



# THE LEAF

THE LYNN VALLEY GARDEN CLUB

Established 1943

February 2024

## President's Message – Donna Wasylik

Hello Everyone,

Plans for the 2024 upcoming garden events are in full swing! I will be giving you the heads-up on a few plans, with more information to follow.

First of all, the Executive has reduced the number of door prizes given away at the monthly meeting to two. The two prizes will be of more value and hopefully will 'up' the excitement factor if you are lucky enough to win.

At our upcoming meeting on February 15, Aline Burlone will have a table set up to dispense veggie seeds, donated to us from West Coast Seeds. *These seeds are meant to be started for the May PLANT SALE*, not for personal use. Please arrive a bit early to get your veggie seeds or see Aline at the break.

Aline has been contacted by the Archives Department of MONOVA to store our historical data. She will speak further on this at the February 15 meeting but please consider that even though this material will be years old, your name or photo may be in this material and if you are not comfortable having anything personal on record at the Archives, please let Aline know.

For our March 21 meeting we have six knowledgeable members who have volunteered their gardening expertise on five different subjects, and they will be leading short 20-minute discussion at tables arranged throughout the foyer. Members will rotate clockwise to all tables at 20-minute intervals. We will start at 7:00 PM and complete two locations, take a quick break to grab a cuppa and treat, then at 8:00 proceed to the third table, with the view to rotating through all five tables by 9:00 p.m. When you arrive at the March meeting you will pick a numbered piece of paper to indicate which table to start at. As always, if you are able, please try to arrive before 7:00 PM to help with table and chair set up.

The **PLANT SALE will be on May 11** and plans are being made to hold the sale **AT ONE LOCATION** on the parking lot at St. Clement's.

Mt. Seymour United Church has a new sound system and Maria and Aline have learned how it works. In appreciation of all the teaching and help we received, the Lynn Valley Garden Club is considering buying MtSUC a new ladder, as the wooden one presently in use is in terrible condition.

I am interested in pursuing a Lynn Valley venue for meetings even though our present spot is second to none. The Executive wants to approach this in a more scientific manner by charting where most members live and possibly take a poll of members and what is important to them in selecting a new meeting venue. More to follow on this.

Finally and certainly the most important: The Executive will be planning and executing on a wide range of activities - our March gardening talks, and the annual plant sale in May. Becka from the Edible Garden Project has pencilled us in for a Loutet Farm Tour on June 20 and of course we will end our year with the annual Christmas party.

## LVGC MEETINGS

3rd Thursday of each month (except July and August) currently at

**Mount Seymour United Church**

**1200 Parkgate Ave,**  
North Vancouver,  
BC V7H 2X9  
(604) 929-1336

*Meetings start promptly at  
**7:00 PM***

## SPEAKER FEBRUARY 14

**OWEN BALLANCE  
MONET'S GARDEN  
WORKING WITH LIGHT  
AND COLOUR IN THE  
ARTIST'S GARDEN**

If you need to contact anyone at LVGC please use email or phone! If you must send a thing – phone to get the address and send it to a VIP (list is on the next page)

**PLEASE USE  
ELECTRONIC ACCESS**

Your emails are welcome:

[Lynnvalleygardenclubnewsletter@gmail.com](mailto:Lynnvalleygardenclubnewsletter@gmail.com)



## Executive 2024

### President

Donna Wasylik x

### Co-Vice Presidents

Penny LeCouteur x

Daphne Page x

### Co-Secretaries

Marilyn Bullock x

Lynne Frith x

### Treasurer

Jennifer Sydenham x

### Membership Co-Chairs

Ann McKinnon x

Krystina Madej x

### Members at Large (MALs)

Jacquie D'Auria x

Sarah-Jane Gray x

Miriam Scott x

Tom Davis x

## Committees

### Plant Table

Cath Rickey x

### Hospitality

Sharon Carabetta x

Bev Fraine x

Brenda Reid x

### Sunshine / Door Prizes

Hiromi Matsui x

### Website

Aline Burlone x

### Newsletter Editors

Maria Issa x

Margaret Campbell x

### Executive Meetings

February Executive meeting will be chez Sarah Grey



Newsletter items to  
[lynnvalleygardenclubnewsletter@gmail.com](mailto:lynnvalleygardenclubnewsletter@gmail.com) by Feb 7, 2024

### Thanks to LEAF contributors:

Rosemarie Adams, Judith Brook, Aline Burlone, Barb Downman, Tom Davis, Carol Ferryman, Linda Howe, Denis McMahon,

Besides the activities already planned, we would like someone, or a small group, to **organize a garden tour and a field trip in the summer**. Past field trips and garden tours are well-documented and simply choosing one that has been done in the past and following the detailed plans would make planning much easier. A garden tour of members' gardens - in Lynn Valley or the Moodyville area - would be great. Refreshments on the garden tour are expected to be simple and everyone can certainly take their lunch on a field trip. If you would like to volunteer to plan either of these outings with a friend or two, or volunteer on your own, please email either Penny Le Couteur at [plecoute@gmail.com](mailto:plecoute@gmail.com) or myself at [wasylikdonna@gmail.com](mailto:wasylikdonna@gmail.com).

Thank you!!!



## SPEAKER

### OWEN BALLANCE

## Monet's Garden: Working with Light and Colour in the Artist's Garden

Owen Ballance is a horticulturalist and an experienced gardener, who has worked within both the public and private gardening sectors in Canada, France and England. He began gardening professionally with the City of New Westminster in 2016; however, was brought up by a pair of keen vegetable gardeners and began gardening at a young age.

His educational background originates from the University of Victoria, studying physical geography, as well as the University of British Columbia attending the Horticultural Training Program. He approaches gardening with a holistic view and an understanding of the importance of gardens, with the roles they play in the greater ecosystem.

Spending time in both France and England, working at Maison & Jardin de Claude Monet in France and Sissinghurst Castle Gardens, respectively, Owen has a keen interest in and deep appreciation for classical and informal gardens. He is currently a horticulturist at the University of British Columbia Botanical Garden, where he is building upon his base of knowledge dealing with rare and sensitive plantings. [Hyperlinksto Monet, Sissinghurst, UBC, are in the "February Links" file in your email]

**Meeting starts at 7:00 PM - Tea break at 7:30 PM - Speaker at 8 PM**



## Co-Vice President - Penny LeCouteur

At the last LVGC Executive meeting it was agreed that we should experiment with an "Honourary Membership" category. The aim of honourary membership is to allow older members or members in failing health or those who move away, to keep in touch with the LVGC and the gardening friends they have made during their years in the club. An Honourary member must:

Have been a garden club member for at least 10 years,.

- Be over 80 years old *or* be in poor health *or* have moved away from the North Shore.
- An honorary member can be nominated by any club member who would send the name to the Executive for approval.
- Honorary membership is for life - no renewal is necessary.

Honorary members receive *The Leaf* online and can access club meetings and guest speakers via Zoom. They pay no fees, don't attend meetings or club events in person, and have no vote.

Honorary memberships would not start until the next round of dues payments *ie* Jan 2025, and if they prove viable, we can amend our constitution to include them at the subsequent AGM.

[This does not mean that you cannot be a full, paid up, active member if you fit the above criteria – Honorary Membership is just a virtual, electronic option. – Ed]

## Treasurer – Jennifer Sydenham

Bank Balance as of January 1	\$18,704.57
In Petty Cash	<u>\$129.50</u>
Total	\$17,575.07

**...in case you weren't paying attention, here it is again:**

**MONTHLY MEETINGS NOW START AT 7:00 PM (not at a quarter after) and the MINUTES FROM THE PREVIOUS MEETINGS CAN BE FOUND ON THE WEBSITE - using a link provided in *The Leaf***

## Membership – Ann McKinnon & Krystina Madej

Thanks to all the members who renewed, and the eighteen new people who joined the club, our membership currently totals 157 people. In addition, there are a few members who intended to renew at the January meeting but were unable to do so when the in-person option was cancelled due to snow. They have until the February 15th meeting to pay their dues or be removed from our mailing list.

The January snow day also prevented people from picking up their 2024 membership cards so they will be distributed at the February and subsequent meetings. If you are unable to attend a meeting, you may wish to ask a friend to collect yours for you. If you want to be sure of getting your 10% discount at Maple Leaf or GardenWorks, it's helpful to have your membership card.

We are hoping that many of the 2024 new members and the 2023 nearly-new members will attend the upcoming meeting. We are thinking we will gather them together at the break and hold a mini meet-and-greet so that they start off with a smaller group of people to get to know. Note that participation is entirely voluntary, and the membership badges will help with learning people's names. Also, we publish a membership roster in the March newsletter to help you all connect with other members. We find that members really get to know each other by helping with the annual plant sale, but as that is not until May, so 'getting to know' should start now!

The skiers amongst us are still desperately hoping for snow, although not on February 15th, but it looks like the keen gardeners will get their early spring. Here's hoping for snow on the mountains and daffodils in the city.



## MALs - Jacquie D'Auria, Tom Davis, Sarah-Jane Gray, Miriam Scott

The MALs are busy planning for another year and another amazing *plant sale*! Please remember to keep the date in your calendar - **May 11th will be the Plant Sale date.**

For those of you wishing to donate plants, now is the time to think about what you'd like to dig out or divide for our sale.

Ordering soil for potting up is in the works and we will be providing you with the details in the near future!

If you have any pots you'd like to donate, please contact Sarah. Many thanks and happy gardening!

*"While it is February, one can taste the full joys of anticipation. Spring stands at the gate with her finger on the latch."* — Patience Strong



## Co-Secretaries – Marilyn Bullock, Lynne Frith and Webguru – Aline Burlone

As promised, the minutes of the January general meeting are posted on the LVGC website – but it's not obvious or easily findable for the world at large: you lucky members have the direct hyperlink to the minutes in the February links file. Happy hunting.



### BRIGHT SPOTS

#### Rosemarie Adams –



*Abeliophyllum distichum* - also known as White Forsythia, is a shrub from Korea, a bit straggly, but has an amazing fragrance. The flower tips turn pink as they age. It grows best in full sun and looks best if grown against a sheltered wall (mine aren't!) They are hardy to Zone 5 and are already in full bloom in January.

Little pot of crocus I found buried up in leaves and struggling to see daylight.

*"There is always in February one day, at least, when one smells the yet distant, but surely coming, summer."*  
– Gertrude Jekyll



#### Barb Downman –



[Barb loves green flowering plants, and she sends these two delicious examples.... The green *Amaryllis* is gorgeous - and when she sent me a photo of that yummy *Hellebore Illumi-lime*, I promptly needed one and raced down to Garden Works. Of course, I forgot my 10% discount, as well as my LVGC gift card that I received - although I went there with the full intention of reveling in the discounts. Damn. - Ed]



#### Rosemarie also brings us the following:

From Art's Nursery Garden and Home: "If your club has active membership cards, they can always show it at our Nursery for a 10% discount. We don't do a very good job at promoting that so I thought I would just mention it." - Rebecca van der Zalm. Along with this lovely offer, she also got permission to reproduce the following very useful article from their newsletter. Their newsletter is chock full of all sorts of useful things, but you need to sign up – so see the link in the February Links file.

**10 Tips for Starting Seeds Indoors (This is useful for what comes after – so read on!)**



## Starting Seeds Indoors?

1. Assess your light situation inside and out. If you have a South/East/West facing window that gets at least 6 hours of bright light or even better, a grow light, go ahead and start your seeds inside.

If you don't, skip it and direct sow outside according to the seed pack. Assess your light situation outside too, that will dictate what you can grow.

If you have full or at least 6 hours of direct sun per day you can grow just about anything and you are good to grow on the tomatoes and the peppers too. If you have less sun, stick to the greens; lettuce, spinach, chard, parsley. If you have no sun, plant shade plants, and look into a community garden plot or maybe ask a friend if they have a space they would like to share! Everyone needs extra garden help so you will be surprised at how many folks would be more than happy to share space !!

2. Seed starting calendar!! Begin your seeds inside according to their planting dates! West Coast Seeds has an excellent seed starting calendar for Coastal and Interior BC. Look to your local seed company or nursery for seed timing advice.

3. Pre-moisten your soil. You can simply open the soil bag on your deck or in the sink. Add a kettle full of boiling water - use warmish tap water if you have soil with mycorrhizae added (more or less depending on the size of the bag of soil). Wait about an hour until the water is absorbed. Your soil will be much easier to fluff up and work with. If you are using a big bale of potting mix you'll need more water, time and a wheelbarrow or tarp.

4. Seed depth and special instructions are on the back of the package! For example, Violas are super easy to grow but if you don't read the package you will miss the part

about covering the seed tray to prevent light for a week or so. They need dark to germinate!

5. Don't sow all your seeds at once!!!!!! I won't name names, but you know you who you are, don't make me fly over there and smack you!! You do NOT need 200 chives and 180 Parsley plants, trust me.

6. Succession Sow!!! With crops like lettuce, basil, carrots and beets you can plant every couple of weeks. Spring is just one of the planting times, not the ONLY planting time.

7. For those completely new to planting seeds, thinning, means to pull out some of the seedlings so that your main row is nicely spaced. Think! Don't be a baby about it. You can replant most ...even carrots!!! I did it last year and they turned out beautifully. So, thin!

8. Don't leave lids on after your seeds have sprouted unless you have a crop that specifically says so. You just need that extra humidity to sprout. Once you see all their little heads up, TAKE OFF THE LID!!!!

9. Air movement makes healthy strong seedlings! A small fan is an absolute help when you are seeding indoors. Once your seedlings are up and putting out true leaves you can turn a small fan on low in your seedling room during the day. I don't mean blow the heck out of your baby plants, they should not be doing the backbend, but enough gentle air movement so you see a wee bit of a jiggle now and then like they would have if they were outside.

10. Put outside according to temperature and seedling pack instructions. That may mean you will need to pot up into bigger pots. That is a bit of work I'd rather not do so I've learned to be patient and NOT PLANT SEEDS BEFORE IT IS TIME!!! There, I feel much better now.

>>> *Now that you know HOW - see below for WHAT!*

## West Coast Seeds DONATION to PLANT SALE

- Tom Davis & Aline Burlone



West Coast Seeds has donated a box of vegetable seeds for members to grow for the **plant sale on May 11**. There is an assortment of cucumbers, tomatoes, squash, beans and a few others available. Aline will be offering them to you at the February meeting during the coffee break; and Tom will be available during coffee breaks in March and April. Tomatoes should be started in mid-March, and most of the other seeds can be started about 3 weeks before the plant sale. Please consider growing some vegetables for the sale. We can sell decent sized, named {eg Tumbler} tomato plants for about 6 \$. and every bit helps.

*"February is the shortest month, so if you're having a miserable month, try to schedule it for February."* - Lemony Snicket

*Paraphernalia you need to get growing - Link to video in February Links file*



...which brings us to the "Vegimates" - a team of intrepid veggie growers whose seedlings are the stuff of LVGC Plant Sale legend. Among them was Bruce Tennant. Denis McMahon found this picture of Bruce in an old school yearbook.

Rosemarie too, was *Leaf*-ing through old papers - and found the following in a 2015 *Leaf*:

#### CLUB HISTORY

Do you know how our club's newsletter got its name?

- **A contest was held, members were asked to submit a name suggestion. It was Leah Younger's suggestion that won top billing.**

Our club symbol - the watering can? Do you know who designed it?

- **Ann Pentland. - using graphics from Corel Draw and "planted" up the watering can.**

#### BRUCE TENNANT:

Another boy who keeps his plans to himself, Bruce belongs to the IFTHIMAF Club, (I forgot to hand in my annual form)



1966

107

## Guerilla Gardening - Judith Brook

In January 2024 LEAF newsletter, Margaret Campbell wrote about boulevard gardening, and asked "Is it time to spread the work further? Could this happen in North Van? Maybe it would be fun to have a different kind of epidemic to work on..."

I say an enthusiastic YES!!

I am a fan of guerilla gardening, which entails gardening in a neglected area. During December I began a project on a boulevard on 27<sup>th</sup> Street, East of Mountain Highway. The first two hours were spent hauling out garbage (including a waterbed!) and clearing fallen branches and logs. The next work effort of several hours was raking out ground debris, and cutting back the horrible thorny blackberry vines. I was prepared with sheepskin gloves, but the thorns managed to shred my legs, through my pants, as I noticed the bloody scratches in the shower! My little hatchback car can be totally stuffed with garbage/green waste which I took home and transferred to my bins for pickup.

By this time, I'd met the next-door neighbour, Taz, who'd thanked me and asked, "Why are you doing this?" I said, "It's a big mess, I can do something about it and I'm going to plant a garden." I asked if they had a hose and they enthusiastically said, "Yes, I can water it" and also agreed that I could use their green waste bin.

The next work effort of several hours was raking and more raking, as I completely filled Taz's huge green bin to the rim and started on another neighbour's bin. 😊

I reported the graffiti on the metal infrastructure box, first to the District of NV, who thought it was BC Hydro's responsibility. Hydro advised that it's actually a Telus connection box, so next, I reported it to Telus - third time lucky! - and they promise to clear the graffiti. More blackberry-clearing to go (do you have any leather chaps I could borrow?), mounds of good soil needed (could District NV donate?), and I am currently paper-planning colourful flowers for all to enjoy as they walk up to the mall - it's a busy area!

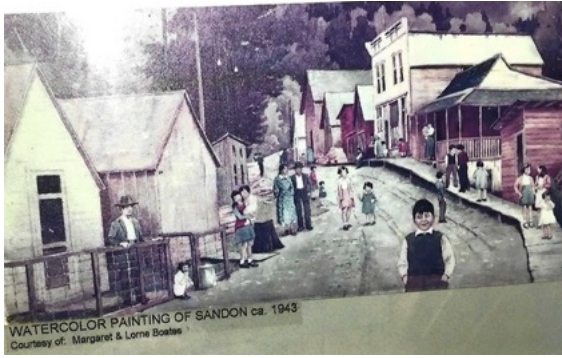
"People from a planet without flowers would think we must be mad with joy the whole time to have such things about us" - Iris Murdoch

### All Green Thumbs by Jason Nocera

www.nichecartoons.com







Creek, Slocan City, Kaslo, and Sandon now a ghost town.

We heard from the locals that there was a Japanese Memorial Garden just outside of New Denver: a graceful stream, frozen in stone, known as Karesansui, a garden in the dried up water scenery style.

This garden was designed by the late master gardener Ray Sumi, himself an internee. The garden flows through the Nikkei Internment



Centre, a museum officially opened in 1994, to remember the internment and to reflect upon its lessons. This garden grows by the Slocan Lake and serves as a community gathering place, a shared labour of love by the local Garden Society, and a bit of living history on what has to be called the valley of ghosts.

The garden at the Nikkei Centre follows the tradition of the Kanakura style (1183-1333), the design suggests a landscape of water, trees and mountains. In the garden one can see flowering cherry, pine and a ginkgo tree (*Ginkgo biloba*) whose leaves it is said, aid the memory. Tea roses, Japanese lilac (*Syringa reticulata*), a ground cover called 'self-heal' (*Prunella vulgaris*), weeping mountain ash, weeping beech, weeping mulberry, and weeping birch can be seen. Lots of tearful trees!

From the "headwaters" located north of the Kyowakai Hall constructed in 1943 by Nikkei carpenters to serve as a religious, political, social and cultural Centre of the New Denver Japanese Community, a pebble river winds through "rapids" under two footbridges before emptying into the "lagoon." Mr. Yumi took an artist's care in placing the 'standing stones' in the garden. Careful consideration was used in their reflection, placement, and orientation to create a harmonious mood for visitors to reflect and mediate.

My home-stay students felt very peaceful here but also experienced a certain feeling of sadness and felt it was one of the highlights of their trip to the Slocan Valley.



## A Map of Plants

– found by Linda Howe

Plants provide oxygen, fill the landscape with colorful flowers, and some even feed us. But looking at the big picture, it can be hard to grasp how different they are from one another. That's why physicist Dominic Walliman of Domain of Science set out to make a comprehensive *Map of Plants* [...] Walliman highlights the differences and similarities of flora to teach us about their inner workings. [See February links].

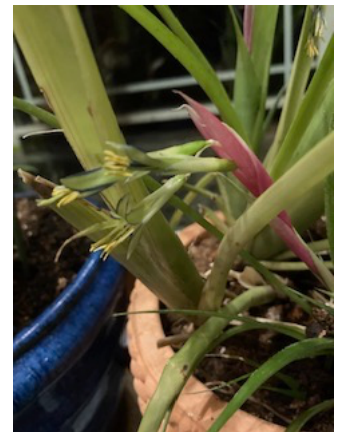
*Good morrow, Benedick. Why, what's the matter,  
That you have such a February face, so full of frost, of storm and cloudiness?  
~William Shakespeare, Much Ado about Nothing*



## Plant-related Bits & Bobs - Maria Issa

My Instagram feed is always full of weird political items, science, recipes, medicine, castle rehabs, music and whatnot – but I discovered that the “bubble” effect works – and if I linger over plant-related posts, thick and fast they come at last, and more and more and more. I pick what I think are relatively sensible or useful, and collect them for you. Many of you probably know all this already and can grow huge crops with both hands tied behind your backs – but the rest of us may find some useful tid-bits. So what you need to do is look in the *February Links* file where the hyperlinks are active – and pick and choose what sings to you. This month’s “menu” has the following offerings:

1. (obviously, as it’s seasonally appropriate) Growing a variety of veggies – the suggestions are useful, if only I could remember them all. **Kiwis, cucumbers, chilis, tomatoes**
2. How to trellis them to keep them happy and producing. I did forego the watermelons, but what works for cucumbers, works for the rest of the fam damily.
3. What to grow with them – companion planting – to keep pests off organically.
4. Then we come to containers – there is a great video on how to make easy baskets – I’m totally trying this as soon as I’ve finished my pruning and have some material. There is also a video on how to make compost containers using wood pallets. It’s really slick – and pallets you can get for free on Facebook Marketplace or Craig’s list... another one I’m considering quite seriously.
5. Then there are those of us who are more arm-chair gardeners, rather than urban farmers. Our pet house plants can “take the waters” to give them a nutrient boost; and our orchids can look stylish and well-maintained.
6. If you prefer to just watch things grow – this amazing, time-lapse video is for you!
7. Having watched something grow – consider that a similar-sized seed grew this magnificent item: a giant sequoia. Make sure you have the bottom of the image visible as that gives you a size reference.
8. More trees – the Garry Oak ecosystem – is in dire need of restoration, as the invasive Scotch broom is running rampant. Some amazing people actually take this on – a little like Judith’s “Guerilla gardening... So many small pockets, ecosystems could be re-wilded, if people take the time and effort.
9. If you wish to delve deeper into some fundamental scientific stuff – here are a couple of interesting concepts: - the short video on plant communication – Yes, you read that right! – is quite amazing. The *Nature* article on moths and light provides a new theory on their orientation. Last month, there was a note about night pollinators – and this fits into that continuing saga.
10. Finally – I have an entire movie offering for you: “The Need to Grow” – yes, you do need to sign in; yes they will probably send you other, similar movies to watch, yes that bubbles you into their marketing... but it’s worth it.



## ANNOUNCEMENTS – one more time, from the top....

From now on, **REGULAR MEETINGS** will commence at **7:00 PM** sharp!!

The “business” part of the meeting will be 30 minutes – so if you have items for the general populace, please let Donna know in good time for it to be put on the agenda. Please keep comments and announcements mercifully short.

**BRIGHT SPOTS** will be enjoyed at **7:30** in the foyer to facilitate interactions, questions, and tea and cookie consumption.

The **SPEAKER** will start at **8:00 PM** sharp and will talk for 45 minutes; with questions for 15 minutes... after which, you will not be considered rude, if you get up and leave as it’s past your bedtime.

Insh’Allah!

## Harvest Project – “Food Bank”

Please remember to grab a can or box or two of non-perishable foods and bring them to the meeting – [put them with your coffee cup/tea mug into your “LVGC grab bag”] – and deposit them in the box waiting for your gifts. Food insecurity

is 'a thing', as much as we would rather not acknowledge it. "*There, but for the grace of God, go I*". The Harvest Project gratefully receives our donations and we even have a NEW VOLUNTEER - Julie Rudd - (THANK YOU, Julie!!!) who will collect them and deposit them at HP, as she lives near-by.

## OTHER GOINGS ON:

### *The Great Backyard Bird Count* **February 16-19**

This is happening February 16-19. For more information go to the following website: <https://www.birdcount.org/> also see the link in the February links file.

### *Van Dusen Gardens is recruiting Garden Guides! DEADLINE* **March 18**

Here is your opportunity to interpret the Garden to the public and to share local and international plants with visitors from around the world.

Anyone who is interested in applying can learn more and sign up by completing an application form here:

<https://app.betterimpact.com/PublicOrganization/5757625f-27eb-4d6c-9df5-ff3182c978da/Activity/49b4a4eb-9aba-417f-9b32-a36d6dcbc30d/1> This link, ungarbled, will be in the 'February links file.'



### *Vancouver Master Gardeners Sunday* **March 24<sup>th</sup>**

9 AM to 3 PM at the Michael J Fox Theatre, Burnaby

Tickets are \$60 after February 1<sup>st</sup> to attend in person, includes recordings for one month viewing.

Recordings Only \$35 for one month of viewing

To Register: FIND THE LINK in the February links file.

Here is our line up!

Taking the Easy Road – Adapting My Garden to a New Climate – **Thomas Hobbs**

A Garden Revival – **Jeff de Jong**

Making Friends with the land: Using Native Plants for Beauty, Health and to Give Back. – **Nancy Shackelford**

More speakers to be announced!

Plus, a used book sale, Sea Soil Sale, a vendors' fair, door prizes and more.



### *COMPOST BIN – Maria Issa*

This is the bottom of the newsletter, so as I like to connect things – this is my perfect chance to connect “alpha and omega” – the fate of the planet – and your bottom/derrière/ass/nether region/backside/butt/tush/booty or any other euphemism of your choice. [Oh, what prudery we owe to Queen Victoria – but that’s a separate conversation.] Let’s cut to the chase: ‘toilet paper’ is the connection. “Huh? Why?” asks the gardener. “Paper, my dears, paper... comes from trees.”

Let’s back up a bit. The fate of the planet is in play here: yup, I’m talking about climate change due to CO<sub>2</sub> concentration in the atmosphere (see link). While there are many hypotheses as to the source of the excess CO<sub>2</sub> and probably many things contribute to the accumulation of



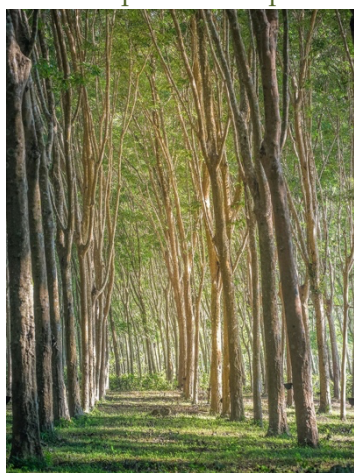


greenhouse gases (and cow bottoms and their emissions are also implicated!) the question is - once emitted, how much CO<sub>2</sub> can we re-capture and how fast? And can we do it by technology or by using 'nature' to get that genie back in the bottle before we - or more likely, our kids and grandkids - bake to a crisp?

We know that fossil fuels that we extract are plant-made long-chain hydrocarbons that were forests trapped aeons ago under layers and layers of earth. Using technology (and by that I mean burning them in cars, turning them into plastics, paving streets etc.) we cut those long-chain hydrocarbons into smaller and smaller pieces until only CO<sub>2</sub> remains and floats happily into the atmosphere, there to wreak havoc. We take a polymer and turn it into a monomer: sort of like taking a Lego structure and disassembling it into the component Lego bits (that you step on with bare feet). So can we build some Lego assembly back up - organize the loose Legos? That is really the ultimate question.

There are ways..... There is carbon capture technology out there - one of the world's most famous ones is in Squamish, Carbon Engineering (see link). There are others. If \$\$ were no object and they full on unleashed their technologies - we'd still be in a pickle because of the sheer volume of what has to be captured. But they add to hope. There are new bacterial strains that have been developed - that take CO<sub>2</sub> and short chain hydrocarbons and turn them into long chain hydrocarbons so we can create our plastics... well hallelujah. That's in a petri dish.....and a work in progress. (see link)

We know the real reversers of CO<sub>2</sub> emissions - and that's plants... and more specifically, trees - because they have a huge surface area. A plant's "dark reaction" fixes CO<sub>2</sub> into carbohydrates, *via* the Calvin-Benson cycle (those dudes got Nobels for that!). While carbohydrates are not petroleum replacements - they have re-sequestered the greenhouse gas from the atmosphere into a plant. That's a part of the equation.



Of course, once the CO<sub>2</sub> is stuck in a bigger molecule, plants can build from there and make lipids - fats and oils - and some even make rubber such as the genus *Hevea*, more commonly known as the rubber tree. It is probably the most famous hydrocarbon creating plant, supplying an estimated one third of the world's rubber demand. It is still not as quick and cheap to make as petroleum-based rubber, which is why it does not occupy a larger portion of the market. Hydrocarbon plants follow certain metabolic pathways that produce hydrocarbon products similar to petroleum, called terpenoids. The plants that produce terpenoids in large enough quantities to be harvested can be as big as trees or as small as single-cell algae: you probably have some in your garden: the family *Euphorbiaceae*, the one studied by Dr. Melvin Calvin.

We haven't quite gotten to the bottom of it yet - nor your bottoms. Summary so far: we extract fossil fuels and release the CO<sub>2</sub>: plants capture it and put it back. So if we fell the boreal forests - in fact any forests - to produce volumes and volumes of toilet paper - our tushes are reducing the planet's ability to capture CO<sub>2</sub>. There was a petition circulating recently, requesting that Costco - the greatest purveyor of bog-rolls - to stop reselling products made from boreal forests, or at least put some money toward boreal forest maintenance (yes, of course I signed it and you can too, see the link!). As those are OUR Canadian forests being used to wipe the ends of the world - I'm a more than a little unhappy.



Do you remember that during COVID, the best jokes surrounded the biggest panic: the shortage of toilet paper? People hoarded the stuff, and it was valuable barter. But really? Is toilet paper worth the future of the planet? Cultures do live and thrive without it: enter the bidet (for a very interesting history of the bidet and why it's not a North American thing - look in the links). Beautiful ceramic bidets, decorated with flowers and birds have existed throughout history and in every culture. Napoleon, for instance, left his son a silver-gilt bidet in his will: bidets are super classy although we all used to giggle at the Japanese multi-functional toilets.... Nowadays even Amazon sells the modern equivalent as a toilet attachment, \$47, and super easy to install.

So, bottom line? Keeping the forests and losing the toilet paper is a viable option for saving our collective asses...

