
Topic: Six Generations
of Family Farming on Keswick Ridge
Saturday, February 18, 1:00 pm
Unitarian Fellowship, 874 York Street

Talks in the Garden

*Enjoying Indoor Green Spaces:
A Guided Tour of the UNB Greenhouses*

Guide: Matt Methven
Saturday, February 11, 2:00 pm
Department of Biology, Loring Bailey Hall
University of New Brunswick
Register in advance, details on page 2

Evolution of an Urban Garden

Speaker: Wayne Burley
Thursday, February 16 7:00 pm
Fredericton Botanic Garden Association Resource
Centre on Cameron Court

*F.A.S.T. Track to Garden Planning: Planning
the Right Garden for You and Your Property*

Speakers: Rod Wetmore (Wetmore's Nursery) and
Lisa Miller (landscape designer/horticulturalist)
Wednesday, March 15, 7:00 pm
Fredericton Botanic Garden Association Resource
Centre on Cameron Court

See page 2 for more "Talks"

wart and generous volunteers and supporters. We would welcome the energy, skills, creativity, ideas and dedication of persons who would be interested in joining our Board or our Committees, or who would like to help us with upcoming events such as our annual Spring Fair and Plant Sale on May 28. Please contact us if you are willing to help.

Enjoy the winter and make the most of it!



Talks in the Garden

Topic: Evolution of an Urban Garden

Speaker: Wayne Burley

Date: Thursday February 16

Time: 7:00 pm

Location: Fredericton Botanic Garden Association Resource Centre, 10 Cameron Court, Fredericton

Wayne Burley's garden has evolved into one of the most beautiful, intriguing and appealing gardens in the city, as a result of over 30 years of investment of his time, resources, energy, vision and creativity. Learn how Wayne has planned, improvised on, designed and sculpted his garden to become a colourful urban oasis most worthy of being featured on the Fredericton Botanic Garden Association's Treasured Garden Tour.

Tour: Enjoying Indoor Green Spaces in Winter: A Guided tour of the UNB Greenhouses

Leader: Matt Methven

Date: Saturday February 11, 2017

Time: 2:00 pm; duration 1 hour

Location: Department of Biology, University of New Brunswick

Details: Participation limited to 15 people. Must register in advance by email, fbga@nb.aibn.com or phone 452-9269. Meeting location will be provided upon registration.

Delight your senses and take a brief respite from winter amidst the greenery, floral colour and diverse array of plants growing in the University of New Brunswick's indoor green spaces. Particular attention will be given to tropical plants and cacti, how plants defend themselves from predators and harsh environmental conditions, and how they have adapted to their native habitats.

Matt maintains these green spaces, is a former board member of the Fredericton Botanic Garden Association and helps us with our annual Spring Fair and Plant Sale by tending many of our seedlings until the day of the plant fair and by doing volunteer work around the time of the fair.

F.A.S.T. Track to Garden Planning: Planning the Right Garden for You and Your Property

Speakers: Rod Wetmore (Wetmore's Nursery) and

Lisa Miller (landscape designer/horticulturalist)

Date: Wednesday, March 15 (Please note that this talk is on a Wednesday night,

Time: 7:00 pm

Location: Fredericton Botanic Garden Association Resource Centre, 10 Cameron Court, Fredericton

What gardener hasn't had grandiose plans inspired by photos in garden magazines or visits to dream gardens, only to find that things don't work as well as hoped in their own garden? Learn how to make the best decisions for you and your garden conditions. As for the acronym, no sneak previews. You'll have to attend this talk to find out what it means. Bring along lots of technical questions and feel free to bring pictures and sketches.

The European Fire Ant: Is it in Your Garden? What Can You Do About It?

Speaker: Chandra Moffat

Date: Thursday, April 20

Time: 7:00 pm

Location: Fredericton Botanic Garden Association Resource Centre, 10 Cameron Court, Fredericton

This aggressive, stinging ant was detected in Fredericton in 2015 but has been in the province for decades. It spreads primarily via movement of infested garden and landscape material. Once established, colonies are very difficult to eradicate, and can leave your lawn or garden unusable! Come learn how to identify the European fire ant, what you can do to keep it out of your yard and how to manage it if you find it.

Date: Thursday May 18

Topic and Speaker: To be announced upon confirmation

Silent Auction

As is the custom, we are asking members for donations to the silent auction at the Annual General Meeting

We are looking for a diversity of interesting and enticing items that will generate much frenzied bidding. Since space is quite limited, we would appreciate quality items only.

If you can offer a service, that would be very welcome, or donate an item, please call Wendy Bourque @ 450-3904 or Nancy Beltrandi @ 459-8004.



Science in the Garden

By Steve Heard (Professor, Biology, UNB).



Photo: Vole tunnels revealed by melting snow, © John Fowler (johnfowler.photoshelter.com), used by permission

On a cold February day, when breath hangs visible in the frigid air and even our winter-resident birds are huddling out of sight, it's easy to think that life outdoors waits suspended for a thaw. Think twice, though, because when that thaw comes it will bring evidence – like the networks of vole tunnels in the photo above – that this apparent suspension was just an illusion. There's a lot going on, even on the coldest days of winter; but a lot of it is happening out of sight, under the snow.

The snow is just the ticket, for a lot of plants and animals. That layer of snow provides an insulating blanket: for example, with a 35 cm snow layer, ground-surface temperatures can stay at or just above freezing even when air temperatures drop below -30°C . Those near-freezing temperatures are more than warm enough for many species to avoid freeze damage, and warm enough for many to remain active.

Among species using snow cover to avoid freeze damage are plants we call *chamaephytes* and *hemicryptophytes*. These are admittedly cumbersome words, but the concept is simple. Through winter, both kinds of plants maintain their living-but-dormant buds above ground level, but under the protective cover of snow. Chamaephytes, such as bunchberry and wild blueberries, bear buds on woody stems but less than about 25 cm above ground. Hemicryptophytes, such as daisies and many grasses, lack woody stems but maintain buds at or just above the soil surface. It's not, of course, impossible for a plant to maintain over-

wintering buds exposed to winter air – our trees do it (and our conifers even maintain green foliage). It's not cheap, though. Such plants need to prepare for winter cold stress by investing in thick, waxy leaf coatings, thick bracts to shelter buds, and high concentrations of antifreeze molecules (sugar, glycerol, and proteins) in their tissues (see *Our Plants Prepare for Winter* in our Winter 2015 Newsletter). Chamaephytes and hemicryptophytes, comfortably ensconced under the snow, avoid the need for this investment and can put those resources to other uses, such as an earlier start to the next year's growth.

The tunnel networks that become visible with spring thaws, though, remind us that other species don't just rest under the snow. Instead, they move about down there, foraging all winter and seldom needing to surface. Among these are the tunnel architects, voles and shrews (two groups of abundant, but secretive, small mammals). Voles are herbivores, feeding on roots and bulbs, green buds, and bark. In high densities (it's true) they can damage a garden, although we don't begrudge them a modest taste of ours since they're part of the natural web a garden can celebrate. Shrews, in contrast, are predators. They feed voraciously on worms, grubs, snails, and even mice and voles considerably larger than they are, in order to fuel their legendary high metabolic rates. They can eat several times their body weight each day (and in doing so can provide excellent pest control). For these tunnelers, the snow provides warmth that makes winter-long activity possible. It also provides protection from their own predators – although not perfect protection, since ermines, foxes, and others have keen hearing and listen for scurrying feet to pounce upon.

There's a lot going on under the snow. Life has found an astonishing variety of ways to make it through winter – and that's something to think about the next time you walk, ski, or snowshoe through our Garden.

facebook

Join the Fredericton Botanic Garden group page on Facebook to see announcements of events, pictures of the Garden and watch for our upcoming contest.



Report on presentation to City Council

By Steve Heard

Each year, the FBGA makes a presentation to the Community Services Committee of Fredericton City Council. On January 12, Steve Heard made this year's presentation on behalf of the FBGA Board of Directors.

Because there was substantial turnover on Council in the most recent election, Steve summarized the aims, history, and activities of the Garden for Councilors who were unfamiliar with us. He also outlined some recent achievements (including the installation of the sculpture "Rhodo") along with short-, medium-, and long-term goals.

Response from Council was friendly and supportive. Several Councilors spoke about their desire for City-FBGA partnership to continue, and made helpful suggestions for funding and other assistance. Council appears to be particularly pleased with FBGA's engagement with the Arts and Culture community ("Rhodo" being a good example), giving us an interesting avenue to consider for future development that taps into known Council interests.

The FBGA is pleased to have the City of Fredericton as a partner in our operation, and we look forward to new avenues of cooperation ahead.

Membership

Visit the website frederictonbotanicgarden.com and find the calendar of upcoming events. Also the option to buy a gift membership has been added under the Membership tab.

Plant Sale

The Committee wishes to announce there will be over 500 healthy herb plants available at this year's event

Board Development

Hello Fredericton Botanic Garden Association Members.

Have you been wanting to become more involved in your Association? We are currently looking for some members to fill a few vacancies. Perhaps your experience would make you a good fit to join the Association's board of directors. If you have the time (approximately one board meeting per month and participation in several events throughout the year) and some expertise that you feel might be an asset to the organization, please contact Wendy Bourque (450-3904) or Graham Allen at the FBGA office (452-9269). We really hope you will consider volunteering some of your time to contribute to this long standing community organization.

The Fredericton Botanic Garden Association Newsletter is published four times a year by the Fredericton Botanic Garden Association, Inc. The FBGA is a registered charitable organization for tax purposes.

The objectives of the FBGA are to guide the establishment of the Fredericton Botanic Garden and to foster an awareness and appreciation of plants.

To obtain information on membership and to become involved in FBGA activities please contact us: **506-452-9269 PO Box 57, Stn. A, Fredericton, NB E3B 4Y2 or fbga@nb.aibn.com**
Web: www.frederictonbotanicgarden.com

Fredericton Botanic Garden Association Board of Directors

Vice-President - Jim Goltz Treasurer - Stephen Heard
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