

theBulletin

September - December 2014

The Garden is a-buzz!

Bumblebees, honey bees, mason bees, butterflies and other pollinators provide essential ecosystem services by pollinating native plants, as well as crops, fruit trees, vegetables and backyard gardens. In the spring and summer, you can walk sections of the Garden – the Laburnum Walk in the spring, for example – and if you stop, you can hear the low drone of thousands of bees doing what bees do best.

But this is not the case everywhere.

Honey bee health is declining across North America and many of our native pollinators are susceptible to the same adverse effects of industrial agriculture, urbanization, disease and pesticide use. In addition, many parks in Vancouver are inhospitable to pollinators because of the predominance of frequently maintained turf areas, lack of native plants and loss of suitable nesting sites.

When we think of reasons why we value places like VanDusen Botanical Garden or the Bloedel Conservatory, we most often think of what it does for us, personally, or for those close to us. It is only natural that we should do so.

But the benefit that the Garden offers to pollinator populations – literally thousands of bumblebees, honey bees, mason bees, butterflies and others – is massive, which is why the VBGA is spearheading the Garden's participation in the Pollinator Project: a collection of organizations in the Lower Mainland dedicated to raising public awareness about the plight of pollinators, and also taking action (where possible) to improve the health of local pollinator populations. The project was launched by City of Vancouver Parks Board in April to support its Local Food Action Plan.

In this issue, you will see other instances of how we have integrated the connection of the Garden to pollinators into our Education program. Pollinators are yet another reason why we should ensure that the Garden is healthy, and accessible. Supporting the Garden has a benefit that goes well beyond ourselves. 

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Pollinator Education

What a wonderful summer full of pollinators in the Garden! Bees of all kinds, butterflies, flies, and hummingbirds have all been seen throughout the Garden visiting their favourite blooms. With an abundance and great diversity of flowers growing over VanDusen's 55 acres (22 ha), it is no surprise that we are one of the top sites in the city to see pollinators in action.

The sight of a bumblebee laden with pollen on its hind legs, or a hummingbird flitting from *Echinacea* to hollyhock is a prime 'teachable moment', and VanDusen's education programs embrace these moments in many ways. During the spring, schoolchildren explored flowers and pollinators, learning about the processes of pollination and seed development, and the interdependence of plants and animals. One of our summer courses in adult education, *Attract Hummingbirds and Butterflies to your Garden*, gave everyone ideas of which flowers they prefer, and what other garden features to add for these pollinators to thrive.

VanDusen's very popular summer camps also explored pollinators. For the second year, our partners at the Environmental Youth Alliance (EYA) joined the camp for a special session on native bees and a visit to their Insect Hotel and the Pollinator Meadow across Oak Street at Oak Meadows Park. Campers discussed the different types of bees, bee anatomy, and the importance of bees to the ecosystem and food production. They loved searching for bees on a bee safari, and envisioning themselves as bees through a multi-sensory bee meditation.

Learn more about pollinators at VanDusen

Night Science for Kids – this special evening Family Program will include collecting nocturnal pollinators and exploring which plants to grow to invite them into your garden.
Friday, October 17 or Saturday, October 18, 6 - 7:30 p.m.

Prepare Mason Bees for Winter – an adult education course covering seasonal care for healthy bees next spring. Participants will clean nests and cocoons and learn how to make new nests.
Tuesday, October 21, 6 – 8:30 p.m.

Additional information and registration on our website or 604.718.5898.



Searching for colourful tropical flowers at Bloedel Conservatory.

New Self-Guided program for school groups at Bloedel Conservatory

Starting this winter, teachers and students will now be able to use Bloedel Conservatory to enhance their science learning with curriculum-linked activities and investigations. With the new Rainforest Explorations resource pack of lessons, teaching aids and student worksheets, they will discover structural features of tropical plants and birds, how these features enable them to meet their basic needs for survival, and relationships between plants and animals. Students will peer into bromeliads to see where poison dart frogs carefully deposit their tadpoles, examine colourful feathers to determine how they help birds to fly, stay warm and dry, or attract a mate. They will experiment with drip tips to see how this adaptation ensures that excess water runs off the leaves of tropical plants, search for colourful tropical flowers, and compare the beaks and feet of parrots and finches in the Conservatory.

Please contact the Education Department at 604.718.5898, or see our website for additional information.



VanDusen Summer Camp visits the Insect Hotel at EYA's Pollinator Meadow



Bee part of the Buzz

Make a donation to programs and projects today and you will be assisting to fund courses and interpretation to raise awareness about attracting and protecting pollinators. Contribute by completing the form enclosed with the mailed Adult Educationcourse brochure; add a donation with your Membership renewal; donate to VanDusen or Bloedel online at canadahelps.org or call 604.257.8190.

Curator's Chat – From the Ground Up

"Botanic gardens are institutions holding documented collections of living plants for the purposes of scientific research, conservation, display and education."

- Botanic Gardens Conservation International

During the frenzy of capital projects and special events – critical for supporting the Garden so we can achieve our mandate – we sometimes need reminding that the heart of VanDusen Botanical Garden is its living collections. Yes, plants!

Here, with the lush growing conditions of the Pacific temperate rainforest, more than 7,800 species, subspecies and varieties of plants (taxa) are growing in 51 beautifully designed, themed collections. Representing the richness and diversity of the world's flora, they provide Vancouverites and international visitors alike with a much needed breath of fresh air.

So what is a living collection anyway? As a botanical garden, we select plants to reflect a variety of botanical themes, documenting, labelling and arranging these plants within the contours of the landscape to echo their ecology or essence. This naturalistic design aesthetic can be seen in the Cypress Family Collection. During your next visit, imagine the seasonally-flooded, ancient cypress forests of the Everglades as you meander through the quirky "knees" of the bald cypress jutting out from Cypress Pond and along the shoreline.

From the threatened Garry oak ecosystems of southwestern British Columbia, to the temperate Pehuén (*Araucaria araucana*) forests of the Chilean Andes, to the middle elevation forests of the Western Himalayas, VanDusen's living collections educate visitors about the amazing world of plants while contributing to scientific research and conservation efforts through local and international partnerships.

Most of these collections have a taxonomic theme with plants that are closely related to one another, such as the Beech Collection (*Fagus* species), or a geographic theme, like the Chilean Garden. Some collections are ecological, featuring plants with fascinating adaptations to specific habitats, like the Carnivorous Plant Collection. Others simply celebrate the joy of horticulture, like the ever popular Black Garden.

Stay tuned to the Curator's Chat as we take a closer look at projects underway in the Garden, explore the collections and learn about VanDusen's role in scientific research and plant conservation.

Cynthia Sayre is Curator of Collections at VanDusen Botanical Garden.



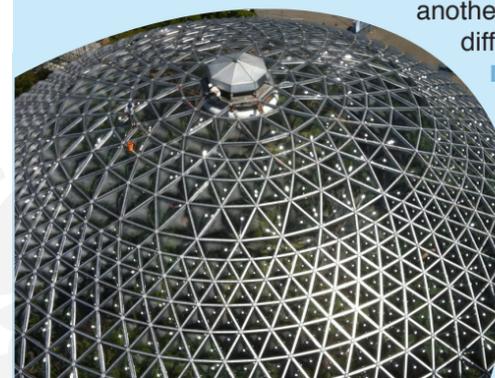
"Knees" (woody root projections) of bald cypress trees (*Taxodium distichum* var. *distichum*) jutting out along the shore of Cypress Pond.

To top it all off

The project to put a new roof on the Bloedel Conservatory was completed in mid-August. With the original roof being more than 40 years old, the new roof is expected to last at least another 40 years. A complex exercise, more than 1,400 individual "bubble" panels of 32 different sizes needed to be cast and installed.

Did you know?

- Originally constructed through a very generous donation from Prentice Bloedel, the Bloedel Conservatory was opened in 1969. The elements for the dome frame were manufactured in Ottawa and shipped to Queen Elizabeth Park. It took over one year to complete.
- The Conservatory was the first large tridetic dome conservatory in Canada and remains this country's largest single-structure conservatory.
- Funds to replace the roof were provided by the City of Vancouver, with support from funds from the Government of Canada.



For a complete listing of events in the Garden and the Conservatory, please visit www.vandusengarden.org

gardenEvents

ShopWood Artist Demo

Michael Hamilton-Clark, *Wood Turner*
Saturday, September 20, Noon - 4 p.m.
Location: Beside the Glass House

Medicine Wheel Ceremony

Sunday, September 21, Noon - 3 p.m.
Canadian Heritage Garden
For more information, contact Marina Princz at 604.257.8668 or email library@vandusen.org



Annual Top Soil, Manure and Bulb Sale

Saturday, September 27th, 10 a.m. - 3 p.m.
Look ahead to glorious colour after our wet winter season!

Top Soil and Manure Sale Location:

Visitor Centre Circular Driveway and VanDusen Parking Lot off of 37th by Gate 1

Products: Red Label Top Soil from high grade organics and Brown Label Manure, an essential organic mix which will stimulate and multiply the natural organisms of your soil.

Price: \$5 per 20 litre bag.

Bulb Sale Location: Entrance Plaza off parking lot

Dried Flower Arrangers Sale

Friday, October 24, 2 - 4 p.m.
Saturday, October 25 & Sunday, October 26
10 a.m. - 4 p.m.
HSBC Arrival Hall, Visitor Centre

Members Only Sale in the Garden Shop

On November 13th and 14th, 10 a.m. - 8 p.m., Members will receive 25% off their purchase* at the Garden Shop. So, bring your current VanDusen Membership card and kick off your holiday shopping with us!

*Books and magazines are not included in this sale.

2014 Festival of Lights

December 10 - January 4, 4:30 - 9 p.m. every night except December 25th or when the Garden is closed due to extreme weather. December 19 - December 23 we are open an extra hour, 4:30 - 10 p.m.



A new roof on Bloedel Conservatory is cause for celebration!

Join us at the *We did it! Bubble Bash* on **September 25th**, from 6:30 - 9:30 p.m. at the Conservatory and help to raise funds for the VBGA's education programs and displays in this tropical oasis.

Tickets are \$95 or \$150 per pair and can be purchased at www.wediditbubblebash.com or 604.731.1604. Ticket price includes beer, wine, tropical-themed drinks, great food, entertainment and parking.

Perfectly Green Gifts

Trying to find the perfect gift? These green gifts will provide enjoyment to the recipient and also support VanDusen programs and projects:

- Gift Membership for 1 or 2 years
- Garden course gift certificate
- Tribute donation in honour of a family member or friend



Contact the Membership Office:

membercoord@vandusen.org or 604.257.8675.



Adopt-a-Tree

at VanDusen Garden to commemorate a significant event or remember a loved one.

For further information: vandusengarden.org or Development Office 604.257.8190