THE LEAF

LYNN VALLEY GARDEN CLUB *Established 1943* **May 2019**

President's Message – Anna Marie D'Angelo

The term dumb luck best describes my early gardening experiences. I used to blissfully go through my yard thinking I knew what I was doing, based solely on how nice everything looked in the summer. In fact, I didn't even know the names of my plants, never mind what they needed for healthy growth. So the pink rose, the crooked gladioli and the scratchy bush were really on their own as far as thriving beyond my watering them.

I am reminded about my gardening naiveté at this time of year as I enjoy watching my forsythia come into bloom. I knew it was a forsythia, as years ago, someone who had marginally more gardening knowledge than I had, told me so. Then I found out that forsythia was a big deal as far as indicating it was spring in gardens. When the forsythia blooms, you prune your roses. Except my forsythia was a little different from everyone else's. The blooms were a dark yellow like a dandelion's centre, and not the lighter yellow of the weed's edges as shown by all other forsythias. Strangely, my forsythia bloomed just slightly after everyone else's. Must be the Upper Lynn climate. After several years, I finally took a good look at the plant and discovered that it wasn't a forsythia but a Japanese Kerria. Good thing both shrubs get pruned the same way. I have hacked away—oops--"revitalized" that plant, whatever its name, a few times over the years, and it keeps coming back beautifully.

Lots going on at our next meeting. We will be picking up our ***t-shirts***—65 orders—which we can proudly model at the plant sale. There will be last minute sign ups for the Thursday, June 6 ***bus trip*** to UBC Botanical Gardens and Southlands nursery. The price is $10 - due when you sign up. Please bring a bagged lunch, good walking shoes and be prepared for sun or rain. We can leave our cars in the third lot away from Mountain Highway. If that lot is full, there is residential parking all around.

The ***Members' Garden Tour*** will be on Saturday, July 6: parking same as the bus tour. We will talk more about the Members' Garden Tour at our June meeting. At our May meeting, we will be selling delicious local **honey for $9 cash** a jar so it is more convenient than buying it at the plant sale. The day after the meeting, on the ***Friday, we drop-off our plants***, they get priced and we setup for the ***sale on Saturday***. Looking forward to seeing everyone there.

LVGC MEETINGS

3rd Thursday of each month (except July and August) at
St. Stephen's Church
1360 E 24th Street
Please note that meetings start promptly at 7:15 PM

SPEAKERS

May 16
PAM ERIKSON
Hostas and Daylilies

LVGC Plant Sale May 18!!!!

June 20
AFFINOR GROWERS
Vertical Gardening

July & August
No meetings, just gardening!

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2018 Executive

President
Anna Marie D'Angelo
xxx
Vice President
Penny LeCouteur xxx
Secretary
Jackie Morris xxx
Treasurer
Ginette Handfield
xxx
Membership
Susan Huber xxx
Sue Callahan xxx
Members at Large
Daphne Page xxx
Doreen Dew xxx
Hiromi Matsui xxx
Linda Howe xxx

Committees

Newsletter Editor
Maria Issa xxx
Plant Table
Norma Buckland xxx
Hospitality
Carole Cobbett xxx
Susan Nicholls xxx
Maggie Davis xxx
Sunshine / Door Prizes
Shirley Lawson xxx
Website
Aline Burlone xxx

Executive Meetings
1st Wednesday of the month
Next Meeting: June 5, 7:30 PM
Chez ANNA MARIE D'ANGELO
xxx
Next Newsletter Deadline
June 12, 2019

If you have material to delight your fellow members - please submit it *via* the time-honoured routes or email to mailto:lynnvalleygardenclubnewsletter@gmail.com

Thanks to all who contributed to this edition: *Rosemarie Adams, Judith Brook, Barb Downman, Linda Ferguson, Linda Howe, Yvonne Kabata, Courtney Mitchell, Margaret Nakahara, Bruce Tennant, Wayne Smith*

REPORTS

VP Report

Interesting speakers are lined up for the remainder of the season and for September. Ideas for speakers are always welcome!

Treasurer's Report – Ginette Handfield

The club's assets as of 30 April, 2019:

Cash on hand	471.95
Bank balance	8,282.02
Total	8,753.97

Membership Report – Susan Huber & Sue Callahan

As of the end of April - we have 125 members!!

If all goes according to plan, the 75th anniversary T-shirts will be available for pick-up at the May meeting – and for wearing and being resplendent at the Pant Sale!!!

Hospitality - Carole Cobbett & Susan Nicholls & Maggie Davis

…. our ever-constant reminder to try and remember to bring your own mug to meetings!!!!
[…and as you think of your own treats, think of something to treat the foodbank.-m]

MALS – Doreen Dew, Linda Howe, Hiromi Matsui, Daphne Page

By the time you receive *The Leaf*, the ***Plant Sale*** will be almost upon us. Your MALS have been working tirelessly and are now ready for the Big Day!

Thank you, Thank you to all the wonderful people who have volunteered to help at the ***Promo in Lynn Valley on May 11th***, when we will be getting the message out about the ***Plant Sale.*** Also, of course, thanks to those of you who volunteered for the **PLANT SALE** days, Friday 17th (prep) and Saturday 18th of May (SALE!) this should be a fun time, ensuring that we will have the best Plant Sale Ever!

I am pleased to say that the plants we split in the fall are looking healthy and beautiful and are ready to be sold! We still have 3 bags of soil left for the last minute potting up if anyone needs it. Please do not leave any more pots in Somerset Street. [There was more than enough!]

For anyone who needs bark mulch, there is still a huge pile in Somerset Street at #464 just help yourselves!!

THERE ARE STILL LAWN SIGNS AVAILABLE – CONTACT THE MALS FOR ONE!!!

Here is our friendly reminder of the long-established ***Plant Sale Rules*** are as follows:

1. Plants will only be accepted on the ***FRIDAY 17th from 12 PM UNTIL 7 PM*** PLEASE NOTE NEW TIMES !!!!
2. ***Pots should be clean***. Unfortunately we do not have time to clean them. We will also need to have all plants ***clearly labelled*** with the common/Latin name. Also indicate whether they are for 'sun', 'shade', *etc.*
3. Obviously, ***no invasive species*** will be accepted for sale.
4. Please ***trim off dead foliage***: the nicer the plant looks, the easier it is to sell and the more money we make!
5. As mentioned before: absolutely no purchasing of plants on Friday. SORRY!!
    a. Members who are working the early shifts can reserve 2 plants on the Saturday then pay for them at the end of their shift.
    b. People who work the later shift can buy 2 plants before their shift starts.
    c. As an added bonus for the people who will be staying late on Saturday to clean up, they can purchase 3 plants.

6. HONEY: YES - we are selling North Shore Honey again this year. You can buy your supplies on the evening of the General Meeting on the 16th May, a bargain at $9 a jar.

Linda has done a fantastic job on the Birthday Presentation, the photos and information she has collected look great and interesting. This display will move to the Lynn Valley Library after the Sale. Here's a photo of Linda and the book – opened to a picture of Mollie Nye.

Please don't forget to donate your old, funky, but in good condition - garden tools, garden gnomes [!!!] or even the odd gargoyle or two! Daphne is the person wrangling these.

Also please remember to save those cardboard trays [you know, the ones the beer cans come on!] we need lots! These can be brought to the General Meeting.

******

Can anyone loan us **garden umbrella stands**, just the heavy bottom bit, with the supporting tube? We need a few for Saturday, to put signs on sticks in them. Again, if you can lift them, these can be brought to the meeting on the 16th, or deposited on Friday after 12 PM (don't forget to put your name on them!)

****

STOP PRESS!!! We received a super donation for the **Raffle** from Carol & Lyle Ferryman. Check this out:

SPEAKER

Thursday May 16
PAM ERIKSON

Pam Erikson is an award-winning daylily hybridizer, photographer, instructor and lecturer from Langley. In 1991, she became the first American Hemerocallis Society judge in Canada. Also in 1991, Erikson started the first daylily club in Canada in affiliation with the AHS and is still its president. The one-acre display gardens at ***Erikson Daylily and Perennial Garden*** now contain over 3,000 varieties of daylilies and other lilies, over 600 varieties of hostas and hundreds of other specimen trees and perennials. Pam will be talking about daylilies and hostas. She will be bringing some unusual specimens for sale.

Assorted Garden Detritus

PAST POT SWAP AT THE APRIL 11 MEETING: So I missed the April meeting – and the pot swap - but I gather that it went more than well – as ***Bruce Tennant*** sent this to all of you: "Sometimes one should be careful what one asks for. There are, apparently, a lot of Pot Suppliers* [**see next item -ed*] in the Garden Club. I have been inundated with an assortment of pots, and many different varieties as well. My thanks go out to all of those who responded to my call. I now have more than enough to last me all winter! Anyone who requires Pot can give me a call and I would be happy to supply! Please pass this on to the club members."

POTPOTTING SOIL: found in Surrey, by Anna Marie

Pot *vs* pot *vs* potting soil *vs* potpotting soil:
? To pot or not to pot?

OVERHEARD AT THE EXEC MEETING:

Anna Marie had some info on the **BC Council of Garden Clubs' scholarship fund**. The way it works is as follows: clubs donate; all the $$ gets pooled; it's in a bank somewhere, earning interest; scholarship monies are drawn from the account; scholarships are handed out as the $ lasts; a scholarship $ received by someone does not necessarily match the $ amount donated by any specific club. If you need more details – email Anna Marie of *The Leaf*.

What couldn't be overheard – but had to be seen (and eaten) – is the kind of **gourmet delights** we have at Exec meetings, that definitely makes it worthwhile attending. There was (a short-lived) Penny's Pavlova…[yumm!] and there were also other goodies: Sue Callahan's cake made of almond flour and covered in lemony drizzle that I embarrassed myself with. If we're lucky, Sue will pass over that recipe.

Each year, Silver Harbour sells – for incredibly little! - the bulbs that the City digs up from the various public gardens. Our members know these things – and will the let the rest us know when the sale is on. Rosemarie scored these a while back – pretty impressive.

From Bruce Tennant: [could not find the source article on the CDC website, so apologies, but no link to this but there is a related link that you might find useful.]

A GREEN THUMB WORKOUT

Good news for gardeners!

The next time you find yourself digging around in the dirt, know that you're also getting a workout that's just about as good as going to the gym.

A new long-term study from researchers in China, Texas and North Carolina has found that just 10 to 59 minutes a week of "leisure time physical activity" — for example, gardening, dancing or simply going for a walk — can lead to an 18-per-cent lower risk of mortality when compared to a sedentary lifestyle.

If you kick it up a notch and log 150 to 299 minutes of activity, there's a 31-per-cent decrease in mortality.

The results were presented in the National Health Interview Survey, an annual event done by the U.S. Centers for Disease Control and Prevention, and came from surveying nearly 90,000 participants over 11 years. *Melissa Hank*

BC Council of Garden Clubs Meeting April 6, 2019 - report by Margaret Nakahara

President Lorna Fraser opened the meeting promptly at 9:00 AM with opening remarks welcoming all members especially those delegates from Quadra Island, Prince George, Castlegar, and Squamish.

The First Speaker was Brian Minter speaking about "***Connecting People and Plants***"

Brian commented on the BC Council anniversary of 75 years and mentioned that in 1944 the first helicopter was flown. The trend nowadays is growing vegetables and other types of food. 54% of food grown in containers is due to the lack of land surrounding our urban landscapes. There is an emphasis on food grown for flavour. Also, ***tropical plants*** are more abundant in our homes to help clean the indoor air pollution. ***Parks and green spaces*** are important to our communities and their benefit translates to reduced healthcare costs. ***Trees and forests*** have a calming effect on our psyche.

The disasters of our environment are: the over cutting of trees; there are more than 60 thousand container ships each burning large amount of bunker fuel; there are islands of plastic in our oceans; our cities are hotter now due to the paved roads and roof-tops; tree life in the city averages only 8 years due to the lack of available water that is wasted into the sewers; 1 million acres of wildlife habitat are lost yearly.

Plants are grown for their flavour and nutrition. The darker the veggies and fruit, the more nutrition and cancer fighting properties they have. Gardening of healing plants is common in today's gardens.

Lawns are "Dead Zones" that can be replaced by micro clover. The blossoms of the clover feed bees, and the clover grows thickly discouraging weed growth. It does not need fertilizers and therefore it is better for our overall health.

Art in the garden*** *[see later, under EVENTS – ed]* attracts young people, and some plants of interest to young people are *Alliums*. *Daphne "Eternal Fragrance"* is hardy to zone 5. *Korean Lilac* called *"Boomerang"* is long lasting, and very fragrant. *Lavender* called "*Pink Perfume*" attracts and feeds the bees and is very helpful around fruiting plants.

Add ***pollinator gardens*** in a community. Young people are attracted to long lasting coloured plants, and lighted gardens.

A garden is more than meets the eye
growth from the past
growth still to come
strolling through a garden
is like wandering through a vast memory
everything has an origin
faraway places always remembered
bonds with friends
some dead but immortal here
growth rings
you are the garden

Translated from
Dick Hellenius,
Collected Poems; found by Barb Downman

The Second Speaker was Douglas Justice speaking on "***Oriental Cherries in Vancouver***".

Douglas said that there are more than 43 varieties of oriental cherry trees in the lower mainland. Grafting is the quickest way to propagate a flowering cherry tree. Viruses are transmitted by bees that have visited native cherry trees. Brown rot on flowering plum tree flowers will spread to the branch and then proceed to the trunk and kill the tree. *Ichio* is the largest cherry tree in Vancouver and was brought to BC in the 1930's from Japan.

The business meeting and AGM

This consisted of the election of President Eric Hees who outlined a very visionary future he hopes to achieve with the BC Council. [He hopes for] …closer ties to garden clubs and a liaison with government concerning policies that affect gardening and flora culture.

Jake Johnson from Maple Ridge Garden Club was voted in as 2nd Vice President, and Lu Schanfanber from Quadra Island was elected to the Scholarship Trust Committee. Ruby Miller was appointed as Treasurer since her bid for the Presidency failed.

Our donation to the prize table of a pink hydrangea plant was snapped up with the third ticket drawn. As usual, the lunch was wonderful, and there were cakes for BCCGC's 75th Anniversary.

On behalf of Daphne Page and myself, I thank you for sending us to this meeting as your delegates.

Respectfully submitted,

Margaret Nakahara

The Rocket Science of Orchid Growing – Part 2: Lighting - Margaret Nakahara

Novice orchid growers of ten search for hard and fast rules for watering, fertilizing, repotting, lighting *etc*. For the most part, light indoors, from an ordinary lamp is usually enough for most commonly acquired orchids such as *phalaenopsis, brassia, oncidium etc*.

Orchids such as *cattleya* grow high up in the forest canopy and enjoy more light than those that grow closer to the ground. As a general rule, orchids requiring high light will do best in a south-facing window. Medium light requirement of an orchid is found usually in a bright east or west window. Low light orchids do best in a north window, or a shaded east or west window. Glass in the window can increase the intensity of light and can cause black/brown burn marks on the orchids' leaves. In this case a sheer curtain or screen can help avoid leaf burn. Also one must remember, that some window-panes can be of tinted glass to reduce the effects of the sun's rays. In other words, tinted glass windows act as sunglasses and block the full power of the sun and thus affect orchid growth. Too much light or heat in a window may cause the leaves to turn yellow or wither.

Hybridization has created growers to seek a "try and see how the plat goes" approach. For example, when a high-light plant is crossed with a low-light plant, the grower has to see how the plant is going to be affects by ore or less light as required by the parentage of the plant. Even two plants from the same parents may respond differently to light.

Phalaenopsis are houseplants of the orchid family. They usually enjoy a moderately lower light situation. Ordinary lights in the house, for a [*photo*-] period of 12-13 hours is usually sufficient for this variety of orchid. Temperature variation from day to night is usually achieved when the lights are on during the day, and off at night.

Oncidium alliance orchids are also easy to grow and require a moderate light setting. Like the *Phalaenopsis,* they require a 10° difference in temperature in order to set a bloom.

Paphiopedilum and ***phragmepedium*** orchids need moderately low light situations. Keep these orchids out of direct sunlight.

Cattleya alliance orchids enjoy a high light and warm temperature situation with cool night temperatures in order to set blooms.

Dendrobium alliance orchids also enjoy a high light situation.

ARTIFICIAL LIGHTING

The light that I use is LED Grow Lights that I bought t our local hardware store. However, there is a great selection of lighting on the market and the orchid enthusiasts must make their own choices as to the best artificial light. I use LED light because it is cheaper to sun and these lights can be set up anywhere in the garage, basement, kitchen *etc*. My KED lights are on timers for 18 hours of light per day, until the plants look like there are flower buds appearing. Then, I switch the time to 12 hours of light per day. The "plant to light" distance is important. High light plants usually enjoy the lights 6" to 8" above them. Low light plants do best when the lights are 10" to 30" above. The closer the plant is to the light, the greater the light intensity. However, most artificial lights also produce heat and the plants may burn if they are too close to the light. Dark spots appear if the plant is too close to the light source – much as it happens in too bright a window. 'Trial and error' is best. As the height to plant distance is increased, with LED lights the coverage increases, but the intensity decreases.

Incandescent light, such as a table light, can be enough for some of the intermediate light requirement plants *ie Phalaenopsis,* some *brassia,* and some *dendrobium, oncidium*. As a general rule, incandescent lights over the plants should be on 12 -18 hours per day until blooms start, then 12 hours day 12 hours night to cause the plants to flower.

When using artificial light, humidity and watering need to be adjusted. A tray of pebbles with water to the top of the pebbles, and the pots place o the pebbles will help with the humidity level. Increasing the watering of the plant is usually important, as orchids tend to grow faster under artificial light situations.

The CANADIAN ORCHID CONGRESS (COC) and the AMERICAN ORCHID SOCIETY (AOS) web pages have printable information for most of the more common orchids.

Again, because of hybridization, the care of some orchids may vary according to the parentage of that plant. Knowing the name of the plant allows one to look up the orchid variety on the internet to get an idea of the best way to care for that orchid.

"Don't judge each day by the harvest you reap, but by the seeds that you plant"

Veggimates' Vegetable of the Month: ASPARAGUS *- Yvonne Kabata*

♪♫ I'm dreamin' of a white ... . asparagus! ♪♫

Growing up in Europe in the 60's and 70's meant having a fruit and vegetable supply that very much depended on the seasons: oranges during the winter months only, and no strawberries at Christmas! …and everything and anything in between that grew locally. Come fall/winter we would store crates of apples and potatoes in the cellar to last us throughout the next six cold, grey, winter months. By March our potatoes looked as wrinkled as the Belle de Boskoop [*that's an apple originating in the Netherlands, for us un-malateds -ed*] and were impossible to peel. As spring approached we could hardly wait for fresh greens and new vegetables. For me the queen of all vegetables and well worth waiting for was and still is the asparagus, to be precise the ***white asparagus.***

The big, fat, succulent, earthy tasting thing needed to be handled with care (so the precious tips wouldn't break off), peeled, tied into bunches and cooked for almost an hour in buttery salt water with a spritz of lemon. Then they were wrapped in a linen towel and served along with Sauce Hollandaise (I skipped the potatoes, thank you very much!) What a delight! How to eat this delicacy was another matter. The ends were held with one hand, the tip dipped in the sauce and with the help of a fork guided to your mouth…. Never, ever, ever would a knife be used to sever the mighty spear! The cooking water by the way and the peels were used to make a delicious soup.

Needless to say I had to try to grow asparagus myself. I planted four crowns a number of years ago. According to the label it is a French variety that could be grown as white asparagus. Imagine my excitement! Well, one pile has disappeared completely since planting, and the other three piles produced this:

like mine – ed]

Instead of this:

I know that a number of our club members are growing asparagus. I overheard a couple who seem to have difficulties with the harvest this year. Perhaps there are members who are having more luck? If so, perhaps they would be willing to share their secret to success during the question and answer period at the next meeting? *[These look*

In the meantime, here are some growing tips.

- **Planting:** Plants can be started from seed about four weeks before the last expected frost (I think Carol Ferryman and Tom Davis started theirs from seed). However, seeds will add several years to your wait. Most people find it easier to grow from crowns, which are available in the spring. They look like a worn out string mop, but they are very much alive. Unlike many plants, the roots of asparagus crowns can withstand some air exposure and you will usually find them for sale just loose. They should still look firm and fresh, not withered or mushy and they should smell like asparagus.

  The most common way to plant asparagus crowns is in a trench. In the spring, dig a trench about 8 to 10 inches deep and 18 to 20 inches wide. Work in your compost or other organic matter at this time. To plant the crowns, spread the roots of the crowns out on the bottom of the trench. Space plants about 12 to 15 inches apart, so they will have room to grow. Cover with a couple of inches of soil, and water well. As the plants begin to grow, continue covering them with soil, leaving only a few inches of the shoots exposed above ground. Do this until the trench is full.
- **Varieties of Asparagus:** The newer cultivars are bred to be all male, which means they will put all their energy into growing spears, not setting seed. *(I think mine must all be female!)* White asparagus is the same plant as green asparagus, however, it is **blanched** *[link in cover email -ed]* by preventing the spears from being exposed to light and therefore not allowed to photosynthesize. This is accomplished by covering the growing spears with either soil or

plastic tunnels (*or upside down buckets*). The final product (*in a perfect world*) is smooth, white and virtually fiber free, provided the harvested spears are immediately chilled to prevent the fiber from forming.

- **Harvesting:** You can't really begin harvesting your asparagus spears until the third year after they are planted. They need that time to become established and build up their root systems. This is especially true the *first* year of planting when the shoots probably won't be very large. You can harvest a few spears in the *second* year of growth. The plants are not fully mature, so let them grow undisturbed after that initial harvest. In the *third* year, begin harvesting spears that are finger-sized and about 8 inches long. You can either snap off the spears or cut them with a knife, just below the soil line. If you use a knife, be careful you don't also slice the later shoots that are still underground and haven't yet poked through. Harvest for about four weeks in the third year. In subsequent years, the shoots will continue emerging from the soil throughout the spring. After you've been harvesting for a couple of months and the weather starts to warm, the shoots will begin to get spindly. At this point, allow the plants to grow into their mature ferny foliage, which will feed the roots for next year's crop. Asparagus plants can continue producing for 20 years or more.

I found this article by Brian Minter very useful:
http://www.gardeningbc.com/page/brianminterasparagus.html

In the meantime, I keep on dreamin' ...

… and to underline Yvonne's and much of Europe's fascination with the white asparagus, here is an 18th century French faïence made in the shape of – and intended for serving - this delicacy.

…so while we are on the subject of "blanching" – the following article will blanch your mind!

The English Vegetable Picked by Candle-light *- sourced by Linda Howe*

By Mike MacEacheran, 25 April 2019

Forced rhubarb – a vegetable deprived of sunlight for extra sweetness – has been eaten in Yorkshire for centuries. Now the culinary treasure is having a renaissance.

At first there was a pop, then a mesmerising sound that drifted through the air like crackling wildfire. An unfamiliar snap and fizz echoed from the inky blackness, followed by another wonderfully alien noise and a phantom whisper of gently rustling leaves. "Listen," Janet Oldroyd Hulme murmured excitedly. "This is the moment of reckoning."

It was a Friday lunchtime, and Oldroyd Hulme was peering through a dark, cavernous doorway into what she calls her 'unearthly world' – a hangar-sized shed alive with the sound of several types of rhubarb in varying stages of accelerated growth. The vegetable was growing so fast, the air seemed to ripple with applause as it matured. The green-leaved, pink-stalked plant was familiar to me, but the situation was not.

Every detail inside the out-of-time barn carried hidden meaning. There were flickering candles elevated on spikes, all thinly spread out to help workers navigate the blackness without fear of treading

on the prized crop. There were shadowy hoes propped against the brick walls to help mulch the earth. There was the outline of gas propane heaters, and a sprinkler system to intensify the heat and humidity in the dark. There were around half a million buds – all cultivated in rows and all making groaning sounds as they germinated at an unnatural speed. It was a riveting exhibition of Mother Nature at work, yet a display teetering on the edge of the surreal. And one all-the-more glorious for rarely being seen by outsiders.

Oldroyd Hulme and her family business **E Oldroyd & Sons** have made their name producing this one-of-a-kind Yorkshire rhubarb on Ashfield Farm in the village of Carlton for five generations.

"Rhubarb has been called 'God's great gift'," said Oldroyd Hulme, who is also known as the 'high priestess of rhubarb' for her knowledge on the subject. "Watch and you can see the plants shooting towards the light – just as we would warm our hands on a fire."

A notoriously fickle vegetable to harvest, Yorkshire forced rhubarb is anything but easy to grow. It thrives in the county's cold winters, but if the soil is too wet, it can't be planted. If the temperature is too hot, it won't grow; and 10 or more frosts are needed before a farmer can even think about forcing it. Only then can horticulturalists remove the heavy roots from the field, then clean and replant them inside the forcing sheds where photosynthesis is limited, encouraging glucose stored in the roots to stimulate growth. It demands patience, expertise and good fortune, and, ultimately, it is engineered for maximum taste: once deprived of light, the vegetable is forced to use the energy stored in its roots, making it far sweeter than the normal variety.

[…]

For a simple vegetable, rhubarb has come a long way since it was discovered growing wild on the banks of the River Volga. Cultivated from Siberia to China as far back as 2700 BC, where it was used for its healing properties, it was transported along the Silk Road to Italy in the 13th Century by Marco Polo. It once commanded three times the price of opium and saffron, and was weighed against gold.

It took another three centuries – up to around the 1620s – before it was brought to England by Sir Matthew Lister, royal physician to James I and Charles I, and used as a cathartic food to purge the body of illness. That would have been the end of the story if it weren't for scientists at London's **Chelsea Physic Garden**, who discovered the forcing process by chance. Covering up leftover rhubarb crowns – the underground part of the plant – with soil in 1817, the gardeners were stunned weeks later when the robust plant produced a shock of sweet pink stems and frilly leaves.

[this probably exceeds 'fair use' so read the rest on the website – link in the cover email – ed]

Best foot forward *- sourced by Courtney Mitchell*

…an article by ***Su Ricketts*** - reproduced with permission from the Bowen Island Garden Club's *CUTTINGS. [btw- they have a very nice ad about our plant sale! – ed]*

I'd like a show of hands from anyone who has ever suffered an injury while out in the garden. It would seem that very few of us have escaped the wrath of the great outdoors. I like to think I always go out prepared: **sturdy boots, gloves, eye protectors, long sleeves and pants** when in among the roses and other **pricklies** *** *[see below – ed]*. I always have my cell phone in my pocket and a hat to protect me from the sun. Sometimes though, however hard I've tried to 'gear up', something seems to be out to get me. I want to feel safe when I go into my garden and blessed though we are not to have hungry wild beasts waiting in the woods, ready to savage us, there are many of aspects of safety we overlook. Let's consider access around the garden. Few of us on Bowen have the luxury of a flat property and in many cases, the only way around the garden is *via* stairs and changes of level. I can't tell you how many gardens I have been in where the steps are slippery, uneven and downright treacherous. Wooden steps, after a dark and wet winter are notorious for being clad in a slimy green coating that is sometimes hard to see until you're in the wobbly, back churning, hip breaking throes of it. One false move and you're horizontal.

Stone steps are equally dangerous, especially those assembled from blasted or site rock. If they haven't been installed professionally, they can be a lethal combination of different heights and widths, slippery and with jagged edges. Trip down these, especially when wet, and the only way back up or down is *via* a stretcher. One very straightforward safety aspect of stair construction is that the riser, or height of the steps, must all be the same. A safe riser is 7 inches high and a tread is 10 inches deep. Even half an inch out and they become very unsafe. If the tread, the part that you put your foot on, isn't deep enough, slanted, or not level, your foot is unstable.

I have heard lots of argument against handrails. 'They spoil the look of the garden.' You don't want your guests quivering with fear as they ascend the

perilous staircase installed overlooking that steep ravine. Or, my favourite: 'It makes it look like old people live here.' Obviously, they have no friends over the age of 30 and their parents or grandparents are long gone. One can only wonder if they perhaps perished on the stairs? Handrails need to be solid and smooth with no splintered wood and be between 34 and 38 inches in height. It should be placed on the right-hand side as you go down the steps.

With our lovely black skies at night, it is really important to have lighting in strategic areas of the garden. Stairways and entrances and where there is any change of grade, or unexpected obstacles are good places to start. These can be motion-sensored and run by solar power so they don't need wiring. There are so many varieties available and all of them just add to the safety aspect of your garden.

Hardscaping can be quite costly and more so when you have large areas to deal with. One of the less expensive materials widely used is gravel. Sadly, it can often be hazardous. If used on a slope, round gravel has to be firmly tamped down with a machine made for the purpose, otherwise it's akin to walking on ball bearings. This can make your feet disappear from under you in a split second. Crushed gravel is preferable as this packs down into a nice hard, non-moving surface. If the slope is really steep, then perhaps it is time to consider installing steps.

Not all hazards in the garden are lurking underfoot. I used to be very keen on large clay pots. They suit every kind of planting and large ones look fabulous in the garden, even when empty. They look good with moss and algae artistically smudged onto the sides and they come in all sorts of shapes and sizes. I loved everything about them until one day I happened to brush my bare leg again stone. I hadn't really noticed at first that the rim had split away from the main pot until I stepped away from it, looked down and saw my shoe was full of blood. It turns out that that little broken bit is like glass and had sliced a deep gash into my leg. A rush to emergency, five stitches and a back up ***tetanus**** shot showed me my love of all things terracotta had come to an earth-shattering end. If you spy any terracotta pots starting to fragment or crack - get rid of them before they bite. If you haven't already done so, please make sure that you have your tetanus shot kept up to date. It lasts about ten years and even if all you do is potter about in a window box, it is important to keep it current. How often have you pricked your hand on a rose thorn, then grabbed some compost and **gotten that into the broken skin***? That's all it can take… even cutting yourself with a rusty pair of pruners, heaven forbid that you have such a thing hanging about the place…. It is so easy to get immunized and very conveniently, [*any*] lovely pharmacy offers this service.

Not every foray out to the garden has to be fraught with danger. Slippery steps, uneven ground and broken pots are just some of the perils lurking but all are avoidable with some forethought and planning. Gardening should be an exercise in fun and enjoyment not one that sends you to the emergency room.

* ***Pricklies:*** **MAY 4** was *World Naked Gardening Day* – I hope you remembered, attended, and were safe and well away from pricklies. Documentation of your activities is avidly sought by *The Leaf*.

* ***Tetanus:*** **[Anti-vaxxers, this one's for you!]** *Clostridium tetani* causes a condition commonly known as tetanus or lockjaw. Basically, the muscles spasm until the diaphragm can't support breathing and the person suffocates: a nasty way to die. Infections are often picked up through cuts or scratches that have allowed the bacteria to enter into the body. If an infection takes places, death is a very real possibility so emergency medical help should be sought as soon as possible. Prevention is as easy as getting a scratch – in fact, it is just a scratch that can save your life: vaccination.

******Broken skin and what gets in:*** while *Clostridium* is a major baddie, there are other nasty bacteria and fungi that can enter through a cut and then cause no end of problems. There are too many to list. If you do get a cut – wash it out with soap and water, cover it so nothing else gets in; and keep your eyes open for the indicators of an infection/inflammation: redness (Latin *rubor*), heat (*calor*), swelling *(tumor*), and pain (*dolor*).

"Gardeners are like doctors – they both bury their mistakes"

"In gardens, beauty is a by-product. The main business is sex and death." ~Sam Llewelyn, British author

Microbiome and Gardening *- Maria Issa*

So where were we in March? Oh yes – we all have a microbiome – an array of bacterial POPULATIONS (think of it as a city full of people) all over our surfaces. The different "people" and their relative abundance – determines the character of each area – we know that some areas of the city are more crime-prone, or have better restaurants, or concentrate micro-breweries or university students. The same with your bacteria… and their effects on you. You want the beneficial ones to thrive – and the the "criminals" gone. The more I think of it, the more it makes sense that the microbiome/ population runs the city – just as much as we vote, and that determines how the city is run, our bacteria produce metabolic by-products that affect us, the host.

What has this to do with gardening? Well, apart from what bugs you get in cuts (see above) there is the concept of "gardening" the microbiome. The foods we eat, the drugs we take, the soaps we use all affect our little passengers. Not surprisingly, our daily activities – especially gardening – has an effect on our microbiome. Obviously: just think of all those bugs in the soil… I fact, soil/dirt has its own microbiome. **Zoë Schlanger, in May 30, 2017**, wrote a lovely article in ***QUARTZ*** that I will steal brazenly because it is intelligent and well written: the link is in your cover email or just cut an paste this one to get the internal links https://qz.com/993258/dirt-has-a-microbiome-and-it-may-double-as-an-antidepressant/

"…Your garden has its own microbiome, and research suggests it's good for you. Our health depends on the flourishing microbiome in our guts—and on how much of the natural world's microbiome we let infiltrate. Lately, thanks to modern life, we don't let in a lot. But in a string of pioneering studies, scientists are beginning to look at what would happen if we literally inject microbes from the soil into our bodies, reintroducing us to the ancient relationship between bacteria and human. So far, the results have been uplifting—to both the scientists and the subjects they study.

In 2004, Mary O'Brien, an oncologist at the Royal Marsden Hospital in London, published a paper with unexpected results: She injected lung cancer patients with a common, harmless soil bacteria, *Mycobacterium vaccae*, to see if it could prolong their life. *M. vaccae* had some success in earlier trials where it was tested for its abilities to fight drug-resistant pulmonary tuberculosis and boost immune system response. O'Brien thought maybe the bacteria could help her patients' immune systems beat back the cancer in their lungs. It failed.

Only, it succeeded elsewhere: the bacteria injection "significantly improved patient quality of life," O'Brien wrote in the paper detailing the findings. Her patients were happier, expressed more vitality, and better cognitive functioning—in short, it reduced the emotional toll of advanced cancer.

A few years later, Christopher Lowry, a neuroscientist at the University of Bristol, injected *M. vaccae* into mice and subjected them to a series of stress tests. The ones inoculated with the bacteria showed far less stressed behavior than their untreated counterparts—in fact, they acted as if they were on antidepressants. In a 2007 paper published in the journal *Neuroscience,* Lowry and his team wrote that the bacteria activated groups of neurons in the mouse brains responsible for producing serotonin—a neurotransmitter that, when impaired, can cause depression. Even more intriguingly, the neurons that lit up were also known to be related to the immune response, suggesting an intimate connection between the immune system and emotional health.

The world of biomedical research has already fallen in love with the promising realm of the human gut microbiome. A body of emerging evidence tells us the millions of microbes in our digestive tract influence our immune systems, our smells, our mood, and possibly even our attractiveness to mosquitoes—and to other people. But *M. vaccae* expands this thinking to the microbiome of the pile of mulch in your backyard.

There's now pretty good evidence to draw at least the outline of a conclusion: ***Breathing in, playing in, and digging in dirt may be good for your health***. Our modern, sterilized life in sealed-off office buildings and homes are likely not. Researchers have already found clear evidence that childhood exposure to outdoor microbes is linked to a more robust immune system; for example, Bavarian farm children who spent time in family animal stables and drank farm milk had drastically lower rates of asthma and allergies throughout their lives than their neighbours who did not.

But the rest of us, not raised on farms, may be missing out on that sort of protection. Some counterbalance, like spending time in a garden, might change that.

One reason dirt is so good for us might be [due to *Mycobacterium*] *vaccae*, which, after Lowry's 2007 paper, emerged on the scene as a sort of celebrity bacterium. Papers published since have described feeding mice *M. vaccae*-laced peanut butter sandwiches, and watching them race through challenging mazes far faster than their counterparts, suggesting the bacteria gave them a significant brain boost, in addition to apparently elevating their mood. That paper also demonstrated that *eating* the bacteria, instead of injecting it, could still give the mice those benefits. Which suggests eating trace amounts of it

from garden vegetables, or breathing it in, may be too, for humans.

Good news: you can get the stuff anywhere. Step out to your yard, or the neighborhood park, and you're likely to encounter some *M. vaccae*. The bacterium lives naturally in soil, though what factors make soil more or less abundant with *M. vaccae* are still being investigated (a team led by Lowry is in the process of inspecting 300 soil samples from across the US and Europe for the tiny creatures). Have a garden? Even better. Grow some food: "A three to four leaf spinach plant has over 800 species of bacteria inside it," Lowry says; eating straight from the garden might be one route to more *M. vaccae* in your life.

[…]

Old as dirt

Imagine, for a moment, if the word "parasite" didn't elicit grimaces. What if "fungus" wasn't gross, and "bacteria" sounded more like, say, the word "electrolytes" does to us now?

Our ancestors lived for centuries with a host of ancient parasites, fungi, and bacteria (including *M. vaccae*) and didn't mind at all. "We've forgotten that these were beneficial," says Emeran Mayer, a gastroenterologist and neuroscientist at the University of California-Los Angeles and author of *The Mind-Gut Connection*. "They might have caused an initial infection, but could then live in symbiosis with us," Mayer says. Many of these organisms evolved alongside humans, and likely the entire line of mammals we descended from, too. "The benefit we got was that we had a much more clever immune system that didn't attack our own selves."

That's according to the "old friends" theory developed by University College London microbiologist Graham Rook in the early 2000s when the "hygiene hypothesis" didn't seem to be able to explain why autoimmune conditions like allergic asthma were on the rise even in so-called "unhygienic" cities. The hygiene hypothesis pinned skyrocketing allergic and autoimmune disease rates on just our modern obsession with cleanliness; the "old friends" hypothesis casts a wider net of blame, implicating modern medicine's aggressive antibiotic use, pasteurized food, indoor living, and anything else that is eradicating these "old friends" from our systems." […..]

It's in your head, too

If you want to understand how an ancient soil bacterium might ward off anxiety and depression, then you need to take the "old friends" theory about modern immune dysfunction, and combine it with another biomedical concept researchers are just beginning to understand: the immune system and the brain are intimately connected. And in turn, scientists are finding more and more proof that depression and other mental health conditions are associated with prolonged inflammation—a sure sign of an immune system problem.

Up until relatively recently, immune responses and brain activity were considered functions of separate systems. But "at least half the brain cells are not nerve cells, but are immune-like cells," Mayer says, referring to "glial" cells, which are now understood to communicate intimately with our central nervous systems. "It's quite clear now that anything going on with the immune system can correspond with the brain."

The portion of American adults taking antidepressants nearly doubled between 1999 and 2012, rising from 6.8% of the population to 13%. […]

Could the trend in depression rates be related to the rise in immune conditions and the chronic inflammation that comes with them? Possibly. The science is in its infancy, but when Christopher Lowry, the neuroscientist, injected mice with *M. vaccae* and watched some of these immune-linked neurons light up, he knew he was on to something. In 2016, Lowry, now at UC-Boulder, again injected mice with *M. vaccae*, and subjected them to a series of stressful scenarios to see just how effective the bacterium was at reducing anxiety. "[…]

"….the researchers placed individual mice in the same enclosure as a dominant, alpha-male mouse, which usually triggers a classic dominant-subordinate relationship immediately. "The subordinate position is an uncomfortable place to be," Lowry says. But the mice treated with *M. vaccae* seemed to not notice. They showed 50% less of the typical flight-or-freeze behaviors the same scenario triggered in untreated mice. And they showed less submissive behaviors for weeks after treatment.

"These were dramatic shifts. We consider it a more proactive response to stress, rather than passive," Lowry says. That distinction is important: "We know in humans, PTSD is a passive response to stress." Lowry wants to know if this humble soil bacterium can be a key for treating PTSD, a sometimes treatment-resistant condition. […]

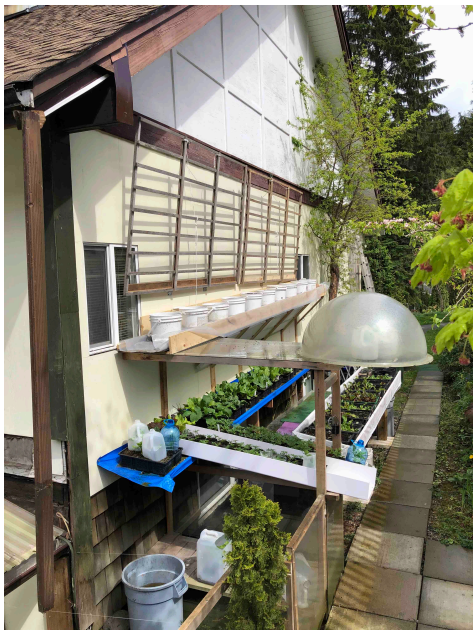
"We're using a probiotic we know has immunoregulatory properties similar to *M. vaccae*. We're also exploring pursuing clinical trials for PTSD and depression." It's a long way off, but these are first steps to seeing if a "vaccine" of sorts for PTSD and depression is possible.

For now, the research seems to at the very least to bolster what gardeners have been saying for centuries: Gardening is great therapy.

"Some people look for a beautiful place, others make a place beautiful"

Gardening Gizmos *- Wayne Smith*

I have to admit, Wayne comes up with the most incredible containers for starting seeds. Besides the gizmo on the laft, he also has a complex system of sand troughs. My plastic cinnamon bun containers pale in comparison. It seems that there are others who are also admirers:



-- "All's going well except I had a raccoon in my attic. I finally got him or her out and fixed the hole s/he made. In the photo it's romping in my veggies trying to find a way back into my house. I hope to grow cucumbers up the movable trellis along the side of the house. I'll start them under milk jugs. The sand troughs get watered at one end with a dripper. Bok-choy is flatten it. That dome is from a celery in milk jugs growing under it. raccoon's nose in plastic troughs I troughs. Sechelt sand works fine, without clay may drain better but I well without the clay. I get a yard at a doing great, if the raccoon doesn't submarine [*!!!???!!! – ed*] and I have Marigolds are growing under that bent up. I put an inch of sand in the there's some clay in it. Washed sand doubt the nutrients would hold as time and store it in a bin."

The article below is from North Coast Gardens based in northern California. I will provide a 'fair use' exerpt, and this website link http://northcoastgardening.com/2015/02/nurseries-neonicotinoid/ is in the cover letter. Their list of growers is irreleant to us, but it does remind us to ***ASK about neonicotinoid use where we buy plants****. Read this in association with the next article and keep microbiomes in your mind as well: they all tie in.*

Buying Bee-Friendly Plants: Neonicotinoid-Free Nurseries, Growers, and Seed Sources *– sourced by Linda Ferguson*

WRITTEN BY GENEVIEVE SCHMIDT

Recently I've heard from a number of wildlife gardeners who say they are no longer buying plants from regular retail nurseries because there is no way of telling whether or not the pollinator-attracting plants they are purchasing have been treated with neonicotinoid pesticides. Neonicotinoids (imidacloprid, etc) are a class of pesticide that many studies indicate contribute strongly to colony collapse disorder in honeybees, and can also kill other bees.

However, the pesticide isn't all bad. Neonicotinoids are often used because the application process is so safe in comparison to spraying. Neonicotinoids are watered in and taken up by the plants' roots to treat the plant internally, so when they are applied correctly, there is less potential for agricultural workers to be exposed to harmful chemicals, and less residue left externally on the plant when it goes to market. In addition to their use on nursery plants, neonicotinoids are commonly used for non-organic food crops (fruits, vegetables, wine grapes, and grains), and in the systemic flea medications that are dabbed on the back of Fluffy's and Fido's necks each month.

The problem with neonics is in the pollen. When plants treated with a neonicotinoid produce flowers and pollen, the pesticide is contained within the pollen and bees bring it home to their hive, where (many studies indicate) even small amounts can build up over time into a concentration that weakens or kills the hive.

Though many growers who use neonics say they take precautions by not applying them when the plant is in bloom, and by applying systemically with a soil drench or granular application rather than spraying, this only avoids acute and immediate honeybee death. The more insidious problem is caused when bees take home enough neonic-containing pollen over time to weaken or kill the hive.

Depending on the type of plant, neonics can linger within the plant and therefore the pollen for a number of years. Is that the case for all plants? No. Seeds that are treated, or tiny cuttings or liners will naturally have a much smaller concentration of the pesticide as they grow and mature, if they are not retreated. However, it's clear that merely avoiding treatment during times of bloom is not an effective way of protecting our pollinators, as the pesticide is intended to remain active within the plant for some time.

It's a heartbreaking realization for a wildlife gardener who has purchased pollinator-attracting plants from a major nursery, to think that they may have inadvertently killed or weakened many of the bees they were trying to benefit.

However, I think that wildlife gardeners who are completely avoiding purchasing from retail nurseries because of their fear of neonic pesticides are going too far. To start, the young plants often available at local native plant sales are a complete nonstarter when it comes to professional landscapers and people who don't want to wait 10 years for their 1 gallon tree to reach a size to where it could provide shelter to birds during the winter. With the average homeowner selling their home every seven years, it's just not practical. Then, there's the issue of selection. Many of these sources do not carry the wide variety of plant material and even native plant material that retail nurseries do, so being able to utilize all the available sources for plants will allow for a garden that better supports wildlife over time. Locally owned retail nurseries can be a huge ally in your search for appropriate wildlife-attracting plants for your region.

Pesticides and Antibiotics Polluting Streams Across Europe

from THE GUARDIAN, by Damian Carrington, April 8, 2019 ***- Sourced by Judith Brook***

Pesticides and antibiotics are polluting streams across Europe, a study has found. Scientists say the contamination is dangerous for wildlife and may increase the development of drug-resistant microbes.

More than 100 pesticides and 21 drugs were detected in the 29 waterways analysed in 10 European nations, including the UK. A quarter of the chemicals identified are banned, while half of the streams analysed had at least one pesticide above permitted levels.

The researchers said the high number of pesticides and drugs they found meant complex mixtures were present, the impact of which was unknown. Pesticides are acknowledged as one factor in plummeting populations of many insects and the birds that rely on them for food. Insecticides were revealed to be polluting English rivers in 2017.

"The importance of our new work is demonstrating the prevalence of biologically active chemicals in waterways all over Europe," said Paul Johnston, at the Greenpeace research laboratories at the University of Exeter. "There is the potential for ecosystemic effects."

The research, published in the journal Science of the Total Environment, found herbicides, fungicides and insecticides, as well as antimicrobial drugs used in livestock. The risk to people of antimicrobial drug resistance is well known, but Johnston highlighted resistance to fungicides too. "There are some pretty nasty fungal infections that are taking off in hospitals," he said.

One of the world's biggest pesticide makers, Syngenta, announced a "major shift in global strategy" on Monday, to take on board society's concerns and reduce residues in the environment.

"There is an undeniable demand for a shift in our industry," said Alexandra Brand, the chief sustainability officer of Syngenta. "We will put our innovation more strongly in the service of helping farms become resilient to changing climates and better able to adapt to consumer requirements, including reducing carbon emissions and reversing soil erosion and biodiversity decline."

Another major pesticide manufacturer, Bayer, said on Monday it was making public all 107 studies submitted to European regulators on the safety of its controversial herbicide glyphosate.

"Transparency is a catalyst for trust, so more transparency is a good thing for consumers, policymakers and businesses," said Liam Condon, the president of Bayer Crop Science. In March, a federal jury in the US found that the herbicide, known as Roundup, was a substantial factor in causing the cancer of a California man.
[more via this link: https://www.theguardian.com/environment/2019/apr/08/pesticides-antibiotics-polluting-streams-europe-wildlife]

EVENTS

May 18

The Lynn Valley Garden Club Plant Sale (just 2 weeks away!)
St. Stephen's hall, 1360 East 24th St.
10 AM to 1 PM

May 25, 26, 12 – 5 PM

"ART IN THE GARDEN"
Featuring LVGC member Susan Johnson!!!
2204 Mahon Ave
(…and her garden; and her partner **Thom Kline** as the resident resident artist!**)**
www.thomkline.com
$20 for an "all gardens" pass; or $2 at each garden.

https://northvanarts.ca/events-exhibitions/art-in-the-garden-2019/

"Beauty blooms in the garden as it does in the heart"

May 26

June 6
The Great LVGC Bus Tour
UBC Botanical Gardens and Southlands Nursery
$10 (there are a few spots left)

July 6
Members' Garden Tour
Details forthcoming in June

June 15-16, 2019
DENMAN ISLAND HOME AND GARDEN TOUR

The Denman Conservancy has declared 2019 to be The Year of the Wetland, and many of our extraordinary properties offer natural and man-made water features, creating complex, lively ecosystems. The famous Des Kennedy Garden is a major attraction again this year, and other highlights include an organic vineyard (with tasting room!!), a home build from creatively recycled components, a modern homestead and market garden, a couple of oceanfront west-coast architectural delights, and an island-style chocolate factory. Bloom lovers will not be disappointed, either - roses, lilies, and a whole host of other blossoms will be found in abundance. This weekend event provides an unforgettable experience for lovers of gardens, homes and rural charm. Many people return year after year, and are never disappointed. Join them! Come for a day trip, or ***book into a cozy B&B*** and stay for the weekend.

Early bird tickets are $18, and can be purchased online at http://www.denman-conservancy.org/home-and-garden-tour/.

There is another sky,
Ever serene and fair,
And there is another sunshine,
Though it be darkness there;

Never mind faded forests, Austin,
Never mind silent fields—
Here is a little forest,
Whose leaf is ever green;

Here is a brighter garden,
Where not a frost has been;
In its unfading flowers
I hear the bright bee hum:

Prithee, my brother,
Into my garden come!
----- *Emily Dickinson*