



THE LEAF

THE LYNN VALLEY GARDEN CLUB

Established 1943

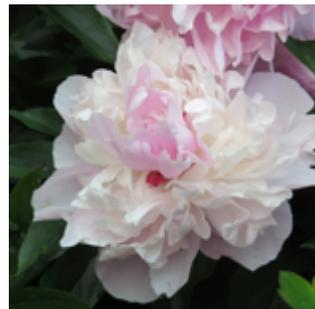
April 2022

President's Message – Lorraine Robson

This time of year, the plants re-awakening in my garden bring back many happy associations. The bronzy-burgundy stems of the peonies shooting up taller each day remind me of my parents and the New Westminster garden in which I grew up. When I moved to North Vancouver 27 years ago, my dear old Dad dug up three big clumps of these peonies that I have loved since my childhood. Their deep crimson petals are the first to open of all my peonies. The scent and sheen of those petals reminds me of carrying armloads of them as a thank-you gift from my parents to my elementary school teachers. The garden was well-established when we moved in to that house in 1966, so these peonies must be at least 80 years old – probably older.



Some pale pink and white peonies which bloom a few weeks later carry newer memories for me, but the



original plants are likely equally old. Some 20 years ago, the faculty of Northwest Community College in Terrace and Smithers invited me to teach a PD workshop on integrating team skills with other course content. My host in Smithers drove me to Terrace and on the way back that frosty April night, she pulled over on the side of the almost-empty highway and asked me to get out of the car because she wanted to show me something. She didn't seem like an axe murderer, so with just a little trepidation, I got out of the car. She pointed to the sky behind us, now swirling with amazing neon green Northern Lights!

Later, I admired some dried pink peonies in a vase in her kitchen, so she promised to dig some up for me. The next morning before driving me to the airport, she dug around in the snow and extricated some clumps from the frozen ground. She wrapped them in newspaper and plastic bags which I was allowed to stuff in the overhead bin of the small plane. Each year when they bloom, I remember with gratitude the generosity of my kind northern host and the story behind her peonies: when her mother had died, her mother's friends had given her clumps of peony roots from their gardens that had come originally from her mother's garden.

My friend Frank Greenhalgh of Australia grows a treasured pink peony that his great-grandmother brought with her from Germany to Melbourne in 1850! Though Frank and I have never met in person, we communicate by email and on Facebook almost daily, so he has become a good friend and part of my beloved peony associations. We first met on a photo-sharing site at Fine Gardening magazine and started our own international Facebook Group, Shared Garden Visions (SGV), two years later. Frank has written a fascinating article that appears in this issue of The Leaf on the sex life of the Bolwarra, a beautiful flowering shrub native to Australia.

Kevin Kelly, our speaker this month on The Four-Season Garden, is another SGV friend coming to us from Pennsylvania via Zoom. Kevin is a (mostly) retired doctor and a

LVGC MEETINGS
Non-Pandemic: 3rd
Thursday of each
month (except July
and August) non-
pandemically at
St. Stephen's Church
1360 E 24th Street

Pandemic: ZOOM
MEETINGS WILL START
AT 7PM

SPEAKER
KEVIN KELLY
TOPIC: "A FOUR-
SEASON GARDEN: SECRETS
FOR SUCCESS"

April 21, 7 PM

We have managed to get rid of our PO Box as we get 99% junk mail. Consequently, 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!
lynnvalleygardenclub@gmail.com

Executive 2022

President
Lorraine Robson x
Vice President
Gillian Konst x
Secretary
Sarah-Jane Gray x
Treasurer
Donna Wasylik x
Membership
Barb Downman x

Members at Large (MAL)
Penny LeCouteur x
Ann McKinnon x
Courtney Mitchell x
Marilyn Bullock x
Brenda Reid x

Committees

Newsletter Editors
Maria Issa x
Margaret Campbell x

Plant Table
Norma Buckland x

Hospitality
Sharon Carabetta x
Susan Nicholls x
Daphne Page x

Sunshine / Door Prizes
Rosamond Hughes x

Website
Aline Burlone x

Executive Meetings
By Zoom, 1st Wednesday of each
month, 7PM

Next Newsletter Deadline
Beginning of May
If you have material to delight
your fellow members - please
submit it via the time-honoured
routes or email to
[mailto:lynnvalleygardenclubnew
sletter@gmail.com](mailto:lynnvalleygardenclubnewsletter@gmail.com)



Thanks to all who contributed to
this edition: Rosemarie Adams,
Aline Burlone, Margaret
Campbell, Barb Downman,
Penny Le Couteur, Rita Marshall,
Catherine Rickey, Lorraine
Robson, Wayne Smith.

Master Gardener who has had his photos shown on Fine Gardening magazine's Garden Photo of the Day site multiple times. When Jay and I travelled to see Frank Lloyd Wright's Fallingwater in 2018, Kevin invited us over for dinner and took us through his beautiful garden. The next day he toured us all over Longwood Gardens with a very knowledgeable commentary on the history and restoration of the gardens, fountains, and glass houses there. One plant in my garden that reminds me of Kevin is *Spigelia marilandica*, a perennial with striking tubular red flowers tipped with yellow stars and native to the southeastern USA. I had only ever seen it in books, but the day after Kevin posted a photo of it on SGV, I saw it advertised at Phoenix Perennials, so now it lives happily in my garden.

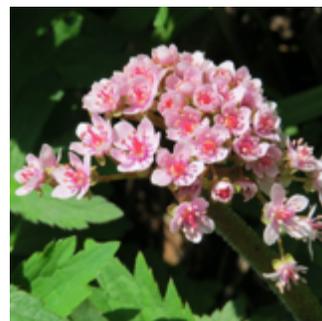
One plant in my garden reminds me of our Plant Sale at St. Stephen's a few years ago. I bought *Omphalodes cappadocica* 'Cherry Ingram' for its pretty blue flowers, but I would love to know whose garden it came from so I can think of you specifically. If it came from



your garden, let me know

For our Plant Sale on May 21, I have potted up a dozen or so little pots of London Pride which came originally from my friend Delphia Johnstone's gorgeous garden. Many of you have probably visited her garden on the Art in the Garden Tour or may remember when she won first place in the North Shore Gardens Tour. The sprays of tiny pink flowers associate beautifully with Japanese Painted Ferns.

I am also potting up some of the thick surface-growing roots of *Darmera peltata* given to me by a dear friend, Dale Fitzpatrick. The large umbrella leaves need moisture to look their best and turn from deep green to lovely autumnal shades in the fall. The waxy round balls of pink flowers rise up on long stalks before the leaves unfurl. I hope everyone is



potting up plants from their gardens or starting new ones from seed for the Plant Sale this year. Our team of MALs is working incredibly hard to organize it all. If you can help that weekend, please email Marilyn _____ to volunteer. With multiple sites, we need lots of helping hands.

Thank you very much to everyone who wrote in support of our club's donation of humanitarian aid to Ukraine and thanks to Pat Holmes, Bonnie Noakes, and Maria Issa for their generous offers to match our donation! Your Executive chose Caritas Internationalis as the recipient because they are already working in Ukraine and neighbouring countries, they have low overhead costs, and they offered matching funds up to \$500,000 from an extremely generous family. As one member wrote, "A garden club in North Vancouver supporting a greater cause DOES make a difference. I was glad to be a part of that today." I felt the same way and am really enjoying getting to know more of the wonderful members of the LVGC! You are becoming part of the web of happy associations I think about it in my garden.

I may have a LOT of favourite plants, but the ones that remind me of friends and family are my *favourite* favourites. Perhaps you feel the same?



"Daffodils and tulips jostle to the front of the stage in April. I love these early perennials: they may be more modest but they nearly all have that one special quality that a plant needs to transform your affections from admiration to affection - charm." - Monty Don

April: From the Latin verb *aperire* "to open"

SPEAKER

KEVIN KELLY

"A FOUR-SEASON GARDEN: SECRETS FOR SUCCESS"

Does your garden look good for a few months, only to disappoint you during the dog days of summer or through the dreary, cold days of winter? Join me for a visual tour of my suburban garden through each of the seasons. You will see through many photographs how I use a varied collection of plants to create year-round interest and excitement. I will share what I have learned along the way. This will be a fun way to close out the winter together.



REPORTS

Vice President – Gillian Konst

(From the Exec Minutes) On May 19 our speaker will be Nina Shoroplova, author of *The Legacy of Trees: Purposeful Wandering in Vancouver's Stanley Park*. She is a Master Gardener. Something special is being booked for June – so watch this space.

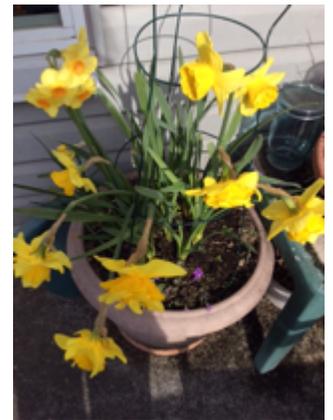
Treasurer – Donna Wasyluk

Bank Balance as of April 4	\$12,335.11
<u>In Petty Cash</u>	<u>\$100.00</u>
Total	\$12,435.11

Bank E-transfers:

Remember that LVGC offers e-transfer as an additional form of payment for club members. Please state the reason for your transfer so that it can be applied to the appropriate income account: *ie* The Dig, Plant Sale, Membership, etc. Please keep in mind **that e-transfers for membership** must be made during the current membership year.

The email to use for e-transfer is: LVGC.Treasurer@gmail.com. **HOWEVER – please note that e-transfer will NOT be available for the Plant Sale: please see the MALs' report below.**



Membership – Barb Downman

"We continue to be at full membership. We now have a few names on the waitlist for next year! If you haven't already done so, Membership would like to encourage you to volunteer to work the plant sale. It is lots of fun and a great way to meet other members. Please read the report from the Members at Large to find out how you can become involved in this fantastic event."

Members at Large (MALs)

*- Marilyn Bullock, Penny LeCouteur
Ann McKinnon, Courtney Mitchell, Brenda Reid*

The MALs are hard at work on the **PLANT SALE** scheduled for **May 21**.

SOIL, POTS and LABELS Special thanks to Jackie Morris and Kathy Stubbs for hosting the soil piles, Barb Downman's husband for expertly making 1,000 labels, Barb herself for scoring an enormous pile of pots, members who dropped off pots, Donna Wasyluk for

getting us free soil from North Van District, and of course to Brenda for pulling all this together.

The North Van District had promised us 2 cubic yards of soil and generously gave us twice that amount. There were some questions regarding the soil we

purchased – it was Premium Veggie Mix from Premium Soils Ltd. – and is the same soil purchased in 2020. Their website advertises it as “the only true veggie soil available in our area” and states that “it is a free draining nutrient rich soil that is high in beneficial organic matter and micro-nutrients with a proprietary blend of premium PH balanced composts and an appropriate amount of sand providing for optimum growing conditions.” The distributor assured us it could be used directly on plants and seedlings without further mixing but mixing it with garden soil was also fine.

We still have a few labels and some pots of various sizes left over so if you find yourself needing them, please contact Brenda by phone or email. We’re looking forward to seeing all the wonderful plants you will be potting up and donating to our sale.

SILENT AUCTION Brenda also volunteered to look after the silent auction so please contact her if you have anything you would like to donate. We are planning on having silent auction tables at a couple of the plant sale sites with various bid closure times happening throughout the day.

VOLUNTEERS WE NEED YOU!!! Thank you to those who have already emailed but we need more of you!

FRIDAY: to label and price the plants we have 9 volunteers and would like at least 9 more!!

SATURDAY: we have 12 volunteers and NEED 40!!

SUNDAY: we need 4 people for 2 sites to finish up.

Please email Marilyn or phone her.

This is a wonderful opportunity to meet fellow gardeners, chat with local folks and remind yourselves of all the great plants that exist on the North Shore.

SITES Again this year, the PLANT SALE will be spread across the 7 sites we used previously. However, we are selling veggies and perennials on the same day, so using 2 fewer sites for perennials than last year. The plan is to sell *only perennials at 5 sites, only veggies at 1 site, and 1 site divided between veggies and perennials.* We hope to make this mixed site work by using tables under which we will store surplus plants, as we did at the church hall sales. Anyone who has a spare long table which they are willing to deliver on the Friday and pick up either late Saturday or on Sunday, should contact Penny by phone or email. Note that the tables may get wet and dirty, although we do have some tablecloths to protect them.

VEGGIES, HERBS, and FRUIT As usual, the Veggie-Growers are coordinating the veggie, herb, and fruit part of the sale; including pricing, site set up and site assignments. If you are donating any of these, please

email Jackie Morris ; because we have eliminated the Veggie, Herb, and Fruit donation form. We learned last year that there are half a dozen large donors, who can be distributed across the two sites. The thirty smaller donors can then easily be assigned to one of the two sites.

PERENNIALS In late April or early May, Ann will send out the Office365 form to collect the data about the names and quantities of the perennial you will donate. If you do not know the name of your plant, please email a picture to Ann and she will put you in touch with an expert who will help you identify it. There is a section at the end of the form for *Other* plants but it would be helpful to have as many identified and labelled as possible, as this much less work for Ann. You will have about a week to fill out the form and *Submit* it to the database. This has the added benefit that most of you will have potted up your donation and the plants will have time to flourish in the pot before they star in the sale. Ann needs a week to look at the data, figure out who are the dozen major perennial donors, assign them to different sites, and fit the other forty or so donors around them. The goal is to have a

balanced set of plants at each site and have you deliver to only one site (except for those of you who also grow veggies). Of course, there are a few exceptions such as Penny, who has over 50 hostas and so gets to drop off at several locations. Luckily, she’s a MAL so she will need to visit multiple sites anyway! In the last week before the sale, Ann will send each donor an email telling them the site to deliver their plants. We ask that

you deliver them on Friday morning, if at all possible. We need the Friday afternoon to arrange the sites and price all the plants. We must also do any last-minute plant identification and labelling, so it can be quite a hectic time. Note that if you are also a veggie donor, Jackie will be contacting you with instructions for dropping off those plants.

SALE DAY The sale runs from 10 am to 4 pm on Saturday May 21 and may spill over to one or two consolidated sites on Sunday morning from 10 am to noon. The current plan is to advertise to the members that the sale starts at 10 am and to the general public that it starts at 10:30 am. The idea is to give the members a head start at the plants. Of course, friends, family, neighbours, and anyone else who appears will be served when we open for business. We plan to create a brochure and advertise in the North Shore News, although we will refer them to the website for the actual site addresses.



This will be a CASH ONLY SALE, although the members may write a cheque for larger purchases. There will be NO e-transfers.

As Covid does not seem to be going away, we plan to provide hand sanitizer, masks, and signs for social distancing.

And finally, *please pray to the weather gods* that we have a warm and sunny weekend. Whatever you did last year worked!

BRIGHT SPOTS

Lewisia, Tulipa linifolia & Pteridophyllum

- Rosemarie Adams



Lewisia – was named after Meriwether Lewis of the famed Lewis & Clark Expedition of 1804-1806. *Lewisia* grow in well drained sandy soil and make a nice display in crevices in walls. They are extremely hardy, but need protection from winter moisture. Whether grown in the ground or in pots, a layer of gravel between the soil and lower leaves helps prevent leaf spoilage and rotting. In winter, I place a small wedge of wood under the bottom edge of my pots to keep the pots on an angle and improve drainage. *Lewisia* come in a lovely assortment of colours.

Tulipa linifolia - I purchased the tulip a couple of years ago with a tag that said *Tulipa linifolia*. All the info I can gather seems to say that this should be red, however it always blooms yellow, so all I know is that it is a pretty, small-flowered species of tulip.



Pteridophyllum racemosum - is a compact woodland plant native to Japan. It looks like a fern, but it is actually in the poppy family. Pretty spikes of white flowers pop up mid spring. It likes it best in morning sun/light shade. My *Pteridophyllum racemosum* is not yet in full bloom, so have sent photo from last year.



"A flower blossoms for its own joy" - Oscar Wilde



DIY Gardening

- Aline Burlone

We received an email from an assistant library media specialist in Maine thanking us for posting the General Gardening Information on our links pages (page<http://lynnvalleygardenclub.org/links/general-gardening-information/>). Their library was hosting a special "Spring Gardening Planning & Preparation" workshop in March and was compiling a resource guide for the attendees and our General Gardening Information section led them to some great sites to check out - LVGC among them!

Take a bow, LVGC!

Her students requested that she let us know how much it had helped them. One of her students found a good site: and wanted to share it with us: <https://couponfollow.com/research/diy-gardening-and-landscaping-ideas>. It has also been posted on our General Gardening information links page.

[Hats off to Aline - who does a fabulous job with the LVGC website: no wonder people find it useful!!]

"That first snowdrop, the flowering of the rose you pruned, a lettuce you grew from seed, the robin singing just for you. These are small things but all positive, all healing in a way that medicine tries to mimic." - Monty Don

New Pollinator Gardens on Grand Boulevard

- Lorraine Robson

The support for pollinators is growing with the potential development of two new gardens on Grand Boulevard! This year, the City of North Vancouver has selected the first of two sunny sites near 17th Street (see map below) with the encouragement and support of Butterflyway Rangers from the David Suzuki Foundation's Butterflyway Project [The Butterflyway Project - David Suzuki Foundation](#). CNV have ensured both sites will have access to water to irrigate the new gardens. Now all they need are some volunteers to help plant flowers to attract the pollinators and maintain the new gardens.

One ranger, Sally Hocking, has been helping Donna Wasylik with the development of a butterflyway garden between Glenhaven Cr. and Dollarton Hwy, so she has asked Donna to collect names of volunteers from our club. If you are willing to help out, please contact Donna by email. This is a wonderful opportunity to learn about which plants best support our native pollinators and to create something beautiful in the community!



Isn't New Life Amazing?

-Wayne Smith

A week ago, my brother-in-law Denis showed up at my place with a little wooden bee house. "I've got too many, here nail this up somewhere warm and keep a look-out for bees." We dumped a handful of bee larvae into the bee house, screwed the box to the warm side of the greenhouse, stood back, and took a look. "Well, should be a thousand of them soon. I'll be back in August to collect the box and new bees. Those holes will be plugged with mud." I was outside in the sun yesterday looking down the bee holes. Something was in there, wiggling. I fiddled with the focus on my camera and cracked off two shots as the focus

cleared and this little bee.



(So here we are working to keep pollinators, create butterflyways and then this comes along: read it and weep!)

Pest Management Plan

-

Aline Burlone

BC Timber Sales' proposed Pest Management Plan for the Chinook Area Summary of Information

On Friday February 20 a notice of intent was published in the Hope Standard regarding the development of a Pest Management Plan (PMP). The applicant was the BC Ministry of Forests, Lands, Natural Resources Operations and Rural Development and BC Timber Sales, Chinook Business Area. BC Timber Sales manages 20 percent of the province's allowable annual cut for Crown Timber. Notice was given by the applicants to manage vegetation of forest lands using the principles of IPM (Integrated Pest Management). The use of pesticides is intended within the area to which the PMP applies. Other methods include manual cutting, manual stem bending, mechanical cutting using brush saws and mechanical cutting using chainsaw. This is to be carried out on Crown Forest lands in the Chinook area which includes Agassiz, Chilliwack, Mission, Hope and Squamish within the Chilliwack Natural Resource District and the Sea to Sky Natural Resource District. This IPM is to be from April 1, 2022 to March 31, 2027. Input was to be sent to BC Timber within 30 days of the publication of the notice.

Articles appeared in the North Shore News on March 24, 2022 the Vancouver Sun on March 25, 2022 and the Hope Standard on March 30, 2022. The following points were mentioned in these articles:

Concerns regarding the aerial and ground application of glyphosate, triclopyr and 2,4-d.

Glyphosate has been linked to cancer and has been found to contaminate vegetation for up to 12 years, has impacts on freshwater zooplankton and is toxic to aquatic organisms.

The 30-day [ONLY!!! - ed] consultation period is not adequate for proper feedback engagement.

There is no indication of the exact location where the herbicides might be used.

Many of the plants targeted are used by First Nations as medicine and food.

The notice of intent was only advertised in print and not electronically.

The rules for herbicide applications do not provide adequate or strict protection of waterways.

Concerns over the consequences of the use of herbicides which include reducing biodiversity, degrading wildlife habitat, reducing carbon sequestration capacity, increasing fire risk and erodibility of soils.

The *Vancouver Sun* contacted the Ministry of Forest. The response is summarized below:

They only use herbicides when other options are not successful. [*define 'successful..' - ed*]

The use of herbicides has declined in recent years. [*and a good thing, too! - ed*]

The permit does not mean that application will take place. [*pull my other leg! - ed*]

Any proposed use of herbicides must be identified and approved by the Ministry of Environment and Climate Change. [*that does not reassure me - ed*]

The effects of glyphosate on human health have been reviewed by international agencies including Health Canada and the general conclusion is that exposure does not pose a carcinogenic risk to humans. [*not considering the food chain - ed*]

On April 1, 2022, The Squamish Nation issued a statement regarding the BC Timber Sales' PMP stating that:

"In Fall 2021, the BC Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD) referred the PMP to Skwxwú7mesh Úxwumixw for review and consultation. The Nation expressed concerns about the potential risks to the Nation's inherent rights to practice its culture, including the gathering of traditional medicines from forests, due to this plan being implemented. After further discussion with FLNRORD staff, Nation staff confirmed that no herbicides have been sprayed within Skwxwú7mesh Territory or the Sea to Sky district since at least 2012, and there are no upcoming plans to spray.

In late 2021, the Skwxwú7mesh Úxwumixw government agreed to the PMP on the condition that BCTS must obtain written consent from Squamish Nation in advance of any chemical prescriptions taking place. Prior to providing consent, staff from Squamish's Ta na wa Yúus ta Stitúyntsam' (Rights & Title) department will review detailed information on the proposed prescription and assess how best to proceed or not.

As a regulator who oversees activities throughout the territory, the Skwxwú7mesh Úxwumixw is committed to stewarding our land and water for current and future generations."

The Engineering, Parks and Environment Department of the City of North Vancouver has provided the following information: "Under the Province's Integrated Pest Management Act, IPMPs must be submitted in advance of any pesticide use. The goal of an IPMP is to guide a multifaceted approach to managing pests, starting with ecosystem planning to avoid pests and multiple methods to treat including biological, mechanical, behavioural, physical and chemical means. Therefore, an IPMP does not imply that pesticides are going to be the main form of treatment for pests: pesticides are intended to be used as a last resort."

BC Timber Sales has confirmed the following additional information:

- There are no active cutblocks in the Metro Vancouver area, and thus no plans to spray at any time within this area.
- There are also no plans to spray in 2022 within the larger district area stretching from Hope to Squamish.
- The IPMP does not necessarily indicate plans for increased amount of herbicide application: the previous IPMP for the district area was expiring this year and a new IPMP was required to be in place under the legislation in advance of any next steps.
- The IPMP is distinct from a "Notice of Intent" to treat specific areas, which would be prepared as a subsequent step should any concrete plans to spray the cutblock areas be developed. The Notice of Intent would be subject to an additional 90-day notice process, including First Nations engagement.
- This IPMP does however highlight the issue of what expectations BC Timber Sales have laid out for forestry businesses to reduce the use of chemicals in their forestry operations. Historically, silviculture operations have used herbicides such as glyphosate as a tool to control deciduous species (eg alder trees and berry-producing shrubs) which could outcompete the coniferous timber species targeted for future harvest. More recent research has demonstrated that reduction of these broadleaf species reduces biodiversity and wildlife habitat and can increase wildfire risk and soil erosion.

I have contacted BC Timber Sales Offices by phone on March 29, 2022 and email on April 10, 2022 to find out if the draft is now in effect, if any changes were made to it and if an update can be found on their website. I have not yet received a response. Please see the "April links" for the complete information summarised above.

[*Editorial comment: "Those that fail to learn from history are doomed to repeat it." - Winston Churchill. Did we learn nothing from DDT? After all we have visited upon Indigenous Peoples - they are still the ones who save our environment and us from ourselves. - Maria*]

The Intriguing Sex Life of Bolwarra

- Lorraine Robson

[If that title doesn't get you reading nothing will!]

And now that you are hooked, let me explain. Bolwarra is an aboriginal name for *Eupomatia laurina*, which is an Australian relic of ancient Gondwanan flora, an evergreen understory shrub. Part of the intrigue of Bolwarra is its unique reproductive biology, involving asexual and sexual reproduction, and its highly specific symbiotic relationship with small weevils in the genus *Elleschodes*. The weevils are attracted by the fragrance of the Bolwarra to feed in the flowers and lay their eggs during the day, and when they emerge at night, the Bolwarra has its pollen ready to adhere to the sticky little weevil bodies before they fly off to find the flowers of other Bolwarra plants. The Bolwarra have various other reproductive systems to fall back on, but apparently the weevils are not attracted to any other flowers, only the Bolwarra.

Nowadays, we are fixated on the role of pollinators, especially bees, so it is intriguing to learn about weevils having such a pivotal role in eastern Australia. The interesting story of this relationship has been extensively researched by Dr Frank Greenhalgh and Dr David Beardsell, who both worked for 40 years

in the Department of Agriculture/Primary Industries of the state of Victoria in Australia. One of their conclusions, however, is that "although there has been a long and successful association between Bolwarra and the weevils, the question is whether this relationship can be maintained when there are far more rapid changes in the climate than previously experienced. The danger is that Bolwarra and its pollinator weevils may respond differently to such dramatic changes. For example, climate change is causing bushfires to become more frequent and severe during summer in south-

eastern Australia, and although Bolwarra will survive the fires via vegetative propagation, the intense heat may kill

BREAKING NEWS - An LVGC SEXCLUSIVE!
This is a "world's first":
Premier pre-print pre-publication presentation printed in THE LEAF
Read the FULL ARTICLE at the end of this LEAF or on the LVGC website

the weevils."

Bolwarra is a member of a lineage of plants, which existed when the supercontinent, Gondwana (Plate 3), was still breaking up around 80 million years ago. Fossils indicate that the plant appeared between 72 to 66 million years ago. It is thought that a weevil pollination system of the plant was developed by the end of the Cretaceous period (66 million years ago).



How to Identify a Hosta

- Penny Le Couteur

A hosta, also known as a plantain lily, is native to Japan and China, frost hardy and mainly grown for the decorative leaves which are often variegated in white, cream, yellow or blue. Usually, all you need to do to identify a hosta is to look at the distinctive foliage and say "Yes, that's a hosta!!!" However, identifying a particular hosta by name is a different, and often impossible task.



So, my first suggestion is don't lose the plant label that comes with the hosta when you buy it from a nursery. You should immediately make a more permanent label as those bendy plastic ones break down within a year or two. And as hostas disappear completely in the winter, you need a nice strong stake-like label that can be pushed firmly into the soil very near the hosta base. As the plant grows in the spring, I move the label out a bit so it can be seen, and return it closer to the plant base as the leaves disintegrate in the fall. The photo shows the stakes I use, the labelling machine and the labels I make. This is an expensive way of making labels, but they usually last for years.

There is an excellent online resource for hosta - "Hosta Library" <https://www.hostalibrary.org/b/b.html> This has the alphabetical listing for

over nine thousand hostas. Each hosta entry has several photos of plants, leaves, flowers etc that you can scroll through

and if you click the top LHS "MyHostas.net Database" you get information on size, vein pair number, colour and variegation, flower, and other details. This is great if you know the name of your hosta, but not much help if you don't.

But there are cases where it will be useful. Say you originally knew the name of your hosta but both its label and your memory have forsaken you. You are almost sure it started with "F". Go to the Fs in the Hosta library and run down the list: wait a minute - "First Frost" sounds familiar! Check the photos and description of "First Frost" to confirm the identification. (Only works if you have an inkling of the initial letter unless you want to scroll through all 9,305 names!!)



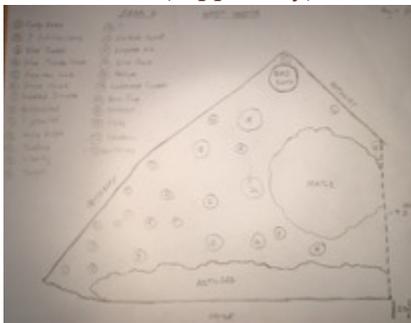
You can also use the Hosta Library if you have two labels, and you are not sure which belongs to which plant. Or if someone looking at your garden thinks they know the name of one of your hostas, you can check this on the Hosta library. In other words, you do need a clue for the Hosta library to be useful in identification.

I should also mention that different photos of the same hosta can look as if they are different plants,

especially regarding the colour. Probably the light or the camera is the reason, but the shape and size of the leaf should be the same. The pair of photos below (taken from the Hosta Library) are both hosta "Barbara Ann". The colour and variegation are different, but the leaf size and shape are similar.

Also, in the database there may be differences of opinion on the size, one saying small and the other small/medium. Sometimes the flower colour is given as white and other times the same plant is said to have very pale mauve flowers.

I have (supposedly) 141 different named hostas - and some unnamed ones -



but each winter I seem to lose a few hostas and some hosta labels despite my precautions. An additional method that helps keep track of my "precious little darlings" is to have detailed plans of what is planted where. This requires me to update periodically and as it has been a while since I have done this. I will have to do it in the next few weeks once the weather warms up and hostas really start their spring sprouting. [and in case you are wondering about the cartoon: Penny has a rula that a hosta shouldn't costa more than a latte - ed]



The Germinator



LVQC

Zoom meetings are just modern seances

"Do this for me. Place a seed, the tiniest you can find, that of a hydrangea or begonia or giant sequoia, singly upon your thumb. Now hold it up to the light to inspect it more closely.

Yes, you may use your reading glasses. There, beneath its seed coat, the lion's share of its mass is simply stored energy in the form of starch or fat. But inside that speck upon your thumb is also found the embryo, a tiny mass of cells that can when awakened destroy concrete, melt hearts, and provide the stuff of honey. Having watched countless times the ignition of life in a germinating seed, having bumbled my way into the arcade of growing plants for a living, I remain grateful and fulfilled."

By Daniel J Hinkley from his book "Windcliff" available in the North Vancouver District Public

Library <https://nvdpl.bibliocommons.com/v2/search?query=windcliff&searchType=smart>



"There's someone who wants to join us."
 "Elizabeth, are you there?"
 "We can't hear you."
 "Can you hear us?"

Since there have been many inquiries about whether pig poo was forthcoming – and I’ve had not a whiff – I thought I would look up what other sh*t was out there and whether the alternatives were good, bad or indifferent. Herewith my researches: [start here – by Cindy Rajhel - <https://homegrownfun.com/how-to-use-manure-in-the-vegetable-garden-chicken-horse-cow/>] So how do the various MANURES stack up?

Once composted or aged, manures lose some of their nitrogen content. Before they are composted, they are considered “HOT”. This means they contain loads of urea nitrogen that can burn plants’ roots. Some manures are hotter than others. Knowing the nutrient strength of a particular manure can help you match it to the plants you’re growing. WARNING: Never use human, cat or dog manure or any manure from a meat eater. If your local zoo offers up some lion poop for free, kindly pass. Lions may be kings of the jungle but not the home garden.

The Hottest of the Hot – CHICKEN. Fresh chicken manure packs a powerful nitrogen punch, almost twice that of horse manure. One aged and/or composted, use it sparingly in areas where you’ll be growing crops that flower because loads of nitrogen may produce loads of leaves and you’ll be left wondering why you didn’t get any blooms or fruit. Corn craves nitrogen and is a good match for poultry poo. (An average-size hen makes 1 cubic foot of manure every six months. Wow!)

The Coldest of the Cold – COW. Cow manure has the least amount of nitrogen but is my preferred manure because it’s easy to find and the least likely to burn plants or over fertilize and stunt flower or fruit development.

OTHER MANURES

RABBIT manure is less smelly than other manures. It’s higher in nitrogen than sheep, horse, chicken and cow manure. Its phosphorus content is wonderful and this type of manure suits flowering and fruiting plants.

HORSE manure is rich in nitrogen but lacks phosphorus and potassium so it’s not the best choice for flowering plants, tomatoes or peppers. Use it instead on leafy plants, ornamental plants and lawns. But remember that it should be aged or composted for use with edibles. Corn, potatoes, garlic and lettuce would benefit from soil amended properly with well-aged or composted horse manure.

SHEEP manure is probably the better manure compared to horse manure because it contains potassium. People comment that it smells less than cow or chicken manure but it takes longer to dry out.

PIG manure is a non-starter. It’s problematic. Although it has loads of nitrogen, it contains awful strains of bacteria and the nitrogen it does have releases so slowly, it’s not worth the risk or trouble.

(This author obviously doesn’t like composted pig poo.... so check out the table above from <http://www.seedseller.in/organic-farming/36-fertilizer-use/76-organic-fertilizers> – as it is the most comprehensive list I could find – but it is still missing “mushroom manure”.) Though technically mushrooms don’t poop, but, as we’ve all heard the complaint that “they treat me like a mushroom: keep me in the dark and feed me bullsh*t”... there must be a mushroom/manure intimate relationship here that needs to be explored.

<https://www.gardeningknowhow.com/garden-how-to/soil-fertilizers/mushroom-compost.htm>

This website states the following: Mushroom compost is a type of slow-release, organic plant fertilizer. The compost is made by mushroom growers using organic materials such as hay, straw, corn cobs, and hulls, and poultry or horse manure.

There are several uses for mushroom compost. It can be used as a soil amendment for lawns, gardens, and container plants. However, this product should be used with caution due to its high soluble salt levels. These salt levels can kill germinating seeds, harm young seedlings, and cause damage to salt-sensitive plants, like azaleas and rhododendrons.

Material	Nitrogen (N)	Phosphorus (P)	Potassium (K)
Manures			
Bat guano	10.0	4.5	2.0
Cow manure, dried	1.3	0.9	0.8
Cow manure, fresh	0.5	0.2	0.5
Hen manure, dried, with litter	2.8	2.8	1.5
Hen manure, fresh	1.1	0.9	0.5
Horse manure, fresh	0.6	0.3	0.5
Pig manure, fresh	0.6	0.5	0.4
Sheep manure, dried	1.4	1.0	3.0
Sheep manure, fresh	0.9	0.5	0.8
Vegetative and Animal Concentrates			
Bonemeal, steamed	2.0	22.0	—
Castor pomace	6.0	1.9	0.5
Cocoa shell meal	2.5	1.5	2.5
Cottonseed meal	6.0	3.0	1.0
Dried blood meal	13.0	1.5	0.8
Fish meal	10.0	6.0	—
Fish scrap	5.0	3.0	—
Garbage tankage	1.5	2.0	0.7
Hoof & horn meal	12.0	2.0	—
Sewerage sludge	2.0	1.4	0.8
Sewerage sludge, activated	6.0	3.0	0.1
Soybean meal	7.0	1.2	1.5
Wood ashes	—	1.8	5.0

The beneficial uses of mushroom compost, however, far outweigh the downside of high salt levels. This type of compost is reasonably inexpensive. It enriches the soil and supplies nutrients for the healthy growth of plants. Mushroom compost also increases the water-holding capacity of the soil, which decreases your watering needs. Mushroom compost is suitable for most garden plants. It supports various types of plant growth, from fruits and vegetables to herbs and flowers. To get the greatest results when organic gardening with mushroom compost, thoroughly mix it in with the garden soil prior to planting or allow it to sit over winter and apply in spring.

The reason I wanted to get this comparison done is because on one of our Hosta Hunts with Penny, in Abbotsford, we found the following: CHICKEN, COW and MUSHROOM manure. The Nursery owner will deliver - if we order enough quantity.... or if we don't, we might have to chat up one of our fellow LVGC members who might have a truck or a trailer. Let me know.



Chicken 20 L - \$6



Cow 12 kg - \$5



Mushroom - \$9



GOINGS-ON - ALIAS CABIN-FEVER TREATMENT

If you are itching to get out - but there is STILL nothing coming up in the garden - here are a number of delightful, curated items for your consideration.

First and foremost, remember that here is a new 'plant buying opportunity' appearing on the North Shore!!! Aline tells us that The **Urban Roots Garden Market** will appear where the buses used to be in Moodyville. And thanks to Lorraine - they will be happy to offer LVGC members a 10% discount. Their *planned opening was during the 1st week of April*. [HAS ANYONE SCOPED THEM OUT? - ED]

Food Farming Opportunities

- Rita Marshall

Keen to volunteer? Our favourite local food farm Loutet Farm is always eager to welcome volunteers and is offering Volunteer Orientation sessions on **27 April, 25 May, 29 June, 27 July and 31 August**. There are four volunteering avenues:

- Farm (bed prep, weeding, shovelling)
- Markets (help with set-up, traffic direction, and cashiering)

- Sharing gardens (teams work at five sites around North Van)
- School programmes (leading small groups of kids on simple gardening projects)

And if you are under 30 and looking for a summer job, the Edible Garden Project at Neighbourhood House is hiring a Farm Hand for the summer.

Check out the website for more details on how to get involved: <https://ediblegardenproject.com/volunteer/>

Chilliwack Tulip Festival

- Lorraine Robson

Despite the excess moisture we enjoyed in last Fall's "atmospheric rivers," the tulips bulbs survived and the Festival is on again! The colourful fields have been open since April 11 and will welcome visitors until May 1st. Almost 12 acres are on display, with the earlier tulip varieties already in full bloom and the later varieties just beginning.

The glorious bands of colour are enough to brighten any day, no matter how gloomy. So plan to *tiptoe through the tulips* at 41310 Royalwood Drive in Chilliwack!

Note: Check the following website for tickets: Buy Tickets - 2022 Chilliwack Tulip Festival <https://tulipsofthevalley.tickit.ca/events/14891>

Tickets are only available online this year. Book in advance for a discount and note that tickets are non-refundable.

Denman Island Garden Tour

- Judith Brook

The Denman Island Home and Garden Tour will take place **June 11 - 12, 2022**. As their website states:

This unique and inspiring Tour has long been considered one of BC's top horticultural events. Every two years our tranquil island throws open its garden gates, inviting the public for a rare up-close look at the creativity, skill and passion Denman residents pour into their properties.

Photos and full descriptions of this year's Homes and Gardens are available at: <http://homeandgardentour.blogspot.com/> All proceeds go to the Denman Conservancy Association, a registered charity which, with the support of this Tour, has protected over 700 acres of Denman Island. **Tickets \$20** (children under 12 free) with all proceeds towards conservation.

You can also watch a 22-minute video with Des Kennedy, a well-known author, humorist and climate protector - He and his wife Sandy have their home on the tour. The video on *Recreating Eden* can be seen here:

<https://www.youtube.com/watch?v=stgj6UmdycU> For more details, see Denman Island Home & Garden Tour | Denman Conservancy Association <https://www.denman-conservancy.org/home-and-garden-tour/>

The Vancouver Rose Society Show

- Rosemarie Adams

We will be hosting the 66th Biennial Rose Show on **June 12** (Sunday) from 12:30 - 4:30 pm at VanDusen Botanical Garden (in the Floral Hall). **Admission is free.**

The event will showcase *hundreds* of varieties of roses. Award winning blooms will be arranged by class, colour, and fragrance. Rose plants and bouquets will be available for purchase as well.



Learn more about the Rose Society:

Website: <https://www.vancouverrosesociety.org>

Contact Us: <https://www.vancouverrosesociety.org/contact-us.html>

Facebook: <https://www.facebook.com/groups/283860336726030>

Instagram: <https://www.instagram.com/vancouverrosesociety/>

"April is the kindest month. April gets you out of your head and out working in the garden."

- Marty Rubin

Fraser Pacific Rose Society Show

“Celebrating our lives with roses” is the catch-phrase for this show! Not only will there be hundreds of roses in horticultural exhibits and displays in vases, bowls and baskets, but you can learn about the more disease-resistant and Canadian-hybridized roses that grow well in the Lower Mainland and other regions of British Columbia.

For even more fun, plan to enter the Floral Art competition. Members of the public are cordially invited to enter an exhibit of roses that you have personally grown in your garden, for THREE MONTHS OR MORE. Advance registration required, of course. Start here: <http://fprosesociety.org/> There are nine different classes to choose from and they all offer cash prizes.

You will also be invited to help judge the People's Choice Award for:

- a) The Most Fragrant Rose
- b) Favorite Floral Design

Roses will be for sale throughout the show, and at the end of the show all the exhibit cut roses will be offered for sale to the public at a very reasonable price.

Mark Saturday **June 25th** & Sunday **June 26th** on your calendars, and plan a trip to the Dogwood Pavilion, 1655 Winslow Avenue in Coquitlam to see the gorgeous display.



The LVGC
Premiere pre-print pre-publication
presentation printed in THE LEAF

Bios of Dr. Frank Greenhalgh and Dr. David Beardsell

Frank Greenhalgh and David Beardsell have both worked for 40 years in the Department of Agriculture/Primary Industries of the state of Victoria in Australia. Frank was initially a plant pathologist specialising on the control of soil-borne diseases of horticultural and agricultural crops, and later managed the Department's investment in research and development supporting horticultural industries. David developed soil-less potting media for the nursery industry in Victoria, and used his reproductive biology skills to develop plants for the cut-flower industry. In retirement, Frank gardens in the small village of Metung in eastern Victoria, and David gardens in Melbourne and lectures part-time at the Burnley campus of the University of Melbourne.

The intriguing sex life of Bolwarra: an Australian relic of ancient Gondwanan flora

- Frank Greenhalgh and David Beardsell

The plant and its history:

Bolwarra is an aboriginal name for *Eupomatia laurina*. It's an evergreen understory shrub (up to 4 m high) in rainforests and wet sclerophyll forests of the east coast of Australia, covering tropical, sub-tropical and warm temperate climates (Plates A & 1). The plant has a primitive xylem for transporting water, and hence, its distribution is confined to moist soils within forested areas of the continent (Plate 2). The most southern natural stand of Bolwarra is just north-east of the small

village of Metung in the state of Victoria, where FG's garden is located (Plate 2).

Bolwarra has dark green, glossy leaves and it flowers during summer (over 8 weeks in southern Victoria). The flowers are unique in their morphology and biology. They are white-cream (2.5-3.0 cm diam.), have a very strong musky-fruity fragrance, and last only one day. They are bisexual (both male and female parts on each flower), but don't have sepals, petals, styles or nectaries. Caps covering flower buds (Plate 5) are

abscised at flowering (Plate 6). The flowers have stamens on the outside and sticky staminodes (petal-like sterile stamens) on the inside (Plate 7). The stamens and staminodes are united at their base, and together form a circular ring (synandrium) around the female parts of flowers in a receptacle. The positions of the stamens and staminodes of flowers are continually changing during most of the day, making it difficult for botanical artists to draw or paint the flowers.

Bolwarra is a member of a lineage of plants, which existed when the supercontinent, Gondwana (Plate 3), was still breaking up around 80 million years ago. Fossils indicate that the plant appeared between 72 to 66 million years ago. It is thought that a weevil pollination system of the plant was developed by the end of the Cretaceous period (66 million years ago).

Part of the intrigue of Bolwarra is its unique reproductive biology, involving asexual and sexual reproduction, and its highly specific symbiotic relationship with small weevils in the genus *Elleschodes*.



Plate A. Mature Bolwarra shrub in the Maranoa Botanic Gardens in Melbourne.

Asexual reproduction:

Bolwarra produces shoots from the base of the trunk and suckers from its roots, resulting in spreading shrubs with multi-trunks (Plate 4.). This enables the plant to regenerate after bushfires, and therefore assists with the survival of established populations.

Some plant species are capable of producing seed from unfertilised ovules through a process called

apomixis. However, it is not known whether this form of asexual reproduction occurs in Bolwarra.

Sexual reproduction via cross-pollination:

Cross-pollination is achieved by a number of ingenious mechanisms. Firstly, the male (pollen) and female (stigmas) parts of the flower are separated physically (Plates 8 & 11), and mature at different times. The flowers are in a female phase (i.e. stigmas exposed and receptive to pollen) in the early morning, in a neutral phase for part of the afternoon, and in a male phase (i.e. pollen released) during the early evening. Early in the morning, the staminodes open exposing the stigmas (Plate 9), and the stamens are reflexed away from the stigmas. In the afternoon, the staminodes move inwards and cover the stigmas (Plates 11 & 12). In the early evening, the stamens move forward and the anthers release pollen through longitudinal slits (Plates 13, 14 & 15).

The development of flowers on individual plants is synchronised during the day (i.e., all flowers are at the same morphological stage). This is also a neat mechanism to facilitate cross-pollination. In addition, plants flower in flushes with a one or two day period without flower production following a day of flowering.

Flowers of natural stands of bolwarras are pollinated exclusively by species of small weevils (2 mm long) in the genus *Elleschodes*. In the early morning, the weevils are attracted to the flowers by their pervasive fragrance, and feed on the staminodes during the day (Plate 10). They lay their eggs at the bases of the staminodes and the inner gyne of the stamens, but not on the floor of the floral chamber. Staminodes provide food for the weevils and also protect them from predators during the day.

When the weevils emerge from the staminodes at dusk, they feed on the pollen and their sticky bodies (due to an exudate on the staminodes) become contaminated with pollen grains. The weevils then fly away from the plants. At dawn the next day, the weevils are attracted to flowers on other Bolwarra bushes (different populations), where they burrow into the staminodes and deposit the pollen grains (Plate 16) on the stigmas. Also, early the next morning after flowering, synandria are abscised from the receptacles (Plate 17) and fall to the ground (Plate 18). The eggs of the weevils in the fallen synandria hatch, and the larvae feed on the synandrial material before pupating in the soil. Adult weevils emerge from the soil and seek Bolwarra flowers. The weevils are not reported to be attracted to other flowers, and their entire life cycle is dependent upon the flowering of Bolwarra plants.

Pollinated flowers set fruit (2.0-2.5 cm in diam.; Plates 19 & 20) and produce seeds, which are dispersed by mammals and birds.

This fascinating system of outcrossing results in genetic diversity, which has enabled Bolwarra to adapt to environmental changes over a very long period (i.e.,

a major benefit of the plant 'sleeping around' with the aid of the weevil).

Sexual reproduction via self-pollination:

Self-pollination of Bolwarra has been reported in northern Australia by a number of pollination experts. A study using bagged flowers showed that 10% of flowers set fruit due to self-pollination, whereas 60% of open-pollinated flowers set fruit as a result of mainly weevil pollination. Self-compatibility enables isolated bolwarras in forests to produce fruit and seeds, which can be spread to other areas, and increase the local population of the plants. In this way, self-fertilisation assists in the survival of Bolwarra in areas where populations are fragmented.

In contrast to natural stands of bolwarras in northern parts of Australia, fruit set is rare on cultivated plants outside their natural range. Less than 0.5% of flowers set fruit in gardens in Metung and Greater Melbourne. One reason for this is the absence of relevant weevils in the gardens, but the studies in northern Australia suggest that there should be a higher level of fruit set due to self-pollination. The temperatures in southern Australia are lower than those in northern parts of the continent, and differences in environmental conditions may cause the differences in the level of self-pollination. It has been shown that high-temperature treatments of stigmas of some self-incompatible plants, results in them becoming self-compatible. However, temperatures in Metung are unlikely to restrict the receptivity of stigmas to pollen of bolwarras because 48% of flowers set fruit when pollen of a clone of

Bolwarra was hand brushed onto stigmas of flowers of the same clone. Therefore, the flowers have a high level of self-compatibility if the pollen reaches the stigmas under the environmental conditions at Metung.

The mechanism for and environmental conditions conducive to self-pollination are yet to be discovered.

Conclusions:

The reproductive biology of Bolwarra has enabled this primitive plant to survive for millions of years. It is remarkable that the mutually beneficial and highly specific relationship between *Eupomatia laurina* and weevil species of *Elleschodes* has been maintained for eons. Although there has been a long and successful association between Bolwarra and the weevils, the question is whether this relationship can be maintained when there are far more rapid changes in the climate than previously experienced. The danger is that Bolwarra and its pollinator weevils may respond differently to such dramatic changes. For example, climate change is causing bushfires to become more frequent and severe during summer in south-eastern Australia, and although Bolwarra will survive the fires via vegetative propagation, the intense heat may kill the weevils. It's nice having plants with interesting stories like bolwarras in gardens in Melbourne and other parts of southern Victoria. Much of the reproductive system of Bolwarra in these environments is unknown at the moment, and this adds to the mystique of the plant. We are now having fun attempting to unravel this gap in knowledge of its sex life.

Plates 1 – 20. History and life cycle of Bolwarra.

Plate 1. Foliage of Bolwarra;

Plate 2. Forested areas in Australia – bolwarras grow naturally north of Metung in rainforests and wet forests within these areas;

Plate 3. The supercontinent, Gondwana, before it started to break up 180 million years ago;

Plate 4. Multi-trunks of Bolwarra;

Plate 5. Flower buds in leaf axils;

Plate 6. Abscising flower cap and emerging stamens (6.0am);

Plate 7. Staminodes opening and stamens retracting (7.30am);

Plate 8. Stamens retracting further (7.40am).

Plate 9. Staminodes fully open and stigmas exposed during the female phase (8.30am);

Plate 10. Small weevils visiting the flower and burrowing into the staminodes (Credit: R. Whyte);

Plate 11. Staminodes folding inwards (early afternoon);

Plate 12. Staminodes closing further (mid-afternoon);

Plate 13. Stamens moving forward and anthers releasing pollen (7.00pm);

Plate 14. Stamens clasping a tight 'ball' of staminodes (8.00pm);

Plate 15. Longitudinal slits in the anthers (x40 magnification);

Plate 16. Pollen grains (x400 magnification);

Plate 17. An abscised synandrium (early the next morning);

Plate 18. Fallen synandria on the ground;

Plate 19. Developing fruit three weeks after artificial pollination;

Plate 20. Mature fruit (Credit: R. Whyte).



Plate 1



Plate 2

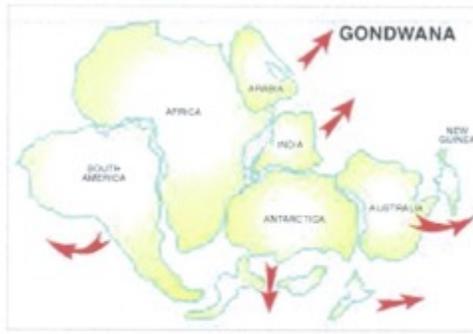


Plate 3



Plate 4



Plate 5



Plate 6



Plate 7



Plate 8



Plate 9



Plate 10



Plate 11



Plate 12



Plate 13



Plate 14



Plate 15

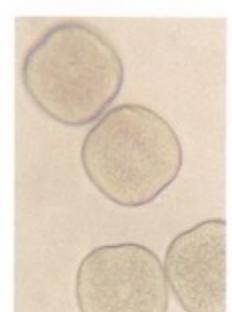


Plate 16



Lorraine's happy associations with plants are exactly on my wavelength: as I weed, and rake and haul and organize, I mull over things. My mind wanders, circles, considers, associates. Lately I have become aware that I seem to like having a "system" for something. Actually: many things.



Case in point - I'm inordinately happy with my weird system for an out-door cold-frame [Wayne, I'm following in your footsteps!] - that is VASTLY superior to my indoor germination set-up. [I won't dare call the latter "a system" as clearly it doesn't work]. My 'invention' of Amazon soil bags-with-handles, coupled with plant-support hoops and covered with clear plastic garbage bags constitute a seriously superior "system". The seedlings are fat and happy, stand tall - and look cheerfully green in spite of rain, snow, sleet and hail. Yes - all of the above. As East Braemar is the 'snow line' and I'm considerably higher up, we've had everything. Bad weather notwithstanding, my little lettuces, arugula, borage - even basil! - are up and running. My indoor, sun-room germination of said same is a disappointing disaster. The seedlings came up earlier - I'll give them that - but they were long, gangly, flopped over and gave up the ghost. I'm not doing that again. Instead, I've doubled down on my outdoor system and planted all my remaining seeds yesterday. Of course, it hailed today - but with the clear garbage bag covers, their little worlds were safe.



This thing with having a "system" stems from my beloved auntie who used to look after me when I was little, and must have been the same age then, as I am now. She had her "system" for everything - and was teased about it, mercilessly. She didn't mind, just smiled knowingly - and now I think I get it - as I also love my "systems".

Aunt Gizella was my grandfather's sister, a 'spinster of the parish' (having lost the love of her life to WWI). She was an extraordinary woman whose bedtime stories consisted of dramatically whispering and humming Wagner's Ring Cycle or La Bohème: Mimi and Rodolfo, Lohengrin, Siegfried, and the Valkyries - I was an opera inductee before I could read. She loved opera, had been a pianist, but 2 wars, the Communist rule, and arthritis had robbed her of the piano which loomed forbidding, black and covered, in the hall. It migrated from family member to family member as we were constrained from house to apartment. What Hungary's history couldn't take from Aunt Gizella was her love of gardening. Without her garden, she still gardened. Her balcony was legend. She specialized in *Pelargonium* ('geranium') and *Tradescantia* - but only the shiny green ones. Not the purple - definitely not! - they were hairy. The occasional, green variegated - well, maybe - but the shiny all green ones, definitely! She had "a system" for propagating cuttings, potting them up "Put a rock over the hole, dear!"; feeding the plants "My system is to soak some compost in water then feed them the juice", moving them in or out of the sun/shade "Water the roots, dear, not the leaves!". She had every possible colour of *Pelargonium* - upright and trailing, singles and doubles, but eventually settled on the fire-engine red ones - that I love to this very day. I absorbed opera and gardening from her like her plants sucked up the compost juice.

Aunt Gizella had another claim to family fame. She shared in the ownership of the family's summer house where she liked to sunbathe and garden in the buff. This led to the occasional - mutual - surprise if a weekend visitor showed up unannounced. As World Naked Gardening Day is soon upon us on Saturday, May 7, I will think of Aunt Gizella, and in her honour, absorb the sunshine in its/my? entirety. Should you consider similar horticultural endeavours - maybe humming opera as you weed? - please do document it for THE LEAF and I will happily publish the photographic evidence thereof. Just remember that weeding blackberries or pruning roses should be left for a "rainy day". Safety first!

My new 'pet' - a fritillaria. I'm hoping it's a red one! It did say "Rubra maxima" crown imperialis. ... I live in hope.

